

Report on an Archaeological Watching Brief



MOL# - OGW08

Ref: 70480.02 January 2009





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Ref: 70480.02

January 2009

Museum of London Code OGW08

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Report on Archaeological Watching Brief

Summary

This report presents the results of an archaeological watching brief commissioned by RPS Planning and Development on behalf of Veolia Environmental Services Ltd and carried out by Wessex Archaeology. The watching brief was carried out during ground works at the Southwark Integrated Waste Management Facility, Old Kent Road, London centred on NGR 534993, 177773.

The work was carried out on works comprising geotechnical test-pitting and removal of building footings prior to redevelopment. It took place between October and December 2008.

No archaeological features or artefacts were found during the watching brief. The groundworks exposed a series of made-ground deposits overlying alluvial clays. The removed foundations were of considerable size and depth, and it is not considered likely that any archaeological remains could have survived beneath the buildings. The remainder of the Site may have the potential to contain archaeological remains below the made ground deposits.

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Acknowledgements

The project was commissioned by Dan Slatcher of RPS Planning and Development on behalf of Veolia Environmental Services Ltd (the Client). Wessex Archaeology would like to thank Tsepo Dingaan and the staff of Fitzpatrick's for their assistance and co-operation on Site.

The project was managed for Wessex Archaeology by Lawrence Pontin. The fieldwork was undertaken by Cornelius Barton, Gary Evans and Kate Orr. Cornelius Barton compiled this report. Illustrations were prepared by Kitty Brandon.

Report on Archaeological Watching Brief

1 INTRODUCTION

1.1 Scope of Document

- 1.1.1 Wessex Archaeology undertook a watching brief at Old Kent Road, Bermondsey, London Borough of Southwark (the Site), centred on National Grid Reference (NGR) 534993, 177773 (**Figure 1**).
- 1.1.2 This document presents the results of the watching brief which took place on geotechnical test-pitting and removal of footings between October and December 2008.

1.2 Planning Background

- 1.2.1 Veolia Environmental Services Ltd instructed RPS Planning and Development to compile a specification for archaeological works in connection with the approved development proposal to construct an Integrated Waste Management Facility off the Old Kent Road, London.
- 1.2.2 The watching brief was carried out in accordance with the Specification prepared by RPS Planning and Development (RPS, 2008) and approved by the Archaeological Advisor to the London Borough of Southwark.

2 SITE DESCRIPTION

2.1 The Site

- 2.1.1 The Site is located at the southern end of the Old Kent Road, Bermondsey, London (**Figure 1**). The main part of the Site lies at an elevation of between 2.5 and 3.5 metres OD; the area to the south and west of building J (see **Figure 1**) has been raised considerably, and lies at a height of 5.5- 5.8 metres OD. The Site covers an area of 5.7 hectares.
- 2.1.2 The approved development area is divided into operational and non-operational areas. The main access is located off Old Kent Road (A2) between Murdock Street and Devon Street. The area is bounded to the north by derelict land used for carparking, by industrial buildings and Ormside Street to the east and to the south and west by industrial businesses.

2.2 Geology

2.1.3 The British Geological Survey map (sheet 270) records the drift geology of the area comprising drift deposits of Langley Silts brickearth and Kempton Park Gravels overlying solid Thanet Beds and Upper Chalk (BGS 1998). This was confirmed by a



detailed geotechnical investigation of the Site carried out by Crossfield Consulting in 2007.

2.2 Made ground deposits

- 2.2.1 The geotechnical survey demonstrated that made-ground deposits were present across the Site area (see **Figure 2** and **3**). A series of 37 window-samples (WS) were dug; the results are recorded in full in Appendix 2.
- 2.2.2 Made-ground deposits were present in all of the sampled areas. WS 1-9 were dug in the northeastern part of the Site, between buildings C and F. Made ground was present to depths of 0.60 1.50m below present ground level, consisting largely of mixed clays with sand, gravel, ash, clinker and brick rubble. To the east of building F, WS 20-25 revealed similar deposits generally to depths between 1.10 -1.80m, although WS20 revealed deposits of clay and concrete rubble to a depth of 3.20m.
- 2.2.3 In the central area, WS 10-18 and WS 25-27 the made ground deposits were between 0.65 and 2.10m thick. The deposits consisted largely of redeposited organic clays, mixed with ash, brick, coal and clinker.
- 2.2.4 The remaining window samples (WS 28 37) were dug in the south area of the Site. In general, the made-ground deposits tended to become deeper toward the south. WS 30 and 31, excavated at the far south end of the Site, revealed redeposited clay with ash and clinker to a depth of 3.50m. The increased depth at the south end is the result of this part of the Site being artificially raised to form a ramp.
- 2.2.5 The made ground deposits consist mainly of redeposited alluvial clay mixed with industrial waste products, presumably waste from the earlier phases of the gasworks. A few of the samples (WS4, 10, 13 and 37) contain organic material, probably the remains of garden-soils from the allotments (see **3.2** below). The deposits were probably used to level the site during redevelopment in the late 19th and early 20th centuries.

3 ARCHAEOLOGICAL BACKGROUND.

3.1 Desk-Based Assessment

3.1.1 An archaeological desk-based assessment of the background and archaeological potential of the Site was carried out by RPS Consulting (RPS 2008). A summary of the findings follows.

Prehistoric

3.1.2 There is considerable recorded evidence for prehistoric activity in the wider area, with evidence for both cemetery and possible occupation activity being recorded. The area now encompassed by Southwark and Deptford was largely marshland during the prehistoric period, the Thames being wider than the present day. Prehistoric settlement is known to have taken place on several eyots or sandy

islands along what is now the southern bank of the Thames, which would have been on higher ground than the marsh. These islands were attractive to early farmers (Cowan, 2000).

3.1.3 A flint making site was found on Old Kent Road, some 600 metres northwest of the Site, on what is now the B & Q site, at NGR TQ 3420 7790 comprising over 1700 artefacts. The site was interpreted as a temporary camp and it was also used during the Neolithic (Cowan, 2000)

Romano-British

- 3.1.4 Watling Street, the Roman road running south from London through Kent forms the line of the Old Kent Road. The exact line of the road between Southwark and Greenwich is unknown (SMR number MLO11490). The Site would have been located some 3.5 kilometres from the Roman city and is likely to have been in an area of farmland or marsh during the Roman period.
- 3.1.5 There is recorded evidence for Roman remains in the vicinity of the Site. On the south side of Old Kent Road, near its junction with Asylum Road, the remains of a building, probably of Roman date, have been recorded at 4-10 Asylum Road (SMR numbers MLO58925, MLO58926).

Medieval

- 3.1.6 There is little physical evidence for Anglo Saxon activity in the area, although it is assumed that Old Kent Road remained in use during this period. The Site apparently lay in the manor of Hatcham during the medieval period. The Domesday Book of 1086 states that Hatcham lay in Brixton Hundred, was held by the Bishop of Liseux from the bishop of Bayeux and that prior to the conquest it had been held from Edward the Confessor (Williams & Martin, 1992).
- 3.1.7 It seems likely that much of the area was dominated, if not owned, by Bermondsey Abbey during the medieval period. This was located at 3.3 kilometres north-west of the Site. There is little, if any, evidence for medieval activity within the Site area itself and it seems likely that it was used for agriculture rather than settlement.

3.2 Gasworks Buildings

- 3.2.1 The area appears to have been fields during the medieval and post-medieval periods. The first detailed map of the area is John Rocque's map of 1762, which shows the Site and the surrounding area as fields
- 3.2.2 Development in the area seems to have commenced in the early 19th century. The South Metropolitan Gas Company was formed in 1829 and a site for a gas works was selected adjoining the Grand Surrey Canal on the eastern side of Old Kent Rd (National Gas Archive Catalogue Ref. SE:SOM). The South Metropolitan Gas Works was constructed in 1831. The site was apparently chosen because of its proximity to the Grand Surrey Canal, along which coal could be delivered.



- 3.2.3 The gasworks is shown on Stanford's Map of 1862, with gasholders along the southern boundary of the canal, outside the Site. Most of the Site is shown as 'Market Gardens'. The exception is the south-eastern part, which is not shaded in the Stanford market garden convention and was probably fields, or perhaps a recreation ground, as indicated on later maps. The area to the south-east and west of the Site had been developed by this time, the south and east mainly for housing and the west for industry, possibly the gasworks. To the north lay the canal. Devonshire Street, to the south of the Site, had not been constructed at this time.
- 3.2.4 The first large scale edition of the Ordnance Survey, of 1874 shows a gasholder outside the northwestern boundary of the Site, with a well immediately to its east. The Site itself is shown to contain paths and a number of small features marked as 'tanks'. These may be associated with the allotment gardens. The 6-inch Ordnance Survey Middlesex edition of 1880 shows the Site, apparently with a convention indicating allotments or market gardens.
- 3.2.5 The 1896 edition of the OS shows a row of four gasholders outside the western boundary of the Site. Within the Site itself, the gasworks had expanded to cover the northern half. The remainder of the Site contained buildings in the west and allotment gardens, a cricket ground and a recreation ground are shown in the southeastern part.
- 3.2.6 The 1916 edition of the OS shows more of the Site having been built over, although the southeast of the proposed development area remained as a sports field and allotment gardens. This edition shows a group of buildings to the north and east of the large southernmost gasholder. Some of these buildings are located within the proposed development area. The 6-inch edition of 1920 shows a similar disposition.
- 3.2.7 A site plan dated 1937 (National Gas Archive SE/SOM/OK/EB4) shows the layout of the works at that time. The works comprised the section along the Surrey Canal, with gasholders in the positions occupied by three gasholders currently surviving adjacent to the proposed development area. The coal stores and retort houses were located outside the north-eastern part of the Site. The south-eastern part of the Site is marked 'coal ground'. A stores and dispatch building is also shown in the area (Building J). To its west was a stove cleaning shop, while to the west of this was a water heater shop and stores (Building G). To the north of this latter building was a demonstrator room (Building E). A boiler house and engine room and coke conveyors and a coke ground occupied the remainder of the Site.
- 3.2.8 The works was heavily bombed during the Second World War as a plan held by the National Gas Archive shows (National Gas Archive BG11/SOM/SM2/EB8), with an unexploded bomb being discovered in one of the gas holders post-war (Mercer 1996).
- 3.2.9 A comparison of pre and post war mapping indicates that, within the Site, no major buildings were demolished. The early post war edition of the OS, dated 1951, shows that much of the centre and southeast of the Site remained as open ground at that

- time. To the east of the Site, vacant plots along Ormside Street, Hatcham Road and Ilderton Road indicate that bombing had been intense in this area..
- 3.2.10 The Old Kent Road works ceased gas production in 1953/4. (Mercer, 1996) This was apparently because of the expense of transporting coal by barge along the Grand Surrey Canal (Mercer: 25). A Central Training Establishment was proposed at the Old Kent Road site, with redevelopment being planned in 1958 (Mercer 1996).
- 3.2.11 The Ordnance Survey edition of 1962 indicates that some of the southeastern part of the Site remained undeveloped. A plan dated 1967 (National Gas Archive SE/SU/OKR/EE2) shows Building G was in use as a AWS water heater shop and AWS tin shop while Building E had been enlarged and was used as industrial, aerodynamic and material laboratories. Building J was used as an appliance warehouse. Most of the remainder of the site was in use for training purposes, with a mains and service layers training road located in the centre of the coal ground. To the north of this Building F had been constructed and is shown as a Training Centre.
- 3.2.12 A plan dated 1982 (National Gas Archive SE/SUD/OKR/EE1) shows that most of the coal ground had been converted into a car park. Building G was in use as a warehouse, while Building E remained in its 1967 use. By 1991, the Ordnance Survey indicates that the Site was in approximately its current layout.

3.3 Archaeological Potential

- 3.3.1 The development of the gas works within the Site is likely to have damaged and degraded any previously existing archaeological remains.
- 3.3.2 There are no known prehistoric, Roman, medieval, or post medieval remains within the Site. Prehistoric settlement is known to have taken place on several eyots along the southern bank of the Thames, with further remains having been found in the marsh. Surviving remains of this period are likely to be of local to regional importance.
- 3.3.3 Old Kent Road follows the line of the Watling Street Roman Road from London through Kent to Richborough. The road itself and an area on each side is designated as an Archaeological Priority Area in the Southwark Plan. Any Roman remains in the area are likely to represent rural settlement, rather than being part of the Roman suburb. The potential for the survival of remains of Roman date within the Site is considered to be low to medium. Surviving remains of this period are likely to be of local to regional importance.
- 3.3.4 The area appears to have been fields during the medieval period and later and the potential for remains of medieval or post medieval date to survive within the Site is considered to be low.

4 AIMS AND OBJECTIVES

4.1 Aim of Watching Brief

4.1.1 The aim of the project was to record any archaeological features which were exposed during the removal of building footings. Based upon these results a model has been formulated of areas of the Site in which archaeological remains might be expected to survive, and at what depth.

5 METHODOLOGY

5.1 Methodological Standards

5.1.1 All works were conducted in compliance with the standards outlined in the Institute of Field Archaeologists' Standard and Guidance for Archaeological Watching Briefs (2001), English Heritage's London Region Standards and Practices in Archaeological Fieldwork (1998) and the Museum of London and English Heritage's A Research Framework for London archaeology (2002).

5.2 Health and Safety

- 5.2.1 Health and Safety considerations were of paramount importance in conducting all fieldwork. Safe working practices overrode archaeological considerations at all times.
- 5.2.2 The work was undertaken 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 legislations, regulations and codes of practice which are in force.
- 5.2.3 Risk Assessment was produced by Wessex Archaeology prior to the commencement of work. This was reviewed as the project progressed.
- 5.2.4 As part of the project briefing, all staff were made aware of their responsibilities and site specific hazards identified under the Risk Assessment. In particular, site staff were instructed not to handle deposits on Site where it could be avoided, due to the presence of contaminants. Fitzpatrick's site engineers advised that the ground at the Site was contaminated with substances including copper sulphate and sodium cyanide.

5.3 Fieldwork

- 5.3.1 The fieldwork strategy is described in detail in the Written Scheme of Investigation (Wessex Archaeology, 2007) but in summary it consisted of observations made during excavation of three geotechnical test-pits, and during removal of belowground foundations of several of the buildings which were demolished in advance of the approved development.
- 5.3.2 The work was carried out with a mechanical excavator under the supervision of a qualified archaeologist.
- 5.3.3 All archaeological deposits were recorded by means of Wessex Archaeology's proforma recording sheets.
- 5.3.4 A photographic record was made by means of digital images.
- 5.3.5 Plans were drawn at a scale of 1:20 and 1:100 and sections at 1:10.
- 5.3.6 All artefacts from archaeological contexts were retained to elucidate the date and function of the features or deposits uncovered.
- 5.3.7 All spoil and uprisings were visually scanned for artefacts and these were retained and recorded.

5.4 Finds Collection and Retention

- 5.4.1 All finds were treated in accordance with the relevant guidance given in the Institute of Field Archaeologist's *Standards and Guidance for Archaeological Field Evaluation* (2001), the UK Institute of Conservators Guidelines *Conservation Guideline No 2* and the Museums and Galleries Commission's *Standards in the Museum Care of Archaeological Collections* (1991), excepting where they are superseded by statements made below.
- 5.4.2 All artefacts from excavated contexts were to be retained, except those from features or deposits of obviously modern date. In the event, very few finds were recovered. These consisted mainly of partially mineralised animal-bones (see below).
- 5.4.3 All finds were, as a minimum, washed, weighed, counted and identified. No artefacts requiring conservation or specific storage conditions were recovered.

5.5 The Archive

- 5.5.1 The project archive is currently held at the offices of Wessex Archaeology in London under the Wessex Archaeology project code WA 70480.
- 5.5.2 The project archive will be prepared in accordance with the guidelines outlined in Appendix 3 of *Management of Archaeological Projects* (English Heritage, 1991) and in accordance with the *Guidelines for the preparation of excavation archives for long-term storage* (UKIC 1990).
- 5.5.3 The resulting archive will be put onto microfiche to the standards accepted by the National Monuments Record (NMR).
- 5.5.4 Following the conclusion of the project and with the permission of the landowner the archive will be prepared for deposition with the Museum of London under accession code OGW 08.

6 RESULTS

6.1 Introduction

6.1.1 The results are described below. Appendix 1 contains a complete list of contexts trench by trench. Context numbers are listed in **bold** type.

6.2 Geotechnical Test-Pits

6.2.1 Three geotechnical test-pits were excavated at the perimeter of the Site (see **Figure 1**). These were numbered 1, 3 and 4. Test pit 2 was abandoned due to previous disturbance.

Test-pit 1

6.2.2 Test-pit 1 was excavated at the north-east corner of the Site (see **Figure 4**, **Section 3**). The test-pit was dug against the eastern gas-works wall, at ground level 2.47m

- OD, and revealed deposits of hardcore and made ground to a depth of 0.98m. Below the made ground deposits was a deposit of clean yellow-brown clay with sandy patches- this deposit was possibly alluvial in nature (See **Plate 1**). The made ground deposits were apparently infill of the foundation-cut for the wall.
- 6.2.3 A machine slot to the west of test-pit 1 revealed that 2.20m to the west of the wall, beyond the line of the foundation cut, was a deposit of similar clean alluvial clay at a depth of 0.55m (see **Plate 2**). Further to the west this deposit was truncated by the foundations of building C.
- 6.2.1 No archaeological remains were present in test-pit 1.

Test-pits 3 and 4

- 6.2.2 Test-pits 3 and 4 were excavated in the south-western corner of the Site against the east and south walls respectively (see **Figure 4**, **Sections 1** and **2**). Ground level in this area is at 5.40m OD.
- 6.2.3 Both test-pits revealed made-ground deposits of dark grey sandy silt and building rubble to a depth of 2.15 1.90 metres OD. Underlying the made ground deposits were clean alluvial clay deposits (see **Plate 3**). No archaeological features were present in either test-pit.

6.3 Building C

- 6.3.1 Building C was located in the north-east corner of the Site (see **Figure 1**). Foundations were removed to a depth of 0m OD, approximately 2.5m below ground level, over an area of approximately 750m². The foundations in this case were particularly large (see **Plate 4**). A sample section was recorded at the east side of the building (see **Figure 4**, **Section 4**).
- 6.3.2 The section revealed deposits of made ground to a depth of 2m OD. Below the made ground was a layer of preserved topsoil (18). Below this were two bands of alluvial clay, (19) and (20). Below this was a deposit of clean, sandy clay (21) to a depth of 1.98m. From 1.98m downward natural coarse sand (22) was present to a depth in excess of 2.50m. No archaeological remains were present.

6.4 Building E

6.4.1 Building E was located at the northwestern part of the Site, covering an area of 1200m² (Figure 1). A section was recorded at southwestern corner of the building (see Section 9). The made-ground deposits in this area were very loose, making safe recording problematic, but it was established that made ground deposits (52) were present between 3.68m OD (ground level) and 2.10m OD, below which there was a further deposit of alluvial clay (53) to below 1.10m OD. No archaeological remains were present.

6.5 Building F

- 6.5.1 Building F was located in the north central area of the Site and covered an area of approximately 2600 m². A sample section (see **Figure 5**, **Section 5**) was recorded at the southeast corner. The removed foundations were again of considerable size, extending to a depth of 0.90m OD, approximately 3.30m below present ground level.
- 6.5.2 Made ground deposits (25 and 26) were observed to a depth of 0.81m, below which was a layer of dark orange-brown compacted organic material (27). This deposit may have been peat or remnant topsoil; (see Plate 5) unfortunately the deposit could not be examined closely due to constraints of health and safety. This deposit was observed between 0.88 and 1.34m
- 6.5.3 Below (27) was a deposit of yellow sandy alluvial clay (24), overlying clean blue clay at 2.88 3.01m. Below this was a coarse yellow sand (28). No archaeological remains were present.

6.6 Building J

- 6.6.1 Building J was located in the south central area of the Site and covered an area of approximately 6400 m². As with building E, the nature of the foundations comprising very loose modern make up meant that observation of their removal was problematic; for this reason it was decided, after consultation with RPS and Fitzpatrick's that the best way to record the deposits within the building footprint would be by means of 3 specially-dug test-pits, test-pits 5, 7 and 7 (see **Figure 1**).
- 6.6.2 The test-pits were dug to a depth of -0.45m OD, approximately 2.90m below present ground level. The stratigraphic sequence in all the pits was similar, consisting of layers of mixed clay and building-rubble made ground to a depth of 1.5m (43, 48). Below this were alluvial clays to a depth of 2.50 2.60m, overlying clean natural sands (see Figure 5, Sections 6, 7 and 8; also Plate 6).

7 FINDS

7.1 Introduction

7.1.1 All material observed in the up cast from the excavations was of obvious late nineteenth or twentieth century origin, consisting chiefly of brick and tile fragments. It was therefore noted and discarded. No artefactual material was considered worth further analysis.

7.2 Environmental Sampling

7.2.1 Due to health and safety concerns, specifically the presence of soil contaminants (see 5.2.4 above), no samples were taken for environmental analysis during this phase of works.

8 DISCUSSION AND CONCLUSION

8.1 Discussion

- 8.1.1 No archaeological remains were observed during the watching brief; any such remains as may have been present having been destroyed during the construction of the buildings. Made ground deposits were seen across most of the Site area to a depth in excess of 1m.
- 8.1.2 The exact nature of the organic deposit (27) encountered in the Building F area is uncertain. This deposit may be a remnant of a prehistoric peat deposit, as peats are known to exist in the surrounding area, but could also be a remnant of a more recent cultivation soil.
- 8.1.3 Remaining deposits encountered on the Site were of limited interest. The alluvial clays do not appear to have been disturbed, and it is possible that archaeological remains could be preserved within these deposits elsewhere on the site.

8.2 Conclusion

- 8.2.1 In general, the below-ground foundations of the demolished buildings were of considerable size and depth. It is not considered likely that any archaeological remains could survive beneath these foundations. Such foundations on the basis of map evidence (see para.3.1.3 above) would appear to have covered the northern third /half of the site.
- 8.2.2 The remainder of the Site area appears likely to have been truncated to some degree, and there are made-ground deposits of around 1 1.50m depth across the Site area. The alluvial clays below the made ground have the potential to contain preserved archaeological remains in areas of the Site without deep foundations.



9 BIBLIOGRAPHY

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(+) feature/deposit not fully excavated

Number	Туре	Description	Keyword	Depth (below ground)
1	Layer	Builders sand	Made ground	0.20m
2	Layer	Loose brick and concrete rubble	Made ground	0.60m
3	Layer	Loose, dark-grey sandy silt with concrete and brick rubble	Made ground	1.80m
4	Layer	Dark grey compacted silt with building rubble	Made ground	3.30m
5	Layer	Clean light yellow-brown clay, possibly alluvial	Natural	3.70m+
6	Layer	Concrete	Made ground	0.15m
7	Layer	Dark grey silty clay with sand, brick and concrete rubble	Made ground	1.30m
8	Layer	Silt and rubble mix	Made ground	3.50m
9	Layer	Dense clay with cbm, glass and china	Made ground	3.60m
10	Masonry	Concrete buttress	Construction	3.50m
11	Masonry	Concrete cap	Construction	0.15m
12	Layer	Clay with building rubble with mod cbm	Made ground	0.40m
13	Layer	Yellow-brown clay with cbm and charcoal	Redeposited	0.95m
14	Layer	Coarse yellow-brown sand	Natural	1.90m+
15	Masonry	Gasworks wall footing	Construction	1.90m+
16	Masonry	N-S wall footing	Construction	
17	Layer	Mixed clay and building rubble with mod cbm	Made ground	0.52m
18	Layer	Grey brown silty clay loam with cbm	Topsoil	0.70m
19	Layer	Mid yellow-brown clay	Alluvium	0.97m

20	Layer	Dark brown clay	Alluvium	1.18m
21	Layer	Mid yellow-brown sandy clay	Alluvium	1.99m
22	Layer	Dark yellow-brown coarse sand	Natural	2.50m+
23	Layer	Mid grey-blue coarse sand	Natural	3.00m+
24	Layer	Mid yellow sandy clay	Alluvium	2.90m
25	Layer	Mixed silty clay with building rubble	Made ground	0.30m
26	Layer	Mid yellow-grey clay with mod cbm	Made ground	0.82m
27	Layer	Dark red-brown compressed organic material	Peat	1.34m
28	Layer	Dark yellow coarse sand	Natural	3.30m+
29	Masonry	Concrete slab	Construction	0.15m
30	Masonry	Concrete footings in Building c	Construction	2m+
31	Masonry	Concrete footings in Building c	Construction	2m+
32	Fill	Modern backfill of foundation cut	Construction	2m+
33	Layer	Coarse yellow sand	Natural	2m+
34	Layer	Coarse dark yellow sand	Natural	2m+
35	Cut	Cut for foundation	Construction	2m+
36	Layer	Mixed silty clay with building rubble and modern cbm	Made ground	0.60m
37	Layer	Yellow-grey clay	Alluvium	2m+
38	Layer	Dark yellow coarse sand	Natural	2m+
39	Layer	Mid brown clay	Alluvium	2m+
40	Layer	Blue-grey clay	Alluvium	2m+
41	Layer	Dark grey silty clay with ash	Made ground	2m+
42	Layer	Dark grey silty clay with ash and building rubble	Made ground	0.64m
43	Layer	Dark grey clay with mod cbm	Made ground	1.11m

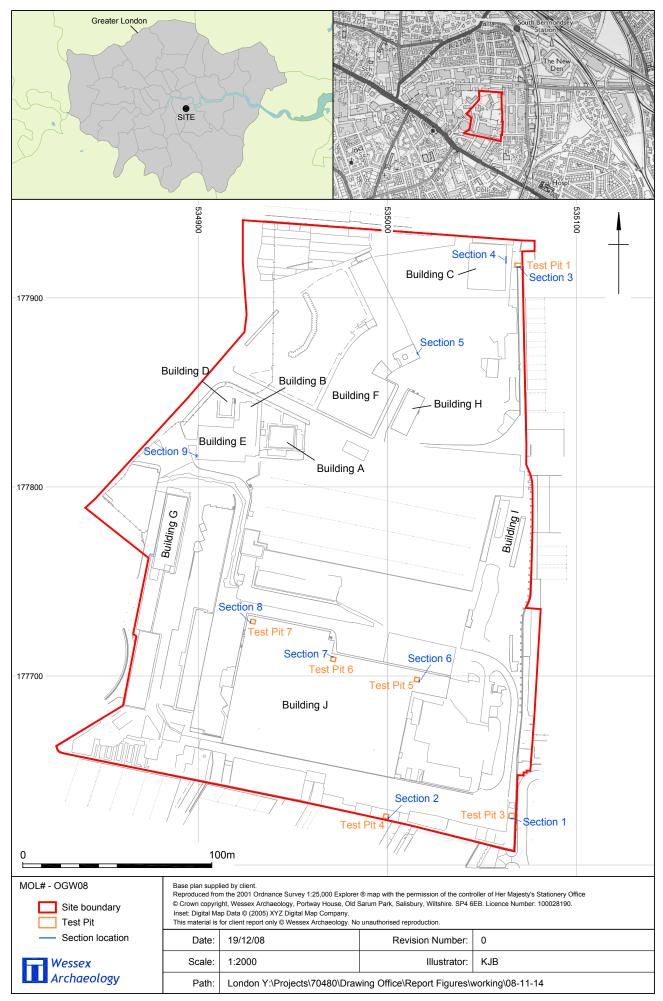


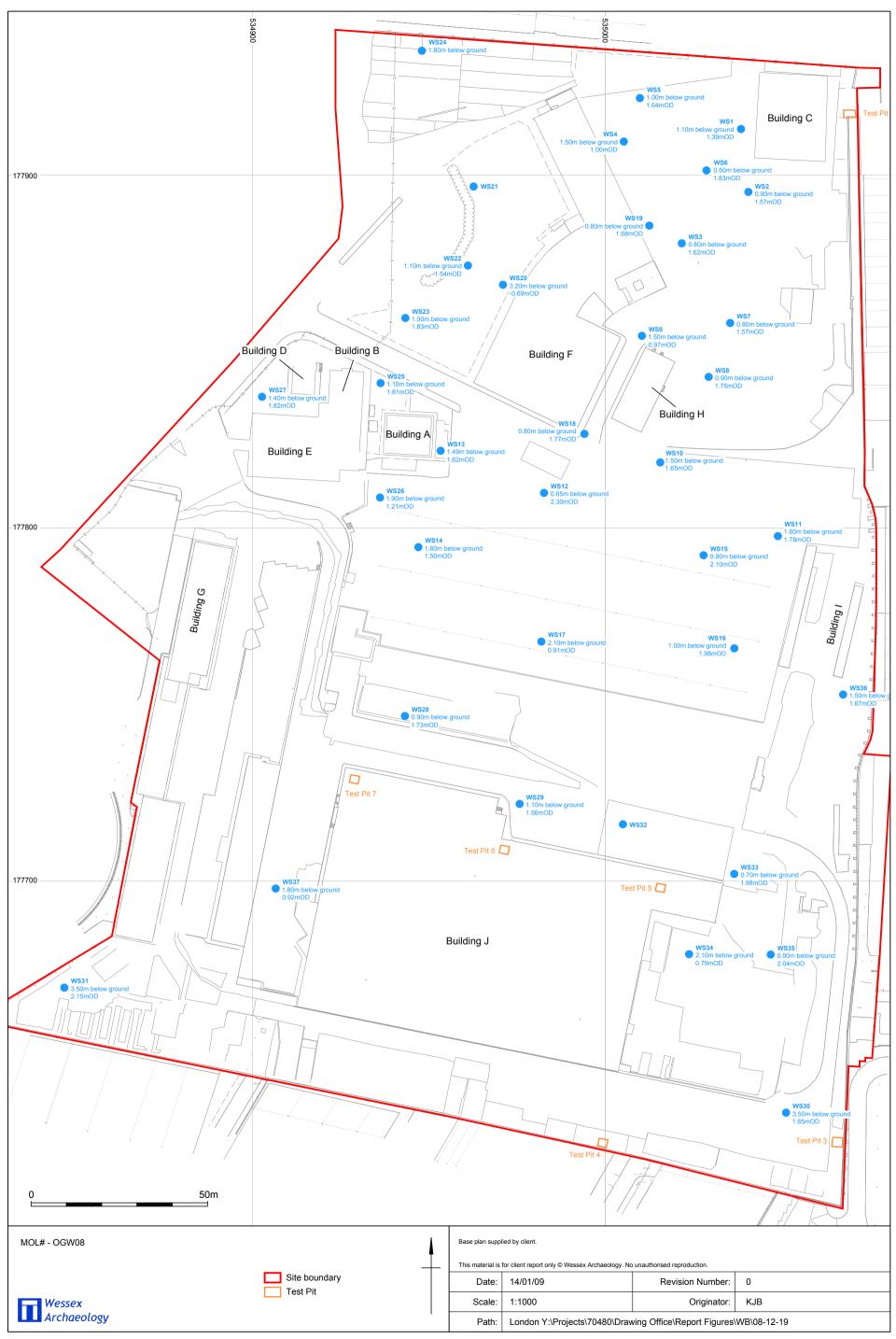
44	Layer	Dark yellow-brown silty clay	Alluvium	1.50m
45	Layer	Mid grey-brown clay	Alluvium	2.40
46	Layer	Mid grey-brown tufa	Alluvium	2.50m
47	Layer	Dark brown coarse sand	Natural	2.60m
48	Layer	Dark grey clay with building rubble and mod cbm	Made ground	1.50m
49	Layer	Yellow-grey silty clay	Alluvium	1.80m
50	Layer	Mid yellow sandy clay	Alluvium	2.00m
51	Layer	Mid brown clay	Alluvium	2.60m
52	Layer	Dark brown coarse sand (same as 47)	Natural	2.80m
53	Layer	Dark yellow coarse sand and gravel	Natural	2.90m+
		1		

10 APPENDIX 2 : WINDOW SAMPLE LOGS

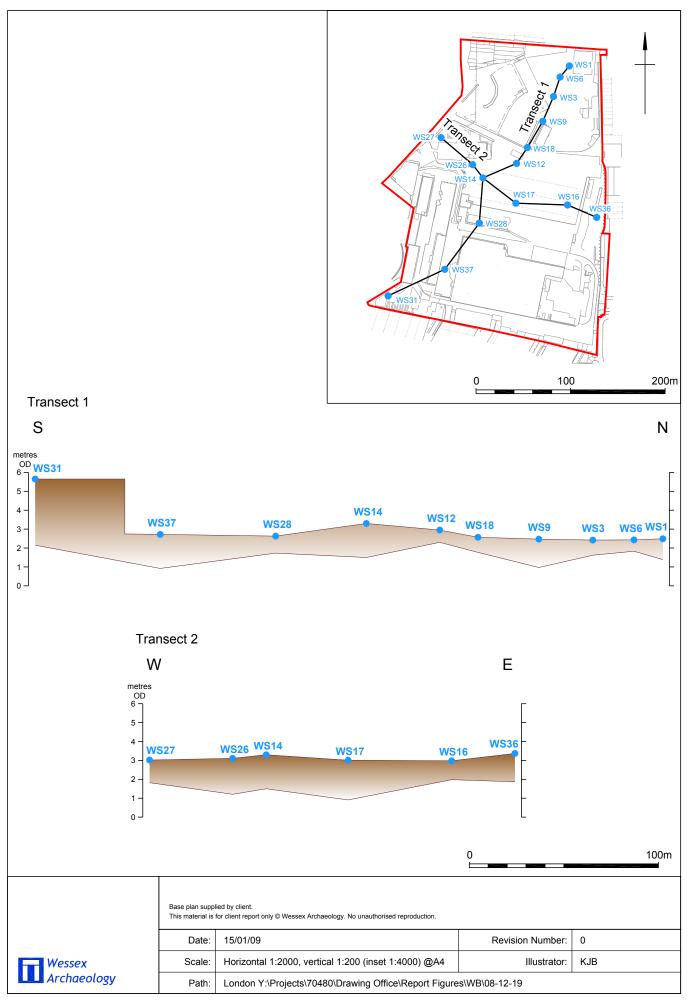
Where several deposits of made ground were recorded only the lowest deposits are described. See Figure 2 for window-sample locations. Depths are given to the base of the deposit.

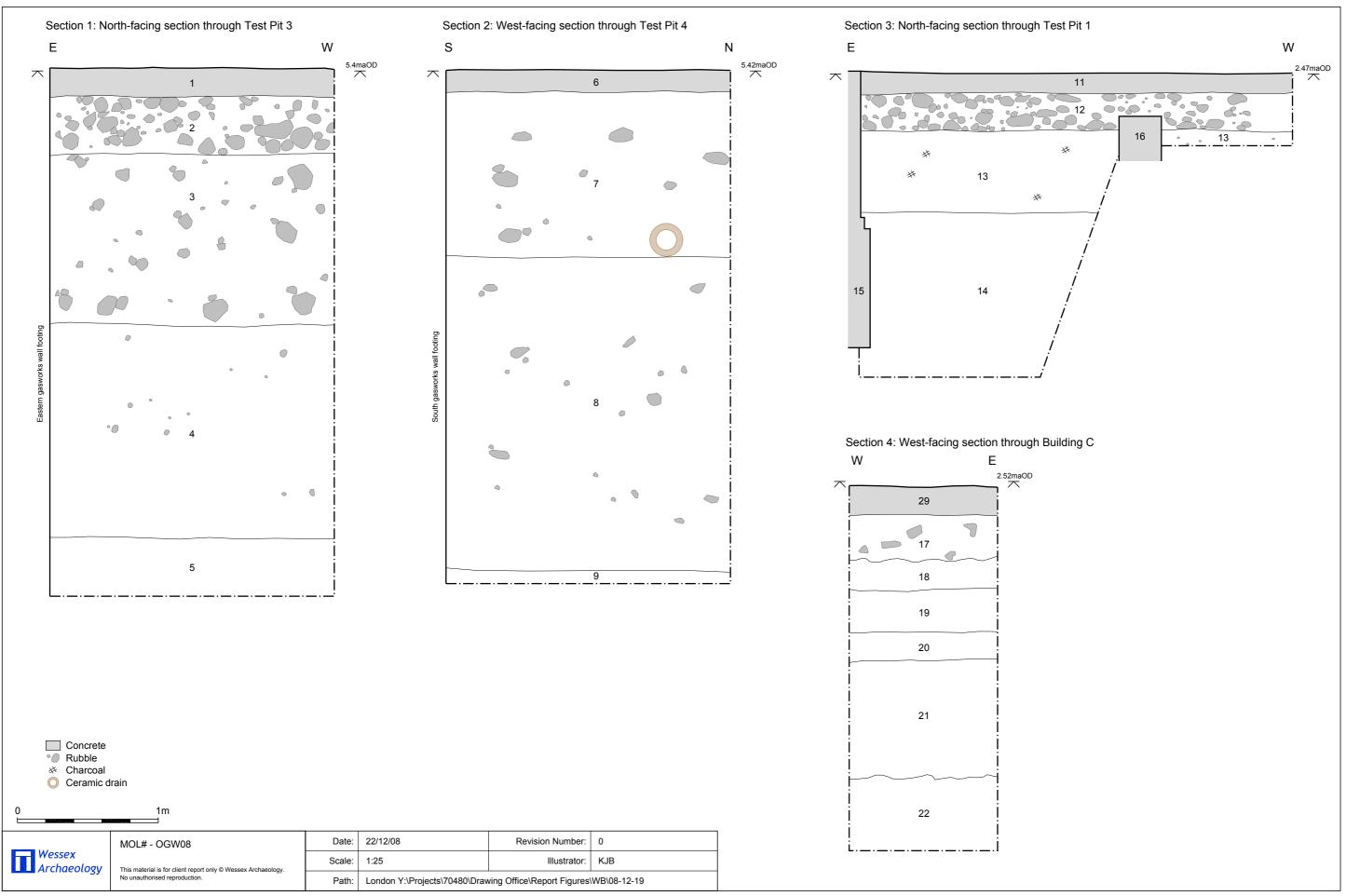
I.D.	Depth	Height	Description		
	below .	OD			
	ground				
WS1	1.10	1.39	Driet och dieter		
WS1			Brick, ash, clinker		
WS2 WS3	0.90	1.57 1.62	Clay with sand, ash and clinker		
WS4			Sands, gravel, brick ash and clinker		
WS5	1.50	1.00	Grey-green clay with organic matter		
WS6	1.00	1.64	Ash, sand concrete and gravel Sand and clinker with ash		
WS7	0.60	1.83 1.57			
WS7 WS8	0.80	1.75	Dark brown clay with sand, brick and coal		
WS9	1.50	0.97	Sand and clay with gravel, brick and clinker		
WS10	1.50	1.65	Sand and gravel with ash, clinker and slag		
WS10	1.60	1.05	Black organic clay with gravel and occasional brick		
WS11	0.65	2.30	Brown sandy clay with brick and coal		
WS12	1.49	1.62	Ash and clinker over concrete		
WS13	1.49	1.62	Sand, clay and brick overlying black organic clay		
WS14	0.90	2.10	Bands of ash, sand and clinker overlying clay and ash		
WS15	1.00	1.98	Black sandy clay with gravel, ash and carbon		
WS17	2.10	0.91	Gravel and clay with brick and coal Sand, clay and clinker overlying concrete		
WS17	0.80	1.77	Gravel and clay with brick, ash and ceramic fragments		
WS19	0.80	1.68	Sandy organic clay with brick and tile fragments		
WS19	3.20	-0.69	Dark brown sandy clay with brick, concrete and gravel		
WS21	-	-	Not excavated		
WS22	1.10	1.54	Brown sandy clay with gravel, brick and ash		
WS23	1.00	1.83	Grey-brown organic clay with ash, brick and gravel		
WS24	1.80	-	Concrete and gravel		
WS25	1.10	1.81	Dark brown sandy clay with gravel, brick and ash		
WS26	1.90	1.21	Dark greenish-brown gravelly clay with brick and coal fragments		
WS27	1.40	1.82	Dark brown organic clay with gravel and brick		
WS28	0.90	1.73	Dark brown clay with sand, gravel, ash, concrete and brick		
WS29	1.10	1.56	Orange-brown clay with sand, concrete and ash		
WS30	3.50	1.85	Dark grey clay with ash, brick, clinker and coal		
WS31	3.50	2.15	Bands of ash and clinker overlying grey-brown gravelly clay		
WS32	-	_	Not excavated		
WS33	0.70	1.98	Gravel, clinker and coal overlying black sandy clay		
WS34	2.10	0.79	Grey-brown sandy clay		
WS35	0.90	2.04	Dark grey sandy clay with gravel and brick		
WS36	1.50	1.87	Dark grey sandy clay with glass and brick fragments		
WS37	1.80	0.92	Dark brown sandy organic clay with coal and vegetation		



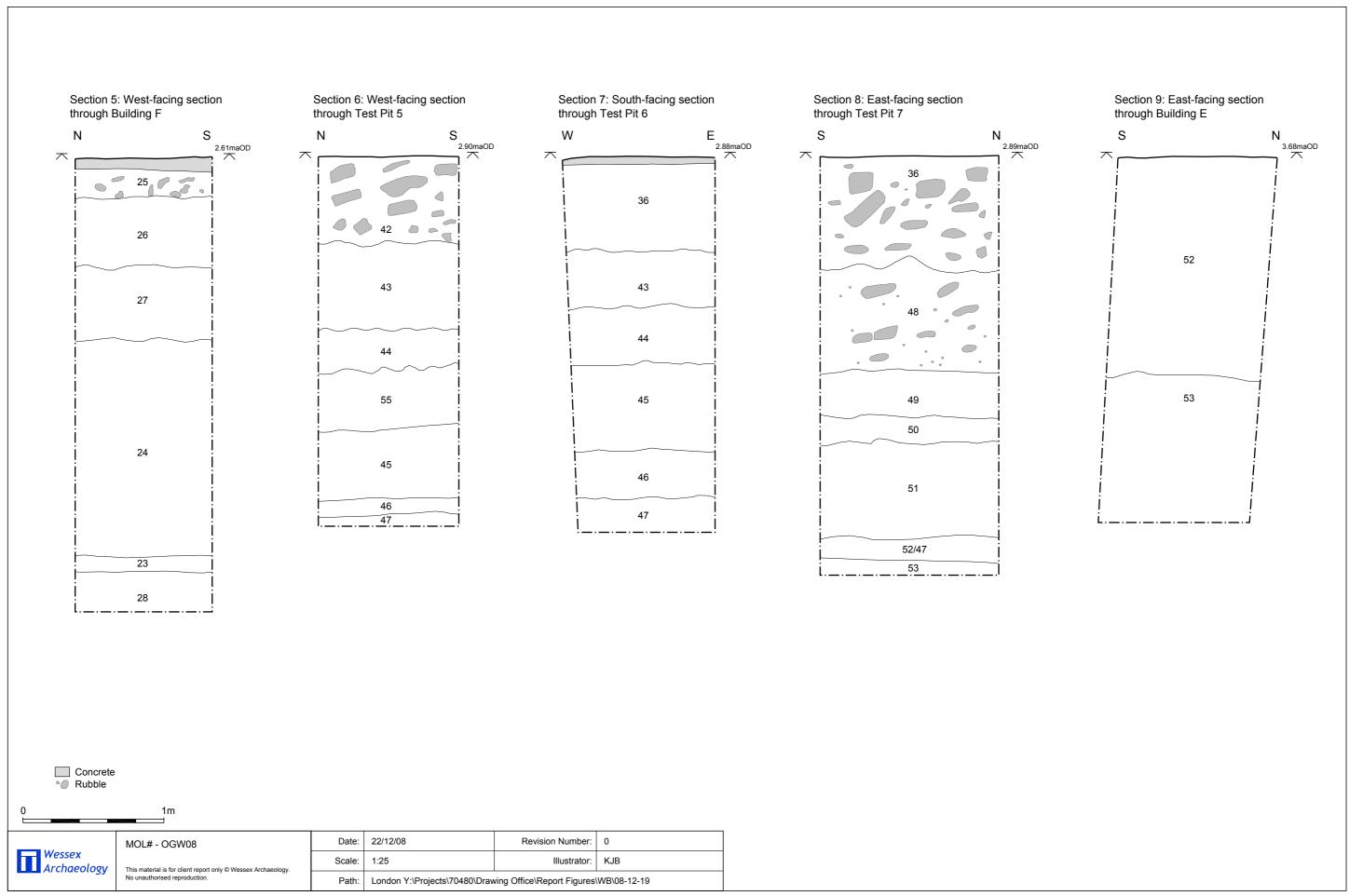


Made ground deposits





Sections 1-4 Figure 4



Sections 5-9 Figure 5



Plate 1: Ground to the west of Test Pit 1 with 1m scale



Plate 2: Test Pit 1 from northwest with 1m scale

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Plate 3: West-facing section in Building C with 0.5m scale



Plate 4: Foundation slabs removed from north area of Site, with 0.5m scale

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Plate 5: Possible peat layer (27) in Building F with 0.5m scale



Plate 6: Test Pit 7 from east, with 1m scale

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