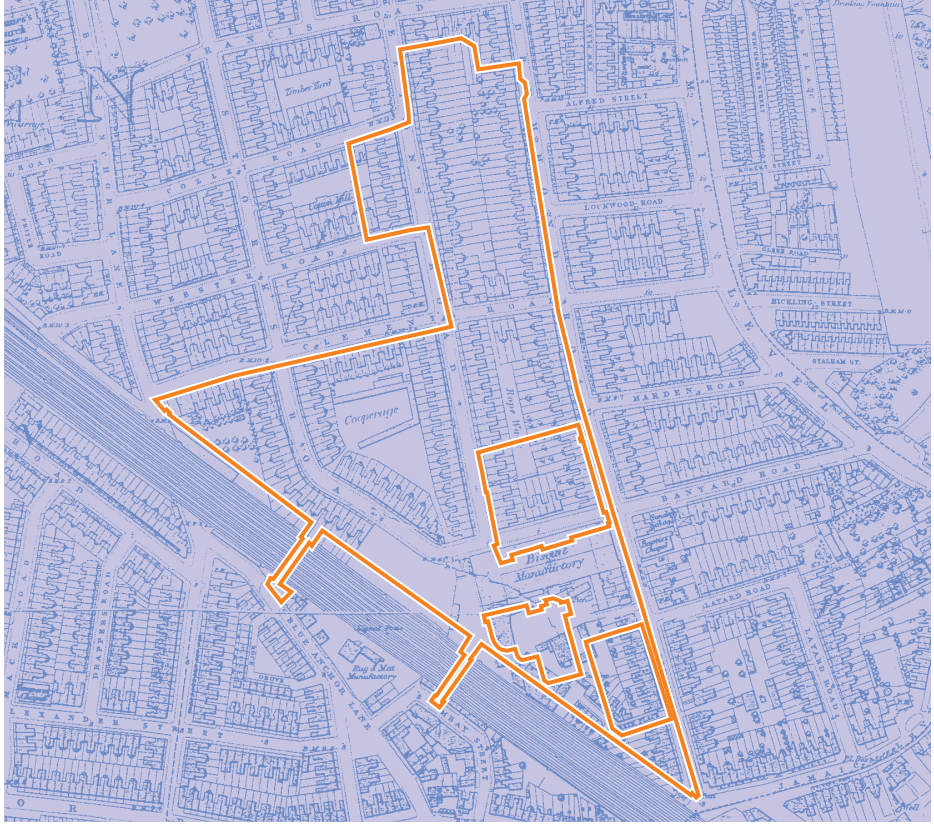

TOWER BRIDGE BUSINESS COMPLEX
100 Clements Road:
The Biscuit Factory & Bermondsey Campus Site
Keetons Road
London SE16 4DG

London Borough of Southwark

Phase 3 Archaeological Evaluation Report

November 2023

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Report on Phase 3 archaeological evaluation

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Summary

This report presents the results of an archaeological evaluation carried out by MOLA at Tower Bridge Business Complex, 100 Clements Road - Aka The Biscuit Factory & Bermondsey Campus Site, Keetons Road, London SE16 4DG. This part of the evaluation is Phase 3, (Bermondsey Campus). An archaeological evaluation was previously completed in Phase 1 (MOLA 2020a) and an archaeological evaluation is currently being undertaken in Phase 2 which will be reported on separately. This report was commissioned from MOLA by Reach Active on behalf of the client.

Originally, Phase 3 comprised the excavation of a single trench, in accordance with the Written Scheme of Investigation (MOLA 2020b), but due to the presence of a live underground service, the initial trench (TR 3a) was abandoned, recorded and relocated (TR3b) following instructions from the Southwark Council Archaeological Advisor. The two Phase 3 evaluation trenches (TR3a and TR3b) were excavated between 23.10.2023 and 14.11.2023.

The natural was sand and gravel at 0.63m OD, sealed by alluvial clay at 1.19m OD. Above the clay, a dark-coloured organic deposit was recorded at 1.58m OD. This formed a distinctive horizon, associated with agricultural activity on the site prior to the urban development of the area in the mid-19th century; pottery sherds recovered from this layer were dated to the mid-17th century. A timber- and- brick raft recorded in TR3b might be associated with market gardening. Later structures illustrated the late 19th and early 20th century; these included a stepped brick foundation, a concrete pad and an iron post – all probably associated with the terraced housing of the 1870s.
A small assemblage of finds were collected during the evaluation, including pottery, glass, ceramic building material and animal bone. In addition to this, one environmental sample (10l) was taken for soil analysis and recovery of ecofacts.

The report concludes that primarily post-medieval/early modern archaeological remains will be impacted by the redevelopment in this area of the site. While the presence of Holocene alluvium above natural gravels suggests some potential for archaeological/ palaeoenvironmental remains from earlier periods, including prehistoric, no further mitigation of this area is recommended.

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1.1 Site background

1.1.1 An archaeological evaluation was carried out by MOLA of the Phase 3 area at Tower Bridge Business Complex, 100 Clements Road, The Biscuit Factory & Bermondsey Campus Site, Keetons Road, London SE16 4DG ('the site') between 23.10.2023 and 14.11.2023. This document is the Report on that work.

1.1.2 The Site is formed of four elements (Fig. 1), the Bermondsey Campus, a portion of Clements Road, the Biscuit Factory and two arches within the adjacent railway arches, excluding the Workspace Buildings and Plot 5 as defined in the *Historic Environment Assessment report* (MOLA 2017) and an updated version was issued to reflect changes in planning policy (MOLA 2019a). It is bound to the north by Collett Road and Tranton Road; to the east by Drummond Road; and to the south and west by a small access road and the railway viaduct associated with the Southern, South-Eastern and Thames Link Rail lines.

1.1.1 Ground level in the area of the evaluation TR3/ Phase 3 is c 2.6m above Ordnance Datum (OD). The ground level varies between 2.3–2.4m OD on the north side of the Biscuit Factory, and the south of the site is at 2.0m OD.

1.1.2 A written Historic Environment Assessment report was previously prepared, which covered the whole area of the site (MOLA 2017). This document should be referred to for information on the natural geology, archaeological and historical background of the site, and the initial interpretation of its archaeological potential.

1.2 Planning background

1.2.1 The legislative and planning framework in which the evaluation took place was fully set out in the *Written Scheme of Investigation* which formed the project design for the evaluation (see Section 1.2, MOLA 2020b). To summarise here:

1.2.2 Planning consent includes serval conditions relating to archaeology, and specifically conditions 11, 12, 13 & 50 which relate the below ground archaeological investigations. The conditions require:

> ***Condition 11 - Archaeological Foundation Design***
> *Before any work hereby authorised begins within any Phase or Building of the development, excluding demolition, a detailed scheme showing the complete scope and arrangement of the foundation design and all ground works for that relevant Phase or Building shall be submitted to and approved in writing by the Local Planning Authority and the development shall not be carried out otherwise than in accordance with any such approval given.*
>
> ***Condition 12 - Archaeological Evaluation***
> *Before any work hereby authorised begins within each Phase or Building of development, excluding above-ground demolition, the applicant shall secure the implementation of a programme of archaeological evaluation works for that Phase or Building in accordance with a written scheme of investigation to be submitted to and approved in writing by the Local Planning Authority.*
>
> ***Condition 13 - Archaeological Mitigation***
> *Before any work hereby authorised begins within each Phase or Building of development, excluding demolition, the applicant shall submit a written scheme of investigation for a programme of archaeological recording for that Phase or Building,*

which shall be approved in writing by the Local Planning Authority and implemented and shall not be carried out other than in accordance with any such approval given.

Condition 50 – Archaeological Reporting
Within six months of the completion of archaeological site works within each Phase or Building of the development, an assessment report detailing the proposals for post-excavation works, publication of the site and preparation of the archive shall be submitted to the Local Planning Authority for approval in writing and the works detailed in this assessment report shall not be carried out otherwise than in accordance with any such approval given.

1.2.3 This report demonstrates that all works during the Phase 3 archaeological evaluation complied with the approved WSI, thereby fulfilling the requirements of Condition 12. The report also recommends that there is no requirement for any mitigation in the Phase 3 area, thereby rendering Condition 13 obsolete – the final decision, however, rests with the LPA. This assessment report constitutes the fulfilment of Condition 50 – no further post-excavation works are proposed and details of publication and preparation of the archive are provided in Section 6 (6.1.6 & 6.1.7). Regarding the discharge of Condition 11, the report demonstrates that no significant archaeological remains were identified during the evaluation of Phase 3, and that the proposed foundation designs and all ground works in that area are unlikely to impact on significant archaeological remains.

1.3 Scope of the evaluation

1.3.1 Evaluation is defined by Historic England as intended to provide information about the archaeological resource in order to contribute to the:

1.3.2 - formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or

1.3.3 - formulation of a proposal for further archaeological investigations within a programme of research

1.3.4 An archaeological evaluation is a limited fieldwork exercise designed to test the conclusions of preliminary desk based work. It is not the same as full excavation.

1.3.5 The evaluation was carried out within the terms of the relevant Standard for evaluation specified by the Chartered Institute for Archaeologists (CIFA, 2014).

1.3.6 All work has been undertaken within the research priorities established in the Museum of London's A research framework for London Archaeology, 2002.

1.3.7 All work was undertaken within research aims and objectives established in the Written Scheme of Investigation for the evaluation (Section 2,2, MOLA 2020b)

2 Topographical and historical background

2.1 Topography

2.1.1 The site is located on Kempton Park River Terrace Gravel (sand and gravel), the most recent of the gravel terraces laid down by the Pleistocene (Quaternary) River Thames.

2.1.2 The Bermondsey 'Eyot' is an island of higher ground, formed of gravels, in an area that is otherwise low lying. The site lies on this eyot, just 50m from the boundary between the eyot and the River Thames floodplain alluvium. To the east lies a natural topographic depression known as 'Bermondsey Lake' dating to the prehistoric period.

2.1.3 The low-lying areas around the eyots are thickly blanketed with fine alluvial sediment which was deposited as a result of rising sea level. These formed under conditions of lowered sea level and corresponding river level, which allowed fen and marsh to develop producing alluvial deposits with occasional peat deposits. Geologically these strata are very recent and most have accumulated over the past 12,000 years. Some may be related to dated sequences of alluvium and peat elsewhere in the Thames estuary that have been used to identify fluctuations in sea level during the prehistoric and Roman periods. Such sequences may contain preserved organic remains and produce palaeoenvironmental and geoarchaeological evidence of past landscapes and their human occupants.

2.1.4 Geotechnical window samples on the site were monitored by MOLA in June 2018 (MOLA 2019b). The watching brief found a stratified sequence of Late Pleistocene (glacial) Kempton Park river gravels succeeded by Holocene (post-glacial) alluvial clays, deposited either by a meandering inland Thames, or in tidal creeks of a more estuarine character, such as those that were to isolate the islet ("eyot") of Bermondsey. There is potential for archaeological remains within the alluvial clay, buried in situ or reworked by river action.

2.1.5 The upper surface of the clay was recorded at different levels which may reflect human activity, such as digging drains or clay pits for brickmaking. The upper deposits recorded were comprised of land-raising dumps dating from 1650–1850.

2.2 Archaeology

Prehistoric

2.2.1 Residual flint tools incorporated in alluvium left by hunter-gatherers which may have dated to the Mesolithic Period (10,000–4000 BC) were found off Bermondsey Eyot at Old Jamaica Road, 340m west of the Site. Burnt flint ("pot boilers"), flint blades and later prehistoric pottery were found in waterlain deposits in 1996 at Southwark College, 30m west of the site (MOLA 2019a, 9-10)

Roman

2.2.2 The site is some distance outside the main area of the Roman settlement. However, Roman pot sherds and ceramic building materials were found within a layer of alluvial clay in Old Jamaica Road (MOLA 2019a, 11).

Medieval

2.2.3 Bermondsey Abbey was founded in the 8th century as a "colony" of the monastery of Peterborough. A second "foundation" of 1082 is presumed to be at the same location, on an eyot located over a kilometre away. Medieval pottery was found

reworked in later soil deposits during the Spa Road Regeneration Scheme, 400m west of the site (MOLA 2019a, 12)

Post-medieval

2.2.4 Following the dissolution of the monasteries, responsibility for maintaining drainage fell to the commissioners of sewers, and their work in maintaining the area around the site as pasture is depicted in the Fairthorne and Newcourt map of 1658 (not illustrated). Increasing population demand from London and better drainage led to the pasture being replaced by market gardening which continued into the 19th century.

2.2.5 In 1863 the Bazalgette sewer was built crossing the south side of Bermondsey Campus and ran onto St Clements Road; it clearly still occupied an open landscape as it swept across the Site without following any boundaries.

2.2.6 The Ordnance Survey 1st edition 25": mile map of 1871–2 shows dramatic change on the Site. A railway line had been built in 1836 forming the southern boundary to the Site, and it had become urbanised, with small, terraced houses lining streets on the Site and a Biscuit Manufactory had been established in the south. Peek Frean built over 10 acres of market gardens with the new factory opening in 1866. The Ordnance Survey 2nd edition 25": mile map of 1896 (not illustrated) shows a new school has been built on Bermondsey Campus to the north. The rest of the Site holds a range of terraced housing and some open spaces with the 'Biscuit Works' showing the location of the factory in the south (MOLA 2019a, 13).

2.2.7 The area was badly damaged during World War II, and several areas within the Site had buildings damaged beyond repair. During the war the Peek Frean's air raid shelters in the nearby railway arches were made available to local people and some 400 Bermondsey residents took refuge there during attacks. Following serious bomb damage, a number of buildings and terraced houses around the Site were demolished or vacated.

2.2.8 By 1977–80 the Bermondsey Campus had been redeveloped with new school buildings constructed. Factory buildings were increasingly built to cover much of the land of the Biscuit Factory, south of Clements Road, with open yards between them. The Peek Frean factory at Bermondsey was closed in 1989 and lay derelict until its redevelopment into the Tower Bridge Business Complex.

3 Evaluation methodology

3.1 Field methodology

3.1.1 Two evaluation trenches (TR3a and TR3b) were excavated in the Phase 3 area of the site (Figs 2&3). Excavation of TR3a was not completed due to the presence of a live underground service and only the eastern half of the trench (5m) was excavated to the depth of 1.3m - following instructions from GLAAS, the trench was relocated a short distance to the south (TR3b). TR3b was excavated to full extent (10m); this was carried out in two stages: first the eastern half of the trench was opened, recorded and backfilled, subsequently the western half of the trench was excavated and recorded.

3.1.2 The slab was broken out and cleared by contractors under MOLA supervision. Trenches were excavated by machine by the contractors and monitored by a MOLA supervisor.

3.1.3 Archaeological excavation was carried out in accordance with the Written Scheme of Investigation (MOLA 2020b)

3.1.4 Trench locations were plotted on plans provided by the client using an 'offset methodology' and subsequently tied to the OS grid by MOLA Geomatics.

3.1.5 Where referenced in this report (e.g., '13.45m OD'), levels relate to OS Ordnance Datum and were calculated by measurement from a nearby spot height on a plan (for TR3a) and from a spot height provided by the Site Engineer (for TR3b).

3.2 Recording methodology

3.2.1 A written and drawn record of all archaeological deposits encountered was carried out in accordance with the Written Scheme of Investigation (MOLA 2020b).

3.3 Site archive

Number of trench record sheets	2
Number of overall location plans	2
Number of Context (SU) sheets	14
Number of photographs	45
Number of Plan sheets	3
Number of Sections	3

4 Results of the evaluation

For trench locations see Fig. 2, for trench plans see Fig. 3. A section showing the stratigraphy of Trench 3b is shown in Fig. 4.

4.1 TR3a

Location	Campus
Dimensions	5m by 2m by 1.4m depth
Modern ground level/top of slab	2.63m OD
Base of modern fill/slab/turf	1.33m OD – 2.13m OD
Depth of archaeological stratigraphy above natural (if any)	1.10m
Level of base of lowest features or deposits observed	1.23m OD
Top of surviving natural observed at	Not reached
Level of base of trench	1.23m OD

4.1.1 The earliest deposit recorded in TR3a was a dark-coloured, organic clayey silt [25], somewhat peaty, which would suggest it had been waterlogged – at least periodically. The top of this layer was noted at 1.58m OD. The continuation of this layer was seen a short distance to the south in TR3b, where it was recorded with context number [28] (see below). This is thought to represent agricultural soil horizon dated from pottery to mid-17th century (see Section 4.3.1).

Photo 1 General view of TR3a (eastern half), 1m scale looking west

4.1.2 A demolition or levelling dump [24] was recorded above the organic layer (top at 1.64m OD, 0.5m bgl)). A stepped brick foundation [22] (Photo 1) was recorded above it, erected within a construction cut [23]. It was built from red, purple and yellow brick bonded with buff-coloured mortar. The foundation, recorded at 2.13m

OD and east-west aligned, was at least 3.10m long and 0.30m wide. It is thought to be of a late 19th-century date at earliest and might represent one of the terraced houses of the late 1870s (see front cover).

4.1.3 Also above the organic horizon was a dump deposit [26] (top at 2.13m OD), probably associated with ground raising sometime in the late 19th/ early 20th century. This was a mixed layer of predominantly silty sand with frequent fragments of broken ceramic building material ('CBM'), large fragments of flagstone, occasional lumps of chalk and gravel.

4.1.4 The top of the sequence was a modern rubble make-up for the current ground surface formed of tarmac.

4.2 TR3b

Location	Campus, immediately south of TR3a
Dimensions	10m by 2.5m by 2.5m depth (max)
Modern ground level/top of slab	2.57m OD
Base of modern fill/slab	1.91m OD
Depth of archaeological stratigraphy above natural (if any)	Approx. 1.30m
Level of base of lowest features or deposits observed	0.63m OD
Top of surviving natural observed at	0.63m OD
Level of base of trench	0.07mOD – 0.44m OD

4.2.1 The earliest deposit recorded in TR3b was natural gravel [34] with sandy lenses (Kempton Park River Terrace Gravel) at 0.63m OD. This was sealed by alluvial silty clay [29] at 1.19m OD. The clay was lighter in colour and greasier toward the base, and slightly darker toward the interface with the layer above it, where occasional inclusions of small CBM fragments and charcoal were present, probably indicating some level of reworking (*Fig 4*, Photo 2).

4.2.2 Above the clay, a distinctive organic silt [28] was noted as high as 1.56m OD. This was a continuation of the organic deposit [25] recorded in TR3a (see above) thought to represent agricultural soil. Similarly to [25], it was slightly peaty, suggesting intermittent waterlogging, further supported by the presence of waterlogged plant seeds in the botanical sample {4}; this sample also produced seeds from a variety of different plants (see Section 4.4). Five pottery fragments recovered from this layer are dated to mid- 17th–century, while a single 19th-century pot sherd is considered intrusive (see Section 4.3.1); occasional fragments of clay tobacco pipe stem were also present (not retained). Animal bone fragments were recovered from this sample; these were unidentifiable bird bone and unidentifiable 'sheep-sized' bones (including a burnt fragment), see Section 4.5.

4.2.3 Two post-medieval features were noted above the organic silt. The earlier one was a probable structure (at 1.57m OD, 1m bgl) consisting of red brick fragments and lime mortar and three parallel conifer timbers (Photo 3); this may have been a crude raft, potentially dated to the 18th or early 19th century, which might represent a period when the site was occupied by market gardening. The later one was a heavily corroded iron post/pile [32] (top at 1.47m OD), probably dated to the 19th century.

4.2.4 Both these features were overlain by a later 19th/early 20th century ground-raising dump [33], composed primarily of silty sand with gravel and frequent CBM fragments (top at 1.91m OD).

4.2.5 The latest feature was, a concrete slab (Photo 4) in iron casing recorded at 1.61m OD (0.96m bgl), above dump layer [33]. It probably illustrates the early 20th century

activity on the site.

4.2.6 The top of the stratigraphic sequence recorded in the trench was composed of the same modern deposits as noted in TR3a: rubble make-up below tarmac.

Photo 2 TR3b: section through deposit sequence above the gravels, 1m scale, looking south-west

Photo 3 Brick, mortar and timber structure [31] above agricultural soil, 1m scale, looking south-west

Photo 4 Concrete slab [30], 1m scale, looking south-east

4.3 The finds

4.3.1 Glass and Post-medieval pottery

By Nigel Jeffries

Category	Description	Weight
Glass	7 fragments	0.01kgs
Post-medieval pottery	6 sherds	0.1kgs

Table 1 Finds and environmental archive general summary

4.3.2 *Introduction and quantification*

4.3.3 The purpose of this report is to introduce the post-medieval glass and pottery assemblage hand-collected and recovered from wet-sieved sample {4} in [28] from PKF18, data which is tabulated below (Table 2), before examining the potential (2) of this material and addressing the site objectives and research questions set in the WSI (MOLA 2020b, 2.2.3, 13–14). This material was retained for the site archive, following the sampling and retention guidelines for finds provided (ibid, 3.3, 16).

4.3.4 The bulk glass (bottle, phials or window glass) was recovered from wet-sieved sample {4} taken from [28] in TR3b and comprises several different colourless and natural green coloured window glass fragments (weight 1.5 grams) (Table 1) and has been tabulated below (Table 2). Their condition makes it difficult to obtain more precise identifications and so the contexts in question can only be dated to the entire period of post-medieval glass production from c.1600.

4.3.5 The site produced six sherds (SC) of post-medieval pottery (Table 1) (SC) with a weight of 100 grams, material both hand collected and recovered from wet-sieved sample {4} from [28] in TR3b. The pottery has been identified using London's medieval and later type-series and tabulated by fabric below, using established Museum of London Archaeology (MOLA) codes for fabric, expansions for which can be found on the MOLA website (http://www.mola.org.uk/resources/medieval-and-post-medieval-pottery-codes). The numerical data comprises sherd count (SC), and weight (see Orton, Tyers and Vince 1993, 167–181, about these specific methods of quantification). As an assemblage the pottery from [28] is dominated by mid- 17th–century fabrics (e.g., PMR, RBOR and TGW A) and forms, but also produced one sherd of refined white ware with blue-transfer printed decoration in the Asiatic Pheasants pattern (e.g., TPW2). This sherd is currently interpreted as intrusive and has not been reflected in the dating applied to the pottery from this context in Table 2.

Context	Trench	Wet-sieved sample	Material type	Classification	Count	Weight (grams)	E.date-Late (for each material)
[28]	TR3b	{4}	Glass	Window glass	7	1	1600–1900
[28]	TR3b	{4}	Prpot	RBOR, PMR	2	2	1580–1800
[28]	TR3b		Prpot	RBOR, PMR, TGW A and TPW2	4	98	1612–1700

Table 2 Tabulation of the post-medieval glass and pottery from PKF18 Phase 3

4.4 The botanical samples

By Kate Roberts

Category	Description
Bulk Flotation samples	1 wet flot

Table 3 Botanical samples archive general summary

4.4.1 *Introduction/ methodology*

4.4.2 One environmental sample was processed for the retrieval of archaeobotanical and other organic remains in order to assess its potential to contribute to the interpretation of the site. The sample produced a flot, which has provided information about its botanical composition.

4.4.3 A bulk soil sample of 0.5 litres was processed by flotation, using meshes of 0.25mm and 1.00mm to catch the flot and residue respectively. The flot was kept wet and the residue air dried and sorted by eye for any finds or environmental material. All flots and sorted botanical materials from the residue were then scanned briefly, using a low-powered binocular microscope. The abundance, diversity and general nature of plant macrofossils and faunal remains were recorded on the MOLA Oracle database, and the archaeobotanical information are summarised in Table 4 and Table 5.

Abundance: Occasional = 1–10 items, Moderate= 11–50, Abundant = 50+ items
Diversity: Low = 1–3 items, Medium = 4–7 items, High = 7+ items

4.4.4 ***Charred remains***

4.4.5 Charcoal was present in moderate quantities.

4.4.6 ***Waterlogged and mineralised remains***

4.4.7 Waterlogged seeds were present in moderate quantities and showed some evidence of deterioration, however they were quite diverse and could be used to consider the use of the feature and the local environment, with environments indicated including waste ground and grassland.

CONTEXT	SAMPLE	VOL PROCESSED	SIEVE SIZE WSIEVED	VOL FLOTTED	SIEVE SIZE FLOTTED	FLOT TYPE
28	4	0.5	1	0.5	0.25	wet

Table 4 Processing information

CONTEXT	SAMPLE	PROCESS	ID	ABUNDANCE	DIVERSITY	COMMENTS
28	4	F	CHD WOOD	Moderate	Low	<2mm
24	4	F	WLG SEEDS	Moderate	High	Chara, Leontodon, stellaria media, solanum nigrum, sambucus nigra, ballota nigra, euphorbia, stellaria graminea/palustris, ranunculus batrachium, Chenopodium/atriplex, rubus fruticosus, urtica urens

Table 5 Botanical remains present in flots

4.5 The animal bone

By Alan Pipe

Category	Description	Weight (kg)
Animal bone	7 fragments	0.001

Table 6 Animal bone archive general summary

4.5.1 *Introduction and quantification*

4.5.2 This record and note quantifies and describes the animal bone recovered from PKF18 wet-sieved sample [28] {4}. This assemblage was recorded as a sample group onto the MOLA ORACLE assessment database, and as individual fragments onto the MOLA ORACLE post-assessment database. The group included only seven fragments, 0.001 kg of highly fragmented, moderately preserved but unidentifiable animal bone, derived mainly from unidentifiable 'sheep-sized' fragments with a single fragment of unidentifiable bird bone. A single fragment of unidentifiable 'sheep-sized' bone had been calcined white indicating a high combustion temperature of at least 700 degrees Celsius, comparable to a cremation pyre or a well-oxygenated hardwood fire (Lyman 1994, 386). There was no tool mark evidence and no evidence of gnawing, pathological changes, or any other modification. This material was retained for the site archive; the assessment and post-assessment level data are available for consultation on the databases.

Context	TR	Wet-sieved sample	Material type	Classification	Count	Weight (kg)	E.date-Late
[28]	TR3b	{4}	Animal bone	unidentifiable bird long bone	1	<0.001	1580–1800
[28]	TR3b	{4}	Animal bone	unidentifiable 'sheep-sized' bone	5	<0.001	1580–1800
[28]	TR3b	{4}	Animal bone	unidentifiable 'sheep-sized' bone/calcined white	1	<0.001	1580-1800

Table 7 Wet-sieved animal bone from PKF18

4.6 Conclusions

4.6.1 Two east – west aligned evaluation trenches, TR3a and TR3b were excavated in the eastern part of the Phase 3 area (Figs 2 & 3). The presence of a live service in the eastern half of TR3a prevented the full excavation of the trench, which in its final shape measured 5m long by 2m wide x 1.4m deep. As a result, TR3b was excavated a few metres to the south of TR3a. It measured 10m long x 2.5m wide by 2.5m deep.

4.6.2 Natural gravels were exposed as high as 0.63m OD, sealed below alluvial clay (top at 1.19m OD). The clay, in turn, was overlain by peaty silt thought to represent

agricultural activity on the site; five pottery sherds suggest a mid-17th century date for this deposit; a single 19th-century sherd is considered intrusive. This layer was present in both TR3a and TR3b, with top recorded as high as 1.58m OD. A soil sample {4} collected from this deposit contained plant remains from a variety of different plants (including charred and waterlogged examples), indicative of grassland and waste ground environment.

4.6.3 A number of later structures recorded above this horizon attest to a change in landuse. A crude brick and timber raft probably dated to the 18th or early 19th century, might be associated with the use of the area for market gardening. The other features date to the 19th and early 20th centuries. They include a stepped brick foundation, iron post/pile and a concrete slab encased in iron. In addition, ground-rising dumps were also recorded. These later structures are possibly associated with terraced housing of the 1870s.

4.6.4 The archaeological features in this area of the site were situated as high as 2.13m OD, just 0.5m below the ground surface.

5 Archaeological potential

5.1 Answering original research aims

5.1.1 The following research aims found in the *Written Scheme of Investigation* (Section MOLA 2020b) are directly relevant to the Phase 3 area of site:

- *What is the nature of the Early Holocene topography of the site and what are the levels of pre-Holocene deposits?*

  The pre-Holocene deposit recorded in TR3b was natural gravel and sand (top ay 0.63m OD) of the Kempton Park terrace gravels, laid down by the Pleistocene (Quaternary) River Thames. It was sealed by a layer of alluvial clay (top at 1.19m OD), representing Holocene (post-glacial) alluvium deposited either by a meandering inland Thames, or in tidal creeks of a more estuarine character, such as those that were to isolate the islet ("eyot") of Bermondsey. This is consistent with the sequence noted in geotechnical window samples on the site monitored by MOLA in 2018 (see Section 2 of this report).

- *Can any buried soil horizons be identified?*

  The dark-coloured organic silt seen in TR3a and TR3b is probably a post-medieval soil deposit relating to the fields and market gardens that existed before the area was built upon in the mid-19th century. The pottery fragments recovered from this horizon were dated to the mid-17th century. Further, the formation of peat within this deposit and waterlogged plant seeds in botanical sample {4} suggest intermittent waterlogging. The botanical sample produced seeds from a wide variety of different plants, indicative of grassland or waste ground environment.

- *What is the nature and thickness of the Holocene sediments?*

  The alluvial silty clay recorded above gravels in TR3b at 1.19mOD was light yellow brown toward base, greasy and without visible inclusions. It was darker in colour toward the top and the presence of occasional small CBM fragments and charcoal flecks suggested probable reworking of the top of this deposit. Its thickness was up to 0.56m.

- *Is there any evidence for Roman or later activity at the site?*

  There is no evidence of Roman or medieval activity in this area of the site.

- *Can the date of the post-17th-century land raising be refined?*

  The only ground-rising dumps recorded in the trenches were dated to the late 19th or early 20th centuries.

- *What is the nature and extent of 19th century development on the site?*

  A stepped foundation, a metal post/pile and a concrete slab are possibly associated

with terraced housing of the 1870s.

- *What is the extent of modern disturbance?*

  The modern disturbance present was a service trench in TR3a as well as horizontal truncation down to approx. 0.5m below ground level at which depth the top of the brick structure in TR3a; the deeper horizontal truncation was evident in TR3b where the latest feature, a concrete slab was noted at 0.96m below ground level.

5.2 General discussion of potential

5.2.1 The evaluation has shown that the potential for survival of ancient ground surfaces (horizontal archaeological stratification above natural ground) on the site is relatively good. The survival of alluvial clay on the site above the natural gravels suggests potential for archaeological remains within the alluvium, buried in situ or reworked by river action.

5.2.2 The small assemblage of post-medieval glass and pottery collected during the evaluation can characterise the agricultural deposit it was found from and provides a consistent 17th-century date for the limited excavated sequence in TR3b.

5.2.3 The plant remains from the botanical sample {4} sample have the potential to provide further information about the local environment of the site. The presence of seeds from a wide variety of different plants suggests the potential for good preservation of waterlogged plant remains (rather than just the more robust seeds being preserved), meaning further sampling could produce good, waterlogged assemblages.

5.2.4 Due to the limited size and fragmented character the animal bone assemblage has no potential to answer site-specific aims or research questions. It does not justify further post-assessment study.

5.2.5 The average depth of archaeological deposits where they do survive is likely to be c 1.30m.

5.3 Significance

5.3.1 Whilst the archaeological remains are of local significance there is nothing to suggest that they are of regional importance.

5.4 Assessment of the evaluation

5.4.1 There is a high level of confidence in the information recovered from two trenches, TR3a and TR3b in the Phase 3 area to provide the basis of any mitigation strategy.

6 Proposed development impact and conclusions

6.1.1 Taking into account the results in the two evaluation trenches and previous desk-based assessment, it appears that archaeological deposits that survive are primarily associated with the agricultural use of the area between the mid-17th and the 18th/early 19th centuries, and 19th/ early 20th century buildings. However, the evaluation also recorded Holocene alluvial deposits above Pleistocene gravels, suggesting some potential for earlier archaeological and/or palaeoenvironmental remains, including those of prehistoric date.

6.1.2 Previous evaluation was completed in Phase 1 (MOLA 2020a) and evaluation is ongoing in the Phase 2 area of development and will be reported on separately in accordance with the approved WSI (MOLA 2020b).

6.1.3 The whole site is being developed to create a mixed-use scheme including residential and commercial buildings and a school. This would have an impact on any surviving archaeological deposits with impacts from piling, strip foundations, drainage works and general groundwork in certain areas.

6.1.4 No further mitigation is recommended in this report but the final decision on any archaeological mitigation to the deposits revealed in the Phase 3 area (and other phases) rests with the Local Planning Authority.

6.1.5 The results of the Phase 3 evaluation will be made publicly available by means of a database in digital form, to permit inclusion of the site data in any future academic research into the development of the area.

6.1.6 The site archive containing original records and finds will be stored in accordance with the terms of the *Written Scheme of Investigation* (MOLA, 2023) Museum of London Archaeological Archive with the Museum of London Archaeological Archive within 12 months of the end of the evaluation.

6.1.7 In view of the limited potential of the material and the limited significance of the data it is suggested that a short note on the results of the watching brief should appear in the annual round up of the *London* Archaeologist.

7 Acknowledgements

7.1.1 The author would like to MOLA would like to thank Reach Active for commissioning the archaeological work on behalf of the client, Grosvenor, and the author would like to thank Piotr Jurkiewicz and Milosz Stolarski of Reach Active for assistance during the evaluation work.

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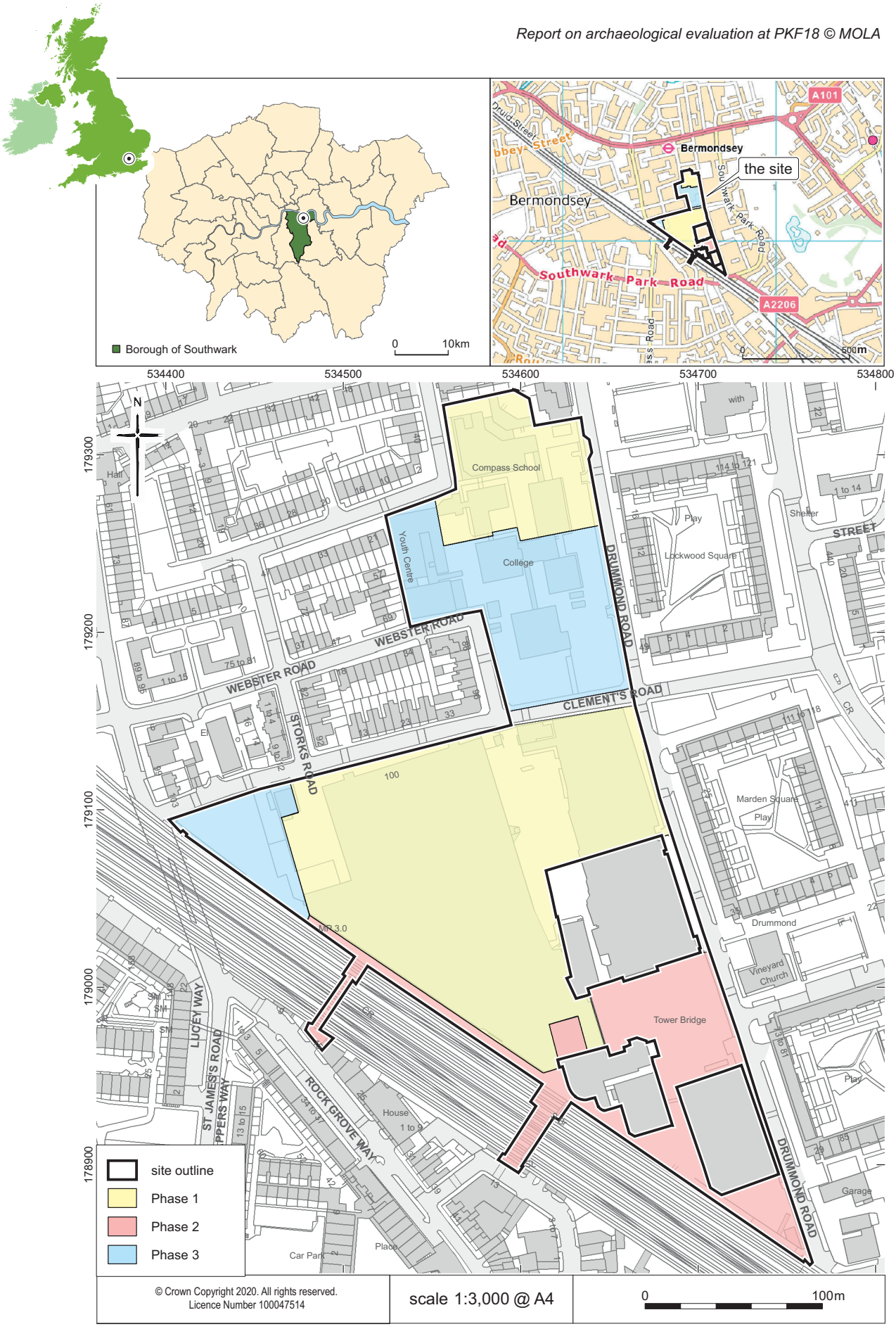

Fig 1 Site location

Fig 2 Areas of evaluation

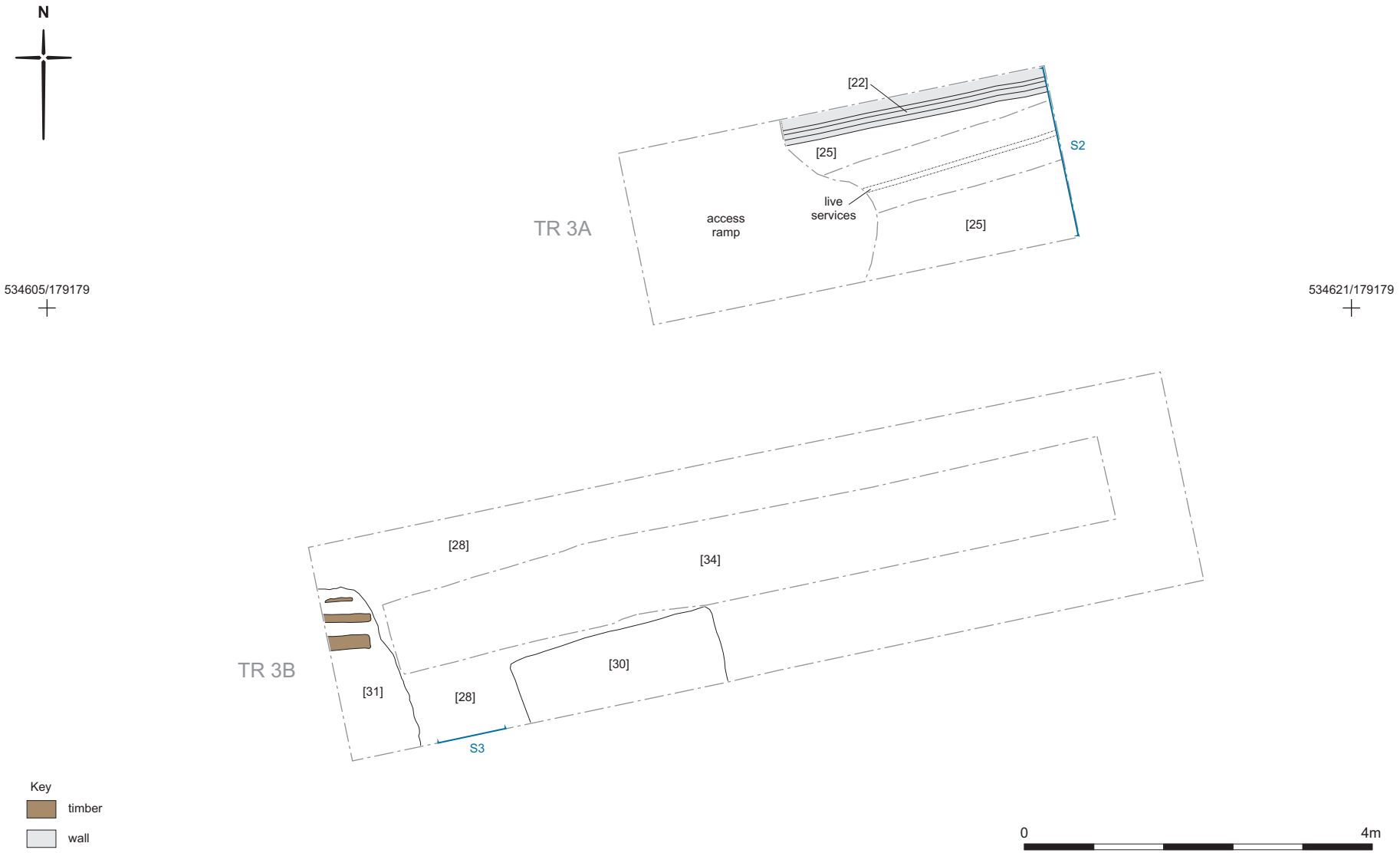

Fig 3 Archaeological features recorded in TR3a and TR3b 16

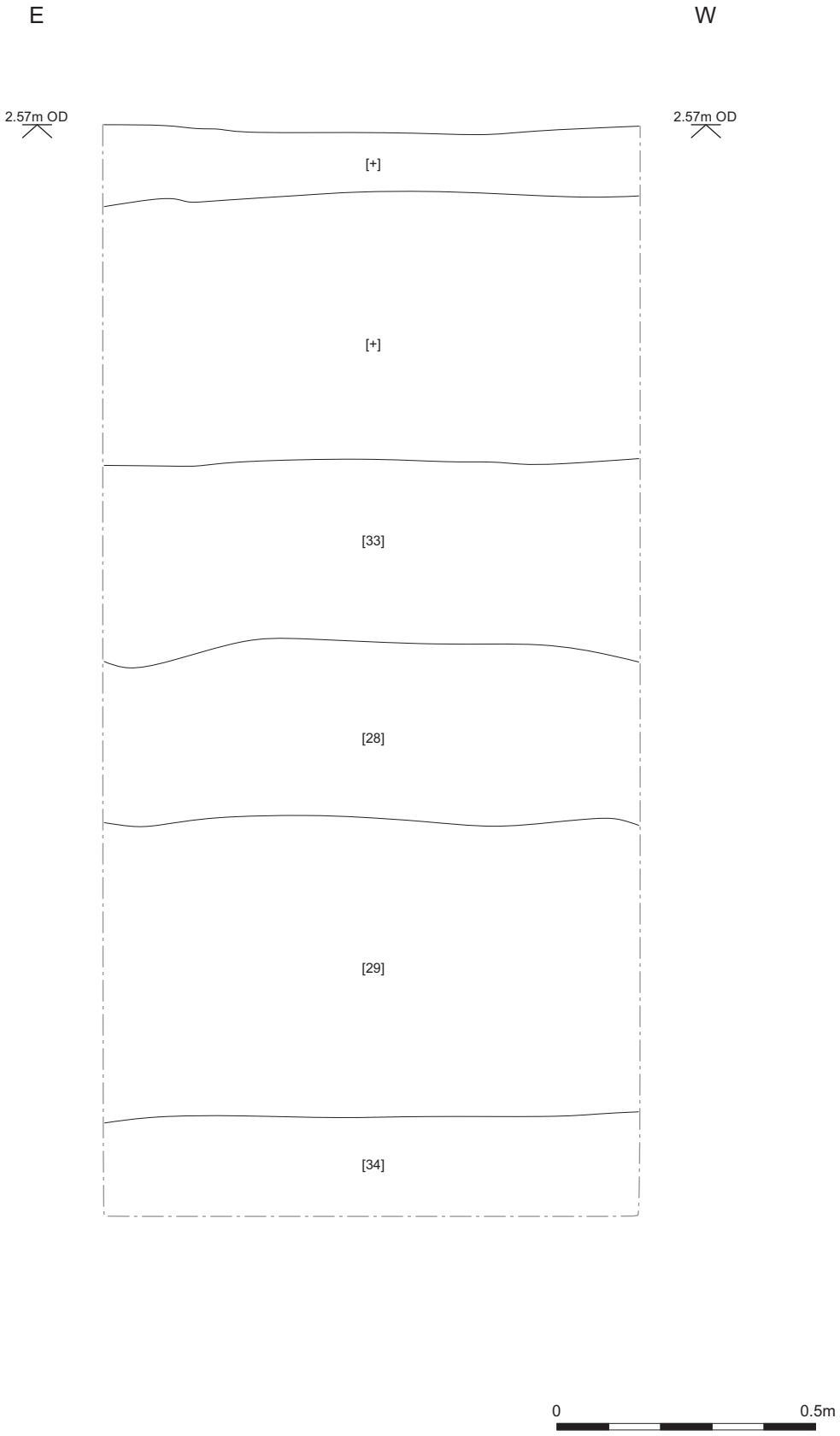

Fig 4 North-facing section through deposit sequence in TR3b

9 OASIS archaeological report form

OASIS ID (UID): molas1-520943

Project Name: Archaeological evaluation of Phase 3 at Tower Bridge Business Complex , 100 Clements Road - Aka The Biscuit Factory & Bermondsey Campus Site, Keetons Road, London SE16 4DG
Activity type: Evaluation
Sitecode(s): PKF18
Project Identifier(s): PKF18
Planning Id: 17/AP/4088
Reason for Investigation: Planning requirement
Organisation Responsible for work: MOLA
Project Dates: 23-Oct-2023 - 14-Nov-2023
HER: Greater London HER
Project Methodology: Two trenches machine excavated in the Phase 3 area of the site. Recorded in section and plan.
Project Results: The natural was sand and gravel at 0.63m OD, sealed by alluvial clay at 1.19m OD. Above the clay, a dark-coloured organic deposit was recorded at 1.58m OD. This formed a distinctive horizon, associated with agricultural activity on the site prior to the urban development of the area in the mid-19th century; post-medieval pottery sherds recovered from this layer were dated to the mid-17th century. A timber- and- brick raft recorded in TR3b might be associated with market gardening. Later structures illustrated the late 19th and early 20th century; these included: a, a stepped brick foundation, a concrete pad and an iron post – all probably representing the terraced housing of the 1870s. One environmental sample (10l) was collected during the evaluation.
Archive:
Physical Archive, Digital Archive - to be deposited with Museum of London;
Reports in OASIS:
Olchowska, K., (2023). *Archaeological evaluation of Phase 3 at Tower Bridge Business Complex , 100 Clements Road - Aka The Biscuit Factory & Bermondsey Campus Site,*
Location
Site name: The Biscuit Factory Phase 3
Coordinates:

TQ 34600 79120 LLNGR12 fig

Administrative Areas:
Country : England
County/Local Authority : Southwark ONS
Local Authority District : Southwark ONS
Parish : Southwark, unparished area