Radlett 500

Radlett Road Estate

Colney Street
St Albans

Archaeological Evaluation Report

oxfordarchaeology

October 2008

Client: SEGRO

Issue No:1
OA Job No: 4215
NGR: TL 156 019

Archaeological Evaluation Report

Client Name: Bilton plc

Client Ref No:

Document Title: Archaeological Evaluation Report

Document Type: Client Report

Issue Number: 1

National Grid Reference: TL 156 019
Planning Reference:

OA Job Number 4215
Site Code: SARAD08
Invoice Code: SARADEV
Receiving Museum: Hertfordshire County Museums Service
Museum Accession No: N/A

Prepared by:	Laura Piper PIFA
Position:	Fieldwork Supervisor
Date:	7th October 2008
Checked by:	Steve Lawrence
Position:	Senior Project Manager
Date:	9th October 2008
Approved by:	Andrew Norton
Position:	Senior Project Manager
Date:	13th October 2008

Document File Location
Graphics File Location
Illustrated by

Oxford Archaeology

Janus House
Osney Mead
Oxford OX2 0ES
t: (0044) 01865 263800 e: info@oxfordarch.co.uk
f: (0044) 01865 793496 w: www.oxfordarch.co.uk

Oxford Archaeological Unit Limited is a Registered Charity No: 285627

Radlett 500, Radlett Road Estate, Colney Street, St Albans

ARCHAEOLOGICAL EVALUATION

CONTENTS

LIST OF FIGURES

The figures are presented at the back of this report

SUMMARY

Oxford Archaeology (OA) undertook a field evaluation at Radlett 500, Colney Street, St Albans on behalf of Bilton plc. The evaluation revealed no archaeological deposits.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 In October 2008 OA undertook a field evaluation at Radlett 500, Colney Street, St Albans (Fig. 1) on behalf of Bilton plc (part of the SEGRO). A Specification was produced by SEGRO following the guidelines for an archaeological evaluation as published by the Greater London Archaeological Advisory Service (GLAAS). A Written Scheme of Investigation (WSI) was produced by OA (2008) in accordance with the specification and agreed with the District Archaeologist prior to commencing the site investigation. This investigation was designed to inform the planning application pre determination.

1.1.2 The development site is centred upon NGR TL 156 019 to the south of the M25 and north of Radlett. The Radlett Phase 500 area comprises 1.97 hectares and is currently utilised as an industrial works estate on the eastern side of Watling Street/Radlett Road (the A5183). Adjacent to the southwestern boundary of the application area is a cleared site, also in the ownership of Bilton plc. During the evaluation this area was partly occupied by site offices for the construction of Phase 400 and does not form part of this development application.

1.2 Geology and topography

1.2.1 The site slopes down from the north to south and the River Colne. The location of the evaluation trenches has a change of slope of approximately 2.5 m from c. 70.5 m to c. 68.0 m above Ordnance Datum (aOD).

1.2.2 The geology of the site is Glacial Gravel overlying Upper Chalk.

1.3 Archaeological and historical background

1.3.1 There have been no previous archaeological investigations at the proposed redevelopment site of Radlett Phase 500. However, this does lie within the boundary of site AS.R.37 (Policy 111) defined within the St Albans District Plan (Chapter 14, p166) which has recorded finds from the Palaeolithic-Saxon periods, and also includes the medieval village of Hansteads. Approximately 500 m to the southeast is the known Roman Kiln site at Houndswood (A.S.R.41).

1.4 Acknowledgements

1.4.1 Oxford Archaeology would like to thank the district archaeologist, Simon West, for the approval of the works and monitoring at short notice and Leon Reid of Fitzpatrick Contractors Limited for his co-operation during the course of the fieldwork.

2 EVALUATION AIMS

2.1.1 The investigation was aimed at establishing the archaeological potential of the site prior to redevelopment. To achieve this the general objectives were:

- to establish the presence/absence of archaeological remains within the proposal area,
- to determine and confirm the character of any remains present, without compromising any deposits that may merit detailed investigation under full area excavation,
- to determine or estimate the date range of any remains from artefacts or otherwise,
- to characterise any underlying archaeological strata down to undisturbed geology without significantly impacting upon significant younger (overlying) deposits where possible,
- to determine the geo-archaeological and palaeo-environmental potential of any archaeological deposits encountered,
- to establish what archaeological remains/deposits may be affected by any proposed development,
- to make available the results of the investigation to inform the planning application and the potential for any further mitigation strategy.

3 EVALUATION METHODOLOGY

3.1 Scope of fieldwork

3.1.1 The evaluation comprised three trenches each measuring 15 m x 2 m (Fig. 2). Due to the constraints of currently available open areas to conduct this evaluation, Trench 2 was positioned within the southwestern part of the site that lies outside of this development application boundary. The overburden (non archaeological deposits) was removed to reveal the top of the underlying geology under close archaeological supervision by a mechanical excavator fitted with a toothless bucket.

3.2 Fieldwork methods and recording

3.2.1 All deposits were issued with unique context numbers, and context recording was carried out in accordance with established OA practice (Wilkinson 1992) and the Institute of Field Archaeologist's *Standards and Guidance for Archaeological Evaluations, 1999*. The stratigraphy of each trench was recorded even where no archaeological deposits were identified.

3.2.2 Black-and-white negative and digital photographs were taken during the works. Site plans were drawn at an appropriate scale. Section drawings of sample sections of stratigraphy were drawn at a scale of 1:20.

3.2.3 Due to their excavated depths, Trenches 1 and 2 were recorded from the surface only.

3.3 Finds

3.3.1 No finds were encountered during the course of the evaluation.

4 RESULTS: GENERAL

4.1 Soils and ground conditions

4.1.1 The site is located on an industrial estate, the majority of which comprises standing structures and tarmac surfacing with small areas of rough vegetation.

4.1.2 The southern part of the site adjacent to the River Colne has been built up to form the terrace on which the estate is partly located.

4.1.3 Trenches 1 and 2 were excavated through the rough vegetation on the made ground adjacent to the river. Trench 3 was excavated through a tarmac surface car park adjacent to the eastern side of Radlett Road.

4.1.4 Geotechnical investigation at the site by WSP (2008) had previously investigated the soil sequence and identified the geological deposits of Upper Chalk, encountered approximately 10.80 m below ground level (bgl), overlain by Lower Glacial Gravels 2.10-8.40 m bgl, overlain by Cohesive Glacial Till 0.1.-4.75 m bgl, overlain by Upper Glacial Gravels 0.10-0.50 m bgl and modern Hardstanding and Made Ground 0.00-0.03 m bgl. The geotechnical investigation locations, plots and borehole logs has been included as Appendix 4 within this report.

4.2 Distribution of archaeological deposits

4.2.1 No archaeological deposits were identified during the course of the evaluation.

5 RESULTS: DESCRIPTIONS

5.1 Description of deposits

Trench 1 (Fig. 3 section 101)

5.1.1 The underlying natural in Trench 1 comprised a light orange-brown clay with gravel inclusions (101) that equates to the Cohesive Glacial Till defined in the geotechnical investigation. The surface of this deposit was noted at 63.25 m aOD. This was overlain by a light brownish grey clay with gravel inclusions (102) encountered at 63.65 m aOD. This may represent a buried topsoil and was overlain by a series of modern made ground deposits (103 to 107) totalling 1.53 m thick The made ground

deposits comprised various quantities of brick, clay and sand. These deposits raised the ground level up to an average height of 65.08 m aOD.

Trench 2 (Fig. 3 section 201)

5.1.2 The underlying natural in Trench 2 comprised a mixed dark grey to brown clay with gravel inclusions (201). This was encountered at 62.30 m aOD and represents the surface of the Cohesive Glacial Till deposit. This was overlain by a deposit of sterile brown clay (207). A series of modern make up deposits with gravel and brick inclusions (202 to 206) totalling 2.36 m thick levelled the surface area of the trench to an average height of 64.95 m aOD.

Trench 3 (Fig. 3 section 301)

5.1.3 The underlying natural in Trench 3 comprised a mid orange brown clay with gravel and chalk inclusions (301). This was encountered at a depth of 68.27 m aOD and represents the Cohesive Glacial Till. This was overlain by a layer of modern compacted made ground (303) and capped with a 0.10 m thick tarmac surface (302). The surface level of the trench sloped down north to south from 69.30 m to 68.50 m aOD. A 1.90 m deep test pit was machine excavated at the southern end of the trench into the Cohesive Glacial Till.

6 DISCUSSION AND INTERPRETATION

6.1 Reliability of field investigation

6.1.1 The trenches excavated represent less than 1% of the overall development area and should therefore be only viewed as a indicative representation for the archaeological potential for the site as a whole. However, conclusive (negative) results were recorded for each trench and no mitigating factors were encountered that would otherwise give reason to doubt the results.

6.2 Overall interpretation

Summary of results

6.2.1 Each excavated trench clearly encountered the Cohesive Glacial Till that overlies the Lower Gravel deposit within the Colne Valley. No archaeological deposits or features were encountered within any of the trenches and the development area had clearly been subject to significant landscaping, probably as part of the original development of the estate. The southern boundary of the site has up to 2.50 m of made ground present. These deposits are likely to have derived from the excavation of foundations and/or grading during the original development of the site. It is also clear that originally the ground level sloped to both the south and the west with the lowest point being at the junction between Watling Street and the River Colne and the hillside having a much sharper slope. This corner of the site lies outside of the current redevelopment plans.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Trench	*Ctxt No*	*Type*	*Thick. (m)*	*Comment*	*Date*
001					
	101	Layer		Natural	
	102	Layer	0.40	Buried Topsoil	
	103	Layer	0.50	Made Ground	Modern
	104	Layer	0.18	Made Ground	Modern
	105	Layer	0.20	Made Ground	Modern
	106	Layer	0.30	Made Ground	Modern
	107	Layer	0.35	Made Ground	Modern
002					
	201	Layer		Alluvium	
	202	Layer	0.25	Silt	
	203	Layer	0.20	Made Ground	Modern
	204	Layer	0.46	Made Ground	Modern
	205	Layer	0.50	Made Ground	Modern
	206	Layer	0.40	Made Ground	Modern
	207	Layer	0.80	Made Ground	
003					
	301	Layer		Natural	
	302	Layer	0.10	Tarmac	Modern
	303	Layer	0.17	Made Ground	Modern
	304	Layer	0.11	Made Ground	Modern

APPENDIX 2 BIBLIOGRAPHY

IFA, 1999 *Institute of Field Archaeologists Standards and Guidance for Archaeological Evaluation (1999)*

OA, 2008 Radlett 500, Radlett Road Estate, St Albans, Hertfordshire. Written Scheme of Investigation for an Archaeological Evaluation.

Wilkinson, D, 1992 *OA Fieldwork Manual*

WSP, 2008 Phase I Geo-Environmental Assessment. Phase 500, Colney Street, Radlett Road, Radlett

APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: Radlett 500, Radlett Road Estate, Colney Street, St Albans

Site code: SARAD08

Grid reference: TL 156 019

Type of evaluation: Three 15 m x 2 m trenches

Date and duration of project: 1st to 3rd October 2008

Area of site: 2.19 ha

Summary of results: No archaeology was identified during the course of the evaluation.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Hertfordshire County Museums Service in due course.

APPENDIX 4 GEOTECHNICAL DATA

After WSP 2008

Table 6.1 Summary of Ground Conditions

Stratum Description	Typical Thickness (m)	Depth to Top of Strata (m bgl)	SPT 'N' Values (Extrapolated)	Exploratory Holes in which strata encountered
Hardstanding*: Concrete and Tarmac hardstanding.	0.05 – 0.50	0.00	N/A	All (Except TP120)
Made Ground*: Orange brown slightly clayey sandy gravel.	0.10 – 2.26 (where proven)	0.00 – 0.30	10 – 11	All trial pits (except TP113 and TP114) and BH208.
Upper Glacial Gravels: Orange brown slightly clayey sandy gravel.	0.45 – 4.45 (where proven)	0.10 – 0.50	11 – 158	BH203 – BH205 and BH207. All trial pits except TP101 – TP103, TP105 and TP115.
Cohesive Glacial Till: Firm to stiff grey/ dark brown slightly gravelly clay.	1.60 – 5.80 (where proven).	0.10 – 4.75	8 – 27	All Boreholes. All trial pits except TP105, TP106 – TP108, TP113, TP114, TP116 – TP120.
Lower Glacial Gravels: Orange brown slightly clayey sandy gravel.	6.40 – 7.05 (where proven)	2.10 – 8.40	12 – 103	All Boreholes. TP101 – TP103.
Upper Chalk: Recovered as: Structureless chalk composed of slightly gravely silt.	ND	10.80	10 – 12	BH203 and BH206.

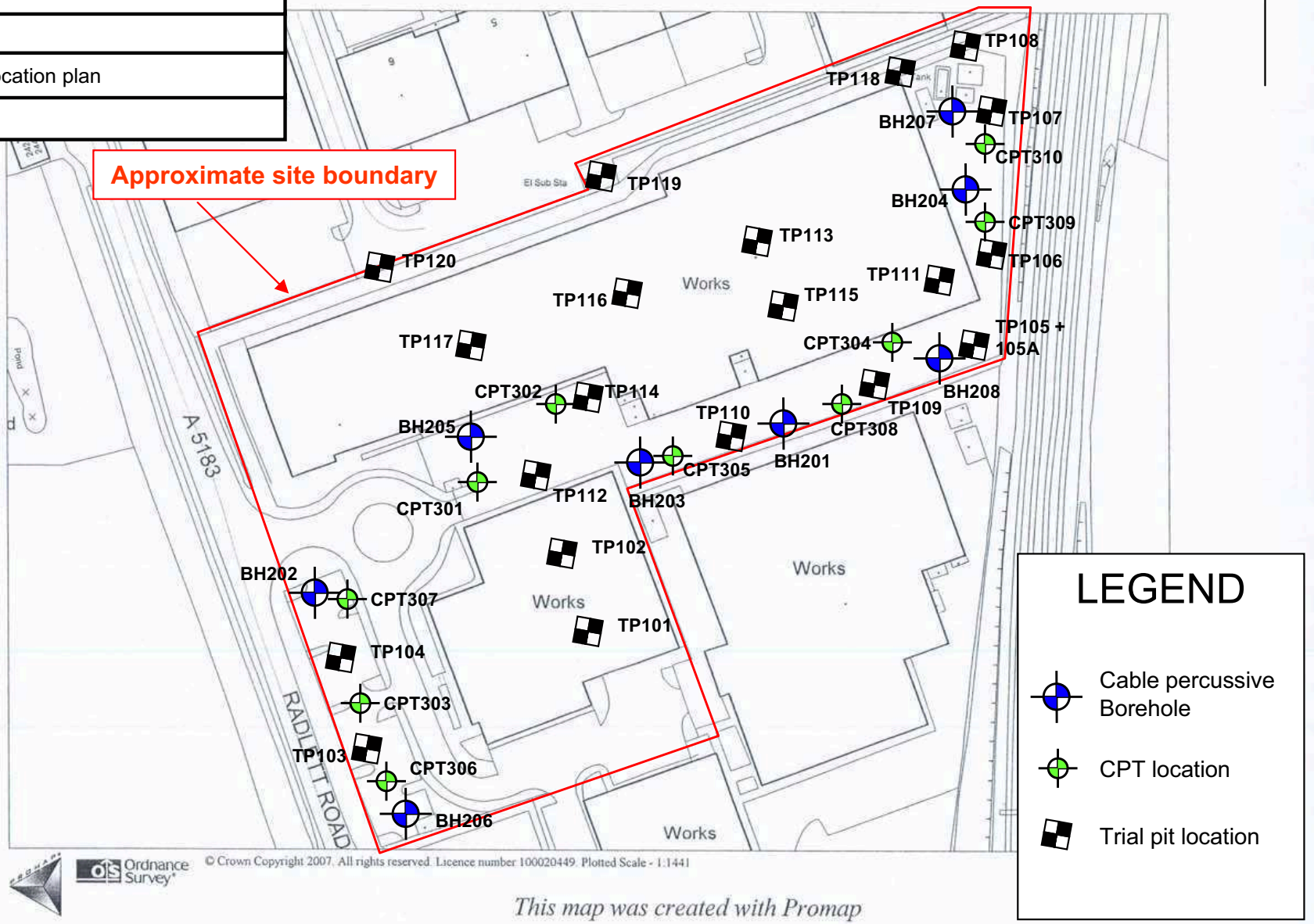
ND Not determined
* Where present

Site: Phase 400, Radlett

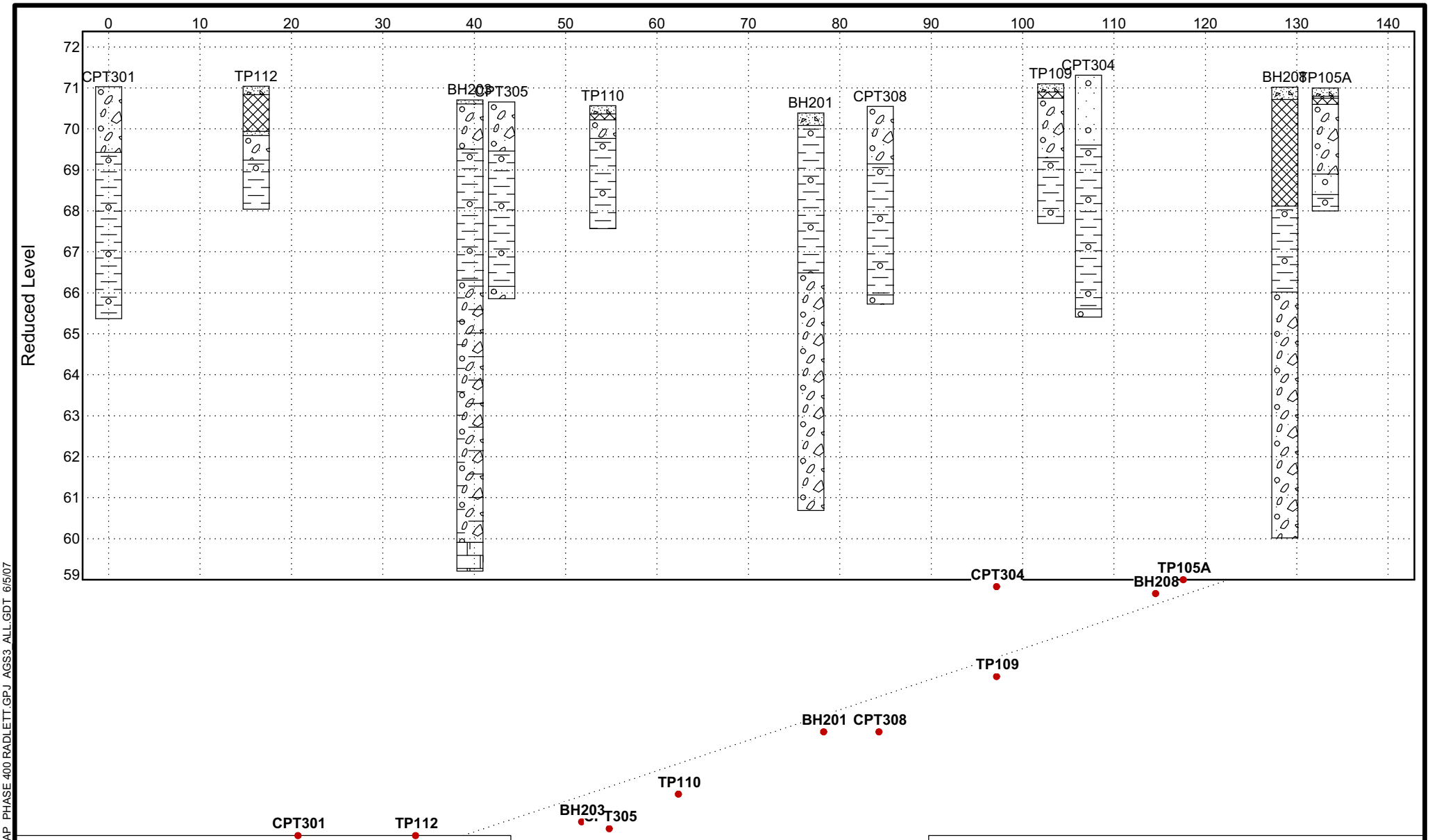
Ref: 12041157/001

Title: Exploratory hole location plan

Scale: Not to scale



This is a generalised section based on ground conditions encountered in exploratory holes. Actual ground conditions including depths and the properties of strata may vary.



WSP Environmental Ltd
24 - 30 Holborn
London, EC1N 2HS
Telephone: 020 7314 5000
Fax: 020 7314 5005

SUBSURFACE SECTION

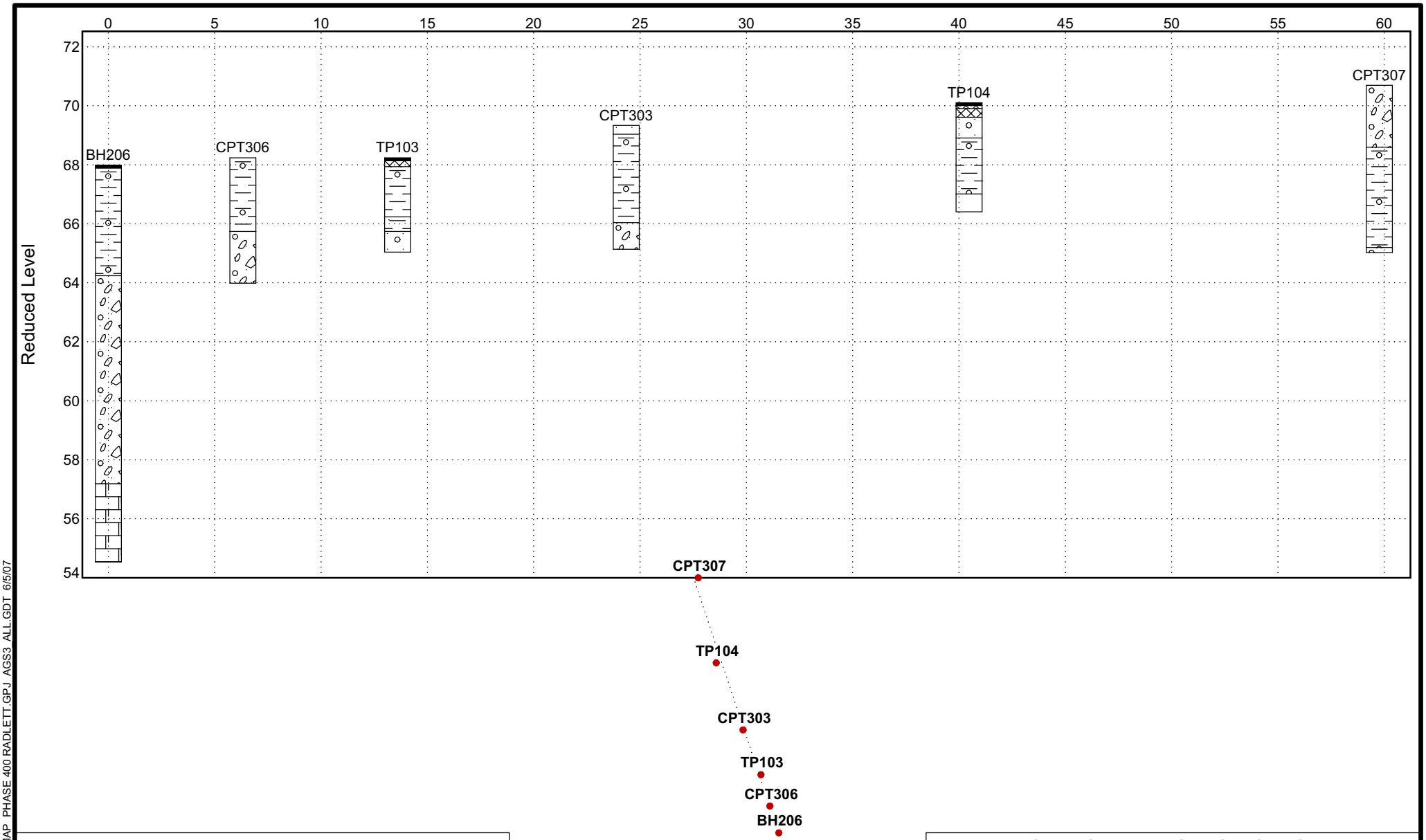
Client: SEGRO

Project: Phase 400, Radlett

Number: 12041157/001

AGS3 LITHOLOGY SITEMAP PHASE 400 RADLETT.GPJ AGS3 ALL.GDT 6/5/07

This is a generalised section based on ground conditions encountered in exploratory holes. Actual ground conditions including depths and the properties of strata may vary.



WSP Environmental Ltd
24 - 30 Holborn
London, EC1N 2HS
Telephone: 020 7314 5000
Fax: 020 7314 5005

SUBSURFACE SECTION

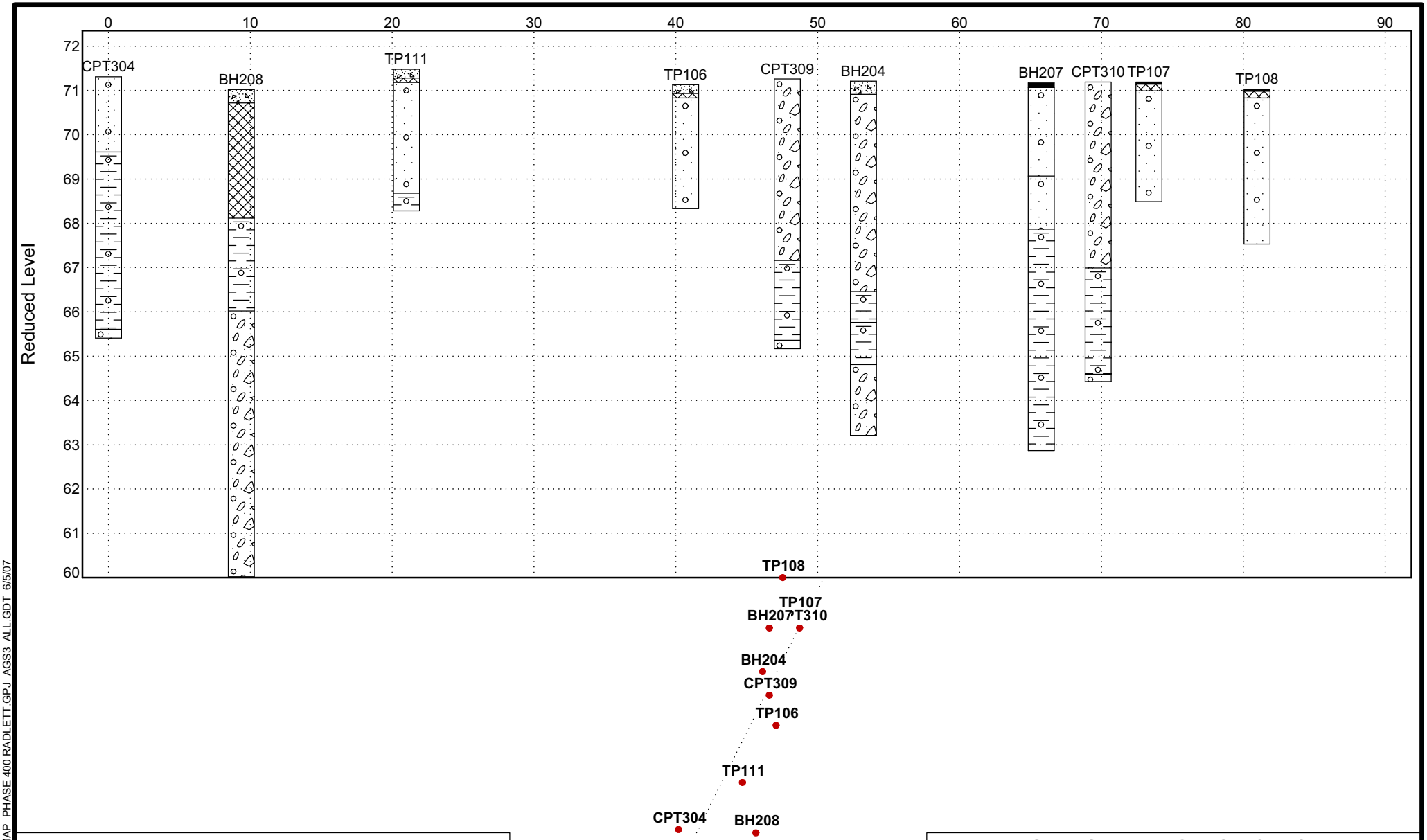
Client: SEGRO

Project: Phase 400, Radlett

Number: 12041157/001

AGS3 LITHOLOGY SITEMAP PHASE 400 RADLETT.GPJ AGS3 ALL.GDT 6/5/07

This is a generalised section based on ground conditions encountered in exploratory holes. Actual ground conditions including depths and the properties of strata may vary.



WSP Environmental Ltd
24 - 30 Holborn
London, EC1N 2HS
Telephone: 020 7314 5000
Fax: 020 7314 5005

SUBSURFACE SECTION

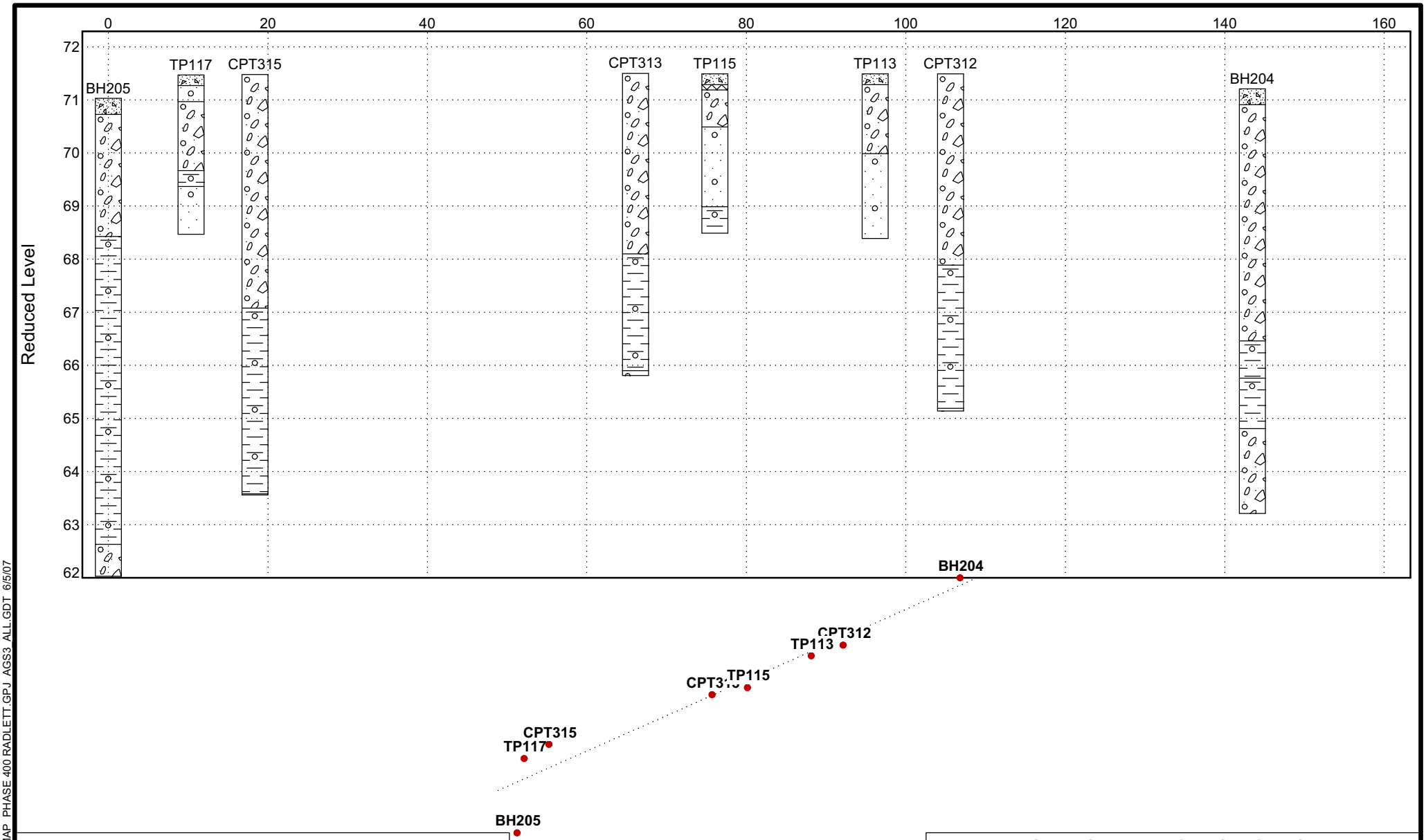
Client: SEGRO

Project: Phase 400, Radlett

Number: 12041157/001

AGS3 LITHOLOGY SITEMAP PHASE 400 RADLETT.GPJ AGS3 ALL.GDT 6/5/07

This is a generalised section based on ground conditions encountered in exploratory holes. Actual ground conditions including depths and the properties of strata may vary.



WSP Environmental Ltd
24 - 30 Holborn
London, EC1N 2HS
Telephone: 020 7314 5000
Fax: 020 7314 5005

SUBSURFACE SECTION

Client: SEGRO

Project: Phase 400, Radlett

Number: 12041157/001

AGS3 LITHOLOGY SITEMAP PHASE 400 RADLETT.GPJ AGS3 ALL.GDT 6/5/07

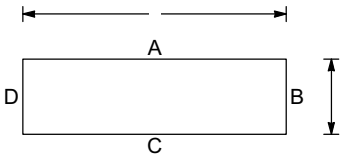
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP101**
Job No: 12041157/001	Date: 24-04-07 24-04-07	Ground Level (m):	Co-Ordinates ():	
Supervising Engineer: Mark Emerson		Client: SEGRO		Sheet: 1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Rinforced concrete hardstanding.					
	0.20-0.40		MADE GROUND: Light brown sandy subrounded fine to coarse GRAVEL of brick, flint, concrete, quartzite, and rare slag and clinker.		0.20-0.40	ES		
	0.40-2.10 (1.70)		Firm becoming stiff with depth dark brown mottled grey locally friable thinly laminated slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse flint and chalk. Rare cobbles of flint.		1.10	ES		
			1.70 - 1.80 Firm light brown orange thinly laminated sandy CLAY band.		1.70	D		
	2.10-3.20 (1.10)		Orange brown very gravelly SAND. Gravel is angular to rounded fine to coarse flint.		2.40 2.40	B D		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By: MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

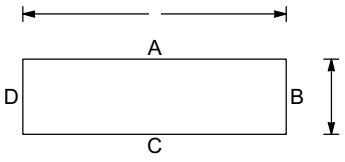
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP102**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	24-04-07 24-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-0.40		MADE GROUND: Light brown sandy subrounded fine to coarse GRAVEL of brick, flint, concrete, quartzite, and rare slag and clinker.		0.30	ES		
	0.40-2.00 (1.60)		Firm dark brown mottled grey slightly gravelly thinly laminated locally friable CLAY. Gravel is angular to subrounded fine to medium chalk and flint.		0.70	D		
	2.00-2.40 (0.40)		Firm orange brown mottled grey thinly laminated sandy CLAY.		2.20	D		
	2.40-3.00 (0.60)		Orange brown very gravelly SAND. Gravel is angular to rounded fine to coarse flint.		2.40-3.00	B		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

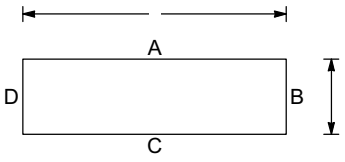
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP103**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	24-04-07 24-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.10		Tarmac hardstanding					
	0.10-0.30		MADE GORUND: Light brown slightly clayey sandy angular to subrounded fine to coarse GRAVEL of brick, flint, quartzite, tarmac and concrete. Occasional cobble of brick. (Subbase)		0.20	ES		
	0.30-2.00 (1.70)		Firm to stiff dark brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to medium chalk and flint.		1.00	D		
	2.00-2.50 (0.50)		Soft to firm yellow orange and light brown slightly sandy CLAY.		2.20	D		
	2.50-3.20 (0.70)		Orange brown very gravelly SAND. Gravel is angular to rounded fine to coarse flint.		2.70	B		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

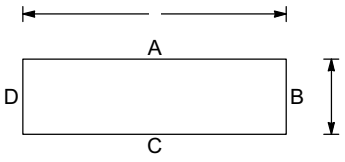
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP104**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	24-04-07 24-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.10		Tarmac hardstanding.					
	0.10-0.20 0.20-0.50 (0.30)		MADE GORUND: Light brown slightly clayey sandy angular to subrounded fine to coarse GRAVEL of brick, flint, quartzite, tarmac and concrete. Occasional cobble of brick. (Subbase)		0.10 0.30	ES ES		
	0.50-1.20 (0.70)		MADE GROUND: Firm dark brown mottled black sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse flint, quartzite and brick. Organic odour and appearance. Orange brown clayey gravelly SAND. Gravel is angular to subrounded fine to coarse flint and quartzite.					
	1.20-3.10 (1.90)		Firm becoming stiffer with depth dark brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is angular to rounded fine to coarse chalk and flint.		1.50	D		
	3.10-3.70 (0.60)		Firm thinly laminated light brown yellow mottled grey and red brown CLAY. Rare cobble of flint.		3.20	D		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

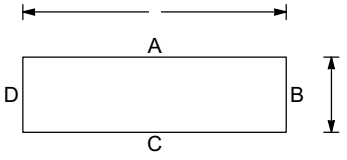
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP105**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	24-04-07 24-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding					
	0.20-0.50 (0.30)		MADE GROUND: Brown clayey sandy GRAVEL. Gravel is angular to subrounded fine to coarse brick, concrete, clinker and quartzite.		0.30	ES		
			Metal pipe, hole terminated.					

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

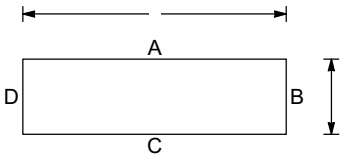
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP105A**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	26-04-07 26-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-0.25		MADE GROUND: Wooden planks.					
	0.25-0.40		MADE GROUND: Black and brown sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse concrete, flint, brick and quartzite. Occasional cobble of brick and concrete.					
	0.40-2.10 (1.70)		Orange brown very sandy subangular to rounded fine to coarse GRAVEL of flint and quartzite. Becoming increasingly sandy with depth. Occasional cobble of flint.					
	2.10-2.60 (0.50)		Orange brown gravelly SAND. Gravel is angular to subrounded fine to coarse flint and quartzite.					
	2.60-3.00 (0.40)		Stiff grey mottled black and brown slightly sandy, slightly gravelly CLAY. Gravel is angular to subrounded fine to medium chalk and flint.					

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

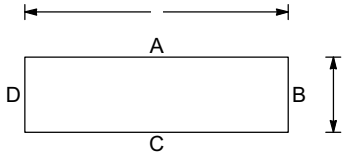
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP106**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	25-04-07 25-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Concrete hardstanding					
	0.20-0.30		MADE GROUND: Orange brown and grey very sandy angular to subrounded fine to coarse GRAVEL of flint and brick.		0.20	ES		
	0.30-2.80		Orange brown slightly clayey gravelly SAND. Gravel is angular to subrounded fine to coarse flint. Occasional soft sandy clay horizons with grey mottling. Wet from 1.0 mbgl.		1.00	B		
	(2.50)							
1								

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

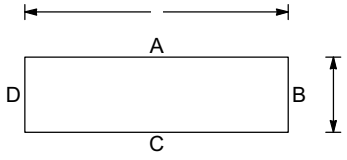
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP107**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	25-04-07 25-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.05		Tarmac hardstanding.					
	0.05-0.20		MADE GROUND: Brown slightly clayey sandy angular to rounded fine to coarse GRAVEL of concrete, brick, flint and quartzite.		0.10	ES		
	0.20-2.70		Orange brown slightly clayey very gravelly SAND. Gravel is angular to subrounded fine to coarse flint and quartzite. Occasional cobbles of flint. Wet from 1.0 mbgl.					
	(2.50)				1.10	B		
1								

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

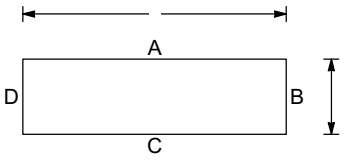
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP108**
Job No: 12041157/001	Date: 25-04-07 25-04-07	Ground Level (m):	Co-Ordinates ():	
Supervising Engineer: Mark Emerson		Client: SEGRO		Sheet: 1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.05		Tarmac hardstanding.					
	0.05-0.20		MADE GROUND: Brown slightly clayey sandy angular to rounded fine to coarse GRAVEL of concrete, brick, flint and quartzite.		0.10	ES		
	0.20-3.50		Orange brown slightly clayey gravelly SAND. Gravel is angular to subrounded fine to coarse flint and quartzite. Occasional cobble size pockets of soft brown orange brown mottled grey sandy clay. Wet from 1.0 mbgl.		0.90	ES		
					1.50	B		
	(3.30)							
1 ▼								

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By: MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

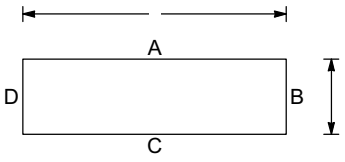
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP109**
Job No: 12041157/001	Date: 25-04-07 25-04-07	Ground Level (m):	Co-Ordinates ():	
Supervising Engineer: Mark Emerson		Client: SEGRO		Sheet: 1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-0.35		MADE GORUND: Brown slightly clayey sandy GRAVEL. Gravel is angular to subrounded fine to coarse flint, quartzite, concrete and rare brick.		0.20	ES		
	0.35-1.80		Brown / orange brown locally slightly clayey very sandy GRAVEL. Gravel is angular to subrounded fine to coarse flint and quartzite. Occasional cobbles of flint.					
	(1.45)				1.00	ES		
					1.50	B		
	1.80-3.40		Stiff brown mottled grey slightly sandy gravelly CLAY. Gravel is subangular to subrounded fine to medium chalk and flint.					
	(1.60)				2.20	D		
					3.40	D		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By: MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

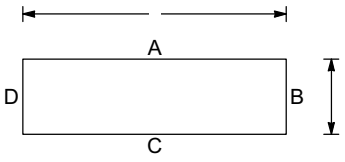
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP110**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	25-04-07 25-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-0.35		MADE GROUND: Grey brown sandy angular to subrounded fine to coarse GRAVEL of concrete, brick, flint and quartzite.		0.30	ES		
	0.35-0.80 (0.45)		Orange brown slightly clayey sandy subrounded to subangular fine to coarse GRAVEL of flint and quartzite. Occasional cobble size pockets of soft ornage brown mottled grey sandy clay.		0.50	ES		
	0.80-3.00 (2.20)		Firm (becoming stiff at 1.5 mbgl) locally friable dark brown mottled grey slightly sandy, gravelly CLAY. Gravel is subangular to subrounded fine to medium chalk and flint.		1.20 2.40	D D		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

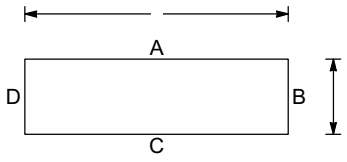
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP111**
Job No: 12041157/001	Date: 25-04-07 25-04-07	Ground Level (m):	Co-Ordinates ():	
Supervising Engineer: Mark Emerson		Client: SEGRO		Sheet: 1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding					
	0.20-0.30		MADE GROUND: Brown slightly clayey sandy angular to subrounded fine to coarse GRAVEL of flint, quartzite, concrete and brick.		0.20	ES		
	0.30-2.80		Orange brown slightly clayey gravelly SAND. Gravel is angular to rounded fine to coarse flint and quartzite. Occasional cobbles of flint. Occasional horizon of soft sandy grey clay. Wet from 2.0 mbgl.					
	(2.50)				2.20	B		
	2.80-3.20		Stiff brown slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to medium flint and chalk.					
	(0.40)				3.00	D		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By: MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

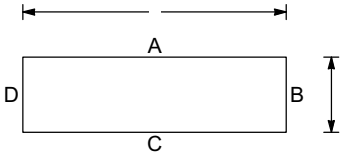
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP112**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	25-04-07 25-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-1.10 (0.90)		MADE GROUND: Orange brown slightly clayey very sandy angular to subrounded fine to coarse GRAVEL of flint, quartzite, concrete, pottery, brick and rare plastic fragments. 0.90 Wooden plank.		0.40 0.50	B ES		
	1.10-1.20		Concrete.					
	1.20-1.80 (0.60)		Possible MADE GROUND: Orange brown slightly clayey very sandy GRAVEL. Gravel is angular to subrounded fine to coarse flint.					
	1.80-3.00 (1.20)		Stiff dark brown slightly sandy slightly gravelly CLAY. Gravel is angular to rounded fine to medium chalk and flint.		2.50	D		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

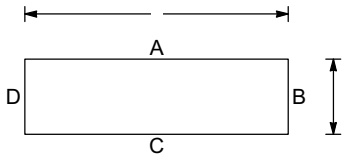
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP113**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	25-04-07 25-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-1.50 (1.30)		Orange brown very sandy GRAVEL. Gravel is angular to rounded fine to coarse flint and quartzite. Occasional cobbles of flint. Occasional band of soft orange brown mottled black and grey sandy clay.		0.40	ES		
1	1.50-3.10 (1.60)		Orange brown slightly clayey gravelly SAND. Gravel is subangular to subrounded fine to medium flint. Occasional bands of soft to firm grey very sandy clay.		2.00	B		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

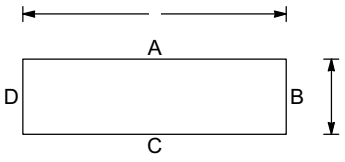
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP114**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	25-04-07 25-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.10		Concrete hardstanding.					
	0.10-0.20		Brick paving.					
	0.20-0.50 (0.30)		Concrete.					
	0.50-3.10 (2.60)		Orange brown very sandy angular to rounded GRAVEL of flint and quartzite. Becoming slightly clayey at 1.5 mbgl.		0.50 2.80	ES B		
▼1								

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

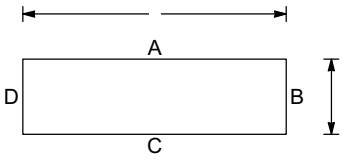
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP115**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	27-04-07 27-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-0.30		MADE GROUND: Brown clayey angular to rounded fine to coarse GRAVEL of quartzite and flint.		0.20	ES		
	0.30-1.00 (0.70)		Brown slightly clayey very sandy angular to rounded fine to coarse GRAVEL of flint and quartzite. Rare cobbles of flint.		0.50	ES		
1	1.00-2.50 (1.50)		Orange brown slightly clayey gravelly SAND. Gravel is angular to rounded fine to coarse flint and quartzite. Occasional cobble size pockets of firm clay.		1.50	B		
	2.50-3.00 (0.50)		Stiff dark brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse chalk and flint.		2.80	D		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

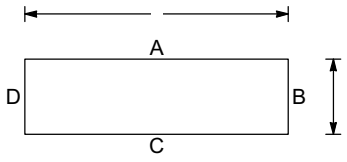
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP116**
Job No: 12041157/001	Date: 27-04-07 27-03-07	Ground Level (m):	Co-Ordinates ():	
Supervising Engineer: Mark Emerson		Client: SEGRO		Sheet: 1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-0.30		MADE GROUND: Firm black brown sandy angular to rounded fine to coarse GRAVEL of quartzite and flint.					
	0.30-1.25 (0.95)		Orange brown clayey sandy subangular to subrounded fine to coarse GRAVEL of flint and quartzite.					
	1.25-1.25		Concrete.					

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By: MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

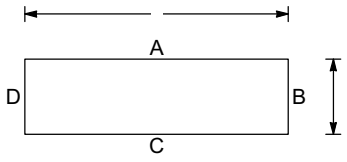
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP117**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	27-04-07 27-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Reinforced concrete hardstanding.					
	0.20-0.50 (0.30)		MADE GROUND: Brown / orange brown clayey gravelly SAND. Gravel is angular to subrounded fine to coarse flint, quartzite and brick. Occasional pocket of firm dark brown very gravelly clay.		0.30	ES		
	0.50-1.80 (1.30)		Orange brown slightly clayey sandy angular to subrounded fine to coarse GRAVEL of flint and quartzite. Occasional cobble of flint.		1.50	B		
	1.80-2.10 (0.30)		Soft grey mottled brown slightly gravelly sandy CLAY. Gravel is angular to subangular fine flint.		1.90	D		
	2.10-3.00 (0.90)		Orange brown / yellow mottled red slightly clayey, slightly gravelly SAND. Gravel is angular to subrounded fine to medium flint. 2.10 - 3.00 Damp.					

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

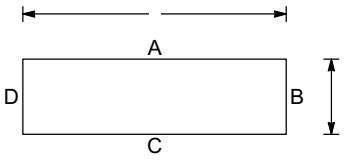
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP118**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	30-04-07 30-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.20		Tarmac hardstanding.					
	0.20-0.40		MADE GROUND: Yellow brown orange slightly clayey very sandy angular to subrounded GRAVEL of flint.					
	0.40-0.45		Concrete.					
	0.45-1.20 (0.75)		Orange brown slightly clayey very sandy angular to subrounded fine to coarse GRAVEL of flint.		0.90-1.20	ES		
			Strata saturated with oil like fluid.					

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

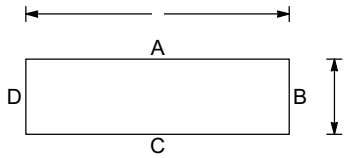
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP119**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	30-04-07 30-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.05		Concrete paving.					
	0.05-0.15		MADE GROUND: Yellow brown slightly gravelly SAND. Gravel is subangular to subrounded fine flint (subbase).					
	0.15-1.00		Orange brown slightly clayey very sandy angular to rounded fine to coarse GRAVEL of flint.					
	(0.85)				0.80	ES		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

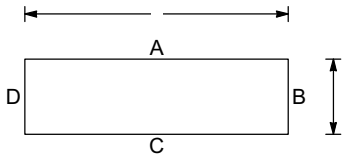
WSP Environmental
24 - 30 Holborn
London
Telephone: 020 7314 5000
Fax: 020 7314 5005

TRIAL PIT LOG

Project				TRIAL PIT No
Phase 400, Radlett				**TP120**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
12041157/001	30-04-07 30-04-07			
Supervising Engineer		Client		Sheet
Mark Emerson		SEGRO		1 of 1

Water	Depth (thickness)	No	STRATA DESCRIPTION	Legend	SAMPLES Depth	SAMPLES No	HSV Depth	HSV Result
	0.00-0.30 (0.30)		MADE GROUND: Dark brown slightly clayey very sandy angular to subrounded fine to coarse GRAVEL of flint. Occasional rootlets.					
	0.30-1.20 (0.90)		Orange brown very sandy angular to subrounded fine to coarse GRAVEL of flint.		1.00	ES		

Shoring/Support:
Stability:



GENERAL REMARKS

All dimensions in metres Scale 1:30.3	Contractor	Method/ Plant Used	Logged By MAE

WSP TP LOG (NO BOX) PHASE 400 RADLETT.GPJ WSP GROUP.GDT 29/5/07

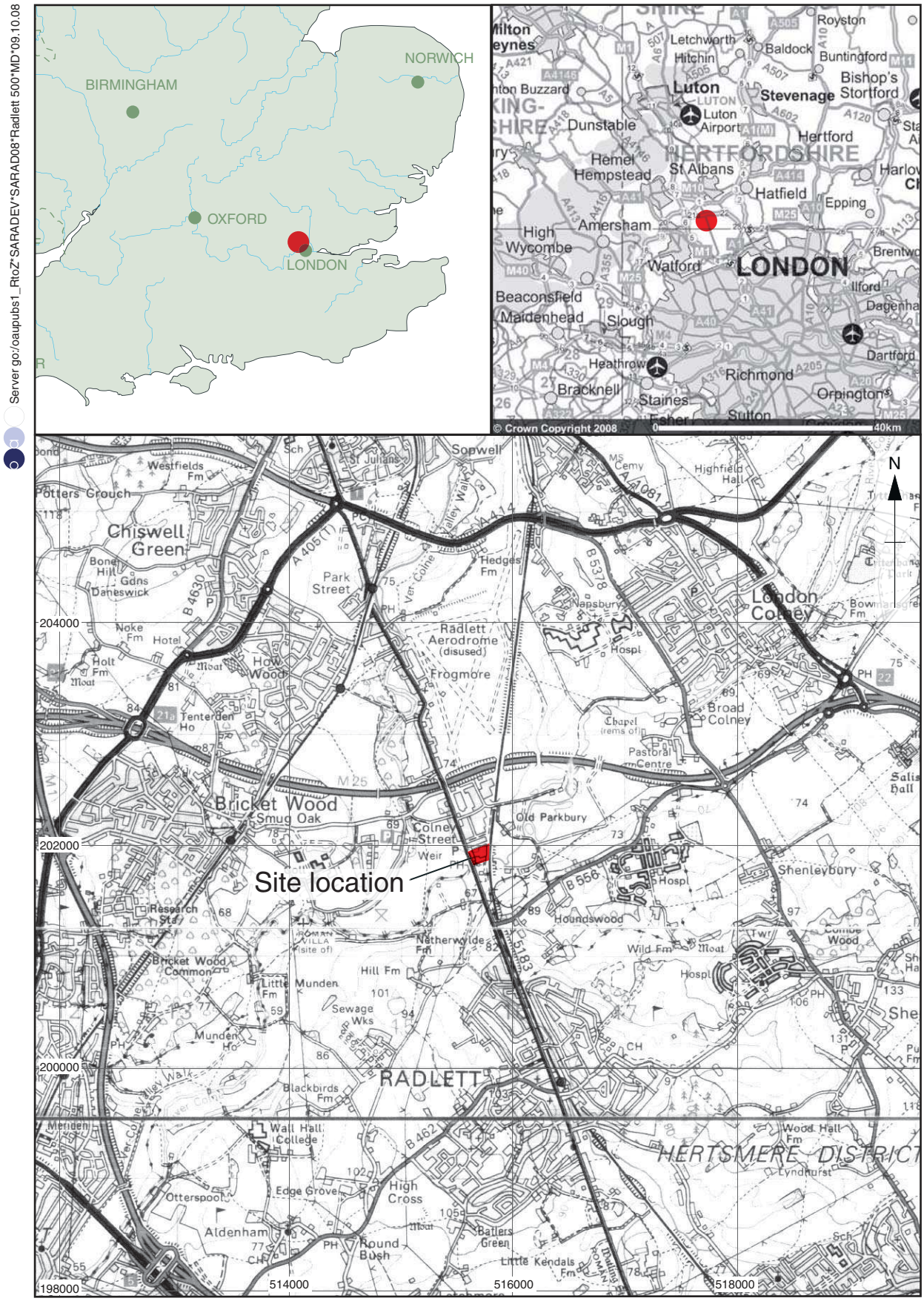


Figure 1: Site location

X:\SARADEV_Radlett500_St_Albans \010Geomatics\02 CAD\001current\SARADEV_current_081008*SL*131008

Trench 3

Trench 1

Trench 2

RADLETT ROAD

70.881

67.685

67.721

66.630

65.511

65.158

66.505

515750E

201950N

515600E

201850N

N

0 10 m

Scale at A3 1:500

Oxford Archaeology
Janus House,
Osney Mead,
Oxford,
OX2 0ES.
Tel: 01865 263800 Fax: 01865 793496
email : mail@oxfordarch.co.uk
web : www.oxfordarch.co.uk

Drawing No.	
Date printed	
Drawing title	

Figure 2
Trench location plan

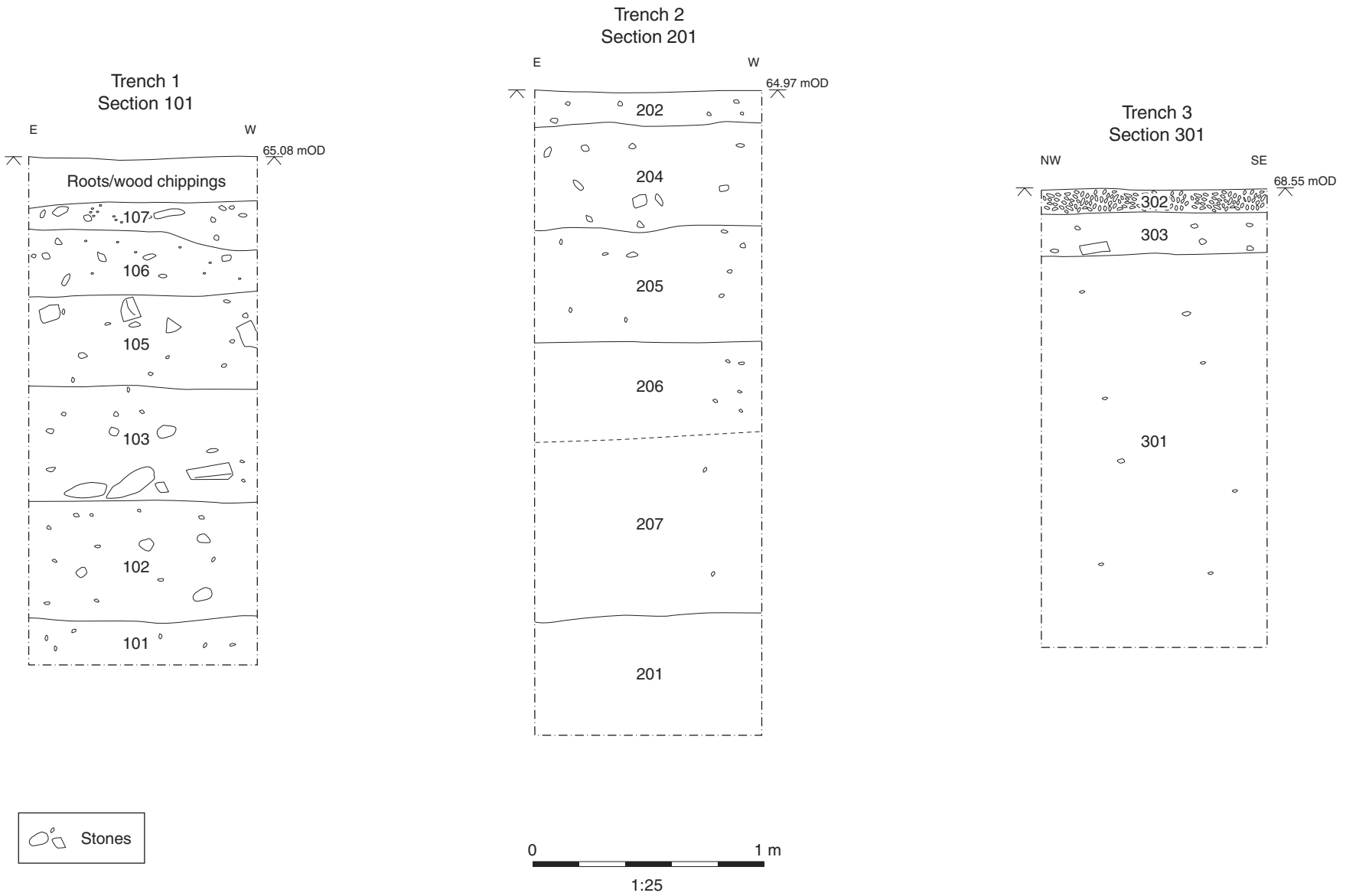


Figure 3: Sections 101, 201 and 301

Oxford Archaeology

Janus House
Osney Mead
Oxford OX2 0ES

t: (0044) 01865 263800
f: (0044) 01865 793496
e: info@oxfordarch.co.uk
w:www.oxfordarch.co.uk

Oxford Archaeology North

Storey Institute
Meeting House Lane
Lancaster LA1 1TF

t: (0044) 01524 848666
f: (0044) 01524 848606
e: lancinfo@oxfordarch.co.uk
w:www.oxfordarch.co.uk

Director: David Jennings, BA MIFA FSA

Oxford Archaeological Unit is a
Private Limited Company, No: 1618597
and a Registered Charity, No: 285627

Registered Office:
Oxford Archaeological Unit
Janus House, Osney Mead, Oxford OX2 0ES