Wessex Archaeology

Gateway Community College, Tilbury Essex

Archaeological Watching Brief

Ref: 57311.01

December 2006

GATEWAY COMMUNITY COLLEGE, TILBURY
ESSEX

Archaeological Watching Brief

Prepared for
CgMs Consulting

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Summary

CgMs Consulting commissioned Wessex Archaeology in London to undertake an archaeological watching brief during construction of the Gateway Community College, Tilbury, Essex at National Grid Reference (NGR) 564230, 177780 (hereafter the Site).

The watching brief was undertaken as a condition of planning consent for the development of the site from low lying farmland to a new Further Education facility with sports pitches, access roads and car parking. The majority of the work on Site was largely non-intrusive due to the construction techniques and depths excavated. All roads and sports pitches were graded off through homogeneous alluvial clays to a depth of up to 1m beneath the existing ground surface and piling was restricted to the construction of the main college building. Observations were only undertaken on excavated areas which were below 1.50m from the ground surface, such as drainage related activities where these interventions went into peat deposits inferred from previous geotechnical work.

Seven areas of such drainage work were observed and recorded, revealing peat deposits from which no archaeological remains or finds were observed.

GATEWAY COMMUNITY COLLEGE, TILBURY ESSEX

Archaeological Watching Brief

Acknowledgements

Wessex Archaeology in London was commissioned by CgMs Consulting. Wessex Archaeology in London would like to thank the onsite staff of Kier Group plc and Galldris Construction Ltd for their assistance.

This report was undertaken by Hilary Valler, the watching brief was undertaken by Cornelius Barton, Gary Evans and Hilary Valler. The illustrations were prepared by Kitty Brandon and the project was managed for Wessex Archaeology in London by Lawrence Pontin.

GATEWAY COMMUNITY COLLEGE, TILBURY ESSEX

Archaeological Desk-based Assessment

1 INTRODUCTION

1.1 Project Background

1.1.1 CgMs Consulting commissioned Wessex Archaeology in London to undertake an archaeological watching brief during the construction of the Gateway Community College, Tilbury at National Grid Reference (NGR) 564230, 177780 (hereafter the Site).

1.1.2 An earlier phase of work was undertaken in July 2004 to record sixteen geotechnical test pits prior to the construction of the College (Wessex Archaeology, 2004).

1.1.3 This report refers to the watching brief undertaken during the construction on the Site from 8th May until 15th November 2006.

1.1.4 The work was undertaken as a condition of planning consent.

1.2 Site Description

1.2.1 The Site is located on the Thames floodplain midway between Chadwell St Mary and Tilbury. It is bounded by Marshfoot Road (A126) to the north and St Chad's Road (A126) to the east (**Figure 1**).

1.2.2 The Site comprises *c*.2ha of flat arable land, lying at a height of around 2m above Ordnance (aOD), which is crossed by a series of drainage ditches and a trackway. The underlying geology comprises Marine Alluvium.

1.2.3 To the north of the Site, the land rises sharply to the gravel bluffs, at around 25m aOD, that over look the floodplain.

1.3 Archaeological Background

1.3.1 A desk-based assessment of the Site was carried out in support of the original planning application (CgMs Consulting, 2003). Below is a summary of its conclusions.

1.3.2 There is low potential for finding remains relating to the Palaeolithic, Mesolithic, Neolithic, Bronze Age, Saxon and medieval periods due to the absence of evidence in the vicinity of the Site.

1.3.3 There are no known Iron Age finds from the Thames floodplain in the vicinity but a Romano-British settlement site has been excavated 150m to the north east of the Site and some finds associated with occupation during this period have been found in the Tilbury Docks area.

1.3.4 A number of WWII anti-glider ditches are recorded as excavated on the Marshes and within the site. Evidence of one of the ditches was observed during the watching brief on the geotechnical test pits (Wessex Archaeology, 2004).

2 WATCHING BRIEF AIMS

2.1.1 The aim of this project was to determine, as far as reasonably possible, the presence/absence, extent, date, character and depth of any surviving archaeological remains located during the construction and excavation of associated services.

2.1.2 A more specific aim relating to this phase of the construction was to observe and record stratigraphic sequences during excavations which extended below 1.5m below ground surface. This was to record the peat sequence and any archaeological remains which may have been present below this depth.

3 METHODOLOGY

3.1 Methodological Standards

3.1.1 All work was undertaken in compliance with the standards outlined in the Institute of Field Archaeologist's Standards and Guidance for Archaeological Watching Briefs (as amended 2001).

3.2 Health and Safety

3.2.1 All work was carried out in accordance with the Health and Safety at Work Act (1974) and the Management of Health and Safety Regulations (1992), and all other relevant Health and Safety legislation, regulations and codes of practice in force.

3.2.2 A risk assessment was prepared by Wessex Archaeology prior to the commencement of fieldwork.

3.3 Fieldwork

3.3.1 The majority of the work on Site was largely non-intrusive due to the construction techniques and depths excavated. All roads and sports pitches were graded off to establish a surface and the buildings have been constructed by piling. Consequently, observations were only undertaken on excavated areas which were below 1.50m from the present ground surface, such as drainage related activities which were likely to impact buried peat deposits.

3.3.2 Seven specific areas of excavation were watched during this phase of the project (**Figure 2**).

3.3.3 All deposits were visually scanned during their removal during excavation.

3.3.4 Representative sections of each observed excavation area were drawn at a scale of 1:20 and the position of which was recorded on a master plan of the

Site. Written records were taken using Wessex Archaeology's pro forma recording system and a photographic record of the works was maintained.

4 RESULTS

4.1 Introduction

4.1.1 The following section provides a brief summary of the findings for all recorded interventions and each has been allocated a trench number. Detailed descriptions of deposits and depths are provided in **Appendix 1**.

4.1.2 Four trenches recorded on the eastern side of the Site (Trenches 1, 5, 6 and 7, see **Figures 2 & 3** for illustrations and **plates 1-3** of Trenches 5 and 7, Trenches 1 and 6 not illustrated) showed that peat was observed at a similar level, between -2.60 and -2.37m OD The peat was consistently of fibrous organic material such as reed and had the consistency of a clay based peat. No archaeological remains or finds were observed within the peat. No other trenches (Trench 2, 3 and 4, not illustrated) were excavated to a depth below -2.10m OD and therefore the peat was not observed within these trenches.

4.1.3 In all the trenches on the eastern side, the layers above the peat were of homogeneous, firm silty clay alluvium, below topsoil.

4.1.4 The two trenches (Trenches 2 and 3, not illustrated) on the north side of the Site were excavated to establish culverts under access routes to the Site. Both produced redeposited peat at a depth of -0.42 to -0.56m OD beneath layers of alluvium which lay under topsoil.

5 CONCLUSION

5.1.1 In conclusion, the watching brief has demonstrated that little if anything, of archaeological significance has been impacted upon by the construction of the development. A layer of peat was recorded at an apparently consistent depth of -2.60 to -2.37m OD. No archaeological remains or finds were recovered from the peat or the alluvium above it.

6 BIBLIOGRAPHY

CgMs Consulting, 2003, *Specification for an Archaeological Evaluation. Gateway Community College, Tilbury, Essex*. Unpublished report.

Institute of Field Archaeologists (IFA), 2001, *Standards and Guidance for Archaeological Watching Briefs*

Wessex Archaeology, 2004, *Proposed Site of Gateway Community College, Tilbury, Essex: Archaeological Watching Brief*. Unpublished client report (Ref: 57310).

APPENDIX 1: TRENCH SUMMARY SHEETS

Trench 1

	DIMENSIONS: 1.60MX 3.60M MAX. DEPTH: 3.10M		
Context	**Description**	**Interpretative & Process of deposition**	**Depth (m OD)**
101	Firm, mid-dark brownish grey silty clay with 20% mid orange brown mottling near base. Diffuse boundary at base.	Topsoil	0.30-¯0.10m
102	Light brown grey silty clay with 40% mid orange brown mottling throughout. Wavy, diffuse boundary at base.	Alluvium	¯0.10-¯0.70m
103	Soft mid bluish grey silty clay homogeneous deposit with few small rounded stones, frequent flecks of black/dark brown with frequent organic materially horizontally deposited of light yellow reeds..	Alluvium	¯0.70-¯2.50m
104	Dark reddish brown soft, wet fibrous clayey peat with moderate organic material, reeds lain horizontally. Organic concentrated within upper 90mm of deposit.	Peat	¯2.50-¯3.10m+

Trench 2

	DIMENSIONS: 5.50MX 1.50M MAX. DEPTH: 1.50M		
Context	**Description**	**Interpretative & Process of deposition**	**Depth (m OD)**
201	Light to mid brown with up to 40% mid orange mottling throughout. A homogeneous moderately compact clayey silt with occasional sub-angular >20mm flint pebbles, moderate planks and plastic sheets.	Topsoil	¯0.12-¯0.62m
202	Light to mid bluish grey becoming darker on exposure to air. Very soft clay with frequent flecks of dark brown peat throughout. No inclusions except moderate becoming very frequent yellow reed fragments within lowest 0.20m of this deposit.	Alluvium	¯0.62-¯1.72m
203	Mid to light brown clay peat with fibrous mixed with light blue clay peat deposit from nearby ditch. Modern material within i.e. plastic bags and planks.	Redeposited peat	¯0.42-¯1.62m

Trench 3

	DIMENSIONS: 5.00MX 1.60M MAX. DEPTH: 1.60M		
Context	**Description**	**Interpretative & Process of deposition**	**Depth (m OD)**
301	Light brownish friable silty clay with occasional small sub-angular flint pebbles and chalk fragments.	Topsoil	¯0.16-¯0.56m
302	Dark brown silty clay homogeneous deposit with frequent reed fragments. Diffuse and wavy boundary.	Alluvium	¯0.56-¯0.96m
303	Mid to light grey blue homogeneous clay with occasional small flecks of black/dark brown peat.	Alluvium	¯0.96-¯1.76m
304	Very soft dark brown peat with fibrous clayey peat. Organic with moderate reed inclusions, occasional wooden sleepers. Redeposited from nearby ditch.	Redeposited peat	¯0.56-¯1.46m+

Trench 4

	DIMENSIONS: 5.20MX 2.00M MAX. DEPTH: 2.00M		
Context	**Description**	**Interpretative & Process of deposition**	**Depth (m OD)**
401	Light to mid brown friable clayey silt with occasional sub-angular small >20mm flint pebbled. Diffuse, wavy boundary.	Topsoil	¯0.10-¯0.60m
402	Light brown homogeneous silty clay. Diffuse, wavy boundary.	Alluvium	¯0.60-¯1.10m
403	Light to mid bluish grey soft silty clay homogeneous deposit with no inclusions (not fully excavated).	Alluvium	¯1.10-¯2.10m+

Trench 5

	DIMENSIONS: 5.00MX 2.70M MAX. DEPTH: 2.70M		
Context	**Description**	**Interpretative & Process of deposition**	**Depth (m OD)**
501	Light brownish grey silty clay with 80% mid orange brown mottling throughout. Malleable deposit with no inclusions. Diffuse, even boundary.	Topsoil	0.00-¯0.20m
502	Dark brownish grey with 80% dark orange brown mottling throughout silty clay (30/70). Occasional	Alluvium	¯0.50-¯0.70m

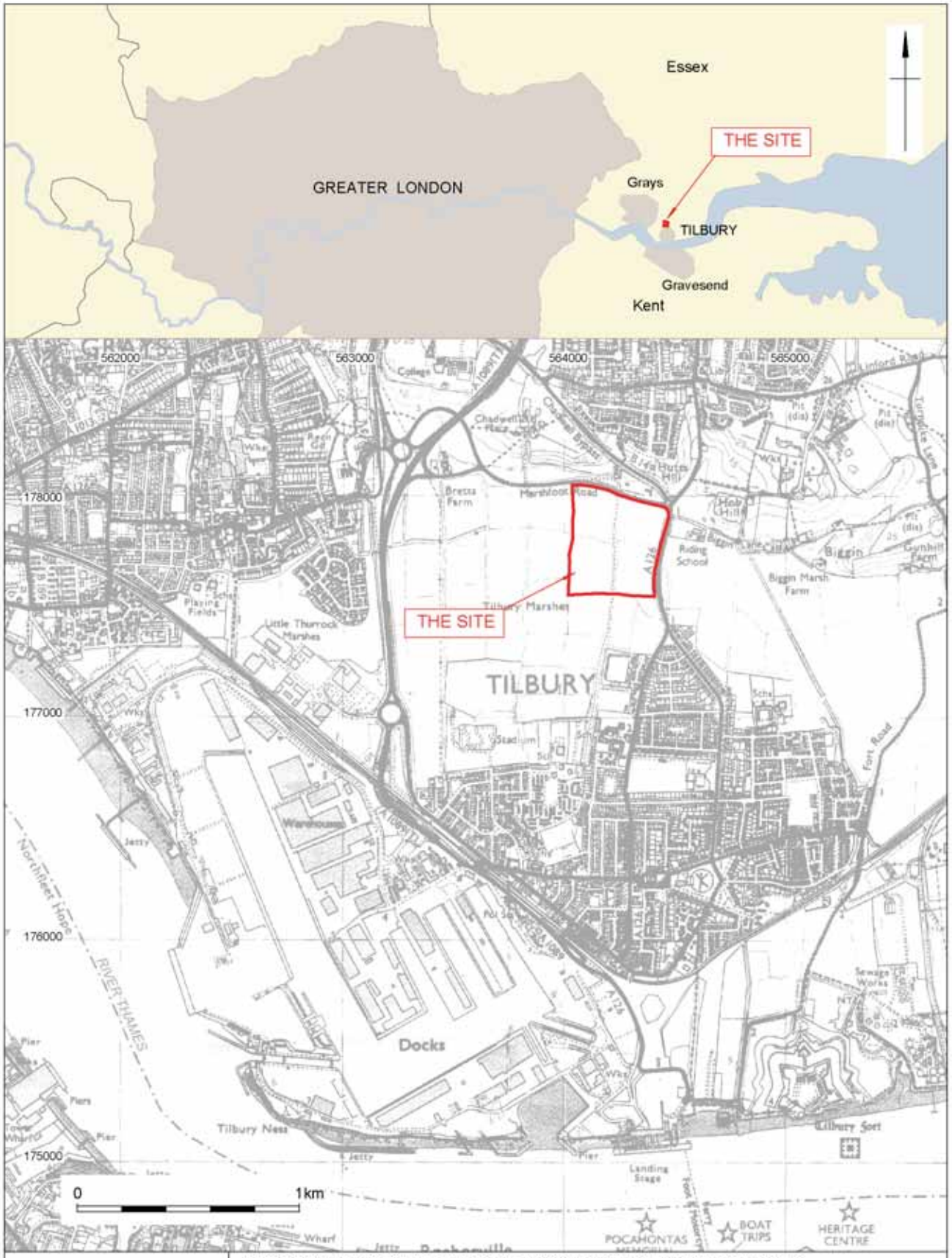
	fragments of decomposed vegetation, malleable deposit with no other inclusions. Diffuse, wavy lower and upper boundaries becoming darker after 30 minutes exposure to air.		
503	Soft, mid bluish grey silty clay becoming darker when exposed to air. With frequent small flecks of black throughout. After 2.00m depth frequent small vertically running roots (1-2mm thickness) some 0.90m long. No other inclusions observed. Lower boundary diffuse, gradually becoming darker and browner with root % increased.	Alluvium	¯1.00-¯2.40m
504	Malleable dark greenish brown, blue grey silty clay (20/70). With frequent up to 10% decomposed vegetation fragments most lying horizontally with some vertical (20%), matted deposit very thin, flat reed like structures with 80% vegetable inclusions, 20% was vertical roots round 3mm wide and up to 10mm long.	Alluvium	¯2.20-¯2.40m
505	Clay peat slopes down from 2.40m in west to 2.60m. Friable peat with mottled vegetation in long horizontal light yellow reed like structures (80%), 1mm thick, 10mm wide & 30mm long. Some 20% reddish very decayed plant remains (poss. Wood?) remains of plants appears to be concentrated within upper 50mm of deposit. Base of this deposit is not reached.	Peat	¯2.60-¯2.70m+
506	Light greyish brown with 30% brown orange mottling. Silty clay with no inclusions. Even and sharp boundary.	Alluvium	¯0.60-¯0.80m
507	Light brown homogeneous silty clay. Sharp boundary	Alluvium	¯0.10-¯0.30m

Trench 6

	DIMENSIONS: 2.00MX 3.00M MAX. DEPTH: 2.00M		
Context	**Description**	**Interpretative & Process of deposition**	**Depth (m OD)**
601	Mid to dark brownish grey firm silty clay with 25% mid orange brownish mottling towards the base of the layer.	Topsoil.	¯0.01-¯0.31m
602	Pale brown grey firm silty clay homogeneous layer with occasional small sub-angular pebbles.	Alluvium	¯0.31-¯1.01m
603	Dark brownish grey with 80% dark orange brown mottling throughout the silty clay with occasional fragments of decomposed vegetation	Alluvium	¯1.01-¯2.41m
604	Dark red brown fibrous peat with 20% clay.	Peat	¯2.41-¯2.51m+

Trench 7

	DIMENSIONS: 5.00MX 4.00M MAX. DEPTH: 3.10M		
Context	**Description**	**Interpretative & Process of deposition**	**Depth (m OD)**
701	Mid brown silty clay with rare sub-rounded stones, brick rubble and modern make up material.	Topsoil	0.03-¯0.17m
702	Mid brown orange silty clay with 40% grey mottling towards base of layer, diffuse boundary at base.	Alluvium	¯0.17-¯0.47m
703	Dark grey brown silty clay band.	Alluvium	¯0.47-¯0.57m
704	Mid to dark orange brown silty clay homogeneous alluvial layer with 40% grey mottling.	Alluvium	¯0.57-¯1.17m
705	Mid grey silty clay with rare organic material towards the base of the layer. Sharp, horizontal boundary.	Alluvium	¯1.17-¯2.37m
706	Dark brown clayey peat, containing fibrous fine and medium reed material throughout the layer. Not fully excavated.	Peat	¯2.37-¯3.07m+



Area of Watching Brief

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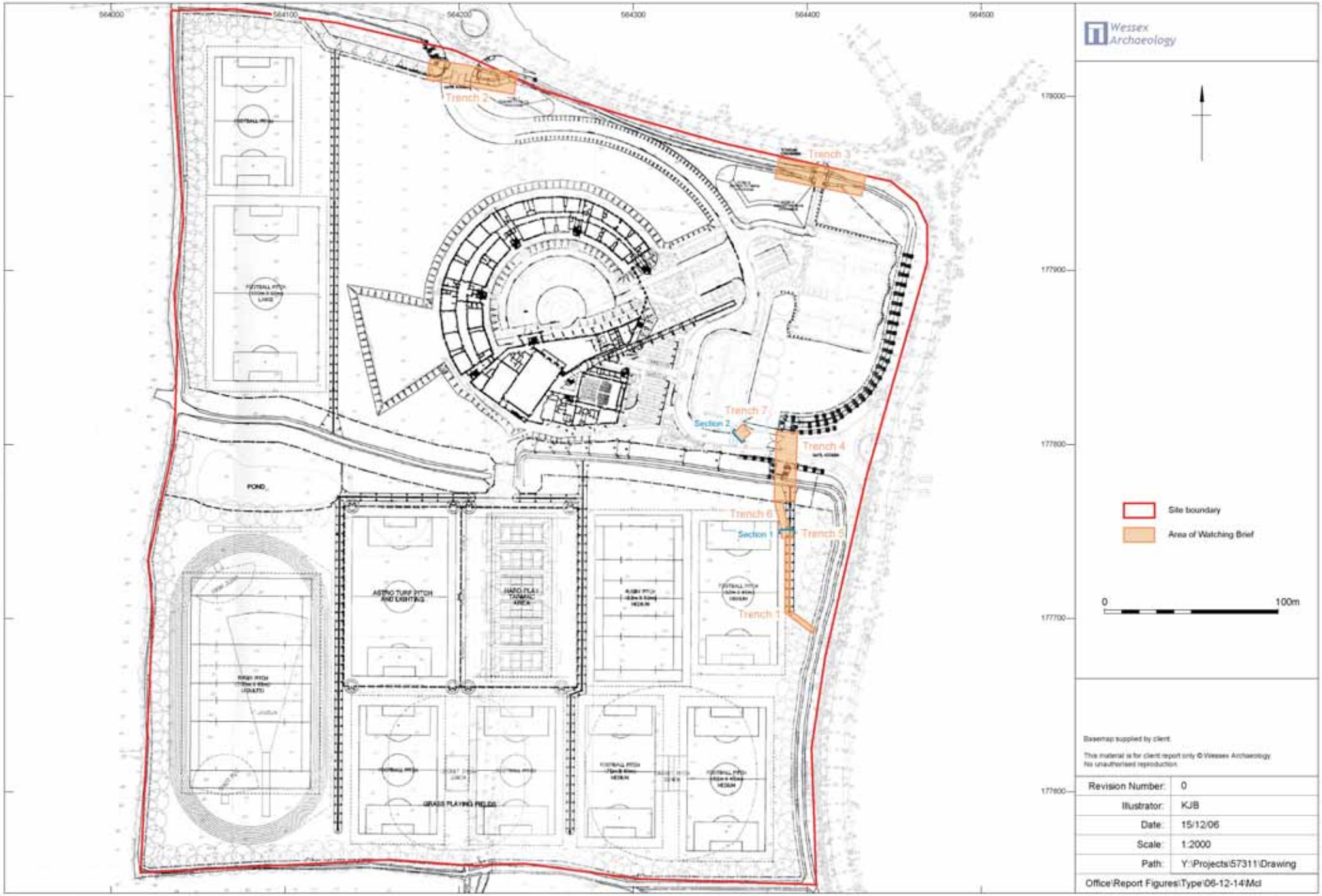
Wessex Archaeology

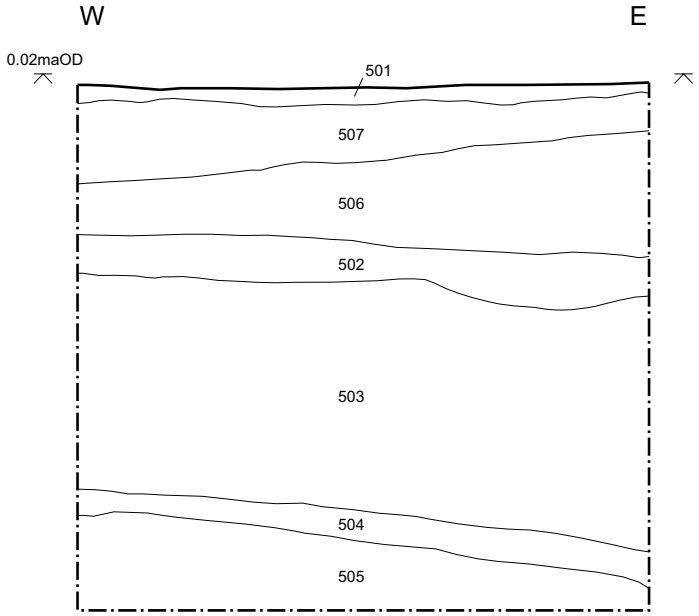
Site location

Figure 1

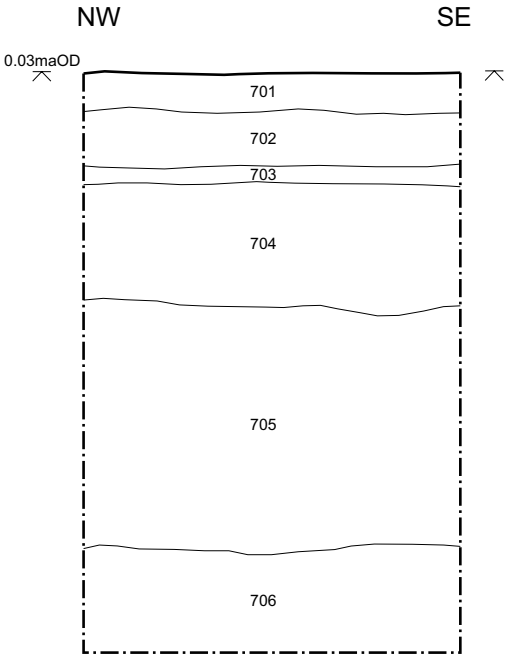


Site plan showing areas covered by Watching Brief

Figure 2



Section 1: Trench 5 south facing



Section 2: Trench 7 north east facing

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Section drawings

Figure 3

Plate 1. Trench 5

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Plate 2. Trench 7 (0-1.30m)

Plate 3. Trench 7 (1.30-3.10m)

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