56-62 MOORGATE & 41-42 LONDON WALL, EC2 CITY OF LONDON

## **ARCHAEOLOGICAL EVALUATION**

PCA REPORT NO: R12286 SITE CODE: MLW15

**PRE-CONSTRUCT ARCHAEOLOGY** 







### **DOCUMENT VERIFICATION**

## 56-62 MOORGATE & 41-42 LONDON WALL, EC2, CITY OF LONDON

## AN ARCHAEOLOGICAL EVALUATION

**Quality Control** 

Pre-Co	K4268		
	Name & Title	Signature	Date
Text Prepared by:	Bruce Ferguson		November 2015
Graphics Prepared by:	Ray Murphy		November 2015
Graphics Checked by:	Josephine Brown		November 2015
Project Manager Sign-off:	Tim Bradley	P	November 2015

Revision No.	Date	Checked	Approved

Pre-Construct Archaeology Ltd Unit 54 Brockley Cross Business Centre 96 Endwell Road London SE4 2PD

### INVESTIGATIONS AT 56-62 MOORGATE & 41-42 LONDON WALL, EC2, CITY OF

### LONDON: AN ARCHAEOLOGICAL EVALUATION

Museum of London Site Code:	MLW15
Local Planning Authority:	City of London
Central NGR:	TQ 32724 81534
Commissioning Client:	CgMs Consulting
Written and Researched by:	Bruce Ferguson Pre-Construct Archaeology Limited, November 2015
Project Manager:	Tim Bradley
Contractor:	Pre-Construct Archaeology Limited
	Unit 54, Brockley Cross Business Centre 96 Endwell Road
	Brockley
	London
	SE4 2PD
Tel:	020 7732 3925
Fax:	020 7732 7896
Email:	tbradley@pre-construct.com
Website:	www.pre-construct.com

### © Pre-Construct Archaeology Limited

#### November 2015

© The material contained herein is and remains the sole property of Pre-Construct Archaeology Limited and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Limited cannot be held responsible for errors or inaccuracies herein contained.

### CONTENTS

1	ABSTRACT	3			
2	INTRODUCTION	4			
3	PLANNING BACKGROUND	5			
4	GEOLOGY AND TOPOGRAPHY	7			
5	ARCHAEOLOGICAL AND HISTORIC BACKGROUND	8			
6	ARCHAEOLOGICAL METHODOLOGY 1	1			
7	ARCHAEOLOGICAL SEQUENCE	2			
8	INTERPRETATIONS AND CONCLUSIONS	D			
9	ACKNOWLEDGEMENTS	4			
10	BIBLIOGRAPHY	4			
	Trial Pit 2 (Looking South)				
	Trial Pit 3 (Looking North)				
Plate 3:	Trial Pit 5 (Looking Northeast)	3			
Plate 4:	Plate 4: Trial Pit 6 (Looking Southeast)				
Plate 5:	Trial Pit 7(Looking North)	9			
Figure <sup>2</sup>	1: Site Location	5			
Figure 2	2: Basement Detail and Trial Pit Locations	6			
Figure	3: 1:10 Scale Sections of Trial Pits 5 & 6	7			
Append	lix 1: Context Index	8			
Appendix 2: OASIS Report Form					
Append	lix 3: Soiltecnichs Draft Results	1			
Appendix 4: LAARC Archive For 43 London Wall (LWA84)41					

### 1 ABSTRACT

- 1.1 This report details the results of an archaeological evaluation conducted by Pre-Construct Archaeology Ltd (PCA) during a geotechnical investigation at 56-62 Moorgate & 41-42 London Wall within the City of London, EC2. Monitoring was conducted between the 4<sup>th</sup> and 5<sup>th</sup> November 2015. The evaluation was commissioned by CgMs Consulting and was monitored by Kathryn Stubbs, Assistant Director Historic Environment at the City of London.
- 1.2 The geotechnical investigation involved the excavation of eight trial pits within the currently occupied seven story commercial buildings to determine depths of footings, soil conditions and archaeological survival below the existing full basement and partial sub-basement floors. Of the eight trial pits three were placed specifically to investigate the archaeological potential of the site (TP3, TP5 and TP6). Despite restricted widths of the trial pits, the potential for survival of ancient ground surfaces (horizontal archaeological stratification) on site was observed during the excavation of Trial Pits 5 and 6. As well as establishing positive evidence of cut features and stratified layers, both trial pits identified potential natural deposits consisting of loose pale yellow sandy gravel (TP5) and soft reddish brown coarse sandy clay (TP6).
- 1.3 The sequence of three deposits recorded above the natural gravel within Trial Pit 6 was either horizontal archaeological stratification (possible dump), or fills of a large undefined cut feature, though the lowest deposit, consisting of a soft mottled grey and brownish orange clay, could be interpreted as redeposited or disturbed brickearth.
- 1.4 Trial Pit 5 observed a clear sequence consisting of a potential organic/peaty layer over the clay deposit. The possible organic layer was sealed by a dumped deposit which was in turn truncated by a partially exposed cut feature. It was not possible to ascertain whether this cut feature, filled with a mottled greyish green silty clay, was a pit or ditch. This was further sealed by a second phase of dumping. The remains of a north-south aligned linear construction cut was recorded on the eastern side of the trial pit cutting into this second phase of dumping. This contained the footings to a truncated wall footing, potentially dating to the late medieval or early post-medieval period.
- 1.5 Other than a potential medieval or early post-medieval date for the wall footing, no dating evidence was recovered from the cut feature or the layers in either trial pits. The archaeological remains recorded survived at a height of 9.52m OD at the northern end of the site and 9.30m OD at the eastern edge. These heights are generally consistent with a Roman date for stratified deposits in the wider vicinity, as is evidenced by excavations at 43 London Wall in 1984 (Site Code LWA84; Appendix 4), where Roman deposits were recorded below the basement at an upper level of c.9.6-9.9m OD.

### 2 INTRODUCTION

- 2.1 This archaeological evaluation was conducted by Pre-Construct Archaeology Ltd and was commissioned by CgMs Consulting. A contractor was appointed to carry out a geotechnical survey within the currently occupied seven story commercial buildings at 56-62 Moorgate & 41-42 London Wall within the City of London, EC2, which lies within an Area of Potential for Archaeological Remains as defined by the City of London.
- 2.2 The evaluation involved monitoring the excavation of eight geotechnical trial pits within the basement of the commercial buildings to determine depths of footings, soil conditions and archaeological survival below the existing full basement and partial sub-basement floors (see Figure 2). The site is immediately bounded by London Wall to the north, commercial properties to the east and south and Moorgate to the west, and is centred at National Grid Reference TQ 32724 81534. The site is close to two Scheduled Ancient Monuments comprising the Armourer's and Brasier's Hall (40m to the west) and remains of the Roman wall and conduit, and a Medieval postern, beneath the centre of London Wall (approx. 8m to the north).
- 2.3 Prior to the commencement of the evaluation an Archaeological Project Design (Bradley 2015) was produced by Pre-Construct Archaeology Ltd. outlining the methodology for the archaeological evaluation during the geotechnical survey. An Archaeological Desk Based Assessment was also prepared prior to the fieldwork being undertaken (CgMs 2015); this document should be referred to for detailed information on the natural geology, archaeological and historical background of the site, and the initial assessment of its archaeological potential.
- 2.4 The evaluation was commissioned by CgMs Consulting and monitored by Kathryn Stubbs, Assistant Director Historic Environment at the City of London. It was conducted between the 4th and 5th November 2015 by the attending archaeologist, Bruce Ferguson, and was managed by Tim Bradley of Pre-Construct Archaeology Ltd. Following the completion of the project the site archive will be deposited in its entirety with the London Archaeological Archive and Research Centre (LAARC) with the unique site code MLW15.

### 3 PLANNING BACKGROUND

3.1 Legislation regarding archaeology, including scheduled ancient monuments, is contained in the Ancient Monuments and Archaeological Areas Act 1979, amended by the National Heritage Act 1983 and 2002.

#### 3.2 National Planning Policy Framework (NPPF)

- 3.2.1 In March 2012 the Department for Communities and Local Government issued the National Planning Policy Framework (NPPF),replacing Planning Policy Statement 5 (PPS5) 'Planning for the Historic Environment' which itself replaced Planning Policy Guidance Note 16 (PPG16) 'Archaeology and Planning'. It provides guidance for planning authorities, property owners, developers and others on the investigation and preservation of heritage assets.
- 3.2.2 In Section 12 of the NPPF, entitled Conserving and Enhancing the Historic Environment provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 12 of the NPPF can be summarised as seeking the:
  - Delivery of sustainable development;
  - Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
  - Conservation of England's heritage assets in a manner appropriate to their significance, and;
  - Recognition of the contribution that heritage assets make to our understanding of the past.
- 3.2.3 Section 12 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 128 states that planning decisions should be based on the significance of the heritage asset, and that level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 3.2.4 In short, government policy provides a framework which:
  - Protects nationally important designated Heritage Assets (which include World Heritage Sites, Scheduled Ancient Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields or Conservation Areas)
  - Protects the settings of such designations
  - In appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions
  - Provides for the excavation and investigation of sites not significant enough to merit in-situ preservation.

3.2.5 Policy in the Consolidated London Plan relevant to archaeology at the study site includes the following:

POLICY 7.8 HERITAGE ASSETS AND ARCHAEOLOGY

#### STRATEGIC

- A. LONDON'S HERITAGE ASSETS AND HISTORIC ENVIRONMENT, INCLUDING LISTED BUILDINGS, REGISTERED HISTORIC PARKS AND GARDENS AND OTHER NATURAL AND HISTORIC LANDSCAPES, CONSERVATION AREAS, WORLD HERITAGE SITES, REGISTERED BATTLEFIELDS, SCHEDULED MONUMENTS, ARCHAEOLOGICAL REMAINS AND MEMORIALS SHOULD BE IDENTIFIED, SO THAT THE DESIRABILITY OF SUSTAINING AND ENHANCING THEIR SIGNIFICANCE AND OF UTILISING THEIR POSITIVE ROLE IN PLACE SHAPING CAN BE TAKEN INTO ACCOUNT.
- B. DEVELOPMENT SHOULD INCORPORATE MEASURES THAT IDENTIFY, RECORD, INTERPRET, PROTECT AND, WHERE APPROPRIATE, PRESENT THE SITE'S ARCHAEOLOGY.

#### PLANNING DECISIONS

- C. DEVELOPMENT SHOULD IDENTIFY, VALUE, CONSERVE, RESTORE, RE-USE AND INCORPORATE HERITAGE ASSETS, WHERE APPROPRIATE.
- D. DEVELOPMENT AFFECTING HERITAGE ASSETS AND THEIR SETTINGS SHOULD CONSERVE THEIR SIGNIFICANCE, BY BEING SYMPATHETIC TO THEIR FORM, SCALE, MATERIALS AND ARCHITECTURAL DETAIL.
- E. NEW DEVELOPMENT SHOULD MAKE PROVISION FOR THE PROTECTION OF ARCHAEOLOGICAL RESOURCES, LANDSCAPES AND SIGNIFICANT MEMORIALS. THE PHYSICAL ASSETS SHOULD, WHERE POSSIBLE, BE MADE AVAILABLE TO THE PUBLIC ON-SITE. WHERE THE ARCHAEOLOGICAL ASSET OR MEMORIAL CANNOT BE PRESERVED OR MANAGED ON-SITE, PROVISION MUST BE MADE FOR THE INVESTIGATION, UNDERSTANDING, RECORDING, DISSEMINATION AND ARCHIVING OF THAT ASSET.
- 3.2.6 The relevant Development Plan framework is provided by the City of London Local Plan which was formally adopted 15 January 2015, replacing the previous documentation which comprised the Core Strategy 2011 and the Unitary Development Plan 2002. The following policy is relevant to archaeology:

#### Policy DM 12.4 Ancient monuments and archaeology

- 1. To require planning applications which involve excavation or ground works on sites of archaeological potential to be accompanied by an archaeological assessment and evaluation of the site, including the impact of the proposed development.
- 2. To preserve, protect, safeguard and enhance archaeological monuments, remains and their settings in development, and to seek a public display and interpretation, where appropriate.
- 3. To require proper investigation and recording of archaeological remains as an integral part of a development programme, and publication and archiving of results to advance understanding.

### 4 GEOLOGY AND TOPOGRAPHY

#### 4.1 Geology

4.1.1 The solid geology of the study site is shown by the Institute of Geological Sciences (IGS 1979) as London Clay deposits forming the London Basin. Overlying the London Clay is a series of gravel terraces deposited during periods of glacial and inter-glacial conditions (Bridgland 1996). Further detail is provided by British Geological Survey Sheet 256 (North London: 1994) which shows the site to lie in an area of Taplow Gravels, defined as 'post-diversionary Thames River Terrace Deposits; gravel, sandy and clayey in part', immediately adjacent to a small area of alluvium, defined as 'mainly sand, silt and clay' the latter associated with the course of the Walbrook stream.

#### 4.2 **Topography**

4.2.1 The ground floor of the study site is level at c.12.90m OD. The basement is level at c.9.60-9.90m OD with sub-basement level at c.5.99-6.00m OD. The course of the Wallbrook flows to the east of the study site, and the MoLA map of Londinium shows a tributary of this stream flowing to the west and south of the study site. The course of the River Thames flows from west to east approximately 700m to the south of the study site.

### 5 ARCHAEOLOGICAL AND HISTORIC BACKGROUND

5.1 The following section taken from the preceding Desk Based Assessment (CgMs 2015) which examined the Greater London Historic Environment Record for all records within a 75m radius and presents the baseline evidence for the archaeological, historical and historic landscape development of the study area from the Prehistoric to the Modern period.

#### 5.2 **Prehistoric (450,000BC – 43AD)**

5.2.1 From around 4000 BC the mobile hunter-gathering economy of the Mesolithic gradually gave way to a more settled agriculture-based subsistence. The pace of woodland clearance to create arable and pasture-based agricultural land varied regionally and locally, depending on a wide variety of climatic, topographic, social and other factors. The trend was one of a slow, but gradually increasing pace of forest clearance. By the 1st millennium (1000 BC), the landscape was probably a mix of extensive tracts of open farmland, punctuated by earthwork burial and ceremonial monuments from distant generations, with settlements, ritual areas and defended locations reflecting an increasingly hierarchical society. Other than an Iron Age horse harness found at the junction of Moorgate and London Wall no finds or features relating to the Neolithic or Bronze Age period have been identified within the radius of the study area.

#### 5.3 Roman (43AD – 410AD)

- 5.3.1 Museum of London Archaeology's map of Londinium places the site within the boundaries of the northern city wall, adjacent to a possible postern gate, within the area of the Walbrook stream, in an area of industrial use. The wall is believed to have been constructed in the last decade of the second century AD, with later additions and alterations, and enclosed the city from the Tower of London to south of Ludgate. Building work in 1882 revealed a 13.11m extent of the city wall, west of the junction with Moorgate and London Wall, beneath the street frontage. Archaeological exploration in 1934 of a hole in the roadway of London Wall (East of Moorgate) revealed the back of the wall and a tunnel through it. Excavation at the junction of Copthall Avenue and London Wall (east of the study site) revealed that the foundations and core of the city wall survived with later additions and alterations; substantial piles, and an arch thought to carry the wall over the west branch of the Walbrook, were found on London Wall opposite the study site. The city ditch is recorded to the north of the wall, which was recut in the fourth century. Further archaeological evidence for the ditch was located at London Wall opposite the site.
- 5.3.2 Roman remains associated with the Walbrook have been identified at Copthall Avenue to the east of the study site, including domestic refuse within flood deposits. Waterlain silts and dumping was identified to the east of the site which also revealed evidence for road surfaces, one with a timber lined drain, a series of drainage ditches and a building. The formation of peat at the end of the Roman period indicates that the area had become marshy. A possible tributary of the Walbrook has also been identified at 30 Moorgate to the south of the site with associated Roman artefacts. Remains of timber framed buildings have also been identified at Copthall Avenue, together with pits and postholes.

Excavation at 43 London Wall in 1984 (Appendix 4) revealed the western edge of the Walbrook Valley, south of the city wall, which included a sequence of Roman deposits including a road, several ditches and infilling (including a plank lined drain), together with waterlogged wood, a post built building. Excavation at 44 London Wall revealed a NNE-SSW aligned Roman road, dated to the late first or early second century AD, with the surface raised to combat the rising water table.

- 5.3.3 Excavation at 44-61 Moorgate and 75-79 Coleman Street (southwest of the study site), revealed an archaeological sequence comprising timber lined tanks and revetments, along the line of a tributary of the Walbrook, the remains of timber and earth buildings, industrial glass and leather working and the remains of a masonry building, all covered by later Roman dumped. Evidence of Roman quarrying was identified at 49-53 Moorgate, also to the southwest, together with a metalled surface interpreted as a road and alley, a brickearth building dated to the second century AD, a road and fence alignment, overlain with dump deposits. Archaeological works at the adjacent 55-61 Moorgate site revealed a timber lined drain and tank, phases of planked revetment, a brickearth and timber building dated to the first century AD, evidence of glass working, a stone statue of a god (possibly Mercury), and a yard surface, again overlain by dump deposits, of second and third century AD date. Previous excavations at the 55-61 Moorgate site appear to have identified traces of the Wallbrook, including piling and revetment, together with artefactual deposits including a silver plaque.
- 5.3.4 West of the study site, at 80 Coleman Street, a similar archaeological profile was recorded: parallel ditches backfilled with domestic rubbish and sealed by later dump material; a brickearth building, pits, a wood lined ditch. Cremation urns have also been identified on London Wall, at the junction with Moorgate adjacent to the site.

#### 5.4 Early Medieval and Medieval (410AD – 1485AD)

- 5.4.1 Excavation at 44 London Wall revealed that the earlier road horizon was sealed by layers of brickearth floors and occupation deposits, of post-Roman date. The city wall was maintained during the medieval period, with the addition of bastions. Excavation at the junction of Copthall Avenue and London Wall to the east of the study site revealed that the outer, northern elevation of the Roman city wall had been refaced in the Medieval period. Further evidence of the wall was revealed in 1925 at the junction of Moorgate and London Wall, where mass concrete including brick, tile, ragstone and septaria, over a timber raft, over rammed chalk. The site of a postern gate has been identified, in the same location. Excavations at 2-3 Cross Key Court to the east of the study site revealed a surface dated to the tenth century AD, together with a series of pits and a ditch dated to the eleventh/twelfth centuries AD, peat deposits interpreted as marshland, with subsequent thirteenth century clay dumping to alleviate the marsh, into which were cut pits for the storage of shellfish. Evidence of metalworking in the fourteenth and fifteenth centuries was also identified.
- 5.4.2 Excavation at 43 London Wall in 1984 indicated that the site lay in marginal land during the Medieval period. Evidence from this site comprised an eleventh century drainage ditch. Observations at 48 London Wall to the east revealed a culvert of possible Medieval date, carrying a tributary of the Wallbrook beneath the Roman wall. Works at 30 Moorgate to the south of the study site revealed chalk walls interpreted as part of an undercroft, together with three pole-axed oxen in a pit. Works at

49-53 Moorgate to the southwest revealed rubbish pits (of twelfth-sixteenth century date), a wattle lined pit, and a chalk well. At the adjacent 55-61 Moorgate site, additional wattle lined pits were identified situated along a property boundary (MLO65752, TQ3268 8149). West of the study site, at 80 Coleman Street, a similar archaeological profile was recorded: a partly wood lined ditch was revealed, together with a pit.

#### 5.5 Post Medieval And Modern (1486 AD – Present)

- 5.5.1 Early maps show the study site occupied by buildings, with an open area to the rear, opposite the More Gate in the City Wall immediately to the north. The Ogilby & Morgan plan of 1676 shows the site occupied by buildings with narrow open areas through the centre and on the eastern boundary. Morgan's map of 1682 shows alterations within the eastern part of the site. Rocque's map of 1745 shows the site bisected by Red Lion Court through the centre. The city wall to the north of the study site was largely demolished during the eighteenth and nineteenth centuries, with the Moor Gate itself demolished in 1760.
- 5.5.2 Much of the line of Moorgate road was laid out in the 1830s, associated with the rebuilding of London Wall. The Cross map of 1835 therefore shows the formation of Moorgate along the site's western boundary. The First Edition Ordnance Survey (1875) shows the site developed with buildings fronting Moorgate to the west and London Wall to the north, with a small open area to the centre of the eastern boundary. The Second Edition Ordnance Survey (1894-96) shows the site fully occupied by buildings. No change is shown on the 1916 Land Registry Ordnance Survey. The 1937 GOAD Insurance Plan shows the site occupied by offices, of five to seven storeys in height, with basements. The building fronting the corner of Moorgate and London Wall is labelled Halifax House, designed by TP Bennett & Sons in 1932. The 1938 Ordnance Survey shows no change within the study site.
- 5.5.3 The 1946 bomb damage map indicates that the site was not impacted during World War Two, with the 1953 Ordnance Survey showing the presence of an open area within the centre of the site, and the reconfiguration of the buildings within the southern part of the site. No further changes are shown within the study site on subsequent Ordnance Surveys dating from the 1960's to the 1970's.

### 6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 All archaeological excavation and monitoring during the evaluation were carried out in accordance with the preceding methodology (Section 2) of the Archaeological Project Design (Bradley 2015) and the PCA Archaeological Site Manual (Taylor 2009).
- 6.2 With the exception of Trial Pit 4, the trail pits were marked out by the attending sub-contractors in accordance with their own plan specifications, and using a 300mm diameter diamond tipped core barrel drilling rig the concrete floor was broken out. Where encountered under the supervision of the attending Senior Archaeologist, the underlying deposits were removed by hand to the required depth suitable for the sub-contractors to ascertain the condition of soils and establish the depth of natural deposits.
- 6.3 Any potential archaeological features or deposits encountered within the trial pits were cleaned and investigated by hand and recorded by the attending Senior Archaeologist. The sequence in Trial Hole 6 was completed to the depth of the underlying gravel using a hand auger operated by the Senior Archaeologist. Investigation of the archaeological features and deposits was restricted due to the dimensions of the trial pits, and was limited to identifying the nature of any deposits and the recovery of any artefacts or dating evidence. In this investigation archaeological deposits were recorded in Trial Pits 5 and 6 only.
- 6.4 Data regarding the site boundary, floor plans and spot heights of the floor levels were supplied by the contractors, while levels of the deposits and features were calculated by the attending Senior Archaeologist using provided floor spot heights and plotted onto the OS grid by members of PCA's CAD team. Written and drawn records of all archaeological deposits encountered were made in accordance with the principles set out in the PCA Archaeological Site Manual (Taylor 2009) and in accordance with the methodology (Section 2.4) of the Archaeological Project Design (Bradley 2015).
- 6.5 The site produced 14 context records; 2 section drawing at 1:10 and a series of colour digital photographs recording the trial pits were also produced. No finds were recovered from the site, and the records can be found under the site code MLW15 in the PCA archive.

### 7 ARCHAEOLOGICAL SEQUENCE

7.1 Each trial pit within the basement area was anticipated to measure 1.00m x 1.00m with trial pits in the sub-basement measuring 0.60m x 0.60m, but spatial constraints eventually dictated the dimensions of each trial pit. Eight trial pits were excavated of the intended nine. Of the eight, two recorded a full archaeological sequence. The remainder were dug to depths suitable for the contractors to ascertain the depths of footings and in the case of four trial pits were limited in depth before a 16mm drill bit was used to determine depths of actual concrete. One trial pit was abandoned completely due to it being inaccessible. Each trial pit has been numbered consecutively (see Figure 2) and a description of those trial pits along with the recorded archaeological deposits follows.

#### 7.2 **Trial Pit 1:**

7.2.1 Trial Pit 1 was located in the sub-basement in the northwest corner of a room to determine the extent of the footings to an internal and external wall. The presence of a large water tank made access to the location inaccessible and therefore it was moved to the eastern side of the water tank. The trial hole measured 0.60m x 0.30m and was excavated to a depth of approximately 0.40m before a 16mm drill bit was used to probe the remaining concrete. The base of the pit was recorded at a height of 1.00m below slab level (c.4.60m OD); the probe hole was still encountering concrete at this point (see also Appendix 3).

#### 7.3 **Trial Pit 2:**

7.3.1 The purpose of this trial pit was to determine the depth of the wall footings located in the southwest corner of the sub-basement. Trial Pit 2 measured 0.60m x 0.60m and was excavated to a depth of approximately 0.36m before a 16mm drill bit was used to probe the remaining concrete. After approximately 0.69m below the cored out basement slab a soft reddish brown course sandy clay was encountered, suggesting the presence of truncated natural at an approximate height of 4.95m OD. The concrete present below the modern floor slab was recorded at a height of 6.00m OD and could be interpreted as a floor layer associated with the brick footing also seen in the trail pit. The three stepped courses of exposed brick were seen in the edges of the pit and may suggest later underpinning of the earlier sub-basement walls (Plate 1; Appendix 3).

#### 7.4 **Trial Pit 3:**

7.4.1 Also located in the sub-basement, against western side of the internal wall, Trial Pit 3 (Plate 2) measured approximately 0.60m x 0.60m and was also recorded at a height of 6.00m OD. The purpose of this trial pit was specifically to determine the survival of archaeological deposits below the sub-basement. As with Trial Pit 2, after approximately 0.40m below the current floor level this trial pit was also probed with a 16mm drill bit to a further depth of 0.70m, establishing that the base of the concrete was laid on soft reddish brown course sandy clay (as encountered in Trial Pit 2), suggesting the presence of truncated natural at an approximate height of 4.90m OD (see also Appendix 3).

#### 7.5 Trial Pit 4:

7.5.1 Trial Pit 4 was located on the eastern side of the basemented area of an adjacent building in a small room with a floor height at between c.9.60-9.90m OD. Due to this location being inaccessible to the contractors the trial pit was abandoned. At the time of writing this report, it is anticipated that the trial pit may be re-scheduled for excavation at a later date.

#### 7.6 **Trial Pit 5:**

7.6.1 The purpose of this trial pit (Plate 3) was to determine the survival of archaeological deposits within an accessible area of the basement and for the contractors to determine the depth of the wall footings located at the eastern edge of the site. Measuring 0.60m x 0.60m (Plate 3) the contractors encountered archaeological deposits directly below the 300mm concrete floor. Recorded at a height of c.9.30m OD, these deposits were removed by hand and a phased description of the deposits follows (see figure 3 Section 1):

#### 7.7 Phase 1: Natural

7.7.1 A soft pale yellow course sandy gravel deposit with frequent small to medium angular flints [10] was recorded across the 0.30m x 0.30m base of the trial hole at an approximate height of 8.12m OD, 1.38m below basement slab level. No finds or dating evidence were recovered from the deposit.

#### 7.8 **Phase 2: Clay Silting/Dumped Deposit**

7.8.1 Overlying the sandy gravel deposit was a soft reddish brown silty clay layer [9] which was devoid of inclusions. It was not clear if this deposit, which was recorded at a height of c.8.36m OD and approximately 0.24m thick, was the result of dumping, silting or even naturally deposited.

#### 7.9 Phase 3: Organic Deposit

7.9.1 Sealing the reddish brown silty clay was a 0.10m layer of soft brown organic clay [8] with no inclusions, observed and recorded at a height of c.8.46m OD. This was interpreted as a low energy waterlain organic/peaty deposit and extended across the 0.30m x 0.30m base of the trial hole.

#### 7.10 Phase 4: Dump Deposit

7.10.1 Sealing the peaty layer [9] was a soft greyish brown clay with occasional flecks of charcoal, fragments of oyster shell and bone [7], recorded at a height of c.8.96m OD. The deposit had a thickness of 0.50m and was interpreted as a dump layer.

#### 7.11 Phase 5: Cut Feature

7.11.1 Observed in the north edge of the trial pit was the partially exposed profile (0.44m east-west) of a cut feature [6]. The profile of the feature, which cut into dumped deposit [7], consisted of a sharp top break of slope, moderate straight (western) side leading to a gradual break of slope to a concave base. Backfilling the feature was a soft mottled greyish green silty clay with occasional small rounded flints and fragments of oyster shell [5]. The feature measured approximately 0.50m in depth and was recorded at highest level of 8.96m OD. This feature is tentatively interpreted as a pit.

#### 7.12 Phase 6: Dumped Deposit

7.12.1 Sealing the partially exposed cut feature [6] and present across the extent of the trial pit was a second phase of dumped material consisting of soft mottled green and grey silty clay [4] with frequent flecks of charcoal and moderate small to medium angular and rounded flints. The deposit was recorded at a height of 9.30m OD and was approximately 0.34m thick.

#### 7.13 Phase 7: Wall Footing

7.13.1 Along the eastern edge of the trial pit, directly below the concrete floor, was the partially exposed construction cut [3] for the remains of a truncated north-south aligned wall footing [2]. Surviving to a height of 9.30m OD, and approximately 0.38m thick, the footing consisted of a firm brownish yellow (buff) sandy mortar [2] with frequent small to medium angular and rounded flints.

#### 7.14 Phase 8: Modern

7.14.1 Sealing the above archaeological sequence was a 0.30m greyish white hard concrete floor forming the current basement slab level recorded at an approximate height of c.9.60m OD.

#### 7.15 Trial Pit 6:

7.15.1 Trial Pit 6 (Plate 4) was also excavated to determine the survival of archaeological deposits within an open area of the northern extent of the basement (see figure 2), and for the contractors to determine the depth and location of the footings to column supports. Measuring 0.90m x 0.90m, archaeological deposits were encountered directly below the 0.37m thick concrete slab which was recorded at a height of c.9.90m OD. The archaeological deposits were removed by hand and a phased description of the deposits follows (see figure 3 Section 2):

#### 7.16 Phase 1: Natural

7.16.1 After auguring approximately 0.15m through the base of the test pit (c.1.45m below slab level) a soft reddish brown course sandy gravel deposit with frequent small angular flints [14] was encountered. This was recorded at an approximate height of 8.26m OD and was interpreted as natural gravel.

#### 7.17 Phase 2: Disturbed Natural/Dumped Deposit

7.17.1 Overlying the gravel deposit and forming the base of the trial pit was a soft mottled grey and brownish orange clay layer [13] with frequent small to medium angular flints, occasional large rounded flints and small flecks of daub. It was unclear within the confines of the test pit whether the deposit, which was recorded at a height of c.8.40m OD and was approximately 0.14m thick, was the result of dumping or possibly represented redeposited/reworked natural clay.

#### 7.18 Phase 3: Dump Layer/Backfill

7.18.1 Sealing [13] was deposit [12], a soft brownish green silty clay with occasional small to medium lumps of mortar and oyster shell fragments recorded at a height of c.8.65m OD and approximately 0.25m thick. The deposit may either have represented a dumped layer or the back fill to an undefined cut feature set beyond the limits of the trial pit.

#### 7.19 Phase 4: Dump Layer/Backfill

7.19.1 Directly below the concrete basement slab was a 0.88m thick deposit consisting of soft mottled green and grey silty clay [11] with frequent small angular flints, occasional flecks of charcoal, moderate fragments of oyster shell and mortar. Recorded at a height of c.9.53m OD and present across the extent of the trial pit, it was not clear if this deposit represented a dumped layer, or possibly the secondary fill to an undefined cut feature.

#### 7.20 Phase 5: Modern

7.20.1 Sealing the above archaeological deposits was a 0.37m greyish white hard concrete floor forming the current basement level, recorded at an approximate height of c.9.90m OD.

#### 7.21 Trial Pit 7:

7.21.1 Trial Pit 7 was positioned within a narrow alcove along the western side of the Boiler Room within the basement. Due to limitations the trial pit was moved to the entrance of the alcove against the western wall (Plate 5). Measuring 0.60m x 0.60m and excavated to a depth 0.78m, this trial pit was positioned to determine the depth of any footings fronting Moorgate and was located against the sub-basement wall. The trial pit located the external northwest corner of the sub-basement and shallow 100mm concrete footings to the wall fronting Moorgate. The basement wall and footing appeared to be surrounded with soft greyish brown clay soil, though the limitations of the trial pit made it unclear if this soil was back fill of a void or disturbed/truncated stratification. Basement slab level was at c.9.60m OD with the base of the trial pit at c.8.71m OD (see also Appendix 3).

#### 7.22 Trial Pit 8:

7.22.1 Also located along the western side of the Boiler Room within the basement, Trial Pit 8 was originally situated behind a large water cylinder but its location would have placed it directly above the sub-basement and so it was moved to just within the alcove entrance. Measuring 0.60m x 0.30m, the purpose of the trial pit was to determine the location of the sub-basement wall. This was located at 0.22m below the basement floor level (c.9.60m OD) with the base of the trial pit recorded at a height of approximately c.8.88m OD. As with Trial Pit 7, the same soft greyish brown clay soil was present (albeit limited) in the northern end of this trial pit. It was not possible to ascertain whether the deposit was backfilling around the sub-basement's external wall face or surviving stratification (at a height of c.9.38m OD) (see also Appendix 3).

#### 7.23 Trial Pit 9:

7.23.1 Trial Pit 9 was intended to be excavated in an adjacent room to the south of the Boiler Room, but access or limitations within the original location meant the trial pit was moved to the southern end of the alcove area of the Boiler Room. Measuring approximately 0.60m x 0.30m and at a height of c.9.60m OD, the trial pit was core drilled to a depth of 0.40m. At this level concrete was still present and a 16mm drill bit was used to determine the depth of the concrete. At 0.78m concrete was still present and the trial pit was abandoned. The estimated depth of the probe hole indicated the concrete was still present at a depth of 8.40m OD (see also Appendix 3).

56-62 Moorgate & 41-42 London Wall, City of London, An Archaeological Evaluation ©Pre-Construct Archaeology Ltd., November 2015

Plate 1: Trial Pit 2 (Looking South)



Plate 2: Trial Pit 3 (Looking North)



#### Plate 3: Trial Pit 5 (Looking Northeast)



Plate 4: Trial Pit 6 (Looking Southeast)



Plate 5: Trial Pit 7(Looking North)



### 8 INTERPRETATIONS AND CONCLUSIONS

#### 8.1 Interpretations:

- 8.1.1 The excavation of the Trial Pits 5 and 6 have established the potential for survival of ancient ground surfaces (horizontal archaeological stratification), as well as cut features and potential structures within the basemented area of the site. This archaeological survival appears consistent across the area of the site, being recorded between 9.30m OD and 8.1m OD in Trial Pit 5 to the south east (1.20m of surviving stratigraphy) and between 9.53m OD and 8.26m OD in Trial Pit 6 to the north west (1.27m of surviving stratigraphy).
- 8.1.2 Probing of the trial pits within the sub-basement established truncated natural gravel deposits at an approximate height of between 4.95m OD (Trial Pit 2) and 4.90m OD (Trial Pit 3) suggesting the cutting of the sub-basement area has removed any survival of ancient ground surfaces, structures and cut features in this area of the site. Trial pits 7 and 8 inside the Boiler Room established the back edge of the sub-basement's northern wall, which appeared to be surrounded with soft greyish brown clay soil at a height of c.9.38m 9.41m OD.
- 8.1.3 Within Trial Pits 5 and 6 undisturbed natural varied from a soft reddish brown course sandy gravel deposit with frequent small angular flints recorded at an approximate height of c.8.26m OD (Trial Pit 6), to a soft pale yellow course sandy gravel deposit with frequent small to medium angular flints recorded at c.8.30m OD (Trial Pit 5). The sequences in Trial Pits 5 and 6 produced evidence of at least two phases of dumping, and whilst it was difficult to determine if the thick upper deposit in Trial Pit 6 represented a single phase of dumping, it does suggest that some degree of raising of the land surface, at least across the northern end of the study site, had taken place. Evidence of silting and a potential organic/peaty layer indicate that the area around Trial Pit 5 may have been marshy prior to the first phase of land reclamation.
- 8.1.4 The earlier cut feature recorded in the southern edge of Trial Pit 5 may have represented part of a linear ditch (as recorded at 43 London Wall to the east Appendix 4) or the back edge of a pit (top edge of cut recorded at a height of 8.96m OD).
- 8.1.5 The later cut feature along the eastern edge of Trial Pit 5 represented a construction cut for the firm brownish yellow (buff) mortar north-south aligned medieval or early post-medieval wall footing, surviving to a height of 9.30m OD.
- 8.1.6 Other than the medieval or early post-medieval date for the wall footing, no dating evidence was recovered from the lower cut feature or the archaeological layers in either Trial Pits 5 or 6. However, the archaeological remains recorded survive at a height of 9.30m OD around Trial Pit 5 at the south eastern end of the site and 9.53m OD at the northern end of the site in Trial Pit 6. This is consistent with the Roman deposits previously recorded immediately to the east during the excavations at 43 London Wall, where Roman deposits including a road, several ditches and infilling (including a plank lined drain), together with waterlogged wood were recorded from highest levels of between 9.61m and 9.67m (Appendix 4). These waterlogged and infilling deposits are of a similar character to those recorded on the current site, and were recorded at a similar level. As such, with the exception of the

later footing, the deposits recorded in Trial Pits 5 and 6 are considered to be Roman in date, representing a continuation of the same activity into and across the upper basement level of the current site.

#### 8.2 **Research Objectives:**

- 8.2.1 A number of site-specific research aims and objectives were raised in the preceding Archaeological Project Design (Bradley 2015). The archaeological investigations sought to address these research questions and are answered in the following section:
  - What is the nature and OD height of the natural strata on the site?

In the two trial pits that exposed untruncated natural deposits, Trial Pits 5 and 6, the natural varied from a soft reddish brown course sandy gravel deposit with frequent small angular flints (Trial Pit 6) to a soft pale yellow course sandy gravel deposit with frequent small to medium angular flints (Trial Pit 5). In Trial Pit 6 natural was recorded at an approximate height of c.8.26m OD and at approximately 8.10m OD in Trial Pit 5.

• What is the natural topography of the area; are there any indications of water courses or waterlogged ground associated with the Walbrook or its tributaries?

The natural topography of the study area as observed in the trial pits showed the strata to vary from a soft reddish brown course sandy gravel deposit to a soft pale yellow course sandy gravel, possibly overlain with clay deposits in Trial Pit 5. The trial pits gave no direct indication of any water courses, though Trial Pit 5 did produced possible evidence of silting and a potential organic peaty layer indicating the area around Trial Pit 5 may have become marshy, possibly due to its location close to the Walbrook or its tributaries.

• Is there evidence of quarrying of the natural deposits?

The site immediately to the east, 43 London Wall, excavated in 1984, recorded a ditch on a northwestsoutheast alignment. The base of that ditch cut into the natural at an approximated depth of c.7.94m OD, with untruncated natural at an estimated depth of c.8.19m OD (Appendix 4).

On the current site natural gravel recorded at an approximate height of c.8.26m OD in Trial Pit 6 places it higher than the natural at 43 London Wall, whilst the natural in Trial Pit 5 was recorded at a similar height of approximately 8.10m OD. These heights for the gravel mirror the untruncated heights recorded immediately to the east, and as such it is concluded that the gravel has not been truncated by quarrying within the areas of investigation.

• What is the depth of truncation, relative to natural deposits, of the existing basement and or previous modern foundation works?

Current ground floor (street level) is placed at c.12.90m OD. Probing of the trial pits within the subbasement established natural gravel deposits at an approximate (lower) height of 4.90m OD (Trial Pit 3) suggesting the cutting of the 18<sup>th</sup>/19<sup>th</sup> century foundations and later basementing has removed any archaeological deposits to a depth of 8.00m below ground floor level. Within the basemented area natural gravel was recorded at an approximate height of c.8.26m OD (Trial Pit 6) and 8.10m OD (Trial Pit 5), with depths of archaeological remains surviving to a height of 9.53m OD around Trial Pit 6 and 9.30m OD around Trial Pit 5. This indicates that archaeological deposits survive to a depth of c.1.26m below the basement floor.

• If the pre-Roman land surface is encountered, are there any indications of prehistoric activity, worked flints or any cut features within its surface?

The lack of dating evidence or artefact retrieval from Trial Pits 5 & 6 make it unclear if the lower deposits recorded are pre-Roman in date.

• Is there any evidence for the presence of an early Roman managed landscape, possibly including levelling dumps, raising the land surface or drainage schemes?

Whilst it was difficult to determine if the thick deposit [11] represented a single phase of dumping in the area of Trial Pit 6, Trial Pit 5 produced evidence of at least two phases of dumping, one of which was truncated by an indeterminate cut feature. The dumped/levelling sequences seen in the trial pits indicate that some degree of raising the land surface had taken place, but the absence of any dating evidence made it unclear as to what period the raising of the land took place in.

• Is there evidence for Roman roads?

There was no evidence of any Roman roads within the excavated trial pits.

• Is there evidence for Roman settlement on the site?

There was no direct evidence of settlement within the excavated trial pits.

Is there evidence for the distribution of Roman buildings and boundaries?

There was no direct evidence for the distribution of Roman buildings within the excavated trial pits.

• Is the settlement of a domestic or industrial nature?

The inclusion of oyster shell and bone fragments within the dumped deposits may suggest domestic occupation within the area of the study site.

• How thick is the Roman stratigraphy across the site?

The archaeological deposits recorded across the site, dated by their level of survival as being at least predominately Roman in date, survive to a depth of c.1.26m below the basement floor.

• Is there any evidence for medieval activity on the site?

The mortar footings of a truncated wall, consisting of a firm brownish yellow (buff) mortar recorded on a north-south alignment along the eastern edge of Trial Pit 5, could potentially be evidence for medieval activity on the site, however it should not be ruled out that the remains could also be earlypost-medieval in date.

• Is there evidence for reclamation or drainage of the marginal land in the medieval period?

The dumping/levelling deposits seen in the trial pits indicates that some degree of raising the land

surface has taken place during the Roman period. Any evidence for later reclamation or drainage episodes had been truncated by the construction of the basement and sub-basement.

• Is there evidence for medieval cellars, cess pits or other structural activity?

The footings to a truncated wall, consisting of a firm brownish yellow (buff) mortar recorded on a northsouth alignment along the eastern edge of Trial Pit 5, could potentially suggest the presence of structural activity on the site.

• What are the truncation levels from 19th century and later basements?

Probing of the trial pits within the sub-basement established natural gravel deposits at an approximate height of between 4.95m OD (Trial Pit 2) and 4.90m OD (Trial Pit 3) suggesting the cutting of the 18<sup>th</sup>/19<sup>th</sup> century foundations and later basementing has severely removed any survival of ancient ground surfaces, structures and cut features.

- Is there evidence for 16th century and later foundations fronting Moorgate/London Wall?
  There was no direct evidence of any 16<sup>th</sup> century or later foundations fronting Moorgate/London Wall.
- What truncation has been caused by the construction of the existing basements on the site?

Probing of the trial pits (Trial Pits 2 & 3) within the sub-basement suggests the cutting of the  $18^{th}/19^{th}$  century foundations and later basementing has removed any survival of ancient ground surfaces, structures and cut features, with the total impact of the sub-basement from ground level being 8m depth. The trial pits in the basement area of the study site recorded archaeological remains surviving to a height of 9.52m OD around Trial Pit 6 and 9.30m OD around Trial Pit 5, indicating that the basement area has had less of an impact on the archaeological deposits to a total depth of 3.60m below current ground level. The depths of archaeological remains below the basement floor survive to a depth of c.1.26m depth.

### 9 ACKNOWLEDGEMENTS

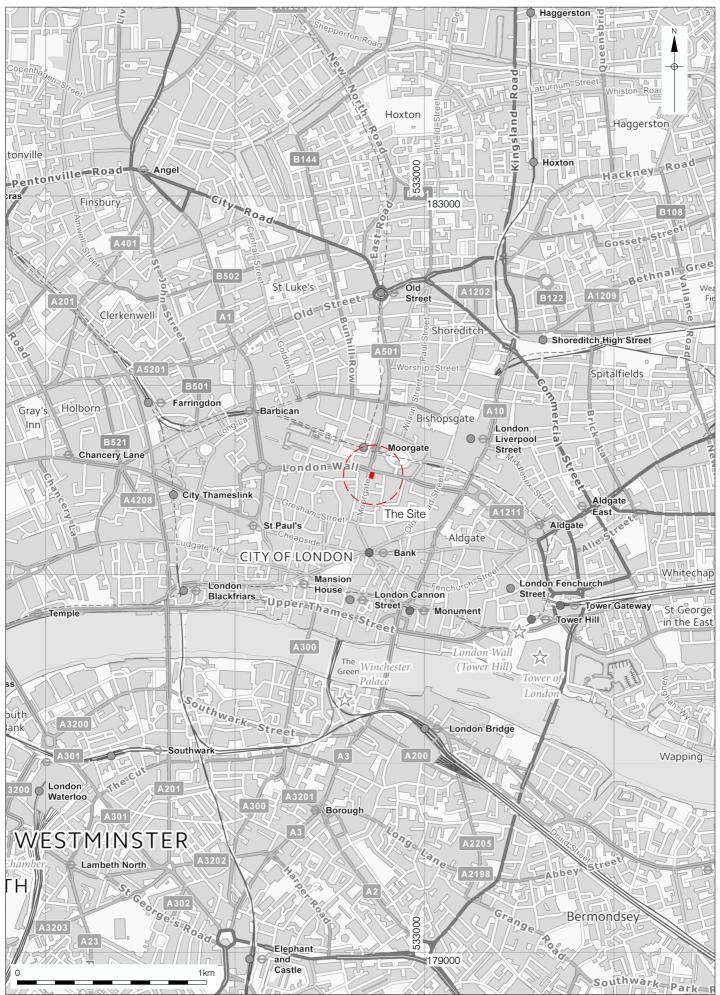
9.1 Pre-Construct Archaeology Ltd and the author would like to thank CgMs Consulting for their commissioning the fieldwork and for contributions and help in producing this report, and to Kathryn Stubbs, Assistant Director Historic Environment at the City of London, for monitoring the fieldwork. The author would also like to thank James French of Soiltechnics for his time and co-operation during the excavation, Ray Murphy for the figures and Tim Bradley for his project management of the evaluation and editing this report.

#### 10 **BIBLIOGRAPHY**

Bradley, T, October 2015, Archaeological Evaluation During Geotechnical Investigations At 56-62 Moorgate & 41-42 London Wall, London EC2, City Of London, Archaeological Project Design, Pre-Construct Archaeology Limited

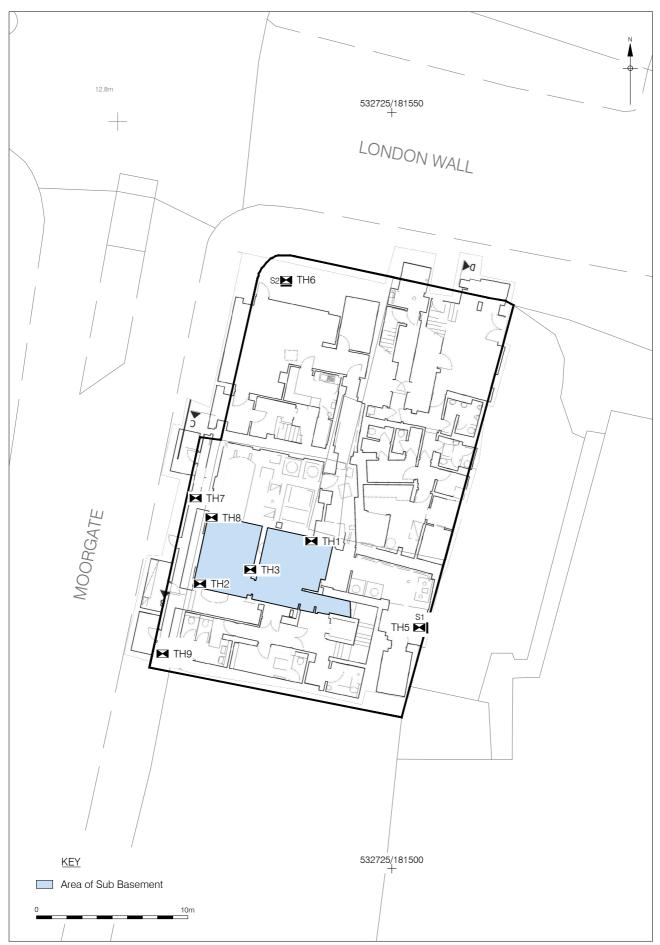
CgMs Consulting, August 2015, 56-62 Moorgate & 41-42 London Wall London EC2 City of London, Desk Base Archaeological (impact) Assessment, CgMs Consulting

Taylor, J. with Brown, G. 2009. *Fieldwork Induction Manual: Operations Manual 1*, Pre-Construct Archaeology Limited

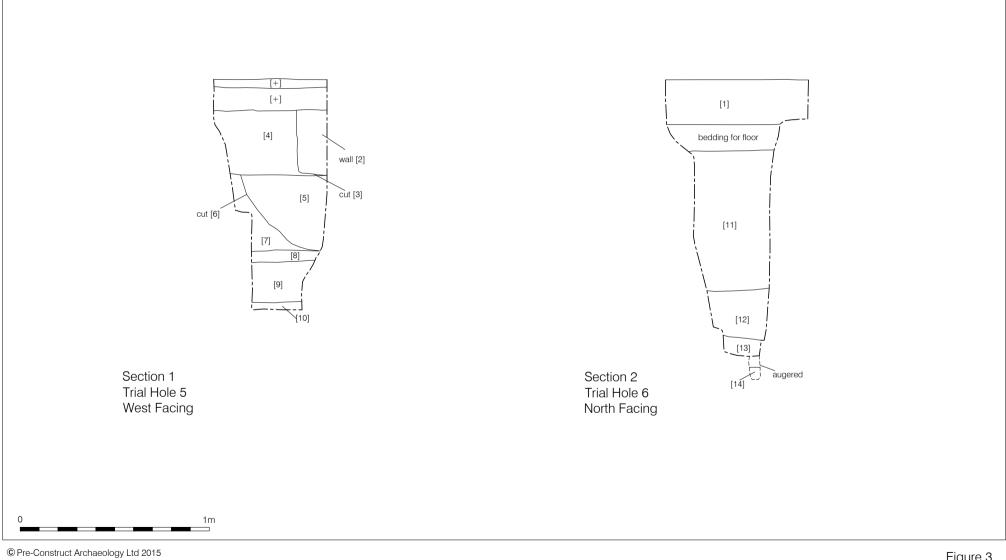


Contains Ordnance Survey data © Crown copyright and database right 2015 © Pre-Construct Archaeology Ltd 2015 10/11/15 RM

Figure 1 Site Location 1:20,000 at A4



© Crown copyright 2015. All rights reserved. License number PMP36110309 © Pre-Construct Archaeology Ltd 2015 17/11/15 RM



10/11/15 RM

### **APPENDIX 1: CONTEXT INDEX**

Site Code	Context No.	Trench	Plan	Section / Elevation	Туре	Description	Date	Phase
MLW15	1	TH6	-	2	Layer	Concrete slab	Modern	+
MLW15	2	TH5	-	1	Masonry	Mortar wall footing	Med/early post- medieval	8
MLW15	3	TH5	-	1	Cut	Construction cut for [2]	Med/early post- medieval	8
MLW15	4	TH5	-	1	Layer	Dump/levelling layer	?Roman	6
MLW15	5	TH5	-	1	Fill	Fill of [6]	?Roman	5
MLW15	6	TH5	-	1	Cut	Pit/Ditch	?Roman	5
MLW15	7	TH5	-	1	Layer	Dump/Levelling layer	?Roman	4
MLW15	8	TH5	-	1	Layer	Soft brown organic clay	?Roman	3
MLW15	9	TH5	-	1	Layer	Dump/levelling layer	?Roman	9
MLW15	10	TH5	-	1	Layer	Natural gravel	Natural	1
MLW15	11	TH6	-	2	Layer	Dump/Levelling layer	?Roman	4
MLW15	12	TH6	-	2	Layer	Soft brownish green silty clay with occasional small to medium lumps of mortar and oyster shell fragments- Dump/Levelling layer	?Roman	3
MLW15	13	TH6	-	2	Layer	Soft mottled grey and brownish orange clay layer with frequent small to medium angular flints, occasional large rounded flints and small flecks of daub	?Roman/natural	2
MLW15	14	TH6	-	2	Layer	Natural gravel	Natural	1

### APPENDIX 2: OASIS REPORT FORM

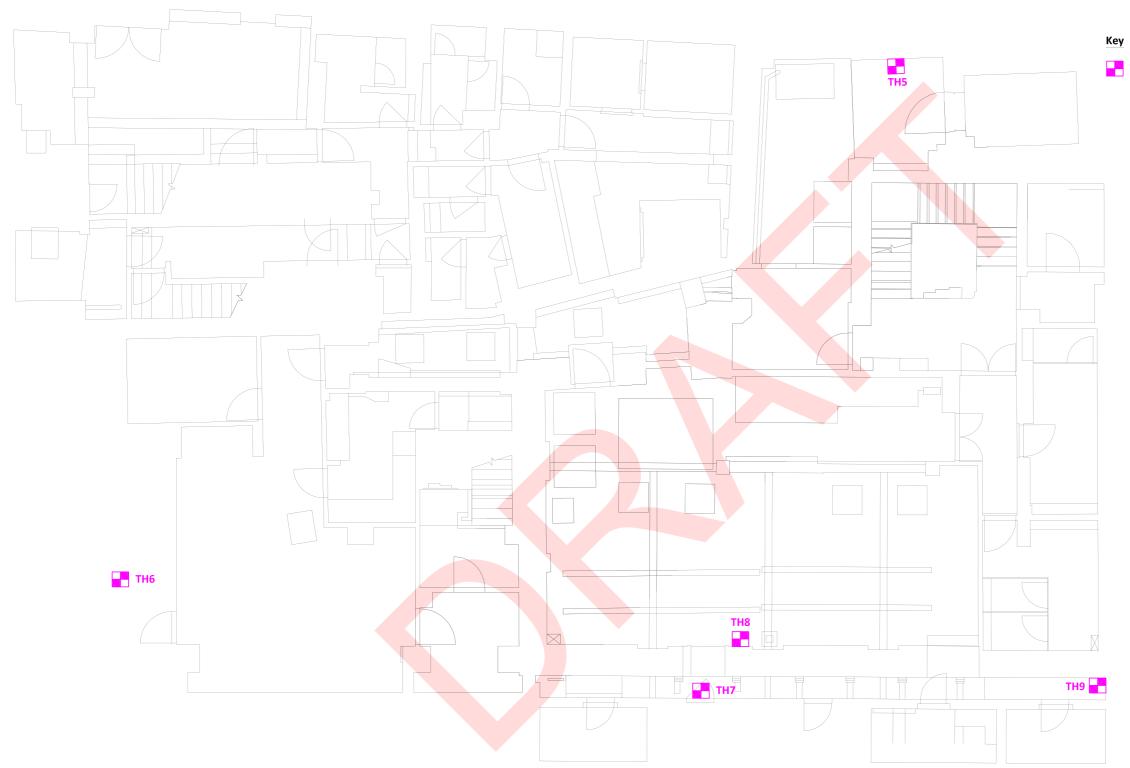
Project details		
Project name	56-62 Moorgate and 41-42 London Wall, City of London	
Short description of the project	The geotechnical investigation involved the excavation of eight trial pits within the currently occupied seven story commercial buildings to determine depths of footings, soil conditions and archaeological survival below the existing full basement and partial sub-basement floors. Of the eight trial pits three were placed specifically to investigate the archaeological potential of the site (TP3, TP5 and TP6). Despite restricted widths of the trial pits, the potential for survival of ancient ground surfaces (horizontal archaeological stratification) on site was observed during the excavation of Trial Pits 5 and 6. Whilst dating evidence was not recovered from these deposits, their Ordnance Datum heights were consistent with a Roman date. As well as establishing positive evidence of cut features (TP5), both trial pits identified natural deposits consisting of loose pale yellow sandy gravel (TP5) and soft reddish brown coarse sandy clay (TP6).	
Project dates	Start: 04-11-2015 End: 05-11-2015	
Previous/futur e work	No / Yes	
Type of project	Field evaluation	
Site status (other)	Area of Potential for Archaeological Remains	
Current Land use	Industry and Commerce 2 - Offices	
Monument type	PIT Roman	
Monument type	FOUNDATION Medieval	
Project location Country	England	
Site location	GREATER LONDON CITY OF LONDON CITY OF LONDON 56-62 Moorgate and 41-42 London Wall, City of London	
Postcode	EC2M 5TB	
Study area	480 Square metres	
Site coordinates	TQ 32724 81534 51.516617606507 -0.086941012182 51 30 59 N 000 05 12 W Point	
Height OD / Depth	Min: 4.9m Max: 8.26m	
Project creators		

Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	CgMs Consulting
Project design originator	Pre-Construct Archaeology Limited
Project director/manag er	, Tim Bradley
Project supervisor	Bruce Ferguson
Type of sponsor/fundin g body	Consultancy
Name of sponsor/fundin g body	CgMs Consulting
Project archives Physical Archive Exists?	No
Digital Archive recipient	LAARC
Digital Contents	"Stratigraphic"
Digital Media available	"GIS","Images raster / digital photography","Spreadsheets","Text"
Paper Archive recipient	LAARC
Paper Media available	"Context sheet","Correspondence","Diary","Drawing","Matrices","Plan","Report","Section","Un published Text"
Entered by Entered on	Tim Bradley (tbradley@pre-construct.com) 17 November 2015

### **APPENDIX 3: SOILTECNICHS DRAFT RESULTS**

#### 50-64 Moorgate & 41-42 London Wall London

#### **Basement Plan**



Title

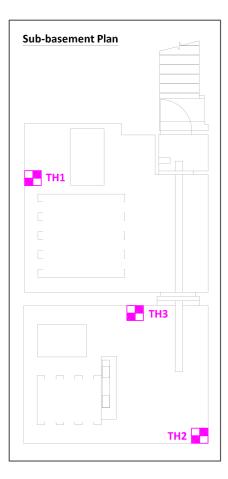
Basement and Sub-basement plans showing approximate location of exploratory points



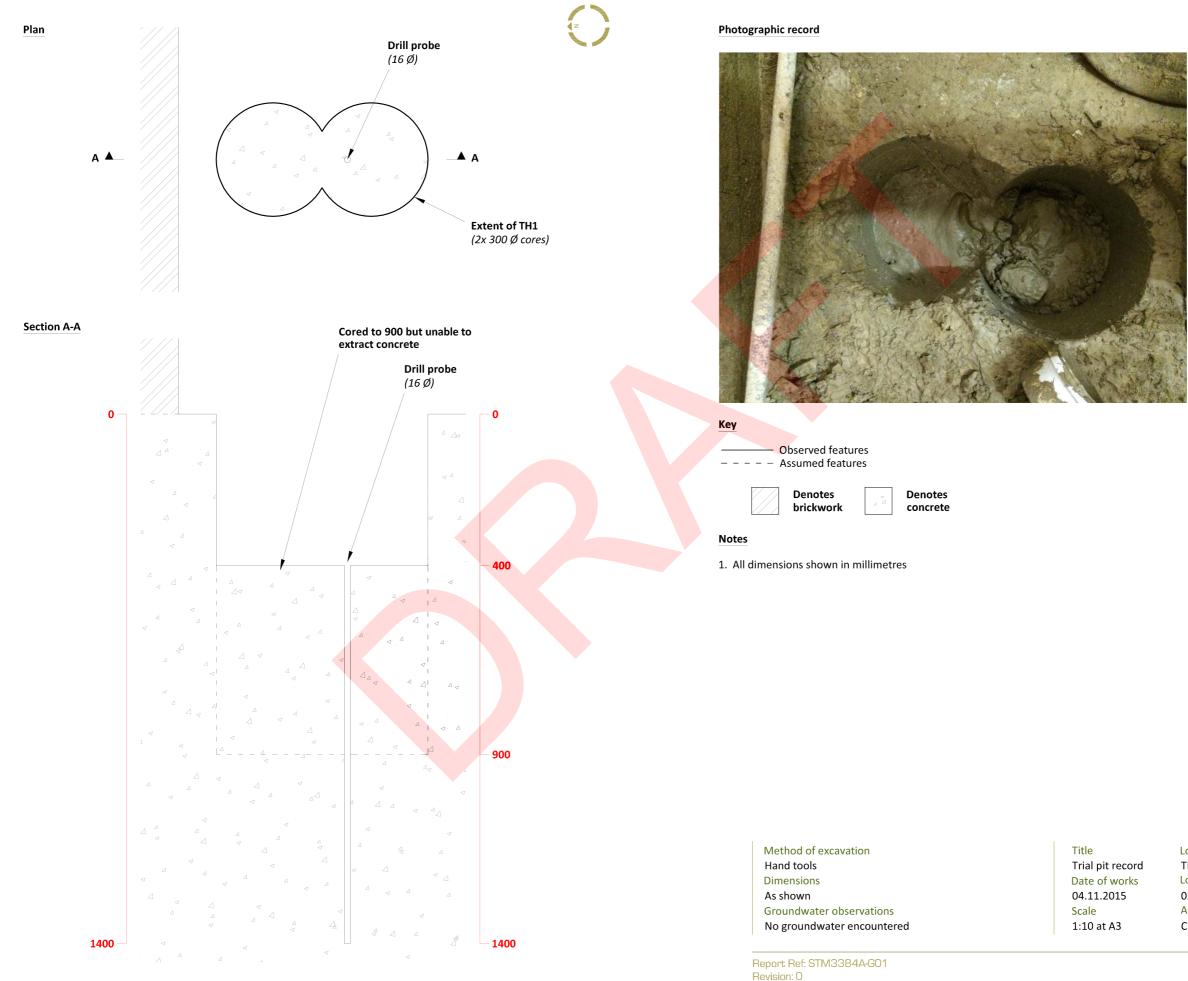




Approximate location of trial pit excavation





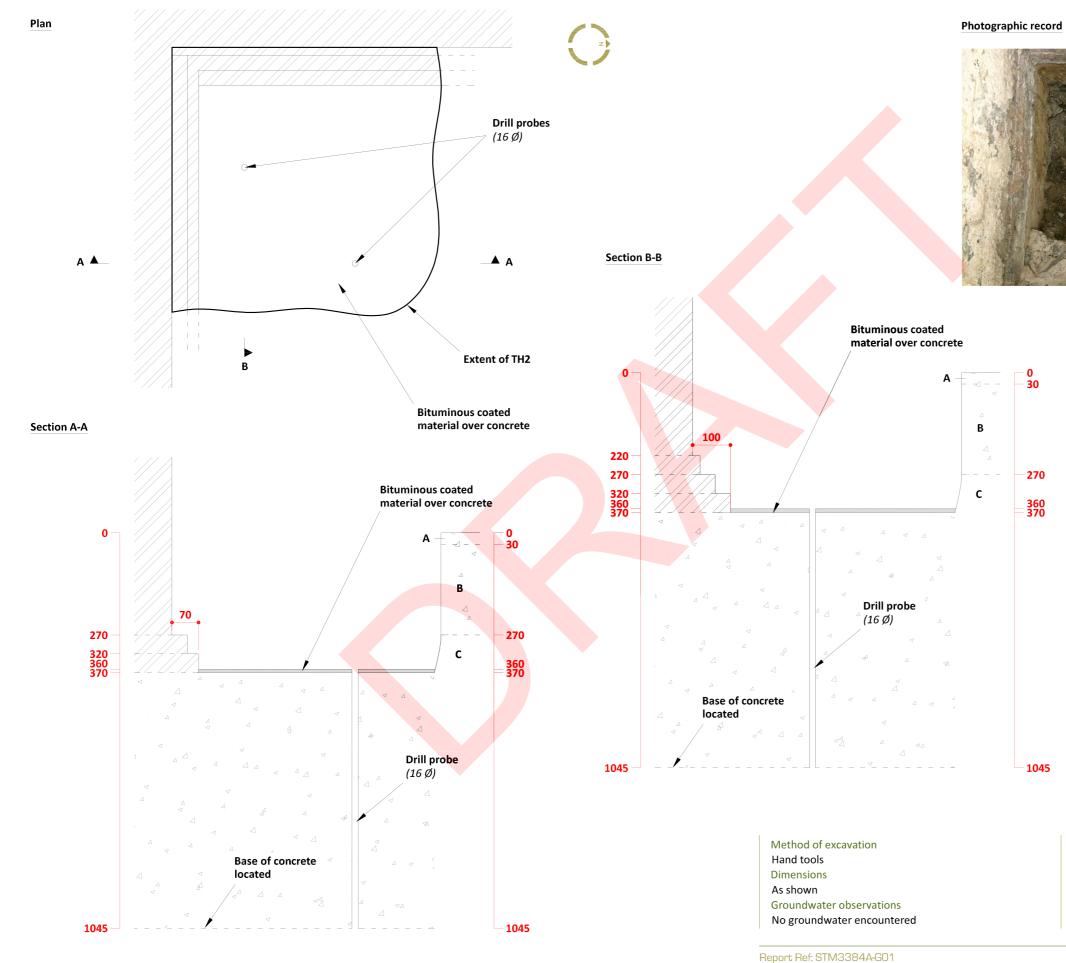




Location reference TH1 Location plan on drawing number 02 Appendix С

November 2015

в



Revision: O

# soiltechnics environmental and geotechnical consultants



#### Key

A. Concrete SCREED. (MADE GROUND)

B. Grey unreinforced CONCRETE. (MADE GROUND)

C. Orange brown SAND and GRAVEL. Gravel consists of flint, concrete and brick. (MADE GROUND)

**Observed** features - - - Assumed features

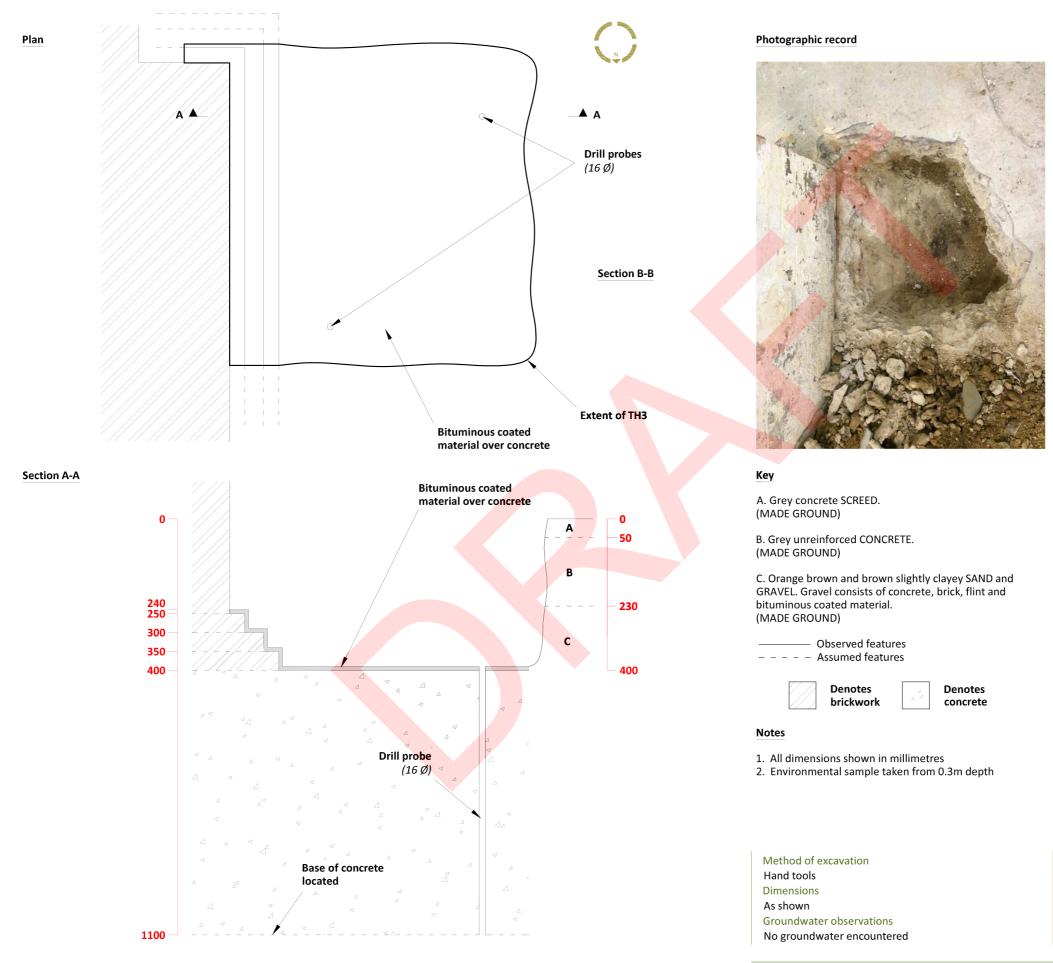
Denotes brickwork



#### Notes

- 1. All dimensions shown in millimetres
- 2. Environmental sample taken from 0.2m depth

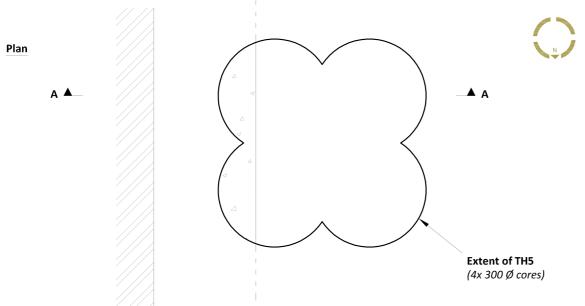
Title	Location reference
Trial pit record	TH2
Date of works	Location plan on drawing number
03.11.2015	02
Scale	Appendix
1:10 at A3	C



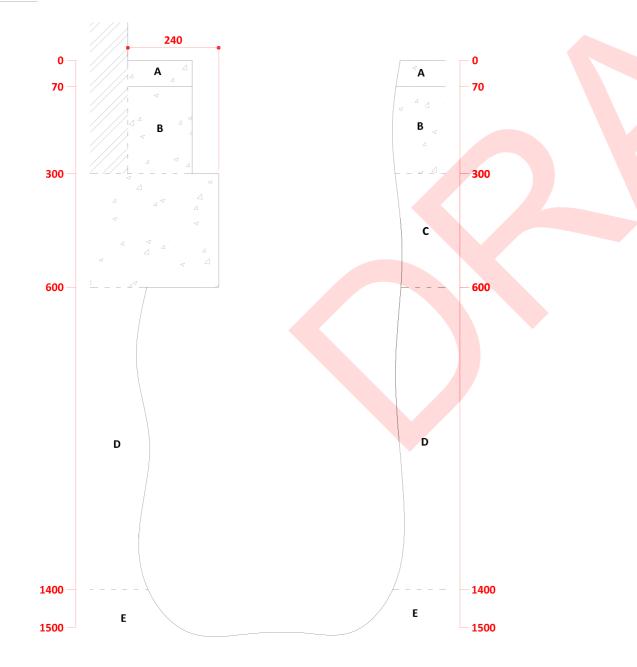


Title Trial pit record Date of works 03.11.2015 Scale 1:10 at A3

Location reference TH3 Location plan on drawing number 02 Appendix С

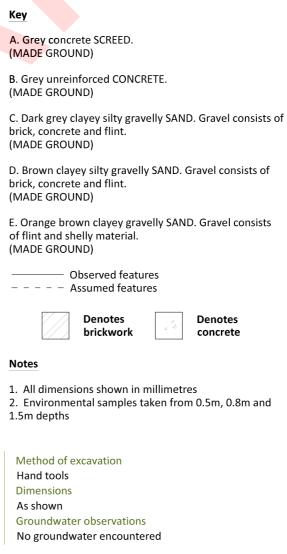


Section A-A



#### Photographic record





Report Ref: STM3384A-GO1 Revision: O



Title Trial pit record Date of works 03.11.2015 Scale 1:10 at A3

Location reference TH5 Location plan on drawing number 02 Appendix С



Report Ref: STM3384A-GO1 Revision: O

# soiltechnics environmental and geotechnical consultants

A. Concrete SCREED. (MADE GROUND)

B. Grey unreinforced CONCRETE comprised of aggregates of flint up to 30mm in size. Approximate 3% air voids. (MADE GROUND)

C. Brown clayey gravelly SAND. Gravel consists of flint, brick and

(MADE GROUND)

D. Orange brown sandy very gravelly CLAY. Gravel consists of flint. (MADE GROUND)

Observed features - - - - Assumed features



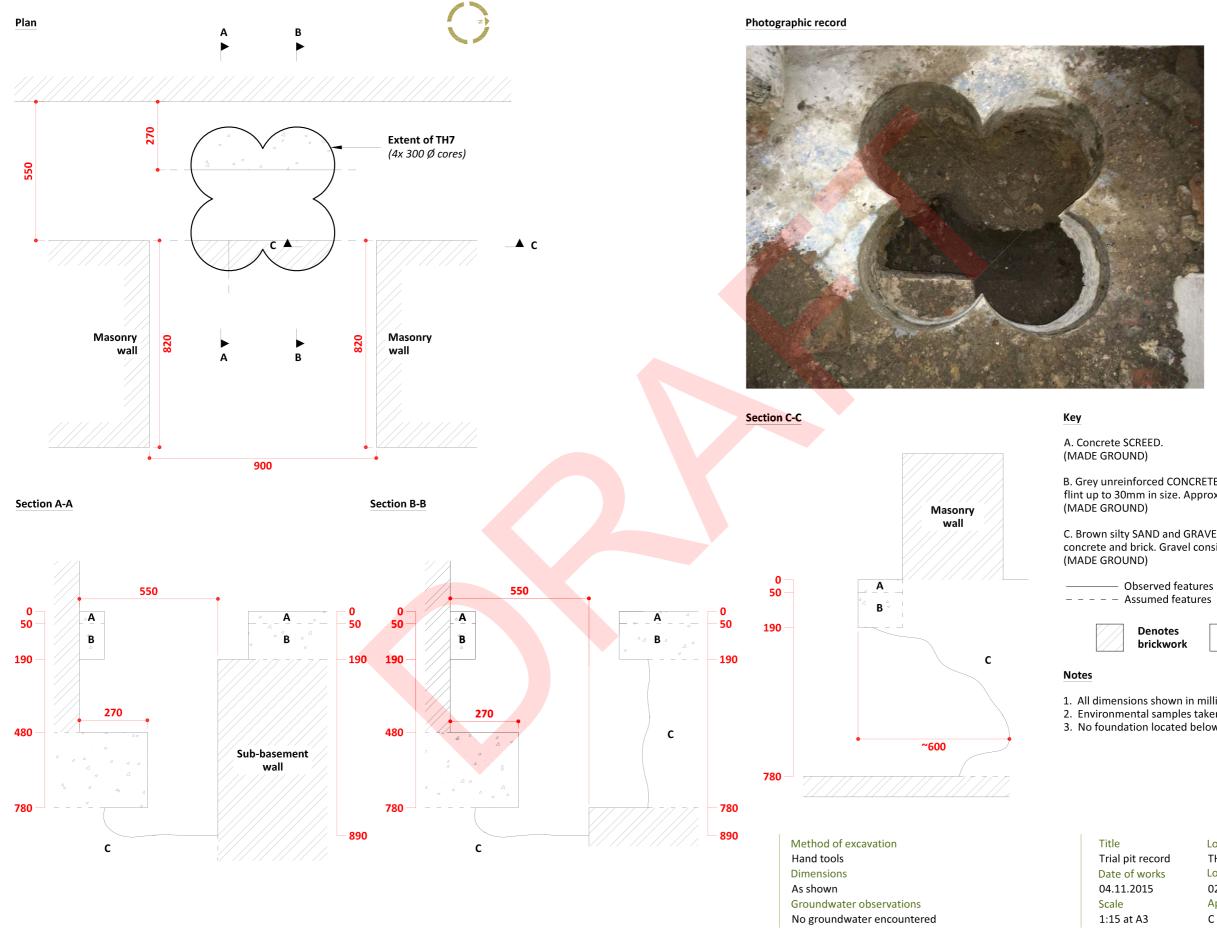
Denotes concrete

1. All dimensions shown in millimetres 2. Environmental samples taken from 0.4m, 0.7m and 1.4m

> Title Trial pit record Date of works 04.11.2015 Scale 1:20 at A3

Location reference TH6 Location plan on drawing number 02 Appendix С





Report Ref: STM3384A-GO1 Revision: O



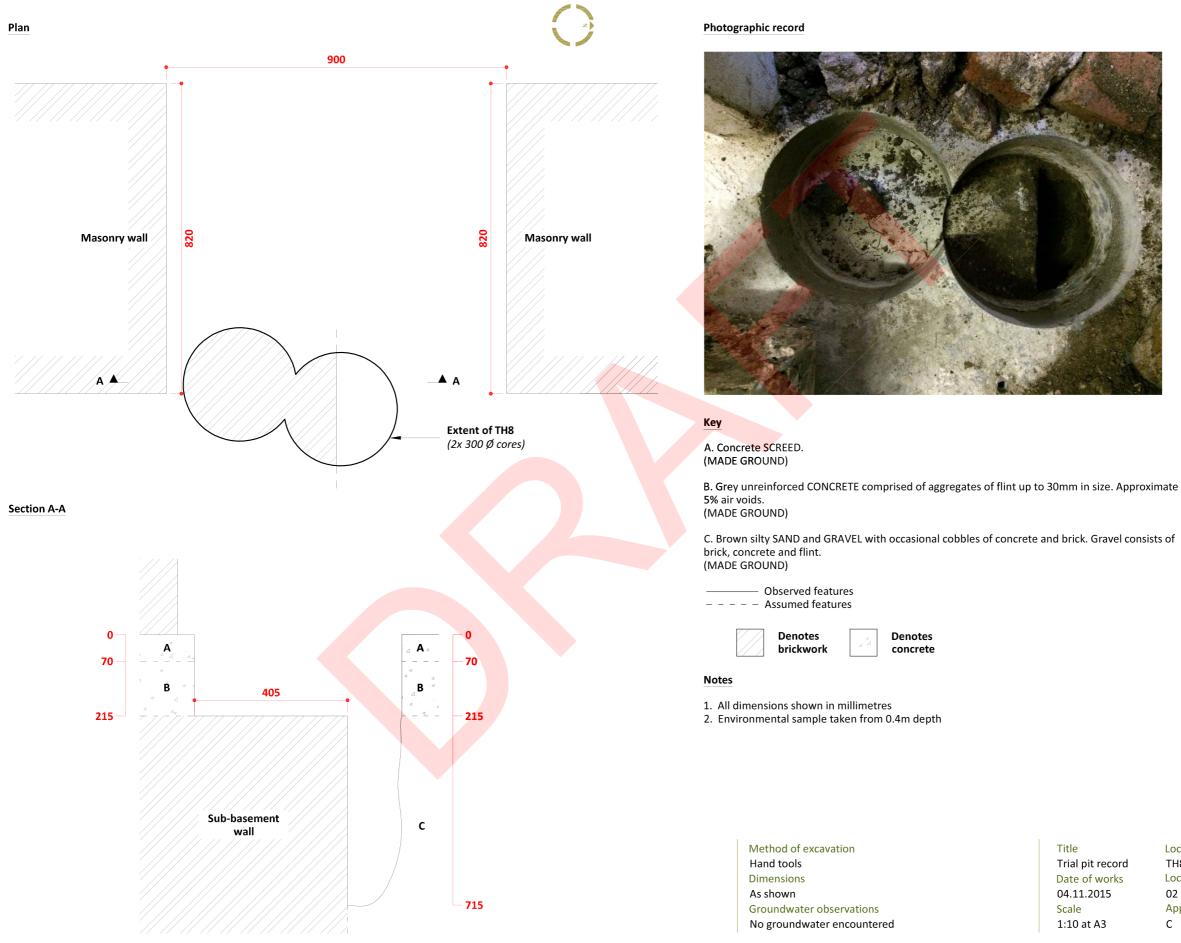
B. Grey unreinforced CONCRETE comprised of aggregates of flint up to 30mm in size. Approximately 5% air voids.

C. Brown silty SAND and GRAVEL with occasional cobbles of concrete and brick. Gravel consists of brick, concrete and flint.

Denotes concrete

1. All dimensions shown in millimetres 2. Environmental samples taken from 0.3m and 0.6m depths 3. No foundation located below internal masonry wall

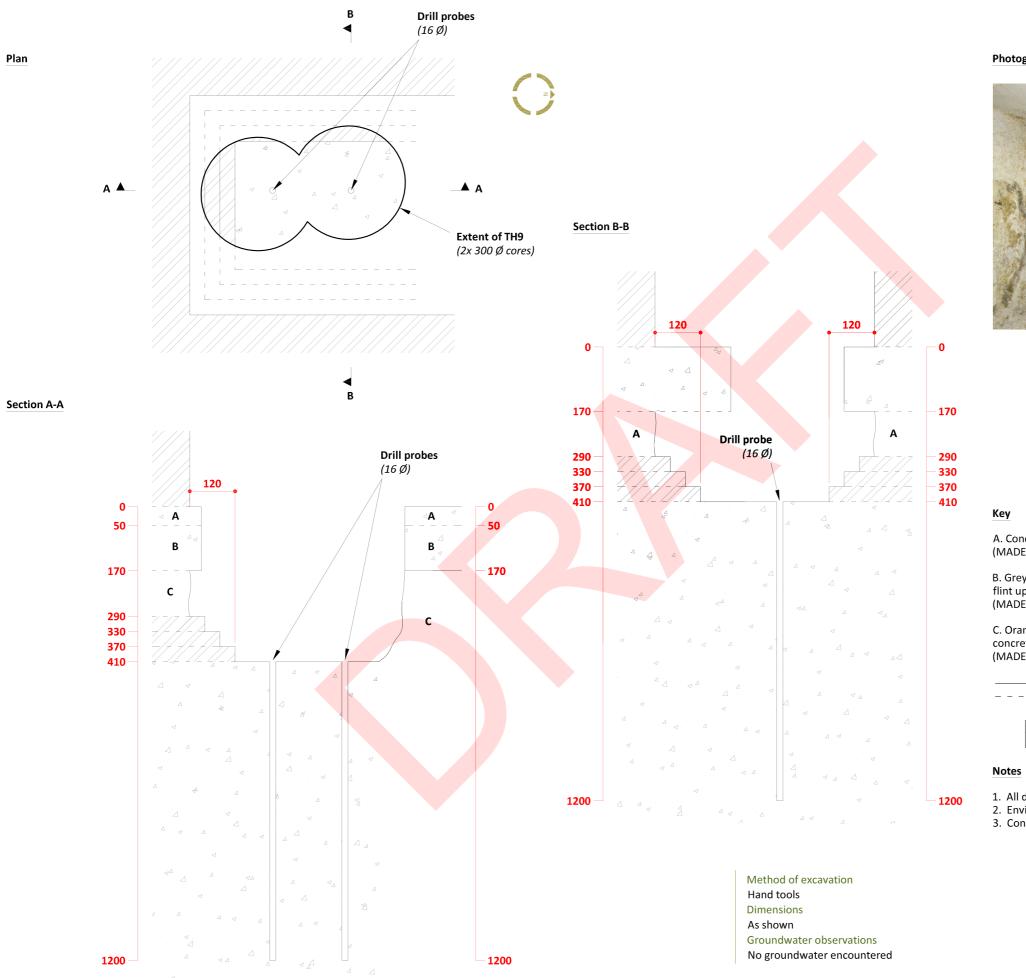
Location reference TH7 Location plan on drawing number 02 Appendix С



Report Ref: STM3384A-GO1 . Revision: O



Location reference TH8 Location plan on drawing number 02 Appendix С



Report Ref: STM3384A-GO1 Revision: O

# soiltechnics environmental and geotechnical consultants

#### Photographic record



A. Concrete SCREED. (MADE GROUND)

B. Grey unreinforced CONCRETE comprised of aggregates of flint up to 30mm in size. Approximate 5% air voids. (MADE GROUND)

C. Orange brown SAND and GRAVEL. Gravel consists of flint, concrete and brick. (MADE GROUND)

Observed features - - - - Assumed features

> Denotes brickwork



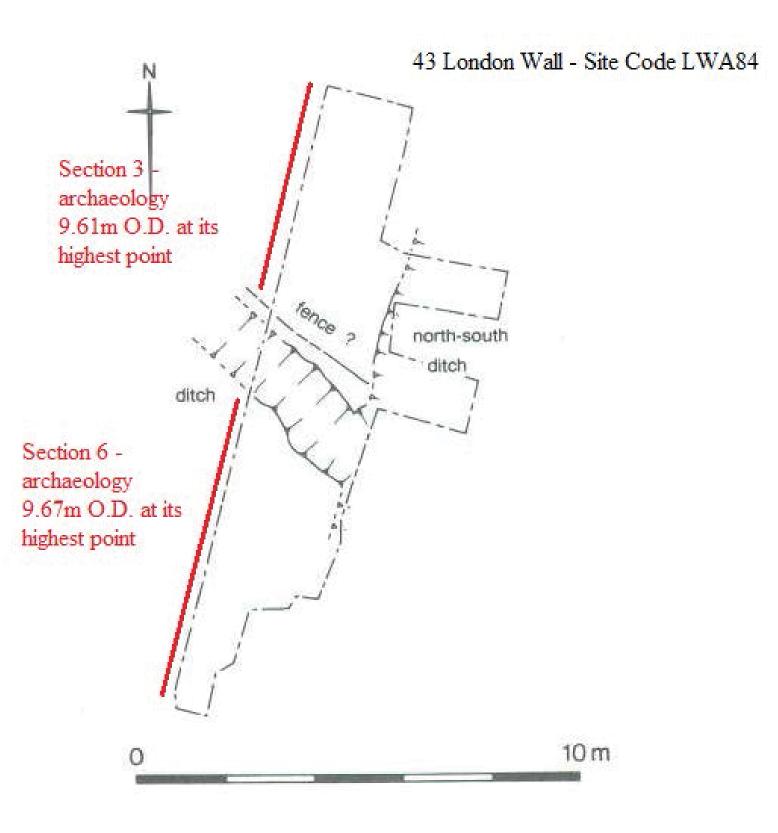
Denotes concrete

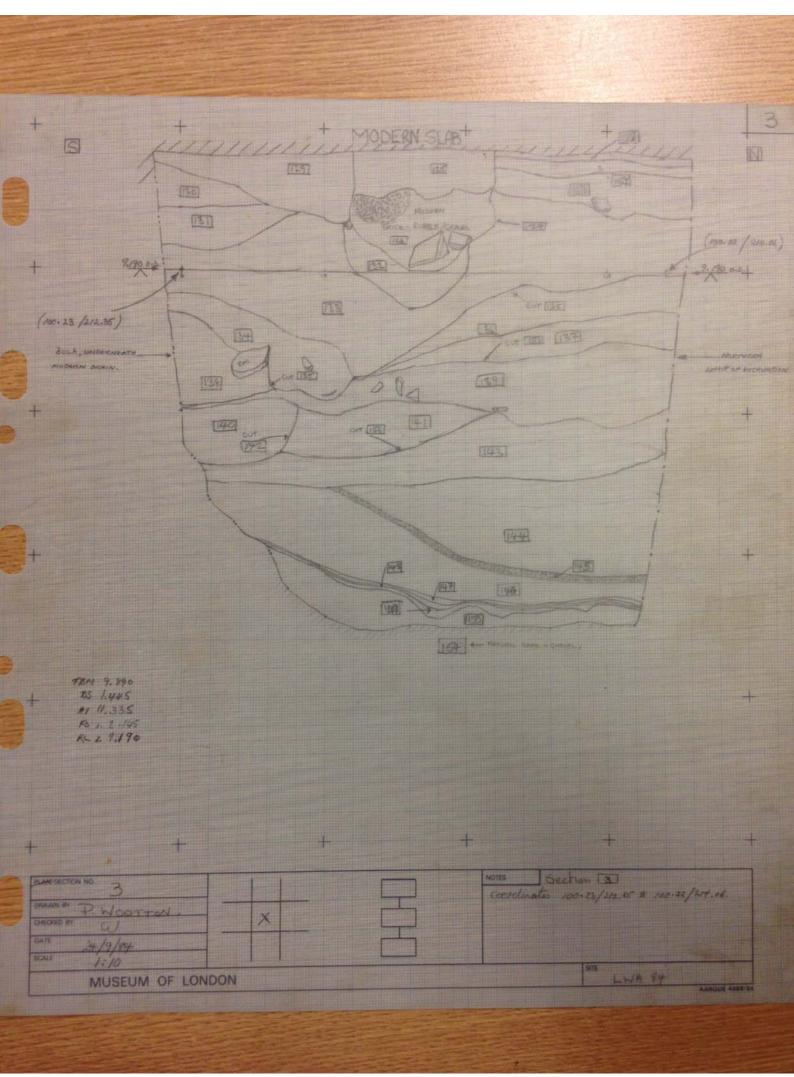
1. All dimensions shown in millimetres 2. Environmental sample taken from 0.2m depth 3. Concrete not penetrated through drill hole probing

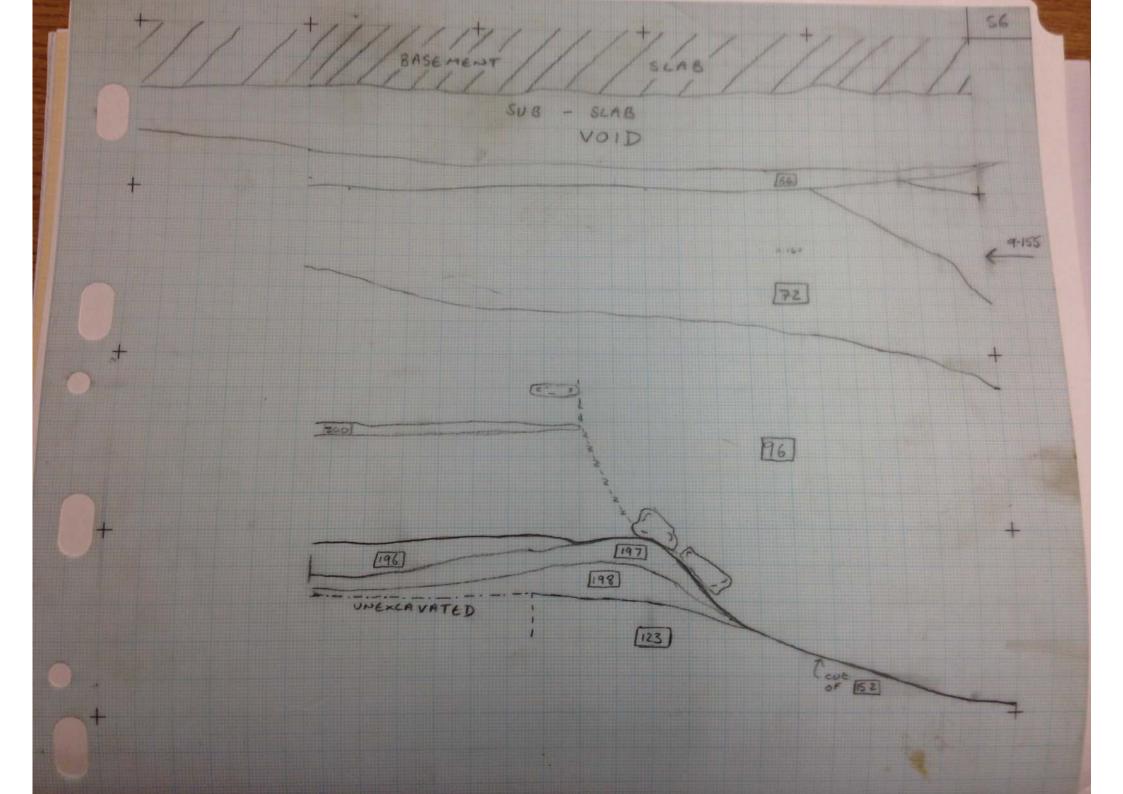
> Title Trial pit record Date of works 04.11.2015 Scale 1:10 at A3

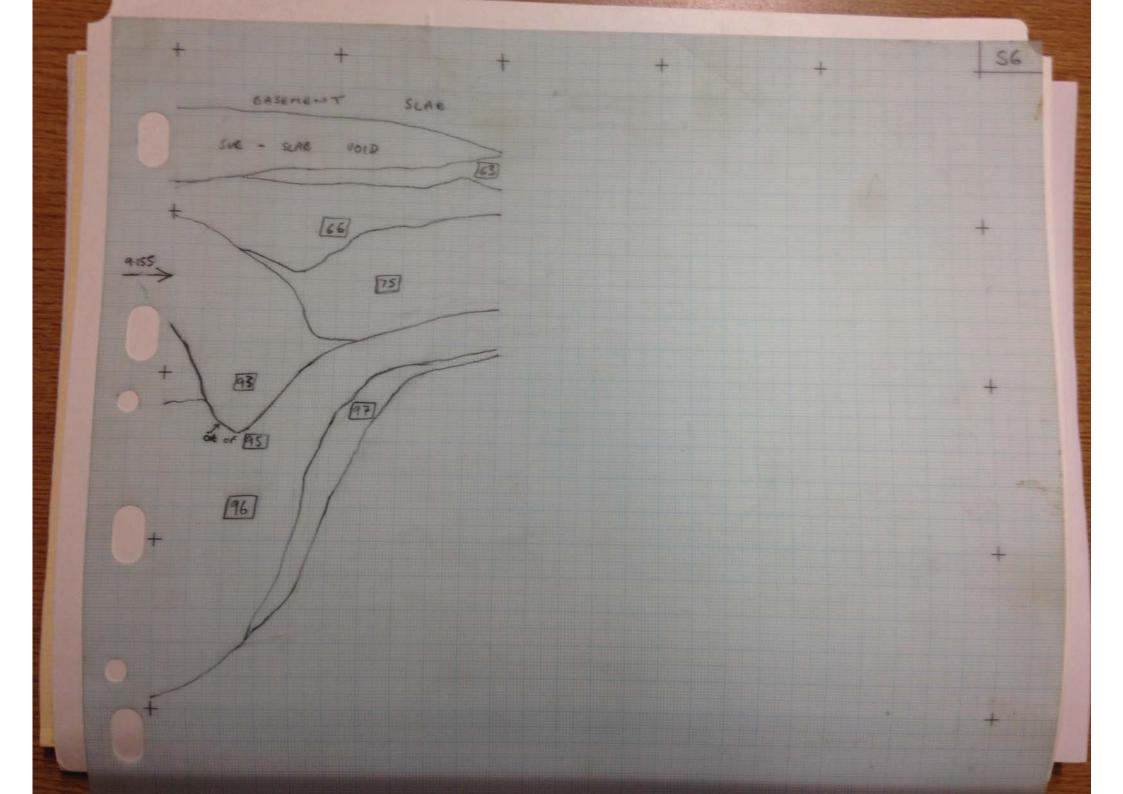
Location reference TH9 Location plan on drawing number 02 Appendix С

## APPENDIX 4: LAARC ARCHIVE FOR 43 LONDON WALL (LWA84)









TEXT SECTION 17 FIG: 19. AREA A. CONTEXTS: 196, 197, 198. MAX.LEVEL: +8.33 m.O.D./[196]. DEPOSITS: [196] Red brown, clay. [197] White cream, clay. [198] White cream, clay (60%), medium to large pebbles (40%). DISCUSSION: A small group of deposits considered to be dumps, although [196] was probably of building material origin and may possibly be part of a sill(?), (however there is no convincing evidence to support this). Excavation beyond [198] was abandonded due to rising ground water. TEXT SECTION 18 FIG: 20. AREA A. CONTEXTS: 72, 93, 95, 96, 97, 152. MAX. LEVEL: +9.29 m.O.D./[95]. PHOTO.NO: 2,4. CUTS: [95] V-shaped, sides slope at 1:3, break of slope at bottom sharp, bottom narrow and flat, depth 0.57m. [152] Regular linear, sides top 0.20m vertical then gradual slope becoming steep, break of slope with bottom gradual, bottom uneven slightly concave, depth 1.62m. DEPOSITS: Mid grey brown, clay (60%), silt (40%), frequent [72] charcoal flecks. Mid grey brown, silt (30%), clay (70%), frequent [93] charcoal and shell flecks. Dark brown, organic peaty material (30%), clay [96] (60%), (as recorded), frequent flecks charcoal, very compact. Dark grey brown, clay (30%), silt (60%), organic/ [97] ferruginous material (10%). DISCUSSION:

I UARA ARCUTUE DEDODT

short sequence representing an east/west ditch cut A [152], probably for drainage purposes, and its fills. The primary material filling cut [152] is the deposit [97], which is probably slumping. This context is in turn covered by a compact organic layer of material [96], possibly dumped into the cut [152] when it was still functioning as a drainage feature? The next fill is the more mixed deposit, a dump(?), of [72], this seems to represent no more than a temporary disuse of this ditch alingment as it is re-cut by the V-shaped cut [95]. At some point the cut [95] is itself filled by the dumped material of context [93].

TEXT SECTION	19	FIG: 21.	AREA A.
CONTEXTS:	162, 163, 164,	, 165, 166, 167,	168, 169.
MAX.LEVEL:	+9.34 m.O.D./[	[169].	
CUTS:			
[163]	Sub square.	sides steeply s	loping, taper to a
[165]	pointed bottom Oval, south	n, depth 0.10m. side vertical,	north side slopes at
[167]	gradual, botto	om rounded(?), (	oottom on north side depth 0.06m. al to steeply sloping,
[169]			epth 0.10m. L, taper to a pointed
DEPOSITS:	bobbom, depon	0.14m.	
[162]			clay (30%), (decayed
[164] [166] [168]	As for [162], As for [162],	y compacted, (f (filled [165]) (filled [167]) (filled [169])	· · · · · · · · · · · · · · · · · · ·
DISCUSSION:			
A [169], and [162],[164],[	what are proba	ably their de respectively.	[163],[165],[167] and cayed timber stakes, They do not form any
TEXT SECTION :	20	FIG: 22.	AREA A.
0.0.11.0.0.11.0.0	C		(

LEAT SECTION	ZU FIG: ZZ. AREA A.
CONTEXTS:	6, 44, 45, 48, 51, 63, 64, 66, 71, 75, 82, 83, 87, 88, 89.
MAX.LEVEL:	+9.67 m.O.D./[51]. PHOTO.NO: 5,6.
CUTS:	
[83]	Sub rectangular, sides concave, (gradient on north side 2:1, gradient on south side 1:2), bottom flat slopes down towards west, depth 0.40m.
[87]	Sub rectangular, sides concave, break of slope with bottom gradual, bottom flat, depth 0.84m.
[88]	Top irregular, sides gradually sloping, slightly concave, break of slope with bottom imperceptable, bottom flat, depth 0.11m.
DEPOSITS:	
[6]	Dark grey, clay $(60\%)$ , clay $(40\%)$ .
[44]	Mid grey brown, silt.
[45]	Mid grey, silt.
[48]	Mid brown grey, silt.
[51]	Mid grey, silt.
[63]	Mid brown grey, silt.
[64]	Dark grey, silt (80%), clay (20%), frequent flecks charcoal.
[66]	Dark grey brown, silt (40%), clay (60%).
[71]	Mid yellow brown, clay (20%), sand (80%),-matrix with medium to coarse pebbles, fragments of tile, well compacted, (metalled surface(?)).
[82]	Mid grey brown, silt, frequent fragments of pottery, shell, and flecks of charcoal and grey

120

	ash(?), loosely compacted.
	Mid grey, silt (30%), clay (70%), frequent flecks
	of charcoal, shell and orange brown ferruginous material.

#### DISCUSSION:

A series of very similar deposits, which are considered to be a number of associated dumps. The three pit cuts [83],[87] and [88], are stratigraphically related and are all filled by [82]. Context [82] is a large deposit of apparent domestic refuse material. Over [82] are a series of dumps [6],[44],[45],[48],[51],[63],[64],[66],[75] and [89] covering the major part of area A. Within this sequence of dumps is the metalled surface of [71], this is seems to represent a clear break in the dumping process, however the truncation which this context has suffered means that no structural relation ships can be described. The dumping later continues with very similar material to the earlier period of dumping.

TEXT SECTION	21 FIG: 23. AREA A.
CONTEXTS:	15, 18, 23, 55, 56, 57.
MAX.LEVEL:	+9.47 m.O.D./[55]. PHOTO.NO: 1.
CUT:	
[57]	Circular, sides vertical, break of slope with bottom, sharp, bottom flat, depth >1.20m.
DEPOSITS:	cocou, sharp, cocou rrao, dopon streom.
[15]	Light brown grey, silt (10%), medium sand (40%), frequent small and medium fragments of chalk and mortar, (40%), (as recorded), lossely compacted(?).
[18]	Grey brown, coarse sand (30%), clay (30%), medium to large pebbles (30%), (as recorded).
[23]	Mid blue grey with flecks of mid brown, fine to medium sand (30%), clay (60%), (as recorded).
[56]	Light grey green brown, medium sandy mortar, frequent flecks and small to large fragments of chalk, loosely compacted.
MASONARY:	ALLETTER LASS IN.
[55]	Horizontally concave faced, rough hewn, chalk blocks (approx. 0.30 X 0.17 X 0.22m), laid in six regular courses to form a circle(?), (bonded with a soft light grey brown medium sandy mortar).

#### DISCUSSION:

A chalk lined well [55], constructed in the circular(?) cut [57], and packed with loose construction debris [56] behind the blocks. Each block was marked with a masons mark, probably a tally or assemble mark as they seemed to relate to the blocks in each particular course.

The fills [23] and [18] both appear to be 'natural' accumulations at the base of the well, however [15] is clearly the post destruction backfill.

# PCA

#### PCA SOUTH

UNIT 54 BROCKLEY CROSS BUSINESS CENTRE 96 ENDWELL ROAD BROCKLEY LONDON SE4 2PD TEL: 020 7732 3925 / 020 7639 9091 FAX: 020 7639 9588 EMAIL: info@pre-construct.com

#### **PCA NORTH**

UNIT 19A TURSDALE BUSINESS PARK DURHAM DH6 5PG TEL: 0191 377 1111 FAX: 0191 377 0101 EMAIL: <u>info.north@pre-construct.com</u>

#### PCA CENTRAL

THE GRANARY, RECTORY FARM BREWERY ROAD, PAMPISFORD CAMBRIDGESHIRE CB22 3EN TEL: 01223 845 522 FAX: 01223 845 522 EMAIL: info.central@pre-construct.com

#### PCA WEST

BLOCK 4 CHILCOMB HOUSE CHILCOMB LANE WINCHESTER HAMPSHIRE SO23 8RB TEL: 01962 849 549 EMAIL: info.west@pre-construct.com

### PCA MIDLANDS

17-19 KETTERING RD LITTLE BOWDEN MARKET HARBOROUGH LEICESTERSHIRE LE16 8AN TEL: 01858 468 333 EMAIL: info.midlands@pre-construct.com

