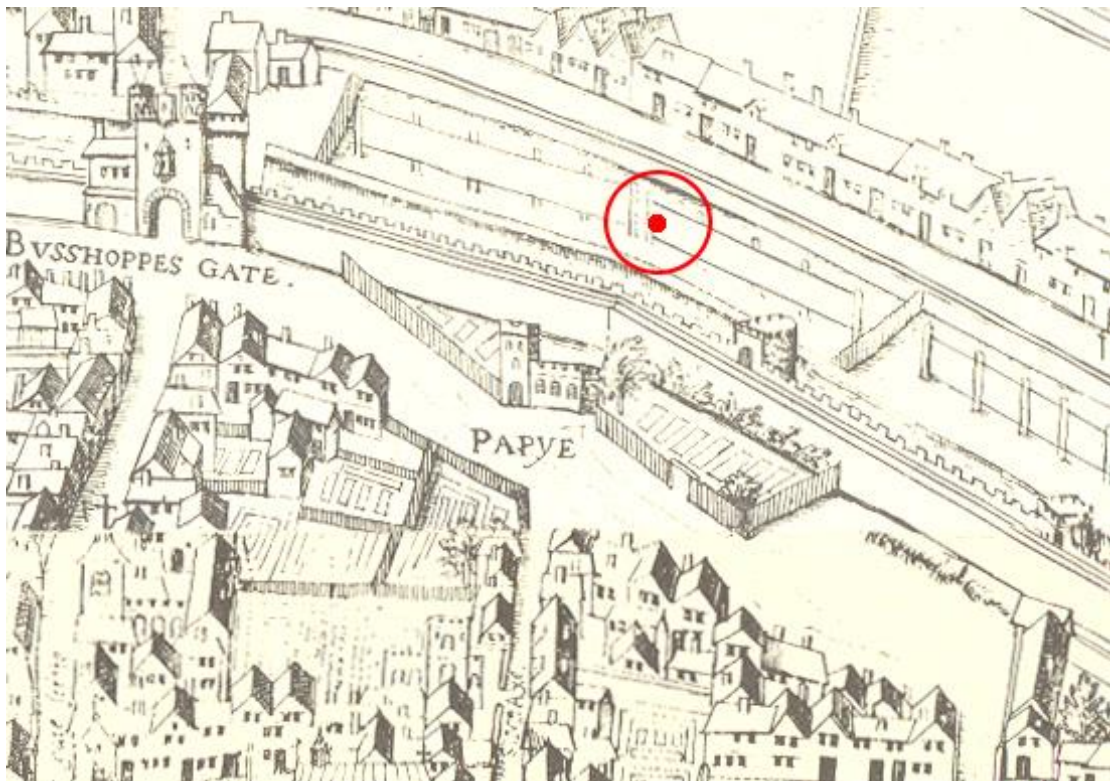
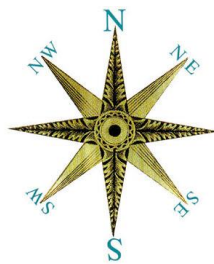


ST MARY AXE
Thames Water Utilities
Sewer connection works
CITY OF LONDON EC3A



June 2013

COMPASS



ARCHAEOLOGY

ST MARY AXE
Thames Water Utilities
Sewer connection works
CITY OF LONDON EC3A

Site Code: MRX12

NGR: TQ 3334 8138 (Centre point)

COMPASS ARCHAEOLOGY LIMITED

5-7 SOUTHWARK STREET

LONDON SE1 1RQ

Telephone: 0207 403 9660

Email: mail@compassarchaeology.co.uk

Author: James Aaronson

June 2013

©Compass Archaeology Limited

Abstract

Between the 7th of July 2012 and the 20th May 2013 two test pits and a construction shaft were monitored by Compass Archaeology during groundworks associated with a new sewer connection towards the northeastern end of St Mary Axe, City of London. The works were located over the line of the former City ditch, which was backfilled by the 16th century.

The trial pits and construction shaft all showed signs of heavy disturbance in recent times either through the insertion of modern services or through later post-medieval development of the area in the form of brick-built structures. Made ground was visible for almost the entire depth of the final shaft, (0.45-4.5m below ground level), with only a metre of earlier, truncated, silt deposits observed towards the base of the pit, (4.5-5.5m below ground level). These deposits directly overlay natural ground, observed from c5.5m-7.5m below ground level – the interface between the two correlating to c6.75mOD.

The dark-grey clay-silt deposit observed towards the base of pit 3 is believed to be a later medieval backfill / silting episode within the base of the City ditch.

Contents

	Page
1 Introduction	1
2 Site location, geology, and topography	2
3 Archaeological and historical background	3
4 Archaeological research questions	7
5 Methodology	7
6 Results	8
7 Conclusions	18
8 Bibliography	18
Appendix I Ceramic Building Material analysis by <i>Sue Pringle</i>	19
Appendix II Pottery analysis by <i>Paul Blinkhorn</i>	19
Appendix III OASIS data collection form	20
Appendix IV London Archaeologist summary	23

Figures

Front cover –	Extract from the ‘Copperplate Map’ c1559 with approximate location of groundworks circled in red	
		Page
Fig.1	Site location in relation to the A-Z map of London	1
Fig.2	Location of trial pits 1 and 2, and shaft 3 in relation to the OS Map	2
Fig.3	Extract from the ‘Copperplate Map’ c1559 with approximate location of groundworks circled in red	4
Fig.4	Extract from Ogilby and Morgan’s Map 1676 with pit locations circled	5
Fig.5	Extract from Horwood’s 1813 Map of London showing the extension of St Mary Axe having been cut through the houses on the north side of Camomile Street	6
Fig.6	Pit 1 facing NW towards the corner of Houndsditch and St Mary Axe	9
Fig.7	Pit 1 facing NNE showing the column of surviving 18 th century made ground	10
Fig.8	Pit 2 facing ENE with services present at both ends and the sondage sunk into the passageway in the centre	11
Fig.9	Blocked passageway facing ENE	12
Fig.10	Blocked passageway facing NE	13
Fig.11	Sondage facing SSW	14
Fig.12	Pit 3 facing SW	15
Fig.13	Pit 3 facing S showing the brick passageway and possible culvert in SW section	16
Fig.14	Pit 3 at c5.5m below ground level showing the dark-grey silt overlying natural gravels and sands	16
Fig.15	Base of pit 3 at c6.5m below ground level showing natural gravel and sands	17
Fig.16	Natural gravels as excavated from the pit	17

Figs. 1 and 2 reproduced from OS data with the permission of the Ordnance Survey on behalf of The Controller of HMSO. © Crown Copyright. All rights reserved. Compass Archaeology Ltd., licence no. AL 100031317

1 Introduction

1.1 This document forms a summary of the results of a watching brief carried out between the 7th of July 2012 and the 20th May 2013 on St Mary Axe, (the City of London, EC3A), during trial pitting works prior to, and during the final installation of, a new connection between two existing mains sewers.

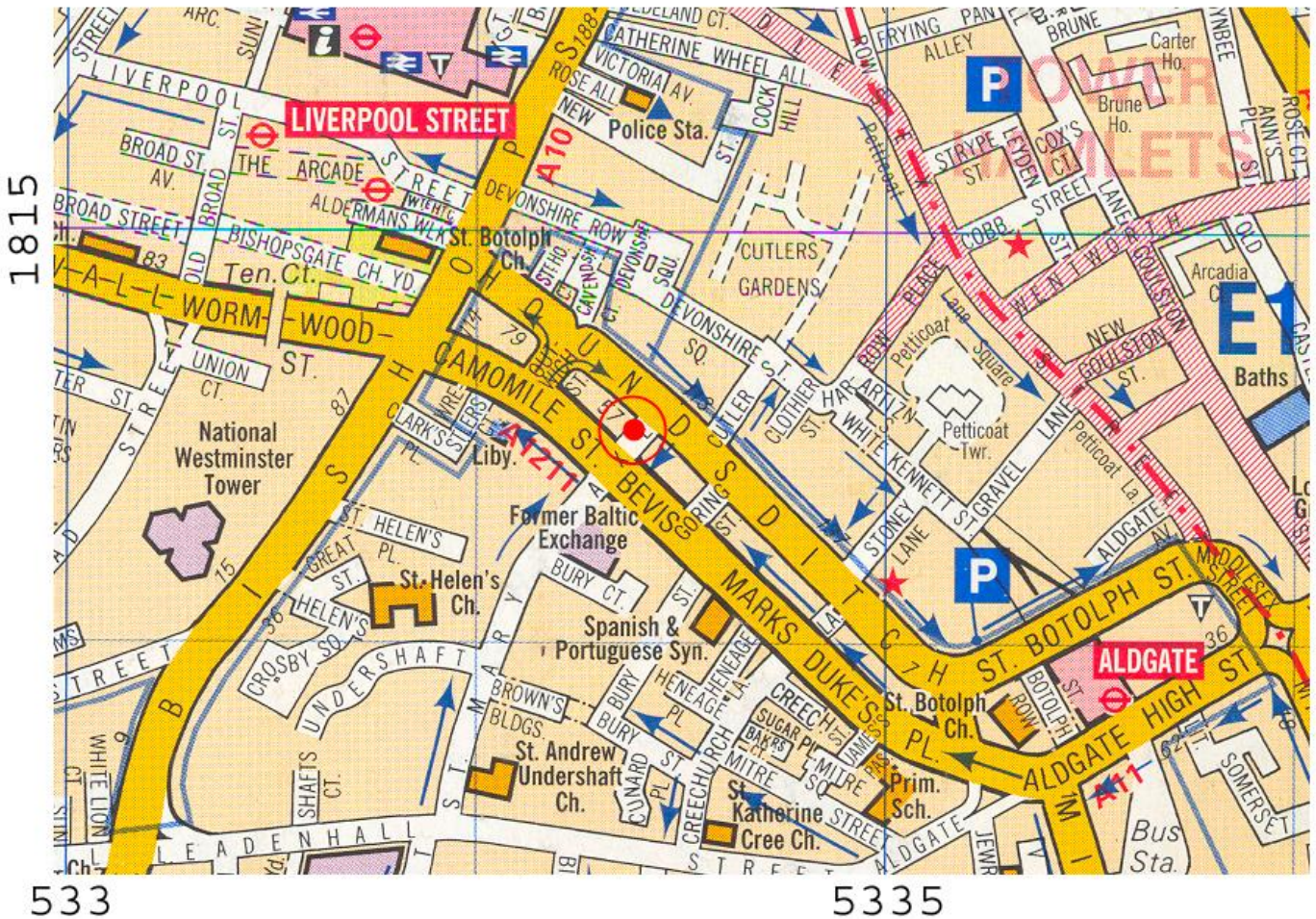


Fig.1: Site location in relation to the A-Z map of London

1.2 The groundworks included the excavation of 2 trial pits at the northwestern end of St Mary Axe near the junction with Houndsditch between the 7th and the 28th of July 2012. As a result a single vertical shaft, (Pit 3), was dug in the location of trial pit 2 between the 9th and 20th of May 2013 followed by a horizontal tunnel to connect the two existing sewers.

1.3 The watching brief was commissioned by Thames Water and groundworks carried out by Optimise. The watching brief was conducted after recommendation and advice from Kathryn Stubbs, Assistant Director of Historic Environment at the City of London. During the project assistance was given by William Chan, (Thames Water Utilities), and Neil Fleming, (Optimise).

2 Site location, geology and topography

- 2.1 The site is located to the northern end of St Mary Axe on the junction with Houndsditch. One of the trial pits was excavated on the NW corner of the junction and the other two approximately 16m from the northwestern end of St Mary Axe. The site does not fall into the boundary of any Scheduled Ancient Monuments, though the line of the Roman and medieval Wall of the City of London does cross the street further to the southeast, (Scheduled Monument No. LO26M).
- 2.2 The British Geological Survey 1998, Sheet no.256: North London, locates the site within an area of Langely Silt over 'Brickearth', surrounded by Taplow gravels.
- 2.3 The site is in a relatively flat area, with the ground gently sloping to the south and north

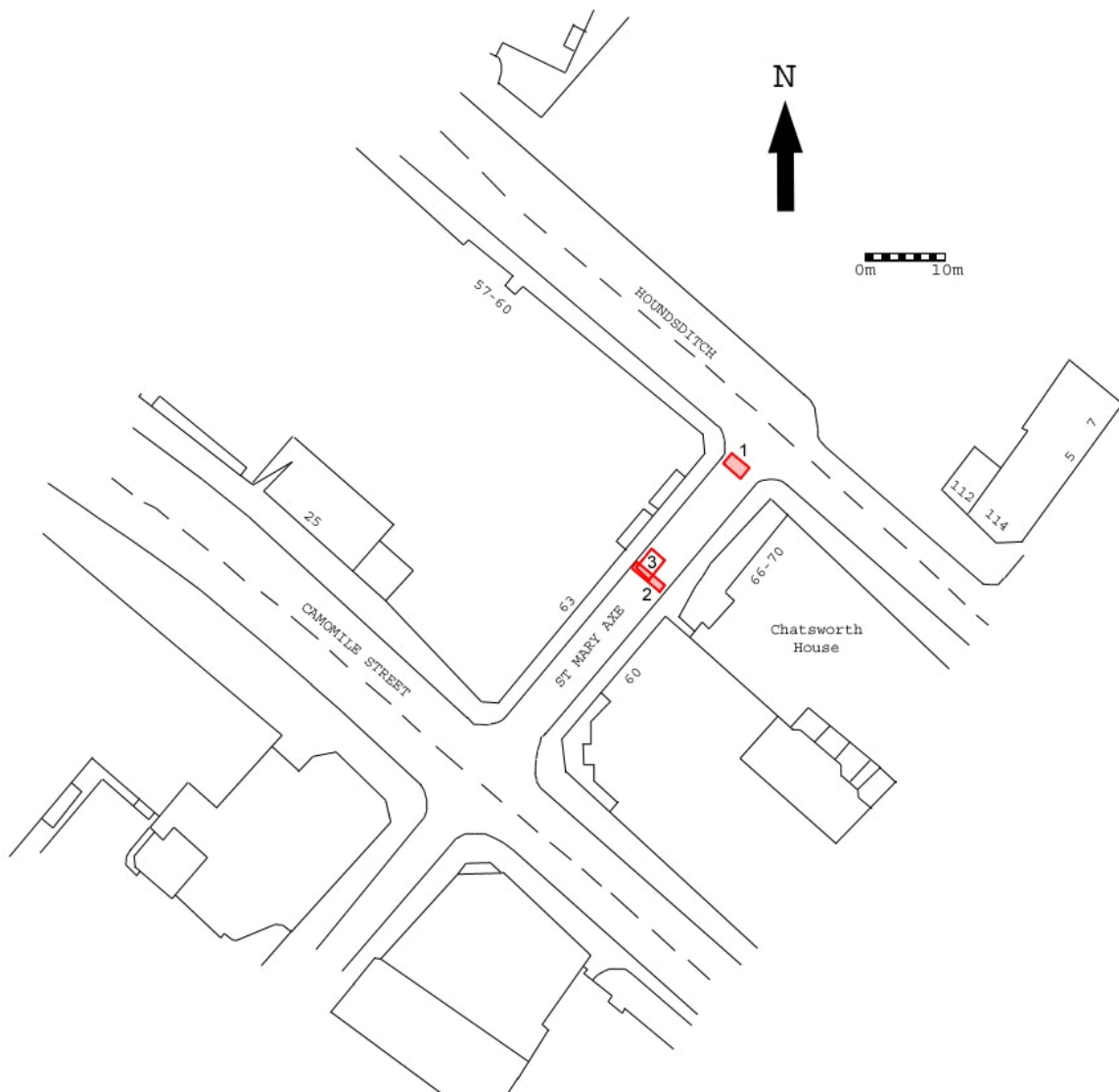


Fig.2: Location of trial pits 1 and 2, and shaft 3 in relation to the OS Map (adapted from a base drawing provided by Thames Water)

3 Archaeological and historic background

A more detailed background to the site area can be found in Section 3 of the WSI prepared by Compass Archaeology prior to commencement of the groundworks and this report should be read in conjunction with that document. A brief synopsis will be reiterated here.

3.1 Prehistoric

The occasional prehistoric find has been found in this area, although excavation has not produced any evidence for significant prehistoric activity or settlement. For example, a Bronze Age socketed axe was found on St Mary Axe (GLHER Number: 041141/00/00).

3.2 Roman

A section of Roman city wall and bastion is located on St Mary Axe, to the south of the groundworks and immediately north of the junction with Bevis Marks, running approximately east-west across the road (Scheduled Monument No: 26M). The pits, therefore, were located close to significant Roman remains.

Other Roman remains have also been found in the immediate area. For example, Roman quarrying at 25–51 St Mary Axe (GLHER Number: 042698/00/00); fragments of Roman tombstones, (Pastscape Record Monument Number: 966498); and a ragstone wall with tile bonding courses was uncovered parallel to the city wall at the junction of St Mary Axe and Bevis Marks, possibly indicating a Roman building in this location (GLHER Number: 041026/00/00 and 041025/00/00).

Importantly, Houndsditch follows the line of the Roman defensive ditch which ran outside the city wall. Eight Roman burials were found within this ditch during excavations at 58–60 Houndsditch in 1989, (GLHER Number: 041705/00/00).

3.3 Medieval

Extensive evidence for medieval activity has been found within this area.

The city wall remained standing into the medieval period, with the original Roman defensive ditch that ran along the wall thought to have been re-cut at least twice. The early medieval ditch has been found in various archaeological excavations, in particularly during excavations at 47–56 Houndsditch (GLHER Number: 041937/00/00). Here, the ditch was observed within 12m of the external face of the wall, running parallel with the wall, cut into the natural deposits for a recorded depth of 1.5m, and extending for a width of at least 8.5m (into the limit of excavation), (Maloney and Harding, 1979). The section of medieval ditch uncovered during a 1989 excavation at 58–60 Houndsditch had dog skeletons in its base (it is believed that this is where the name

‘Houndsditch’, which first appeared in the 13th Century, came from: the tendency for the local populace to dispose of the dead animals in this section of the town ditch) (GLHER Number: 041936/00/00). DGLA excavations in 1988 at 63–71 St Mary Axe also uncovered the medieval ditch, with stakeholes in its base, which are believed to have been stock pens (GLHER Number: 041941/00/00).

A later ditch was then recut as observed in the excavations at 47-56 Houndsditch, where its outer edge was positioned 17m from the wall (it is believed to have been far narrower: a maximum of 18m in width). It has been suggested that this ditch was constructed in 1477, partly based on Stow’s record of the ditch being “cast” (cut?) in this year (Maloney and Harding, 1979). The 1559 Copperplate Map, (Fig.3), depicts the narrower, re-cut ditch, close to the wall with the tenter grounds beyond, and the street ‘Houndsditch’ beyond this.

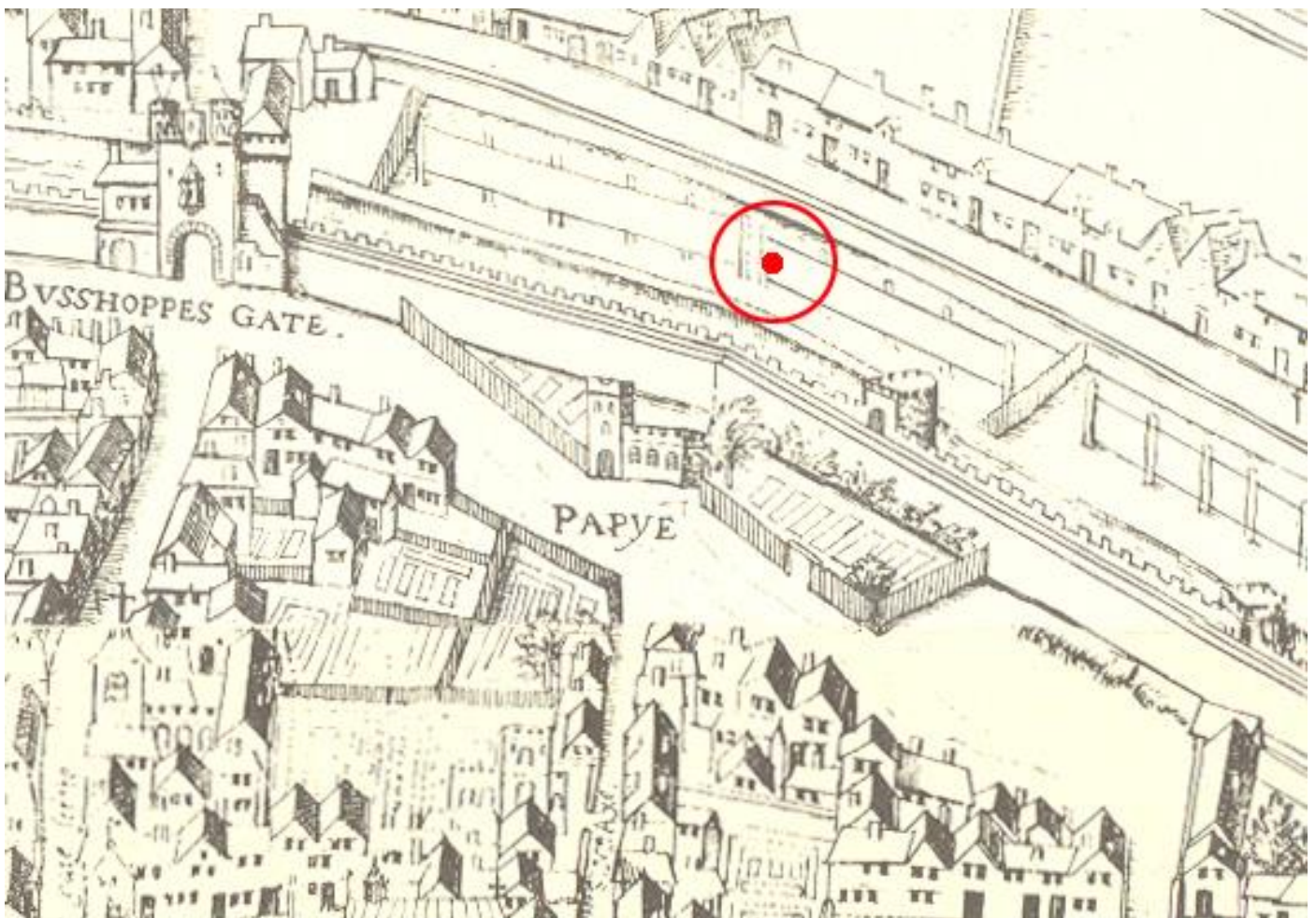


Fig.3: Extract from the ‘Copperplate Map’ c1559 with approximate location of groundworks circled in red. The City wall, the narrow, later-Medieval, ditch, ‘tenter grounds’, with the cloth staked out, and Houndsditch beyond are all visible

The later-medieval ditch gradually silted up towards the end of the 16th Century, before its final deliberate infilling in the early 17th century, the upper fills consolidated and levelled off with bands of clean sand and gravel. Ogilby and Morgan’s 1676 Map importantly depicts the City Wall but with no ditch,

indicating that it had been infilled by this date. The area of the ditch is depicted as being developed for residential use, with the relatively wide road 'Houndsditch' running along this line.

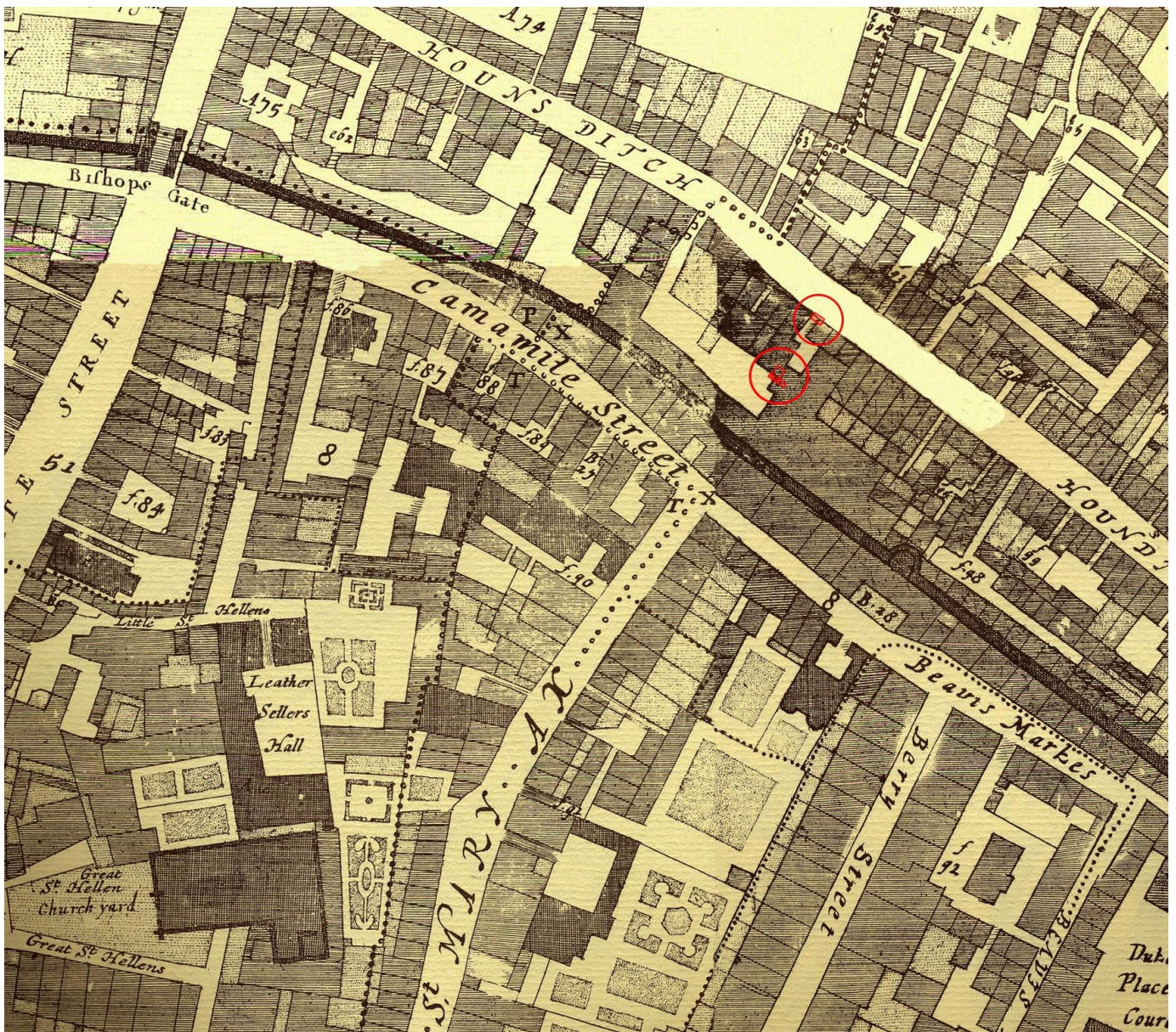


Fig.4: Extract from Ogilby and Morgan's Map 1676 with pit locations circled

Domestic activity is represented by medieval pits uncovered during a 2007 evaluation at 46–50 St Mary Axe (GLHER Number: MLO99007); and further medieval rubbish pits uncovered during the 1989 excavation at 25–51 St Mary Axe (GLHER Number: 042700/00/00).

3.4 Post-Medieval

Due to the City wall St Mary Axe did not originally stretch all the way north to Houndsditch, terminating instead at the junction with Camomile Street / Bevis Marks. John Strype states in his Survey of the Cities of London and Westminster:

'St Mary Axe goes out of Leadenhall Street, and runs Northwards to Camomile Street by London Wall. It is a Street graced with good Buildings, and much inhabited by eminent Merchants. Out of this Street, and almost over against St Andrew's Undershaft Church, is a Passage into Great St. Helens; and towards the North End is Soper's Yard, a very mean Place, opposite to which is Fletchers Hall'.

This means that the area in which the three pits were located lay within a developed area, rather than a roadway. Remains of post-medieval buildings have been found in this area, such as cellar walls and cess-pits uncovered at 25–51 St Mary Axe in 1989 (GLHER Number 042703/00/00 and 042704/00/00). The extended road was constructed at some point in the later half of the 18th-century, as the road is not depicted on Rocque's 1746 Survey, (not shown), but is on Horwood's 1813 Map (fig.5). It was therefore expected that post-medieval remains would survive to some extent within the roadway and the scope of the pits.

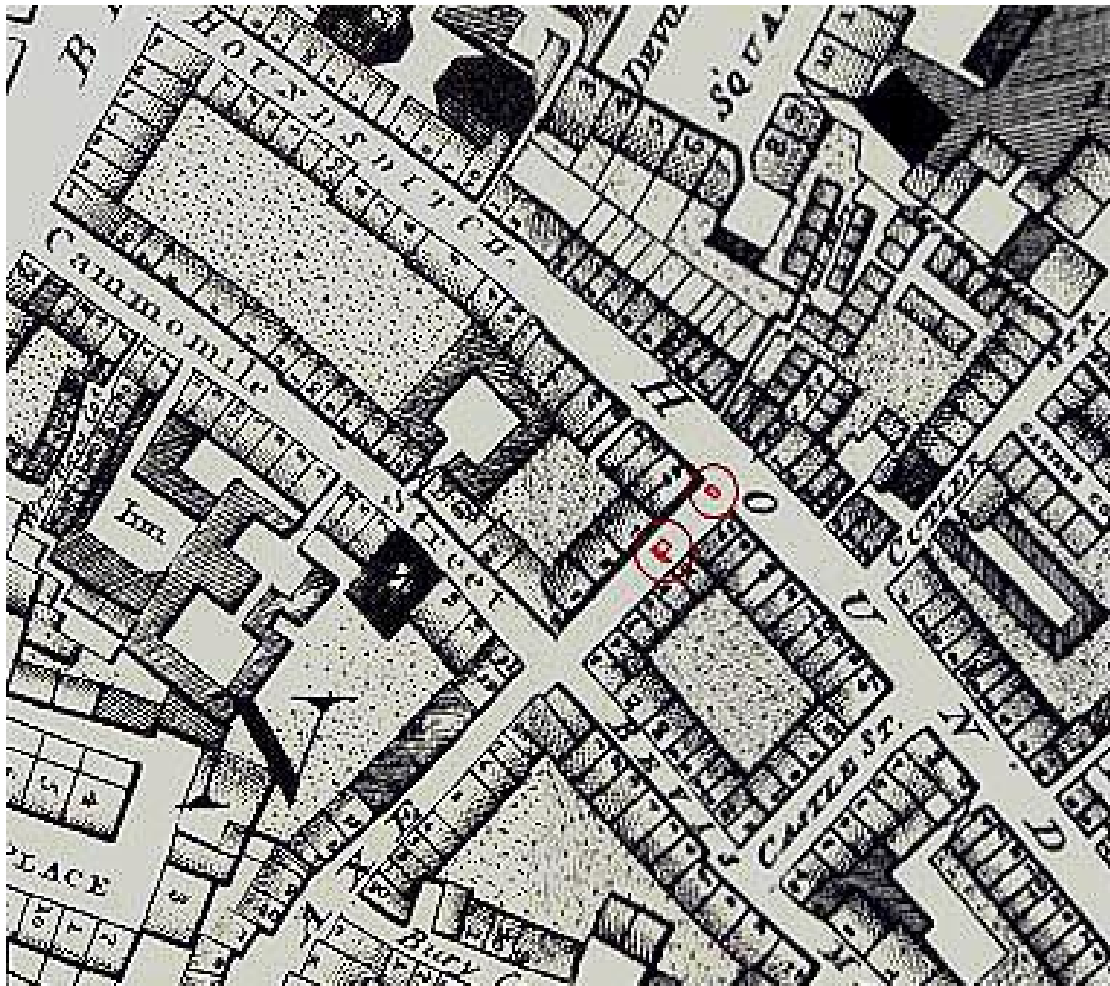


Fig.5: Extract from Horwood's 1813 Map of London showing the extension of St Mary Axe having been cut through the houses on the north side of Camomile Street after removal of the City wall

4 Archaeological research questions

The groundwork presented an opportunity to address a number of research questions:

- Is there any surviving evidence for Roman activity in this area, particularly the ditch which ran alongside the city wall?
- Is there any evidence for medieval activity, particularly the ditch which was re-cut on two separate occasions during the medieval period?
- Is there any evidence for the tenter grounds, believed to be located within the area of the trial pits?
- Do any deposits relating to the infilling of the ditch, thought to have occurred in the early 17th Century, survive? What is the nature of these?
- Is there any evidence for the subsequent (early post-medieval) development of the area? This is particularly relevant because the area in which these trial pits are located originally fell within the area of earlier post-medieval buildings, before the road was extended into this area.

5 Methodology

5.1 Fieldwork

The fieldwork was carried out in accordance with current English Heritage guidelines (in particular, *Standards and Practice in Archaeological Fieldwork, Guidance Paper 3*) and to the standards of the Institute for Archaeologists (*Standard and Guidance for Archaeological Watching Briefs*). Overall management of the project was undertaken by a full member of the Institute.

In the case of the trial pits, (1 and 2), ground reduction was undertaken by a 5 tonne mechanical excavator fitted with a toothless bucket and finished off by hand around exposed services. The vertical shaft, (3), was dug by mechanical excavator to a depth of *c*1.5m, and then hand dug to the full depth of 7.5m using shovel and where necessary a pneumatic drill to loosen the deposits. Shoring was used from the outset.

Adequate time was given for investigation and recording of the observed pits, although every effort was made not to disrupt the contractors' programme. The archaeological monitoring included an on-site photographic and written record. A *pro forma* Trench Record sheet was completed for the excavations; recording the nature of exposed deposits and details of any archaeological finds and features. Where suitable, finds/samples were collected from deposits for dating purposes. Photographs, recording representative trench sections and general site locations, were also taken. Levels were derived from an OSBM situated on the east frontage of St Botolph's without Bishopsgate, (value +16.37m)

The same process was observed in the case of the shaft pit, but due to health and safety constraints observations were made from the side of the trench and deposits were sifted through upon their being brought to the surface and placed in a large skip. Because of this method daily visits were made to site to monitor the spoil.

Close liaison was maintained with the groundworks team to ensure a presence on site as and when necessary. Thames Water and Kathryn Stubbs were kept advised of the progress of the fieldwork.

5.2 Post-excavation work

The fieldwork was followed by off-site assessment and compilation of a report, and by ordering and deposition of the site archive under site code MRX12.

Finds were treated in accordance with the appropriate guidelines. Finds and artefacts were retained and bagged with unique numbers related to the trench records, although some of this material was later discarded following assessment. Assessment was undertaken by appropriately qualified staff.

Copies of this report will be supplied to the Client, Historic Environment Department (City of London), and the local studies library. A short summary of the fieldwork has been appended to this report using the OASIS Data Collection Form, and in paragraph form suitable for publication within the 'excavation round-up' of the *London Archaeologist*.

6 Results

6.1 The fieldwork took place over the course of three phases of excavation between the 7th of July 2012 and the 20th May 2013. These will be discussed in the order in which they were dug and as labelled in fig.2

6.2 PIT 1

Pit 1 was dug on the 7th of July 2012 on the northwest corner of St Mary Axe on the junction with Houndsditch. The pit measured approximately 2.9m long, (NW-SE), by 1.7m wide, (NE-SW) and to a maximum depth of 1.05m. The majority of the pit revealed no in situ archaeological deposits or features and the underlying stratigraphy was truncated by existing service cuts and their associated backfills. The southeastern side of the pit exposed telecommunication ducting at 350mm below ground level; surrounded by yellow sand and sealed beneath 300mm of concrete road base and a further 50mm of tarmac. The northwestern side of the pit had existing water pipes and other services sealed within a mixture of yellow-brown sand and purple-brown MOT Type 1 sealed beneath the same 350mm of concrete and tarmac.

The only exception to this observed stratigraphy was a thin 'corridor' of brown-grey made-ground surviving down the middle of the trench. The made

ground was comprised of a silty-sand-like material containing occasional crushed Ceramic Building Material, (CBM: tile and brick etc), some 17th-19th century pottery and pieces of clay tobacco pipe. The pottery included a single sherd of Tin-glazed Ware, (c1600-1800), Salt-glazed stoneware, (mid 18th century). At the northeastern end of the surviving deposit and projecting from the section by 290mm were three courses of yellow stock brick footings, cut through and built over the 18th century deposit. The footings were not of considerable age and they had been truncated by the service cuts to the East.



Fig.6: Pit 1 facing NW towards the corner of Houndsditch and St Mary Axe, post downpour (1m scale)



Fig.7: Pit 1 facing NNE showing the column of surviving 18th century made ground, modern wall footings and the abundance of existing services crossing the roadway (1m scale)

6.3 PIT 2

The second pit was excavated on the 28th July 2012. It was located c16m from the northwest corner of the junction between St Mary Axe and Houndsditch. It extended from the west kerb eastwards for 4.5m and was cut 0.95m wide and up to 2.5m deep in the centre, but 0.5m elsewhere due to the concentration of existing services.

The existing tarmac road surface was 80mm thick and overlay a bed of concrete at least 380mm thick. The concrete directly overlay several service cuts and ducting for the easternmost 2.45m and the westernmost 1.3m.

In the section of trench between these services a sondage was dug to a depth of 2.5m and which broke through the roof of a brick built passageway aligned NW-SE across the street. The structure was built from red, hand-made bricks measuring approximately 230mm long by 105mm wide and between 66-69mm thick, bonded with coarse lime mortar. The structure was no more than 1.05m wide, as the span of the arch was intact in section, as was the northern wall. The southern side of the structure was truncated away and revealed made ground and backfill to the base of the pit at 2.5m below ground level. The top of the arched roof was 950mm below ground level making the excavated height of the passageway 1.55m. The base of the passageway was not reached. At the eastern end of the passageway, as exposed, a red brick wall had been crudely built across the passage, blocking access in either direction. It was only a single stretcher thick at the top of the wall but appeared to step out in the lower part of the pit by 100mm suggesting a thicker wall foundation towards the base. The passageway had been truncated at the western end by the insertion of a cast iron service pipe. The whole

structure had been backfilled with a sterile brown-orange sand and gravel mix. The nature of this backfilled material and the fact that the east side of the passageway had been truncated by the insertion of a pipe suggests that the passageway had been encountered previously and deliberately backfilled in the recent past.

The bricks were broadly dated to the middle of the 18th century to the middle of the 19th century, (1750-1850)¹, and so the passageway probably relates to an underground passage linking two properties. These properties could have become separated by the construction of the road. It was not unusual for cellars to have been linked in such a way, especially if they were shops or storehouses.



Fig.8: Pit 2 facing ENE with services present at both ends and the sondage sunk into the passageway in the centre

¹ Pers.comm.. Sue Pringle, see Appendix I pg.20



Fig.9: Blocked passageway facing ENE. A noticeable gap between the passageway wall and the brickwork blocking any access is clearly visible (1m scale)



Fig.10: *Blocked passageway facing NE. The crudely built wall blocking access is visible, as is the fact that the archway is constructed independently from the east and west section of wall, 'wedged' between the two (50cm scale)*



Fig.11: Sondage facing SSW showing the broken spring-work of the passageway arch below made ground and the existing road base

6.4 *PIT 3 (construction shaft)*

The vertical connection shaft was dug between the 9th and the 20th of May 2013, partially within the northwestern side of Trial Pit 2. The shaft measured approximately 3.2m long, (NE-SW), by 2.1m wide, (NW-SE) at the base. The shaft was dug vertically from 14.22mOD for 7.5m, to approximately 6.75mOD, and then continued as a tunnel NW to join up with the existing sewer in Houndsditch. Due to health and safety constraints Compass Archaeology were not permitted to enter the shaft itself and so all observations were made from the side of the trench on a daily basis.

The uppermost 0.45m of the shaft comprised the existing tarmac road surface overlying a bed of concrete. Below this to a depth of c4.5m below ground level was a mixture of made ground and existing service backfill. The brick-built passage observed in Trial Pit 2 was visible in the southwest section up to a depth of approximately 4.2m. In the northwest section the existing Victorian mains sewer was visible, to a similar depth. Across the southwestern edge of the pit, and abutting the brick passage, an earlier, brick-built culvert was seen from approximately 4m below ground level. The full depth of the passage wall and culvert were not seen due to the insertion of shoring.



Fig.12: *Pit 3 facing SW showing shoring down to 3.5m below ground surface. Base of pit at 4.2m*



Fig.13: Pit 3 facing S showing the brick passageway and possible culvert in SW section. Approximate depth is 4.2m at base

Between 4.5-5.5m below ground level, (7.75-6.75mOD), a dark-grey to black, damp and pliable clay-silt, was observed which contained several domestic animal bones including part of a sheep skull, a cow horn, possibly a cow jaw and part of a cow radius. A single sherd of Late-Medieval Sandy Transitional Ware pottery recovered from the spoil was dated to the late 15th to early 16th century. It is thought that this deposit may represent the lowermost fill of the medieval city ditch. Below this deposit natural orange-brown gravels and silts were observed. Therefore the final two metres or so of the shaft were dug through natural gravel deposits.



Fig.14: Pit 3 at c5.5m below ground level showing the dark-grey silt overlying natural gravels and sands

As a result it was not deemed necessary for further visits to be made to observe the horizontal tunnel, as the excavations would be taking place below the level of any expected archaeology.



Fig.15: Base of pit 3 at c6.5m below ground level showing natural gravels and sands.



Fig.16: Natural gravels as excavated from the pit.

7 Conclusions

The trial pits and construction shaft all showed signs of heavy disturbance in recent times either through the insertion of modern services or through later post-medieval development of the area in the form of brick-built structures. Made ground was visible for almost the entire depth of the final shaft, (0.45-4.5m below ground level), with only a metre of earlier, truncated, deposits observed towards the base of the pit, (4.5-5.5m below ground level). These deposits directly overlay natural ground; this was observed from c5.5m below ground level correlating to c6.75mOD.

The dark-grey clay-silt deposit observed towards the base of Pit 3 is believed to be a backfill / silting episode within the base of the city ditch which is believed to have extended well into the area of the shaft. Unfortunately due to restricted access the deposits could not be observed in detail *in situ* but were instead examined when brought to the surface. Nevertheless, one sherd of pottery was recovered which dates the context to the final period of the City ditch; probably earlier 16th century.

8 Bibliography

Compass Archaeology, (2012), *Method statement for an Archaeological Watching Brief, Sewer works, St Mary Axe, City of London, EC3A*

Maloney, J & Harding, C. (1979), 'Dukes Place and Houndsditch: The Medieval Defences', in *London Archaeologist* **V3**, Issue 13.

Appendix I: Ceramic Building Material analysis by *Sue Pringle*

Location of brick	Date of CBM / Context	Period	Fabric	Form	Count	Weight (g)	L	B	T	Condition	Comments
Arched roof of passageway	1750-1850	PM	3032	Brick	1	2502	230	102	c 66	M	Shallow frog, c.130x50mm. Two indentations at ends are probably from nails holding frog into the mould. Probably later 18 th century to early 19 th century
Arched roof of passageway	1750-1850	PM	3032	Brick	1	2531	231-235	105	c 66-69	M	Shallow frog, c.135x55mm. Similar indentations to other brick, (above). Later 18 th century to early 19 th century

Key: L = Length; B = Breadth; T = Thickness; M = Mortar retained

All measurements given in millimetres

Appendix II: Pottery from St Mary Axe, London (Site MRX12) by *Paul Blinkhorn*

A single sherd of pottery weighing 45g occurred in context (3). It is a bodysherd from a jar or similar vessel with a thin internal glaze in Late Medieval Sandy Transitional Redware, Museum of London fabric LMSR (eg. Vince 1985), and probably of late 15th – 16th century date. The sherd is in good condition, and appears to be reliably stratified.

Bibliography

Vince, AG, (1985), *The Saxon and Medieval Pottery of London: A review in Medieval Archaeology* 29, pp.25-93

Appendix III: OASIS data collection form

OASIS ID: compassa1-153504

Project details

Project name	Sewer Connection works St Mary Axe
Short description of the project	Between the 7th of July 2012 and the 20th May 2013 two test pits and a connection shaft were monitored by Compass Archaeology during groundworks associated with a new sewer connection towards the northeastern end of St Mary Axe, City of London. The trial pits and construction shaft all showed signs of heavy disturbance in recent times either through the insertion of modern services or through later post-medieval development of the area in the form of brick-built structures. Made ground was visible for almost the entire depth of the final shaft, (0.45-4.5m below ground level), with only a metre of earlier, truncated, deposits observed towards the base of the pit, (4.5-5.5m below ground level). These deposits directly overlay natural ground observed from c5.5m-7.5m below ground level correlating to c6.75mOD. The dark-grey clay-silt deposit observed towards the base of pit 3 is believed to be a backfill / silting episode within the base of the city ditch which is believed to have extended well into the area of the shaft, which produced a single sherd of late 15 th to early 16 th century.
Project dates	Start: 07-07-2012 End: 20-05-2013
Previous/future work	No / No
Any associated project reference codes	MRX12 - Sitecode
Any associated project reference codes	city013 - Contracting Unit No.
Type of project	Recording project
Site status	None
Current Land use	Other 11 - Thoroughfare
Monument type	UNDERGROUND STRUCTURE Post Medieval
Monument type	CITY DITCH FILL Medieval

Significant Finds	POT SHERD Medieval
Investigation type	"Watching Brief"
Prompt	Water Act 1989 and subsequent code of practice

Project location

Country	England
Site location	GREATER LONDON CITY OF LONDON CITY OF LONDON St Mary Axe
Postcode	EC3A
Study area	16.00 Square metres
Site coordinates	TQ 3334 8138 51 0 51 30 54 N 000 04 41 W Point
Height OD / Depth	Min: 6.00m Max: 8.00m

Project creators

Name of Organisation	Compass Archaeology
Project brief originator	City Archaeologist
Project design originator	Compass Archaeology
Project director/manager	Compass Archaeology
Project supervisor	James Aaronson
Type of sponsor/funding body	Water utility/company
Name of sponsor/funding body	Thames Water Utilities Ltd

Project archives

Physical Archive recipient	Museum of London archaeological archive
----------------------------	-----------------------------------------

Physical Contents	"Ceramics"
Digital Archive recipient	Museum of London archive
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Museum of London Archive
Paper Media available	"Context sheet","Correspondence","Notebook - Excavation',' Research',' General Notes","Plan","Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	ST MARY AXE SEWER CONNECTION WORKS CITY OF LONDON EC3A
Author(s)/Editor(s)	Aaronson, J
Date	2013
Issuer or publisher	Compass Archaeology
Place of issue or publication	5-7 Southwark Street, SE1 1RQ
Description	Short report of the results of the watching brief. Includes historical, archaeological, geological and topographical background of the site, details of the methodology used, photographs and descriptions of all trenches monitored, and brief conclusions reached.

Appendix IV: London Archaeologist summary

Site Address: St Mary Axe, City of London, EC3A
Project Type: Watching brief

Dates of Fieldwork: 7th July 2012 – 20th May 2013
Site code: MRX12
Site Supervisor: James Aaronson

NGR: TQ 3334 8138

Funding Body: Thames Water Utilities Ltd.

Between the 7th of July 2012 and the 20th May 2013 two test pits and a connection shaft were monitored by Compass Archaeology during groundworks associated with a new sewer connection towards the northeastern end of St Mary Axe, City of London.

The trial pits and construction shaft all showed signs of heavy disturbance in recent times either through the insertion of modern services or through later post-medieval development of the area in the form of brick-built structures. Made ground was visible for almost the entire depth of the final shaft, (0.45-4.5m below ground level), with only a metre of earlier, truncated, deposits observed towards the base of the pit, (4.5-5.5m below ground level). These deposits directly overlay natural ground observed from c5.5m-7.5m below ground level correlating to c6.75mOD.

The dark-grey clay-silt deposit observed towards the base of pit 3 is believed to be a backfill / silting episode within the base of the city ditch which is believed to have extended well into the area of the shaft, and produced one potsherd of late 15th-early 16th century date.