BARRATT INDUSTRIAL ESTATE
GILLENDER STREET
LONDON BOROUGH OF TOWER HAMLETS

ARCHAEOLOGICAL WATCHING BRIEF

PCA REPORT NO: R13962

SITE CODE: GND19

DECEMBER 2019

PRE-CONSTRUCT ARCHAEOLOGY

DOCUMENT VERIFICATION

BARRATT INDUSTRIAL ESTATE
GILLENDER STREET
LONDON BOROUGH OF TOWER HAMLETS

AN ARCHAEOLOGICAL WATCHING BRIEF

Quality Control

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Assessment of an Archaeological Watching Brief at Barratt Industrial Estate, Gillender Street, London Borough of Tower Hamlets, E3 3JX

Site Code: GND19

Central National Grid Reference: TQ 38186 82146

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December 2019

PCA Report Number: R13962

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1 ABSTRACT

1.1 This report details the results and working methods of an archaeological watching brief undertaken by Pre-Construct Archaeology at Barratt Industrial Estate, Gillender Street, London Borough of Tower Hamlets E3 3JX. The work was undertaken by Pre-Construct Archaeology Limited and commissioned by CgMs Heritage (part of RPS Group) on behalf of Gillender 2 LLP. The central grid reference for the site was TQ 38186 82146.

1.2 Previously an evaluation was undertaken between 13th February and 7th March 2019, while the subsequent watching brief was carried out between 18th April and 18th June 2019. The watching brief was supervised by the author, James Langthorne and Ireneo Grosso. The project was instructed by Richard von Kalinowski-Meager, CgMs Heritage (part of RPS Group), it was managed for PCA by Helen Hawkins and it was monitored for the London Borough of Tower Hamlets by Adam Single, Archaeological Advisor (GLAAS).

1.3 The watching brief trench was located in the area of the 18th-century Still House building of the Four Mills Distillery, as illustrated on the Horwood historical map of 1819. Several structures, belonging to the first phase of the distillery were recorded. A hearth with a connected room, a brick-lined tank and an external wall were interpreted as structural elements of the late 18th–early 19th-century Still House.

1.4 The natural drift geology was not observed on site, but a natural superficial layer interpreted as an alluvial deposit was observed in the northwest of the watching brief area at 2.78m OD, where it was overlaid by reclamation deposits.

2 INTRODUCTION

2.1 This report details the results and working methods of an archaeological watching brief undertaken by Pre-Construct Archaeology Ltd on land at Barratt Industrial Estate, Gillender Street, London Borough of Tower Hamlets E3 3JX (Fig. 1) in advance of redevelopment of the site.

2.2 The work was carried out in accordance with the Written Scheme of Investigation prepared for the project (Hawkins, H. 2019) and approved by Adam Single, Archaeological Advisor for the Greater London Archaeological Advisory Service (GLAAS) on behalf of the London Borough of Tower Hamlets.

2.3 Prior to the watching brief, the site was subject to a geoarchaeological investigation (Quest 2018) and an archaeological desk-based assessment (CGMS/RPS 2018). Magnolia House, a building redeveloped from the remains of the southern distillery blocks and located in the southwestern corner of the site, was also the object of a historic building recording (Garwood 2019). The archaeological evaluation was undertaken between 13th February and 7th March 2019 and revealed two phases of masonry structures dating from the early 19th century to the early 20th century (Hawkins, N. 2019).

2.4 The site lies within an 'Archaeological Priority Zone' as defined in the LPA's Unitary Development Proposals Map and is centred on National Grid Reference TQ 38186 82146 (Fig. 1).

2.5 The site is roughly rectangular in shape and is located between the Limehouse Cut and the River Lea. It is bound to the north by new riverside buildings, to the east by the Lea riverside, to the south by factory buildings and to the west by Gillender Street (Fig. 2). The site covers an area of approximately 4550m².

2.6 Discussions were carried out with the archaeological adviser to the London Borough of Tower Hamlets and it was agreed that the focus of the watching brief would be the 18th century remains on the site. The archaeological investigation consisted of a watching brief, intended to assess the presence or absence of the 18th-century distillery building remains within the Still House (Horwood map 1819). The watching brief area (14m x 30m) will be referred to in this report as Trench 6.

2.7 The watching brief continued to utilise site code GND19 which had been allocated for the original evaluation.

2.8 The archaeological investigation was instructed by CgMs Heritage on behalf of Gillender 2 LLP. The project was managed for PCA by Helen Hawkins and supervised by Ireneo Grosso, Cecilia Galleano and James Langthorne.

19/11/19 RM

Figure 1
Site Location
1:800,000, 1:250,000, 1:12,500 at A4

19/11/19 RM

Figure 2
Trench Location Plan
1:800 at A4

3 PLANNING BACKGROUND

3.1 The planning background was outlined in the Archaeological Desk-Based Assessment specifically written for this project (CgMs/RPS 2018) and that report should be consulted for full details.

3.2 The archaeological investigation was undertaken in line with an archaeological planning condition for trial trenching and watching brief attached to the planning permission for the site. The work was designed within Written Scheme of Investigations prepared by Pre-Construct Archaeology Ltd (Hawkins 2018; 2019) which were approved by Sandy Kidd and Adam Single, the GLAAS archaeological advisors to the London Borough of Tower Hamlets.

4 GEOLOGY AND TOPOGRAPHY

4.1 Geology

4.1.1 The following is reproduced largely from the Archaeological Desk-Based Assessment (CgMs/RPS 2018) with additional information added.

4.1.2 The solid geology of the 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.

4.1.3 The British Geological Survey (mapapps.bgs.ac.uk) shows the site is situated at the interface of two geological horizons: Kempton Park Gravels to the west, and alluvium to the east. Kempton Park Gravels have been categorised as part of the Devensian Stage, the last glacial stage of the British Pleistocene epoch.

4.1.4 Site specific geotechnical information indicates deposits of made ground 4.9-7.1m thick (where the full profile was identified), above deposits of Kempton Park gravels (BH02b in the centre of the site; BH03 towards the centre of the eastern boundary) and London Clay (BH01 towards the centre of the western boundary; Quest 2018).

4.1.5 The maximum depth was reached during the watching brief at 1.99m OD, about 3.5m below ground level. No superficial gravel deposits, nor bedrock was reached during the two investigations. A mid-brown alluvial deposit [73]/[91] was observed overlaid by reclamation layers during the watching brief in the northwest of Trench 6 at 2.78m OD.

4.2 Topography

4.2.1 The site was roughly rectangular in shape and was bounded to the north by new riverside buildings, to the east by the Lea riverside, to the south by factory buildings and to the west by Gillender Street (Fig. 2).

4.2.2 The current ground level of the site is roughly level at 4-5m OD. The site covers an area approximately 4550m², while the watching brief Trench 6 covers an area 105.33m².

4.2.3 The site lies between two streams, the River Lea incorporating the Lee Navigation and the Limehouse Cut. The Lea Navigation is a canalised river constructed during the 18th century, incorporated into the existing River Lea and bounds the site to the east. The Limehouse Cut is a canal linking the Lea Navigation with the Regent's Canal, it was constructed between 1766 and 1770. The Limehouse Cut bounds the site to the north and carries on towards the southwest. These streams influenced developments and activities of the Four Mills Distillery.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 The following is reproduced largely from the Archaeological Desk-Based Assessment (CgMs/RPS 2018) with some additional research.

5.2 Prehistoric

5.2.1 The prehistoric activity within the vicinity of the study site is sporadic and consists of some finds with associated features that cover the prehistoric period from the Palaeolithic to the Bronze Age (Hawkins, N. 2019, 9).

5.3 Roman

5.3.1 The sole record of Roman archaeological remains within the vicinity of the site comprises a ditch containing pottery of 1st-century date, identified during an evaluation at 46-51 Gillender Street, to the south of the site (Cuthbert 2009).

5.4 Medieval

5.4.1 The few historical records related to the Four Mills Distillery are associated with the nearby Three Mills Distillery complex, located to the northeast of the site.

5.4.2 In the Little Domesday Book (1086) nine mills are mentioned and have been interpreted as probable water mills on the River Lea. Although the location is uncertain, it is possible that some of them comprised the Three Mills (Strong 2016, 4) and Four Mills complexes.

5.4.3 The vicinity of the Four Mills Distillery site with water courses would had been vital for the mill activities and, later on, for the distilling process. During the medieval period the River Lea was a navigable river used for transhipments to points along the river, and southwards to the Thames. Works to improve the navigation are known to have taken place from the late 12th century onwards (Corcoran 2011).

5.4.4 Documentary evidence attested four watermills at the Four Mills site by 1227 (CGMS Heritage 2019, 15). During this period the nearby Three Mills complex was purchased by the Abbey of Stratford Langthorne, on a branch of the River Lea and it remained the Abbey's property until the dissolution of the monastery (Strong 2016, 6). The Abbey in the medieval period owned twelve watermills and four windmills (Strong 2016, 6), it is therefore possible that mills at Four Mills were included in these.

5.5 Post-medieval

5.5.1 After the dissolution of the monastery the Three Mills and Four Mills sites transferred to private ownership. Documentary connections between these sites are attested from the early 17th century onwards, when disputes among millers occurred over water use (Strong 2016, 8).

5.5.2 In the first half of the 18th century the site is illustrated on two historical maps. The Gascoyne Map of Stepney (1702) shows the site lying in open land, near to the west

side of the river. On the north of the study site several buildings appear under the name of Bromley Mill. In the John Rocque Map of London (1745) the area in between Bromley Hall and Three Mills appears reasonably developed with roads, orchards and fields and the presence of buildings; some of which are present to the west and to the north of the study site.

5.5.3 Towards the end of the 18th century London saw the development of the distilling industry, which followed an act of Parliament that restricted the importation of brandy from France and reduced the tax on distilled production (Defoe 1727, 90-95).

5.5.4 The production of cheap gin, often mixed with other substances, caused abuse and addiction among the poor, particularly in London. The gin abuse had such a heavy social impact that this period is referred to as the Gin Craze (Abel 2001, 401-405; Noorthouck 1773).

5.5.5 In 1759 the Four Mills complex became a distillery owned by John and Peter Lefevre, nephews of Peter Lefevre who had earlier converted Three Mills into a distillery. From its conversion onwards the Four Mills Distillery had several owners and became, with Three Mills, one of the largest distillers in the country (Strong 2016, 12).

5.5.6 Disputes for control of the water continued through the 19th century. During this period, the Four Mills Distillery used sugar in the production process due to grain shortages caused by the Napoleonic Wars (Strong 2016, 11). In 1820 the Three Mills and Four Millis Distilleries together produced over a third of the national total of the spirit (Strong 2014, 16; 2016, 20).

5.5.7 The Richard Horwood map (1819) shows the distillery on its earliest phases (Fig. 4). This map shows the site occupied by buildings around the southern, western and northern boundaries, with open space in the centre. Immediately to the south of it a rectangular block is illustrated as ‘Still House’. The eastern boundary appears to project into the River Lea.

5.5.8 The following historical maps show later modifications and developments of the distillery. The configuration of buildings within the site has changed by the time of the 1827 Greenwood map, where the western and northern blocks look to be considerably resized.

5.5.9 In the Weller Map of 1862 and in the 1869 Ordnance Survey Map, the site is almost entirely occupied by buildings. Around this period, J. & W. Nicholson & Co took possession of Three Mills Distillery in 1872, however there is no mention of the Four Mills Distillery during their ownership (Marshall 2013, 208-211).

5.5.10 In the 1894 Goad Insurance Plan the site is illustrated in detail. This map shows a three storey granary building across the northern boundary, a grains yard to the west/centre, a three storey mill building to the east, and a 1-3 storey brewhouse projecting towards the southern boundary. The Second Edition Ordnance Survey map of 1895 shows no

significant changes within the site. The 1921-2 Ordnance Survey showed only minor changes to the buildings.

5.5.11 The 1948 Ordnance Survey map shows the buildings within the site as a single mass, while the 1967 Ordnance Survey shows an area of glazing projecting towards the southern boundary. No substantial changes of the area were observed in the next maps until the 1991 Ordnance Survey, which shows the redevelopment of the site.

6 ARCHAEOLOGICAL METHODOLOGY

6.1 The watching brief followed a Written Scheme of Investigation (Hawkins 2019) approved by the archaeological adviser to the London Borough of Tower Hamlets. To the south of the study site, Magnolia House building was also the subject of historic building recording prior to development (Garwood 2019). The focus of the archaeological investigation, as agreed with Historic England, was the original 18th-century Distillery known to date from 1759.

6.2 The watching brief area (Trench 6) was located in the area of the 18th-century Still House as depicted on Horwood's Map of 1819. This trench was stripped with mechanical excavators utilising a toothless bucket in spits under a constant archaeological supervision until archaeological structures were encountered. All structures exposed by the machine were rapidly hand cleaned and recorded. These were inspected on site by a building material specialist. All structures were also sampled for further analysis off site. Structures were recorded as found, with no further hand digging after the initial cleaning, in accordance with the methodology agreed in the watching brief WSI. the trench was extended to the north and west at the request of the archaeological adviser to expose more of the 18th century remains within the area of development impact.

6.3 All recording systems adopted during the investigations were fully compatible with those most widely used elsewhere in London; those developed out of the Department of Urban Archaeology Site Manual, now published by Museum of London Archaeology (MoLAS 1994). Individual descriptions of all archaeological and geological strata, and features exposed and excavated were entered onto pro-forma recording sheets. All plans and sections of archaeological deposits were recorded on polyester based drawing film, the plans being at scale of 1:20 and the sections at 1:10. The OD heights of all principal strata were calculated and indicated on the appropriate plans and sections. A full photographic record was taken in the digital format.

6.4 The OD heights of all principal strata and structures were calculated and indicated on the appropriate plans and sections.

6.5 All finds from the site were retained for off-site assessment. Brick samples were taken from appropriate contexts for off-site processing and assessment.

6.6 The complete site archive for both the evaluation and the watching brief, including site records and photographs, will be deposited at the Museum of London Archaeological Archive under the unique site code GND19.

7 PHASED ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1: Undated Alluvial Deposits

7.1.1 A mid-brown alluvial deposit [73]/[91] was observed overlaid by reclamation layers during the watching brief in section in the northwest of Trench 6 at 2.78m OD (Fig. 5).

7.2 Phase 2: Undated Dumped Deposits

7.2.1 The deposits in this phase contained no dating evidence and were only recorded in section (Fig. 5). They represent land reclamation and levelling deposits prior to the construction of the Phase 3 structures.

7.2.2 Covering the alluvial deposits [73] and [91] were two layers, [71] and [90] respectively. Layer [71] consisted of a 0.50m thick deposit of gravel which was recorded at a level of 3.13m OD, whilst layer [90] consisted of a 0.25m thick light grey silty clay at a level of 2.92m OD. The latter was sealed by another layer of green brown made ground [88] up to 0.31m thick at a level of 3.18m OD.

7.2.3 The gravel deposit [71] was cut by [68] which continued beyond the northern limit of excavation. It measured at least 0.52m wide by 0.44m deep with a top height of 3.10m OD and contained two fills, [66] and [67]. Two thin spreads, [65] and [72], covered the pit.

7.3 Phase 3: Post-Medieval, 18th-early 19th century (Fig. 3)

7.3.1 Eighteenth-century structures were revealed during the excavation of the Trench 6 (Fig. 3). Most of them were located in the northwest of the trench, with only scattered fragments of wall found to the east.

7.3.2 All the structures were built with red unfrogged bricks dating between 1750 and 1850 (Plates 1-2). Wall [74], which was aligned WSW-ENE, was 6m long and 0.27m wide. It survived to a level of 3.46m OD and was 0.66m high. This wall continued to the east as [104]. Wall [104], which measured 0.77m x 0.26m and was observed at 3.28m OD, was heavily truncated by modern foundations to the east and by the construction of floor [103] to the west. Wall [62] to the east was exposed at 3.73m OD and was 0.27m wide by 1.13m high and truncated to east and west by modern foundations. It may also have represented a continuance of wall [104]/[74].

7.3.3 Wall [102] constituted the NNW-SSE return of wall [74] to the north and was 1.8m long and 0.27m wide. It continued beyond the northern limit of excavation.

7.3.4 The space enclosed by walls [82], [94] and [95] had been subjected to burning and may have been the location of a hearth (Plate 3). Wall [82] ran NNW-SSE for 1.84m and was 0.35 wide, wall [94] ran NW-SE for 2.1m and was 0.22m wide, wall [95] ran WSW-ENE for 1.55m and it was 0.29m wide. All the walls were built with red unfrogged bricks bonded with soft yellowish-white lime-coarse sand mortar with wall [82] also containing

Reigate stone ashlar blocks. All these walls had burnt surfaces and cracks due to prolonged heat exposure, and also contained a deposit of gravel, ash and charcoal [96]. These structures survived to a level of between 3.54m OD and 3.15m OD.

7.3.5 A rectangular brick-lined feature [84] was located to the west at 3.17m OD and measured 0.33m by 0.45m. It was constructed with unfrogged thin bricks with no bonding material observed. It was interpreted as a tank or soakaway, possibly associated with the heat source to the east.

7.3.6 To the west was another room formed of wall [83] to the east which was 1.34m long and 0.22m wide and was orientated NNW-SSE. It was constructed with a pinkish sandy mortar that was not observed in any other structure and was recorded at 3.35m OD. Parallel to wall [83] and to the west was wall [98] which survived as a single row of bricks with no mortar visible. It extended for a length of 1.68m and was only 0.14m wide. A small remnant of original flooring [93] was present against wall [98] consisting of broken roof tiles covering an area measuring 0.34m x 0.23m. Both floor [93] and wall [98] were recorded at 3.36m OD with the floor 0.42m higher than floor [103] to the southwest (see below), suggesting different functions/phases of these surfaces. It was observed that the preparation floor for [93] had a similar mortar to walls [62], [74], [82], [94], [102] and [104], suggesting contemporary construction.

7.3.7 To the south of the area which displayed evidence of extreme heat was another room consisting of walls [97] to north, [75] to the east and [92] to the south. Wall [97] was aligned WSW-ENE with a southern return at its eastern end. It was 0.24m wide and it had a total extension of 1.67m x 1.33m. This wall appeared to abut walls [74], [104] and [95]. It was exposed to a height of 3.20m OD which was the same level as NNW-SSE wall [75] which measured 1.7m x 0.3m and formed the eastern wall of the room. Wall [92] was located to the south of wall [75] on the same alignment and measured 0.80m x 0.28m with a top height of 2.94m OD, forming the southern wall of the room. Walls [75], [97] and [92] were built with similar soft mid grey lime mortar with occasional flecks of charcoal and frequent fragments of chalk. Within the room was a brick floor [103] which was likely built after the demolition of parts of wall [74]/[104]. This surface was only exposed in a slot that measured 0.50m x 1.50m at a level of 2.86m OD.

7.3.8 Several walls were recorded to the south of the masonry features during the evaluation located within Trench 1 and were probably associated with them. These consisted of a series of masonry wall foundations, contexts [35], [36] and [37]. Brick wall [35] ran NNW-SSE for a distance of 2.40m and was 0.75m wide. The wall, which was recorded at 4.80m OD, was composed of post-Great Fire and yellow stock stamped deep frogged bricks and survived to a height of 0.50m.

7.3.9 Projecting east from wall [35] were two further walls, foundations [36] and [37]. Both these walls ran for a length of 1.25m to the east, both continuing east beyond the limit of excavation, and were 0.24m and 0.46m wide respectively. Wall [37] was recorded at

a height of 4.72m OD and wall [36] was recorded at 4.43m OD. These two walls were composed of post Great Fire and yellow stock stamped deep frogged bricks which provides date ranges of 1850-1900 and 1850-1925 and were installed on concrete foundations, contexts [38] and [39], suggesting a later phase of building.

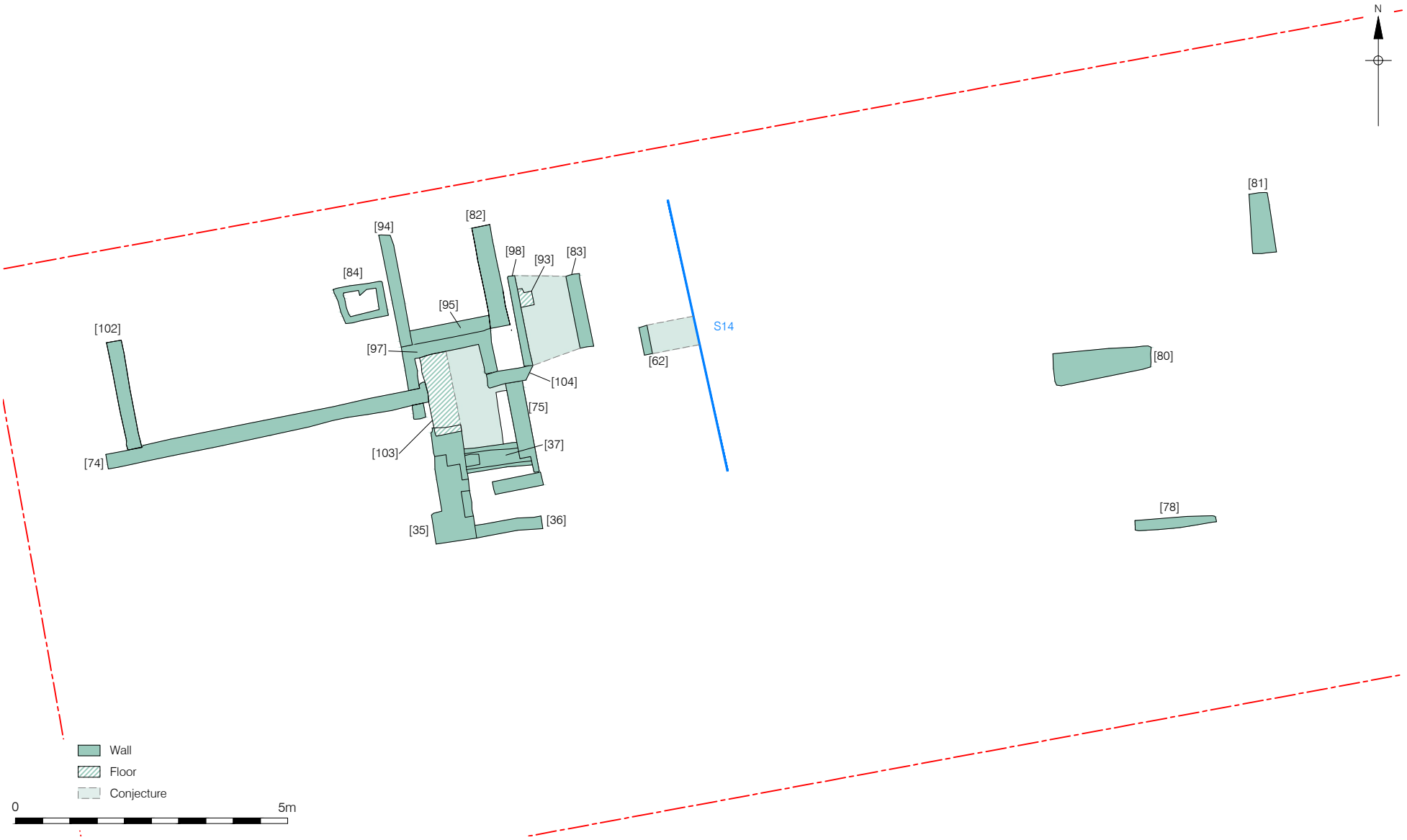
7.3.10 Wall [81] was found at 2.12m OD in the northeast corner of Trench 6. It was orientated NNW-SSE and was 1.04m long and 0.33m wide. Only two courses remained and the bonding material appeared different from all the others observed on site (soft dark grey sandy-lime mortar with moderate fleck of charcoal). Two other fragments of wall were recorded to the southeast, WSW-ENE aligned wall [80] and a badly truncated fragment on the same alignment to the south [78].

7.4 Phase 4: 19th-20th century

7.4.1 Later dump layers to raise the ground were seen in section (Fig. 5). Layer [64] was an organic deposit possibly formed during the 18th-century phase of the distillery (Plate 4). It was 0.12m thick and it was observed at 3.25m OD, roughly at the same level of the furnace and floor [93]. Deposit [63] was recorded at 3.35m OD and was 0.18m thick and was observed covering most of the structures in the north-west of Trench 6.

7.4.2 To the south of wall [62] a layer of made ground [61] (Plate 4) was possibly a levelling layer used for the later phases of the distillery. This deposit was recorded at 3.34m OD and was 0.73m thick. It sealed alluvial layer [73] (Fig. 5).

7.4.3 Demolition layer [60] was observed at 3.74m OD sealing most of the northwest area of Trench 6.



20/11/19 RM

Figure 3
Plan of Phase 3 Masonry
1:100 at A4

22/11/19 RM

Figure 4
Phase 3 Masonry overlain on1819 Horwood Map
1:250 at A4

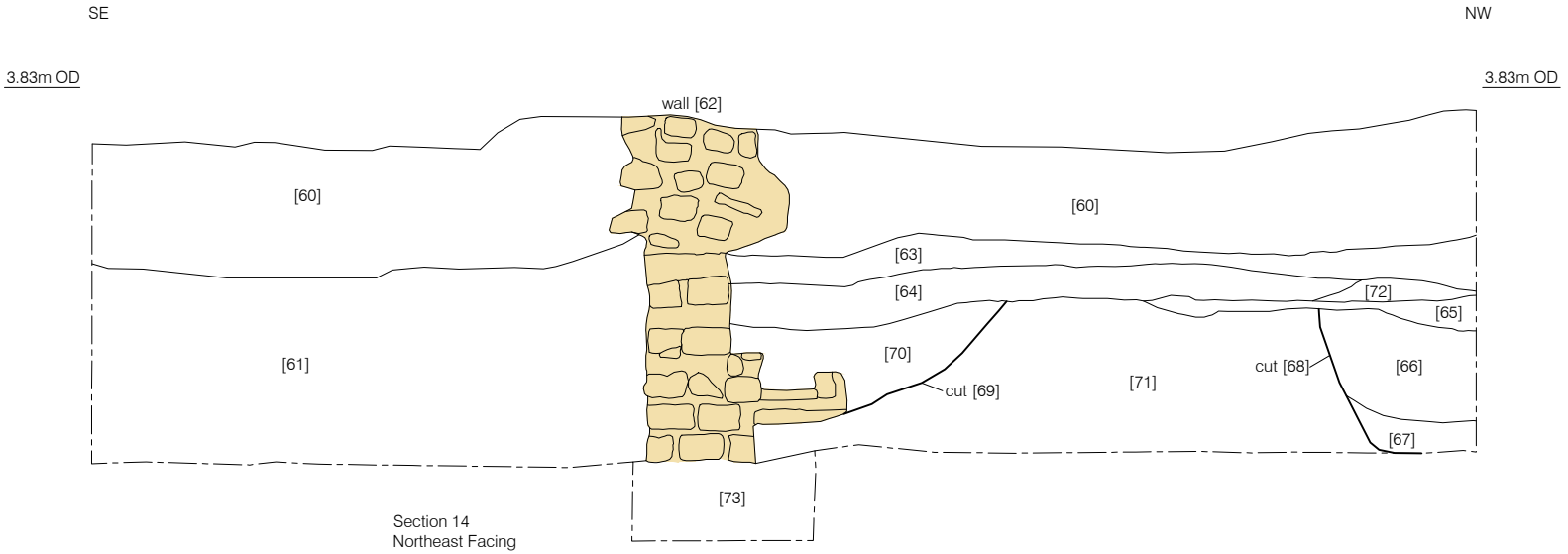


Figure 5
Section
1:25 at A4

19/11/19 RM

PLATES

Plate 1: Northwest part of Trench 6, looking north, 0.50m and 1m scales

Plate 2: Northwest part of Trench 6, looking east, 1m scale

Plate 3: Hearth, looking north, 1m scale

Plate 4: Section 14, facing east, showing masonry [62], looking west, 0.50m and 1m scales

Plate 5: Section 15, facing south, showing deposits [60], [88], [90] and [91], looking north, 1m scale

8 ARCHAEOLOGICAL PHASE DISCUSSION

8.1 Pre-Distillery activity

8.1.1 It would appear that the site was initially subject to regular inundation with alluvium deposited from the River Lea to the east. Prior to the occupation and development of the area at least 0.50m of reclamation layers and levelling dumps were laid to prepare the ground for building.

8.2 Distillery buildings

8.2.1 Due to the poor level of preservation and only partial exposure of the masonry, it is hard to determine the function of rooms or the different phases of rebuilding with any certainty. The 18th-century building remains do not appear to align well with the contemporary historical map (Horwood 1819). However, assuming that the position of the Still House (Fig. 4) is accurate, some speculative interpretations can be proposed.

8.2.2 The use of bricks and mortar dated to between 1750-1850 might suggest that the majority of the buildings encountered during the watching brief may be late 18th century in date and possibly dating to the time of the establishment of the Four Mills Distillery in 1759 by John and Peter Lefevre. However, it is not possible to determine with any accuracy the date of the buildings revealed on the site. They do not seem to accord entirely with the Horwood Map of 1819 which might suggest that if the map is indeed accurate (which may be doubted) that they represent buildings predating the structures depicted on the map or even might be later structures altogether. The masonry as seen revealed some evidence of structural changes suggesting that the Distillery underwent some rebuilding in this period.

8.2.3 Based on the position and length, wall [74]/ [104]/ [62] was potentially the northern external wall of the Still House. The fact that it does not align well with the 1819 Horwood map might suggest that either the map is inaccurate or that the wall represents part of an earlier building than that shown on the map.

8.2.4 The hearth (Plate 3) may be related to the distillation process, and the brick-lined feature [84] could have been linked to the activities related to the hearth use (Marshall 2013, 208). Based on its location the hearth could have been part of a later construction phase that saw a development towards north. However, the mortar of the walls appeared similar to the northern external wall, suggesting that they could be part of the same construction phase.

8.2.5 The hearth could have been located externally to the Still House, possibly under a canopy (Fig. 4). If the hearth is part of the same phase as the northern external wall of the Still House, these features and the eastern external walls of the northwest block represent the earliest structures recorded during the investigations.

8.2.6 Walls [97], [75], [92] and floor [103] formed a small room, possibly associated with the

hearth to the north. All these walls appeared to have the same mortar, indicating that they were likely contemporary. This small chamber has been interpreted as being later than the hearth and the northern external wall, as the northern wall was partially demolished for the construction of the room. This room likely represented an internal modification to the original Still House.

8.2.7 Another small room of undetermined function was formed by walls [98] and [83] with floor [93] to the northeast which is also likely to be a later modification to the original building. Masonry [81] was possibly part of the eastern external wall of the Still House.

8.2.8 Further evidence of modification of the buildings in the later 19th century was seen to the south as walls [35], [36] and [37].

9 ORIGINAL RESEARCH AIMS AND OBJECTIVES

9.1 Introduction

9.1.1 The research aims were identified subsequent to the evaluation phase which were detailed within the specific Written Scheme of Investigation document for the mitigation phase (Hawkins 2019). These research aims are addressed below.

- **To establish the presence or absence of the 18th-century distillery buildings and assess the level of survival of these buildings and to record any remains.**

  The presence of 18th-century distillery structures was established during the watching brief investigation. In the northwest part of Trench 6, several walls located within the Still House (Fig. 3), utilising bricks and mortar dating to between 1750 and 1850, were recorded. The level of survival of most of the masonry was low, making the structures difficult to interpret. An industrial hearth, an attached possible functional room, an external wall running WSW-ENE and several other internal walls were all interpreted to be parts of the 18th-century Still House and the contemporary northwest building.

- **To establish the extent of all past post-depositional impacts on the archaeological resource in the upper levels of the site.**

  The 18th-century distillery remains within Trench 6 had been heavily truncated, especially in the central and eastern parts of the trench. These truncations belonged mostly to the later phases of the distillery. In particular, during the 19th century a brew house building with connected stores, pump rooms and underback block was built (as illustrated in the Goad Fire Insurance Plan of 1894), presumably demolishing the earlier phases of the distillery. The impact of these constructions was severe, considering the approximate ground level of the 18th-century distillery was around 3.30m OD and the foundation of the late 19th-century brew house reached 2.12m OD. Only limited masonry remains belonging to the 18th-century distillery were noted in the central and eastern parts of Trench 6. Other modern truncation unrelated to the distillery affected the west portion of Trench 6 where a foundation cut demolished the southern part of walls [83] and [98].

10 IMPORTANCE OF THE RESULTS, FURTHER WORK AND PUBLICATION PROPOSALS

10.1 Importance of the Results

10.1.1 Only very limited remains of the 18th-century Four Mills Distillery were found on site and the function of many of the rooms was difficult to interpret with the possible exception of an area of heat damage which may represent the remains of an industrial hearth associated with the distilling process. The results are of very limited importance due to the high degree of truncation across the area of the 18th-century Still House.

10.2 Further Work

10.2.1 No further work is proposed.

10.3 Publication Proposal

10.3.1 As the results of the archaeological watching brief are so limited it is proposed that the publication of the site merits no more than an entry in the *London Archaeologist* Annual Round-up.

11 ACKNOWLEDGEMENTS

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11.3 The author would also like to thank Helen Hawkins for managing the fieldwork project and Jon Butler for the post-excavation management and editing. Thanks are also extended to Ray Murphy for the illustrations and Amparo Valcarcel for the building material spot dates, Ireneo Grosso and James Langthorne for co-supervising the site. Thanks also to the field team of Chloe Sinclair, Ester Capuz-Duran and Omar Quadir.

11.4 The author would also like to thank Mustapha for surveying the site.

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1819 Richard Horwood Map
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1856-1862 Weller Map
1862 Stanford's Map
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1894 GOAD Insurance Plan

1895 Ordnance Survey

1921-1922 Ordnance Survey

1948 Ordnance Survey

1953 Ordnance Survey

1967 Ordnance Survey

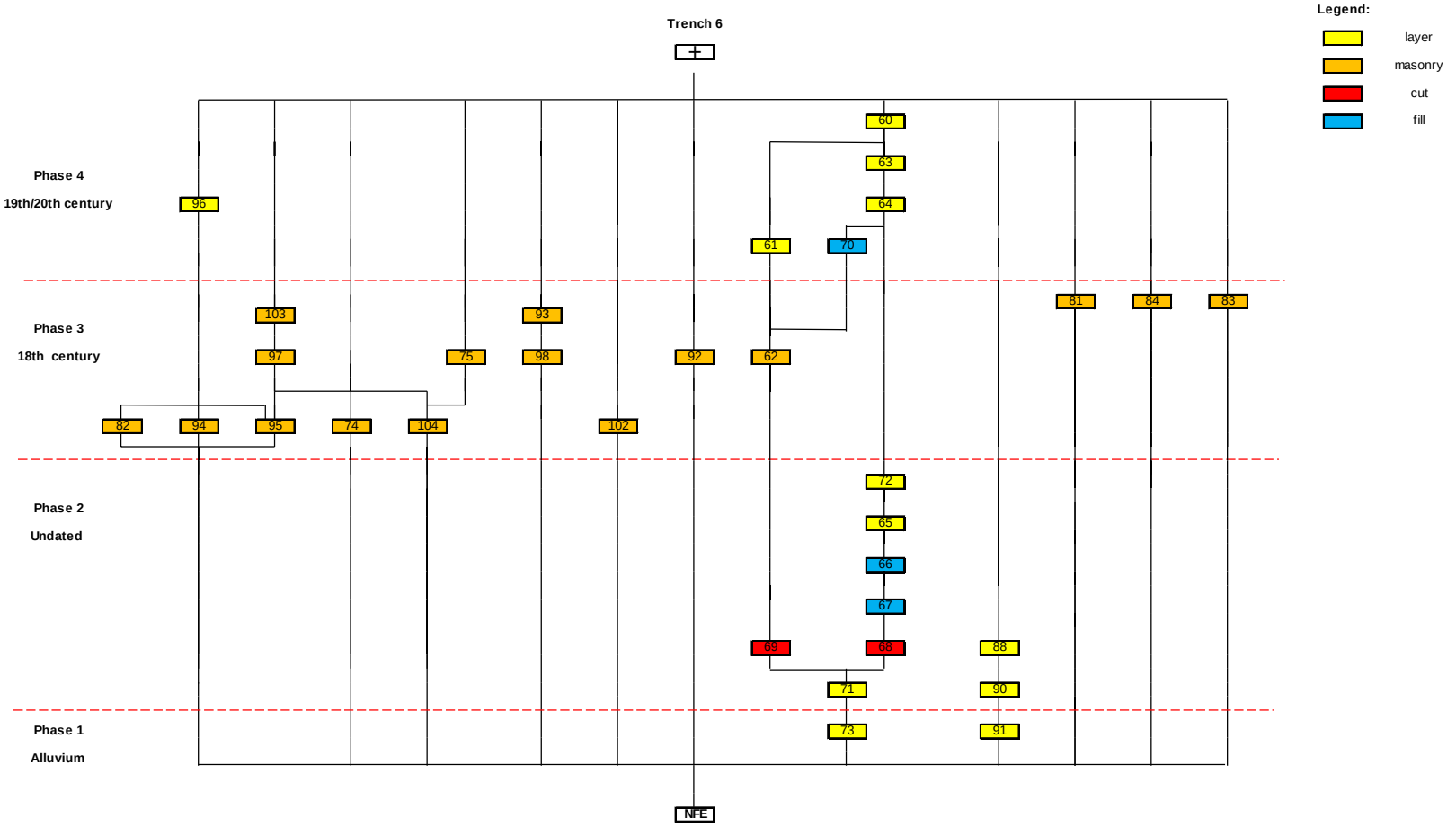
1991 Ordnance Survey

APPENDIX 1: CONTEXT INDEX

Context	Context Type	Fill of	Context Category	Context Interpretation	Length	Width	Depth	Highest Levels	Lowest Levels	Phase
60	Layer		Demolition	Demolition Layer	4.6		0.5	3.74		4
61	Layer		Make-up	Possible Levelling Layer	1.85		0.73	3.34		4
62	Masonry		Wall	External Wall	0.27	0.27	1.13	3.73		3
63	Layer		Make-up	Possible Levelling Layer	2.5		0.18	3.35		4
64	Layer		Occupation	Possible Occupation Layer	2.04		0.12	3.25	3.18	4
65	Layer		Occupation	Lens	0.9		0.1	3.15		2
66	Fill	68	Infilling	Fill of Pit [68]	0.52		0.37	3.1	3.03	2
67	Fill	68	Infilling	Fill of Pit [68]	0.44		0.18	2.83	2.76	2
68	Cut		Pit	Possible Pit	0.52		0.44	3.1	2.66	2
69	Cut		Construction Cut	Possible Foundation Cut	0.86		0.41	3.12	2.71	2
70	Fill	69	Infilling	Fill within Cut [69]	0.84		0.41	3.12	3.04	4
71	Layer		Levelling	Dumped Deposit	2.1		0.5	3.13		2
72	Layer		Occupation	Lens	0.55		0.08	3.21		2
73	Layer		Alluvial	Alluvial Deposit	0.6	0.26	0.26	2.63		1
74	Masonry		Wall	External Wall	6	0.27	0.66	3.46	3.3	3
75	Masonry		Wall	Internal Wall	1.7	0.3	0.4	3.28		3
81	Masonry		Wall	Possible External Wall	1.04	0.33	0.13	2.12		3
82	Masonry		Wall	Furnace	1.84	0.35	0.22	3.54		3
83	Masonry		Wall	East Wall of Small Room	1.34	0.22	0.48	3.35		3
84	Masonry		Drain	Brick-lined Feature, Possible Tank	0.45	0.33	0.4	3.17		3
88	Layer		Make-up	Possible Reclamation Layer	0.45	0.33	0.4	3.18	3.05	2
90	Layer		Make-up	Possible Reclamation Layer	1.93	1.35	0.3	2.92	2.87	2

Context	Context Type	Fill of	Context Category	Context Interpretation	Length	Width	Depth	Highest Levels	Lowest Levels	Phase
91	Layer		Alluvial	Alluvial Deposit	1.93	1.35	0.4	2.78	2.73	1
92	Masonry		Wall	Internal Wall	0.8	0.28	0.2	2.94		3
93	Masonry		Surface	Floor	0.34	0.23		3.36		3
94	Masonry		Wall	Furnace	2.1	0.22		3.33	3.15	3
95	Masonry		Wall	Furnace	1.55	0.29		3.15		3
96	Layer		Occupation	Furnace Layer	1.4	1.02	0.2	3.32		4
97	Masonry		Wall	Possible Internal Wall	1.64	1.33	0.24	3.2		3
98	Masonry		Wall	West Wall of Small Room	1.68	0.14		3.36	3.28	3
102	Masonry		Wall	External Wall	1.8	0.27	0.6	3.29		3
103	Masonry		Surface	Floor	1.5	1	0.5	2.86		3
104	Masonry		Wall	External Wall	0.77	0.26		3.28		3

APPENDIX 2: MATRIX



APPENDIX 3: CERAMIC BUILDING MATERIAL ASSESSMENT

By Amparo Valcarcel

Introduction and Aims

Four crates of ceramic building material, mortar and stone were retained from the excavation. This medium sized assemblage (37 examples, 76.94kg) was assessed in order to:

- Identify (under binocular microscope) the fabric and forms of the post-medieval ceramic building material recovered from GND19.
- Identified the different construction phases of the building
- Identify the fabric of the unworked and worked stone in order to determine what the material was made of and from where it derived.
- Made recommendations for further study.

Methodology

Two site visits were conducted to examine the date and form of some structures of post-medieval date. Two whole brick samples were taken from each structure in accordance with the Pre-Construct Archaeology Ltd building material sampling guidelines.

The application of a 1kg mason's hammer and sharp chisel to each example ensured that a small fresh fabric surface was exposed. The fabric was examined at x20 magnification using a long arm stereomicroscope or hand lens (Gowland x10). The appropriate Museum of London building material fabric code is then allocated to each item.

A limited number of masonry samples were also collected as well as the *in-situ* recording from selected groups of post-medieval structures. Most of the surviving masonry contexts were found in different construction phases of the site however building material was also recovered from layers and dump deposits, mostly consisting of brick fragments.

Ceramic Building Material[1] (34 Examples, 67.75kg)

The assemblage is characterised by bricks consists of post-medieval ceramic building material, with much smaller quantities of modern bricks.

Late Post-Medieval (31 examples, 59.55kg)

[1] Excluding stone and mortar

Condition and distribution

A large assemblage of brick was recovered from the earliest phases. The earliest bricks with any quantifiable dimensions came from period 1750 to 1850. Some fabrics, such as 3046 were still manufactured until 19th century, so probably some of these fabrics are late post-medieval. Most of the post-medieval building material is in a good condition, preserved by the remaining structures. It is important to point out the absence of floor and roofing tiles.

Bricks (29 examples, 58.56kg)

3046 (1450-1900) *sandy fabric with frequent coarse quartz* (18 examples, 33.86kg)

3032R-3034 (1666-1900) p*ost Great Fire purple and yellow clinker rich fabric* (6 fragments, 13.36kg)

3035 (1770-1940) *yellow stock bricks, inclusions are frequent fine specks of ash and charcoal* (5 fragments, 11.6kg)

A small group of purple and yellow post Great Fire bricks were recovered from the site, especially from structures located in the northwest of the site and related to the last phasing of building construction. The largest proportion of bricks are narrow and unfrogged. Some have sharp arises suggesting possible machine manufacture. All the examples of deep frogged bricks are bonded with concrete, indicating a modern occupation.

The very sandy red 3046 dominates the post-medieval assemblage. The largest proportion of bricks are thick (57-68mm), wide (101-112mm) and unfrogged. They were by far the most common fabric in London from the mid 15th century to 1666 and were still manufactured until 1900. The dimensions, sharp arises and the absence of sunken margins indicates a 1750-1850 date. They were bonded with different mortar types associated with different phases, but mostly are hard white lime mortars.

A smaller quantity of unfrogged machine bricks, dated 1800-1900 century were preserved in some structures. These were bonded with a hard mortar.

A group of yellow stock bricks was recorded in walls [+] and [83]. The example from [83] is unfrogged and with sharp arises dated 1800-1900, and the examples from [+] are stamped (ineligible) indicating a 1870-1925 date.

Peg tiles (2 examples 686g)

2276 (1480-1900)

The only roofing tiles found within the site were used for levelling wall [103]. The examples belonged to the sandy red fabric 2276, and where bonded with a lime hard mortar with small pebble inclusions. No examples of roofing tiles were collected from the site.

Mortar

The mortar types identified from the excavations at GND19 provide the basis for a chronological sub-division of the structures. The majority of mortars are hard lime base with pebbles or black glassy inclusions.

Stone (3 examples 9.18kg)

A handful of stone was found during the archaeological work. Two examples of granite cobbles were recorded from context [60] dated 1800-1900 and an ashlar made of Reigate was collected from contexts [82]. The ashlar presented burnt surfaces, probably associated with some industrial work. Reigate stone was not used for external architecture after the 15th century due to poor weathering properties.

London and surrounding areas have no indigenous stone; it was an expensive material that would have been transported from various locations and used principally on important structures. The River Thames remained the principal means of access to the growing city for the transport of building stone up until the development of the railway network in the early 19th century.

Summary

The fabric and form of the stone, ceramic building material and mortar retained from the watching brief forms the basis of a broad chronological subdivision. The ceramic building material recovered from the site reflects construction episodes associated with building and remodelling structures related to the distillery complex.

The date ranges represented by the fabrics and forms suggest an initial phase of construction between mid 18th century and mid 19th century, followed by a later 19th-century phase.

Bricks are the predominant form with large quantities of early red post-medieval bricks some of which are clearly reused with later mortars. These sandy red fabrics were still manufactured outside City of London until the late 19th century. Post Great Fire purple and yellow stock bricks (some frogged) are less representative.

The building material recovered from GND19, associated with the first phase of the mill, and successive phases, suggests that the building was principally constructed using bricks, with less quantity of stone.

Distribution

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
0	3261; 3035	Yellow stock stamped deep frogged bricks; Gault machine bricks	5	1740	1850			1870-1925	1875-1925
60	3120	Granite cobbles	2	1700	1900	1700	1900	1800-1900	No mortar
61	3261	Gault machine bricks	2	1800	1900	1800	1900	1870-1925	No mortar
62	3046; 3032; 3034	Post-medieval sandy red and Post Great fire bricks	6	1450	1900	1666	1900	1780-1900	1780-1900
74	3046	Post-medieval sandy red bricks	2	1450	1900	1450	1900	1750-1850	1750-1850
75	3046	Post-medieval sandy red bricks	1	1450	1900	1450	1900	1750-1850	1750-1850
80	3046	Post-medieval sandy red bricks	2	1450	1900	1450	1900	1750-1850	No mortar
82	3032; 3107	Post Great fire brick partially burnt	1	50	1900	1666	1900	1750-1850	No mortar
83	3035	Yellow stock stamped deep frogged bricks	1	1770	1940	1770	1940	1800-1900	1800-1900
84	3046	Post-medieval sandy red bricks	2	1450	1900	1450	1900	1750-1850	No mortar
85	3046	Post-medieval sandy red bricks	1	1450	1900	1450	1900	1750-1850	1750-1850
92	3046	Post-medieval sandy red bricks	2	1666	1900	1450	1900	1750-1850	No mortar
93	3046	Post-medieval sandy red bricks	2	1450	1900	1450	1900	1750-1850	No mortar
102	3046	Post-medieval sandy red bricks	2	1450	1900	1450	1900	1750-1850	No mortar
103	2276; 3032	Post-medieval peg tiles, Post Great fire brick	3	1480	1900	1666	1900	1750-1900	1750-1900

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APPENDIX 4: OASIS FORM

preconst1-373684

Project details

Project name	Assessment of an Archaeological Watching Brief at Barratt Industrial Estate, Gillender Street, London Borough of Tower Hamlets
Short description of the project	An archaeological watching brief undertaken by Pre-Construct Archaeology at Barratt Industrial Estate, Gillender Street, London Borough of Tower Hamlets recorded masonry remains related to the 18th-century Four Mills Distillery.
Project dates	Start: 13-02-2019 End: 18-06-2019
Previous/future work	Yes / No
Any associated project reference codes	GND19 - Sitecode
Type of project	Watching Brief
Site status	Local Authority Designated Archaeological Area
Current Land use	Industry and Commerce 4 - Storage and warehousing
Monument type	INDUSTRIAL BUILDINGS Post Medieval
Significant Finds	MASONRY Post Medieval
Methods & techniques	''Targeted Trenches''
Development type	Urban residential (e.g. flats, houses, etc.)
Prompt	Planning condition
Position in the planning process	Not known / Not recorded

Project location

Country	England
Site location	GREATER LONDON TOWER HAMLETS BOW Barratt Industrial Estate, Gillender Street
Postcode	E3 3JX
Study area	4550 Square metres
Site coordinates	TQ 38186 82146 51.520804980267 -0.008022865669 51 31 14 N 000 00 28 W Point
Lat/Long Datum	Unknown

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd.
Project brief originator	Greater London Archaeological Advisory Service
Project design originator	Richard von Kalinowski-Meager
Project director/manager	Helen Hawkins

Project supervisor	Cecilia Galleano
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Gillender 2 LLP

Project archives

Physical Archive Exists?	No
Digital Archive recipient	MLAA
Digital Contents	''none''
Digital Media available	''Database'',''Survey'',''Text''
Paper Archive recipient	MLAA
Paper Contents	''none''
Paper Media available	''Context sheet'',''Diary'',''Drawing'',''Plan'',''Section''

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Assessment of an Archaeological Watching Brief at Barratt Industrial Estate, Gillender Street, London Borough of Tower Hamlets, E3 3JX
Author(s)/Editor(s)	Galleano, C.
Date	2019
Issuer or publisher	Pre-Construct Archaeology Ltd
Place of issue or publication	London

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