709 OLD KENT ROAD
London SE15

London Borough of Southwark

Watching brief report

March 2011

MUSEUM OF LONDON ARCHAEOLOGY

REGISTERED ORGANISATION IfA

Site code: NCA09
NGR: 534841 177881

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A report on the archaeological watching brief

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Summary (non-technical)

This report has been commissioned by Nation Grid Properties in order to record and assess the results of a watching brief carried out at 709 Old Kent Road, London, SE15.

An archaeological watching brief on ground remediation of a former gasworks found evidence of the slope of the gravel terrace above the Thames floodplain. Water-lain organic silts, on the north of the site, may have been associated with the floodplain, or the prehistoric 'Bermondsey Lake', but were too truncated and contaminated for further analysis. Twentieth-century concrete tanks from the gasworks' purification process were observed.

Subsequent monitoring of ground reduction associated with the proposed development of the site, demonstrated further truncation of the archaeological resource.

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1 Introduction

1.1 Site background

The watching brief took place on remediation works at 709 Old Kent Road, London, SE15, hereafter called 'the site'. The site was formerly a gas works (see Fig 1). From its north-western corner, the site boundary runs south-west along Ruby Street, turns east and south to the rear of numbers 22–32 Ruby Street, and east to run around the north and east sides of gas holder number 3, which is not within the site. The boundary turns north-east, following the western side of an access road, east across the road and north-east to include the junction with another access road from the south-east. It then turns north to the edge of the industrial estate to the north; it runs west as far as gas holder number 1 (also excluded from the site), with the site boundary skirting it to re-join the edge of the industrial estate to the north. The site boundary then turns west to Ruby Road. The centre of the site lies at National Grid reference 534841 177881. Modern ground surface is at heights of between c3.5 m OD and 4.5 m OD. The site code is NCA10.

In response to a requirement placed upon the developer prior to determination of planning consent for the development of the site, an *Archaeological desk-based assessment* was prepared by MOLA, which covered the whole area of the site and contained information on the natural geology, archaeological and historical background of the site (MOLA November 2009b). This document, it should be noted was prepared when remediation works were already underway and therefore assessed the potential archaeological survival as it would be subsequent to remediation.

1.2 The planning and legislative framework

The legislative and planning framework in which the archaeological exercise took place was summarised in the *Method Statement* which formed the project design for the remediation watching brief (see MOLA, November 2009a, Section 1.2).

1.3 Planning background

The remediation work was subject to archaeological planning conditions under a London Borough of Southwark planning consent (Registered No. 09-AP-1000, decided 19/08/09) requiring the submission of a written scheme of investigation to be submitted and approved prior to the commencement of the works (MOLA, 2009b)

In addition, planning consent for the redevelopment of the site (Registered No. 10/AP/1676) required the submission of a written scheme of investigation in respect of the impacts of development. A written scheme of investigation was duly submitted (MOLA, 2010). As remediation works were still in progress when the method statement was approved, it allowed for a number of strategies to be employed on the basis of the findings of the remediation watching brief.

1.4 Origin and scope of the report

This report was commissioned by National Grid Properties and produced by Museum of London Archaeology (MOLA). The report has been prepared within the terms of the relevant Standard specified by the Institute for Archaeologists (IFA 2001).

The purpose of the watching brief was to determine whether archaeological remains or features were present on the site and, if so, to record the nature and extent of such remains. A number of more site-specific research aims and objectives were established in the preceding *Method Statement* (MOLA November 2009a), and are outlined in the following section.

The purpose of the present report is to analyse the results of the excavation against the original research aims, and to suggest what further work, including analysis or publication (if any), should now take place.

1.5 Aims and objectives

The following research aims and objectives were established in the *Method Statement* for the watching brief (Section 2.2):

- What was the level and nature of natural topography?
- What information do geoarchaeological deposits provide on the palaeotopography of this part of Southwark?
- What are the earliest deposits identified?
- What is the evidence for human occupation or activity on the site?
- What are the latest deposits identified?

All research is undertaken within the priorities established in the Museum of London's *A research framework for London Archaeology*, 2002.

2 Topographical and historical background

A detailed archaeological background was included in the desk-based assessment (MOLA November 2009b, section 4), prepared in respect of the proposed development of the site.

2.1 Topography

The site lies on terrace gravels to the south of the former extent of the Thames floodplain and south-west of a vast topographic feature known as the "Bermondsey Lake." This was a large freshwater lake formed after the last Ice Age (*c* 10,000 BC) when the River Thames left a braided mass of streams and eyots, generally south of its current course, with no tidal flow. A possible Late-Glacial channel has been identified across the eastern part of the site, probably associated with the Bermondsey Lake to the north-east of the site.

2.2 Prehistoric

At Varcoe Road, *c* 150m to the north-east, the earliest deposits recorded dated to c 13000–9000 years BP, and were sealed by peats and organic clays representing fluctuating water levels in the lake basin and a transition from shallow standing water to sedge fen or reed swamp environment. About 550m west of the site, a large assemblage of early Mesolithic flints (obliquely backed points, microburins, scrapers and hammerstones) was found during archaeological excavations close to Old Kent Road in 1990 and redeposited worked flints have been recorded during an archaeological investigation *c* 450m south-east of the site. Possible Neolithic evidence was found during an archaeological investigation on the Old Kent Road, *c* 450m south of the site. Above water-laid sands, gravels and clays, a thin layer of weathered sand contained flint blades, scrapers, cores and waste flakes. At Varcoe Road, *c* 150m to the north-east of the site, a layer of peat over the sedge fen deposits represented the development of a fen or alder carr environment from *c* 3500 BP. This was in turn sealed by alluvial clay, deposited during seasonal flooding by the rising waters of the Thames, *c* 2600 BP. Evidence of Bronze Age activity was revealed during an archaeological investigation at Bramcote Grove, *c* 350m north-east of the site. Natural clays and sands were recorded, laid down when sea levels rose (marine transgression), and peat which was formed when sea levels fell (marine regression). A simple log pathway was found, possibly constructed in two phases. The first consisted of parallel planks or logs pegged down with cross-bracing pieces; the second of a line of oak logs pegged down by stakes and laid on bark. The stakes had been sharpened with bronze axes and, in one end of a log from the track way, marks made by a palstave were seen. Above the peat was floodplain clay.

2.3 Roman

The route of the main road from *Londinium* to Canterbury has been suggested on the alignment of Old Kent Road, c 250m south-west of the site. A possible junction with the road to the south coast lay *c* 330m south of the site. A number of archaeological investigations close to Old Kent Road have recorded Roman features. The foundation of a possible Roman building was revealed *c* 400m south of the site, consisting of a spread of limestone and Kentish ragstone blocks. Roman drainage ditches, containing significant amounts of pottery, were recorded *c* 450m south of the site. A metalled gravel surface may have represented a small yard, and included pottery from the 2nd century AD. A Roman ditch has also been found *c* 500m west of the site and a Roman lamp, *c* 400m west of the site. A causeway of

squared chalk blocks and oak piles, found during the construction of the Grand Surrey Canal in 1809, *c* 300m north-west of the site, was also thought to be of Roman date.

2.4 Medieval

The manor house of Hatcham Coldharbour is recorded on Ruby Street, *c* 150m south-west of the site.

2.5 Post-medieval

The area remained rural in character until the early 19th century. Rocque's map of 1741–5 shows the area of the site as open pasture or arable fields to the north-east of a main road, now Old Kent Road. In 1801, construction began of the Grand Surrey Canal, when the site lies in open land, a large part of which is marked as 'Gardens' probably market gardens. To the south-west of the site, Brick Kilns are marked, possibly making use of the underlying brickearth in the vicinity. Terraced houses line much of Kent Road (now Old Kent Road) and the turnings off it, but much of the land away from the main roads is still undeveloped. The canal ceased to be used for transport in 1836, and became a line of wharves.

The South Metropolitan Gas Company was formed in 1829 and, in 1834, began supply from its works close to Old Kent Road on the south side of the Grand Surrey Canal, to the north-west of the site. At this date most of the site is still shown as Market Gardens, although there was increasing development outside the site to the south and west. By this 1875, a gas holder had been built to the east of Church Place, just outside the boundary of the site. The Ordnance Survey 2nd edition 5":mile map of 1894–6 shows the development of the Gas Works, both within and outside the site. The site continued to development throughout the early 20th century.

Utilities such as gas works were key targets for enemy bombing during the Second World War. Bomb damage maps produced by the London County Council show limited damage within the site, with two buildings suffering general non-structural blast damage. Buildings to the south of the site were, however, totally destroyed in some parts and damaged beyond repair in others. The Ordnance Survey 1:1250 scale map of 1952 shows little change within the site from its pre-War layout. By 1972 the gas holders and larger buildings in the site still in situ but the extreme north-western part of the site, and most of the north and eastern edges had been cleared of buildings. The majority of buildings on the site were subsequently demolished.

3 The watching brief

3.1 Methodology

All archaeological excavation and recording during the watching brief was done in accordance with the *Method Statements* (MOLA 2009a; MOLA 2010) and the *Archaeological Site Manual* (MoLAS 1994).

The locations of the watching brief were pre-defined in the *Method Statement* (MOLA November 2009b, Fig 2) after the examination of the results of extensive geotechnical investigations, including boreholes, window samples and test pits, had established areas of potential archaeological survival on the site.

The site has produced: 1 set of notes and 18 digital photographs. No finds were recovered from the site.

The site records can be found under the site code NCA10 in the MoL archive.

3.2 Results of the watching brief

In total, two watching brief areas were identified (see Fig 2). There follows a brief description of the archaeological deposits as recorded.

The former production area, along the northern boundary of the site, was reduced from the present ground level by 3.25m across the whole area, because of the depth of contaminated ground. To the west and north, were cast iron pipes (0.60m diameter), which to the west had been cut deep into the underlying gravels. Across the central area were the grubbed out remains of 19th- or 20th-century brick buildings (see front cover). Natural yellow sandy gravels were seen at 2m beneath the present ground (c 2m OD). In places dark grey organic water-lain silts were observed, but not peat, overlying the gravel. To the east was a complex of concrete walls, and concrete tanks that the cast iron pipes fed into. A series of four tanks, each 10m by 3m, was observed (see Fig 3). Theses were probably part of the purification system, where tar and other impurities were removed (Francis 2010, 12–4).

The garage area, along the southern boundary of the site, was reduced from the present ground level by 2m. In the 6m wide strip to the west a cast iron pipe had truncated the underlying natural deposits. In the central area, under the former garage, the concrete piled building had disturbed the underlying strata (Fig 4). Where not truncated by modern buildings, natural yellow sandy gravels were observed as little as 0.20m beneath the present ground surface, sealed by modern made ground. The east was not remediated as this lies in the present access road, which lies at 2m OD, i.e. the depth of remediation.

On the basis of these results, a second phase of watching brief was undertaken in the areas where development impacts on unremediated ground were identified in the written scheme of investigation for development (MOLA, 2010, Fig 3). it was found that similar levels of truncation by the garage buildings had removed any potentially significant archaeological deposits.

4 Potential of archaeology

4.1 Original research aims

- What was the level and nature of natural topography?

Yellow sandy gravels were seen just beneath the ground surface (c 4m OD) along the southern site boundary, While the same gravels, overlain in places with dark grey organic water-lain silts, were seen at 2m beneath present ground surface (c 2m OD). This suggests that, whilst the site was highly truncated, the slope of the gravel terrace above the floodplain could be defined.

- What information do geoarchaeological deposits provide on the palaeo-topography of this part of Southwark?

Unfortunately the high levels of truncation, contamination and the process of remediation on the site did not allow for the observation of features such as palaeo-channels on the site.

- What are the earliest deposits identified?

The dark grey organic water-lain silts, seen overlying the natural gravels in place along the northern boundary may have been associated with the "Bermondsey Lake" or Thames floodplain. However these deposits were too badly truncated and contaminated for further analysis.

- What is the evidence for human occupation or activity on the site?

With the exception of the gasworks, there was no evidence of human occupation or activity on the site.

- What are the latest deposits identified?

The latest deposits were associated with the industrial processes of the gasworks.

4.2 New research aims

There are no new research aims.

4.3 Significance of the data

Whilst the identification of the slope of the gravel terrace above the Thames floodplain is part of a regionally significant theme in itself it is only of local significance. Furthermore it is unlikely the evidence of the industrial processes of the gasworks found here will the contribution to the understanding history of the gasworks or gasworks in general, as better examples have been discussed elsewhere.

5 Publication and archiving

Information on the results of the excavation will be made publicly available by means of a database in digital form, to permit inclusion of the site data in any future academic researches into the development of London.

The site archive containing original records and finds will be stored in accordance with the terms of the *Method Statement* (MOLA November 2009) with the Museum of London within 12 months of the end of the excavation.

In view of the limited potential of the material (Sections 4) and the relatively limited significance of the data (Section 4.3) it is suggested that a short note on the results of the watching brief should appear in the annual round up of the *London Archaeologist*.

6 Acknowledgements

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- Anthony MacKinder, MOL Archaeology, for undertaking the first phase watching brief
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8 NMR OASIS archaeological report form

OASIS ID: molas1-95625	
Project details	
Project name	709 Old Kent Road, London, SE1
Short description of the project	An archaeological watching brief on ground remediation of a former gasworks found evidence of the slope of the gravel terrace above the Thames floodplain. Waterlain organic silts, on the north of the site, may have been associated with the floodplain, or the prehistoric Bermondsey lake, but were too truncated and contaminated for further analysis. Twentieth-century concrete tanks from the gasworks' purification process were observed.
Project dates	Start: 11-04-2010 End: 03-03-2011
Previous/future work	No / No
Any associated project reference codes	NCA10 - Sitecode
Type of project	Recording project
Current Land use	Industry and Commerce 1 - Industrial
Monument type	ALLUVIUM Uncertain
Monument type	GAS PURIFIER Modern
Investigation type	'Watching Brief'
Prompt	Planning condition
Project location	
Country	England
Site location	GREATER LONDON SOUTHWARK CAMBERWELL AND DULWICH 709 Old Kent Road, London
Postcode	SE15 1JZ
Study area	2.00 Hectares
Site coordinates	TQ 34841 77881 51.4832844599 -0.05784214435680 51 28 59 N 000 03 28 W Point
Height OD / Depth	Min: 2.00m Max: 4.00m
Project creators	
Name of Organisation	MOL Archaeology
Project brief originator	Southwark Archaeologist
Project design originator	MOL Archaeology
Project manager	Robin Nielsen

Project supervisor	Tony Mackinder
Type of funding body	Client
Name of funding body	Nation Grid Properties
Project archives	
Physical Archive Exists?	No
Digital Archive recipient	LAARC
Digital Archive ID	NCA10
Digital Media available	'Images raster / digital photography','Survey','Text'
Paper Archive recipient	LAARC
Paper Archive ID	NCA10
Paper Media available	'Diary','Report','Survey ','Unpublished Text'
Project bibliography	
Publication type	Grey literature (unpublished document/manuscript)
Title	709 Old Kent Road, London SE1
Author	Howell, I
Date	2011
Issuer or publisher	MOL Archaeology
Place of issue or publication	London
Description	Client report

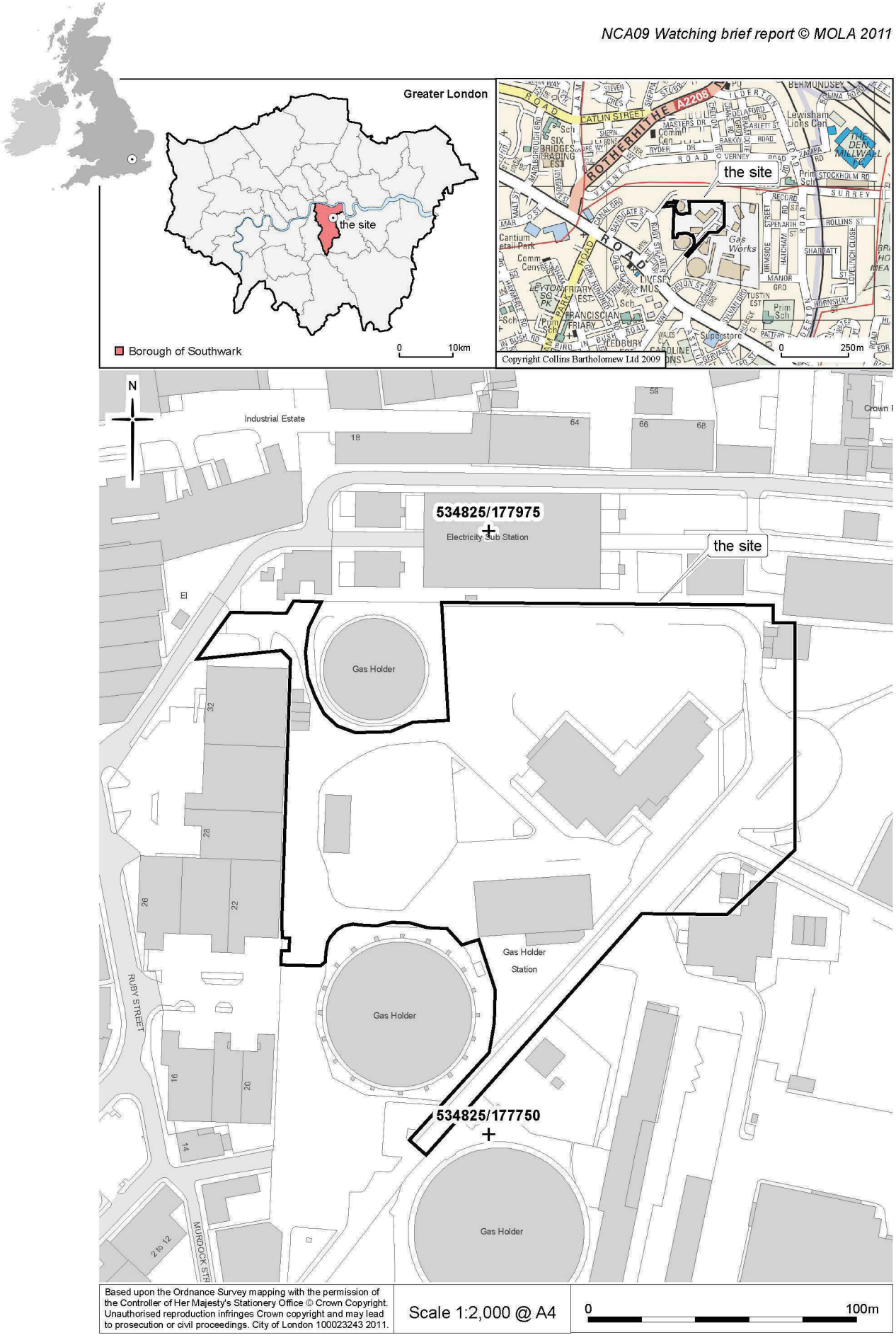

Fig 1 Site location

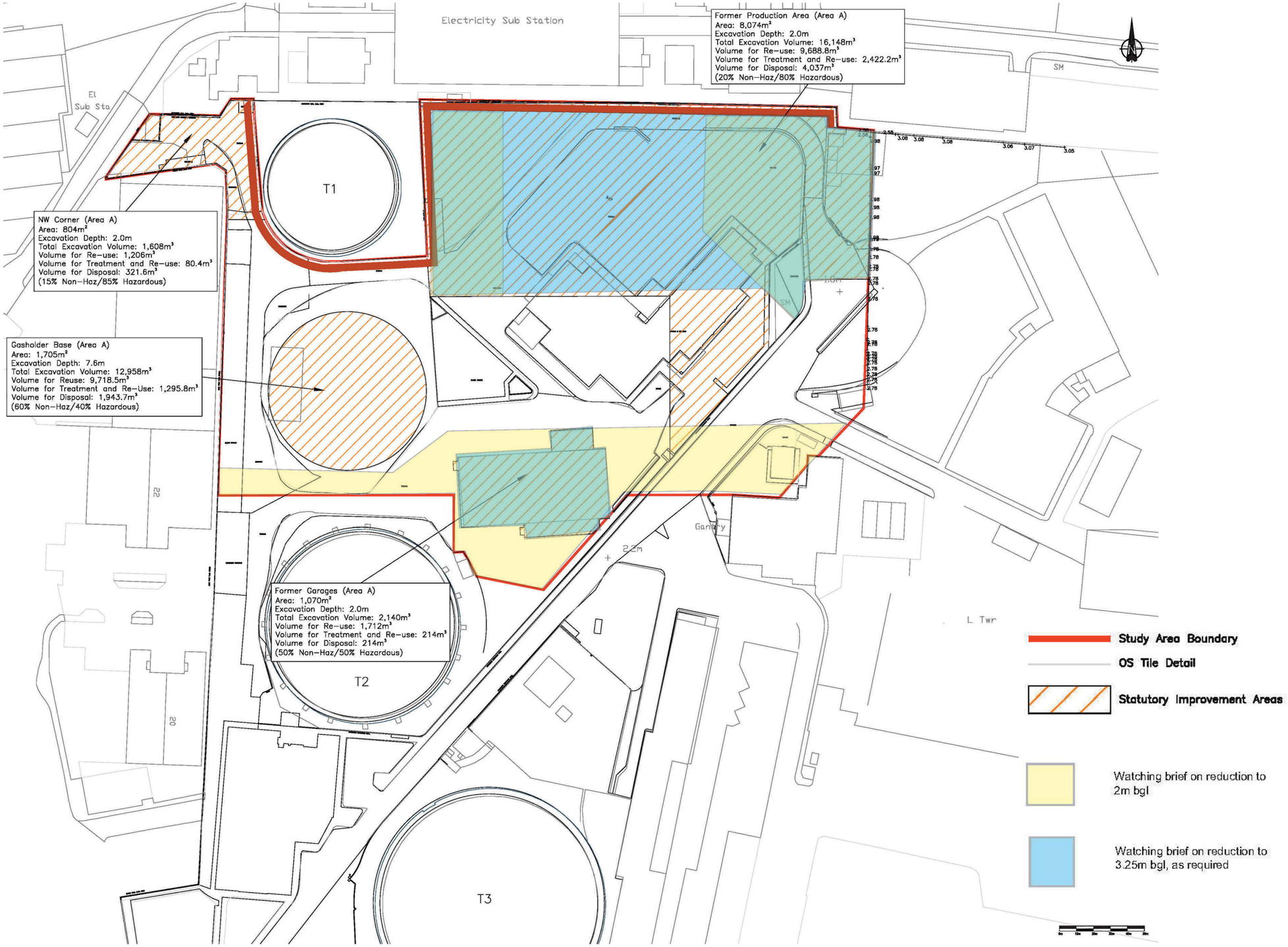

Fig 2 Watching brief areas (based on Celtic drawing D1322/3633/A9)

Fig 3 Purification tanks on north side of site, looking north

Fig 4 Site of former garage on south side of site, looking east