An Archaeological Watching Brief on Land at Canada Water, Surrey Quays, Rotherhithe, London Borough of Southwark

Site Code: CWQ 08

Central National Grid Reference: TQ 3553 7958

Written by Richard Humphrey

Pre-Construct Archaeology Limited, March 2009

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ILLUSTRATIONS

1 INTRODUCTION

1.1 An archaeological watching brief was undertaken by Pre-Construct Archaeology Ltd on the 25th February and 4th March 2009 at land at Canada Water, Surrey Quays, Rotherhithe, London Borough of Southwark. The investigation was commissioned by Duncan Hawkins of CgMs Consulting on behalf of the client Barratt East London. It was managed for Pre-Construct Archaeology Ltd by Chris Mayo and supervised by Alexis Haslam.

1.2 Following an archaeological watching brief conducted on geotechnical test trenches in January 2008 (Seddon 2008), Pre-Construct Archaeology Ltd undertook a watching brief with the aim of monitoring ground reduction as part of the redevelopment of the site. That work comprised of the removal of made ground and modern backfill deposits.

1.3 The site is centred on National Grid Reference TQ 3553 7958 and is bounded to the east by Needleman Street, to the south by Canada Water and the west side of Albion Canal, to the west by Canada Water Underground Station and interchange, and to the north by residential development. The site comprises of approximately 3.8 hectares in total and is bisected by Surrey Quays Road (Figure 1).

1.4 An Archaeological desk Based assessment has previously been undertaken for the site (Hawkins 2007). This concluded that the site has a very good potential for the later prehistoric periods, a good potential for the Roman period and a limited potential for medieval and post-medieval periods. It pointed out that later 19th and 20th century features are not only expected to survive, but in fact can be seen to be present in places at the existing site level.

1.5 The site was given a unique site code, CWQ 08.

1.6 Previous works on site had revealed a sequence of naturally deposited gravel, clay and peat overlain by the backfilling of the docks in the 20th century. The works detailed in this report recorded the removal of modern made ground and gravel backfilling the docks only with no alluvial or natural horizons observed.

Figure 1
Site location
1:25,000 at A4

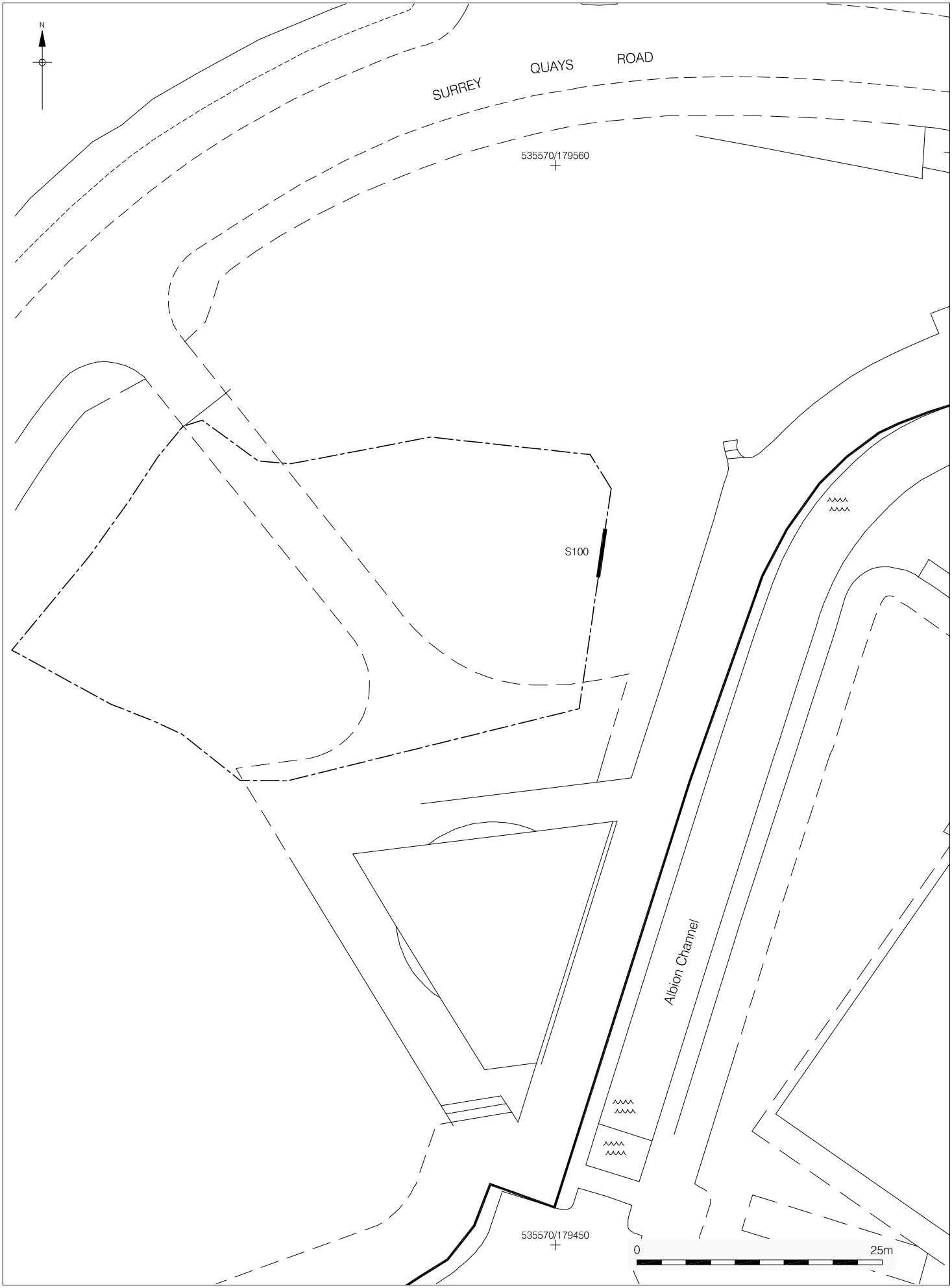


Figure 2
Trench Location
1:500 at A4

2 PLANNING BACKGROUND

2.1 The relevant planning background for the site and the wider area is set out in the Desk Based Assessment for the site (Hawkins 2007).

2.2 The study site has the benefit of planning consent subject to two archaeological planning conditions:

- *NO DEVELOPMENT SHALL TAKE PLACE UNTIL A DETAILED SCHEME (2 COPIES) SHOWING THE SCOPE AND ARRANGEMENT OF FOUNDATION DESIGN AND ALL NEW GROUNDWORKS, WHICH HAVE AN IMPACT ON ARCHAEOLOGICAL REMAINS, HAS BEEN APPROVED IN WRITING BY THE LOCAL PLANNING AUTHORITY AND THAT THE SCHEME WILL BE MONITORED BY THE COUNCIL. REASON: TO ENSURE THAT ARCHAEOLOGICAL REMAINS ARE NOT DISTURBED OR DAMAGED BY FOUNDATIONS AND OTHER GROUNDWORKS BUT ARE, WHERE APPROPRIATE, PRESERVED IN SITU.*

- *NO DEVELOPMENT SHALL TAKE PLACE UNTIL THE IMPLEMENTATION OF A PROGRAMME OF ARCHAEOLOGICAL WORK HAS BEEN SECURED IN ACCORDANCE WITH A WRITTEN SCHEME OF INVESTIGATION WHICH HAS BEEN SUBMITTED (2 COPIES) AND APPROVED IN WRITING BY THE LOCAL PLANNING AUTHORITY. REASON: IN ORDER THAT THE ARCHAEOLOGICAL OPERATIONS ARE UNDERTAKEN TO AN ACCEPTABLE STANDARD AND THAT LEGITIMATE ARCHAEOLOGICAL INTEREST IN THE SITE IS SATISFIED.*

3 GEOLOGY AND TOPOGRAPHY

3.1 The underlying drift geology comprises alluvium and River Terrace Deposits overlying London clay (Hawkins 2007).

3.2 Archaeological investigations associated with Canada Water underground station and interchange identified a thin irregular peat deposit at around –1.19m OD (approximately 6.49m below existing ground level which is at 5.3m OD) (from Hawkins 2007, 7).

3.3 Palaeoenvironmental and archaeological investigation carried out by Museum of London Archaeological Service (Sidell *et al*., 2000) revealed sands below -1.60m OS most likely overlying Pleistocene river gravels. The sand was overlain by silt that accumulated to a depth of -1.30m OD. The silt was unconformably overlain by a series of peats and 'organic muds' dated to 4280-3970 cal yr BP. The organic-rich sediments were unconformably overlain by silts and clays from -0.85m OD. The modern day ground surface (ca. 5m OD) lies on ca. 5m of made ground from ca. 0m OD.

3.4 Cable percussion boreholes taken by RSA Geotechnics Ltd were monitored by Archaeoscape and recorded in the previous phase of works (Batchelor and Branch, 2008). These revealed made ground to extend to a depth of ca. 5m from the surface with one exception that recorded a depth of ca. 11m from the surface and representing the backfilling of the Albion Dock. Below this, fine-grained occasionally organic-rich sediments were recorded to a depth of between 5.9m and 7m from the surface, overlying very well humified wood peat. This in turn was underlain by blue-grey fine-grained mineral-rich deposits occasionally containing detrital wood macrofossils. This passed into greenish grey silty sand and marl at an approximate depth of between 7.5m and 8m from surface. Sands and gravels were recorded from between 7.5m and 8m from the surface, most likely representing Pleistocene River Gravels.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 The archaeological Desk Based Assessment gives a detailed report on the archaeological and historical background for the site (Hawkins 2007). The conclusions of that report can be summarised as follows:

- The site has a low archaeological potential for the Palaeolithic period;
- The site has a very good archaeological potential for the Neolithic and Bronze Age periods;
- The site has a low archaeological potential for the Iron Age period;
- The site has a good potential for the later Roman period;
- The site has a low archaeological potential for the Anglo-Saxon and early medieval periods;
- The site has a limited archaeological potential for the late medieval and post-medieval periods (up to *c* 1860 – 1875);
- The site contains substantial remains of the former Surrey Commercial Docks, present as both sub-surface and upstanding features.

4.2 From early in 1980, Albion Dock, part of the former Surrey Commercial Docks, and the adjacent linking canal to Canada Water were reclaimed with imported fill.

4.3 Recent monitoring of two geo-technical test-trenches in co-operation with RSA Geotechnics Ltd. (Seddon, 2008) confirmed the presence of structural components relating to Albion Dock such as capstans and canal edges as well as thick dumped horizons used to backfill them. This sequence was also confirmed during the monitoring of five percussion boreholes by Archaeoscape (Batchelor and Branch, 2008).

5 METHODOLOGY

5.1 Pre-Construct Archaeology Ltd sporadically monitored ground reduction across the site in advance of redevelopment. This was undertaken using a mechanical excavator fitted with a toothed bucket. A toothless grading bucket was deemed unnecessary owing to the large volume of material to be removed as well as its low-grade archaeological significance and homogeneity.

5.2 The results of previous monitoring projects on the site suggested that widespread backfilling of the dock structure overlay natural, alluvial deposits.

5.3 Relevant plans and sections were drawn and context descriptions recorded on *proforma* sheets. The trenches were located by TST survey.

5.4 Levels in this report are approximated from a surface level on the site of 5.3m OD.

6 ARCHAEOLOGICAL SEQUENCE

6.1 Ground Reduction

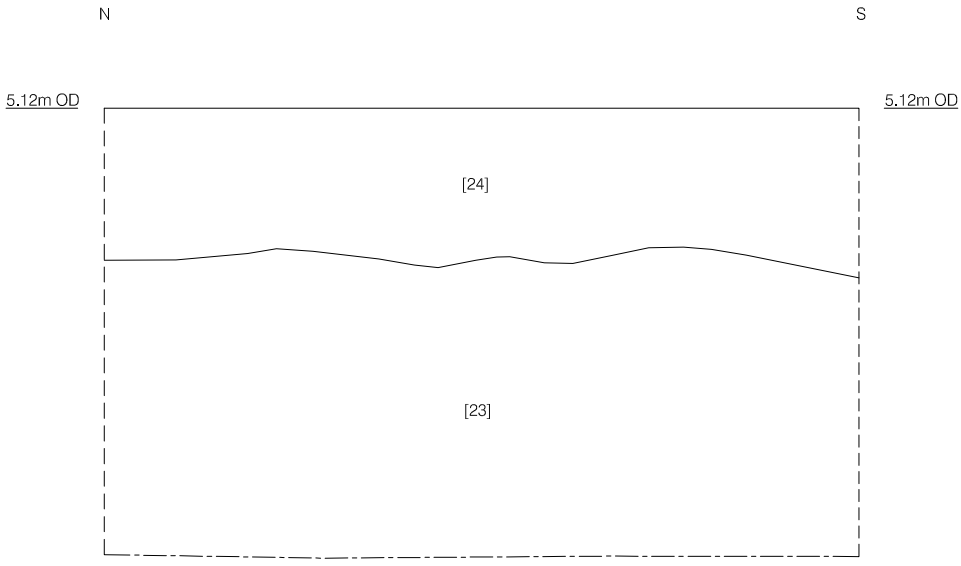
6.1.1 Ground reduction was monitored towards the southwest of the study area, to the east of Canada Water Station buildings and to the north of the recently constructed Toronto House building.

6.1.2 Due to the bulk excavation methodology employed by the groundworks contractors and therefore dangerous site conditions, close examination of deposits was not possible. Observation and recording was therefore conducted from the section edges.

6.1.3 The area observed measured approximately 32.30m north to south and was 57.82m east to west. The base of the excavation area was recorded at a height of between 1.91m OD and 2.30m OD.

6.1.4 Filling the base of the trench was an orange-brown sandy-gravel [23]. Although this had the appearance of representing natural stratigraphy, comparison with the data obtained from the previous observations of geo-technical test trenches and borehole surveys suggest this horizon represents the material used to backfill the docks. Its height is not consistent that with the natural, alluvial gravels observed as part of these surveys.

6.1.5 Overlying backfill [23] was a layer of modern made ground [24] that measured approximately 1m thick and was seen across the area. This consisted of modern demolition rubble such as brick, tile, concrete, plastic and mortar contained within a dark-brown clayey-sand matrix. The top of this layer was seen at a height of ca. 5m OD around the entire area.



Section 100
West Facing

0 3m

Figure 3
Section 100
1:50 at A4

Figure 4: Photograph of backfill [23] overlain by modern ground raising [24]

Figure 5: Photograph of backfill [23] overlain by modern ground raising [24]

7 CONCLUSIONS

7.1 Bulk ground reduction occurring in the area of the site monitored by the works detailed in this report revealed a sequence of redeposited gravel to be overlain by modern made ground. The redeposited gravel is material used to backfill the Albion Docks.

7.2 Natural, alluvial deposits of gravel, clay and peat that were recorded in previous monitoring exercises in the area were not observed during these works as the ground reduction did not extend deep enough to have an impact upon them. It is likely that these exist at a height of ca. 0m OD and below. The base of the excavation was at a height of between 1.91m OD and 2.30m OD.

8 ACKNOWLEDGEMENTS

8.1 Pre-Construct Archaeology Limited would like to thank Duncan Hawkins of CgMs for commissioning the work on behalf of Barratt East London Ltd. The work was monitored by Dr. Christopher Constable of Southwark Council.

8.2 The author would like to thank Adrian Phillips of RSA Geotechnics Ltd for his assistance in the field, Alexis Haslam for undertaking the watching brief, Aidan Turner for surveying, Jennifer Simonson for the illustrations and Chris Mayo for project management and editing.

9 BIBLIOGRAPHY

Batchelor, C. and Branch, N. (2008) 'Surrey Quays, Rotherhithe: Geoarchaeological Field Monitoring- Interim Report'. Archaeoscape unpublished report

Hawkins, D. (2007) 'Archaeological Desk Based Assessment of Land at Canada Water (Sites A and B), Surrey Quays, Rotherhithe'. CgMs unpublished report

Seddon, G. (2008) 'An Archaeological Watching Brief of Land at Canada Water (Sites A and B), Surrey Quays, Rotherhithe, London Borough of Southwark'. Pre-Construct Archaeology Ltd unpublished report

Sidell, J. K., Wilkinson, R., Scaife, and Cameron, N. (2000) *The Holocene Evolution of the London Thames: Archaeological Excavations (1991-1998) for the London Underground Limited Jubilee Line Extension Project.* Museum of London Monograph 5, 118-124.

APPENDIX 1: CONTEXT INDEX

Site Code	Context No.	Plan	Section	Type	Description
CWQ08	23	N/A	100	Fill	Fill of dock
CWQ08	24	N/A	100	Layer	Ground-raising

APPENDIX 2: OASIS FORM

OASIS ID: preconst1-57359

Project details

Project name	An Archaeological Watching Brief of Land at Canada Water, Surrey Quays, Rotherhithe, London Borough of Southwark
Short description of the project	Bulk ground reduction occurring in the area of the site monitored by the works detailed in this report revealed a sequence of redeposited gravel to be overlain by modern made ground. The redeposited gravel is most-likely to represent material used to backfill the Albion Docks. Natural, alluvial deposits of gravel, clay and peat that were recorded in previous monitoring exercises in the area were not observed during these works as the ground reduction did not extend deep enough to have an impact upon them. OD It is likely that these exist at a height of ca. 0m OD and below. The base of the excavation was at a height of between 1.91m OD and 2.30m OD.
Project dates	Start: 25-02-2009 End: 04-03-2009
Previous/future work	Yes / Yes
Any associated project reference codes	CWQ08 - Sitecode
Type of project	Recording project
Site status	Local Authority Designated Archaeological Area
Current Land use	Vacant Land 1 - Vacant land previously developed
Investigation type	'Watching Brief'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	GREATER LONDON SOUTHWARK BERMONDSEY ROTHERHITHE AND SOUTHWARK Canada Water, Rotherhithe
Postcode	SE16 2**
Study area	3.80 Hectares
Site coordinates	TQ 5530 9580 51.6390348530 0.244525849609 51 38 20 N 000 14 40 E Point
Height OD / Depth	Min: 0m Max: 0m

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	CgMs Consultants Ltd
Project design originator	Duncan Hawkins
Project director/manager	Chris Mayo
Project supervisor	Alexis Haslam
Type of sponsor/funding body	Developer
Name of sponsor/funding	Barratt East London

body

Project archives

Physical Archive Exists?	No
Digital Archive recipient	NMRC, Museum of London
Paper Archive recipient	NMRC, Museum of London

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Surrey Quays, Rotherhithe: Geoarchaeological Field Monitoring- Interim Report
Author(s)/Editor(s)	Batchelor, R and Branch, N
Date	2008

Project bibliography 2

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Watching Brief of Land at Canada Water (Sites A and B), Surrey Quays, Rotherhithe, London Borough of Southwark
Author(s)/Editor(s)	Seddon, G.
Date	2008

Project bibliography 3

Publication type	A published monograph
Title	The Holocene Evolution of the London Thames: Archaeological Excavations (1991-1998) for the London Underground Limited Jubilee Line Extension Project, 118-124. Museum of London Monograph 5
Author(s)/Editor(s)	Sidell, J. K., Wilkinson, R., Scaife, and Cameron, N.
Date	2000

Project bibliography 4

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Desk Based Assessment of Land at Canada Water (Sites A and B), Surrey Quays, Rotherhithe
Author(s)/Editor(s)	Hawkins, D
Date	2007

Entered by	Richard Humphrey (rhumphrey@pre-construct.com)
Entered on	25 March 2009