



**C261 Archaeology Early East**  
**Post-Excavation Assessment and**  
**Updated Project Design**  
**TCR East (TCG09)**

**Document Number:** C261-MLA-X-RGN-CRG03-50045

**Contractor Document Submittal History:**

Revision:	Date:	Prepared by:	Checked by:	Approved by:	Reason for Issue:
1.0	15.07.13	J Bowsher	Elaine Eastbury	Lucy Whittingham	For CRL Review
2.0	1.11.13	J Bowsher	Elaine Eastbury	Lucy Whittingham	MOLA response to C261-MLAX-XCS-CRG03-5007 v1
3.0	18.03.14	J Bowsher	Elaine Eastbury	Lucy Whittingham	MOLA response to Review sheet v2
4.0	18.08.14	J Bowsher	Nicholas Elsdon	Lucy Whittingham	MOLA response to Review sheet v3
		<i>Julian Bowsher</i>	<i>N. Elsdon</i>	<i>LS Whittingham</i>	

<b>CROSSRAIL REVIEW AND ACCEPTANCE STATUS</b>	
This decal is to be used for submitted documents requiring acceptance by CRL.	
<input checked="" type="checkbox"/>	Code 1. Accepted. Work May Proceed
<input type="checkbox"/>	Code 2. Not Accepted. Revise and resubmit. Work may proceed subject to incorporation of changes indicated
<input type="checkbox"/>	Code 3. Not Accepted. Revise and resubmit. Work may not proceed
<input type="checkbox"/>	Code 4. Received for information only. Receipt is confirmed
Reviewed/Accepted by:(signature)	<i>[Signature]</i>
Print Name:	<i>J. CARVER</i>
	Date: <i>11/09/14</i>
Acceptance by CRL does not relieve the designer/supplier from full compliance with their contractual obligations and does not constitute CRL approval of design, details, calculations, analyses, test methods or materials developed or selected by the designer/supplier.	

This document contains proprietary information. No part of this document may be reproduced without prior written consent from the chief executive of Crossrail Ltd.

## 1 Executive summary

*This report presents the results of archaeological work carried out by Museum of London Archaeology (MOLA) on the site of 12 Goslett Yard, London WC2. The report was commissioned from MOLA by Crossrail Ltd.*

*This work was undertaken as part of a wider programme of archaeological assessment and mitigation for the new London Underground and Crossrail Eastern Ticket Hall at Tottenham Court Road Station. The scheme consisted of new underground station concourses, ventilation shafts, service diversions, demolition of non-listed buildings and other works at several sites of which 12 Goslett Yard is one.*

*At 12 Goslett Yard the work comprised preliminary assessments consisting of both desk-based studies of the general area (including deposit survival modelling), an archaeological field evaluation and a subsequent Targeted Watching Brief of the site itself. Historic building recording was also carried out before the demolition of the standing buildings.*

*This report also takes into account work undertaken at 2 Stratford Place which was part of the Bond Street London Underground upgrade and Crossrail grout shaft.*

*The results of the investigation confirm historic map evidence with the first urbanisation consisting of 17th-century structural remains with further phases of building development in the 18th, 19th and early 20th centuries.*

*It is recommended that the archaeological results up to the 20th century should be included in the West Area Archaeology publication (CRL7) to be compiled by Oxford Archaeology discussing the urbanisation of this part of London.*

*In addition this post-excavation review recommends an additional publication on the impact of Crosse and Blackwell in the Charing Cross Road/Soho Square area from the mid-19th century onwards to be undertaken by MOLA (C&B publication). The form of this publication is envisaged to be a popular booklet aimed at the local community, historian, archaeologists and the general public.*

*Because the Crosse and Blackwell complex utilised existing 17th and 18th-century buildings, including cellars, as well as structures they built in the 19th and 20th-centuries, the publication should describe the sequence of development at the site, albeit concentrating on the use by and material associated with Crosse and Blackwell. There is a large body of associated documentary material that will enhance the archaeological evidence from TCG09.*

*Of particular interest were four large deposits of finds, one in a vaulted chamber/cistern. These are significant assemblages of ceramic and glass vessels associated with the products of Crosse and Blackwell, which together with further documentary research will contribute to a discussion of the evolution of the company, its buildings, products and packaging, trade and export within the social context of late Victorian and Edwardian Britain. There may also be the potential to identify changes in packaging influenced by major historical events such as WWI.*

## Contents

<b>1</b>	<b>Executive summary</b> .....	<b>2</b>
<b>2</b>	<b>Introduction</b> .....	<b>6</b>
2.1	Site location.....	6
2.2	<b>Circumstances</b> and dates of fieldwork.....	7
2.3	Organisation of the report .....	8
2.4	Historical and archaeological background .....	9
2.5	Museum of London Archaeology team .....	9
<b>3</b>	<b>The site sequences: interim statement on field work</b> .....	<b>11</b>
3.1	Natural deposits (TCG09) (CRL7).....	11
3.2	Medieval Great Conduit cistern (SFJ10) (CRL7 publication) .....	11
3.3	Pre-urbanisation (TCG09) (CRL7) .....	13
3.4	17th to 18th-century structures (TCG09) (CRL7, referred to in C&B publication).....	14
3.5	19th to 20th-century industrial structures (TCG09) (C&B publication) .....	16
3.6	Early 20th-century features .....	19
3.7	Listed and Non-listed buildings (CRL1, CRL7, C&B publication).....	19
<b>4</b>	<b>Quantification and assessment</b> .....	<b>22</b>
<b>5</b>	<b>Updated Project Design - potential of the data and recommendations for further analysis</b> .....	<b>57</b>
5.1	Realisation of the original research aims .....	57
5.2	Revised research aims.....	57
5.3	Discussion of potential (CRL7).....	57
5.4	Discussion of potential (C&B publication) .....	59
<b>6.</b>	<b>Significance of the data</b> .....	<b>72</b>
6.1	General .....	72
6.2	Listed and non-listed buildings.....	72
6.3	Ceramic building material.....	72
6.4	Post-medieval pottery .....	72
6.5	Post-medieval bulk and accessioned glass .....	73
6.6	The accessioned finds and related bulk finds .....	73
6.7	Animal bones .....	73
6.8	Geoarchaeology.....	73
<b>7</b>	<b>Preliminary publication synopsis (Crosse and Blackwell publication)</b> ... <b>74</b>	
7.1	Publication project: resources and programme.....	76

7.2	Publication project: task sequence (CRL7 publication).....	84
<b>8</b>	<b>Bibliography.....</b>	<b>86</b>
8.1	Statutory and other guidelines .....	86
8.2	Site specific bibliography.....	87
8.3	Archaeological bibliography .....	88
<b>9</b>	<b>Appendix: management, delivery and quality control .....</b>	<b>89</b>

### List of Figures

- Fig 1 Site location
- Fig 2 Location of built heritage recording
- Fig 3 Location of Great Conduit Cistern at Stratford Place, Bond Street Station Upgrade. Site code SFJ10
- Fig 4 Plan of pre-urbanisation features recorded during the targeted watching brief
- Fig 5 Morgan's map of London (1682) showing Soho Square to the west of the site
- Fig 6 Plan of 17th – 18th century features
- Fig 7 Plan of 19th – 20th century features
- Fig 8 19th-century features overlaid onto Ordnance Survey map of 1871

### List of Photos

- Photo 1 View of south–west corner of site showing natural gravel deposit [137], looking south–west*
- Photo 2 View of south–west corner of site, showing pre-urbanisation deposit [129], looking south*
- Photo 3 View of internal arch-roofed alcove [88], looking east*
- Photo 4 View of cellar floor [133], looking east*
- Photo 5 View of stairway addition [124], looking south*
- Photo 6 View of cellar wall [121] and later cistern [104], looking north-east*
- Photo 7 View of 17th to 19th-century wall foundations and circular soak-away in southern area of site, looking east*
- Photo 8 View of 19th-century wall foundations in south-west corner of site, looking south-west*
- Photo 9 View of vaulted cistern [104], looking north–west*
- Photo 10 View of site looking north–east, showing 19th-century fire brick structures, vaulted cistern and 17th to 18th-century cellar with arch roofed alcove*
- Photo 11 Crosse & Blackwell pottery collection within cistern [104]*
- Photo 12 View of warehouse floors [35] and [37], looking north*
- Photo 13 View of brick lined pit [45], looking north*
- Photo 14 Sample of firebricks taken from context [148]*
- Photo 15 View of 20th-century machine base, looking east*
- Photo 16 Sequence of monolith tin sample <3>*
- Photo 17 Sequence of monolith tin sample <6>*

### List of Tables

- Table 1 stratigraphic archive details for TCG09 and TCG09 eval
- Table 2 stratigraphic archive details for other sites in TCR East (CRL7)
- Table 3 Finds and environmental archive general summary
- Table 4 dating and quantification of clay pipes from the site

Table 5 Dating and quantification of pottery recorded on Oracle, from deposits currently dated to the 17th and 18th centuries

Table 6 Dating and quantification of pottery recorded on Oracle, from deposits currently dated to the 19th and 20th centuries

Table 7 Summary of selected accessioned finds discussed in this report

Table 8 Preliminary list of objects for illustration

Table 9 Bulk sample summary

## 2 Introduction

### 2.1 Site location

Goslett Yard lies off the north-western end of Charing Cross Road. It is (presently) a *cul de sac* and the site lies to the north. The centre of the site lies at Ordnance Survey National Grid Reference 529810 181260. The concrete ground slab within the site lay at between 12.00m and 25.25m OD. The site code is TCG09 (Fig 1).

Nearby relevant sites included:

TCU09, an evaluation at 1–6 Denmark Place and 144 Charing Cross Road (MOLA for London Underground 2009a)

TCZ07 a watching brief on Tottenham Court Road Station Utilities Upgrade (MOLA for London Underground 2009b)

SFJ10, a watching brief at 2 Stratford Place, Bond St Station Upgrade

Built Heritage recording was carried out at 101–103 Oxford Street, London WC2, 1–15 Oxford street, 157–167 and 138–148 Charing Cross Road, 1–6 Falconberg Court (MOLA for London Underground, March 2009)

Built Heritage recording of features associated with Centre Point (MOLA for London Underground January 2009)

Built Heritage recording of 12 Sutton Row to 12 Goslett Yard (see Fig 2 and section 3.1.2) (MOLA for London Underground, February 2010)

TCG09, an evaluation at Crossrail Eastern Ticket Hall, 12 Goslett Yard, London WC2 (MOLA for London Underground, January 2010)

TCG09, a targeted watching brief on Crossrail Eastern Ticket Hall, 12 Goslett Yard, London WC2 (MOLA for London Underground, November 2011)

## 2.2 Circumstances and dates of fieldwork

- 2.2.1 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 previous archaeological evaluation (MOLA, November 2009, Section 1.2). The planning background in which the archaeological targeted watching brief took place was summarised in the *Site-Specific Archaeological Written Scheme of Investigation for Crossrail Eastern Ticket Hall (TCR)* (MOLA, June 2010, Section 2.1).
- 2.2.2 Two phases of archaeological work have been undertaken at 12 Goslett Yard, WC2. An archaeological field evaluation between 08/12/2009 and 14/12/2009 comprised eight trial trenches within the existing building at the site, supervised by Julian Bowsher (Figure 2). Two archaeologists fully excavated, recorded and planned each trench with samples of artefacts and ecofacts removed from the site for analysis at MOLA. Visiting MOLA specialists included two surveyors, a photographer, a building recording specialist, a pottery specialist and a geoarchaeologist.
- 2.2.3 An archaeological evaluation as defined by the Institute for Archaeologists is ‘a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate.’ (IFA, 2001).<sup>1</sup>
- 2.2.4 A further tranche of archaeological work at the site between 9/6/2010 and 23/7/2010 was designated a ‘targetted watching brief’ supervised by Paul Thrale. All archaeological recording during the targeted watching brief was carried out using selective strip, map and sample techniques in accordance with the Crossrail WSI (Crossrail Version 2, January 2010), the MOLA Method Statement (Crossrail Version 2, June 2010) and the *Archaeological Site Manual* (MoL, 1994). To all intents and purposes it was an archaeological excavation. The results of this TWB were summarised in a fieldwork report ( MOLA for Crossrail 2010a )
- 2.2.4 An archaeological excavation as defined by the Institute for Archaeologists is ‘a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are

---

<sup>1</sup> Attention may also be drawn to paragraph 1 (under ‘The Role of Archaeologists’) of the *Code of Good Practice On Archaeological Heritage in Urban Development Policies* established by the Cultural Heritage Committee of the Council of Europe which points out that archaeology can ‘add value’ to a development, influencing overall concept and/or architectural design: ...archaeological work will thereby contribute to the urban landscape of the future (CHCE, 2000).

*studied and the results of that study published in detail appropriate to the project design' (IFA, 2001).<sup>2</sup>*

- 2.2.5 Archaeological features were recorded by MOLA Geomatics by optical survey using MOLA GPS control. The survey was tied into 3D control loop previously established for the work at Tottenham Court Road Underground Station, which was then tied into the OS. Levels were derived from Ordnance Survey Bench mark on the north-west corner of St Patrick's Church (26.02m OD). A *Survey Report* was produced by MOLA Geomatics (MOLA, January 2010).

## 2.3 Organisation of the report

- 2.3.1 The *Post-excavation assessment and updated project design report* is defined in the relevant GLAAS guidance paper (Paper VI) as intended to 'sum up what is already known and what further work will be required to reach the goal of a well-argued presentation of the results of recording and analysis' (VI/1).
- 2.3.2 The principle underlying the concept of post-excavation assessment and updated project design were established by English Heritage in the *Management of Archaeological Projects 2* (MAP2), (1991). More recent GLAAS guidance has emphasised the need for this stage to be seen as 'brief and transitional', the document acting as a 'gateway' to further analysis and eventual publication (EH, GLAAS, 1999 VI/1)
- 2.3.3 The post-excavation document has been written in response to the proposed publications (CRL7) and additional work on the Crosse & Blackwell buildings as set out in the Crossrail Post-Ex strategy document (CR-XRL-T1-STP-CROO1-50001). This report contains a summary of the recommendations made for publication and is presented in the following sections. Section 2 introduces this document and summarises the circumstances of fieldwork and archaeological background. Section 3 discusses the site sequence and Section 4 the finds and environmental assemblages with recommendations for further analysis and publication. Section 5.3 presents the potential for analysis for the CRL7 publication and Section 5.4 the potential for analysis in the Crosse and Blackwell publication and Section 6 the significance of the evidence. Section 7 presents the proposed format of publication, themes to be discussed and a synopsis, followed by the proposed analysis tasks and resources required. Sections 8 and 9 are bibliography and appendix
- 2.3.4 Within the report the archaeological data is broken down into specific numbered units. For example [145] refers to the specific context number allocated to a feature during the excavation. During the analysis process, these are amalgamated into larger units: subgroups (sgp 1) and groups (group1). Context numbers are distinguished in the text by square brackets

---

<sup>2</sup> Attention may also be drawn to paragraph 1 (under 'The Role of Archaeologists') of the *Code of Good Practice On Archaeological Heritage in Urban Development Policies* established by the Cultural Heritage Committee of the Council of Europe which points out that archaeology can 'add value' to a development, influencing overall concept and/or architectural design: *...archaeological work will thereby contribute to the urban landscape of the future* (CHCE, 2000).



[1], accessioned finds by chevron brackets <1> and environmental samples by the use of curly brackets {1}.

## **2.4 Historical and archaeological background**

### **2.4.1 Geology and Topography**

2.4.1.1 The site is relatively flat at 25.45m to 25.70m OD. The underlying natural geology is Thames terrace gravels (Lynch Hill). The natural gravels may have been overlain in places by brickearth (Langley Silt Complex). This is fine-grained silt believed to have accumulated by a mixture of natural processes since the Last Glacial Maximum, around 17,000BP. Much of the brickearth in London has been quarried away in the past. The level of the top of untruncated brickearth (or gravel, if the brickearth was quarried in antiquity) is important as it represents the base of the archaeological deposit sequence, although individual cut features (such as wells or ditches) may penetrate deeper into the natural geology.

### **2.4.2 Archaeological background**

2.4.2.1 The archaeological, historical and topographic development and potential of the site have been addressed in previous documents (Crossrail January 2009, section 2.3; MOLA, 2009, section 3).

2.4.2.2 The earliest archaeologically significant deposits in the site vicinity have included peaty soils, alluvial clay/silts and reworked brickearth, recorded at Soho Square and nearby Falconberg Court, Falconberg Mews and Sutton Row. These deposits suggest a wet, marshy environment and reworked brickearth may be the result of early agricultural activity or later brickearth quarrying. This supports cartographic evidence and previous archaeological investigation in the area, which suggests the site remained as open, rural land prior to urbanisation in the 17th century. No dating evidence for prehistoric, Roman or medieval occupation was retrieved from the archaeological investigations.

2.4.2.3 The site lay on the western edge of St Giles medieval village and probably just outside the precinct of St Giles Hospital. Post-medieval buildings and development can be seen within the area of the site on historic maps from the later 17th to the 19th centuries.

## **2.5 Museum of London Archaeology team**

In the document below the following terms should be understood:

- 2.5.1 *Museum of London Archaeology* (MOLA) is a company limited by guarantee registered in England and Wales with company registration number 07751831 and charity registration number 1143574. Registered office: Mortimer Wheeler House, 46 Eagle Wharf Road, London N1 7ED.
- 2.5.2 *Project Manager* - MOLA office based manager who was the client's principal point of contact and who has overall responsibility for the project budget and delivery.
- 2.5.3 *Site Supervisor* - MOLA site based manager who was responsible for the direction of the field team. Site supervisors on larger sites will tend to be Project Officers in grade, whilst on other sites they will be Senior Archaeologists. On some sites there may be both a Project Officer and/or one or more Senior Archaeologists.
- 2.5.4 *Archaeologists* - MOLA excavation staff responsible on site for archaeological excavation.
- 2.5.5 *Health and Safety Manager* – The MOLA manager with sole responsibility for site inspections, reporting and issuing of recommendations for the Site Supervisor and Project Manager to implement. Reports directly to MOLA CEO.

### 3 The site sequences: interim statement on field work

#### 3.1 Natural deposits (TCG09) (CRL7)

<i>Natural geology sequence</i>	<i>OD Level (Top)</i>	<i>Preliminary interpretation and date</i>
Silt and gravel [140]	22.75m OD	Truncated natural
Sandy gravel [137]	22.15m OD	Truncated terrace gravels

The earliest deposits recorded on the site were river terrace gravels (context [137]) (Lynch Hill gravel formation) which are a Pleistocene deposit and form the basis to the Holocene sequence of deposits.

Context [137], although not sampled in either monolith or bulks was the river terrace gravels underlying the whole site and consisted of compact, orange, heavily iron stained sands and sub-rounded to sub-angular gravels (Fig 4 and Photo 1). This context undulated across the site but lay some 0.4m below the monolith sample at approximately 22.15m AOD. The gravels are a Pleistocene deposit of interest both archaeologically and palaeo-environmentally.

Context (140), recorded at heights of between 22.15m and 22.75m AOD), was a greeny grey silt with fine rootlines, moderately frequent gravel throughout with associated iron staining and fissures filled with silts from above. Interestingly the fissures in [140] could indicate a period of drying out prior to the accumulation of [129] over [140]. Furthermore, the fine rootlines indicate vegetation (although probably light) did take hold on or over [140]. The sediments of this context were considered to be the remnants of a truncated and trampled area probably as a result of quarrying activity.

#### 3.2 Medieval Great Conduit cistern (SFJ10) (CRL7 publication)

*Phil Jefferies*

A medieval culvert found in a watching brief at 2 Stratford Place, Bond Street Station Upgrade (SFJ10) (Fig 3) is described as follows: The structure is provisionally thought to be a water cistern associated with the 13th-century Medieval Great Conduit and possibly represents the Conduit Head House nearest to the Lord Mayor's Banqueting House, built at the later date of 1565. Its first phase of construction can be provisionally placed as mid 13th-century in date and it is likely that the red brick vaulted arch roof is evidence of a later rebuild during the Post-medieval period (1485-1901) possibly replacing an original stone vaulted roof. The lower stone culvert on the south wall was probably the out flow channel feeding the system flowing towards the City of London and the upper brick passageway may well represent a later door or out flow channel contemporary with the brick vaulted roof. The later use of bricks and the subsequent wider brick passageway in the southern wall may indicate a change in the function of the structure. Whilst the lack of identifiable floor surface may well indicate later robbing activity it is possible the

original structure was designed without a floor in order to function, or that a change in function at a later date no longer required one. A consideration could be that the cistern was built directly over a natural spring and the water rose directly into the structure which then contained it for subsequent release into the Conduit. (MOLA April 2013 Bond St\WB Nov 2011-2013)

There were three unstratified finds of little consequence found at SFJ10

### 3.3 Pre-urbanisation (TCG09) (CRL7)

The area of the site was known as Soho Fields, comprising 22 acres, and remained open farmland until 1536 when it became parkland belonging to the Palace of Westminster until the mid 17th century. Our site lies in the north-east corner of this area, just to the west of Hog Lane (later Crown Street and now Charing Cross Road) which formed the boundary between the ancient parishes of St Martin in the Fields to the west and St Giles in the Fields to the east.

#### 3.3.1 Post-medieval quarrying

<b><i>Post-medieval quarrying</i></b>	<b><i>OD Level (Top)</i></b>	<b><i>Preliminary interpretation and date</i></b>
Clayey, sandy silt [129]	22.66 – 22.77m OD	Late 17th to early 18thC soil
Clayey, sandy silt [151]	22.47m OD	Late 17th to early 18thC soil

A uniform part-waterlain deposit of dark sandy silt [129], becoming more clayey and humic with depth, was recorded as the lowest archaeological level across the site, beneath these infill deposits (Photo 2). This deposit contained pottery sherds dating to between 1670 and 1720 and clay tobacco pipes dating to between 1680 and 1710. An underlying mid dark grey/brown clay sandy silt [151] that represents a dumping/levelling layer was also recorded. These two deposits represent a post-medieval rudimentary soil layer developing within an area of extensive but shallow open-cast brickearth quarrying prior to backfill and construction activity in the 17th century through a mix of dumping, soil formation and bioturbation.

The absence of brickearth; the relatively low level and uniform truncation of the underlying terrace gravel and the presence of post-medieval finds in these deposits all support this hypothesis. There was therefore no evidence of an original soil profile or associated prehistoric, Roman or medieval features. The evidence suggests that the quarrying had already removed this horizon across the site and taken away any evidence of Prehistoric, roman or medieval activity in this area. The dating of these deposits and the closely dated overlying levelling deposits suggest the urbanisation of the area followed closely after quarrying in the late 17th century. This confirms the chronology of the first urbanisation of the area, as first indicated from historic maps.

#### 3.3.2 Post-Medieval levelling deposits

<b><i>Post-Medieval levelling deposits</i></b>	<b><i>OD Level (Top)</i></b>	<b><i>Preliminary interpretation and date</i></b>
Deposits [98], [105] and [119]	23.76m OD	Late 17th to early 18thC levelling deposits

At the second main archaeological phase of activity the post-medieval buildings had cut into 17th-century levelling deposits [98], [105] and [119]. These represent the general dumping of post-medieval demolition material and infill prior to development. Deposit [98] contained pottery sherds dating to between 1650 and 1700 and clay

tobacco pipes dating to between 1680 and 1710. These deposits may have originally covered a large area but were recorded mainly in the southern part of the site having been completely truncated in the north by basements and in the east by substantial brick foundations relating to the 19th-century Crosse & Blackwell development.

### 3.4 17th to 18th-century structures (TCG09) (CRL7, referred to in C&B publication)

Beneath the 19th to 20th-century buildings and features including those associated with the Crosse & Blackwell development, the brick walls, foundations and drainage of 17th to 18th-century properties fronting onto Bow Street and George Yard (now Goslett Yard) were recorded (Fig 6). These features can be related to historic maps of the period (Fig 5) and included a brick floored cellar with vaulted alcove recorded in the north west of the site.

Development of housing began in the 1670s and it can be seen that by 1682 Soho Square and adjoining streets were laid out and (partially) built up (Fig 5). An integral part of the development was the street marked as Bow Street, parallel to and just to the east of Soho Square. The southern part of this street, however, was known as George Yard (now Goslett Yard) and the buildings on its west side comprised the stables and coach houses for the grander houses fronting Soho Square (SoL 81, 82). This north-south street was broken by at least the mid-18th century but the northern arm is still represented by Falconberg Mews. The road crossing Bow Street - Giles Street - is now Sutton Row. Buildings on the east side were almost certainly smaller domestic properties whilst the square left in the centre – bounded by other properties facing Crown Street (now Charing Cross Road) to the east – was clearly back yards or gardens.

It is therefore likely that the walls found during the investigation represent the original structures on the east side of Bow Street/George Yard.

#### 3.4.1 17th to 18th-century buildings and associated features

<b>17th to 18th-century buildings and associated features</b>	<b>OD Level (Top)</b>	<b>Preliminary interpretation and date</b>
Tile surface [112]	23.70m OD	Tiled floor surface
Brick drains [110] and [115]	23.56m OD	Brick lined drains associated with 17th to 18thC properties
Brick wall [158]	23.97m OD	17th to 18thC property wall
Brick walls [81], [95] and [99]	24.20m – 24.32m OD	17th to 18thC properties
Brick walls [144] and [159]	24.07m OD	17th to 18thC property

To the west of the cellar a brick drain with ragstone slab capping [115] was recorded running parallel and abutting wall [107]. To the south this drain was built into the north face of wall [158], probably for a down drain pipe, and in the north the drain continued beneath a tiled floor surface [112]. In the north there was a junction with an east-west running brick drain [110] which was truncated to the west by 20th-century buildings. A main structural wall [158], the probable continuation of property wall [121] also continued west beyond the limit of excavation until truncated by 20th-century buildings, which suggests the original building may have continued westwards beyond the limit of excavation.

To the south of this, walls [159] and [144] represent the remains of a 17th–18th century building without cellar that also fronts onto the east side of Bow Street (now Goslett Yard). Wall [102], which continues west beyond the limit of excavation, may be part of a later soakaway or cess pit with associated brick drain [101]. A later brick culvert [69] was also recorded in this area. Walls [81], [95] and [99] represent the remains of 17th-18th century properties fronting onto the southern section of George Yard including the corner building of Bow Street and Georges Yard (Fig 6).

These three wall foundations truncate large levelling deposits [98], [105] and [119] down to natural gravel [137] but show no evidence that these properties were cellared. Pottery sherds date these levelling deposits to between 1650 and 1700 and fragments of clay tobacco pipes date to between 1680 and 1710 which suggests the construction of the buildings is of a late 17th-century date.

#### 3.4.2 17th to 18th-century cellar

<b>17th to 18th-century cellar</b>	<b>OD Level (Top)</b>	<b>Preliminary interpretation and date</b>
Walls [91], [107] and [121]	24.12m – 24.36m OD	17th to 18thC cellar
Brick floor [133]	22.57m OD	17th to 18thC cellar floor
Brick arch [88]	24.20m OD	17th to 18thC internal arch

Walls [107], [121] and [91] form the west, south and east walls of a 17th-18th century cellar with brick floor [133] and an internal arch-roofed alcove [88] abutting the eastern back wall [91] (Photo 3–4 and 6). The cellar shows signs of being in use through both the eighteenth and perhaps 19th centuries. An additional wall [120], which forms an internal western wall of the cellar, appears to have a recess that was bricked up at a later date with a possible 18th century wall [125]. This feature may have been for an entrance way, light well or similar. A later stairway [124] was recorded in the southern wall [121] of the cellar with the addition of a brick supporting plinth to the immediate west of this entranceway and abutting the internal face of cellar wall [121], (Photo 5). These later additions are evidence that the cellar remained in use into the 19th century.

### 3.5 19th to 20th-century industrial structures (TCG09) (C&B publication)

At the first significant horizon a sequence of brick structures dating to the 19th and early 20th centuries was revealed. Previous recording of standing buildings in the vicinity and associated documentary research indicated that the site formed part of the industrial complex of the Victorian enterprise Crosse & Blackwell at this time. The potential for associated buried structures had been confirmed in the field evaluation and this phase was one of the key objectives of the TWB. These structures included the brick walls and wooden floors of the factory buildings, cellars, a circular brick-lined furnace and a machine base. A brass plate on the machinery is for J & E Hall Ltd, a company established in Dartford since the 18th century and pioneers of early refrigeration equipment.

A brick vaulted chamber in the central area of the site, possibly beneath an open yard had been carefully lined with cement and is interpreted as a cistern, also associated with the Crosse & Blackwell works. When it went out of use it was backfilled with late 19th century ceramic containers for their products. Large assemblages of Crosse & Blackwell pottery and glass vessels were present within this and other features. A MOLA pottery specialist was present on site to log and sample this material.

#### 3.5.1 19th-century building foundations

<b>19th-century building foundations</b>	<b>OD Level (Top)</b>	<b>Preliminary interpretation and date</b>
Brick walls [80], [82], [96] and [97]	24.52m – 24.79m OD	19th to 20th-century building foundations

The Ordnance Survey map of 1871 (Fig 8) shows the south-west corner of the site is occupied by a group of four individually outlined properties on the corner of George Yard (later Goslett Yard), which may have housed small manufacturers with independent workshops. The alignment of the 19th to 20th-century buildings follow those of the previous occupation across the site. This can be seen in the western half of the site where a number of walls, associated drainage and foundations (Fig 5) were built directly onto the remains of the demolished 17th-18th century structures.

Walls [80], [82], [96] and [97] may represent the two southern properties fronting onto George Yard (Photo 7). A brick culvert [85] was recorded running along the perimeter of the site that may represent associated drainage.

A narrow alleyway can be seen running between the south-west corner property and the northern properties on the Ordnance Survey map of 1871 (Fig 8) and also Ordnance Survey maps of 1894 and 1914 (not re-produced here). This may be the narrow space seen between walls [80] and [106] (Figs 7–8). A circular brick feature [79] was recorded within this open area which may represent a drainage feature such as a soak-away (Photo 7).



A further series of walls and features were also recorded beneath the modern concrete slab that may represent a third, large property to the immediate north. Walls [60], [65], [68], [75], and [76] represent the northern wall of this property and were built directly on top of the property line and southern wall of an underlying 17th to 18th-century cellar [121]. The walls, foundations and drainage features recorded within this area may be associated internal features and additions. Walls [103], [106], [100] and [143] may be part of the southern section of this property.

### 3.5.2 Brick vaulted cistern

<b><i>Brick vaulted cistern</i></b>	<b><i>OD Level (Top)</i></b>	<b><i>Preliminary interpretation and date</i></b>
Brick vaulted chamber [104]	24.57m OD	Cistern

A brick vaulted chamber [104] in the central area of the site (Photo 9–11), had been carefully lined with cement and is therefore interpreted as a cistern, also associated with the Crosse & Blackwell works. When it went out of use it was backfilled with late 19th-century ceramic containers for their products [131] and [149]. A large percentage of this pottery was sampled. Context [149], the undisturbed fill of the cistern under [131] contained the most pottery with over 2.7 tonnes of ceramics dumped here (Photo 11). The majority is of the largest sized grooved whiteware jar form with c10,000 of these vessels present. Again representing a large clear out of Crosse & Blackwell's stock, the range of stoneware stamps from Charles Bailey's operation of the Fulham pothouse during 1865–90 (Green 1999) indicate that much of this material was made and used during the last quarter of the 19th century. A large proportion of the pottery in this context was collected, with only the voluminous quantities of grooved jar body sherds not subject to stringent retrieval.

The cistern fits within the footprint of a large property seen on the Ordnance Survey map of 1871 (Fig 6) which suggests it may be associated with this, although it could also be of an earlier date and lie possibly beneath an open yard. Before and during the second half of the 19th century, a period when Crosse & Blackwell began acquiring properties for development other commercial activities existed on the site and it is possible that this vaulted chamber could have been associated with a previous occupant.

### 3.5.3 Warehouse floors and associated features

<b><i>Warehouse floors and associated features</i></b>	<b><i>OD Level (Top)</i></b>	<b><i>Preliminary interpretation and date</i></b>
Iron plated floor [35]	24.58m OD	Warehouse floor
Timber floor [37]	24.37m OD	Warehouse floor

Two phases of flooring associated with the Crosse & Blackwell warehouses were recorded in the north-west area of the site (Photo 12). Floor [35] consisted of re-used heavy iron plates resting on timber joists. Although only fragments of this floor survived later development it is evident that it would have originally provided a

substantially hard wearing work surface. The iron plates originate from a previous industrial use possibly associated with the firebrick structures recorded in the eastern half of the site (Section 3.1.5.4).

The underlying levelling deposit for this [36] was predominately made up of an extensive assemblage of Crosse & Blackwell fragmented glass, ceramic and stoneware food vessels and a large quantity of glass stoppers dating to between 1870 and 1900.

Beneath this the remains of a timber floor [37], composed of softwood planks aligned north south on timber joists, was recorded that represents an earlier probably late 19th-century phase of warehousing.

### 3.5.4 19th-century circular brick lined pit and associated trenches

<b>19th-century industrial sequence</b>	<b>OD Level (Top)</b>	<b>Preliminary interpretation and date</b>
Circular, concave brick lined pit [45]	24.12m OD	Possible furnace or chimney base
Brick lined trench [47]	24.08m OD	Possible flue
Brick lined trench [48]	24.10m OD	Possible flue
Brick floors [41], [42], [49] and [138]	24.00 – 24.10m OD	Possible industrial furnace, kiln or boiler room floors

In the northern area of the site a large room constructed entirely of firebricks dating from the mid to late 19th century was recorded. This structure contained a circular brick lined pit [45] that may be part of a furnace base, chimney base or similar, two parallel running large rectangular brick trenches [47] and [48] that may represent a flue system and floors [41], [42], [49] and [138] (Photo 8). The structures were substantial enough to suggest they are of an industrial nature and represent part of the Crosse & Blackwell enterprise that occupied the site at this time. At one stage in the structures usage the circular pit was halved in size [146] (Photo 13) and the two brick lined trenches were also much reduced in length with the addition of internal walls [139] and [160] and being partially backfilled by rubble deposits [147], [148] and [146]. This suggests the structures were linked in their usage and that the alterations may represent a degree of downsizing or re-use. An interesting collection of firebricks of various forms were recorded in the backfills (Photo 14), suggesting some structures were demolished down to floor level.

Although the fabric and forms of these building materials suggest kiln, oven or furnace structures there is little evidence, apart from the presence of soot deposits, for their being exposed to high heats during their use. Brick lined pit [45] is the only structure that shows evidence for the exposure to high heat temperature.

The material from context [148] comprises of various shapes of firebrick used principally in kiln construction and what may be kiln shelving made from the same

material and manufactured by E J & J Pearson Ltd, Stourbridge, West Midlands. Firebricks from this manufacturer were found during the first phase of evaluation and date from 1852 to around 1900.

### 3.6 Early 20th-century features

<i>Early 20th-century features</i>	<i>OD Level (Top)</i>	<i>Preliminary interpretation and date</i>
Ash and clinker [34]	24.72m OD	Levelling deposit for concrete slab
Sandy silt and pottery [43]	24.57m OD	Levelling deposit

Crosse & Blackwell moved their warehouse in 1925 and subsequently redeveloped the site. The buildings were part demolished and replaced with a building constructed of brick with steel joists, concrete foundation pads and concrete slab floors.

In the north-west area of the site, levelling deposits [34] and [43] recorded beneath the concrete slab and overlying earlier warehouse floors (Sec 8.1.3) contained large quantities of Crosse & Blackwell pottery dating to between 1900 and 1930.

In the north-east area of the site a 20th-century brick and concrete plinth for a machine base was recorded (Photo 15). This included a brass plate on the machine base for J & E Hall Ltd, a company established in Dartford since the 18th century and pioneers of early refrigeration equipment. It is possible that this represents part of a purpose-built early 20th-century cold store with slate-lined walls associated with a later phase of the Crosse & Blackwell works. Another interpretation is that as J & E Hall Ltd are listed as also having produced lift equipment, it is possible that the machinery recorded is part of a lift mechanism for an elevator noted on the 1st floor plan of the previous standing building (MOLA 2010b, A Standing Buildings Report, Fig 11).

### 3.7 Listed and Non-listed buildings (CRL1, CRL7, C&B publication)

*David Sorapure*

The buildings of 12 Sutton Row and 12 Goslett Yard recorded by MOLA in 2010 (site code TCG09), along with the Astoria recorded in 2008-9 (site code GCI08) now demolished, were once part of the complex of buildings belonging to Crosse and Blackwell, who produced pickles and sauces at Soho Square and Charing Cross Road between 1858 and 1925. The buildings were of high significance due to their association with Cross and Blackwell and the important part they played in the changes and urban development of the immediate area. Three standings buildings reports have been produced as a result of the built heritage recording (Fig 2).

### 3.7.1 Centre Point

The Museum of London Archaeology Service was commissioned by Transport for London to analyse and record structures in front of Centre Point, a 35-storey office block constructed in 1963–7 at 101–103 Oxford Street, London WC2. These structures comprised a ground-level plaza and ornamental pool, a set of steps leading from the plaza to the mezzanine floor of Centre Point, and a pedestrian subway, public lavatories and snooker club situated below the plaza. These ancillary structures are, like the office block, statutorily listed (grade II). The structures were demolished in order to enlarge Tottenham Court Road Underground station, and their archaeological investigation and a subsequent report were required as a condition of planning consent for this. The investigation took place in October 2008 and January 2009.

The results of the standing building recording at 101–103 New Oxford Street (MOLA for Crossrail 2009a) are significant to the development and urbanisation of the area from the late 18th century onwards, possibly contributing to the West Area Archaeology publication (CRL7). The widening of Charing Cross Road (formerly Hog Lane) and the creation of New Oxford Street were crucial in reshaping this area in the 19th century.

### 3.7.2 Astoria

The results of the standing building recording at 1–15 Oxford street, 157–167 and 138–148 Charing Cross Road, 1–6 Falconberg Court (MOLA for Crossrail 2009b) report on the survey of the Astoria Theatre previously used as warehousing for the Crosse and Blackwell manufacturing site. These buildings are clearly pertinent to the development of the area from the mid 19th century but also contribute to the more general theme of urbanisation in this area of the west end from the late 17th century onwards. Details of the mid 19th-century Astoria buildings will form part of the publication on Historic Buildings (CRL1) but will also be referred to as part of the Crosse and Blackwell publication.

### 3.7.3 Crossrail Eastern Ticket Hall; 12 Sutton Row to 12 Goslett Yard (CRL7 and C&B publication)

The buildings on this site were formerly 19th-century warehouses along with other 20th-century buildings belonging to the Crosse and Blackwell company, that produced pickles and sauces in a factory in Soho Square. The building in Sutton Row is known to have been linked by a walkway over the street to the Astoria to the north, itself formerly a warehouse and part of the food factory, built in 1900 and converted to a cinema in 1927.

2 Sutton Row and 12 Goslett Yard were recorded by MOLA in 2010 (site code TCG09), along with the Astoria recorded in 2008-9 (site code GC108) now demolished, were once part of the complex of buildings belonging to Cross and Blackwell, who produced pickles and sauces at Soho Square and Charing Cross Road between 1858 and 1925. The buildings were of high significance due to their association with Crosse and Blackwell and the important part they played in the changes and urban development of the immediate area. The results of the standing

building survey at 12 Sutton Row to 12 Goslett Yard have been reported on previously (MOLA for Crossrail 2010b)

#### 3.7.4 The area, its development and the impact of Cross and Blackwell

The boundary between the parishes of St Martin in the Fields to the west and St Giles in the Fields to the east was also an important line of communication from the north to Covent Garden and the Strand. This road had until the 18th century been known as Hog Lane, but probably changed its name gradually to Crown Street after the establishment of the Crown public house in 1759, which stood at its north eastern extremity. The west side of Hog Lane appears to have been built up by the late 17th century although in 1720 John Strype described Hog Lane as “*very ordinary*” and “*a place not over well built or inhabited*”.

However, a large number of taverns or inns became established in Hog Lane by the late 18th century along with small plots and dwellings which ran either side of the narrow street and were a combination of dwellings and centres of small scale manufacture. This thoroughfare was widened to the east in the 1880s by the Metropolitan Board of Works and its name changed to Charing Cross Road. The new, wider Charing Cross Road opened in 1886–7 and shortly after Messrs Crosse & Blackwell had erected and expanded their food manufacturing business to the site of the Astoria, on the northern side of Sutton Row, then called Sutton Street. However the growth of Crosse & Blackwell within the site involved the gradual acquisition and piecemeal development of existing smaller units of property by the company, rather than one redevelopment all at once.

Crosse & Blackwell had acquired their first premises at No. 20 Soho Square in 1858 and the growing success of their enterprise led to successive acquisitions of neighbouring properties. The company’s development greatly contributed to the architectural character of the area as brick built industrial premises became the norm, with functional elements such as loading loops, hoists large windows, but sometimes a striking difference between the imposing façade on Charing Cross Road and the stricter functionalism of the rear.

## 4 Quantification and assessment

### Post-excavation review

#### 4.1.1 site archive and assessment: stratigraphic

The following have been completed for the post-excavation assessment,:

- site sgp matrix completed
- subgrouping finished
- plan digitisation completed
- all photographs have been cross referenced and indexed
- provisional ceramic spot dating completed
- all finds and environmental material assessed

All of the records listed in Tables 1 and 2 will be retained as part of the site archive.

Type	Description	Quantity	Notes
<b>Contexts</b>	TCG09 eval	33	
	TCG09 TWB	133	
<b>Plans</b>	Multi context (eval)	1	1:20
	multi context (TWB)	3	1:50
<b>Sections</b>	eval'	3	1:20
<b>Matrices</b>	eval & TWB	Yes	paper
<b>Photographs</b>	Colour	286	Archive Film no 300/09 214/10 222/10 230/10 238/10 273/10

Table 1 stratigraphic archive details for TCG09 and TCG09 eval

Type	Description	Quantity	Notes
<b>Contexts</b>	TCU09 eval	27	+ Field notebook
	TCZ07 WB	27	
	SFJ10 WB	16	
<b>Plans</b>	TCU09 eval	4	
	SFJ10 WB	5	
<b>Sections</b>	TCU09 eval	3	
	TCZ07 WB	3	
	SFJ10 WB	7	
<b>Matrices</b>		No	
<b>Photographs (Colour)</b>	TCU09 eval	3	Archive film no 028/09
	TCZ07 WB	8	Archive film no 284/08
	SFJ10 WB	201	Archive film no 272/12
	SFJ10 WB		361/12
			421/12
	752/12		
		924/12	
		505/13	
		566/13	

Table 2 stratigraphic archive details for other sites in TCR East (CRL7)

#### 4.1.1.1 Recommendation for analysis

(Analysis tasks 1-7, section 7.1.2 and tasks 51-55 section 7.1.9)

The first tasks of analysis will be to arrange the stratigraphic data into structural components (Grps and LU) within a chronological framework (periods). This information will be entered onto the MOLA Oracle database. The archaeological description of features in the publication text will be minimal but will be form the foundation by which the history of the factory buildings on this site, associated industrial structures and finds assemblages are discussed.

Further potential for the analysis of TCR East (Crosse & Blackwell) is discussed in section 5.4.1. and 5.4.2.

Further potential for the analysis of 2 Stratford Place, Bond St Station (SFJ10) and material which may have potential for inclusion in CRL7 publication work is discussed in section 5.3 and tasks listed in section 7.2

#### 4.1.1.2 Recommendations for illustration/photography

Up to 2/3 site images and 2/3 building plans, historic maps and photographs, In addition 2/4 historic photographs of staff or working premises

#### 4.1.2 Site archive and assessment: finds and environmental

Table 3 contains a summary of finds and environmental material which forms part of the site archive. A sample of the Victorian and later pottery and the bulk glass will be retained after analysis.

Building material	24 fragments of bulk building material (some discarded after assessment). Three retained boxes
Clay tobacco pipes	81 fragments
Post-med pottery (17th-18thC)	109 sherds, 91 ENV. Total 6.994kg
Victorian and later pottery	56753 sherds.of 3232kg + 218 sherds of 306kg
Accessioned finds	97 accessions, mainly p-m ceramic and glass
Bulk and accessioned glass (bottles, jars, stoppers etc)	5487 fragments, 5069 ENV, 118.853kg
Animal Bone	estimated 27 fragments. Total 0.550kg. 1 box

*Table 3 Finds and environmental archive general summary*

#### 4.1.3 The building material (CRL7 and C&B publication)

*Ian Betts*

##### 4.1.3.1 Introduction/methodology

All the building material has been recorded using the standard recording forms used by Museum of London Archaeology. Each tile fragment was allocated a fabric number based on a fabric reference collection held by Museum of London Archaeology. Fabric analysis undertaken was undertaken with the aid of a x10 binocular microscope. The information on the recording building material forms has been added to an Oracle database.

##### 4.1.3.2 Roman building material

None.

##### 4.1.3.3 Saxon building material

None.

##### 4.1.3.4 Medieval building material

Fabric 2586

A medieval splashed-glazed peg roofing tile was recovered from a fill deposit (context [135]).



#### 4.1.3.5 *Post-medieval ceramic building material*

##### *Floor tile*

Fabric 2318

A plain green glazed floor tile was found in post-quarrying soil (context [129]). This is made from sandy, silty clay (fabric 2318) which indicates it is a Low Countries import dating to around 1480–1600.

##### *Wall tile*

Fabric 3498

There are four pieces of wall tile, possibly all part of the same tile, from context [131]. These are machine-made products made with a black speckled light grey firing clay. There are markings on the back, but most are obscured by hard mortar, although the numbers, 1, 2, 3 and 4 are visible. These tiles are probably mid to late 19th century, or later, in date.

##### *Peg tile*

Fabrics, 2271, 2586, 2587

Most of the small number of peg roofing tiles recovered from the site (contexts [129] [135]) are probably post-medieval in date. One has the remains of a circular nail hole 16mm in diameter.

##### *Pantile*

Fabric 2275

Two pieces of black glazed pantile were found in context [127]. The glaze is in pristine condition suggesting they may not have actually been used on a roof. These tiles are probably 18th or 19th century.

##### *Brick*

Fabrics 3032, 3033, 3035?, 3046, 3073?, 3312, 3498

Some of the earliest bricks from the site are London-made examples in fabrics 3033, 3032 and 3046 from an east-west brick wall (context [6]) and a brick vault (context [13]). These cannot be dated with any certainty, but are probably mid 16th/17th to 18th century. Bricks were often reused during this period, especially for less visible brick features such as wells, drains and cesspits, so they need not necessarily indicate the date of the brick walls in which they were incorporated.

Bricks in the same fabrics were found in an east-west wall (context [121]), a north-south wall (context [120]) and the blocking of a cellar doorway (context [125]). These all form part of a 17th to 18th-century brick cellar. The bricks themselves are of 16th to mid 17th-century date.

Post 1666 bricks (fabric 3032) were also recovered from the brick cellar. These were found in the east-west wall (context [121]), the brick cellar floor ([133]), an internal cellar buttress (context [123]) and a stairway addition to the cellar ([124]).

The bricks from another north-south brick wall (context [8]) are fairly deeply frogged with sharp edges. This suggests a 19th century date.

Reused hard orange bricks with distinctive white and black inclusions (fabric 3312) were used in circular brick-lined pit (context [45]) in the Crosse and Blackwell factory. This may be part of a furnace or chimney base. The origin of these bricks is uncertain, although they were almost certainly brought in from outside the London area.

#### *Firebrick*

##### Fabric 3275

Firebricks were made to withstand high temperatures, so were frequently used in the construction of hearths, furnaces and oven structures.

The most interesting bricks from the first phase of the site are from an area of brickwork (context [18]). These are yellowish-cream coloured firebricks stamped in their top/bottom face: E J & J PEARSON / STOURBRIDGE. Similar firebricks from the Stourbridge area are known from London (Smith 2008, 36; Betts 2009), but these are the first examples from the firm of E. J. & J. Pearson. These date from after 1852 where George Pearson and Peter Harris formed a partnership in 1852 (Pearson 2005, 366). The firm of Harris & Pearson was a sister company to E. J. & J. Pearson.

The other firebrick collected from context [18] has a slightly different fabric, so may be from another source. This has a curved header end and is marked 6A on the top/bottom surface. Numbers were impressed in the stretcher faces of voussoir bricks made by Joseph Cowen & Company of Blaydon-on-Tyne on Tyneside (Smith 2008, 34).

Fifteen firebricks were recovered from the second phase of the site (contexts [146] and [148]). All derive from the Crosse & Blackwell factory. The material from context [148] comprises of various shapes of firebrick used principally in kiln construction and what may be kiln shelving. It is not always apparent whether certain individual items were part of the kiln structure itself or used internally. Certain items may have been interchangeable.

A number of different Pearson products are present:

Standard firebricks measuring 222–227 x 107–111 x 74–76mm stamped E J & J PEARSON LD / STOURBRIDGE (contexts [146] <47> and [148] <48>–<49>). Those from [146] have soot blackened stretcher faces. One firebrick from [148] (<48>) is unusual in having the lettering in a slightly raised rectangular border with screw holes clearly visible at each end. This indicates the firebrick was impressed with a wooded stamped with the letters screwed into place on two metal plates. The words Pearson and Stourbridge are closer together in this firebrick so it was clearly marked with a different stamp to the other Pearson firebricks.

Semi-circular firebrick stamped E J & J PEARSON (LD) / STOURBRIDGE (context [148] <44>). Above the stamp is what appears to be batch or production mark with the number 5 followed by what may be a faint letter I or number 1. This was added by a separate stamp. The firebrick measures 226 x 113 x 73mm in size.

Large rectangular firebrick with a partial semi-circular curved face and rounded end. The curved surface is stamp E J & J PEARSON L(D) / STOURBRIDGE. Above (but upside down) is another stamp, with larger letters, with what appears to be the word

SHORT (perhaps the size of the product). This firebrick measures 296 x 227 x 220–225mm.

*Product from Poultons, Reading, Berkshire*

There are a number of large rectangular firebricks with a curved end ([context 148] <40>–<43>). These are stamped on the upper face:

POULTONS  
PATENT  
CURVILINEAR  
READING

The lower faces are deeply stamped 5A with the letters LONG in a separate stamp below. Again the former seems to be batch or production mark, with the word LONG perhaps representing the size of product. These firebricks probably date from the second half of the 19th to the early 20th century. They are the first firebricks from Poultons, Reading recorded from London.

*Other fire clay products*

Perhaps the most unusual unmarked product is a fired clay 'stopper' (context [148] <40>). This measures 160mm diameter by 160mm in length. The top of the stopper has an indented circular area with a bar across the middle to enable the stopper to be turned when in place.

From the same context ([146] <45>) are a number of square shaped firebricks with a curved end. These measures 109mm square by 68mm in thickness. All are stamped on the upper/lower face with the number 6 or 9.

From context [148] is part of a square of rectangular firebrick measuring 298mm in breadth by 80mm in thickness. This may be kiln shelving as definite shelving measuring 295mm in breadth by 60mm thick was found 9 Albert Embankment (AEB01) the site of one of Doulton's Lambeth pothouses - although these were pierced.

A thin rectangular firebrick measuring 230 x 114 x 24mm (context [148]) may again be kiln shelving, although there is no indication it was ever used in a kiln. Mortar of the top and base would suggest use as brick walling.

*Drain pipe*  
Fabric 3253

Found unstratified in Trench 8 was a large fragment of brown glazed stoneware drain pipe approximately 140mm in (outer) diameter. This is of interest in having being stamped SMITH & CO, OLD KENT ROAD, LONDON in an oval frame. This was made by Thomas Smith at his Canal Potteries, which was in existence by 1867 and survived until at least 1894. The company was succeeded by Hosea Tugby in about 1896. Smith made various other stoneware items such as ginger beer bottles (Askey 1998, 179).

No other stamped drain pipes are known from London, although this is probably because such items are not normally collected, unless they are mistaken for pottery.

#### 4.1.3.6 *Assessment work outstanding*

All assessment work is complete

#### 4.1.3.7 *Recommendations for analysis (C&B publication)*

(Analysis tasks 14-15, section 7.1.4)

Analysis will establish which various types of building material are associated with which phase and part of the building discovered on site. Publication text will describe the most significant of these in terms of dating and intrinsic interest, with particular reference to the firebricks and their association with industrial structures and processes.

Section 7.2.2 lists the building material analysis of relevance to the CRL7 (OAU) publication.

#### 4.1.3.8 *Recommended for illustration*

The following are recommended by the specialist for illustration as of intrinsic value. Final artwork and images for the C&B publication will be decided at analysis in a finds review.

*Context [146] <47> or <49> – Firebrick stamped E J & J PEARSON LD / STOURBRIDGE – stamp type 1*

*Context [146] <48> – Firebrick stamped E J & J PEARSON LD / STOURBRIDGE – stamp type 2*

*Context [146] <44> – Firebrick stamped E J & J PEARSON (LD) / STOURBRIDGE – semi-circular brick*

*Context [146] <48> – Firebrick stamped E J & J PEARSON L(D) / STOURBRIDGE and SHORT – large rectangular brick*

*Context [148] <40>/<42>/<43> (best example) – Large rectangular firebrick with a curved end stamped POULTONS PATENT CURVILINEAR READING*

*Context [148] <40> – Fired clay ‘stopper’*

*Context [146] – Square shaped firebrick with curved end*

*Context [148] – square or rectangular firebrick (kiln shelving?)*

*Context [148] – Thin rectangular firebrick (kiln shelving?)*

*Context [8] – Drainage pipe stamped SMITH & CO, OLD KENT ROAD, LONDON*

### **4.1.4 The clay tobacco pipes (CRL7)**

*Jacqui Pearce*

#### 4.1.4.1 *Introduction*

The clay tobacco pipe assemblage from TCG09 was recorded in accordance with current MOL Archaeology practice and entered onto the Oracle database. The pipe bowls have been classified and dated according to the Chronology of London Bowl Types (Atkinson and Oswald 1969), using the prefix AO. Quantification and recording follow guidelines set out by Higgins and Davey (1994; Davey 1997).

A total of 81 fragments of clay tobacco pipe were recovered from 13 contexts, most of which included no more than 12 pieces. This includes 69 bowls. The largest group comes from post-medieval quarrying (context [129]) and consists of 29 bowls and five stem fragments, dated to c 1680–1710. There is one accessioned item: a decorated and marked bowl from [34]. All pipe bowls identified are typical of London manufacture and most of the pipes have been smoked.

Ctxt	TPQ	TAQ	B	S	M
3	1680	1710	2	1	
15	1680	1710	8	3	1
16	1680	1710	7		
21	1680	1710	2	1	
34	1840	1880	1		
43	1580	1910		1	
59	1680	1710	11	1	
98	1680	1710	6		
127	1680	1710	2		
129	1680	1710	29	5	
131	1580	1910		4	1
149	1680	1710	1	2	
151	1580	1910		2	
<b>Total</b>			<b>69</b>	<b>20</b>	<b>2</b>

Table 4 dating and quantification of clay pipes from the site

The identifiable clay pipe bowls mostly range in date from c 1660 to c 1710. All are types common in London during this period, including types AO15 and AO18 (both made c 1660–80) and types AO20, AO21 and AO22, which are typical of the period c 1680–1710, which saw an increase in size and a marked lengthening of the bowl. They still retain the bottered rim that characterised the earlier, 17th-century pipes and just predate the introduction of the gin press, which saw the move to a cut rim that was no longer sloping forward at an angle to the stem. Only 11 are milled and three examples are burnished, out of a total of 69 pipe bowls. Both features are indicators of better quality, and their low incidence suggests that the sample collected represents ordinary, everyday smoking habits that entailed minimal expense. This is further borne out by the complete absence of marked or decorated pipes in the 17th- to 18th-century pipes – these are again indications of better quality.

Contexts in which stem fragments alone have been found are dated only broadly to the entire period of production (c 1580–1910). The stems could have been deposited at any time during this period, although they are most likely to fall within the main date range of other pipes recovered on the site. For the most part, contexts dated by clay pipes to c 1680–1710 (see Table 4) fall within the date range assigned to pottery from the same contexts, and help to refine that range in some cases. One type AO20 bowl in context [149] is residual, but the remaining examples appear to be contemporary with deposition. The latest clay pipe recorded on the site is a type AO20 bowl (c 1840–80) decorated with thorns and marked by the maker on the sides of the heel with moulded stars in relief (context [34] <35>). Symbols of this kind

cannot be attributed to individual known makers. Thorn pipes were very popular from the mid 19th century onwards and continued to be made into the early 20th century.

#### 4.1.4.2 *Assessment work outstanding*

All assessment work is complete.

#### 4.1.4.3 *Recommendations for analysis*

Further analysis of the clay tobacco pipe is relevant only to the CRL7 publication and OAU work ( see sections 5.3.5 and 7.2.3)

### 4.1.5 **The post medieval pottery; 17th to 18th century** (CRL7)

*Jacqui Pearce and Lyn Blackmore*

#### 4.1.5.1 *Summary/Introduction*

This note comments on pottery from nine contexts that are not included in the assessment of 19th-century material recovered from contexts [34], [43], [131] and [149]. The pottery considered here largely predates this material, although some is residual in 19th-century deposits. This report is intended to complement the main assessment by Jeffries.

#### 4.1.5.2 *Methodology*

The pottery was examined macroscopically and using a binocular microscope (x 20) where appropriate, and recorded on paper and on the MoLAS Oracle database using standard Museum of London codes for fabrics, forms and decoration. The numerical data comprises sherd count, estimated number of vessels and weight. A summary of the pottery recorded on Oracle is given in Tables 3 and 5. The dating applied here is based on the TPQ of ceramic fabrics and forms that include long-lived types remaining in production and circulation for longer than the span indicated.

#### 4.1.5.3 *Fabrics and forms*

##### *17th century*

Contexts dated to the late 17th century have been divided into two groups, the quarry fills ([129], [151]; 2.6.3.1) and subsequent levelling ([3], [15], [16], [105]; 2.6.3.2); while some finds cannot be closely dated, the combined central date for this period of activity is c 1670–1700. The main group is from [129] (52 sherds), all others having less than 10 sherds). The fabrics and forms are typical of those in everyday use throughout the London area. The main types are Surrey-Hampshire border wares (both whitewares and redwares) and London-area redware, which are more or less equally represented (23 and 22 sherds respectively), with a smaller amount of delftware or tin-glazed ware. Much of the more closely datable pottery is typical of the mid to late 17th century, as shown by distinctive forms and styles of decoration.

Phase	Context	TPQ	TAQ	Size	SC	ENV	Weight (g)
2.6.4.2	59	1670	1700	S	16	11	560
2.6.3.2	98	1650	1700	S	11	10	634
2.6.4.1	113	1780	1800	S	4	2	45
2.6.4.1	144	1870	1900	S	1	1	218
2.6.3.2	3	1612	1700	S	7	7	263
2.6.3.2	15	1580	1700	S	5	4	182
2.6.3.2	16	1630	1700	S	4	4	95
2.6.3.2	105	1680	1710	S	8	6	628
2.6.3.1	129	1670	1720	M	52	45	4345
2.6.3.1	151	1550	1700	S	1	1	24
<b>Total</b>	<b>Total</b>				<b>93</b>	<b>80</b>	<b>6434</b>

*Table 5 Dating and quantification of pottery recorded on Oracle, from deposits currently dated to the 17th and 18th centuries*

The Surrey-Hampshire border wares include flanged dishes, bowls, tripod pipkins, porringers and chamber pots. Two of the flanged dishes from [129] are decorated, one with a series of dimples around the rim and the other with multiple wheel-shaped stamps. London-area redwares were produced throughout the post-medieval period; those datable to the 17th century include bowls and dishes in various forms and sizes, large storage jars, cauldrons or pipkins, a jug and a large, deep, oval straight-sided trough with horizontal side handles at each end (context [129], two draw). This last is an unusual form, the purpose of which is unclear. There are also sherds from a handled jar ([105], to draw) and a large domed lid, glazed externally only ([129]); the form for which the latter was intended is again uncertain. Fine Essex-type redwares are of minimal importance, with only one sherd from a mug in post-medieval black-glazed ware.

The main decorative pottery consists of tablewares and pharmaceutical jars in delftware (15 sherds). Styles typical of the early and mid 17th century include both blue and white and polychrome decoration, typically in geometric patterns. These are found on jars and dishes, with sherds from plain white delftware also recorded. The latest 17th-century material consists of sherds from bowls decorated with the so-called 'chinamen in grasses' style and 'Persian blue', current during the last quarter of the 17th century (contexts [105] and [129]).

There are also six sherds from six butter pots in Midlands purple and Midlands orange ware – tall cylindrical jars used to transport dairy produce and common throughout the London area. The only imports recorded are sherds from two Frechen stoneware Bartmann jugs from Germany, a sherd from a very large Spanish amphora in [129] and part of a saucer in Chinese blue and white porcelain in [105]. The latest finds in these deposits are a single sherd of English stoneware that, from the known date of the development of the area, must be either a very new product from Fulham, or intrusive, and three sherds of industrial finewares (creamware, pearlware and refined white earthenware) which are definitely intrusive.

Small amounts of 17th-century pottery are residual in later deposits, such as [59], [78], and [98].

### *18th century*

Four contexts have been dated to the 18th century ([59], [98], [113], [144]), yielding only 16 sherds (24 ENV, 1.457kg; see Table 1). A similar, but narrower range of fabrics was recorded; Surrey-Hampshire border wares and London-area redwares are present in more or less equally numbers, and the same range of forms is represented. One sherd is from a post-medieval black-glazed ware chamber pot. Only four sherds of tin-glazed ware were found. Other contemporary wares comprise single sherds of Midlands purple ware butter pot and Westerwald stoneware, and four sherds of industrial fineware, comprising creamware dating to after 1740, and pearlware dating to after 1770. A sherd of refined white earthenware jar dates from the Crosse and Blackwell era and must be from demolition of wall [144] rather than its construction.

Pottery dating to the 18th-century is also present in what appears to be a later context, a levelling make-up within a 17th-century cellar ([127], see below), which contained 33 sherds dating to c 1740–1800. These are similar to the above but include a wider range of fabrics and forms, with notable delftware and imports. The two tin-glazed vessels comprise part of an ointment pot with all over pale blue glaze and the complete profile of a saucer-dish with finely painted floral decoration typical of the mid 18th century (to draw). The imports comprise part of a tin-glazed bowl with oriental-style figures finely painted around the exterior, probably made in Holland, with sherds of Frechen stoneware and a Chinese porcelain plate. The one sherd of English stoneware could be of 18th- or 19th-century date.

#### *4.1.5.4 Assessment work outstanding (all periods)*

All of the assessment work for the 17th- to 18th-century pottery is complete.

#### *4.1.5.5 Recommendation for analysis*

Analysis of the 109 sherds from this period is recommended for inclusion in the CRL7/OAU publication, the potential of which is discussed in section 5.3.6. Four sherds are recommended for illustration (see section 7.2.4).

### **4.1.6 The Victorian and later pottery** (C&B publication)

*Nigel Jeffries*

#### *4.1.6.1 Summary/Introduction*

This text considers the Victorian and later pottery retrieved in four contexts ([34], [43], [131] and [149]) from the 2010 dated targeted watching brief on this site. It further evaluates the character and the date range of the assemblage, determines the research questions this material can address while identifying areas of further work. These four contexts, yielded c 56,753 sherds from c 14,576 vessels and weighed 3,232 kilos (or 3.2 tonnes) with the filling of a cistern (context [149]) containing the most material.

The pottery is either late Victorian (in contexts [131] and [149]) or Edwardian ([34] and [43]). Reflecting the sites usage by the famous food manufacturing company



Crosse & Blackwell it is characterised by a variety of different shaped and sized whiteware preserve jars and stoneware food storage jars; all had been thrown away before being filled with their contents.

#### 4.1.6.2 Methodology

During the 2009 evaluation (Bowsher 2010) it was clear that within the brick vaulted cistern (2.7.4.2), part excavated in Trench 3 during the evaluation, hundreds of complete and thousands of smashed pots remained in this feature, in addition to the other large-sized fragments located in Trench 7. Clearly such quantities of pottery would take considerable resources to catalogue and curate. The method statement produced for this site (Dennis and Eastbury 2009) further defines the parameters by which these sorts of deposits are dealt with:

‘All material from stratified archaeological deposits is retained unless it is clearly residual or part of a large but routine assemblage, in which case samples of both typical and diagnostic items are retained’ (Dennis and Eastbury 2009, 7).

Therefore following custom and practice established for the excavation, recording and managing of the large quantities of waste products of London’s earlier stoneware and tin-glazed ware pothouses, the repetitive nature of this Edwardian pottery lent itself well to an (on and off) site sampling and recording strategy. A MoLA pottery specialist (Nigel Jeffries) was therefore present during much of this targeted watching brief (in particular during the excavation of contexts [34], [43] and [131]; see below) and devised a system for retention, recording and discard of this material. A summary of each context and the pottery it contained is given below.

Representing a large dump of pottery of around one metre depth spread underneath warehouse flooring, context [34] appears to be a response to the ground levelling and make-up required prior to the floors construction. The integrity of this deposit was however damaged during excavation by the two contractor’s test pits required to evaluate the extent of the eastern facing footings of St Patrick’s Chapel. A large quantity of plain white marmalade jars - many with paper labels relating to Crosse & Blackwell products - were observed with Bristol-glazed stoneware upright bottles and bung jars also frequent. Unlike contexts [43], [131] and [149], the whiteware ‘grooved’ preserve jars that dominate these noted deposits were not common although importantly the few labelled examples in [34] demonstrate that they would have contained jam. Conversely the plain whiteware jars common to context [34] were largely absent in the other three contexts. As the integrity of this layer was damaged by the test pits none of the pottery from [34] was 100% collected and was instead sampled under watching brief conditions with an emphasis on recovering the labelled pots. The product and content information displayed on these labels will shed important light on the packaging and advertising of Crosse & Blackwell’s products with the statement on these labels that the company served as ‘purveyors to his Majesty the King’ indicating it was discarded during the reign of either Edward VII (1901–10) or George V (1910–36).

The second context [43] appears to be in a similar sequence as [34] related to a make-up and levelling episode prior to a warehouse floor being laid. Although not all body sherds were retained, a significant portion of the pottery (7853 SC/1466 ENV) from [43] was retained on site. As an assemblage it differed from the other three in supplying the only examples of smallest-sized Bristol-glazed stoneware mustard jars and whiteware marmalade pots. In common to the pottery groups from contexts [131]

and [149] it is nevertheless dominated by whiteware 'grooved' preserve jars and stoneware bung jars. The whiteware 'grooved' preserve jars in [43] were largely fragmented and so all were discarded after being counted and recorded, as better examples existed in the cistern. Otherwise the variety of different stonewares jars present meant that after the collection was sampled a reasonable proportion of the pottery in this context was retained for research and for archive.

Context [131] represented a machine excavated deposit found in Trench 3 during the initial evaluation (Bowsher 2010). This deposit, the upper fill of the cistern and therefore related to the same event as [149], was reinstated onto a Terram sheet upon the completion of this, the first phase of archaeological work. Inevitably this action led to more breakages among this already damaged group and consequently when (re) excavated during the last phase of targeted watching brief it was recovered in a poor condition. After being sorted by fabric and form and counted and weighed, nearly all the 10481 sherds (from 998 vessels weighing 165 kilos) from [131] were therefore discarded as better examples of the pottery found here were located elsewhere.

Context [149] - the undisturbed second fill of the cistern under [131] - therefore contained the most pottery (38419 SC/12112 ENV) with over 2.7 tonnes of ceramics dumped here. The majority are the largest sized grooved whiteware jar container with c10000 of these vessels present. An episode that appears to represent a large clear out of Crosse & Blackwell's stock prior to filling (none of the pots displayed evidence of being filled with food), the range of stoneware stamps from Charles Bailey's operation of the Fulham pothouse during 1865–90 (Green 1999) indicate that much of this material was made and used during the last quarter of the 19th century. A large proportion of the pottery in this context was collected and then sampled, with only the voluminous quantities of grooved jar body sherds not subject to stringent retrieval.

The pottery from all four contexts was recorded on computer, using standard Museum of London codes for fabrics, forms and decoration. The numerical data comprises sherd count (SC), estimated number of vessels (ENV) and weight (by grammes) but because of the large volume of material was entered onto an excel spreadsheet per context (pot.xls) rather than the less flexible ORACLE database.

#### 4.1.6.3 *Fabrics and forms*

The pottery can be divided into whiteware and stoneware, in different forms with various different decorative techniques applied. Whiteware is the most frequent of the two fabric type in the assemblage.

##### 4.1.6.3.1 WHITEWARE

Three whiteware forms (or vessels) related to food canning were identified, with most examples stamped 'Maling Newcastle', a pottery factory attributed to revolutionising the production of food storage wares and in particular the mechanisation of jam and marmalade jars in the 1860s. The vessels represented in this fabric are each considered below.

*'Grooved' cylindrical jam and meat paste (straight-sided) jars*

The vast proportion of the overall pottery assemblage is of the same type and decoration: the tightly vertically 'grooved' heavier bodied whiteware cylindrical jar often stamped 'Maling Newcastle' on the base. Over 1000 of these vessels were retrieved complete in the cistern backfill (context [149]) alone. Three different sizes of this jar were identified, with the largest-sized jar by far the most common, with the evidence of what these vessels would have been filled with is supplied by the examples with labels still adhering retrieved in context [34]). The two smaller 'grooved' jar sizes identified are likely to have contained meat extract.

*Plain cylindrical preserve and meat paste (straight-sided) jars*

Four different sized examples of this form were identified. The largest - of the same size and shape to the few black printed 'Keiller marmalade' examples that survived - include 13 intact examples. Whilst they may have been filled with meat and fish pastes, further examination of the labelled examples recovered in [34] should reveal what Crosse & Blackwell products they would have been filled with. A further three sizes of these plain, straight-sided pots were found with some stamped 'Maling Average 8oz' and like the smaller examples of above 'grooved' jars were probably meant for meat extracts and pastes.

*Plain shouldered marmalade jars*

Similar in shape to the stoneware bung jars found (see below), the next most common whiteware are plain shouldered jars with 45 examples recovered complete. Of one size only, these heavier bodied whiterwares are again stamped 'Maling Newcastle' or 'Maling Newcastle Two Pounds' on their base and the intact labelled example retrieved in context [149] demonstrates that when filled they would have contained marmalade. Another example of this form is black-transfer printed with the standard and common design of print of the Keiller marmalade company of Dundee.

*Other forms*

A few other whiteware forms were present although in much smaller quantities when compared to the above. A second jam jar type is fluted with some examples stamped 'Maling Average 11B' and 'Maling Average 16 oz' on the base. The third jam is six-sided and restricted to two examples only, with one vessel stamped with 'Castell Brown' and 'Maling' on its base. The whiterwares are completed by the two highly decorative and collectable tableware marmalade 'pots' and their lids found in context [43] with the type of base located registration stamp used between 1868–83 indicating they were made in 1878.

4.1.6.3.2 STONEWARE

English made stoneware provides the other significant fabric type of this pottery assemblage. Beige Bristol-glazed stonewares are the more common, with the products of the Bourne's Derbyshire pothouse providing all the brown salt-glazed stonewares with a darker second dip around the shoulder and rim. All examples are glazed inside. The various manufacturer stamps present demonstrate that Crosse & Blackwell largely sourced its stoneware from either C I C Bailey's of west London's Fulham pothouse (who owned these premises between 1865–90: Green 1999), James Stiff & Son in Lambeth (south London), Powell of Templegate Bristol (Askey 1998, 127) and Derbyshire's Joseph Bourne & Sons (ibid, 148-52). Green (1999, 169) noted that Crosse & Blackwell's custom provided the mainstay of the Fulham

pothouse's order book during the later 19th century following its acquisition of the Vauxhall Pottery's customers.

The five main stoneware forms are described below with many of these vessels and their functions already identified during the excavations on the Fulham pothouse or can be matched to the 1873 dated price lists of the manufacturers James Stiffs & Sons (Green 1999, 361-4) and Doulton & Watts (ibid, 365-8). Included among the few labelled stonewares are examples of Crosse & Blackwell's famous Chow Chow Piccalilli products.

### *Bung Jars*

Bristol-glazed and brown salt-glazed stoneware bung jars (ibid, form 396, fig 136, 167) - vessels well suited for containing mustards, pickles and jams etc - are the most common stoneware vessel form. The brown salt-glazed stoneware bung jars with beaded shoulders in contexts [43] and [149] were represented in two different sizes and supplied by the Derbyshire pothouse of Joseph Bourne & Sons with the triangular stamped C&B (for Crosse & Blackwell) also applied towards the bottom of the base. Of particular interest are the black painted 'batch' numbers daubed on 23 bases in [149] with nos. 3.1, 3.4 and 3.8 most often used.

Among the Bristol-glazed bung jars, the eight different base sizes identified between 110–190mm reflect different volume capacities with the James Stiff & Sons price list illustrating they were sold in ¼ to 3 pint, 2–3 quart and 1–6 gallon measures (Green 1999, Appendix 17, 362). Sealed by cork stoppers - examples of which were found on site - three different rims types are identified (two with beaded shoulders) and a number stamped with 'Crosse & Blackwell', 'Oilmen' and '21 Soho Square' also present. The batch numbers applied to these bases are interestingly restricted to the largest size jar (190mm base) or on the most common 150mm sized base, with numbers ranging between 3.1 and 3.14 used on the last.

### *Extract pots and wide mouth straight-sided jars*

These vessels, advertised in Doulton & Watts price list as either 'extract pots or wide mouth pots' for 'soups, jellies, & c.' (ibid, 362) supply only a small proportion of the stoneware vessels. Three different sizes were identified and retained, with some examples stamped '3' located under the groove below the rim.

### *Mustard jars*

Beaded or rouletted decorated around the shoulders, the two different sizes of mustard jar (both restricted to contexts [43] and [149]) can be matched to excavated examples from the Fulham pothouse (Green 1999, form 426, fig 139, 171) and to those illustrated in the noted Doulton & Watts 1873 price list (ibid, Appendix 17, 365: although the jars displayed in the last price list resemble the jam jar in Stiff's corresponding list, ibid, 362). The no. 15 batch number daubed in blue paint under the base of all the mustard jars in [43] is restricted to the smaller sized and capacity examples with the circular stamps located towards the bottom of these bases displaying the stamp of the Powell pothouse in Bristol (Askey 1998, 127).

### *Upright bottles*

Four different sizes of stoneware upright bottle (Green 1999, form 391–2, fig 135, 165–6; form 403–4, fig 138, 169–70) were retrieved with bases sizes ranging from 210mm (largest) to 120 mm (smallest, probably akin to Green form 404, ibid).

Complete or reconstructable examples of each size were found and retained from context [149] as the research sample and for archive. Contemporary records demonstrate their use as ‘bottles for acids with screw stoppers’ with stoneware well suited as containers of corrosive chemicals (ibid, 169). Bailey’s operation of the Fulham pothouse provide most of the makers marks, usually applied to the shoulder, in addition to a few vessels with the diamond stamp of the Union Potteries of Vauxhall Walk in Lambeth applied.

*Straight-sided meat paste jars*

The Bristol-glazed stoneware cylindrical jars in up to three different sizes supplied the smallest stoneware retrieved. Maker’s stamps and batch numbers are absent and these vessels are not listed as among the products of the Fulham pothouse (Green 1999) nor presented in both Stiff and Douton & Watts price lists (ibid). The fragmentary labels on two jars do however supply clues to their function, with the partial lettering ‘EXT...’ observed probably translating as EXTRACT with the second ‘.EAT’ probably MEAT. Many of these small jars also appear to show the remnants of a tin (?) seal around the rim and groove although this requires further examination.

*Other forms*

Food jars (Green 1999, form 425, fig 139, 171) sealed by a metal closure fitted to the seal lid were found with both the iron and ceramic components of these closures once affixed also retrieved. They survived in two different sizes and display the linear ‘Bailey Fulham’ stamp on the underside of the base.

4.1.6.4 *Additional pottery found during examination of the finds*

In addition to the very large groups reported separately, and context [127] discussed above, which also contained 19th-century refined white earthenware, there are seven other contexts that have been dated to the late 19th century ([14], [19], [36], [77], [78], [127], [130]), of which [127] contains pottery typical of the 18th and earlier 19th-centuries (see Pearce and Blackmore assessment), but also later wares in keeping with those found in the large assemblages. Excluding [127], these late 19th-/20th-century assemblages consist of 169 sherds (119 ENV, 27.905kg), of which 98 large sherds are from a range of large shouldered and cylindrical jars in English stoneware with Bristol glaze, typical of the output of the Doulton factory during the last quarter of the 19th century, some of them marked accordingly. There are also examples of the medium cylindrical jars with plain or ribbed bodies in refined white earthenware, as produced by Maling in Newcastle during the same period. The only other pottery found in these contexts includes a near-complete small cylindrical jar in blue stoneware, glazed inside, from [36] <51>; the base of a rounded one-handled bowl in red border ware and sherds of refined white earthenware with sponged decoration and transfer-printed ware in [77]. The only imported ware not already noted is part of a substantially complete mineral water or Selzer bottle in Westerwald stoneware from [130] (lacking only the base), with an impressed mark on the shoulder bearing the word ‘SELTER’ in a circle, surrounding a cross with the letters C and T each side, an R below and the number 191.

Phase	Context	TPQ	TAQ	Size	SC	ENV	Weight (g)
2.6.5	77	1870	1900	M	45	18	3020
2.6.5	78	1870	1900	S	15	3	1673
2.6.5.5	34	1900	1930	VL	0	0	0

2.6.5.5	43	1900	1930	VL	0	0	0
2.6.5.3	19	1908	1920	M	33	32	6019
2.6.5.3	36	1870	1900	S	22	12	767
2.6.5.3	127	1740	1800	M	33	21	2181
2.6.5.3	130	1750	1900	S	1	1	1109
2.6.5.2	14	1870	1920	M	14	14	14937
2.6.5.2	131	1870	1900	VL	5	5	380
2.6.5.2	149	1870	1900	VL	0	0	0
	<b>Subtotal</b>				<b>218</b>	<b>151</b>	<b>30646</b>

*Table 6 Dating and quantification of pottery recorded on Oracle, from deposits currently dated to the 19th and 20th centuries*

#### 4.1.6.5 Recommendations for analysis

(Analysis tasks 16–23, section 7.1.5)

This material will be analysed to establish the types of products found on the site which relate to Crosse & Blackwell's occupation of this site between 1858 and 1925. The analysis will be broadened out to a wider discussion about the preservation and packaging of food in the late Victorian and Edwardian period. The structure of this analysis with recommendations for further research is discussed as potential in section 5.4.4.

#### 4.1.6.6 Recommendations for illustration or photography

Victorian and later pottery – up to 50 vessels (to be confirmed at finds review)

#### 4.1.7 Post-medieval bulk and accessioned glass (C&B publication)

*Lyn Blackmore and Nigel Jeffries*

##### 4.1.7.1 Introduction

This report considers the post-medieval bulk and accessioned glass (bottles, jars and closures) from the archaeological evaluation on the site of the Crosse and Blackwell premises in Soho Square (TCG09). This large assemblage comprises finds recovered during the main excavation in 2010 and a sample of each identifiable form collected during a site visit to the evaluation in December 2009. To date a total of 5486 fragments from 5068 vessels (c 119kg) from 16 contexts have been recorded, filling some 16 boxes; there are also three boxes of accessioned glass (mainly stoppers). The bulk of the material is from deposits [19], [34], [36], [43] and [149] and dates to between c 1870 and 1925. The glass is in generally good condition, with numerous large sherds, but there are few complete vessels or reconstructable profiles. The forms and groups are summarised below; the historical background is considered more fully elsewhere.

##### 4.1.7.2 Methodology

Most of the glass from [19] and some of the stoppers from [36] were recorded by Nigel Jeffries in 2009; the bulk of the remaining material has been recorded by the

present writer. The assemblage was recorded directly onto an Excel database in order to list individual vessels more easily, using standard MOLA codes for form, decoration and other attributes, or creating new ones where necessary; quantification consists of sherd count, estimated number of vessels and weight. A condensed version of these records will be transferred to the MOLA Oracle database. Many of the forms present can be paralleled in extensive typologies developed for this material (in particular the Society of Historical Archaeology/Bureau of Land Management website <http://www.sha.org/bottle/>). Where body fragments are concerned, however, they have been recorded in bulk as either bottle or bottle/jar depending on the make-up of the group in question. While a few bottles are of true green glass, and some finds are in true colourless glass, the bulk of the bulk of the assemblage comprises natural green or pale blue-green glass; as it was generally difficult to draw a line between greener and bluer tones, only a few finds have been recorded as being of natural blue glass, the remainder being classed as natural green. The distribution of the material is summarised according to the present understanding of the stratigraphy (information from Paul Thrale).

#### 4.1.7.3 *The forms*

The forms present fall into three main types, bottles (mainly for sauces and pickles), jars and closures (lids and stoppers), each with various sub-types, but a range of other forms is also present. The different types are summarised below, highlighting notable examples.

##### *Bottles*

While a function can be suggested for many bottles, there are 222 sherds (142 ENV) that, although having a form type (polygonal, square, rectangular, oval, cylindrical), could have served a variety of functions; this has, therefore been kept open until the analysis stage.

##### *Wine bottles*

The earliest bottle glass comprises four fragments (72g) of late 17th-century shaft-and-globe, onion bottle, of which only one is stratified; also present are sherds from one onion/mallet bottle and two probable mallet bottles (909g), of which only one is stratified. Five cylindrical bottles are represented, of which two are free blown and one with inverted bucket-shaped kick to the base is a probably French import ([36]). The glass from the early deposits [135] and [151] was not located in time for this assessment.

##### *Beer and soft drink bottles*

Context [149] contained a complete cylindrical bottle with the words BATEY & Co / TRADE MARK/ KINGSLAND RD/ and the image of Britannia in relief. This would have held ginger beer made by William Batey in the factory established by him c 1853 at 216 Kingsland Rd (on the east side, south of the Regents canal), which used bottles of stoneware as well as glass. Following Batey's bankruptcy in 1881 the company was purchased on 5th October 1882 by Robert George Alabaster, manufacturer of mineral water, who registered 'Batey and Co' on 17th December 1886 and established the brand as a limited company in 1887. An advertisement of 1910 shows Batey's as John Bull's favourite ginger beer. Fragments of probable beer bottle were recovered from [36].

### *Sauce bottles*

Sauce bottles were produced in a range of forms and can be difficult to classify from rims or bases alone, but most have a long narrow neck with a mineral or oil finish to the rim. Some 246 possible examples were identified (limiting base diameter to under 70mm). Of particular note is a near complete rectangular bottle with bevelled corners from [34], a form usually associated with medicines, with part of the original label indicating that it contained Mushroom Catsup made by Crosse and Blackwell (to illustrate). A complete bottle of this type from [36] has the initials 'C&B' in relief at the base of one of the main faces, with the letters 'KE' on the underside of the base (to illustrate).

Most probable sauce bottles are cylindrical, the most notable being a near complete find from [149] with the words 'LEA & PERRINS' down the side (to illustrate). Another example also has the words 'WORCESTERSHIRE SAUCE' around the top (unstratified). A variant of this form, represented sherds from a least two moulded colourless glass bottles found in [36], has a band of vertical ribbing just below the shoulder. Again, several bases have numbers or lettering on the underside, usually reading 'C S & Co' (for Cannington Shaw and Co., see above).

A most distinctive form is the fluted bottle in light olive green glass, represented by a complete example from [36] and sherds from [34] and [43]. This elegant bottle was probably designed for use at the table; it may have contained oil or a condiment.

In addition, [149] contained four cylindrical bottles with carinated shoulders with cylindrical bodies and concave narrow necks that resemble the stoneware bottles used for ginger beer but are smaller and probably contained condiments. Two sizes are present, with heights of 133mm and 165mm. (two complete, two near complete)

Other possible bottles for sauces or dressings include two rim/neck sherds with an external screw thread at the rim and decorative rings at intervals on the neck ([34], [36]), and two bases from [19] and one from [43] are from bottles or jars that taper in to the base and have a small pedestal type foot with cabled edge (those from [19] are 44mm and 54mm in diameter. It is possible that these were used for vinaigrette.

### *Pickle bottles*

Pickle bottles have distinctive rim forms that are wider-mouthed than those of the sauce bottles, often with a double bead and packer finish. However, as the body can be cylindrical or squared, and such bottles are impossible to identify from body sherds alone it is possible that some of the bases and body sherds recorded as bottle/jar or jar are from pickle bottles; at present up to 50 vessels are listed as possible pickle bottles. They include a complete conical bottle with slightly lop-sided conical profile and ground flat-topped collared rim [34] that is unlike those of contemporary milk bottles. Also from [34] is a complete biconical bottle with low carination and a cylindrical neck, decorated with two bands of an oblique Greek key-type pattern in relief; the rim of second example was found in the same context, while sherds from another are present in [149].

### *Phials/Small essence bottles*

Two phial forms, both in colourless glass, were probably used for a concentrated sauce or essence, but perhaps for spirits or perfume. The first is a small squat cylindrical phial with narrow cylindrical neck, of which three complete examples (height c 78mm) and 16 other incomplete examples were found in [149]; others were



present in [19], [34], [36], [43], [131]; one form [19] has the letters 'DD' on the base. A complete example from [19] has the remains of the original label (to illustrate). The second type has a distinctive lentoidal section and cylindrical neck. Two complete examples of slightly different sizes were found in [34] (heights 32mm and 35mm), one in [36] and part of another is present in [43]. The largest group is form [149], which (from the bases) contained up to 24 examples. In addition there are three small square and one cylindrical bottle in bright green glass from [149] and [36].

### *Bottles/Jars*

Some 108 sherds (60 ENV) in natural green glass cannot at this stage be assigned to either bottles or jars; they include a number of bases over 60mm, and mainly over 70mm in diameter, of the larger bases from both jars and bottles have lettering and/or numbers in relief. Several have the letters 'C.S & C<sup>O</sup> L<sup>D</sup>' and one has 'CBK' on the underside.

### *Jars*

The most distinctive type of jar is the cylindrical shouldered form in natural green glass, used for range of preserves or pickled foods, with 182 sherds from 92 vessels. A complete example (height 173mm) was found in [34], with another of the same size but fragmented. Context [19] includes two sizes; most are of the larger form (c 106-107mm in diameter), and but one is smaller in diameter (90-97mm). These vessels are the glass equivalents of the 'bung jar' shape made in stoneware, and would have been closed with a glass lid or cork bung, numerous examples of which were also found (see below). One large base is from the Castleford Bottle Co ([149]), which eight bases with a recessed, concave profile, have the letters 'C S & Co Ld' on the underside (for Cannington Shaw and Co., see above), together with what is assumed to be a range of individual patent or manufacturers numbers. One reads '157', while the others include the numbers '2024', '3704' (two examples), '4038', '4093' and '?096'. In addition there is a recessed flat base with the initials 'J K & S', and the number '2773' which is likely to have been made by John Kilner and Sons of Yorkshire; this jar also has the remains of an applied label.

A further 44 sherds were recorded as cylindrical jars, although they may be from shouldered jars or from bottles. They include a bases with a range of symbols on the underside, including numbers in a triangle and a blank six-pointed star, and one with the letters 'B & C Co', which would be of interest if it could be shown to be Blackwell and Crosse, rather than the usual Crosse and Blackwell. One sherd from [19] has the remains of a label stating 'FRESH'. A few sherds are from necked cylindrical jars with a slack shoulder (all from [19]), while another from this context has a constricted neck with everted rim for tying a covering of paper or cloth.

Finally, context [19] contained sherds from up to nine flaring, or 'tumbler shaped' jars in colourless glass with simple packer rims vessels; these are present in a range of sizes (known heights 80mm and 110mm) and probably held pickles or jams that could be served at the table; with one example still bearing a partial and worn paper label with the words 'LONDON ENGLAND' at the base (to illustrate). Another complete small jar with a band of ribbing below the rim (from [34]), probably used for fish or meat paste, has a diamond-shaped label (to illustrate). A larger jar from [36] has an incised zig-zag band below the rim.

### *Stoppers and lids*

This category forms a very important element of the collection, totalling 4281 bottle stoppers (82.347kg), a possible decanter stopper and 41 lids. A sample of the stoppers has been retained, and at least three types are represented. By far the most common is type 2, which is in natural green glass, the head either flat-topped or slightly convex, often with a number on the top (usually a '6'). The better preserved examples show that these originally had a cork collar around the upper part, if not all, of the shank, and a metal cap embossed with the royal coat of arms at the centre, and the words 'CROSS & BLACKWELL / PURVEYORS TO HER MAJESTY' around the edge, with '21 SOHO SQ / LONDON' at the centre, within a milled border. It would appear that this type of stopper remained in use until the 1950s. Numerous examples of this type of stopper were clearly used for Lea & Perrins sauce. A variant of this form from [36] has lettering in relief and picked out in red; the lettering around the edge reads 'D. COUTTS & C<sup>O</sup> / LONDON'. Within this are 'OLD YET FIRM' and 'TRADE / REGISTERED / MARK'; the motif at the centre is unclear but may have been an oak tree. Nothing has yet been found out about this firm. The next most common form, usually in colourless glass, has a serrated edge and screw thread (type 1). The third type is flat-topped, made in two-part mould with the words 'RYLANDS PATENT' around the edge and a slightly expanded terminal to the shank.

Four main types of lid are present in a range of sizes (measured examples are 40mm to c 68mm in diameter). The first type is flat-topped and completely plain. The second is the same but with a groove across the centre to act as a socket for twisting open with a key. The third, represented by only one example, is plain with a recessed centre.

The fourth type is of this type but with relief-moulded lettering around the edge. The different companies represented are identified as 'AIRE & CALDER BOTTLE CO / CASTLEFORD & LONDON'; 'SYKES MACVAY & C<sup>O</sup> / ALBION GLASSWORKS CASTLEFORD'; 'JOHN KILNER / WAKEFIELD'; 'WRIGHT & C<sup>O</sup> / BRIERLEY HULL' and 'CANNINGTON SHAW / ST HELENS'. Three lids from [36] have a monogram at the centre made up of the letters 'KTB', while one from [149] has a monogram of the letters 'KCB'.

A fifth type of lid is in colourless glass with a ground edge and raised rectangular knob handle. On the underside are two interlinked hearts in relief, while the tops are etched with the numbers 254 and 918. All these lids and stoppers are highly illustratable and can inform on the links between Crosse and Blackwell and their suppliers.

### *Other forms*

Context [151] contained a small rim fragment from a goblet (<54>), probably of 17th-century date, recovered from sieved sample {8}.

Context [149] contained approximately half of a small mould-blown beaker jar (<53>) with flaring profile, slightly recessed upright rim and geometric 'cut' glass decoration; lettering in relief on the underside of the concave base reads / DEPOSÉ / H.P. /. This suggests that it either held a foodstuff such as paté or fish paste, or was used to hold a sauce bottle on the dining table.

Contexts [34] and [36] include narrow cylindrical necks with corrugated ribbing and a possible external screw thread below the rim that are either from ornate sauce bottles

or flasks. Also from [34] is a complete mould-blown ink bottle in colourless glass; the relief-moulded lettering on the underside of the base reads 'FCC / 4'.

#### *Window glass*

Eight fragments of glass appear to be from windows rather than square or rectangular bottles (from [36], [43], [128], [131]).

#### *4.1.7.4 Distribution*

The assemblages from the different contexts vary in size and differ subtly in character.

#### *Late 17th century*

Very little glass was found in the quarry fills or levelling (phases 2.6.3.1, 2.6.3.2); only two sherds (9g) could be located at the time of writing, and those from [135], [151] remain to be recorded. A few sherds of shaft-and-globe/onion and onion bottle were found in later contexts ([149], [59] and [43]). In addition, context [151] contained a small rim fragment from a goblet (<54>), probably of 17th-century date, that was recovered from sieved sample {8}.

#### *18th century*

The two pieces of glass associated with the late 17th- to 18th-century buildings comprise is part of a mallet bottle from [119] (phase 2.6.4.1). A few sherds of mallet bottle and cylindrical bottles of possible 18th-century date were also found in later contexts ([127], [43], phase 2.6.5.3).

#### *19th to 20th century*

A total of 407 fragments of glass were recovered from the cistern (phase 2.7.4.2), of which 342 fragments (231 ENV, 8.858kg) are from the lower fill [149] and the remainder are from the upper fill [131]. Both groups are dated by the pottery to c 1870-1900. The finds from [149] mainly comprise bottles, including a complete cylindrical lemonade bottle made by Batey (to illustrate) and four small cylindrical bottles with angled shoulders, two of which are complete (to illustrate). Most sherds from probable sauce bottles, including one substantially complete for Lea & Perrins sauce (to illustrate), and a number of bases, some with numbers and/or the letters C&B on the underside. Of interest is part of a biconical bottle/jar with raised Greek key pattern, like that found in [34]. In addition there are 28 sherds from shouldered jars, at least one made by the Castleford Bottle Company, two with 'K' on the underside and others with the letters 'C S' Ld (for Cannington Shaw and Co., see above). Two types of phial are present, one cylindrical, the other lentoid, along with 28 assorted lids and stoppers. The finds from [131] are less varied, and 20 of the estimated 39 items are bases and body sherds from bottles/jars. Both contexts includes bases from shouldered jars with apparent valve or ejection marks on the underside that suggest they were made in semi automatic & automatic non-Owens bottle machines; if so they must date to the first decade of the 20th century, or later, when this technology was introduced.

A large amount of glass was found in the levelling deposit [36] under the warehouse floor (phase 2.7.4.3), totalling 4478 sherds (4397 ENV, 88.931kg). The bulk of the group comprises stoppers, with an original total of 4169 examples (80.194kg), of

which a sample of has been retained. In addition there are 29 assorted lid forms and a stopper that may be from a decanter. Most of the remaining finds comprise sauce and pickle bottles, but jars are well represented, with sherds from up to 78 examples, of which at least 40 are of the angled shoulder type; there are also sherds from a range of colourless glass jars, several with numbers and symbol on the underside of the bases, and one of flaring type with moulded zig-zag decoration. Other forms include a complete fluted bottle in natural green glass (to illustrate), cylindrical and lentoidal phials, a bottle or flask with corrugated neck and part of an oval flask. From the pottery these finds could date to between 1870 and 1920; it should be possible to refine this; a number of finds merit illustration.

A large amount of glass was incorporated in the levelling dumps [19], [34] and [43] that date to c 1925 or a little later (phase 2.6.5.5), totalling 587 sherds (392 ENV, 19.044kg). In addition to 90 lids and stoppers, these finds include a range of glass jars and paste pots, some shoulders, others in colourless glass and of 'tumbler' type, three of which have the remains of their labels. Bottles of note include a complete conical example, possibly for milk or pickles, a complete biconical example with Greek key pattern and part of another, (like that from [149]), a near complete rectangular bottle with label from mushroom ketchup and a complete ink bottle. Other forms include three cabled pedestal bases, part of a bottle with a ribbed band below the shoulder, sherds from a oval flask, a rim/neck with corrugated moulding like that from [36] (see above) and sherds from a possible medicine bottle with dosage lines.

This group includes several bases from jars made in semi automatic & automatic non-Owens bottle machines, with valve or ejection marks present on some of the colourless glass 'beaker' jars of machine made manufacturing. These finds cannot be dated any earlier than the first decade of the 20th century when this technology was introduced.

#### 4.1.7.5 *Assessment work outstanding*

Almost all the glass has been recorded, but that from [135] and [151], both early deposits, has not been located. There was not time to review the stoppers from [36]; it is presumed that those recorded by Nigel Jeffries are the same as those now accessioned, but this needs to be verified and the accession numbers matched with the records.. It was also intended to produce a table of makers marks stamps noted on the lids and bases, identifying the different producers in order to quantify the different sources and demonstrate the range but this remains for the analysis stage.

#### 4.1.7.6 *Recommendation for analysis*

(Analysis tasks 24–30, section 7.1.6 )

The main aims of the research should be to inform on the history and use of the Crosse and Blackwell site, the sources of glass supply and the preservation, packaging and distribution of food in the late Victorian period to the early 20th century. The study should also be linked to documentary archive material relating to products of Crosse and Blackwell and its trading and marketing and the potential for this is discussed in section 5.4.5.

4.1.7.7 *Recommendations for illustration or photography*

Bulk and accessioned glass – up to 48 artefacts ( to be confirmed at finds review)

**4.1.8 The accessioned finds and related bulk finds (excluding glass, clay pipe and building material) (C&B publication)**

*Lyn Blackmore*

Material	Post-med	Total	Comment
Ceramic (excludes BM, stamps)	6	6	6 stoppers
Glass	43	43	Bulk accessions, 858 objects mainly stoppers (see glass assessment);
Iron	15	16	Bulk accessions, 55 objects, mainly stoppers
Copper alloy (including coins)	4	4	
Lead/tin	3	3	
Bone	1	1	
Rubber	2	2	5 objects
Wood	6	6	Bulk accessions, 31 objects, all stoppers, plus a number of unaccessioned finds
Total	80	80	

*Table 7 Summary of selected accessioned finds discussed in this report*

4.1.8.1 *Introduction/methodology*

The following summarises the main categories of post-medieval accessioned finds other than glass lids and stoppers, which are included in the glass assessment, and building materials and clay pipes, which are considered individually. All finds were recorded in line with standard Museum of London practice on record cards and on the MoLAS Oracle database. Also included in this report are some currently non-accessioned finds that should be given accession numbers (leather, cork stoppers). Slag is noted separately.

*Ceramic*

Excluding clay pipes and building material, there are six ceramic accessions, although four of these are bulk accessions, comprising a number of composite lid fittings, of which two are from [34] (<37>) and 17 are from [36]. All are of the same general construction, consisting of flat-topped ceramic disc with bevelled sides, and a central pin made of a dark silvery metal, possibly lead; in every case a white powdery substance survives around the pin. In most cases the pin is incomplete, but on the five intact examples it projects for c 6mm and has an expanded round base with

stamped lettering; mostly this is hard to read but one find from [34] (<37>) appears to have an 'O', others from [36] have an 'A' (<38>; possibly preceded by 'H'), 'JG' (<66>) and 'Y &' (<66>). Two sizes and three types are present, the smaller being c 38mm in diameter, the larger c 40–41mm. Three examples (two of the smaller group) are well-formed with a well-defined recessed circular area at the centre (c 21–23mm across); and this is also present on the second group, which comprises nine larger, flatter and more crudely finished examples. The third group comprises five flat-topped examples. These objects would have been part of a composite closure that probably involved an iron clip-on cover as supplied with stoneware jars made by Doulton and Watts, Lambeth (cf Green 1990, 362, 366). It is recommended that a selection of these finds are illustrated.

The base and lower body of a large thick-walled crucible or mortar (<34>; weight 540g) was found in [127]; this is in a highly-fired, buff-coloured flint-tempered fabric and has an incised horizontal line around the body (?post-firing); a darker residue covers the surface of the base and lower body. Slag recorded in the ceramic material category is considered below.

### *Glass*

See 4.1.7 Post-medieval bulk and accessioned glass.

### *Iron*

Most of the 15 accessions are lids/stoppers that were presumably used with preserving jars, of which 43 examples were found in [36] (<18>–<21> and <65>), two in [43] (<22>, <23>) and two in [149] (<26>); most are c 57mm in diameter and 15mm thick. One of the examples from [149] shows that these were made with a tin or aluminium core within an outer case of iron (to illustrate); no complete handles were found but it is possible that they were a form of ring pull. Two smaller discs from [43] (<24>, <25>) are the same size as the heads of the glass and wooden stoppers and it is possible that they are not iron as such but simply covered in corrosion (to be confirmed). Four unstratified examples were also retained (<4>).

A near complete iron spoon-shaped paddle (<32>) was found in [43] (to illustrate). Its length is now 420mm, but was probably up to 450mm; the bowl/blade is now 160 x 18mm but was probably a bit longer than this. The handle is a simple shaft with round-section and bevelled heel. This is probably a piece of 19th- or 20th-century equipment used in the Crosse and Blackwell factory. Context [77] contained a possible handle (<29>) and a heavy rectangular bar (<30>), presumably both of structural and/or industrial origin. Context [113] contained a T-shaped object with pointed end with mortar adhering to the underside and wood to the upper side (<31>). This has been listed as a hinge but as there is no X-ray this cannot be confirmed.

Of interest, although unstratified, is a large rectangular plate (30 x 13mm) from a cold storage unit (<27>) with eyes for fixing to the wall at the mid-point of either side, and octagonal bolts that secure a separate element on the back, made of folded sheet metal and apparently designed to grip a rectangular object. The front bears the words 'J&E HALL LTD / DARTFORD' with 'B1' in the bottom right corner; at the centre of the right side is a smaller plate (60 x 30mm), held in place by round-headed screws. The incised lettering upside down in relation to the main panel, reads 'USE

MINERAL / OIL ONLY / VACUUM DTE AA'. See below for more details on this company. This find merits illustration.

In addition, an iron nail was found in context [43], and two others in [129] (from sieved sample {4}).

#### *Copper alloy*

The only stratified finds are a single dress pin in two pieces <14>, found in [59] and a button <10> from [129], the latter in poor condition (diameter 18mm). In addition there is a coin from [75], identified as a Victorian farthing.

Of interest is an oval brass plate (<28>, unstratified) with eyes for attachment on either side, which merits illustration. The lettering in relief reads 'J. & E.HALL, LD / MAKERS. / REFERENCE NO / M323 / DARTFORD, ENGLAND' on a cross hatched background and within flat border. J and E Hall were established in 1785 as maker of foundry equipment but later branched into refrigeration, supplying ships and warehouses, hospitals and hotels with cold storage facilities from the early 20th century onwards. The present find is from such a storage unit. Another development was in transportation, including lifts and escalators, and chassis for buses and lorries

#### *Lead*

Two crumpled items of lead-tin alloy from [43], both distorted, are seals that would probably have covered the glass bottle stoppers (see glass assessment). The smaller <12> has a diameter of c 23mm; it is unclear whether it had any markings or not. The larger <11> has a diameter of c 43mm and bears a large circular motif in relief. At the centre is a crown, around which are the words 'PURVEYORS TO HER MAJESTY' and around this are traces of 'CROSS & BLACKWELL'; below the crown is possibly part of an address (hidden where the edge is bent), and below this 'LONDON'. This probably read / 21 SOHO SQ / (see also glass stoppers). A third example, also bent, is <13> from [149] has part of a lentoidal border in relief, at the centre of which is a circular motif. Above this is the word 'PATENT', with 'BETTS CO' to the left and 'LTD' to the right. The lettering below this is very faint and has not yet been deciphered.

#### *Composite*

A few glass stoppers were originally recorded as composite objects; they are considered in the glass assessment.

#### *Bone*

A complete button was found in [43] (<7>; this is a flat-backed circular disc with a centring hole for the cutting tool and four holes in the central recess. The closest parallel in the typology devised by South and published by Noël Hume (1969, 90–3) is type 19, which is most common between 1837 and 1865.

### *Leather*

A small amount of dessicated leather (not accessioned) was recovered from a sieved sample {2} of context [46] (weight c 20g). One fragment appears to be from the toe of a shoe, while others are rand fragments from the heel or toe, one with an iron nail in situ. Three other pieces (maximum size 16 x 27mm) have a number of closely spaced nails and/or screws up to 28mm in length in situ and may be from another type of object.

### *Rubber*

Stopper <17> from [43] and the four screw-top closures from [36] are made of vulcanite, a specially treated rubber. The stopper has a screw thread and chisel top of rectangular form with recessed panels on each side, one containing the word 'RILEY'S', the other 'PATENT'. Nothing has yet been found out about the inventor.

The four screw-top stoppers are similar in size with milled sides (diameter of head c 30mm) and are clearly from beer bottles. One reads '[JOHN] LOVIBOND & SONS / BREWERS / GREENWICH'; the second reads 'WHEATLEY & BATES Ld / BEACON / RILEY'S PATENT'; the third reads 'KOPS BREWERY FULHAM'. The fourth is the most worn but reads 'C HAMMERTON & Co BREWERS'; the octagonal field at the centre contains an unclear motif and the word 'STOCKWELL'. All five finds merit discussion and illustration.

### *Wood/organic compounds*

Three mould-made round-topped lids/stoppers with milled sides from [30] (<8>; diameter c 46mm) are in a buff-coloured material that includes abundant fine organic matter; they are not of pure cork or wood and so could be of papier mache (this needs further research). At the centre of the recessed upper surface is a crown motif flanked by the words 'TRADE' and 'MARK'; the lettering around the flat-topped border is largely worn away and has not yet been deciphered. The short cylindrical neck is hollow.

Two smaller examples from [36] (<16>, <52>) differ in that the heads are smaller (diameter 29–30mm) with a cylindrical shank around which is a cork collar (remains still in situ). Example <16> is in an orange-coloured fabric, with the royal coat of arms of England flanked by the lion and the unicorn at the centre; the lettering in relief, within a beaded border, reads 'CROSSE & BLACKWELL / PURVEYORS TO HER MAJESTY' around the upper edge, with '21 SOHO SQUARE LONDON' horizontally at the base. Stopper <52> is probably the same but the lettering is obscured by later deposits.

Context [19] contained four complete and three incomplete stoppers of the same type, with heads ranging between 26mm and 31mm in diameter (<96>; all have the same design as <16>. Also from this context are two larger stoppers with octagonal heads (<97>); the design comprises the letters / C & B / above and below the royal arms within a roundel at the centre.

In addition there is a large group of purely cork stoppers from contexts [19], [34], [36] and [43], totalling 108 examples (830g), of which 17 from [19] have been



accessioned (<6>). Most are from [36] (84 examples, 614g); the others are from [19] (17 examples), [34] (two examples) and [43] (six examples). The corks vary in shape and size, and measurements are hindered by the fact that several are somewhat distorted. All were measured to ascertain their diameter and thickness, and the data was recorded in an excel file.

The majority are flat discs used to seal jars; diameters range between 30mm and 95/97mm, with a small group of 30mm to 45mm (six examples) and two between c 43mm and 54mm). Most are over 50mm across, with 10 examples at 52–55mm, and three more at 56–57mm. The main cluster is at 58–63mm (58 examples), with three at 65–66mm and two with diameters between 94mm and 97mm. Thickness is between 13mm and 25mm, with most examples being between c 16mm and 22mm. Most have more or less straight sides, but in a few cases that are more bevelled, and it was sometimes apparent from a constriction in the side that a cork had been reused to seal a jar slightly smaller than that which it was originally made for. An interesting feature, noted on three examples, is a central perforation that is larger on the upper side than on the underside; two are round, but one is rectangular in outline. Two other corks have semi-finished perforations.

In addition there are 15 corks from [36] and [43] which are of cylindrical form; four from [36] are of wine bottle type (diameter c 20mm), but others are larger in diameter (32–50mm; thickness 20–48mm) and must have been used for other bottles or narrow-necked jars.

### *Slag*

Four large pieces of slag (total weight 4.002kg) were recovered from [59]. These have a mixed texture, being partly slag and partly clinker; pieces of coal are also embedded in the surface. All pieces have relatively flat surfaces and one has a rounded edge suggesting that all could be from the base of a hearth, but this not the kind of hearth bottom associated with smithing, and so it has been recorded as undiagnostic furnace slag. A small piece of vitrified hearth lining was found in a sieved sample from [129].

Context [34] contained a large cake of solidified matter containing coal, charcoal and other matter (<33>; diameter c 220mm, thickness up to 4mm). The underside is smooth and convex, with an outwardly bevelled edge, while the upper surface is partly smooth but also uneven, suggesting that this is contents of a crucible or hearth.

These particular finds have no potential for further analysis.

#### *4.1.8.2 Functional analysis*

The bulk of the collection comprises stoppers and lids and other equipment associated with the food processing and distribution carried out by Crosse and Blackwell. The very few non-industrial items comprise a button, a dress pin <14>, a coin, two glass vessels and a few structural fittings.

#### 4.1.8.3 *Provenance of objects*

Only three finds predate the Crosse and Blackwell occupation. The earliest is a copper alloy button <10>, which is from the late 18th-century levelling [129]. The other finds are the possible iron hinge <31>, from the fill of an 18th-century drain [113], and copper alloy pin <14> from a levelling deposit/garden soil ([59]).

Of the remaining finds, only three are from the lower cistern fill [149]. One is a moulded cut-glass vessel <53>, while the others are a glass stopper <15> and part of the cap from another <13> (see glass assessment), all of which could be derived from the overlying deposit [131]. The largest group is from the dumps under the warehouse floors ([19], [36], [59], [77]), with 54 accessions, although 39 of these are glass (see glass assessment). Most are associated with food packing, but a copper alloy pin <14>, a crucible (<34>), an iron handle (<28>) and a structural fitting (<30>) were also recovered. Sixteen accessions are from the demolition levels, which contain material dating up to c 1925 ([19], [34], [43]); they mainly comprise lids/stoppers of pottery, iron, rubber and wood, but also include an iron paddle <32>, a bone button <7>, and some possible slag (<33>).

#### 4.1.8.4 *Assessment work outstanding*

No X-rays have been made of the iron; this is needed to interpret the construction of this artefact - a supposed hinge <31>. X-rays of the iron lids/stoppers would also inform on their construction.

#### 4.1.8.5 *Recommendations for analysis*

(Analysis tasks 31–42, section 7.1.7)

The accessioned finds from the different phases of dumps associated with the warehouse and food processing have the potential to inform on the activities and processes carried out on the site and to answer questions regarding patterns in the numbers and sizes of different vessels. The range of different lids and stoppers is of particular interest and the potential from their analysis is discussed in section 5.4.6.

#### 4.1.8.6 Recommendations for illustration

Accessioned finds – up to 12 artefacts (Table 8)

Cxt	Acc	Material	Object	Frgs	Comment
30	8	Wood	Stopper	3	Selection; group photo?
36	67	Rubber	Stopper	4	Selection; group photo?
43	17	Rubber	Stopper	1	
36	38	Ceramic	Stopper	3	Selection; group photo?
36	39	Ceramic	Stopper	7	Selection; group photo?
36	66	Ceramic	Stopper	5	Selection; group photo?
19	96	Wood	Stopper	7	Selection; group photo?
19	97	Wood	Stopper	2	Selection; group photo?
43	32	Iron	Spoon/paddle	1	Draw/photo
19	6	Wood	Stopper	17	Selection; group photo?
0	28	Copper	Mount	1	Named plate; photo
0	27	Iron	Mount	1	Named plate; photo

Table 8 Preliminary list of objects for illustration

Conservation input is needed to clean some of the stoppers for illustration and photography (Table 8)

#### 4.1.9 The animal bone (CRL7)

Alan Pipe

##### 4.1.9.1 Introduction/methodology

This report identifies, quantifies and interprets the animal bone from contexts [59], [77], [129], [135] and [151] derived from TCG09. Hand-collected animal bone from each context group was recorded directly onto Excel spreadsheets in terms of weight (kg), estimated fragment count, species, carcass-part, fragmentation, preservation, modification, and the recovery of epiphyses, mandibular tooth rows, measurable bones, complete long bones, and sub-adult age groups. All identifications referred to the MOLA reference collection; and Schmid 1972. Fragments not identifiable to species or genus level were generally allocated to an approximate category, particularly; 'ox-sized' and 'sheep-sized', as appropriate.

A summary of the hand-collected context groups in terms of weight (kg), estimated fragment count, fragmentation, preservation, faunal composition, and the recovery of evidence for ageing and stature can be consulted in the site archive (*p:\camd\1144\TCG09\env\zoology\bontab01.xls*). A detailed summary of the hand-collected context groups in terms of taxon, carcass-part, modification and the recovery of sub-adult age groups can be consulted in the site archive (*p:\camd\1144\TCG09\env\zoology\bontab02.xls*).

#### 4.1.9.2 *Composition*

This assemblage provided 0.550 kg, estimated 27 fragments, of well-preserved hand-collected animal bone with a maximum fragment size generally between 25 and at least 75 mm.

The bulk of the hand-collected bone derived from adult and sub-adult ox *Bos taurus* and 'ox-sized' fragments of rib and long bone with fewer fragments of sheep/goat *Ovis aries/Capra hircus* and 'sheep-sized' and single fragments of pig ulna (lower fore-leg) from [77] and [129].

There was no recovery of fish, amphibians, poultry, wild 'game', commensal or scavenger species, or human bone.

There were no foetal, neonate or infant animals. Cattle were represented by identifiable fragments of vertebra [77], rib, radius (lower fore-leg) [135] and toe [151] with unidentifiable fragments of 'ox-sized' vertebra [77], rib [77] and long bone [59] and [151], with most fragments derived from carcass areas of good or at least moderate, meat-bearing quality. The radius had been split down the mid-line, probably to allow removal of the marrow. Sheep/goat were represented by a single fragment of tibia (shin bone) from [135] with a juvenile sheep-sized cervical (neck) vertebra from [129]; single fragments of pig ulna were recovered from [77] and [129]; again, areas of moderate and good meat-bearing quality, with no recovery of the head and feet. There was no recovery of ox or sheep/goat horn core. Clear evidence of butchery was seen on cattle bones from [77], [129] and [135]; and on a pig ulna from [77] only. There was no evidence for working, gnawing, burning, pathological change or any other modification.

The assemblage produced very limited evidence for age at death of the major domesticates with no mandibular tooth rows but seven epiphyses; there were no measurable bones or complete longbones.

#### 4.1.9.3 *Assessment work outstanding*

None.

#### 4.1.9.4 *Recommendations for analysis*

Further analysis of the animal bone is relevant to the CRL7 publication and OAU work ( see section 7.2.5)

#### 4.1.10 Geoarchaeology (CRL7)

Jamie Andrews

##### 4.1.10.1 Introduction

Two visits were made by a MOLA geoarchaeologist to the site to examine, record and sample two sequences of sediments exposed in the evaluation trenches at Goslett Yard, London, WC2. This exercise followed a request by the site supervisor and Crossrail Archaeological Consultant. The purpose of the visit was to determine whether the deposits exposed in the trenches were soils and to evaluate their environmental potential.

The site lies on the river terraces of the Thames, which comprise gravels, overlain in places by brickearth and slope deposits. Cartographic evidence and previous archaeological investigation in the area suggests the site was open, rural land prior to urbanisation in the 17th century. The earliest archaeologically significant deposits in the site vicinity have included peaty soils, alluvial clay/silts and reworked brickearth which suggest a wet, marshy environment and agricultural activity. The brickearth is also likely to have been removed and disturbed by quarrying.

##### 4.1.10.2 Methodology

###### On-site

The best-preserved area of stratigraphy exposed in each of the two trench sections (specifically contexts (137), (140) and (129)) was examined in detail and the deposit characteristics recorded. A preliminary interpretation of their mode of deposition and the environments represented was made. In order to test and enhance these on-site interpretations three monoliths and five bulk samples were taken for off-site examination of environmental remains. The monolith tins were hammered in to the cleaned section face. The OD height of the monolith was surveyed in by the on-site archaeologists. The monoliths were then located on the section drawings, photographed *in situ*, cut from the section, wrapped in cling film and will be retained in the MOL Archaeology cold store until a decision is made on the requirement for off-site analysis. The five bulk samples taken from the contexts sampled by the monolith have been processed for environmental remains.

###### Off-site

No work has been undertaken on the three monolith samples. All five bulk samples were processed by flotation/wet sieving using a modified Siraf flotation tank with meshes of 0.25mm and 1mm to retain the flot and residue respectively. The sample residues were dried and sorted by eye for artefacts and environmental materials. The residue sample density (RSD) of each sample was calculated and recorded. This measurement, expressed as a percentage shows the ratio of matrix (<1mm) to residue (>1mm) and allows quick comparison of the overall abundance of material, including stone recovered from the sample. The flots were air dried then scanned briefly, using a low-powered binocular microscope, and the abundance, diversity and nature (method of preservation, specific features) of plant macrofossils and any faunal or artefactual remains were recorded on the MOLA Oracle database.

#### 4.1.10.3 Results

##### Stratigraphy

##### *Sequence One*

Monolith <3> (23.05m AOD.) (Photo 16). Bulk Samples <3> <4> and <5>

Context [129] (22.95m to 22.75m AOD) was a moderately firm, dark brown gritty silt, poorly sorted with occasional brick, clinker, oyster shell, mortar and flint gravel. This was interpreted as a post medieval layer probably formed through a mixture of dumping, soil development and bioturbation.

Context [140] (22.75m to 22.15m AOD) consisted of light to medium brown silts mixed with increasingly frequent and increasingly compact, iron stained rounded to subangular flint gravel and was very poorly sorted as a whole. The sediments of this context were considered to be the remnants of a truncated and trampled area probably as a result of quarrying activity on top of which [129] accumulated.

Context [137], although not sampled in either monolith or bulks was the river terrace gravels underlying the whole site and consisted of compact, orange, heavily iron stained sands and subrounded to subangular gravels. This context undulated across the site but lay some 0.4m below the monolith sample at approximately 22.15m AOD. The gravels are a Pleistocene deposit and form the basis to the Holocene sequence of deposits that is of interest both archaeologically and palaeo-environmentally.

##### *Sequence Two*

Monoliths <6a> and <6b> (22.72 m AOD) (Photo 17). Bulk Samples <7> <8> and <9>

In this area to the east of the site, two monolith tins (both sample <6>) were used to obtain a continuous sequence approximately 0.93m long from 22.72m AOD and resting on top of the river terrace gravels at 21.75m AOD.

Context [129] was described in this area as a medium grey (becoming darker and more humic with depth), slightly fine sandy silt with occasional clinker, CBM and gravel throughout. This was interpreted as a post medieval layer probably formed through a mixture of dumping, soil development and bioturbation.

Context [151] was a firm, mid dark grey/brown clay sandy silt with occasional flecks of charcoal, CBM, animal bone, oyster and gravel. It is possible this is a dumping/levelling layer.

Context [140] was a greeny grey silt with fine rootlines, moderately frequent gravel throughout with associated iron staining and fissures filled with silts from above. Interestingly the fissures in 140 could indicate a period of drying out prior to the accumulation of 129 over 140. Furthermore, the fine rootlines indicate vegetation (although probably light) did take hold on or over 140. The sediments of this context were considered to be the remnants of a truncated and trampled area probably as a result of quarrying activity

#### 4.1.10.4 Bulk Samples

Table 9 summarises the materials recovered from the bulk samples associated with the monoliths.

Sequence	Sample	Context	Litres	Residue	RSD	Stone	Fauna			Finds						
							Mml	Bird	M.Moll	Pot	CBM	CTP	Fe Nail	Coal	Glass	Slag
1	4	129	20	3.100	16%	###	#			#	#	#	#	#		
1	5	140	20	1.700	9%	###					#					
2	7	129	10	1.000	10%	###	#		#	#	#			#	#	
2	8	151	10	1.550	16%	###	#	#	#		#	#		#	#	
2	9	140	10	0.400	4%	###										

Table 9 Bulk sample summary

The preservation of environmental remains was universally poor. A range of finds were recovered but only in small quantities. In spite of this the recovered materials support the field interpretations of each deposit.

Context [129], samples <4> and <7> contained a small number of very small fragments of mammal bone, oyster shell, pot, CBM, clay tobacco pipe, nails, glass, coal and slag.

Sample <4> was the only sample to produce a flot. This consists mostly of clinker, but also moderately abundant waterlogged seeds and occasional insect remains. Seeds include many sedge (*Carex* spp.), indicating damp conditions, and a variety of disturbed-ground species, most of them characteristic of highly nitrogenous soils. This suggests the presence of decaying organic matter. Occasional food remains were also seen, in the form of grape (*Vitis vinifera*), fig (*Ficus carica*) and blackberry (*Rubus cf. fruticosus*) seeds.

The range and size of these materials are consistent with the field interpretation for this deposit - a deposit formed through a mixture of dumping, soil development and bioturbation.

Context [151], sample <8> is very similar to (129) in terms of what was recovered, the only addition was small fragment of bird bone. This again supports the field interpretation.

Context [140], samples <5> and <9> were largely sterile and contained only stone but for a couple of very small abraded fragments of CBM in sample <5>. This is not unexpected from a sample of brickearth.

#### 4.1.10.5 Recommendation for analysis

Further examination of the bulk samples confirm the geoarchaeological interpretation, that the deposits represent a rudimentary soil layer developing over the quarried ground prior to the construction activity of the 17th century.

It is recommended that closer examination of the monoliths is undertaken. Following this the monoliths obtained from the site should be examined and sub-sampled (4x) for pollen assessment.

Further analysis of the soil samples is relevant to the CRL7 publication and OAU work ( see section 7.2.6)



## **5 Updated Project Design - potential of the data and recommendations for further analysis**

### **5.1 Realisation of the original research aims**

The following research aims were proposed after evaluation (MOLA for Crossrail 2010a and MOLA for Crossrail 2010b) and remain relevant to analysis and publication.

- To determine the nature/chronology of the 17th to 19th-century urbanisation, particularly the Crosse and Blackwell occupation of the site
- The following documentary sources have initially been scanned: Historic and OS maps, London Metropolitan archive, London Society Library, Postal directories from 1841 to 1839. The potential of the documentary sources will be further defined to correlate with both the built and buried archaeology by assessing the Crosse and Blackwell Archive and Maling Factory archive
- To clarify the date, extent and character of the pre-urban landscape

### **5.2 Revised research aims**

Revised research aims are presented in the following relevant sections as they are pertinent to the potential for analysis.

### **5.3 Discussion of potential (CRL7)**

This site lies to the south-west of the Roman Newgate to Watling Street road which survives today as a major route along New Oxford Street and to the south of St Giles Circus, a point at which the old Roman road looped down along the route of St Giles High Street skirting around marshy land. The site appears to have remained as an open area in the hinterland of the cities of London and Westminster throughout the medieval period, close to leper hospital of St Giles-in-the-Fields, and development in this area only began to expand in the 17th century after the civil war and Great Fire of 1666 which created the desire to build on a more expansive scale. From this point onwards development within the area shifts from domestic 17th-century settlement to industrial and commercial development by the 20th century.

The results of the targeted watching brief and evaluation (TCG09) provided limited evidence of anything earlier than the 17th century due to truncation by post-medieval quarrying in the area. However, two themes the geoarchaeological work and the 17th to 20th-century urban development of the area have great potential in understanding the character of the area and therefore can contribute to the theme of the CRL7 publication. In addition the watching brief carried out at 2 Stratford Place (SFJ10) in which the medieval Great conduit cistern was observed contributes to the medieval history of the Bond Street area.

### 5.3.1 Medieval Great Conduit cistern (CRL7)

A medieval culvert of mid 13th-century date and early post-medieval brick rebuild represented by a red brick-vaulted arch roof was found in a watching brief at 2 Stratford Place, Bond Street Station Upgrade (SFJ10) (Fig 3, section 2.6.2). This has great potential in contributing to the history of the Bond Street area and possible early post-medieval industrial development within the area.

### 5.3.2 Post-medieval quarrying and Geoarchaeology (CRL7)

Wide-scale brickearth quarrying had removed evidence of any previous occupation or activity on the site. However, deposits recorded overlying natural have been sampled and the results confirm the geoarchaeological interpretation, that the deposits represent a rudimentary soil layer developing over quarried ground prior to the construction activity in the 17th Century. There is potential for future work on these to provide information of whether the land was cultivated for a short time or was left open as waste ground.

More detailed information about the nature of the soil accumulation on the site and the historic activities associated with it might be obtained by soil micromorphology and pollen analysis. A clearer idea of whether pollen is preserved in the deposits could be obtained by limited pollen assessment, which could follow closer analysis of the monolith samples. If preserved, pollen would contribute to our understanding of the post medieval environment of the site during the period prior to development. Perhaps, for example it was cultivated for a short time rather than just waste ground. If pollen is preserved, then soil micromorphology would be a useful additional technique, able to enhance the information obtained.

### 5.3.3 17th- to 18th-century development and land use (CRL7)

Evidence of the brick walls, foundations and drainage systems of the 17th to 18th-century properties fronting onto Bow Street and George Yard (now Goslett Yard) were recorded during the targeted watching brief at TCG09 and represent the original structures on the east side of Bow Street/George Yard. Development began in the 1670s and it can be seen that by 1682 Soho Square and adjoining streets were laid out and (partially) built up (Fig 5). An integral part of the development was the street marked as Bow Street, parallel to and just to the east of Soho Square. The southern part of this street, however, was known as George Yard (now Goslett Yard) and the buildings on its west side comprised the stables and coach houses for the grander houses fronting Soho Square (SoL 81,82). This north-south street was broken by at least the mid-18th century but the northern arm is still represented by Falconberg Mews. The road crossing Bow Street - Giles Street - is now Sutton Row. Buildings on the east side were almost certainly smaller domestic properties whilst the square left in the centre – bounded by other properties facing Crown Street (now Charing Cross Road) to the east – was clearly back yards or gardens.

The earlier 17th to 18th-century buildings and the later alterations into more commercial properties will add greatly to the understanding of these transitional periods of urbanisation with the potential of comparison to the results of previous and future works in the local area.

#### 5.3.4 Ceramic building material (CRL7)

With an exception of a solitary medieval peg roofing tile, all the material from the site is of definite or probable post-medieval date. One plain glazed Tudor floor tile is present along with a few London-made red bricks of mid 16th/17th to 18th-century date. Most of the other bricks relate to a 17th to 18th-century cellar. These are of little potential for further analysis.

#### 5.3.5 Clay tobacco pipes (CRL7):

The pipe assemblage has limited potential for further chronological refinement, although valuable in the integration of all finds data to clarify the site sequence. The material is chiefly relevant in relation to the site.

#### 5.3.6 17th and 18th-century pottery (CRL7)

The post-medieval pottery has potential as dating evidence, and that from the earliest deposits shows that the filling of the quarry and levelling of the ground took place shortly before the construction of the first buildings. As the buildings are shown on Morgan's map of 1682 it is possible that some pottery types might have been in use earlier than formerly thought, or very new when discarded. There is little potential to comment on the nature of the property or properties in which the pottery was used, but the assemblage is of average status.

#### 5.3.7 The animal bone (CRL7)

Some of the assemblage (0.550 kg, estimated 27 fragments) of well-preserved hand-collected animal bone comes from contexts relevant to the CRL7 archaeology.

### 5.4 Discussion of potential (C&B publication)

The targeted watching brief and evaluation at TCG09 have provided significant potential and detail as to the occupation of the area from the 17th century onwards, and, in particular, the impact and development of the area by Crosse and Blackwell as major manufacturing premises in the area.

The site at TCG09 lies on the boundary between the parishes of St Martin in the Fields to the west and St Giles in the Fields to the east which was an important line of communication from the north to Covent Garden and the Strand. Until the 18th century this road had been known as Hog Lane, but probably changed its name to Crown Street in 1759 and was probably built up on the west side by the late 17th century. By the late 18th century a large number of taverns or inns became established in Hog Lane along with small plots and dwellings which ran either side of the narrow street and were a combination of dwellings and centres of small scale manufacture. This thoroughfare was widened to the east in the 1880s when it also changed its name to Charing Cross Road. The new Charing Cross Road opened in 1886–7 and shortly after Messrs Crosse & Blackwell erected and expanded their food manufacturing business to the site of the Astoria, on the northern side of Sutton Street (modern Sutton Row).

Although Crosse & Blackwell acquired their first premises at No. 20 Soho Square in 1858 the growing success of their enterprise led to successive acquisitions of neighbouring properties and involved the gradual acquisition and piecemeal development of existing smaller units of property. The company's development greatly contributed to the architectural character of the area as brick built industrial premises became the norm, with functional elements such as loading loops, hoists large windows, but sometimes a striking difference between the imposing façade on Charing Cross Road and the stricter functionalism of the rear.

In studying the impact of Crosse and Blackwell in this area it is therefore imperative to investigate documentary evidence of industrial and commercial activity from the late 17th to 19th century correlating the buried structures and standing buildings now demolished, with historic documentary sources. As the development of the Crosse and Blackwell premises involved the acquisition of existing 17th/18th-century there is potential to identify these buildings from documentary sources and marry the premises with the buried structures found at TCG09.

The early post-medieval history of the site and the arrival of Crosse and Blackwell, the development of the buildings and the products the company produced have good potential to be of interest to a wide audience as the company is a well-known Victorian industrial enterprise and still a household name, now owned by the Princes Food and Drink Group. There are seven major themes that could be explored such as the following:

- The changing nature of area, what was the area like prior to the arrival of Crosse and Blackwell and why were their factory and warehouses positioned at the site?
- How did the Crosse and Blackwell buildings expand and how did they change the nature of the area and how did it change again after their departure in 1925?
- What can be said about the different functions taking place in the various buildings on the site?
- What were the methods of production for their sauces and pickles and what type of products were made on site?
- Why did they leave?
- What can we say about the distribution and export of products produced at the site and the raw commodities needed in the manufacture of their products?
- What can we say about development of preservation and packaging for the various products and the use of ceramic, stoneware and glass jars and tins by Crosse and Blackwell?

#### 5.4.1 Listed and non-listed buildings - documentary research and sources

*David Sorapure*

During MOLA's survey the potential to expand the study of the buildings through further documentary research was recognised, but such a study was beyond the scope of the commissioned work. However, the data produced has good potential to be enhanced by the further detailed research of documentary sources, in order to disseminate the findings of the survey and to communicate the important social

history of the changes to the Soho/Tottenham Court Road area and the Crosse & Blackwell buildings and their functions.

A programme of detailed research into archive sources would need to be undertaken. Much of the Crosse and Blackwell Archives are held at the London Metropolitan Archive (LMA) The archive is dated 1830–2003 and has been organised and indexed under the following:

- LMA/4467/A Corporate
- LMA/4467/B Financial
- LMA/4467/C Production
- LMA/4467/D Sales
- LMA/4467/E Staff
- LMA/4467/G Promotion

In addition further research into the individual building plans would be necessary, along with a study of historical photographs and map regression and insurance maps. These may help identify the functions of buildings and features.

The parent company of Cross and Blackwell, the Princes Food and Drink Group should also be approached and may provide valuable information on the history of the company at Soho Square and the products produced in the Victorian and Edwardian eras.

#### *5.4.1.1 Recommendations for analysis*

(Analysis tasks 8–13, section 7.1.3 )

A programme of detailed research into the archive sources would need to be undertaken. Much of the Cross and Blackwell Archives are held at the London Metropolitan Archive (LMA) dated 1830–2003. Matching any archive material with the standing building records will form the basis of text for Chapters 1 and 2 discussing the early buildings occupied by the company and the later buildings and various rooms which constitute this factory site. The archaeological remains will be matched to building plans such as Goad fire insurance maps if found in the search of archive material.

Further research aims will contribute to the analysis;

RRA01: Further research into the individual building plans would be necessary, along with a study of historical photographs and map regression and insurance maps. These may help identify the functions of buildings and features.

RRA02: The parent company of Crosse and Blackwell, the Princes Food and Drink Group should also be approached and may provide valuable information on the history of the company at Soho Square and the products produced in the Victorian and Edwardian eras.

RRA03: The research into the range of vessels found at the site would help to reveal the types of products being produced at the site and how they were used and sold. Any collections of comparable material or published material would need to be identified and consulted.

Recommendations for illustration

Up to 2/3 site images and 2/3 building plans, historic maps and photographs,

#### 5.4.2 Documentary records – assessment of potential

*Nigel Jeffries*

##### 5.4.2.1 Crosse Blackwell archives

The archival records relating to Crosse & Blackwell are also considered here with the view of assessing its potential when used in appropriate dialogue with the archaeological record. The London Metropolitan Archive (LMA) is the principal resource for the documents and printed ephemera pertaining to the Company, catalogued according to functions and subsidiary companies of Crosse & Blackwell Limited. This archive is dated 1830-2003 and include business agreements; correspondence; published histories; financial records; papers relating to shareholders; papers relating to production including agreements, ledgers, notebooks, reports and labels; price lists; papers relating to staff organisations and staff photographs; premises records such as inventories, leases and photographs etc.

Sections LMA/4467/A-G relating to Crosse and Blackwell Ltd were assessed with the objective of characterising this resource and assessing its potential for further work. In addition, the indexed material related to subsidiary companies (not examined) it acquired during the 20th century is divided as follows:

- LMA/4467/H British Vinegars Limited
- LMA/4467/I Elizabeth Lazenby Limited
- LMA/4467/J James Keiller and Son Limited
- LMA/4467/K Adlards Wharf

The archival resource supplies only a fragmentary account of the Companies' activities and does not appear to contain detailed references to the management of its premises and its stock.

##### 5.4.2.1 Corporate

Files and documents catalogued under the Corporate heading (LMA/4467/A) are sub-divided into the following (four) sections: Agreements, Correspondence, Published Histories, and Crosse and Blackwell family papers.

Archived under Agreements (LMA/4467/A/01/001-005), the 5 files comprising 8 documents include items such as 'Letter granting Crosse and Blackwell the right of supplier to the King of Belgium' (LMA/4467/A/01/005) from 1868 and similar agreement for Emperor Napoleon of France also dated to 1868 (LMA/4467/A/01/004). The most useful documents with the most potential are those related to the early history of the company with the original purchase agreement of William Wyatt's company (West and Wyatt was founded in 1706) by Edmund Crosse and Thomas Blackwell in 1830 surviving (LMA/4467/A/01/001). The next Correspondence (LMA/4467/A/02/001-005) section contains five files, with two

documents considering the company's foundation and its early operation of interest. The first (LMA/4467/A/02/003), the 'Transcript of letter from Charles Blackwell to his brother Sam Blackwell' written in 1830 and transcribed in 1947 concerns the establishment of the company and its initial financing with the second a 'Letter from Victor Crosse to L.E. Jackson regarding early history of the organisation and Royal Warrants' (LMA/4467/A/02/005). Of a similar subject matter to the last two documents, the material filed under Published Histories (LMA/4467/A/03/001) - 'A bundle of Old Letters, a narrative history of Crosse & Blackwell' - dated to 1910 appears to have the most potential. The Corporate section is completed by the Crosse & Blackwell Family Papers (LMA/4467/A/04-08) although the summary provided in the index suggests these have little use to the project.

#### *5.4.2.2 Financial*

The Financial heading (LMA/4467/B) is sub-divided into the following four sections: Accounts, Other Financial Records, Bills of Exchange Drawn and Shareholders Probate Books. The various volumes and files covering Accounts include 'Ledgers, Private Ledgers and Private Balances' from the 1910s and 1920s are not yet publically accessible (LMA/4467/B/01/003). This leaves a series of open access ledgers that maybe of interest and potential with regard to the companies functioning. For example, the 1922-5 ledger (LMA/4467/B/01/004) is alphabetically indexed, so A for Advertising, B for Bad Debts etc and may, upon some searching, yield useful information, although chronologically it is outside the date range provided by the pottery. The remaining part of this indexed section 'Other Financial Records' (2 volumes 1 file: LMA/4467/B/02/001-003) includes two documents. The first is an account notebook from Crosse and Blackwell with Henry Drummond dated 1830–33 (LMA/4467/B/02/001) and the second a balance sheet and summary of stock from 1844 (LMA/4467/B/02/002). The third 'Bills of Exchange Drawn' section (LMA/4467/B/03) and the fourth 'Shareholder's Probate Books' dating to the 1930s and 1940s appear little use to the project.

#### *5.4.2.3 Production*

This section of the Crosse & Blackwell archive (LMA/4467/C) is divided into Agreements, Ledgers, Notebooks and Labels. The eight documents filed under Agreements (LMA/4467/C/01/001-8) dated to the 1850s to 1870s regard the creation of some of the companies famous products, for example the 'Assignment of invention with William Strange (executor of William White): Captain White's Curry Paste, Powder and Saucer' from 1861 (LMA/4467/C/01/005). Two volumes of stock ledgers (LMA/4467/C/02/001 and C/02/002) comprise 'Stock Ledger: includes weekly stock analysis and annual totals' dated 1849-58 and 'Tin Shop Ledger' Costings for production of tins for variety of products' dated 1912-20.

The material filed under Notebooks, Letter and reports (LMA/4467/C/03/001-002: two volumes and two documents) is of interest. With such a large quantity of ceramic marmalade and jam jars found during the targeted watching brief, the file indexed 'Notebook of Thomas Blackwell. Contains notes on stock, recipes, production processes, tables of weights and measures, sales and stock' (LMA/4467/C/3/001) has high potential. Similarly the 'Notebook of T G Blackwell: Jam and Marmalade Book. Includes recipes and notes on the production process' (LMA/4467/C/3/002) made during the 1850s appears significant.

Sadly the index to the promising Labels section (3 Volumes and 4 files: LMA/4467/C/04/001-006) - relevant given the amount of pottery with product labels

finds on site - is unfortunately mostly dated to the 1950s-80s. The one unspecified dated folder (LMA/4467/C/04/004) was searched and though catalogued by general product range i.e. 'Section VII Spices etc' most labels appear to be dated from the 1930s onwards (although no chronology is provided) and none of the examples here match the excavated examples. Among the series of 10 slides with labels and packaging (LMA/4467/C/04/006), the one depicting a stack of jam pots from 1920s/30s is of interest as it shows that the 'grooved jars' found in such large quantities on site were no longer used and that the labelling for these products had changed. Another slide depicts a product display from the 1920s presenting an arranged stack of ceramics and glass vessels.

#### 5.4.2.4 Sales

This section (LMA/4467/D) comprises a series of wholesale price lists dated from 1910 (LMA/4467/D/01/001-022). The first is a Wholesale Prices Lists organised by month from 1910, with a comprehensive list of Illustrated Export Price lists surviving from 1920-50s. The following two documents were searched to assess their potential. The first catalogue, the Crosse & Blackwell Wholesale Prices List for 1910 (LMA/4467/D/01/001) is divided monthly. The front cover for each month presents the company logo whilst also listing its various premises which include the Jam & Marmalade Factory on Charing Cross Road and Candied Peel Factory on Stacey Street (also Charing Cross Road). Within is a full listing of its 67 main products arranged alphabetically including how they were canned and details of their carriage. Tins, glass and packets were mostly used to can their wares, though in 1910 pots remained in use for 'Extractum Carnis' (ibid, 5, product no. 25: the labels for this meat extract were applied to stoneware found on the site), with 'Household Jam' (ibid, product no. 33, 6) now canned in glass jars or tins, rather than in the stoneware jars found. However product no. 34 'Jams and Jellies' sold per dozen in '1lb White Pots or Glass' (up to 3lb in weight) demonstrate that pottery was still being used for one of its mainstay foods, with 'Orange Marmalade' (ibid, product no. 42: again the labels for this found on site) also contained in either in glass or pots, with the 4lb size canned in 'brown jars' (ibid, 7).

The second price list searched, the Crosse & Blackwell Illustrated Export Price List for 1923 (LMA/4467/D/01/002) has high potential and depicts many of the ceramic, and in particular glass vessels found on site together with their labels. This monthly record, organised in the same manner as the 1910 price list, illustrates pickles canned in a stone pot (ibid, 2) together with the blue transfer-printed whiteware jars found in context [43], listed here as containing 'Preserved Ginger' (ibid, 47). By 1923, Extractum Carnis had ceased being sold in the (small cylindrical stoneware) pots and was now canned in packets (ibid, 28). A number of the glass vessels found on site are also shown, with the Mushroom Catsup bottle featuring (ibid, 4), and the Florence Cream bottles (ibid, 8). Notably the 'Pure Orange Marmalade' it made (ibid, 20), the label of which was applied to many of the whiteware ceramics on site (in particular context [34]) is now canned in tins by 1923, rather than in pots or glass.

#### 5.4.2.5 Staff

Among this small but diverse portion (LMA/4467/E) of the companies archive are programmes from its amateur orchestral society (LMA/4467/E/01/001), are useful summaries of the company's history in 'Group News' (LMA/4467/E/01/005) from 1962 and again in 'Combine Link Newsletter' from 1928 (4467/E/01/006). Both histories are supplied by members of the Blackwell family with an image of the



founders of the company, Edmund Crosse and Thomas Blackwell also held in this section (LMA/4467/E/02/001).

#### 5.4.2.6 Premises

This section is sub-divided into Leases (LMA/4467/F/01/01-003), Inventories (LMA/4467/F/02/001-004) and Photographs (LMA/4467/F/04/001-010).

Leases comprise three documents, but do not include the companies West End premises.

The four Inventories are dated 1830 (for King Street only), 1860 (includes Soho Square but not George Yard), 1867 (factory in Ireland) and 1868 (West End). The 1868 inventory (LMA/4467/F/02/004) is therefore of most interest as it an 'Inventory of goods in the property of Mssrs Crosse and Blackwell. At premises in Soho Square, Sutton Place, George Yard, Denmark Street, Stacey Street, Dean Street and Earl Street'. This very detailed inventory of nearly 100 pages provides a clear sense of the scale of operation this company had achieved by the 1860s, with its premises around and including Soho Square ranging from a Piccalilli room, to various factories and warehouses, a Jam Jar Warehouse (ibid, 26), Spirit cellar (no.2, ibid, 27), and a Jam Room (ibid, 65) all listed. The inventory gives the impression that the labelling and filling of its products occurred on the premises here. The New Warehouse on Sutton Place (ibid, 68-71) lists the contents of its ground, first and second floors with jam room adjoining (ibid, 71). Bottle washing also occurred on the premises (see Lands Bottle Washing Place, ibid, 74). Of relevance for the site sequence is the small entry for George Yard (now Goslett Yard: ibid, 75) which mostly lists stables, with a Cooperage, Smiths Shop, Dry Cask Warehouse, Coopers Shop located in Sutton Place (ibid, 76-8). The various premises and operations on Denmark Street (ibid, 79), Stacey Street (ibid, 85), the Tinmans shop (ibid, 86-7), Dean Street (ibid, 88) and East Street, Blackfriars (ibid, 95), also form part of this inventory. One notable omission is that the apparent lack of the ceramics and glass stock it kept despite the inventory being as detailed as listing a paper clip in the Jam Room. The Photographs section (LMA/4467/F/04/001-010) is mostly related to the interior and exterior of its Soho Square premises; an image from 1910 (LMA/4467/F/04/003) is perhaps of most interest for our chronological period and the 1835 photograph of the print of the exterior (LMA/4467/F/04/001) is also of note. The 'Slide of Crosse and Blackwell shop display' from the 1920s (LMA/4467/G/05/001) has a shop display which could be used in any output, and showed three pictures of premises followed by a selection of its products.

#### 5.4.2.7 Promotion

After the Correspondence and Advertisements section perhaps the most interesting portion of this archive is the series of Newscuttings (4467/G/03/001-007). The 'Scrapbook of press advertisements and product labels (4467/G/03/001) unspecified 18- - date, is sadly unfit for access.

- *Additional relevant LMA resources*

The Photograph Collection Street Index for Westminster was searched to see if any surviving images of Crosse and Blackwell exist. Under the heading for Charing Cross Road is an image from 1925 described as 'West Side Looking north to Oxford Street 1925' (96.0 CHA). A series of photos of Goslett's Yard from 1974 comprise 'Looking

to Charing Cross Road', 'Tunnel', 'Vaults' and 'Cellars under public house' (96.0 GOS) with two general views for Sutton Row are also taken in 1974.

The Valuation Department Goad Fire Insurance map of this part of the West End (VA/GOAD/IX 225) from 1923 depicts Goslett yard but Crosse and Blackwell are no longer present here - Colgate Palmolive offices now occupy their footprint - or in Sutton Row. Crosse and Blackwell still has premises at no.20 Soho Square. The original 1880s Goad Fire Insurance map for the area, which would depict Crosse and Blackwell's at their height, are not held at the London Metropolitan Archive and instead might be held in Westminster's archive.

- *Other archival sources*

Though not physically located and assessed, searching online The National Archives Collections <http://discovery.nationalarchives.gov.uk/SearchUI/> (keyword search Crosse & Blackwell) yielded 118 archival documents pertaining to the company, mostly related to the various design patents for its various products supplied by the Board of Trade and of successor and related bodies dated 1840s to the 1870s. Matching the design patents to the excavated labels might prove productive. Of interest for understanding the general history of the Company are a number of judicial documents in 'Judicial Records of the Supreme Court Judicature' related to the company, for example the dissolving of Crosse & Blackwell (Holdings) Ltd (for example TNA BT 31/42516/164655) or Crosse & Blackwell Ltd and Reduced in 1924 (J 107/15) and again the winding up of the Company in 1936 (TNA J 13/15089/626). In addition among the 'First World War claim settlements' are lists of dozens of steamers (for example TNA BT 365/9/42) presumably lost through enemy action which were assured by the Company.

Also of potential are regional archival collections that curate the records of various businesses whose products are represented in the excavated assemblage which might contain correspondences from and to Crosse & Blackwell. For example Crosse & Blackwell sourced a good proportion of its stoneware from the Fulham pothouse, and the archival material of this company, held by the London Borough of Hammersmith and Fulham Archive and Local History Centre under its business section therefore has potential. The Fulham pothouse records are divided into Ledgers, cash books, wages books, stock and sales books, letter books, correspondence, and price lists 1865–1969. Similarly with a considerable portion of the ceramic assemblage made by the Maling pottery of Newcastle, the records pertaining to this company which are curated by Tyne & Wear Archives and Museums may well prove useful (although much of the Maling company records was sold as scrap paper upon closure in 1963). Searching the A2A website (<http://www.nationalarchives.gov.uk/A2A/default.aspx> accessed July 2nd 2013, keyword search Crosse and Blackwell) revealed a number of other collections of Crosse & Blackwell records held in archives across England, for example the 'Envelope containing miscellaneous papers re Crosse & Blackwell Ltd' curated by Teeside Archives (U.MSB (2)/106 dated 1920–4). The Company was brought up by the sweet and food manufacturers Rowntree in the 1960s although the extensively catalogued archive for this company mostly located at the York University, Botherwick Institute of Archives does not appear to hold any Crosse & Blackwell material.

### 5.4.3 Ceramic Building Material

The main potential of the site rests with the 19th-century building material, much of which would seem to relate to the Crosse & Blackwell factory on the site. Related to the factory are various types of brick and firebrick, and possibly some of the roofing tiles. The various firebricks are an important feature of the site including the stamped firebricks in a variety of different shapes and forms. Further work is required to determine the precise use of these, although all were presumably intended for a kiln of oven structure. Of particular potential and importance are the large rectangular firebricks with semi-circular ends made by Poultons of Reading and the various fireclay products of Pearson, Stourbridge

### 5.4.4 The Victorian and later pottery

Of direct relevance to Crosse & Blackwell, the pottery from this site is of great potential not least as questions remain as to why so much usable stock was discarded on this site. Further analysis of the types of ceramic vessels found, their batch numbers and the paper labelling is of great potential for understanding the methods of production used by Crosse and Blackwell for various types of sauces, pickles and marmalades made on site and the development in their techniques of preservation and packaging used.

Work that combines the site sequence with the pottery and the surviving records of the Crosse & Blackwell curated at the London Metropolitan Archive (LMA/4467/A-K), and The National Archives (TNA) in order to understand the nature and scale of Crosse and Blackwell's occupation of the site during this period would be of value. Elements of the Crosse and Blackwell archive in the LMA have great potential to enhance the study of the pottery and glass, in particular the illustrated price export lists in which depict the range and packaging of Crosse and Blackwell's products and the potential to match this with excavated examples. This resource is of significant as it shows that by the 1920s most of its export products were contained in packets, glass or tin rather than ceramics.

There is also potential for defining the range of stock ordered by Crosse and Blackwell from various contemporary glass and pottery manufacturers. These containers were brought as such from Fulham and Doulton potteries in London and from Maling in Newcastle upon Tyne to be filled on site before these canned products were exported to national and international markets.

This material therefore has significance and potential to inform the use of the site during its occupation, consider the products of Crosse & Blackwell and broadened out to a wider discussion about the preservation and packaging of food in the late Victorian and Edwardian period.

The following research aims have been determined in relation to understanding the context of the site and Crosse and Blackwell's occupation of this site at Charing Cross Road. It is hoped that a history of the company's products found in the archaeological record will document historical developments in the supply of canned and packaged foods.

#### *5.4.4.1 Crosse and Blackwell warehouses and the site sequence*

RRA04: Whether all four deposits can be related to the same sequence of site development or are major episodes of dumping made separately over a 30 year period. This remains an important question and is therefore the first research aim.

RRA05: With the site occupied by the warehouses of Crosse and Blackwell, the pottery and the deposits excavated have a very clear context and are of significance for understanding the development of the site and its functions. The paper labels proudly display Crosse & Blackwell as purveyors of foods to 'his majesty the King' (and therefore related to either the reigns of King Edward VII or King George V) in contexts [34] and [43] indicating this batch was discarded during the first decades of the 20th century. This contrasts to the cistern fill (contexts [131] and [149]) where the range of stamps on the stoneware related here to Charles Bailey's ownership of the Fulham pothouse suggesting the cistern was filled during the last quarter of the 19th century.

Although at first glance the pottery in all four deposits might appear homogenous and repetitive, differences in the wares and forms can be observed in all four deposits. For example, contexts [131] and [149] mostly contained unlabelled 'grooved' jam jars and stoneware bung jars whereas context [43] displayed a far wider range of forms pertaining to the different stock held by the company. This contrasts to context [34], which relates to the same ground make-up episode as the material in [43] but yielded a large quantity of labelled jars. Characterising the overall assemblage forms the second research aim. The pottery in each action may well have been selected by taking different elements of the company's stock.

RRA06: Cataloguing and understanding the batch or stock marks on the bases of the stoneware mustard pots and upright bottles.

RRA07: Why was such a large stock of pottery, most of which appears to have been labelled, but not filled, dumped in various locations? Is this related to the period when Crosse and Blackwell removed their premises from the site in the 1920s, or from a general period of expansion or shift in emphasis of production? Crosse and Blackwell supplied rations to the British Army during WWI and the mass clear out of usable stock might be related to production being given over to producing tinned rations.

#### *5.4.4.2 Preservation and packaging of food in late Victorian/early 20th-century Britain*

Two further specific research aims are recommended in relation to the preservation and packaging of food;

RRA08: This vast pottery assemblage supplies the material evidence of the increasingly industrialised nature of food preservation and packaging as the 19th century progressed. Examining further the range of paper labels found on this site (in particular in context [34]) would provide an important resource for understanding labels as a flexible mechanism by which preserved food could be advertised during the early 20th century. There appears as much emphasis on the labelling dispelling any health concerns as there is extolling the various awards each product had received. Initial observation indicates the majority of labels applied to the cylindrical whiteware jars are for one particular orange marmalade product. Examining the range of pottery and their labels further will supply important evidence on the

emphasis and weight that Crosse & Blackwell placed on the range of products represented and the markets they catered for.

In addition the paper labels will also provide an important mechanism by which the functions of the large quantities of repetitive unlabelled pottery found in from Victorian dated domestic sites in London and elsewhere can be better understood.

#### *5.4.4.3 Examining the products of the Maling and Fulham pothouses*

RRA09: The assemblage has further value for understanding the range of whiteware marmalade and jam pots made by the Maling factory in Newcastle within a well-sealed archaeological context. The Maling factory was closed in the 1963 and much of its archive destroyed. While a research group remains (see <http://www.maling-pottery.org.uk/>) most of the focus on its products is from the collectors and connoisseurs of the studio art ware it made. Similarly much of the stoneware was supplied by the Fulham pothouse and as noted above, its archive may supply important evidence for the nature of the relationship between these London businesses.

#### 5.4.5 Post-medieval bulk and accessioned glass

There are virtually no finds from deposits predating the Crosse and Blackwell occupation and they have very limited potential for further analysis.

As noted for the pottery, most of the glass is from a period that has not yet been fully encompassed by archaeology, being generally dismissed in favour of earlier remains. Industrial archaeology is, however, an essential component of the history of the nation and our present economy, especially where well-known institutions are concerned.

Bottle glass such as that recovered from the site is of interest to collectors, but usually only where whole pieces are concerned. Websites exist that attempt to classify the various forms, but they have received little scientific or detailed study and there is a lack of consistency in the use of terminology. Although the present assemblage includes few complete pieces, it contains a range of form types that have good potential for illustration and which together can help to build a typology and guide to the study of modern glass. Study of these finds can help to refine their dating and this in turn can help with the interpretation of the site, defining the date at which the new floor was laid, and when and why so much material was discarded in the cistern.

In addition, as noted above, a number of finds have the remains of labels, and many have relief-moulded lettering indicating that they were made for Crosse and Blackwell and their brands, which can help understand the activities carried out on the site and the products that were marketed. For example, there has been some confusion in the past as to whether the premises were a factory or a warehouse, but the numbers of containers, corks and stoppers suggests that a certain amount of bottling and packing took place on the site, even if the contents were produced elsewhere. A study of lid/stopper diameters carried out as an integrated study alongside the glass containers can inform on the relationship between the two and on the different sizes of container that were distributed. From this there is the potential to develop the study to cover the industries that supplied the glass containers, lids and stoppers, and to consider the changing relationship of glass to ceramic containers within the wider context of food packaging and distribution in the late 19th to early 20th century. This should also involve a study of the archives held by the London Metropolitan archive and other institutions.

The following research aims have been determined in relation to understanding the context of the glass finds and glass vessels in relation to Crosse and Blackwell's occupation of this site at Charing Cross Road.

RRA10: What are the sizes and dates of the different context groups?

RRA11: How does the distribution of the glass compare with that of the pottery? Where are the similarities and differences, and why?

RRA12: What is the final quantification of form types? What are the dominant functions?

RRA13: Can the stoppers and lids be related to specific bottle and jar forms?

RRA14: Can the various forms and functions of the glass be related to any documentary evidence?

RRA15: Can the distribution of the finds be linked to different areas and functions of the Crosse and Blackwell premises?

RRA16: Do the numbers of the different forms relate to the general output of Crosse and Blackwell and can they inform on patterns of sales? How do other forms shed light on daily activities in the factory?

RRA17: Where were the production centres of the glass bottles and jars? What were the patterns of supply?

RRA18: How does the range of forms compare with that of other contemporary food suppliers?

#### 5.4.6 The accessioned finds and related bulk finds

The accessioned finds from the different phases of dumps associated with the warehouse and food processing have the potential to inform on the activities and processes carried out on the site and to answer questions regarding patterns in the numbers and sizes of different vessels. The range of different lids and stoppers is of particular interest, especially those of the unusual wood/fibre compound, which if identified may merit a note in its own right. A study of lid/stopper diameters carried out as an integrated study alongside the glass and pottery analysis will inform on the relationship between the two, on the different sizes of container that were distributed (ie cork stoppers and iron for larger jars, ceramic, wood and other types for smaller containers), and possibly on changes in vessel forms and closures over time. The beer bottle lids shed some light on non-industrial activities and, with a little research, they can almost certainly be more closely dated. Several items bear the Crosse and Blackwell name in different formats; with some documentary research it should be possible to establish a chronological sequence that reflects that changing image and marketing of the brand from the 19th to 20th centuries, and in turn, changing consumerism.

#### 5.4.7 Animal bones

The hand-collected assemblage has only very limited potential for further study of the local beef, mutton/lamb and pork diet and pattern of waste disposal, with reference to carcass-part selection and age at death of the major domesticates; cattle, sheep/goat and pig, and butchery of cattle and pig.

In view of the lack of wet-sieved samples and consequent absence of small vertebrates, there is no potential for interpretation of local habitats.

*RRA19: What are the characteristics of the local meat diet in terms of the selection of species, carcass-part and age-group?*

*RRA20: What butchery techniques were used to process cattle and pig carcasses?*

## 6. Significance of the data

- The EH National *Research Agenda* notes that the themes it discusses 'are by no means exhaustive, but are offered as a general framework upon which to construct specific research designs'. Whilst much of the focus of the document is on the move from single-site to multi-site based synthesis it is also made clear that the 'multi-site synthesis advocated...will not abrogate the need for particular cases of site-specific research and publication'.
- Similarly the *Capital Concerns* document notes that the nine themes are 'presented as outline sketches, neither exhaustive individually nor prescriptive as a set' (p7).

### 6.1 General

The archaeological remains are assessed as of regional significance in the case of industrial remains associated with Crosse and Blackwell because of the comparative potential with documentary evidence.

### 6.2 Listed and non-listed buildings

The buildings of 12 Sutton Row and 12 Goslett Yard recorded by MOLA in 2010 (site code TCG09), along with the Astoria recorded in 2008-9 (site code GCI08) were once part of the complex of buildings belonging to Cross and Blackwell between 1858 and 1925. The buildings were of high significance due to their association with Crosse and Blackwell and the important part they played in the changes and urban development of the immediate area.

### 6.3 Ceramic building material

An important feature of the site is the various firebricks which are believed to represent part of the Crosse & Blackwell enterprise. The range of stamped firebricks in a variety of different shapes and forms is significant as their manufacturers; Poultons of Reading and Pearson, Stourbridge, have not been recorded previously in London.

### 6.4 Post-medieval pottery

6.4.1 The 17th- to 18th-century pottery is of local significance only.

6.4.2 The Victorian and later pottery

Despite the vast majority of the pottery assemblage appearing apparently familiar as the mass-produced products of an industrial age, the later 19th- and 20th century ceramics are of great significance as little is known of the range of vessels found here. Examples tend to survive either as museum pieces displayed 'out of context' or as mementos, yet they once circulated in the homes of people of all classes throughout Britain and were widely exported throughout her Empire. Though some of the pots found here are collectable, most of this material is usually unscientifically retrieved by bottle collectors and has not been subject to rigorous academic study.



## **6.5 Post-medieval bulk and accessioned glass**

The post-medieval finds predating the Crosse and Blackwell occupation of the site are of local significance only, but the later finds are of considerable interest. Almost all the glass was used to contain food or sauces and condiments. Five vessels still retain their paper product labels, with the underside of some bases embossed with the lettering of their manufacturer and patent number. Coming from an identifiable property with a known function and documentary evidence for the dates between which it was operating, the assemblage would already be of importance, but this is enhanced by the size of the collection (especially when combined with the ceramic containers) and the fact that the site belonged to the world famous food manufacturer Crosse and Blackwell, a brand whose products were distributed globally. The assemblage is thus of local, national and international significance, giving unique insights into the distribution of foodstuffs on an industrial scale in central London.

## **6.6 The accessioned finds and related bulk finds**

The post-medieval finds predating the Crosse and Blackwell occupation of the site are of local significance only. Those from the later 19th- and 20th-century levels are few in number but of national and international importance within the context of the world-famous Crosse and Blackwell industry.

## **6.7 Animal bones**

The hand-collected animal bone is of very limited local significance only, particularly in terms of meat diet, with emphasis on the skeletal representation and age-selection of cattle, sheep/goat and pig, and butchery of cattle and pig.

There is no wider significance or significance in terms of local habitats

## **6.8 Geoarchaeology**

A better understanding of the natural stratigraphy and vegetation of the site is likely to have local significance, as it would help to reconstruct the past landscape characteristics of the area prior to development of the 17th century.

## 7 Preliminary publication synopsis (Crosse and Blackwell publication)

The presence of Crosse and Blackwell as a major industrial manufacturer of packaged foods in the west end of London has been observed in both the buried archaeology and standing structures recorded at 12 Goslett Yard (sitecode TCG09). The structures and material assemblages recorded during the excavations are highly significant in characterising the types of buildings used and operated during the mid 19th- and early 20th-century period of occupancy and production by Crosse and Blackwell. It is therefore proposed that the results be analysed further, mapping buildings with historical records to determine their chronological sequence, and drawing upon a range of resources in order to discuss the impact of this company on the area, its buildings, products, trade and exports over a period between 1858 and c 1925. Further analysis of the products and their containers (glass and ceramic) will highlight the commercial treatment of food sales and preservation in the Victorian and Edwardian eras. In view of the importance of the structures and assemblages finds found it is intended to publish the results pertaining to Crosse & Blackwell's occupancy of the site a popular booklet. This is possibly the first such publication on the history of Crosse and Blackwell in Victorian London.

**Provisional Title: History of food manufacturing at Crosse & Blackwell Ltd in London's west end 1858 –1925**

<b>Principal Authors:</b>	<b>Nigel Jeffries, Dave Sorapure, Paul Thrale</b>
<b>Format:</b>	<b>Crossrail popular book (48 pages)</b>
<b>Total word count:</b>	max 10,000 words
<b>Total figure count:</b>	max 40 figures to include
	2/3 site images
	2/3 building plans and historic maps,
	2/4 staff related images
	11 images of pottery vessels
	11 images of glass products & stoppers
	5/6 images of labels and advertising and other relevant artwork.
	All colour

### **Front and back covers**

Images relating to Cross& Blackwell buildings and products – colour if possible

### **Title Page**

### **Contents**

**Chapter Synopses-** themes will include

**Chapter 1** The arrival of Crosse & Blackwell (500 words)

The changing nature of area, what was the area like prior to the arrival of Cross and Blackwell and why was the factory and warehouses positioned at the site?

**Chapter 2** The factory buildings from the Astoria to the Piccalilli room (2,000 words)  
Which pre-existing buildings were initially occupied by Crosse and Blackwell when they first became established in the west end. Link the recorded building survey work and archaeological structures with historic mapping and documentary research to summarise the building history. Examine the layout and plan of the Crosse and Blackwell site and the function of its various departments and rooms such as warehouses, stables, cooperage, bottle washing room, jam room, piccalilli room, showrooms. Enhance our understanding of the distribution of assemblages found at TCG09.

**Chapter 3** Staff (1,000 words)  
Staffing; the enlightened Victorian company and its holistic approach to staff welfare and education. Any records on staff roles, wages and numbers of employees would contribute to another theme though these may be missing from the LMA archives.

**Chapter 4** Relishes and Sauces – Mushroom Catsup (4,000 words)  
Consideration of the products, recipes and practises and the manufacture and packaging of late Victorian and Edwardian period relishes, sauces and marmalades as represented by the various types of bottles and containers ( glass/ceramic) found. Do these relate to different periods of production at Crosse and Blackwell and can the packaging used be linked to social or historical events such as supplies to the British Army during WWI?

**Chapter 5** Sales and marketing- Home and abroad (2,000 words)  
Marketing and consumerism; an examination of the evidence for distribution and export of the Crosse and Blackwell products. The 1923 export books in the LMA archive provide a close match to glass containers found at TCG09 some of which are labelled in French. Similarly any advertising literature in the archives might distinguish different products for specific markets and differences between international, European or the home market. Were there differences in the quantities and types of products sold to home markets versus foreign markets? How was this organised and what modes of transport were used (shipping, horse and cart or train). Where were the raw materials purchased to make the various preserves, sauces and pickles- were these being brought to London by train or bought through the commercial markets such as Covent Garden? How much production took place at Charing Cross Road or was this a warehouse and distribution centre?

**Chapter 6** The late Edwardian/Victorian household (1,000 words)  
Changes in social history pre and post war. Are these reflected in the changes in packaging from Late Edwardian households making their own supplies to an era when ready-made foods were more commercially available? Were these originally bought as more of a luxury item but changed to readily available mass-marketed goods. What is the social context for these changes and does it also relate to women's emancipation? The Edwardian woman's role was less of a home environment and increasingly moving into employment at this time. Was she less occupied with preserving food in the home in the form of pickling and more interested and financially able to purchase the same as a readily available Crosse and Blackwell product?

**Bibliography/Further Reading**  
**Acknowledgements**

## Illustrations

The book will be illustrated with:

- site location and historic plans;
- historic photographs
- drawings and photographs of the various containers for products
- representation of different products varying through time as shown by difference in packaging, labelling and types of products changing through time

## 7.1 Publication project: resources and programme

### 7.1.1 Analysis/publication task list (C&B publication)

All work carried out on this project is subject to the health and safety policy statement of MOLA as defined in Health And Safety Policy (MOLA 2013). This document is available on request. It is MOLA policy to comply with the requirements of the Health and Safety at Work Act 1974, the Management of Health and Safety at Work Regulations 1992 and all Regulations and Codes of Practice made under the Act which affect MOLA operations.

The following is a detailed list of tasks required to fulfil analysis and publication.

### 7.1.2 Stratigraphic method statement

*Task 1. Check that all the assessment data, including final dating evidence, is present on relevant databases and up to date*

*Task 2. Full integration of spot-date information with stratigraphic sequence on the ORACLE database and checking of discrepancies to finalise phasing.*

*Task 3. Define group sequence by arranging subgroups into groups. The groups will be defined using stratigraphic, spatial and chronological analysis, the subgroup matrix and dating evidence*

*Task 4. Map subgroups to groups on the MOLA ORACLE database with description at a rate of c 200 subgroups per day. Create group matrix*

*Task 5. Define land use sequence by arranging groups into identified buildings and other structures, create LU diagram and define periods at a rate of c 20 groups per day. Define which buildings relate to Crosse & Blackwell*

*Task 6. Map and describe land uses to the MOLA ORACLE database*

*Task 7. Attend project meetings and liaise with other contributors and drawing office*

### 7.1.3 Listed and non-listed buildings method statement

*Task 8. Research to be carried out at LMA on the Crosse & Blackwell archives (RRA01)*

*Task 9. Map regression and research on other sources of information such as insurance plans, building plans, street plans and archive photographs and investigation of building phases, functions and changes*

*Task 10. Research (including contact with Princes Food and Drink Group) relating to the buildings used by Crosse & Blackwell*

*Task 11. Compile, review and edit written text and images relating to buildings and company history at the site (Chapters 1 and 2)*

*Task 12. Incorporate specialist info from ceramic and glass vessels which elucidates function of rooms*

*Task 13. Attend project meetings with drawing office, Field archaeologist and pottery specialist*

#### **7.1.4 Ceramic building materials method statement**

*Task 14. Compare the building material assemblage with the stratigraphic sequence and all available dating evidence*

*Task 15. Write publication report*

#### **7.1.5 Pottery method statement: The Victorian and later pottery**

*Task 16. Write text exploring the reasons behind the deposition of the assemblage , establishing where ceramics found within C&B buildings plan*

*Task 17. Compile text on the nature of the ceramic assemblage; types of wares, forms and uses. Discuss their relevance to the products produced at Crosse & Blackwell, and the relevance of the batch numbers. (Chapters 4 and 5)*

*Task 18. Discuss the methods used for the processing and packaging of foods. What types of products, sauces and pickles were made and if any recipes survive in the archives? Discuss evidence of products from labelling and any chronological differences detected which reflect the social history of the late Victorian and Edwardian Britain. What developments can be seen in the use of packaging between the ceramic, stoneware and glass jars and tins*

*Task 19. Write text on jam jar assemblage made by the Newcastle Maling factory and the various sources of ceramic jars used. What types of transport were Crosse & Blackwell's using - both in purchasing empty containers for use at the factory and for the distribution of final products. Examine archives for further evidence of transport, ie shipping records/ horse and cart and then train? (Chapter 4 and 6)*

*Task 20. Examine in detail selected parts of the Crosse and Blackwell archive deposited at the London Metropolitan Archive to better inform tasks 16 to 19 and 24 to 27. Look for material relating to marketing, advertising and distribution*

*Task 21. Make final selection of finds for illustration, finds review and checking artwork*

*Task 22. Project meetings*

*Task 23. Editorial work (queries, checking proofs etc)*

#### **7.1.6 Bulk and accessioned glass method statement**

*Task 24. Produce text (with tables) which characterises the glass bottle and jar assemblage by ware types and forms. Summarise quantities briefly after completing quantification of the various form types (dimensions) and review all contexts for consistency*

*Task 25. Complete the quantification of the various lids and stoppers and review all contexts for consistency. Correlate stoppers and accession numbers*

*Task 26. Discuss the methods used at C& B for the processing and packaging of foods, different vessels used for products, evidence of labelling and any chronological differences detected which reflect the social history of late Victorian and Edwardian Britain. Liaise with documentary researcher and research literature for contemporary glass bottle and jar forms. (Chapters 4 and 5)*

*Task 27. Write text on the purchasing of glass bottles and glass containers used by Crosse & Blackwell and the evidence from TCG09 of such trade, both as purchasers of ready-made empty vessels and any evidence of where trading final products to. Liaise with documentary researcher for evidence of how and to where C&B were transporting final goods and if there are chronological differences which can be seen in the assemblages at TCG09? (Chapters 4 and 6)*

*Task 28. Make final selection of finds for illustration, finds review and checking artwork*

*Task 29. Editorial work (queries, checking proofs etc)*

*Task 30. Project meetings*

#### **7.1.7 The accessioned finds and related bulk finds**

The following concentrates on the finds associated with the Crosse and Blackwell era.

*Task 31. Examine the stratigraphic location of the other finds and relevance to C& B premises on the site. Confirm and report on the distribution of the finds, considering the nature of each group in relationship to the pottery and glass products (Chapter 4)*

*Task 32. To research the materials and construction and history of the iron and composite lids/stoppers*

*Task 33. To research the diameters of the lids/stoppers and compare with ceramic and glass forms*

*Task 34. To research the dating of the logos on the various stoppers and lids*

*Task 35. To research the beer bottle stoppers*

*Task 36. To write a report based on the above*

*Task 37. To finalise a selection of finds for illustration/photography, attend finds review and check artwork*

*Task 38. Attend project meetings and liaise with team*

*Task 39. Editorial work (queries, checking proofs)*

*Task 40. To identify the material of the stoppers and lids currently <8>, <16> and <52>, currently listed as rubber*

*Task 41. Investigate the materials of the composite ceramic lids (<37>, <38>, <39>, <66>)*

*Task 42. Conservation input is needed to clean some of the stoppers for illustration and photography.*

#### **7.1.8 Graphics method statement**

*Task 43. Geomatics: georeference relevant historic maps with site plans to locate building survey records in relation to archaeology.*

*Task 44. Geomatics: GIS10/CAD preparation of phase plans and figures*

*Task 45. DO Preparation of final publication figures to include stratigraphic figs and maps*

*Task 46. DO Finds illustration*

*Task 47. Head of Graphics design, layout, typeset and production management*

*Task 48. DO Purchase of external images*

*Task 49. Studio photography of C& B artefacts (relevant ceramic and glass vessels, labels and other finds such as cork stoppers/lids and iron lids*

Recommendations for illustration or photography will be confirmed at a finds review

Accessioned finds – up to 12 artefacts

Bulk and accessioned glass – up to 48 artefacts

Victorian and later pottery – up to 50 vessels

*Task 50. Preparation of stratigraphic photographs and external images for publication*

#### **7.1.9 Integration of publication text method statement**

*Task 51. Write detailed publication synopsis for contributors*

*Task 52. Write text on the historical background and establishment of Crosse and Blackwell in Soho Square in 1858*

*Task 53. Integrate all texts into single draft on all Chapters*

*Task 54. Select final images to integrate with text*

*Task 55. Proof reading by author*

#### **7.1.10 Project management method statement**

*Task 56. Project management*

*Task 57 Xrail liaison and management*

*Task 58. Managing editor to edit, copy edit and proof read*

*Task 59. Production costs*



Table 10 Summary of resources

Task No.	Staff	Task Description	Time required (person days)
<b>Stratigraphic</b>			
1	PT	Check all assessment data is correct	0.5
2	PT	Full integration of spot-date information	0.5
3	PT	Define group sequence	1
4	PT	Map and describe sgps to gps on MOLA ORACLE database	1
5	PT	Define land use sequence and periods	1
6	PT	Map and describe land uses	1
7	PT	Liaise with project staff	0.5
		Subtotal	
<b>Listed and non-listed buildings</b>			
8	DS	Research at LMA archives	3
9	DS	Map regression and research other sources	2
10	DS	Research relating to the buildings used	1
11	DS	Compile text, review and edits	4
12	DS	Incorporate specialist info	1
13	DS	Attend project meetings	1
		subtotal	
<b>Ceramic Building materials</b>			
14	IB	compare with strat sequence	0.5
15	IB	Write publication report	0.5
		subtotal	1
<b>Pottery Late Victorian</b>			
16	NJ	Write text exploring the reasons behind the various ceramic deposits	1
17	NJ	Compile text on the nature of the ceramic assemblage	4
18	NJ	Discuss the processes used for the processing and packaging of foods	3
19	NJ	Discuss the import of white ware jars from Maling Pottery in the NE.	2
20	NJ	Examine selected parts of the Crosse and Blackwell archive	5
21	NJ	Final selection of finds for illustration	1
22	NJ	Project meetings	1
23	NJ	Edit/proof read	1
		subtotal	
<b>Bulk and accessioned Glass</b>			
24	LB	Produce text which characterises the glass bottle and jar assemblage	2.5
25	LB	Complete the quantification of the various lids and stoppers	2.5
26	LB	Discuss the methods used at C& B for the processing and packaging of foods,	3

		different vessels used for products,	
27	LB	Write text on the purchasing of glass bottles and containers	2
28	LB	Final selection of finds for illustration	1
29	LB	Edit	1
30	LB	Project meetings	1
		subtotal	
Accessioned Finds (other)			
31	LB	Examine strat location of other finds	1
32	LB	Examine history of iron and composite lids	1
33	LB	Establish range of lid/stopper sizes	0.5
34	LB	Research dating of logos	1
35	LB	Research beer bottle stoppers	0.25
36	LB	Compile report	3
37	LB	Final selection of finds for illustration	1
38	LB	Project meetings	0.5
39	LB	Edit	1
		subtotal	
40	Cons	Identify material of stoppers	0.5
41	Cons	Investigate materials used in the composite lids	0.5
42	Cons	Clean artefacts for photography	1
		subtotal	2
Graphics			
43	GEO	Georeference historic maps and plans	1
44	GEO	Prep of phase plans	1
45	DO	Prep of final artwork	2
46	DO	Finds illustration	2
47	TW	Prep Design, layout, typeset, production mgmt	9
48	TW	Purchase of ext images	TBC
49	PHOTO	Studio photography of artefacts	4
50	PHOTO	Prep of strat and ext images	1
		subtotal	
Integration of text			
51	DS	Write detailed pub synopsis for contributors	0.5
52	DS	Write text on historical background	2
53	DS	Integrate all texts to form all chapters	10
54	DS	Select final images for publication	2
55	DS	Proof reading	1
		subtotal	
Project Management			
56	LW	Project management	6
57	EE	Project liason with Xrail	3
58	Ext	Managing editors copy edit, proof read	2
59	Ext	Production cost	TBC

The following are indicated as appropriate staff allocated to the project but may change subject to availability.

Staff

PT – Paul Thrale

DS – David Sorapure

IB – Ian Betts

NJ – Nigel Jeffries

LB – Lyn Blackmore

TW – Tracy Wellman

GEO – Geomatics

DO – Drawing Office

PHOTO – Andy Chopping/Maggie Cox

LW– Lucy Whittingham

EE– Elaine Eastbury

Financial resources sufficient to cover the proposed analysis work have been allocated and a programme has been prepared in a separate document.

## **7.2 Publication project: task sequence (CRL7 publication)**

The historical development of the west end can be traced through several features which have been seen in various TCR East archaeological interventions. These range from the watching brief of the medieval Great Conduit cistern at 2 Stratford Place (SFJ10) through to post-medieval brick quarrying and levelling at TCG09 and the more uniform urban development of the area in the 17th century and 18th centuries (including the historic building recording of listed and non-buildings) also at TCG09. These are envisaged as contributing to the Western Area publication CRL7

The following tasks are suggested as relevant to the CRL7 publication

### **7.2.1 Stratigraphic method statement**

Define which archaeological features and events relate to the various phases of historic development within the Western Area

For this assessment it has been proposed that MOLA define all 166 contexts from TCG09 into groups, landuse (Open Area, Buildings and Structures) and periods. It is estimated that approximately one third of the contexts at TCG09 relate to archaeology which has relevance to the CRL7 publication (see sections 3.1 – 3.4). In addition, features such as the Medieval Great Conduit cistern at 2 Stratford Place (SFJ10) should be part of the CRL7 analysis.

Other stratigraphic tasks to be confirmed by Oxford Archaeology

### **7.2.2 Ceramic Building material**

Other than the large collection of industrial firebricks there are is one fragment of medieval roof tile and earlier fragments of post-medieval floor tile, wall tile and brick (from TCG09) which relate to early post-medieval features and brick quarrying

*Estimated specialist time including editing: 1 day*

### **7.2.3 Clay tobacco pipes method statement**

Eighty one five fragments of clay tobacco pipe relate to features pre-dating the establishment of Cross & Blackwell in the Western area. The present note could be adapted to form part of a full site report.

*Estimated specialist time, including editing: 1 day.*

### **7.2.4 17th to 18th-century pottery**

At present the 109 sherds of 17th to 18th-century pottery merit comment if this phase (section 2.7) is discussed in the CRL7 publication. Four items have been selected for illustration.

*Liaise with field archaeologist re preparation of a note based on the above for inclusion in the text: 0.25 day*

*Write revised report on the assemblage, if required: 0.25 day*

*Prepare finds for illustration, liaise re finds illustration/photography and check artwork: 0.25 day*

*Editorial (all stages): 0.25 day*

*Total: 1 day*

#### **7.2.5 Animal bone method statement**

Some of the assemblage (0.550 kg, estimated 27 fragments) of well-preserved hand-collected animal bone comes from contexts relevant to the CRL7 archaeology. It is recommended that the animal bone assemblage should be recorded, as individual bones, directly onto the MOLA Oracle animal bone post-assessment database and then analysed as a discrete assemblage with reference to stratigraphic data and to contemporary local sites.

<i>Recording of assemblage onto database</i>	<i>0.25 pday</i>
<i>Analysis of data/preparation of report/edit/archive</i>	<i>0.25 pday</i>

*Total: 0.50 pday*

#### **7.2.6 Geoarchaeology method statement**

Further examination of the bulk samples confirm the geoarchaeological interpretation, that the deposits represent a rudimentary soil layer developing over the quarried ground prior to the construction activity of the 17th century.

It is recommended that closer examination of the monoliths is undertaken. Following this the monoliths obtained from the site should be examined and sub-sampled (4x) for pollen assessment. Monoliths <6a> and <6b> is the better sample for further work as it provides a longer sequence. If pollen survives, then a proposal for analysis could be put forward, combining pollen with soil micromorphology and an interpretation of the sediments obtained from their examination on site and a detailed off-site examination of the monoliths.

The objectives of this work would be to reconstruct the changing environment of the site in the past trying in particular to ascertain the nature of the vegetation and sedimentary processes acting on the site and whether the land was cultivated for a short time or left open as waste ground.

*Estimated specialist time –TBC*  
*Pollen Analysis – TBC*

## 8 Bibliography

### 8.1 Statutory and other guidelines

ACAO, 1993 Model briefs and specifications for archaeological assessments and field evaluations, Association of County Archaeological Officers

Archaeological Archive Forum, 2011 *Archaeological Archives: a guide to best practice in creation, compilation transfer and curation* located on intranet and: [http://www.archaeologyuk.org/archives/aaf\\_archaeological\\_archives\\_2011.pdf](http://www.archaeologyuk.org/archives/aaf_archaeological_archives_2011.pdf)

BADLG, 1986 *Code of Practice, British Archaeologists and Developers Liaison Group*

Corporation of London Department of Planning and Transportation, 2004 *Planning Advice Note 3: Archaeology in the City of London, Archaeology Guidance*, London

Corporation of London, 1998 Department of Planning, *A Directory of Conservation Areas, Listed Buildings & Scheduled Monuments in the City of London*

DCLG [Department of Communities and Local Government], March 2012 *National Planning Policy Framework*.

DCLG [Department of Communities and Local Government], EH [English Heritage] & DCMS [Department for Culture, Media and Sport], March 2010 *PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide*.

Department of the Environment, 1990 *Planning Policy Guidance 16, Archaeology and Planning*

English Heritage, 1991 Management of Archaeological Projects (MAP2)

English Heritage, 1991 Exploring our Past. Strategies for the Archaeology of England, English Heritage

English Heritage, 1997 Sustaining the historic environment: new perspectives on the future

English Heritage, May 1998 Capital Archaeology. Strategies for sustaining the historic legacy of a world city

English Heritage Greater London Archaeology Advisory Service, June 1998 Archaeological Guidance Papers 1-5

English Heritage Greater London Archaeology Advisory Service, May 1999 Archaeological Guidance Papers 6

English Heritage Centre for Archaeology Guidelines, 2002 Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation

English Heritage Greater London Archaeology Advisory Service, 2009 Archaeological Guidance Papers 1-5

Institute for Archaeologists (IFA), 2001 By-Laws, Standards and Policy Statements of the Institute for Archaeologists (rev. 2001), Standard and guidance: excavation

Institute for Archaeologists (IFA), supplement 2001, By-Laws, Standards and Policy Statements of the Institute for Archaeologists: Standards and guidance – the collection, documentation conservation and research of archaeological materials

Institute for Archaeologists (IFA), rev. 2001 By-Laws, Standards and Policy  
Statements of the Institute for Archaeologists: Standards and guidance — Field  
Evaluation

Institute for Archaeologists (IFA), supplement 2001, By-Laws, Standards and Policy  
Statements of the Institute for Archaeologists: Standards and guidance – the  
collection, documentation conservation and research of archaeological materials

Museum of London, 1994 Archaeological Site Manual 3rd edition

Museum of London, 2002 A research framework for London archaeology

Thompson, A, Westman A, and Dyson, T (eds), 1998 Archaeology in Greater London  
1965-90: a guide to records of excavations by the Museum of London, Archaeol  
Gazetteer Ser Vol 2, London

MOL Archaeology July 2013, Health & Safety Policy

Museum of London, 1994, Archaeological Site Manual 3rd edition

Museum of London, 1998, General Standards for the preparation of archaeological  
archives deposited with the Museum of London

Museum of London, 2002, A research framework for London archaeology 2002

Museum of London, 1994 Archaeological Site Manual 3rd edition

## 8.2 Site specific bibliography

Crossrail, 2008, *Archaeology Generic Written Scheme of Investigation*, Document  
Number 14022008-44ES-P2Z1

Crossrail, January 2009, Multi-disciplinary Works Package 2 Tottenham Court Road  
Station Site Specific Archaeological Written Scheme of Investigation, document  
reference CR-SD-TCR-EN-OT-00001

Crossrail, June 2009, Archaeology Specification for Evaluation & Mitigation  
(including Watching Brief) (Document Number: CR-PN-LWS-EN-SP-00001);

Crossrail Version 2, June 2010, Method Statement for Targeted Watching Brief,  
Crossrail Eastern Ticket Hall (TCR), 12 Goslett Yard

McGee Environmental Solutions, October 2009, Survey Report, Type 3 Asbestos  
Survey Rev 1, 135-155 Charing Cross Road, 12 Goslett Yard and 12 Sutton Row,  
Job No SUPN2035

McGee, October 2009, Tottenham Court Road LU, Construction Phase Plan  
(Document No CPHSP-004)

McGee, December 2009, Tottenham Court Road Station Upgrade, Method  
Statement for MOLAS Excavations in Goslett Yard (Document No MS087)

MOLA, July 2009, Tottenham Court Road, Crossrail Eastern Ticket Hall, Goslett  
Yard, London WC2, Archaeological Deposit Survival Plan

MOLA, November 2009, Tottenham Court Road, Crossrail Eastern Ticket Hall, 12  
Goslett Yard, London WC2, A method statement for archaeological evaluation

MOLA, March 2009, Tottenham Court Road Station Upgrade. London Borough of  
Camden and London Borough of Westminster; A standing building survey report.

MOLA April 2013 Bond St\WB Nov 2011-2013

MOLA , 2009a, Tottenham Court Road Station Upgrade. Works at rear of 1–6 Denmark Place and 144 Charing Cross Road, London WC2, An archaeological evaluation report

MOLA , 2009b, Tottenham Court Road Station Upgrade Utilities Upgrade, London W1 and W2, an archaeological watching brief report

MOLA , 2010a, Crossrail Eastern Ticket Hall, 12 Goslett Yard, London WC2: An archaeological evaluation report

MOLA , 2010b, Crossrail Eastern Ticket Hall, 12 Sutton Row – 12 Goslett Yard, London WC2, A Standing Building Report

MOLA, 2001, Crossrail Eastern Ticket Hall, 12 Goslett Yard, London WC2: A Targeted Watching Brief Report

### **8.3 Archaeological bibliography**

Askey, D, 1998 *Stoneware bottles*, 2nd edition, Elsecar Heritage Centre, near Barnsley

Atkinson, D R and Oswald, A, 1969 London clay tobacco pipes, *J British Archaeol Assoc* 32, 171–227

Bell, R.C, 1986 *Malling and Other Tyneside Pottery*, Shire Publications

Betts, I M, 2009 Building material, St Giles Court, St Giles High Street, WC2 (SIC06), unpub MoL rep

Davey, P 1997 *Clay pipes from Bolsover church*, unpub archive rep

Green, C, 1999 *Fulham Pottery excavations 1971–9*, English Heritage

Higgins, D A and Davey, P, 1994 *Draft guidelines for using the clay tobacco pipe record sheets*, unpub rep

Oswald, A, 1975 *Clay pipes for the archaeologist*, BAR 14, Oxford

Pearson, L, 2005 *Tile Gazetteer*, Shepton Beauchamp

Pevsner – Bradley, S & Pevsner, N, 2003, *The Buildings of England. London 6: Westminster*, Yale University Press.

Oswald, A, 1975 *Clay pipes for the archaeologist*, BAR 14, Oxford

Smith, T P, 2008 Some sources of fireclay bricks used in London, *Information* (J British Brick Soc) 106, 33–41

Survey of London, Volume XXXIII; *The Parish of St Anne Soho*, University of London / Greater London Council, 1966.

Schmid, E, 1972 *Atlas of animal bones for prehistorians, archaeologists and Quaternary geologists*, London. Elsevier.



## 9 Appendix: management, delivery and quality control

- 9.1.1 Museum of London Archaeology is a company limited by guarantee registered in England and Wales with company registration number 07751831 and charity registration number 1143574. The Registered Office is Mortimer Wheeler House, 46 Eagle Wharf Road, London N1 7ED). It has its own independent Board of Trustees but works in partnership with the Museum of London via a Memorandum of Understanding.
- 9.1.2 MOLA is a 'Registered Archaeological Organisation' with the archaeological professional body, the Institute for Archaeologists (IfA). The *IfA Register* is a rigorous Quality Assurance scheme for archaeologists. In order to be accepted, MOLA has passed a Board resolution to comply with the IfA Code of Conduct and Standards, to demonstrate that compliance through bi-annual re-registration, to submit to regular IfA inspections, and to ensure that all MOLA activities are under the overall direction of a Member grade (MifA) 'responsible post-holder'. The Registered Organisation scheme also provides procedures for investigating and handling of external complaints.
- 9.1.3 MOLA subscribes to and abides by the general principles and specific terms of the *Code of Good Practice On Archaeological Heritage in Urban Development Policies* established by the Cultural Heritage Committee of the Council of Europe, and adopted at the 15th plenary session in Strasbourg on 8-10 March 2000 (CC-PAT [99] 18 rev 3). In particular to the following points: *...archaeologists shall be aware of development costs and adhere to agreed timetables* (Para 3 'The Role of the Archaeologist'), with all work 'carried out to written statements setting out standards timetables and costs' (para 4 *ibid*).
- 9.1.4 MOLA further subscribes to and ensures that its activities comply with and/or are guided by the following policies, procedures and guidance:
- Appropriate local and regional planning authority archaeology guidance – eg for London: English Heritage, *Archaeological Guidance Papers 1-5* (1998)
  - Appropriate Archaeological Research Framework for the region – eg for London: English Heritage Archaeology Division, *Research Agenda* (1997); Museum of London, *A research framework for London archaeology* (2002); and *Historic Environment Research Strategy for Greater London* (in prep. CBA/MoL/Rowsome).
  - English Heritage, *Management of Archaeological Projects* (MAP2), (1991)
  - English Heritage Centre for Archaeology, *Guidelines* (various)
  - Museum of London Archaeological Service, *Archaeological Site Manual* (1994)
  - Museum of London Archaeological Service, *Archaeological Finds Procedure Manual* (2006)
  - National archive disposition standards including Museum and Galleries Commission, *Standards in the Museum Care of Archaeological Collections* (1992) and Society of Museum Archaeologists, *Towards an Accessible Archaeological Archive: the Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales* (1995)

- Relevant local archive deposition standards, eg for London, Museum of London, *General Standards for the preparation of archaeological archives deposited with the Museum of London*, (2009).
- 9.1.5 MOLA governance and organisational strategy are determined by the Senior Management Group (SMG), led by the Chief Executive Officer and comprising the Finance Director, the Head of Operations, and three Directors heading the Planning, Development Services and Research & Education divisions. The SMG reports regularly to an independent Board of Trustees, who oversee MOLA's performance and strategic direction. As a charitable company MOLA is monitored and regulated by the Charities Commission.
- 9.1.6 MOLA is structured to reflect its project orientation. Within Development Services the Director manages the Client Team of c 10 Project Managers (PMs). Individual PMs are responsible for developing new work for MOLA, and thereafter for designing, budgeting and delivering projects for clients. They remain the principal point of contact for the client for the duration of each project.
- 9.1.7 PMs drive projects through successive stages in accordance with client needs, forming project teams by drawing upon the skills available within MOLA Operations teams. PMs ensure that projects are completed to the highest standards within time and budget. Financial monitoring of projects against budget is undertaken by the Finance Director and PMs at monthly review meetings. Project management software is employed by MOLA Operations to plan resourcing and track and adhere to programme and budget. Project team meetings are held throughout the programme, allowing refinement of research strategies in the light of on- or off-site findings or analysis. Recording, excavation, and sampling strategies may be modified to provide optimum information retrieval in support of the research objectives. At post-excavation phase internal project management is normally devolved to a designated Post-Excavation Project Manager.
- 9.1.8 All archaeological field work is controlled and monitored on a day to day basis by the on-site Site Supervisor (SS), who reports to the designated Project Manager. Together with PMs and the Field Manager (responsible for H&S) they also liaise as necessary with the client's agents and principal contractors regarding all enabling works and H&S..
- 9.1.9 All written documentation, eg initial '*written scheme of investigations*' ('*wsis*'), evaluation reports, post-excavation *Assessment Reports* and final publications undergo stages of internal review and sign-off prior to final issue to clients. For both field and reporting work PMs and SSs meet and liaise with the client and the Local Authority's archaeological advisor or officer to ensure delivery according to *wsis* and to review progress, research aims, archaeological procedures, and site strategies as appropriate..
- 9.1.10 At all stages, what constitutes an appropriate archaeological response will be assessed against criteria of local, regional and national significance and within frameworks of valuable archaeological research topics identified in local or regional Archaeological Research Frameworks (where these exist)



*Photo 1 View of south-west corner of site showing natural gravel deposit [137], looking south-west*



*Photo 2 View of south-west corner of site, showing pre-urbanisation deposit [129], looking south*



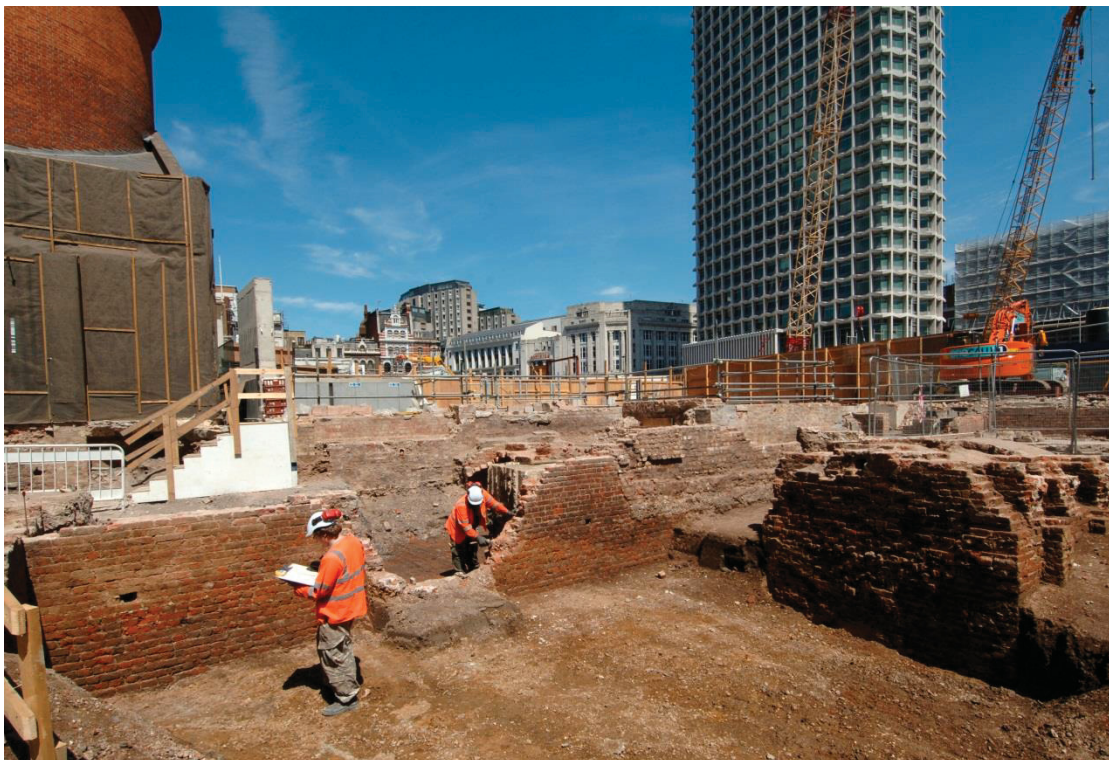
Photo 3 View of internal arch-roofed alcove [88], looking east



Photo 4 View of cellar floor [133], looking east



*Photo 5 View of stairway addition [124], looking south*



*Photo 6 View of cellar wall [121] and later cistern [104], looking north-east*



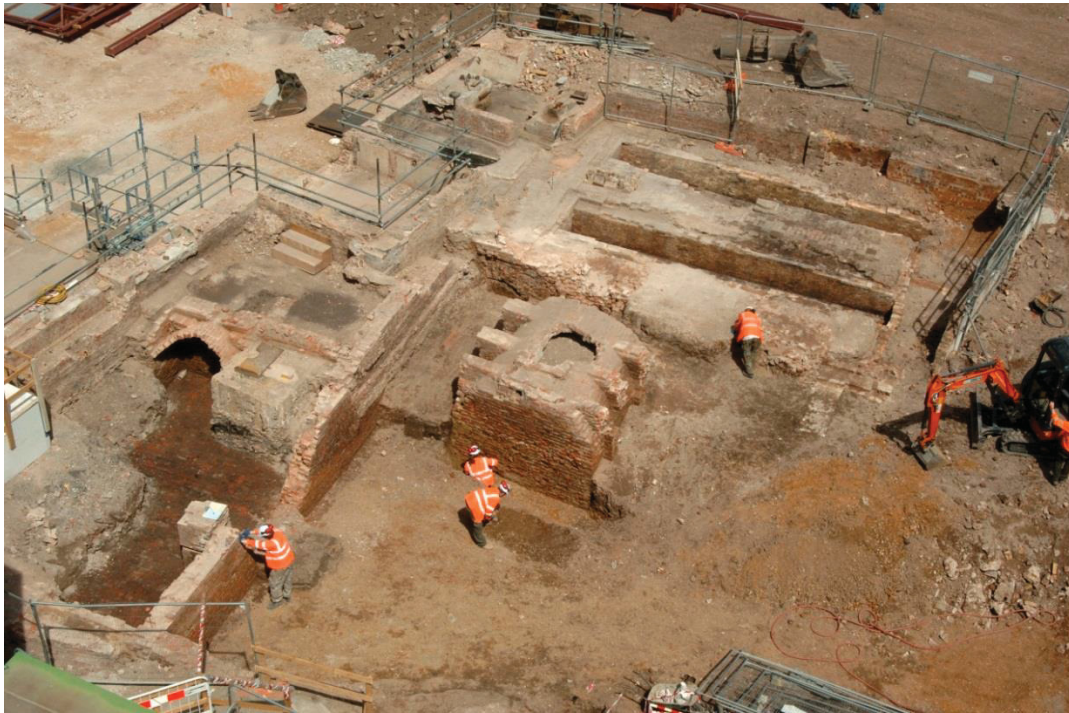
Photo 7 View of 17th to 19th-century wall foundations and circular soak-away in southern area of site, looking east



Photo 8 View of 19th-century wall foundations in south-west corner of site, looking south-west



*Photo 9 View of vaulted cistern [104], looking north–west*



*Photo 10 View of site looking north--east, showing 19th-century fire brick structures, vaulted cistern and 17th to 18th-century cellar with arch roofed alcove*



*Photo 11 Crosse & Blackwell pottery collection within cistern [104]*





*Photo 12 View of warehouse floors [35] and [37], looking north*



*Photo 13 View of brick lined pit [45], looking north*



*Photo 14 Sample of firebricks taken from context [148]*



*Photo 15 View of 20th-century machine base, looking east*



Photo 16 Sequence of monolith tin sample <3>



Photo 17 Sequence of monolith tin sample <6>

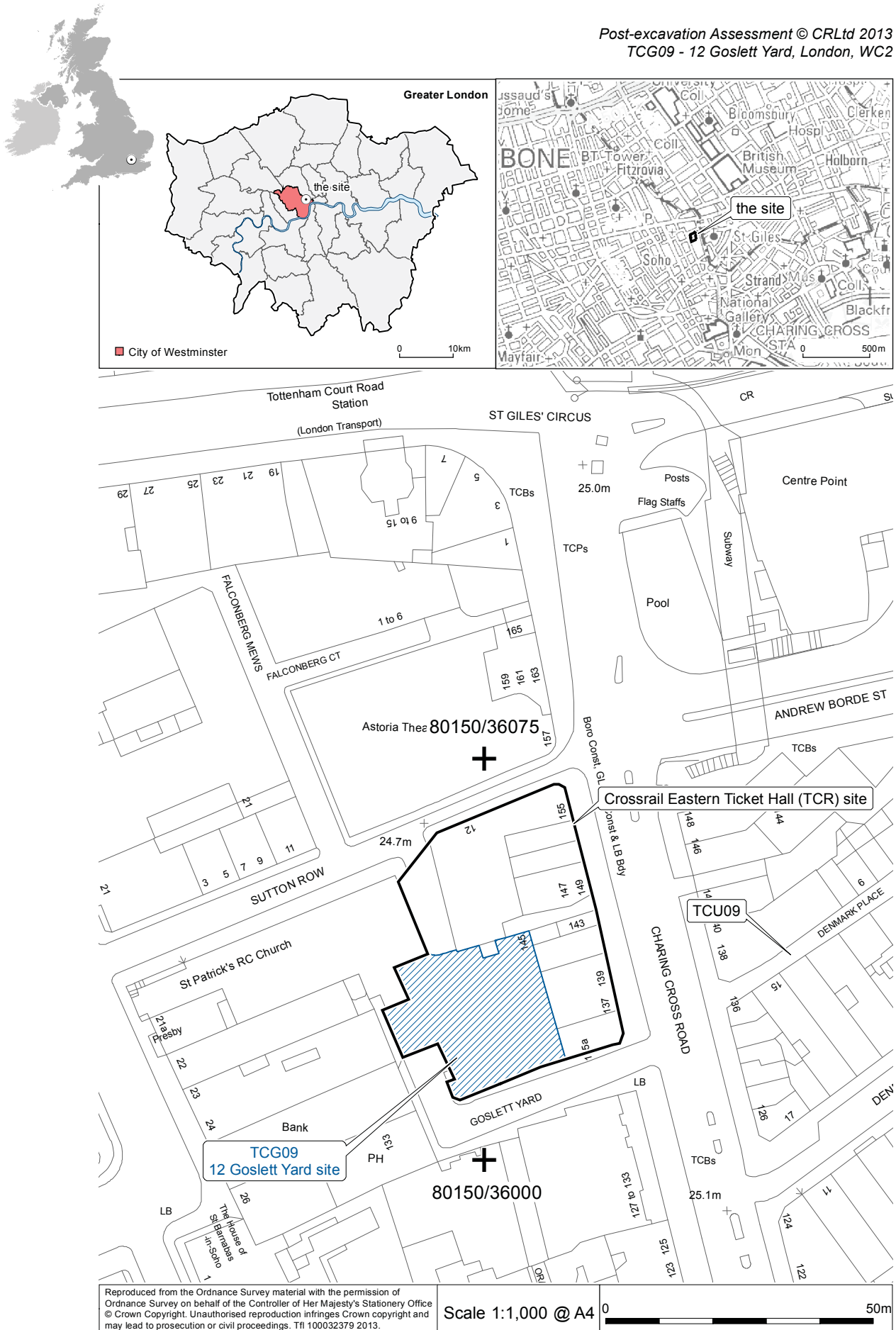


Fig 1 Site location

Reproduced from the Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Tfl 100032379 2013.

Scale 1:1,000 @ A4



Based upon the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office. Copyright in the Ordnance Survey data is the property of the Ordnance Survey, Crown Copyright. All rights reserved. City of London 100023243 2013.

Fig 2 Location of built heritage recording

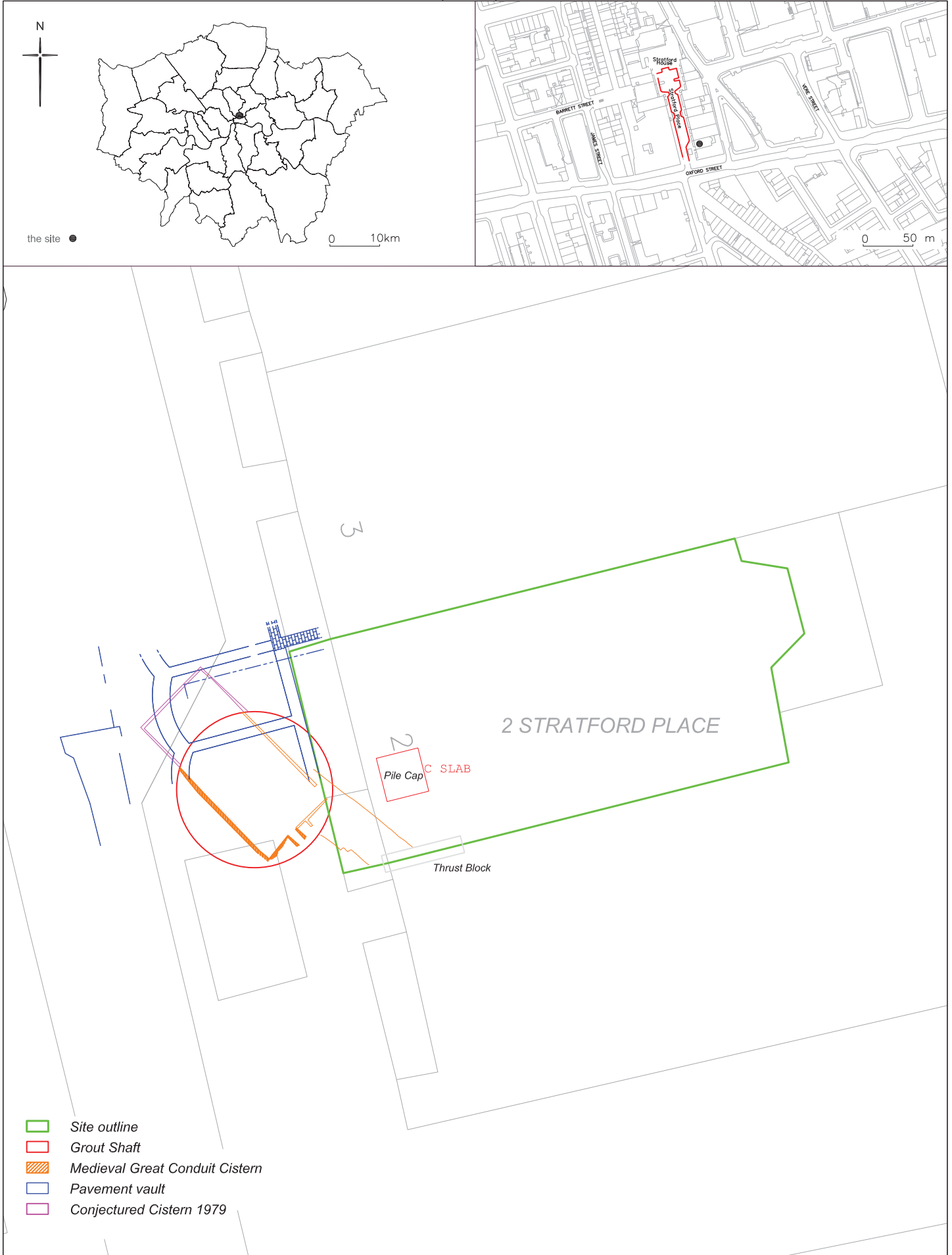
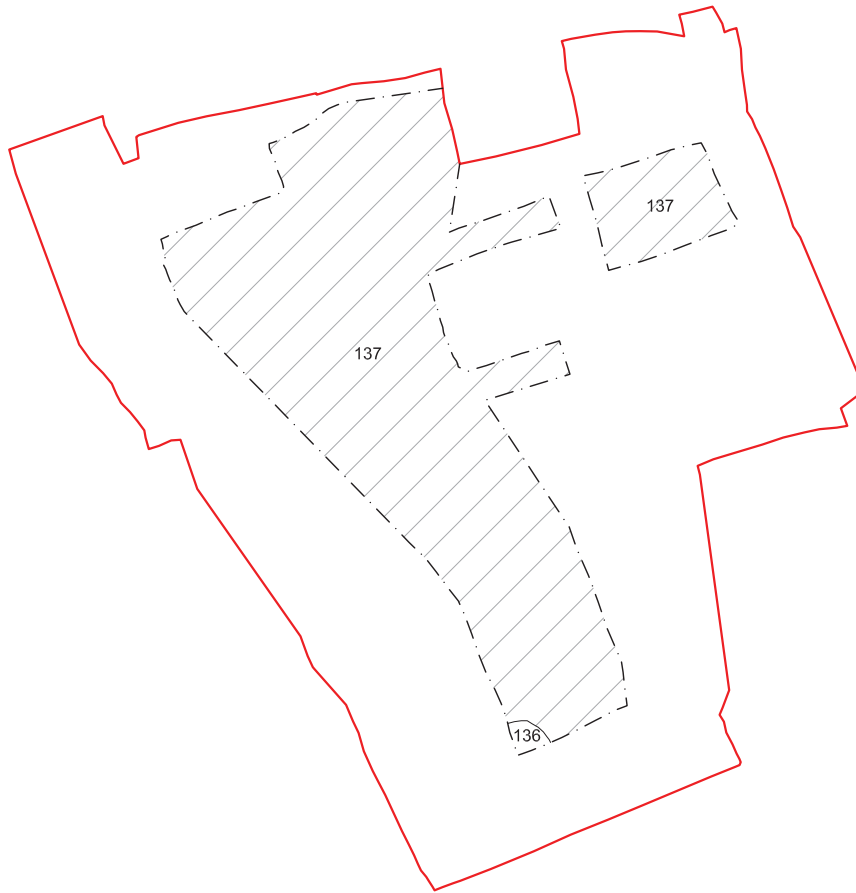


Fig 3. Location of Great Conduit Cistern at Stratford Place.  
Bond Street Station Upgrade. Site code: SFJ10

0 1:500 @ A4 25m



80150/36045  
+



80150/36008  
+

Key




-  Targeted watching brief
-  Limit of Excavation
-  Truncated gravel within probable open-cast brickearth quarry



Fig 4 Plan of pre-urbanisation features recorded during the targeted watching brief



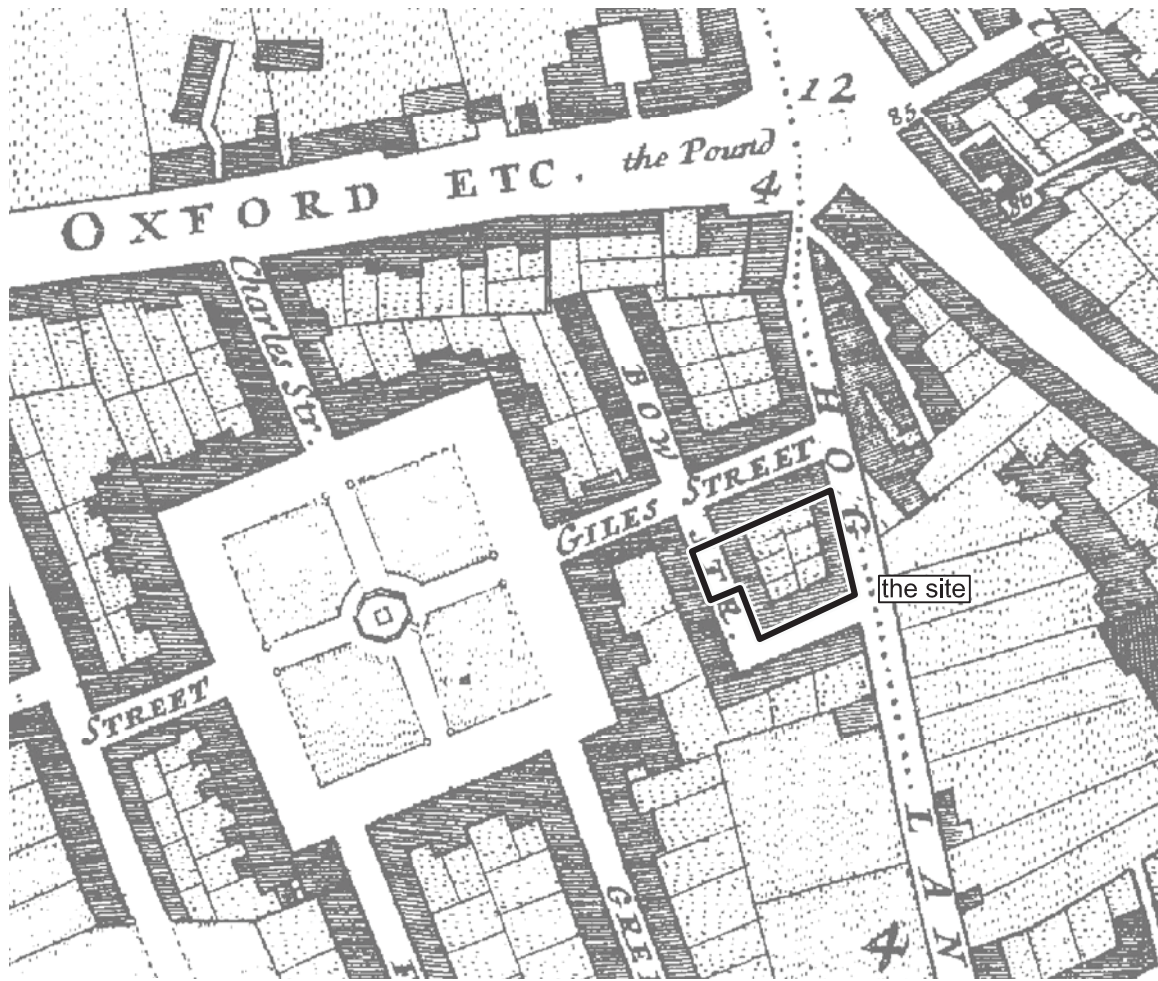
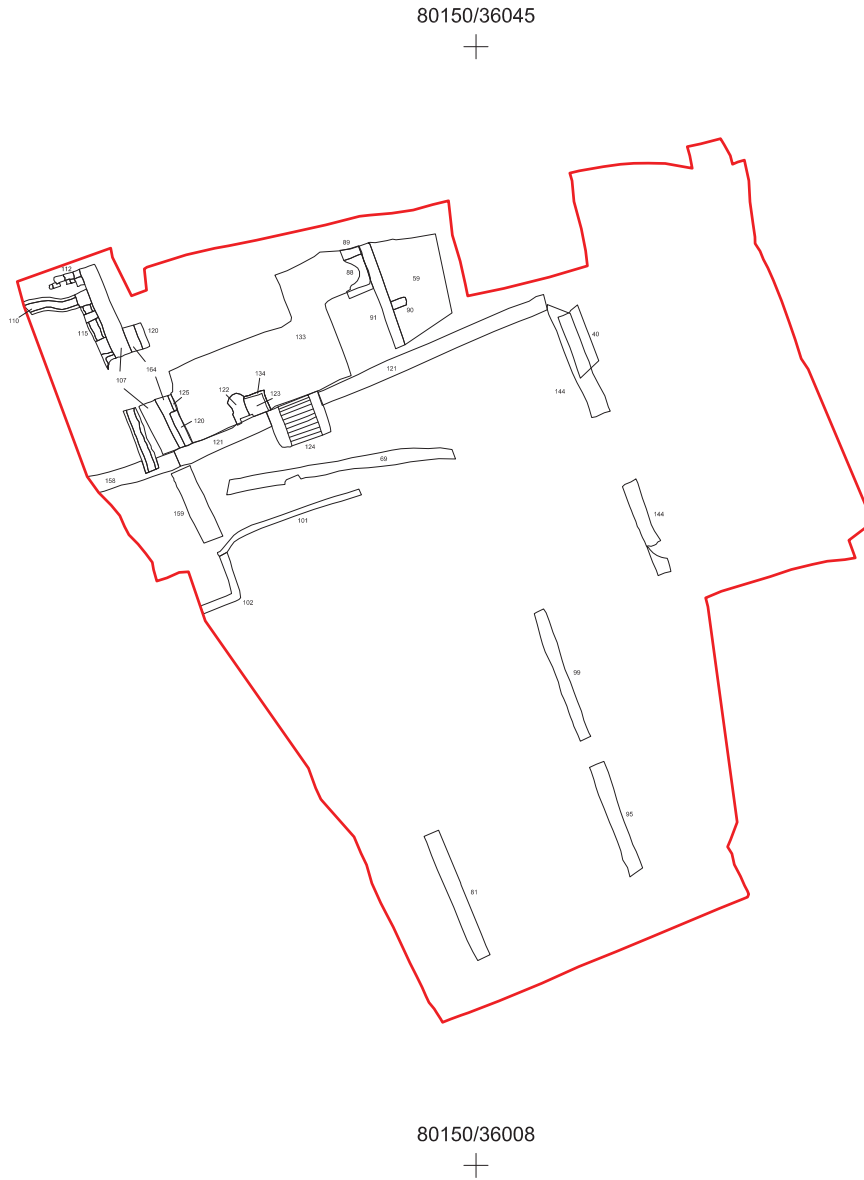


Fig 5 Morgan's map of London of 1682



Key

— Limit of excavation



Fig 6 Plan of 17th - 18th century features



Key




- 20th Century Concrete Foundation Pads 
- 20th Century Features 
- Limit of excavation 



Fig 7 Plan of 19th - 20th century features

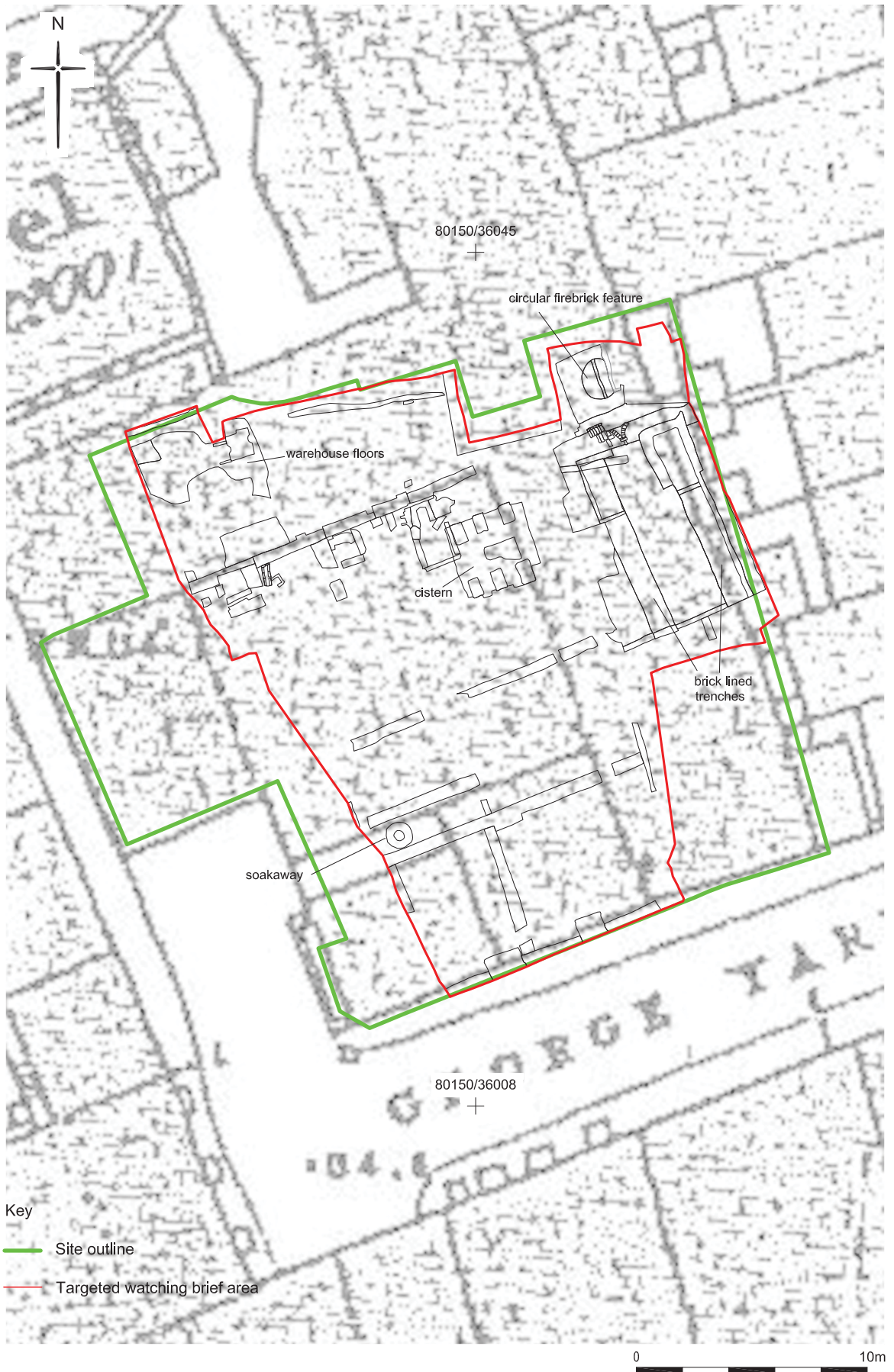


Fig 8 19th century features overlaid onto Ordnance Survey map of 1871