

Smithfield Market Development Birmingham

*Archaeological Evaluation
and Watching Brief*



for:
Birmingham City Council

CA Project: MK0351
CA Report: MK0351_1
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SUMMARY

Project name:	Smithfield Market Development, Birmingham
Location:	Birmingham
NGR:	407391 286433
Type:	Evaluation and Watching Brief
Date:	9 December 2020 – 18 December 2020, 11 January 2021 – 18 January 2021, 15 March and July 6 – 9 2021
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In December 2020 and January 2021 Cotswold Archaeology carried out an archaeological evaluation at the former Wholesale Market site, off Pershore Street in Birmingham. This was undertaken as part of the Smithfield Market Development. Three trenches were excavated, targeted on the site of the former medieval manor house and associated structures, along with the moat that surrounded these buildings. These remains represent the focus of settlement in early Birmingham. A watching brief was also undertaken during the excavation of a lift pit at the Site.

The evaluation demonstrated that structural elements of the medieval moated manor survive substantially intact at no more than 0.5m beneath the present concrete slab. Deposits of medieval date were also identified at the base of the moat. This suggests that *in situ* deposits, artefacts and palaeoenvironmental evidence survive well, where not cut by groundworks in the 1970s.

Post-medieval to 19th century structural remains were recorded within the former area of the moat platform, as well as to the southern edge of the former moat and to its north. Deposits that may be associated with the former moat platform and those associated with the clearance of the Site and development of the markets in the 19th century were evident but were very mixed and represent remains spanning several centuries, though reflecting activities that took place probably throughout the 19th century.

1. INTRODUCTION

- 1.1. In December 2020 and January 2021, Cotswold Archaeology (CA) carried out an archaeological evaluation of land at Smithfield Market, Birmingham, B5 4QL (centred at NGR: 407391 286433; Fig. 1; hereafter, the Site), on behalf of Birmingham City Council. This was followed in March and July 2021 by an archaeological watching brief, first of a small hand-dug geotechnical test pit and then subsequently for ground investigation works in advance of the installation of a lift pit on the northern edge of the Site.
- 1.2. The Site had previously been subject to an archaeological ‘salvage’ watching brief in the 1970s (Watt, 1980), an Archaeological Desk-Based Assessment (Atkins 2010) and an archaeological watching brief undertaken during a borehole survey of the Site in 2019 (CA 2019). This informed the preparation of a *Brief for an Archaeological Evaluation of the Birmingham Moat, Smithfield Market Site, Birmingham* defined by Chris Patrick, the Principal Conservation Officer for Birmingham City Council (PCOBCC).
- 1.3. The present archaeological works were carried out in accordance with a Written Scheme of Investigation (WSI) prepared by CA (2020, updated in 2021) and approved by the PCOBCC. The works also adhered to the *Standard and guidance for archaeological field evaluation* (ClfA 2014; updated October 2020) and the *Standard and guidance for an archaeological watching brief* (ClfA 2014; updated October 2020), the *Management of Research Projects in the Historic Environment (MoRPHE) PPN 3: Archaeological Excavation* (Historic England 2015a) and *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015b).

The Site

- 1.4. The wider development site measures approximately 16.8ha in extent, and comprises the former Wholesale Markets Precinct, including market buildings, warehouses, associated infrastructure and car parking. The Site is bounded to the north by Upper Dean Street, to the east by Moat Lane and Bradford Street, to the south by Barford Street and to the west by Dean Street and Pershore Street. It lies on level ground at approximately 107m above Ordnance Datum (aOD). The evaluation and watching brief were undertaken in the north-eastern part of the wider site (Fig. 2).

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- 1.5. The underlying bedrock geology of the area is mapped as mudstone of the Sidmouth Mudstone Formation, formed approximately 228 to 250 million years ago in the Triassic Period; and sandstone of the Helsby Sandstone Formation, formed approximately 242 to 247 million years ago in the Triassic Period (BGS 2020). No superficial deposits are recorded for the area. Geotechnical boreholes excavated in 2019 recorded the natural substrate as a mixture of silty sandy clays (GIP 2019).

2. **ARCHAEOLOGICAL BACKGROUND**

- 2.1. As noted above, the Site has been the subject of a 'salvage' watching brief in the 1970s (Watts 1980) and more recently, an Archaeological Desk-Based Assessment (Atkins 2010) and an archaeological watching brief undertaken during a borehole survey of the Site in 2019 (CA 2019). The archaeological background of the Site has been summarised within the preceding WSI (CA 2020) and the following revisits the information taken from these documents.

Prehistoric (pre-AD 43) and Roman periods (AD 43 to AD 410)

- 2.2. The extent of known prehistoric settlement and associated activity within the wider Birmingham area has become better informed in recent years as a result of archaeological investigation, prior to which the picture was largely based on chance finds of flint, stone and bronze artefacts. These investigations suggest that the less-urbanised parts of the city could retain surviving prehistoric buried remains, but the built-up areas of the city centre and its surroundings are far less likely to retain extensive remains. To date, no substantial prehistoric remains have been recorded within the study area.
- 2.3. The Site was subject to a previous archaeological investigation in 1975, when the Smithfield Market was first built. This investigation identified a prehistoric peat deposit, potentially of the Upper Palaeolithic period (Watts 1980).
- 2.4. Very little evidence of activity during the Roman period has been recorded within the city centre, with the exception of finds of Roman coins during the construction of sewers in Dudley Street (c.250m to the north-west of the Site) and at several other locations in the wider city area. In the wider region, there is evidence of Roman military, agricultural/industrial and domestic activity, including a fort and associated vicus occupied from the 1st to 2nd centuries AD at Metchley. Roman farmsteads have been discovered at King's Norton, Sutton Coldfield and elsewhere (Hodder 2004, 49).

Early medieval period (AD 410 to 1066)

- 2.5. Early medieval Birmingham developed on a sandstone ridge. Much of the present-day city centre is situated on the same ridge, along which it has spread, as well as to the west. It is thought that the central part of the present settlement, c.1km to the north of the Site, was the original focus of settlement during the early medieval period. Birmingham is an Anglo-Saxon name which has been interpreted as "land-unit of Beorma's people" (Atkins Ltd 2010). It has been suggested that the shape of the Parsonage moat, situated to the west of the Site, may reflect the location of a late Saxon manor, but this is based only on its depiction in much later maps (Hodder 2004, 80).

Medieval period (1066 to 1540)

- 2.6. In 1166, Peter de Birmingham bought the rights to hold a weekly market, to be held at his *castrum* (Atkins Ltd 2010). This "castle" probably refers to the site of the moated manor house which stood at the Site, although there is no firm archaeological evidence for when the Site was initially developed and what form it took. Over the following centuries the town grew in size and stature, its heart focused on St Martin's Church, the Manor and the market area. Birmingham achieved regional importance over the next two centuries, becoming one of the three largest towns in Warwickshire.
- 2.7. As described above, there is very little archaeological evidence of substantive occupation in the Birmingham city area prior to the medieval period, and it is suggested that the town may have been created around the 12th century (Hodder 2004, 83). It has also been suggested that the purchase of the market charter in 1166 may have been contiguous with the initial medieval development, or deliberate foundation, of the town. The distinctive triangular formation of the marketplace, with St Martin's on its south-western side, is also considered indicative of this theory (Atkins Ltd 2010). Alternatively, the moated manor site may have represented the focus and impetus for initial development of the manor of Birmingham during the late 11th and early 12th centuries. At this time, Birmingham was situated on the edge of Arden, an area in which moated sites are a distinctive feature of the regional settlement pattern, with the majority dating between the 13th and 14th centuries. The circular shape of the Birmingham moat and the sub-circular shape of the Parsonage moat are indicative of an earlier phase of moat-building in the region, estimated to be around 1150 (Atkins Ltd 2010).

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- 2.8. The origins of the two moats and their possible relationship to each other are not known, though they may originally have represented the manorial site and its home farm. Both moated sites are located on the Birmingham Fault, a geological feature which occurs where the Mercia Mudstone deposits on the east and south-east have been let down (Watts 1980). This fault is reflected in the steep slope from the Bull Ring down to Digbeth and the River Rea. This is also associated with a line of natural springs and wells which would have made the area a prime development focus in the medieval period and obviously influenced the installation of the moats in each case.
- 2.9. In 1901, groundworks associated with the fish market extension of Smithfield Market, fronting onto Moat Row, hit unstable ground to a depth of up to almost 5m. This ground comprised loose soil and rubbish, and may have represented moat fill (Watts 1980). No further discoveries are recorded until the archaeological investigations of the 1970s, when the demolition of the old Smithfield Market and preparatory groundworks to reduce the level of the Site were undertaken in advance of the construction of the Wholesale Markets. An archaeological watching brief during the excavation of pile base pits and trenches identified parts of the former moat, along with the *in situ* remains of a substantial sandstone wall on the inner edge of the moat (i.e. on the south-eastern part of the former moat platform). In addition, a stone building was recorded in the south-western part of the Site, near the inner edge of the western arm of the moat. This was interpreted as evidence of the presence of substantial medieval buildings within the boundary of the moat, on the interior platform. Re-deposited pieces of stonework and other medieval artefacts were also present (Watts 1980).
- 2.10. The majority of the artefacts recovered during the 1970s watching brief dated to the 13th and 14th centuries, according with the general date range for moated sites in the region; however, the recovered stone moulding fragments, not found *in situ*, have been ascribed a slightly earlier, 12th century origin (Watts 1980).
- 2.11. The top of the intact remains of the stone wall were recorded at approximately 106.47m aOD and its base lay at approximately 104.90m aOD. The wall was constructed of the same red sandstone as the bedrock material on which it had been built, though in places a bedding layer of pebbles and broken bedrock was evident (Watts 1980). An earlier wall was evident within part of its length, embedded within its thickness. This earlier wall, also of sandstone, survived to approximately 2m in height and was constructed of more roughly formed blocks than the later structure.

The more substantial later wall was faced with well-cut sandstone blocks with a chamfered plinth. The south side of the main structure was recorded to 11m in length, with a return of 4m, and had a buttress about 4m from its south-eastern corner (Atkins 2010).

- 2.12. The 1970s watching brief showed the moat to have undergone a number of silting episodes during the medieval and post-medieval periods (Watts 1980). Medieval artefacts recovered from the moat deposits dated principally between the 13th and 14th centuries and between the 14th and 15th centuries. Organic remains were also recovered from the moat deposits. These indicated that the water within the moat was clean for most of the period in which the moat was open, with only slight sewage contamination occurring later in the post-medieval period. The moat contained typical water plants and waters-edge plants, whilst its surroundings were predominantly rural, with woody thickets or hedgerows, arable and pastureland and possibly evidence of hop or hemp growing (Watts 1980).

Post-medieval and modern periods (1540 to present)

- 2.13. Evidence for more recent activity and occupation in and around the Site is far more extensive. As late as 1731, the watercourse running between the Parsonage moat and the Birmingham manor site formed the southern boundary of the city. By 1766, however, Thomas Gooch was given permission by an Act of Parliament to develop much of the area to the south. Rapid growth ensued and, by 1778, Birmingham moated manor was surrounded by streets and buildings. In the 17th and 18th centuries, small-scale industry and associated housing characterised the area and, by the 18th century, the manor and its structures had been given over to wire manufacture.
- 2.14. By 1816, the whole manor site had been sold off. The buildings were demolished and all valuable materials were removed. There followed a period of decades when the Site was occupied by a livestock market, initially called 'The Moat.' Brick buildings and surrounding iron palisade fencing were installed and were added to over the decades that followed. Around the same time, the Parsonage moat was infilled, and the Site levelled. In the late 1820s, a turnpike road was constructed through the area to connect Worcester Street with Bromsgrove Street.
- 2.15. The Smithfield Wholesale Fruit and Vegetable Market was constructed in 1881, to a design by W Spooner Till, the Borough Surveyor, on the former moated manor site.

This enhanced the status of the area and, in particular, the wholesale and livestock markets and surrounding industries. In the 20th century, the markets declined. Redevelopment in the 1970s levelled the markets area once again and the (now recently demolished) Wholesale Markets were constructed.

- 2.16. An archaeological watching brief undertaken during ground investigation works (CA 2019) recorded the natural substrate at depths ranging from 0.8m below present ground level in the north of the Site to 5.9m below present ground level in the south. No features or deposits of archaeological significance were identified during these groundworks, despite two boreholes being located in proximity to the anticipated locations of the former moat and manor platform.

3. AIMS AND OBJECTIVES

Archaeological evaluation

- 3.1. The general aim of the trial trench evaluation was to define the presence or absence, character, extent, date, integrity, state of preservation, quality and significance of surviving archaeological deposits and features at the Site. This information will enable the PCOBCC to identify and assess the particular significance of any such remains, consider the impact of any proposed development upon that significance and, where required, develop strategies to avoid or minimise any conflict between the conservation of those heritage assets and the development proposals. This process is in line with policies contained in the National Planning Policy Framework (MHCLG 2021).
- 3.2. The specific aims of the work were outlined within the WSI (CA 2020), and are listed below:
- to establish whether the stone structure identified in the 1975 watching brief survives;
 - to identify the extent of the moat and the depth of pre-19th century deposits;
 - to establish the extent of truncation across the moat platform and whether further structures and deposits survive; and,
 - to test for the presence of prehistoric peat deposits with palaeoenvironmental potential.

Watching brief

- 3.3. The objectives of the archaeological watching brief were:

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- to monitor preliminary site investigation works associated with a small hand-dug test pit at the base of the existing retaining wall at the northern boundary of the Site, and during the excavation of a lift pit at the northern end of the Site, and to identify, investigate and record all significant buried archaeological deposits revealed during the course of these groundworks; and,

3.4. A general aim for the evaluation and watching brief as a whole was, at the conclusion of the project, to produce an integrated archive for the project work and a report setting out the results of the project and the archaeological conclusions that can be drawn from the recorded data.

3.5. Again, as for the archaeological evaluation, where significant archaeological remains have been identified, reference is made to *The Archaeology of the West Midlands: A Framework for Research* (Watt 2011), so that the remains can, if possible, be placed within their local and regional context.

4. METHODOLOGY

Evaluation

4.1. The evaluation comprised the excavation of three trenches (Figs 2 – 3):

- Trench 1 measured 11m in length by 2.2m in width and was aligned approximately north-east/south-west. This sought to identify evidence of the former stone structure recorded in 1975 and its relationship to the moat platform and the edge of the moat. It also sought to identify the extent and depth of the moat on its south-western side. The intention was to excavate the trench between the foundation bases of the former market building, and with that in mind its original position was very slightly amended to better align with the space between concrete foundation bases and associated ring beams.
- Trench 2 measured 25m in length by 2.2m in width and was aligned broadly north/south. This sought to evaluate the potential survival of the former moat platform within the western arm of the moat.
- Trench 3 measured 40m in length by 2.2m in width and was aligned broadly north/south. This trench sought to understand the extent of the moat on its south-western side and its relationship with the interior of the moat platform.

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- 4.2. Two contingency trench options were also provided within the scope of the WSI, as Trench 4 Option A and Trench 4 Option B. The intention, initially, was to open Trenches 1 – 3 in order to define the depth, extent, state of preservation and date of buried archaeological remains and then, if required, to excavate Trench 4 in either of the two locations defined in the WSI to enhance the results of the excavation of those trenches. Following consultation with the PCOBCC and the Client, the implementation of this contingency was not required.
- 4.3. Each of the trenches exceeded 1m in depth in places, though not for their entire lengths. The depth of each trench was initially established when the first archaeological horizon or natural substrate was revealed (whichever was encountered first). Where the trenches were excavated to depths greater than 1m (and less where necessary) and safe access could not be guaranteed, recording of archaeological remains took place from ‘trench-side’ only. The excavation methodology was agreed on Site with the PCOBCC once the nature of the sub-surface deposits was confirmed.
- 4.4. Trenches were set out on OS National Grid co-ordinates using Leica GPS and were scanned for live services by trained CA staff using CAT and genny equipment, in accordance with the *CA Safe System of Work for avoiding underground services*. The position of Trench 1 was adjusted slightly on Site to account for below ground constraints (the alignment of the sub-surface ring-beams) with the approval of the PCOBCC.
- 4.5. Upon completion of the evaluation, the trenches were backfilled by mechanical excavator, with Type 1 hardcore and a newly laid concrete slab. The exposed remains of key structural remains (medieval wall 306; see Section 5 for details) were protected with geotextile overlain with a bedding layer of sand.

Watching brief

- 4.6. The watching brief comprised the observation by a competent archaeologist of intrusive groundworks. The monitored groundworks comprised the hand excavated of a small (1m long by 0.5m wide) geotechnical test pit and the machine excavation of footprint of a proposed lift (measuring 8m long by 6m wide).

Excavation and recording

- 4.7. Where physically safe to access, all archaeological features present were investigated, planned and recorded in accordance with *CA Technical Manual 1*:

Fieldwork Recording Manual. Each context was recorded on a pro-forma context sheet by written and measured description. Hand-drawn sections of excavated archaeological features were prepared (scale 1:10 or 1:20, as appropriate). Features/deposits were recorded in plan using Leica GPS or Total Station (as appropriate), in accordance with *CA Technical Manual 4: Survey Manual*. Key structural features in Trench 3 were also recorded in plan photogrammetrically.

- 4.8. A photographic record, utilising high resolution digital photography of a minimum of 10 megapixels (and a sensor size of a minimum APS-C) and in RAW format, was taken as appropriate. All photography was in accordance with *CA Technical Manual 1: Fieldwork Recording Manual* and conformed to industry best practice (e.g. Historic England 2015b). Images were converted to uncompressed baseline v.6 TIFF for archiving. All images will have accompanying metadata specifying; photo ID, capture device, converting software, colour space, bit depth, resolution, date of capture, photographer, caption, and any alterations made to the image.

Artefacts

- 4.9. Artefacts were recovered and retained for processing and analysis in accordance with *CA Technical Manual 3: Treatment of Finds Immediately after Excavation*.

Environmental remains

- 4.10. Deposits were assessed for their palaeoenvironmental potential in accordance with the guidelines outlined in *Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011) and *CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites*.

Archive

- 4.11. CA will make arrangements with Birmingham City Museum and Art Gallery, through liaison with the Birmingham Museum Trust, for the deposition of the project archive and, subject to agreement with the legal landowner(s), the artefact collection. An ordered, indexed, and internally consistent site archive has been prepared in accordance with the *Archaeological Archive Standards: A Standard for the Creation, Compilation and Transfer of Archaeological Archives in Birmingham* (Birmingham City Council and Birmingham Museums 2019); *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Archaeological Archives Forum 2007) and *Standard and Guide to Best Practice for Archaeological*

Archiving in Europe: EAC Guidelines 1 (Europae Archaeologia Consilium 2019). A digital archive has also been prepared and will be deposited with the Archaeology Data Service (ADS). The archives (museum and digital) will be prepared and deposited in accordance with *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (ClfA 2014; updated October 2020).

- 4.12. A summary of information from this project, as set out in Appendix E, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS

- 5.1. This section first provides a detailed description of the evaluation results, followed by a description of the watching brief results. Detailed summaries of the recorded contexts for both the evaluation and watching brief are given in Appendix A. Details of the artefactual material recovered from the Site are given in Section 6 and Appendix B. Details of palaeoenvironmental and biological material are provided in Sections 7 and 8 and in Appendices C and D.
- 5.2. The natural substrate was reached in machine-dug sondages in each of the three trenches. In Trench 1, the natural substrate was reached at c.2.1m depth from the modern surface (c.104.88m aOD) and comprised compact red sand with some yellow sand (Fig. 7). This contained chunks of red sandstone and represents the upper, eroded surface of the solid red sandstone beneath. In Trench 2, the natural substrate was reached at c.2.15m below the modern surface (c.104.84m aOD) and comprised solid red sandstone (Figs 8 and 9). In Trench 3, the natural substrate was reached at c.2.5m below the modern surface (c.104.50m aOD) and comprised compact yellow sand with some red sand banding (Fig. 10). This also contained chunks of yellow and red sandstone and represents the upper, eroded surface of the solid red sandstone beneath.
- 5.3. There was no evidence of a subsoil or buried topsoil deposit in any of the trenches. The composition of the deposits that overlay the natural substrate are described below for each of the trenches.
- 5.4. Archaeological features dating from the medieval to modern periods, none of which appeared to cut the natural substrate, were identified in each of the three trenches. Figure 3 presents a plan of the features recorded in each of the trenches.

Trench 1 (Fig. 7)

- 5.5. The natural substrate was overlain by deposit 107, which comprised a firm grey-brown clay silt. It measured c.0.1m – 0.25m in thickness and had a noticeable organic, sulphur smell. There was some evidence of plant fibre remains within the deposit. Deposit 107 was noticeably ‘cleaner’ than overlying deposits 104 and 101, containing no finely eroded bricky inclusions, large fragments of Ceramic Building Material (CBM), animal bone or pieces of clay pipe, which were relatively common in deposits 104 and 101. A large sherd of 13th – 14th century medieval glazed ware, deriving from a tankard or a tall, narrow jug, was recovered from deposit 107, along with a hand-made brick fragment, which may be of late medieval to early post-medieval date, and a fragment of post-medieval tile. Palaeoenvironmental sample 1 from deposit 107 yielded a moderate assemblage of uncharred seeds, a single nut fragment, wood fragments and a little charcoal.
- 5.6. Deposit 104 overlay deposit 107. Deposit 104 comprised a compact grey-brown clay silt, similar in composition to deposit 107, but with some evidence of finely eroded bricky inclusions and a range of finds of mixed date. Deposit 104 measured c.0.6m in thickness. It also exhibited a mild organic, sulphur smell. There was some evidence of plant fibre remains within this deposit. A few sherds of post-medieval to modern pottery were recovered, along with several pieces of clay pipe stem and four pieces of animal bone.
- 5.7. Deposit 104 was sealed by deposit 101, which comprised a compact dark brown-black sandy clay silt measuring between 0.45m and 0.65m in thickness. A range of finds were recovered from deposit 101, including late 18th to 20th century sherds of pottery, CBM, clay pipe stems and iron objects, such as a chisel, lengths of wire, thin pieces of iron sheet and a disc. Seven pieces of animal bone were also recovered.
- 5.8. All of the deposits described above were cut through by three large structures. The earliest of these was Structure 102, a substantial 19th century load-bearing wall or pillar base constructed of brick, rubble and mortar present in the western half of the trench. This structure measured c.2.2m in length by 1.4m in width by at least 1.4m in depth. It was evident in the north-facing section of the trench and in partial plan at the excavated base of the trench (Fig. 7). It is likely to represent an element of the supporting sub-structure for the 1880s Smithfield Market development.

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- 5.9. Structure 102 was cut on its northern side by a concrete platform/base (103), which measured 1.8m in length, >0.8m in width and >2.0m in depth. A further concrete platform/base (106) lay toward the north-eastern end of the trench. These are examples of the concrete bases which supported the concrete ring-beams underlying the modern concrete slab of the former Wholesale Market.
- 5.10. The trench was sealed by the modern concrete floor slab 100.

Trench 2 (Figs. 8 and 9)

- 5.11. The natural substrate was overlain by a mixed, poorly defined deposit (219). This comprised a sandy clay silt with pebble/cobble inclusions, measuring at least 0.72m in thickness where exposed.
- 5.12. Deposit 219 was overlain by deposit 215, which was c.0.14m – 0.4m thick and comprised a moderately compact light brownish clay silt. Artefacts recovered from deposit 219 comprised three sherds of 17th – 19th century pottery of date and one sherd of 16th century Cistercian-type ware, as well as a clay pipe bowl of 17th – 18th century date and several broken stem pieces. Two pieces of cattle bone were also recovered. Deposit 215 may be a less waterlogged upper element of deposit 219, though it was not possible to resolve this. It is possible that deposits 219 and 215 represent deliberate infilling of the earlier moat.
- 5.13. Two brick-built structures – well 202 and the remains of a probable cellar or privy, defined by walls 204, 205 and 213 – were recorded in the central part of the trench. These cut deposit 215 (and underlying deposit 219); they may also have cut deposit 201 (see below), though this was not confirmed.
- 5.14. Well 202 measured c.1.8m in diameter. It was brick-lined, with each brick being of angular/curved design and measuring 9” long at the outer edge, 4¼” wide and 2¾” thick (225mm – 240mm x 110mm x 70mm). The bricks had no frogs and were probably hand-made. A recovered sample brick was tentatively dated to the earlier post-medieval period. The well profile was recorded in section to a depth of 0.9m. Its uppermost courses were probably removed during the development of the Wholesale Market in the 1970s. The well had been infilled with demolition rubble (203), either during the demolition of the Smithfield Market buildings or, perhaps, at an earlier date when municipal water supplies were established and the well fell out of use. Finds recovered from well fill 203 comprised a range of 18th – 20th century ceramics, but

also two sherds of 16th century Cistercian-type ware, industrial waste (molten glass slag), thin pieces of iron sheet and fragments of 'nib' roof tile.

- 5.15. The probable cellar or privy structure defined by walls 204, 205 and 213 was exposed in plan c.1.6m south of well 202. The remains of wood plank shoring (217) survived on the north-eastern face of wall 205. Faint traces of further shoring were also evident in plan on the north-western face of wall 204. The space defined by the walls measured c.1.0m north/south by at least 1.1m wide east/west. Much of wall 213 had been destroyed by the later construction of concrete bases for the Wholesale Market. A sample brick taken from wall 204 measured 9" long, 4" wide and 2½" thick (220mm x 100mm x 60mm). The brick has no frog and was hand-made; it likely dates to between the 17th and early 19th centuries.
- 5.16. Several demolition deposits on the western side (possibly the exterior) of the cellar or privy structure, comprising sandy, brick and rubble deposits (206, 207, 208 and 209) were probably associated with the demolition of surface structures associated with this structure. A small assemblage of post-medieval tile was recovered from deposits 208 and 209. Two pieces of clay pipe stem, pieces of animal bone and two redeposited sherds of medieval fine sandy glazed ware were also recovered from deposit 209.
- 5.17. Two wooden stakes (211) with axe-cut ends were recorded *in situ* in the east-facing section at the northern end of the trench (Fig. 9, Sec. CC). These were very well preserved, black stained and somewhat waterlogged in appearance. They measured c.0.15m in diameter, tapering to a chopped-down point. Both stakes had been driven into deposit 215. They may represent an element of revetting for structures that lay adjacent to the then-infilled moat at a time when the early 19th century open-air Smithfield Market was established. Other large pieces of wood – the possible remains of a floor sill beam and another cut stake – were also recovered (but not retained) from deposit 201 (see below).
- 5.18. Two demolition deposits (221 and 222), each c.0.2m thick, overlay deposit 215 and abutted stakes 211. The earliest of these (222) comprised a very compact mixed brown-black clay silt deposit with frequent coal fragments. Deposit 221 was predominantly composed of red tile fragments, white-yellow mortar and coal fragments in a grey-brown clay silt matrix.

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- 5.19. Deposit 201 overlay stakes 211 and in part deposit 221, as well as earlier deposit 215. Deposit 201 probably represents a final levelling layer in advance of the construction of the late 19th century Smithfield Market. This deposit survived up to 0.5m in thickness and comprised dark brown-black quite organic mixed compact silt clay with fairly substantial quantities of post-medieval/modern artefacts.
- 5.20. A sondage/sump was machine excavated to a depth of 1.78m at the southern end of the trench to confirm (if possible) the presence or absence of deeper-lying and pre-19th century remains. No such remains were evident, though a demolition/levelling deposit (220), probably associated with the demolition of 19th century Smithfield Market structures, was present at this depth.
- 5.21. A load-bearing wall or pillar foundation base (216) constructed of dense brick, rubble and mortar was present in the southern end of the trench, presumably representing a structural element of the earlier Smithfield Market buildings.
- 5.22. Deposit 212 overlay deposit 220 and foundation base 216 in the southern half of the trench, and probably represents a levelling layer associated with post-demolition groundworks for the 1970s Wholesale Market development. Deposit 212 measured between 0.6m and 1.25m thick and comprised a series of dump layers/lenses of mid orange-brown clay sand within a matrix of very mixed dark blackish-grey clay sand. It also overlay earlier deposit 219 and infilled the void created by the basement/privy structure defined by walls 204, 205 and 213.
- 5.23. Other exposed remains comprised the cuts for concrete pads, the remains of pads and ring-beams and associated backfills.

Trench 3 (Figs. 10–12)

- 5.24. The natural substrate was overlain in the southern half of the trench by a compact dark grey-brown clay silt deposit containing some organic plant (322). This deposit measured c.0.5m – 0.6m in thickness and probably represents the primary (perhaps naturally occurring) infill of the former moat; it may be equated with deposit 107 in Trench 1. Palaeoenvironmental sample 3 from deposit 322 yielded a moderate assemblage of uncharred seeds a single bud, a thorn fragment, wood fragments and a small amount of charcoal.
- 5.25. Medieval sandstone wall 306 and associated demolition and structural elements were present in the northern end of the trench (Figs. 10 and 12, Sec. DD). The main body

of wall 306 was constructed of rough, undressed and uncoursed sandstone of various sizes, ranging from c.0.36m wide to 0.55m long. Open joints and larger gaps were infilled with loose sand and occasional small sandstone chunks.

- 5.26. Cleanly sawn and dressed sandstone ashlar (315) provided the exterior south-facing elevation of the wall along c.1m of its length. The remainder of the wall face had been substantially damaged during preparatory groundworks for the Wholesale Markets foundations. The dressed ashlar were closely jointed and bonded with limestone mortar (314). They measured between 0.37m and 0.48m in length by at least 0.2m in width and 0.3m to 0.4m in thickness (height). Four courses of ashlar were exposed before standing water prevented any further excavation, along with the modern concrete that had poured against it in the 1970s. It is likely that further courses are present beneath these. The second lowest of the exposed courses comprised chamfered ashlar blocks.
- 5.27. A stretcher course of smaller and reasonably well-dressed sandstone blocks (312) lined what may be the inner (northern) face of wall 306 (Fig. 10 and 12, Sec. DD). These rectangular blocks measured 0.34m in length by 0.15m in width; their thickness was not exposed. These blocks were tightly butted together and may have been mortared originally, although no mortar was evident *in situ*. A possible sandstone rubble foundation (313), perhaps for an internal stone flagged floor, abutted stretcher course 312. This was exposed in a 1.2m wide sondage in the eastern half of the trench to a length of c.2.2m. Its northern edge had been removed during preparatory groundworks for the Wholesale Market development in the 1970s. The rubble foundation deposit did not appear coursed or formally jointed at any point, though care was evidently used in its original preparation.
- 5.28. Three intermixed demolition deposits (307–309), comprising sandstone fragments, mortar and charcoal in a sandy matrix. Two small sherds of medieval glazed ware of 13th – 14th century date were recovered from deposit 308, along with a very small fragment of CBM, an iron nail, and a few pieces of animal bone.
- 5.29. In the southern half of the trench, deposit 310 overlay primary moat infill deposit 322. Deposit 310 comprised a compact black-brown clay silt deposit. It measured c.1.16m in thickness and contained post-medieval and modern pottery, pieces of clay pipe stem, CBM (including a piece of sewer pipe), industrial waste associated iron working, and a number of iron objects.

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- 5.30. Deposit 301 overlay deposit 310 and probably represents the final levelling layer associated with groundworks for the late 19th century Smithfield Market development. Deposit 301 comprised mixed black-brown and grey-brown clay sand silt and measured between 0.4m and 0.6m in thickness.
- 5.31. The remains of a north-east/south-west aligned brick wall (302) were exposed at the southern end of the trench. This wall is likely to have been associated with the 19th century Smithfield Market buildings. The bricks were set predominantly as headers, with a facing of stretchers. They measured 9" in length, 4½" in width and 2¾" in thickness (230mm x 120mm x 70mm). They had no frog and were probably hand-made, similar, though not precisely so, to those in Trench 2 associated with wall 204. This structure too may have dated between the 17th and early 19th century, also perhaps associated with the establishment of the open-air Smithfield Market, post-1817.
- 5.32. Deposit 305 lay to the 'interior' of wall 302 (i.e. its south-eastern side). This deposit comprised demolition rubble in a clay silt matrix. It may be associated with the demolition of structures associated with the earlier Smithfield Market, prior to the late 19th century development of the larger scale market buildings. This deposit may be associated with deposit 301 elsewhere in the trench, as well as deposits 101 (Trench 1) and 201 (Trench 2).
- 5.33. Deposit 318 lay to the south of medieval wall 306. This wall is believed to be the same wall that was exposed previously during the 1970s redevelopment of the Site, and deposit 318 probably represents modern backfill associated with this activity.
- 5.34. Trench 3 also contained a series of concrete pads (e.g. 317, 320), plus associated construction cuts and backfill deposits.

Watching brief (Figs 13–17)

Test pit

- 5.35. A single test pit measuring 1m in length by 0.5m in width was hand-dug by geotechnical contractors adjacent to the base of the retaining wall at the northern boundary of the Site. The concrete slab overlay a deposit of modern Type 1 hardcore. Standing water was reached at c.0.7m below the present ground level where excavation ceased. No deposits or features of archaeological interest were observed during this work.

Lift pit

- 5.36. The lift pit measured 8m in length by 6m in width.
- 5.37. The red sandstone natural substrate was exposed at a depth of c.0.9m below the modern surface (c.105.92m aOD) in the southern quarter the lift pit and at c.1.6m below the modern surface (105.22m aOD) in the eastern and western quarters. The natural substrate was not exposed in the northern quarter due to the presence of a reinforced concrete slab at a depth of c.1.2m below the modern surface. This slab is likely to have been installed during the 1970s as a cap to an underlying water course or culvert (see below).
- 5.38. Two brick-built wells (402 and 408) were cut into the natural sandstone in the south-western quarter of the lift pit. The earliest of these (408) lay in the south-western corner and was not fully exposed in plan. Its uppermost surviving course was exposed 0.9m below the modern tarmac surface; it had likely lost its original uppermost courses as a result of the demolition of the 19th century Smithfield Market in the 1970s.
- 5.39. Well 408 comprised at least eight courses of slightly curved bricks. Each brick measured 9" in length, 4¼" in width and 2¾" in thickness (228mm long x 110mm wide and 70mm thick); they had no frog and were probably hand-made. The bricks were very similar to those from well 202 (Trench 2), which was tentatively dated to the earlier post-medieval period. A 0.3m-wide packing/sealing deposit of red clay (409) was laid around the outside of the brickwork. Well 408 was filled with a densely-packed deposit of demolition rubble, presumably associated with the demolition of the 19th century Smithfield Market in the 1970s.
- 5.40. Well 402 lay c.1.5m to the east of well 408. It was initially exposed c.0.9m below the modern surface. Approximately half of its circumference survived; its south-western half had been removed by the excavation of a 20th century ceramic pipe trench (405). Well 402 was constructed of probably later 19th century bricks, measuring 9" in length, 4½" in width and 2¾" in thickness (225mm x 115mm x 70mm). Three brick courses survived. These appeared to have been unmortared, but parts of a red clay sealing layer (406) survived on the outer (north-western) edge. This well was also infilled with demolition rubble (403), seemingly more loosely than the fill of well 408.
- 5.41. The earliest course of well 402 had been laid onto the natural sandstone. Beneath this course, the natural sandstone had been excavated to form a large well base or

cistern measuring c.3m in diameter, to a depth of at least a further 1m beyond the lowest brick course (the base of this cut was not reached due to water ingress). Chisel marks were evident over the whole inner surface of this sandstone well base/cistern. The well base/cistern and the overlying well structure had been infilled with demolition waste. A rubble deposit comprising mainly large chunks of 19th century brick and tile mixed, with a deposit of thick black silt filled the sandstone bowl of the well base (419). A long piece of cast iron tram rail, a machine-stamped brick and wine or port bottle were also visually recorded but could not be recovered.

5.42. It was evident that water was flowing into well 402 from beneath the reinforced concrete slab in the northern corner of the lift pit, apparently through a purpose-built opening on the north-eastern side of the well's base. It is likely that there is part of an active water course or culvert beneath the concrete slab. No further interpretation of its construction was possible due to constraints of access, inflowing water and the location of the reinforced concrete slab.

5.43. A series of made ground/demolition deposits overlay the natural substrate, the reinforced concrete slab and the remains of the two wells. These deposits measured between 0.5m to 1.2m in combined thickness. They were overlain in turn by the modern tarmac layer, which measured c.0.35m – 0.4m in thickness.

6. THE FINDS

6.1. Artefactual material was recovered from 16 deposits, consisting of well and moat fills, structures and deposits, and as unstratified material (Appendix B). The material was recovered predominantly by hand but in some cases in spoil recovered by machine.

Pottery

6.2. The pottery from the evaluation has been recorded direct to an Excel spreadsheet from which Appendix B (Table 1) is derived and which forms part of the project archive. The pottery was examined by context, using a x10 binocular microscope, and was quantified according to sherd count and weight per fabric type. The fabrics are described in Appendix B (Table 2) in accordance with the Historic England guidelines (Barclay *et al.* 2016). A concordance with Warwickshire type series has been provided where possible (Soden and Ratkai 1998).

6.3. The assemblage comprised 103 sherds (3104g) of pottery. The pottery is in moderately good condition, with fractures and surfaces exhibiting only minor signs of

wear. Mean sherd weight is moderately high for a predominantly post-medieval/modern assemblage at 30.4g.

Medieval

- 6.4. A total of six sherds (451g) of pottery can be dated to the medieval period. One unstratified sherd of medieval coarseware (MCW) is decorated with an incised linear pattern and an applied strip. It can be dated between the 12th to 14th centuries. Three sherds of sandy medieval glazed ware (MGW) made in a pinkish-buff fabric are possibly products of the kilns at Walsall or Nuneaton. All are coated externally with a green lead glaze. One sherd, from wall demolition deposit 308, is decorated with applied circular pads and strips. The fabrics from Walsall date from the 13th to 14th centuries (Wrathmell and Wrathmell 1976). One sherd of fine medieval glazed ware (MFGW) was recovered from deposit 209. The fabric is partially reduced with patches of external green glaze. The origin of the fabric is uncertain, but it possibly represents a late product of the kilns at Chilvers Coton, Nuneaton, dating between the 13th and 15th centuries (Mayes and Scott 1984).

Post-medieval/modern

- 6.5. A total of 97 sherds (2653g) of pottery can be dated to the post-medieval or modern periods. Cistercian-type wares (CIST), dating to the 16th century, are recorded in small quantities (four sherds, 93g). A small quantity (Table 2) of Staffordshire-type wares, including slipwares (STAF), manganese glazed wares (STMG) and salt-glazed stonewares (SWSW), can be dated between the late 17th and 18th centuries. Likely to be of a similar date (late 17th to 18th centuries) are two unstratified handles made in Nottinghamshire-type English stonewares (ESWN). Three unfeathered sherds of British stoneware (BSW) are recorded from well fill 203 and moat backfill 310. British stonewares were produced between the 17th and 19th centuries. Ten unfeathered sherds of Midlands blackware (MIDB) are of a similar date (17th to 19th centuries). The largest fabric group by both count and weight (Table 2) is the North Midlands earthenware fabrics (NMEW). Several forms were noted in these fabrics, including bowls with flange rims, from moat backfill 104, moat backfill 310 and modern backfill layer 318, and an unstratified barrel shaped jar with a flat-topped rim. North Midlands earthenwares date between the 17th and 20th centuries. A total of 23 sherds (258g) of refined white earthenware (REFW) and 14 sherds (92g) of transfer printed white earthenware (TPE) are recorded. Both fabrics date between the late 18th and 20th centuries. Refined white earthenware forms include a bowl with a flat flanged rim, from moat backfill 310, and an unstratified small jug with a rolled rim

containing an internal channel. This latter vessel may represent a small chamber pot, although too little survives to be certain of its function. A small teacup or sugar bowl, from moat backfill 310, and two plain rim sherds are noted in transfer printed earthenware fabrics. Two unstratified sherds of coarse red earthenware (URE/UGEW) are also recorded. The origin of both sherds is uncertain. One sherd has a thick brown striped glaze characteristic of a later post-medieval fabric and it is likely this material post-dates the 17th century.

Summary

- 6.6. The pottery assemblage provides evidence for activity from the medieval period onwards. The majority of the medieval pottery is from deposits containing later material and it is most likely residual. The post-medieval/modern pottery is domestic in nature consisting of both coarsewares and fine table wares. The bulk of the assemblage has been produced regionally from production sites in and around the Birmingham hinterland. There is no evidence of any imported wares. A slightly larger assemblage of medieval and post-medieval pottery was recovered from the preceding salvage watching brief at the Site during the 1970s (Watts 1978-79, 56). The composition and dating of the material from that investigation is consistent this assemblage.

Ceramic building material

- 6.7. A total of 50 fragments (15,858g) of ceramic building material were recovered from 13 deposits. The assemblage is made in fine sandy (fs), medium sandy (ms) and coarse sandy fabrics (cs), some with clay pellet (cp), calcareous (c), ferrous (fe) or limestone inclusions (li). Several fragments of drainpipe are made in a high-fired stoneware fabric (sw). The bricks from moat fill 107 and well superstructure 202 are handmade and poorly wedged and could possibly be of late medieval date or early post-medieval date. Based on the fabric, thickness and conditions of firing, the brick from wall 204 probably dates to the later post-medieval period. A total of five fragments of nib tile and 26 fragments of tile can be dated to the post-medieval or modern period, based on their thickness and fabric. A similar assemblage of brick and unglazed roof tiles was recorded at the preceding investigation in the 1970s (Watts 1980, 48). Four fragments of drainpipe with both an internal and external purple/brown glaze and coated in brownish accretions are mostly likely post-medieval or modern sewage pipes. The remainder of the assemblage is undiagnostic.

Clay tobacco pipe

- 6.8. A total of 55 fragments (221g) of clay tobacco pipe date to the post-medieval period. The majority (47 fragments) are undiagnostic pipe stems. Three bowls with short spurs are unstratified or recorded from levelling deposit 201 and deposit 215 in Trench 2. Similar examples have been dated to the 17th or 18th centuries (Oswald 1975, 41, fig.4.G, no.17 & 19). Two unstratified bowls with flat heels, which probably predate those with short spurs, are recorded from Trenches 2 and 3 (*ibid* 41, fig.3.G, no.6 & 9). One is stamped with a maker's mark 'O'; however, it has not been possible to identify the maker.

Glass

- 6.9. Seven fragments (234g) of green bottle glass were recovered from levelling deposit 201 and levelling deposit 212. The glass is in very poor condition with highly degraded surfaces. It is most likely post-medieval or modern in date. The assemblage is otherwise undiagnostic.

Industrial waste

- 6.10. Five fragments (366g) of industrial waste were recovered from four deposits. One large fragment of molten glass (well fill 203) is probably glass working waste. One small fragment of coal was recovered from levelling deposit 212. Three fragments, from deposit 209 and moat backfill 310, are metal working residues and most likely represent waste from iron working activity. They are all derived from deposits containing post-medieval or modern material and are most likely of a similar date.

Metalwork

- 6.11. A total of 24 fragments (2,055g) of iron were recovered from four deposits. Two nails with round shafts, from deposit 308 and moat backfill 310, and an unstratified square shafted nail were recovered. The round shafted variants are machine produced and probably date to the 19th century industrial expansion. Well fill 203 produced nine fragments of thin iron sheet and five thin strips of iron no more than 5mm in width. Two fragments of iron sheet were also recovered from moat backfill 310 and levelling deposit 101. The sheeting is twisted and irregular and its precise function is uncertain; it most likely represents a portion of machinery or vehicle external housing. A curved iron rod of unknown function and a broken door handle were recovered from moat backfill 310. A length of iron wire was recovered from levelling deposit 101. A small iron disc, most likely the bases of a cylindrical container and an iron wood working tool with a broken tip, possibly a chisel, were recovered from the same deposit.

Except for the square shafted iron nail, which could be earlier, the bulk of the ironwork probably dates to the post-medieval or modern periods.

Worked wood

- 6.12. A wooden disc (18g), measuring approximately 47mm in diameter and with a central perforation was an unstratified find. Its use is uncertain, although its condition suggests it is of fairly recent origin.

Concrete

- 6.13. An unstratified fragment (47g) of a concrete tile of modern type is recorded. The fragment is fractured along three edges and although it was most likely structural, its precise function is unclear.

Mortar

- 6.14. Five pieces (173g) of building (lime) mortar were recovered from the mortar jointing 314 of medieval wall face 315. The mortar is made in a dense sandy fabric with calcareous inclusions. The fragments are otherwise undiagnostic.

7. THE PALAEOENVIRONMENTAL EVIDENCE

- 7.1. Two environmental samples (four litres of soil) were processed from potential moat deposits. Both samples were taken from areas that lie beneath the water table. The samples were assessed for the potential of waterlogged material and were processed by standard wet sieving procedures, using a 250-micron sieve mesh (CA Technical Manual No 2.).
- 7.2. Preliminary identifications of plant remains are noted in Appendix C (Table 3), following nomenclature of Stace (1997). Any dates mentioned below are based on dating set out in Section 6.

Trench 1

- 7.3. Sample 1 from moat fill 107, the possible primary fill of the moat, contained moderate quantities of uncharred seeds. These include such species as meadow/creeping buttercups (*Ranunculus acris/repens* type), lesser spearwort (*Ranunculus flammula* type), fig (*Ficus carica*), cabbage (*Brassica* sp.), brambles (*Rubus* sp.), fool's parsley (*Aethusa cynapium*), bittersweet (*Solanum dulcamara*), elder (*Sambucus nigra*), and sedge (*Carex* sp.). A single nut fragment was observed but due to the small size and lack of identifiable features on the fragment it was not possible to determine the

species. Wood fragments were noted in the assemblage alongside a small number of charcoal fragments.

Trench 3

- 7.4. Fill 322 (sample 3), a backfill moat deposit, also contained moderate quantities of uncharred seeds, which included such species as celery-leaved buttercup (*Ranunculus sceleratus*), greater spearwort (*Ranunculus lingua*), buttercups, fig, persicaria (*Persicaria* sp.), docks (*Rumex* sp.), brambles, bittersweet, and sedge. Additionally, a single bud was observed alongside a single thorn fragment. Wood fragments and a small number of charcoal fragments were noted in the assemblage.

Summary

- 7.5. None of the species recorded are indicative of moat/pond environments, although these results do correspond partially to those of the watching brief in 1975 (see 9.10 below). The weed seeds are typical of waste/rough ground with areas of damp and marshy ground. This is indicated by the presence of fool's parsley, brambles, and bittersweet, which are species that favour waste ground and scrub, and buttercups, sedge and greater spearwort which favour damper and marshy areas similar to those beside streams or moats. Elder is also typical of waste ground and hedgerows. The presence of fig in this instance may suggest the presence of a tree in the area, rather than the result of food consumption. Fig trees can be found on waste ground and by walls, particularly near rivers. The assemblages suggest that the local environments during the medieval and post-medieval periods were similar.

8. THE BIOLOGICAL EVIDENCE

Animal bone

- 8.1. Animal bone amounting to 39 fragments (1,705g) was recovered by hand excavation from nine deposits (Table 4, Appendix D). The material was fragmentary but was preserved well enough to identify the presence of cattle (*Bos taurus*), sheep/goat (*Ovis aries/Capra hircus*) and horse (*Equus caballus*). A limited amount of bird bone was also recovered but was too fragmentary to identify to species.

Medieval

- 8.2. Four fragments (23g) were recovered from deposit 308. Sheep/goat was identified from two metapodial bones. None of these fragments displayed any cut marks or impact damage to suggest an origin in butchery waste which, when coupled with the low recovery, limits any inference to species identification.

Post-medieval/modern

- 8.3. A total of 25 fragments (695g) were recovered from eight deposits. A limited amount of cattle and sheep/goat bone was recovered, with each species being identified from meat-poor lower limb bone fragments. No cut or chop marks were observed, but the type of bone recovered is common to waste from the early stages of butchery. Of note among the assemblage is a single distal cattle metapodial which has been cleanly sawn through, suggesting that cattle bone was being used as a secondary product and was being worked on or near the Site.

Unstratified

- 8.4. The remaining ten fragments (987g) in the assemblage are unstratified. Cattle, sheep/goat and horse were identified from meat-poor skeletal elements that, in terms of preservation, strongly resemble the bone dated to the post-medieval/modern era.

9. DISCUSSION

- 9.1. The evaluation sought principally to determine the location and condition of buried remains associated with the infilled moat and structural remains associated with the former medieval manor house. It successfully identified elements of both. Recovered artefacts dated from the 13th – 14th centuries through to the 20th century, providing an intriguing window into 800 years of the history of Birmingham. In addition, an element of the scope of the evaluation sought to test for the presence of prehistoric peat deposits with palaeoenvironmental potential. No such evidence was recorded.
- 9.2. Each of the three trenches provided information on different periods and aspects of the Site's life. Trench 1 contained evidence of the earliest, probably naturally deposited moat fill. This was overlain by 19th century infilling and levelling deposits, laid following the sale and demolition of the old moated manor and its assets in 1816. These layers were then cut by the brick and rubble foundations for the Smithfield Fruit and Vegetable Market in 1881, and then by the concrete foundations for the Wholesale Market in the 1970s.
- 9.3. Trench 2 proved to be the most disturbed of the three. It contained remains associated with the infill and levelling of the moated site in the early 19th century, the installation of brick structures, levelling for the Smithfield Fruit and Vegetable Market, the subsequent demolition of that market and levelling for the Wholesale Market.

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- 9.4. Trench 3 contained *in situ* well preserved structural remains associated with the medieval moated manor, or a substantial adjunct of it. These remains had been impacted by both the groundworks for the Wholesale Market development and possibly by the recording process associated with the salvage watching brief that took place at the time (Watts 1980).

Medieval: moat

- 9.5. Deposit 107, which lay immediately over the natural substrate in Trench 1 (where exposed), is likely to represent the earliest naturally occurring *in situ* moat deposit on Site. It is likely to equate with deposit 322 in Trench 3. Both were of similar composition, exhibited a quite notable organic, sulphur smell and yielded similar palaeoenvironmental assemblages. Based on their locations, the remains in Trench 1 are probably within the western arm of the moat, and those in Trench 3 are probably within the south-western turn into the southern arm.
- 9.6. The constraints of the present evaluation and the compact composition of these deposits precluded a detailed examination of the upcast material. The recovered finds comprised a single large unabraded sherd from a probable 13th – 14th century tankard-like vessel and a hand-made brick, which could be of later medieval to earlier post-medieval date.
- 9.7. The earliest (medieval) moat deposits recorded during the 1970s watching brief comprised what was termed Period 1 layers and in this case Master Layer 2 (ML2) (Watts 1980, 36). Deposits 107 and 322 appear to accord closely with these “*layers and lenses of fine silt, sand or clay ... containing some organic material such as hazelnut shells but no thick vegetable matter and very few artefacts beyond a small quantity of medieval pottery*” (Watts 1980, 36). The pottery dates from the 1970s layers accord well with those recovered from these layers in the present evaluation.
- 9.8. A recent geo-environmental investigation of the Site also recorded a possible moat deposit in window sample borehole WS117 (Obsidian Geo-Consulting 2021). This deposit was recorded as possible moat bed material represented by ‘dark grey and black peaty silt with organic remnants and quartzite gravel’ (p.12 and percussion drilling log WS117). This was identified between 1.6m – 2.95m below the present ground level (at 104.87m – 103.52m aOD). This deposit, if indeed it does represent *in situ* moat fill deposits, likely represents an element of the south-eastern arm of the moat, toward the location of the former eastern access to the manor (Figs 3 and 4).

No such deposits were recorded elsewhere during the geo-environmental investigation, although a very similarly described deposit – ‘(wet) black, slightly sandy gravel with a slight organic odour’ – was present in WS118 to the north. This drilling log also recorded fine to course gravel and subangular roadstone’ which may represent more recently disturbed material of similar origin. The depth at which these deposits were recorded (105.22m – 104.87m aOD) is similar to the depth of the deposit recorded in WS117. The depths at which deposits 107 and 322 were recorded are not too dissimilar, being c.105.13m – 104.88m aOD and c.104.50m – 105.10m aOD, respectively.

- 9.9. In addition to the possible moat bed material, the geo-environmental investigation recorded alluvium within seven exploratory holes. These were mostly in the south of the Site – nearer to the current course of the River Rea – but alluvium was also present in rotary core borehole RH103 toward the centre of the Site, c.20m south of Trench 3 (Obsidian Geo-Consulting 2021, p.12).
- 9.10. Neither of the palaeoenvironmental assemblages recovered from deposits 107 and 322 included remains indicative of an active water-filled moat environment, more of waste and marshy ground, which could have lain adjacent to a stream or moat. The presence of fig in both assemblages may suggest the proximity of a tree, often found on waste ground and by walls, particularly near rivers. These results correspond partially to those of the watching brief in 1975, which did identify remains of plants typical of ponds and streams (and moats) but also recorded remains associated with marshy ground, waste ground and ground adjacent to such water sources. It was noted that the anaerobic conditions of the earliest moat deposits preserved pollen grains, seeds, fragments of other parts of plants and of insects and had the “*distinctive smell of reduced sulphur compound*” (Limbrey in Watts 1980, 66).
- 9.11. The questions of the precise location of the moat in plan, its proximity to St Martin’s Church and whether Westley’s map (1731), Bradford’s map (1750) or Hanson’s map (1778) is the more accurate interpretation have not been resolved. The trenches did not expose the edge of any element of the moat from which to attempt tying in with the 18th century mapping. Moat material was evident at the westernmost end of Trench 1 and in the southern part of Trench 3 and was represented by 19th century backfill and levelling in Trench 2, but the moat was otherwise ill-defined in plan.

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- 9.12. An archaeological watching brief undertaken in 2000 just to the north of the Site in The Row (now part of Upper Dean Street) identified putative remains of the northern arm of the moat, further to the north than may have been expected from the cartographic evidence. The composition of the earliest deposits recorded at that time appeared to equate with those recorded in 1975 as medieval (ML2), and a single sherd of 12th – 13th century pottery was also recovered (Patrick 2000). Palaeoenvironmental samples taken from these deposits equate well with those recovered during the present evaluation, with an absence of water plant seeds and the majority of the paleoenvironmental remains being indicative of the wooded and wet grassy margins of the moat. Pollen from aquatic plants was also little represented in the results from 2000.

Medieval: building

- 9.13. Wall 306 and associated elements, comprising cut and dressed ashlar 315, possible inner base course 312 and possible rubble floor foundation 313, represent the only exposed remains of an *in situ* medieval building found during the evaluation. This structure is probably associated with the former moated manor house or a substantial adjunct of it and accords with part of Wall B of Structure 1, recorded during the salvage watching brief at the Site in 1975 (Fig. 10). Unfortunately, there is no documentary description of the architecture of the buildings, with the exception of Hamper's drawing of 1814, and historic mapping can only be considered a general representation at a point in the mid to later 18th century.
- 9.14. The layout of the dressed sandstone ashlar (315) and the first chamfered 'step' exposed during the evaluation can be seen in Plate 2(b) at a point just east of the damaged section of the wall (Watts 1980, Plate 2(b), 74). In the evaluation, two courses of ashlar were recorded above the first chamfered course, below which another vertically faced course was laid (Fig. 8). This accords with Plate 2(b) when accepting that, following the watching brief, groundworks proceeded and reduced the ground level, taking away the uppermost chamfered course depicted in the photo. On that basis, we can confidently cross-reference the survey results for wall 306/315 and associated elements with those given in 1975 for Structure 1. This will indicate the depth at which upper courses of the building survive elsewhere beneath the existing concrete slab, and the depths to which the base courses and foundations of the medieval structure lie.

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- 9.15. Additional information on the medieval structure to the interior of the wall 306 was recorded during the evaluation. The single stretcher course of smaller, reasonably well-dressed sandstone blocks (312) to the inner (north) face of wall 306 may represent part of the dressed interior wall face, though this is somewhat speculative on the basis of just three *in situ* blocks. Similarly, the possible sandstone rubble floor foundation (313), just to the north of 312, may represent part of a rubble foundation for an internal stone flagged floor. Again, this may be considered somewhat speculative, but it is felt that the absolute heights of 312 and 313 accords well with those of the dressed and chamfer designed south-facing elevation.
- 9.16. The proximity of these structural remains, c.7m north of the moat deposits, defined at their earliest by deposit 322, suggest proximity to the southern edge of the former moat platform and the northern edge of the southern arm of the moat itself. Any potential exposure of the interface between building and moat in Trench 3 was lost, however, probably as a result of the groundworks in the 1970s for the Wholesale Market development. The excavations for the concrete foundation pads bases and possibly also some machining along the length of Structure 1 to facilitate the archaeological recording process, plus subsequent pouring of the concrete and associated backfilling, precluded any attempt at speculating on the location of the northern edge of the southern arm of the building.
- 9.17. Discolouration/staining on the lowest exposed ashlar faces could represent a period of time when there was standing (moat?) water against them. This could suggest that the base of the building was set right against the moat's edge, or it could reflect periodic phases of flooding. This condition of the ashlar was also noted in 1975 (Watts 1980, 62).

Post-medieval/modern

- 9.18. Two *in situ* stakes (211) recorded in the east-facing section at the northern end of Trench 2 appeared to be driven into post-medieval deposit 215. The 1975 works recorded 15 wooden stakes measuring up to 0.15m in diameter and 1m in length (Structure 2; Watts 1980, p.41). These lay within the lift pit at the northern end of Moat Street multi-storey carpark. Those stakes were of similar cut and diameter to the two recorded in the present evaluation but in some cases were driven into the natural Mercia Mudstone and in others into the medieval deposits that immediately overlay the natural substrate (Watts 1980, 41 and plate 4). This suggests that Structure 2

predates the stakes identified in this evaluation, although they are morphologically very similar.

- 9.19. Structure 2 was interpreted as revetting to the southern side of the bridge crossing the moat onto the central platform. The stakes exposed in the present evaluation may have been a post-medieval revetting installation or part of a water-side structure at the edge of the northern part of the western arm, perhaps at a point where the water course from the Parsonage moated site flowed into the Birmingham Moat. It should be noted that deposit 215 contained artefacts of 17th to 19th century date and probably represented a phase of either deliberate infilling of the moat or perhaps a more *ad hoc* accumulation of debris at a period when the moat had ceased to serve its primary function and had fallen into disrepair, along with the buildings on the moat platform.
- 9.20. Two brick-built structures, well 202 and a cellar/privy defined by walls 204, 205 and 213, were recorded in the northern half of Trench 2, and the remains of another brick-built structure (302) were recorded at the southern end of Trench 3. The remains of two more wells (402 and 408) were also recorded in the lift pit at the northern edge of the Site. The bespoke handmade brickwork of wells 202 and 408 could date to the earlier post-medieval period, though this is not certain; if so, these structures may represent remains that predate the 1816 clearance of the Site and subsequent development of Smithfield Market. On balance, though, it is more likely that both wells were sunk at a time when the open-air Smithfield Market was newly established. Much of the former moat platform is thought to have been substantially reduced during the construction of the late 19th century Smithfield Market and again during the groundworks in the 1970s, removing all standing structural remains and shallow-cut foundations. The lower courses of these wells likely survived due to their depth.
- 9.21. The probable cellar/privy structure also survived due to the depth of its construction. The bricks from which it was constructed were handmade and dated between the 17th and early 19th century and are also probably associated with the establishment of the first phase of Smithfield Market. The brickwork of wall 302 in the southern part of Trench 3 was also probably handmade and may be broadly contemporary with wall 204. Well 402, constructed of similar handmade bricks, may also be contemporary with these structures and may have been supplied by a stream at the northern edge of the Site. This water course may relate to the stream that fed the earlier moated manor site, though at present this is only conjecture.

9.22. The most recent deposits recorded in each of the three trenches, (those that predate the 1970s Wholesale Market development at least) represent the final clearance of the moated manor site in 1816, following the sale of the buildings, woodwork, stonework, the bridge, trees for wood – everything that could feasibly be carried away. The clearance and subsequent deliberate infilling of the moat and the levelling of the wider site took place immediately following the sale. The range of artefacts recovered from within these infilling deposits reflects the prevailing activities on Site in the latter centuries and final decades of its occupation and use. The catalogue for the sale of all *Valuable Building Materials of the Moat House and Buildings connected therewith* at auction on July 5th, 1815, illustrates this. For example, there were casting shops on site, a dying and tinning shop, a blacking shop, blacksmiths and an annealing shop. Also, the first phase of Smithfield Market, which was up and running by 1817 and initially known as the ‘Moat’, was trading “*neat cattle, horses, sheep and pigs,*” as well as hay and straw.

Summary

9.23. In summary, the evaluation has demonstrated that, despite substantial earth-moving and associated preparatory groundworks for the Wholesale Market in the 1970s, and several phases of site clearance and levelling in 19th century, preservation of structural elements of the former medieval moated manor survive substantially intact at no more than 0.5m beneath the present concrete slab. These remains represent part of a building (Structure 1) recorded previously in 1975 and suggest that such earlier structures may survive intact where they have not been cut by groundworks for concrete pads and ring beams in the 1970s. Remains of similar medieval date were identified at the base of the moat in Trenches 1 and 3, also suggesting that *in situ* deposits, artefacts and palaeoenvironmental evidence survive well, where not cut by groundworks in the 1970s.

9.24. Post-medieval to 19th century structural remains were evident within the former area of the moat platform and to the southern edge of the former moat. Deposits that may be associated with the former moat platform and those associated with the clearance of the Site and development of the markets in the 19th century were certainly evident but were very mixed and represent remains spanning several centuries.

9.25. The present evaluation has confirmed that potentially well-preserved and possibly extensive medieval structural remains survive on Site. It also confirmed the presence of deep-lying *in situ* moat deposits, and associated ancillary wooden structures. The

Site retains, on that basis, significant potential to shed light on the origins and physical development of the moated manor from its earliest development in the 12th century through to its demolition in the 19th century. In addition, there is the potential for in-depth palaeoenvironmental investigation and sequencing of primary moat deposits, where these are found to be *in situ*. Further investigation of the manor site also has the potential to contribute to our understanding of the chronology and secure dating of moated sites in the West Midlands (Watt 2011, p.197).

10. CA PROJECT TEAM

- 10.1. The fieldwork was led by Dr Mark Hewson, assisted by Mat Ferron and Jake Hewson. This report was written by Dr Mark Hewson. The finds report was prepared by Pete Banks, the palaeoenvironmental report by Emma Aitken and the biological report by Andy Clarke. The report illustrations were prepared by Amy Wright. The project archive has been compiled and prepared for deposition by Hazel O'Neill. The project was managed for CA by Rob Sutton, assisted by Derek Evans who undertook a review of this report.

11. REFERENCES

- Archaeological Archives Forum 2007, *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*
- Atkins Ltd 2010, *Archaeological Desk-Based Assessment for the Birmingham Wholesale Markets and Surrounding Area*
- Barclay, A., Booth, P., Knight, D., Evans, J., Brown, D.H. and Wood, I., 2016, *A Standard for Pottery Studies in Archaeology* Historic England
- BGS (British Geological Survey) 2020, Geology of Britain Viewer
<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html> (Accessed 03 November 2020)
- Birmingham City Council and Birmingham Museums 2019, *Archaeological Archive Standards: A Standard for the Creation, Compilation and Transfer of Archaeological Archives in Birmingham*
- CA (Cotswold Archaeology) 2012, The taking and processing of environmental and other samples from archaeological sites: Technical Manual No. 2

-
- CA (Cotswold Archaeology) 2019, *Birmingham Smithfield Development, Birmingham, West Midlands: Archaeological Watching Brief*. CA Report MK0069_1
- GIP (Ground Investigation and Piling Ltd) 2019, *Smithfield, Digbeth, Birmingham* (Project 28268)
- Line, P.L 2011, *Birmingham: A History in Maps*. The History Press: UK
- Mayes, P. and Scott, K. 1984, *Pottery Kilns at Chilvers Coton, Nuneaton* The Society for Medieval Archaeology Monograph Series **10**
- MHCLG (Ministry of Housing, Communities & Local Government) 2019, *National Planning Policy Framework*
- Obsidian Geo-Consulting 2021, *Geo-Environmental Investigation Report: Smithfield Development, Former Wholesale Markets, Birmingham*
- Oswald, A. 1975, Clay pipes for the archaeologist *Brit. Archaeol. Rep.* **14**
- Patrick, C. 2000, *The Row, Birmingham City Centre, West Midlands: An Archaeological Watching Brief*. Birmingham University Field Archaeology Unit. Project No.635
- Soden, I. and Ratkai, S. 1998, *Warwickshire medieval and post-medieval pottery types series* Warwick, Archaeology Warwickshire
- Stace, C. 1997, *New flora of the British Isles* (2nd Edition), Cambridge: Cambridge University Press.
- Watts, L. 1980 'Birmingham Moat: its history, topography and destruction' *Birmingham and Warwickshire Archaeological Society: Transactions for 1978 – 1979* Volume **89**, 1-77
- Wrathmell, S. and Wrathmell, S. 1976, 'Excavations at a moat site, Walsall 1975' *Trans. Staffordshire Archaeol. Hist. Soc.* **18**, 29-46

APPENDIX A: CONTEXT DESCRIPTIONS

Trench	Context	Type	Fill of	Context Interpretation	Context Description	Length (m)	Width (m)	Depth/ thickness (m)
1	100	Structure		Concrete slab	Concrete slab	11.0	2.20	0.25 – 0.65
1	101	Layer		Levelling layer	Dark brownish black, clayey silt, compact, some sand wood and organic material inclusions	11.0	2.20	0.65
1	102	Structure		Rubble	Brick, mortar, 10-20cm chunk, possible base/platform for wall	2.20	1.40	>1.80
1	103	Structure		Concrete pad	Concrete pad beneath (100)	1.8	0.80	>2.0
1	104	Layer		Levelling layer	Greyish brown, clayey silt, compact, inclusions of organic material (twigs, wood)	11.0	2.2	0.40 – 0.60
1	105	Fill		Modern rubble	-	0.40	0.80	1.36
1	106	Structure		Concrete pad	Concrete pad beneath (100)	2.2	1.80	2.0
1	107	Fill		Moat layer	Greyish brown, clayey silt, very compact, CBM and pottery inclusions	c.6.0	2.20	0.10 – 0.25
1	108	Cut		Concrete pad	Cut of concrete pad (103)	-	-	-
1	109	Cut		Concrete pad	Cut of concrete pad (106)	-	-	-
1	110	Deposit	106	Possible fill of concrete pad (106)	Mixed bricky rubble pebble and mortar, very compact, mortar sand inclusions	1.30	1.0	<0.60
1	111	Layer		Natural	Compact red sand	>6	2.20	-
2	200	Layer		Concrete slab	Concrete slab	25	2.20	0.25 – 0.33
2	201	Layer		Levelling layer	Dark brownish black, organic sandy silty clay, compact, sand and coal inclusions along with wood and twigs	25.50	2.20	0.25
2	202	Structure		Well	Brick, bricks L225 - 240mm / W110mm / T70mm, squared regular coursing, laid on bed (stretcher), wall of well	1.80	0.96	>1.0
2	203	Fill	202	Fill of well	Dark blackish brown, silt, moderately compact, CBM rubble and coal present in high amounts in the fill	1.80	0.96	>1.0

Trench	Context	Type	Fill of	Context Interpretation	Context Description	Length (m)	Width (m)	Depth/thickness (m)
2	204	Structure		Wall	Red brick, 100mm x 60mm x 220mm, regular coursing, English bond laid on bed, exterior NNE and interior SSW, light pinkish/yellowish grey cementing	1.80	0.33	>1.0
2	205	Structure		Wall	Red brick, 100mm x 60mm x 220mm, regular coursing, English bond laid on bed, exterior NNE and interior SSW, light pinkish/yellowish grey cementing	0.50	0.33	>1.0
2	206	Deposit			Light yellowish brown, silty sand, friable loose compaction	>1.0	0.80	0.05
2	207	Layer		Wall collapse	Red brick, 100mm x 60mm x 220mm, complete bricks, some bricks laid on edge some laid on bed, exterior SSW interior NNE, light pinkish/yellowish grey cementing	0.60	0.40	0.10
2	208	Layer		Wall collapse	Mixed mid orangey red and light whiteish grey, brick rubble broken up mortar and quarry tile, compact/firm, pebble and charcoal inclusions	0.80	0.55	0.10
2	209	Layer		^	^	1.10	0.70	0.08
2	210	Cut		Construction cut (204)/(205)	Rectangular, right angle corners, steep deep sides, unexcavated base, NW/SE running	>1.0	>2.15	>0.90
2	211	Structural		Wooden stake x2	Wooden stake, vertical, roughly aligned N/S	c.0.5	c.0.15	-
2	212	Layer		Levelling deposit	Mixed dark blackish grey with lenses of mid orangey brown, clayey sand, moderately compact, pebbles and cobbles inclusions	>1.0	1.40	0.96
2	213	Structural		Wall remnant and rubble collapse	Mid orangey red, dark blackish grey, brick rubble clayey sand, moderately compact, pebbles and charcoal inclusions	0.95	0.10	-

Trench	Context	Type	Fill of	Context Interpretation	Context Description	Length (m)	Width (m)	Depth/thickness (m)
2	214	Cut		Foundation cut of well	Semi-circular, vertical sides, unexcavated base	>1.0	1.66	0.76
2	215	Deposit			Light brownish, clayey silt, moderately compact, limestone and charcoal inclusions	>2.0	2.20	0.14 – 0.40
2	216	Deposit		Rubble / tile foundation base	Red brick rubble deposit with tile, very compact	>2.0	>1.5	-
2	217	Structural		Timber	Timber planks, lining interior of cut [210], vertical – c.20mm thick	>1.0	>2.15	>0.90
2	218	Fill		Packing material	Light orangey brown, clayey sand, friable loose compaction, pebble inclusions	>1.0	0.10	>1.0
2	219	Layer		Fill of moat	Dark blackish grey, sandy clay-silt, compact, pebble/cobble inclusions along with flecks of charcoal	>10.0	>1.0	>0.72
2	220	Layer		Demolition layer	Grey-brown sandy clay silt	c.4.0	>0.50	>0.50
2	221	Layer		Demolition layer	Red tile fragments of white/yellow mortar, grey brown clayey silt, <12cm length fragments of tile, very compact	1.0	-	0.20
2	222	Layer		Demolition deposit	Brownish black, clay silt, very compact, coal fragment inclusions	1.40	-	0.20
2	223	Deposit		Demolition deposit	Red tile fragments of white/yellow mortar, grey brown clayey silt, very compact, some pebble inclusions	0.95	-	0.4
3	300	Layer		Concrete slab	Concrete slab	40.0	2.2	0.25 – 0.35
3	301	Layer		Levelling layer	Heterogenous mix of moderately compact grey-brown and black-brown clay sand silt. Pebbles throughout, isolated and in small lenses, CBM, bone, pottery	>25.0	2.2	c.0.6
3	302	Structure	303	Wall	Of handmade bricks, exposed only to one/two courses L230mm x W120mm x 70mm thick	2.89	0.35	>1 course
3	303	Cut		Foundation cut for wall 302	Undefined in plan	2.89	0.35	>1 course

Trench	Context	Type	Fill of	Context Interpretation	Context Description	Length (m)	Width (m)	Depth/thickness (m)
3	304	Deposit		Associated with wall 302	Mixed friable mid orangey-red to mid brownish-grey silty sand and brick	c.2.2	x.0.06	>0.20
3	305	Layer		Possibly = to 301	Mid blackish-brown moderately compact clay silt, some charcoal inclusions, lot of CBM	>2.2	>2.0	-
3	306	Structure		Medieval sandstone wall	Loosely cut and roughly dressed rubble core of sandstone wall. Not evidently coursed in exposure. Possible casemate with dressed ashlar (315) on south side and cut and roughly dressed blocks (312) on north face	c.1.1	2.2	-
3	307	Deposit		Demolition / erosion deposit partially overlying 313	Large fragments of red sandstone c.0.20 – 0.40m length. Compact and intermixed with soft yellow and red sand	c.2.5	2.2	c.0.30
3	308	Deposit		Demolition / erosion deposit partially overlying 313	Dark brownish-black silty clay, moderately compact and quite sticky. A few small pebbles and CBM flecks. Intermixed with sandstone rubble of 307	>0.60	>0.90	c.0.10
3	39	Deposit		Demolition / erosion deposit partially overlying 313	Poorly defined loose greenish-yellow sand and loose red sand. Intermixed with sandstone rubble 307	-	-	-
3	310	Layer		Deliberate infill of moat to level for 19 th century development	Compact, quite wet black-brown clay silt. A very little sand, stained black	c.25.0	2.2	c.1.16
3	311	Layer		Natural sandstone substrate	Clean loose red and yellow banded sand over more solid sandstone	>7.0	2.2	-
3	312	Structural		Wall	Rough cut red sandstone blocks one course exposed in plan L 340mm x W 150mm x ?	-	-	-

Trench	Context	Type	Fill of	Context Interpretation	Context Description	Length (m)	Width (m)	Depth/thickness (m)
3	313	Structural		Foundation deposit	Rough uncut red sandstone rubble layer. Laid fairly flat, tightly packed but not mortared or bonded	>2.2	>1.2	-
3	314	Structural		Mortar bonding for 315	Yellow-white limestone mortar c.10mm thick bonding joints of ashlar 315. Tightly adhering in places, loose, wet and eroding in others	-	-	-
3	315	Structural		Wall	Saw-cut, dressed and bonded red sandstone ashlar blocks facing wall 306. Exposed to four surviving courses, one of which is chamfered. A further chamfered course beneath but inaccessible.	>1.0	>0.40	c.0.25
3	316	Cut		Cut of concrete pad 317	-	>2.0	>2.0	>2.0
3	317	Structural	316	Concrete pad foundation for ring beam	-	>2.0	>2.0	>2.0
3	318	Fill		Backfill of 1970s watching brief and for concrete pad 317	Loose mix of brown sandy clay silt, small pebbles and some gravel inclusions. Compact in places. Lots of chunks of sandstone debris from wall 306 within it. Some coal fragments and CBM	c.3.0	2.2	>2.0
3	319	Cut		Cut of concrete pad 320	-	>2.0	>2.0	>2.0
3	320	Structural	319	Concrete pad foundation for ring beam	-	>2.0	>2.0	>2.0
3	321	Fill		Fill of cut for concrete pad 320	Dark brown sandy clay silt mainly compact, loose in places, gravel inclusions and sandy patches	0.20 – 0.60	-	>2.0
3	322	Layer		Earliest moat deposit overlying natural substrate	Dark grey-brown compact clay silt, with rotted organics.	>10.0	2.2	0.50 – 0.60
Lift Pit	400	Layer		Tarmac – finished surface	Black	8.0	6.0	0.35 – 0.45
Lift Pit	401	Layer		Type 1 granular hardcore	Mixed – crush and gravel	8.0	6.0	0.25 – 0.35

Trench	Context	Type	Fill of	Context Interpretation	Context Description	Length (m)	Width (m)	Depth/thickness (m)
Lift Pit	402	Structure		Brick-built Well	of handmade red bricks, partial survival to three courses L220mm x W110mm x T70mm	Diameter c.1.4	-	>3 course. Then c.3m diameter sandstone cut base / cistern >1m deep
Lift Pit	403	Fill	402	Fill of well	Dark blackish brown, silt, moderately compact, CBM rubble present in high amounts in the fill	Diameter c.1.4	-	>3 courses into upper well-base deposit.
Lift Pit	404	Structure		Ceramic water pipe	Modern – 20 th century typical hard-glazed pipe	6" 150mm diameter	-	-
Lift Pit	405	Cut	404	Cut for drain	-	c.4.0	c.0.50	c.0.70
Lift Pit	406	Fill	402	Clay packing/sealing	Clean red clay sealing around outer surface of brick-lined well – partially survived	0.85	0.10 – 0.15	0.30
Lift Pit	407	Layer		Leveling layer in N half of trench - below Type 1 granular layer	Red-brown sharp sand, loose with some small gravel inclusions.	8.0	3.5	0.15 – 0.20
Lift Pit	408	Structure		Brick-built Well	of handmade / bespoke curved red bricks, partial survival to eight courses L220mm – 240mm x W110mm x T70mm	Diameter c.1.5	-	>8 courses sitting on natural sandstone – unexcavated below this level
Lift Pit	409	Fill	408	Clay packing/sealing	Clean red clay sealing around outer surface of brick-lined well – partially survived	>2.0	0.30	>0.70
Lift Pit	410	Fill	408	Fill of well	Very rough mix of demolition rubble - compact, predominantly CBM, some mortar and clinker, pot and bone	Diameter c.1.5	-	>8 courses into upper element of natural sandstone – presumed to fill cut deeper into sandstone but unexcavated any further.
Lift Pit	411	Cut	402	Foundation cut of well	Semi-circular, vertical sides for brick-built element then cut out in a bowl shape through natural sandstone to c.3.0m diameter and >1.0m deep. Unexcavated to base.	c.1.4m diameter (brick-built element. C3.0m diameter excavated bowl in sandstone	-	>1.5

Trench	Context	Type	Fill of	Context Interpretation	Context Description	Length (m)	Width (m)	Depth/thickness (m)
Lift Pit	412	Layer		Natural sandstone substrate	Clean, firm red sandstone with yellow bands of firm sandstone. Some looser sand at surface in places	>8.0	>6.0	-
Lift Pit	413	Fill	404	Fill of modern drain cut	Modern Type 1 granular fill with some mixing of dirtier black-brown silty sand	c.4.0	c.0.50	c.0.70
Lift Pit	414	Fill	402	Fill of well	Very wet black silty primary fill with a lot of CBM, including large chunks of demolition masonry, a cast iron length of tram track, some pottery and glass bottle	c.3.0m diameter	-	>1.0
Lift Pit	415	Cut	408	Foundation cut of well	Semi-circular, vertical sides for brick-built element then (probably) cut deeper through natural sandstone. Unexcavated to base.	c.1.5m diameter (brick-built element. C3.0m diameter excavate bowl in sandstone	-	>0.70
Lift Pit	416	Structure		Concrete pad	Modern concrete pad with 25mm rebar steel reinforcement throughout	4.8	2.5	0.30
Lift Pit	417	Layer		Leveling layer –deriving from demolition of Smithfield Market in 1970s	Mixed dark brown silty sand with chunks of tarmac, a lot of CBM, ashy clinker, bits of concrete	8.0	3.5	0.15 – 0.20

APPENDIX B: THE FINDS

Table 1: Finds Concordance

Context	Class	Description	Fabric Code	Count	Weight (g)	Spot-date
101	Post-medieval/Modern Pottery Post-medieval/Modern Pottery Post-medieval Pottery Post-medieval Pottery CBM Clay Tobacco Pipe Iron	Refined white earthenware Transfer printed earthenware Staffordshire-type manganese glazed ware Midlands blackware Drain x 1 Brick x 1 Stem x 3 Chisel x 1, wire x 1, sheet x 1, disc x 1	REFW TPE STMG MIDB sw/ms	3 2 1 4 2 3 4	54 10 19 52 1293 6 1709	LC18-C20
104	Post-medieval Pottery Post-medieval/Modern Pottery Clay Tobacco Pipe	Staffordshire-type slipware North Midlands earthenware Stem x 7	STAF NMEW	1 5 7	6 147 21	LC17-C20
107	Medieval Pottery CBM	Medieval glazed ware Brick x 1, Tile x 1	MGW fsc/ms	1 2	126 890	C13-C14
201	Post-medieval/Modern Pottery Post-medieval/Modern Pottery Post-medieval Pottery CBM Clay Tobacco Pipe Glass	Transfer printed earthenware North Midlands earthenware Staffordshire-type slipware Nib Tile x 1 Bowl x 1, Stem x 13 Green bottle glass	TPE NMEW STAF cs	1 5 1 1 14 1	6 258 2 74 41 76	LC18-C20
202	CBM	Brick x 1	msli	2	3284	
203	Post-medieval/Modern Pottery Post-medieval/Modern Pottery Post-medieval Pottery Post-medieval Pottery Post-medieval/Modern Pottery Industrial Waste Iron CBM	Transfer printed earthenware Refined white earthenware Midlands blackware British Stoneware North Midlands earthenware Sheet x 9, strips x 5 Nib Tile x 1	TPE REFW MIDB BSW NMEW cs	3 1 1 1 3 1 14 3	6 1 6 47 89 196 114 828	LC18-C20
204	CBM	Brick	fscp	1	2751	
208	CBM	Tile x 5	fscp/ms/mscp	7	1129	
209	Medieval Pottery	Medieval fine sandy glazed	MFGW	2	276	C13-C15?

	CBM Clay Tobacco Pipe Industrial Waste	ware Nib Tile x 2 Tile x 8 Stem x 2	ms/msc/cs	10 2 1	2021 9 14	
212	Post-medieval Pottery Post-medieval Pottery Post-medieval/Modern Pottery Post-medieval/Modern Pottery CBM Clay Tobacco Pipe Glass Industrial Waste	Cistercian-type ware Midlands blackware North Midlands earthenware Refined white earthenware Tile x 7, Drain x 1 Stem x 3 Green bottle glass Coal	CIST MIDB NMEW REFW cs/sw	2 2 2 3 8 3 6 1	20 35 74 13 478 9 158 6	LC18-C20
215	Post-medieval Pottery Post-medieval Pottery Clay Tobacco Pipe	Midlands blackware Cistercian-type ware Bowl x 1 Stem x 7	MIDB CIST	3 1 8	42 9 24	C17-C19
308	Medieval Pottery CBM Iron	Medieval glazed ware Nail	MGW msfe	2 1 1	16 6 9	C13-C14
310	Post-medieval/Modern Pottery Post-medieval/Modern Pottery Post-medieval/Modern Pottery Post-medieval Pottery CBM Clay Tobacco Pipe Industrial Waste Iron	North Midlands earthenware Transfer printed earthenware Refined white earthenware British Stoneware Drain x 2 Stem x 2 Nail x 1, handle x 1, sheet x 1 rod x 1	NMEW TPE REFW BSW sw	3 2 5 1 2 2 2 4	249 22 74 24 448 6 150 206	LC18-C20
314	Mortar			5	173	
318	Post-medieval/Modern Pottery Post-medieval/Modern Pottery CBM	North Midlands earthenware Refined white earthenware Nib Tile x 1 Tile x 2	NMEW REFW cs	1 1 3	56 18 941	LC18-C20
U/S Tr 2	Clay Tobacco Pipe	Bowl x 2		2	20	
U/S Tr 3	Clay Tobacco Pipe	Bowl x 1		1	13	
U/S	Post-medieval/Modern Pottery Post-medieval/Modern Pottery Post-medieval/Modern Pottery Post-medieval/Modern Pottery	Refined white earthenware North Midlands earthenware Transfer printed earthenware Unsourced brown glazed red earthenware	REFW NMEW TPE UGEW	10 13 6 1	98 705 48 4	

Post-medieval Pottery	Un sourced red earthenware	URE	1	183	
Post-medieval Pottery	British Stoneware	BSW	1	89	
Post-medieval Pottery	English Stoneware	ESWN	2	57	
Post-medieval Pottery	Nottinghamshire-type Staffordshire white salt-glazed stonewares	SWSW	2	31	
Post-medieval Pottery	Staffordshire-type manganese glazed ware	STMG	1	32	
Post-medieval Pottery	Staffordshire-type slipware	STAF	1	3	
Post-medieval Pottery	Cistercian-type ware	CIST	1	64	
Medieval Pottery	Medieval coarseware	MCW	1	33	
CBM	Brick x 1, Nib Tile x 1, Tile x 3	ms/msc	8	1715	
Concrete	Tile x 1		1	47	
Clay Tobacco Pipe	Bowl x 3, Stem x 10		13	72	
Iron	Nail		1	17	
Worked Wood	Spindle whorl		1	18	

Table 2: Fabric Descriptions

Period	Fabric Description	Fabric Code	Warks Type Series*	Count	Weight (g)
Medieval pottery	Medieval coarseware	MCW	SQ01	1	33
	Medieval glazed ware (Nuneaton/Walsall)	MGW	WW011	3	142
	Medieval fine sandy glazed ware (Nuneaton/Walsall)	MFGW		2	276
Post-medieval/Modern Pottery	Cistercian-type ware	CIST	CIST	4	93
	Staffordshire type slipware	STAF	SLPW01	3	11
	Staffordshire type manganese glazed ware	STMG	MANG	2	51
	Staffordshire salt glazed stoneware	SWSW		2	31
	Midlands blackware	MIDB	MB02	10	135
	British stoneware	BSW	STE01	3	160
	Nottingham-type English stoneware	ESWN	STE02	2	57
	North Midlands earthenware	NMEW		32	1578
	Unsourced brown glazed red earthenware	UGEW		1	4
	Unsourced red earthenware	URE		1	183
	Refined white earthenware	REFW		23	258
	Transfer printed earthenware	TPE		14	92
Grand Total				103	3104

* Warwickshire type series (Soden and Ratkai 1998)

APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE

Table 3 Assessment of the environmental remains

Phase		Medieval – Post-medieval	Medieval – Post-medieval?
Area		Trench 1	Trench 3
Feature		Moat	Moat
Context		107	322
Sample		1	3
Sample Type		W/L	W/L
Processed vol (L)		2	2
Waterlogged material			
<i>Ranunculus sceleratus</i> L.	celery-leaved buttercup	-	+
<i>Ranunculus lingua</i>	greater spearwort	-	+
<i>Ranunculus acris/repens</i>	meadow/creeping buttercup	+	+
<i>Ranunculus flammula</i>	lesser spearwort	+	-
<i>Ficus carica</i> L.	fig	+	+
<i>Persicaria</i> sp.	persicaria	-	+
<i>Rumex</i> sp. L.	docks	-	+
<i>Brassica</i> sp.	cabbage	+	-
<i>Rubus</i> sp.	brambles	+	+
<i>Aethusa cynapium</i> L.	fool's parsley	+	-
<i>Solanum</i> cf. <i>dulcamara</i> L.	bittersweet	+	+
<i>Sambucus nigra</i> L.	elder	+	-
<i>Carex</i> sp.	sedge	+	+
Woody stems/twigs frags > 4mm		+	+
Woody stems/twigs frags > 2mm		++	+
Root/Grass/Leaf frags		++	-
Bud		-	+
Nut fragment		+	-
Thorn		-	+
Charred material			
Charcoal 4/2mm		-/+	-/+
Other			
Insect remains		+++	+++
Fish bone/scale		+	+

Key: + = 1–49 items; ++ = 50–100 items; +++ = >100 items

APPENDIX D: THE BIOLOGICAL EVIDENCE

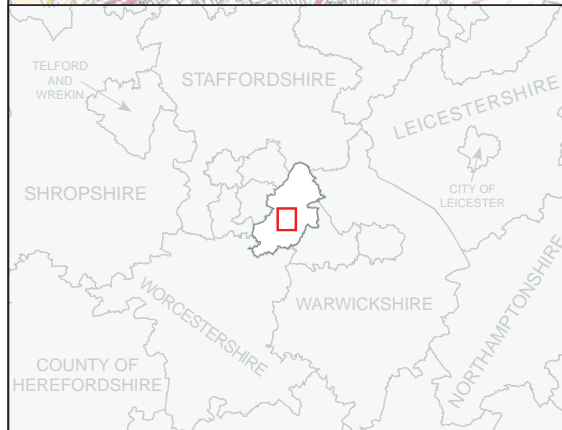
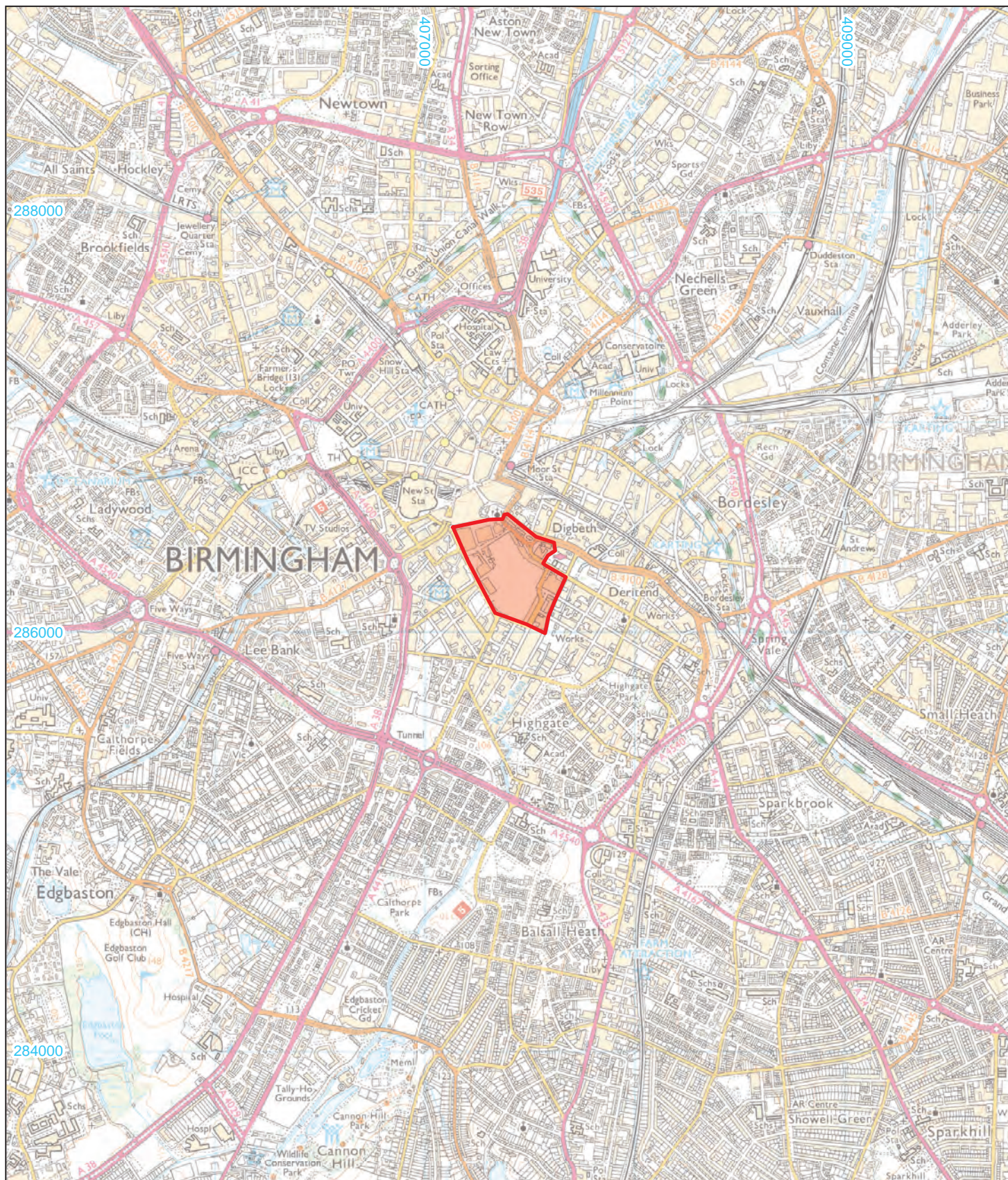
Table 1: Identified animal species by fragment count (NISP) and weight and context

Cut	Fill / Deposit	BOS	O/C	EQ	Bird sp.	LM	MM	Ind	Total	Weight (g)
Medieval										
	308		2		1	1			4	23
Subtotal			2		1	1			4	23
Post-medieval/modern										
	101	1	2			3	1		7	304
	104	1				1	2		4	128
	201					1	1		2	18
202	203		1				1		2	36
	209		1			1			2	84
	212		2					1	3	52
	215	2							2	36
	310				1		2		3	37
Subtotal		4	6		1	5	7	1	23	695
Unstratified										
	u/s	4	2	3		1			10	987
Total		8	10	3	2	8	7	1	39	
Weight		717	227	341	4	348	61	7	1705	

BOS = Cattle; O/C = sheep/goat; SUS = pig; EQ = horse; Canid = dog; GAL = domestic fowl; LM = cattle size mammal; MM = sheep size mammal; Ind = indeterminate

APPENDIX D: OASIS REPORT FORM

PROJECT DETAILS		
Project name	Smithfield Market Development, Birmingham	
Short description	<p>In December 2020 and January 2021 Cotswold Archaeology carried out an archaeological evaluation at the former Wholesale Market site, off Pershore Street in Birmingham. This was undertaken as part of the Smithfield Market Development. Three trenches were excavated, targeted on the site of the former medieval manor house and associated structures, along with the moat that surrounded these buildings. These remains represent the focus of settlement in early Birmingham. A watching brief was also undertaken during the excavation of a lift pit at the Site.</p> <p>The evaluation demonstrated that structural elements of the medieval moated manor survive substantially intact at no more than 0.5m beneath the present concrete slab. Deposits of medieval date were also identified at the base of the moat. This suggests that in situ deposits, artefacts and palaeoenvironmental evidence survive well, where not cut by groundworks in the 1970s.</p> <p>Post-medieval to 19th century structural remains were recorded within the former area of the moat platform, as well as to the southern edge of the former moat and to its north. Deposits that may be associated with the former moat platform and those associated with the clearance of the Site and development of the markets in the 19th century were evident but were very mixed and represent remains spanning several centuries, though reflecting activities that took place probably throughout the 19th century.</p>	
Project dates	9 December 2020 - 18 December 2020; 11 January 2021 - 18 January 2021, 15 March and July 6 – 9 2021	
Project type	Field evaluation and watching brief	
Previous work	Desk-based Assessment (Atkins 2010)	
Future work	Unknown	
PROJECT LOCATION		
Site location	The former Wholesale Market site, Pershore Street, Birmingham	
Study area (m ² /ha)	16.8ha (wider site)	
Site co-ordinates	407391 286433	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project design (WSI) originator	Cotswold Archaeology	
Project Manager	Rob Sutton	
Project Supervisor	Dr Mark Hewson	
MONUMENT TYPE	Former medieval Moated Manor	
SIGNIFICANT FINDS	<i>In situ</i> remains of structures and deposits associated with the medieval moated manor and infilled moat.	
PROJECT ARCHIVES	Intended final location of archive (museum/Accession no.):	Content:
Physical	Birmingham City Museum and Art Gallery	Pottery, CBM, Animal Bone, Metal
Paper	Birmingham City Museum and Art Gallery	Trench recording forms, context sheets, photographic registers, permatrace drawings, report
Digital	ADS/ Birmingham City Museum and Art Gallery	Digital photographs, report
BIBLIOGRAPHY		
Cotswold Archaeology 2021 <i>Smithfield Market Development, Birmingham: Archaeological Evaluation and Watching Brief</i> CA typescript report MK0351_1		



 Site boundary

0 1km

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PROJECT TITLE

**Smithfield Market Development,
Birmingham**

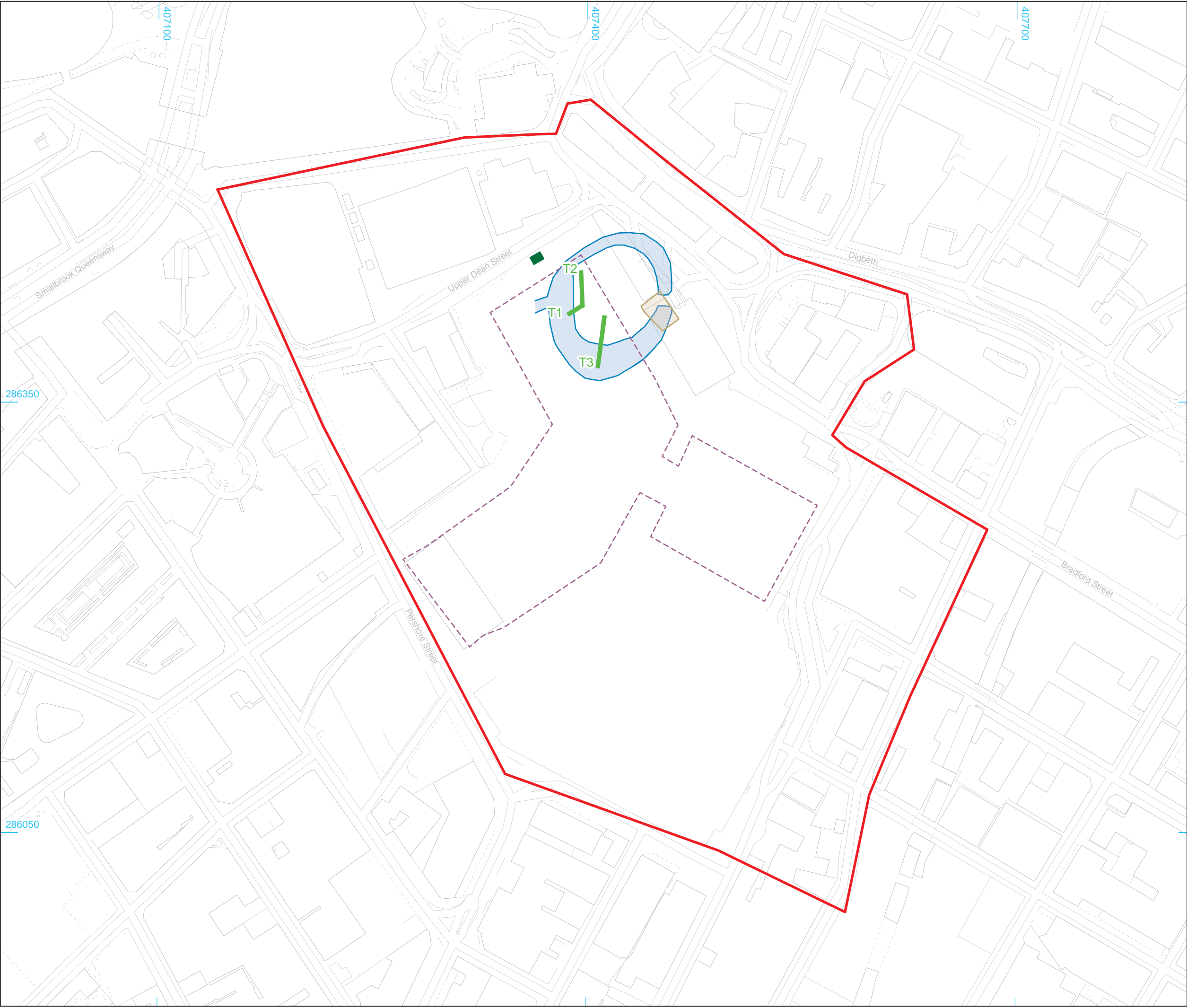
FIGURE TITLE

Site location plan

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CHECKED BY **DJB** DATE **17/09/2021**
APPROVED BY **MH** SCALE @A4 **1:25,000**

FIGURE NO.

1



- Site boundary
- Evaluation trench
- Watching Brief location
- Approximate location of moat
- Outline of former market buildings
- Location of 1970s lift pit



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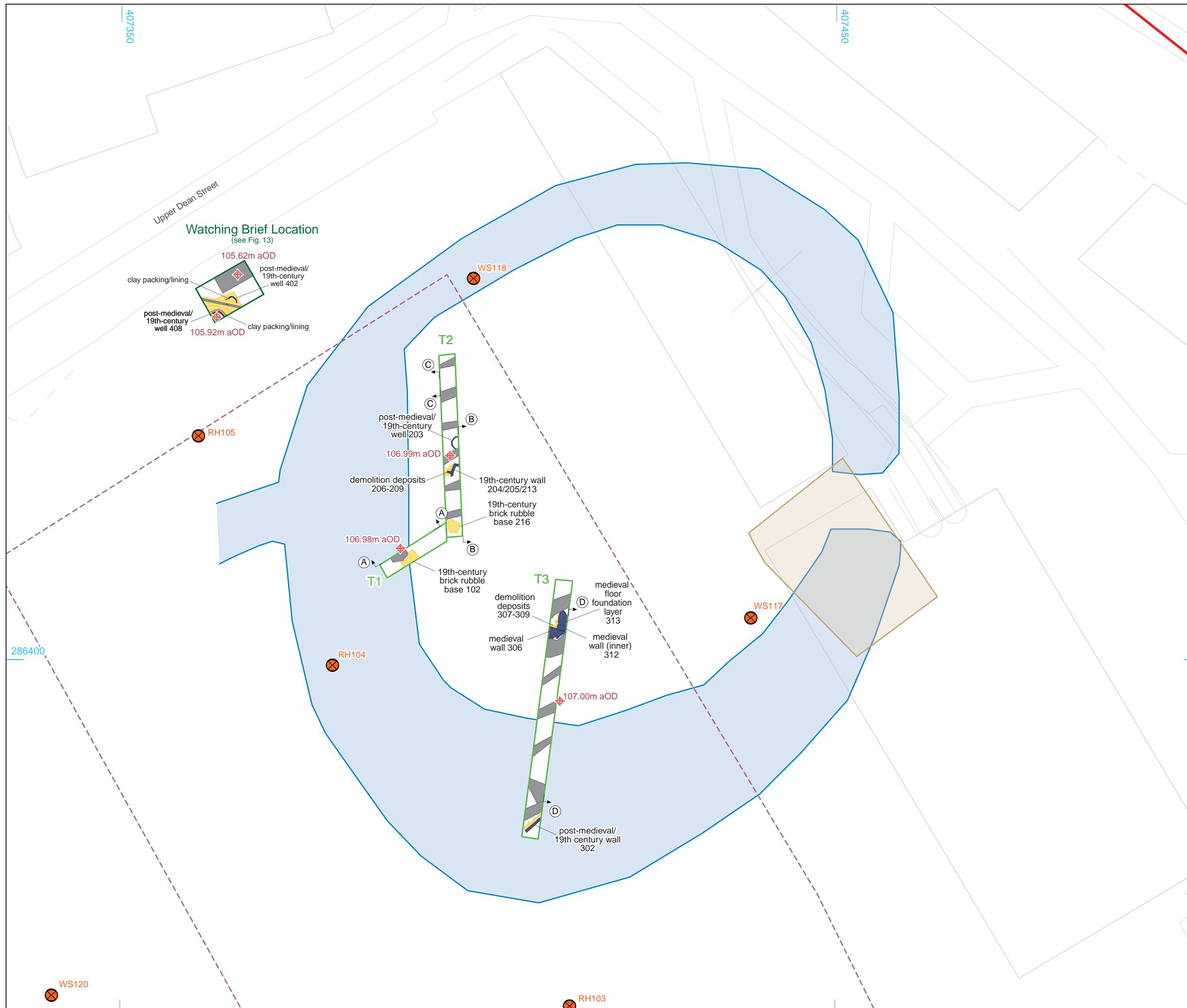
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PROJECT TITLE
**Smithfield Market Development,
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FIGURE TITLE
**Evaluation trench and Watching Brief
location plan**

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CHECKED BY	DJB	DATE	17/09/2021	2
APPROVED BY	MH	SCALE	A3 1:2500	



Site boundary

Evaluation trench

Watching Brief location

Deposit

Clay packing/lining

Structure

Modern/concrete

Height

Section location

Approximate location of moat

Outline of former market buildings

Location of 1970s lift pit

Borehole location

0150025m

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PROJECT TITLE

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FIGURE TITLE

Evaluation trench and Watching Brief
location plan with features

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MH

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DATE
SCALE @A3

MK0351
17/09/2021
1:500

FIGURE NO.

3



- Site boundary
- Evaluation trench
- Watching Brief location
- Approximate location of moat
- Deposit
- Structure
- Modern/concrete

0 1:1000 50m

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Site of Smithfield Market Development, looking east



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PROJECT TITLE

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FIGURE TITLE

Pre-commencement Site Photograph

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 APPROVED BY MH SCALE@A4 NA

FIGURE NO.

6

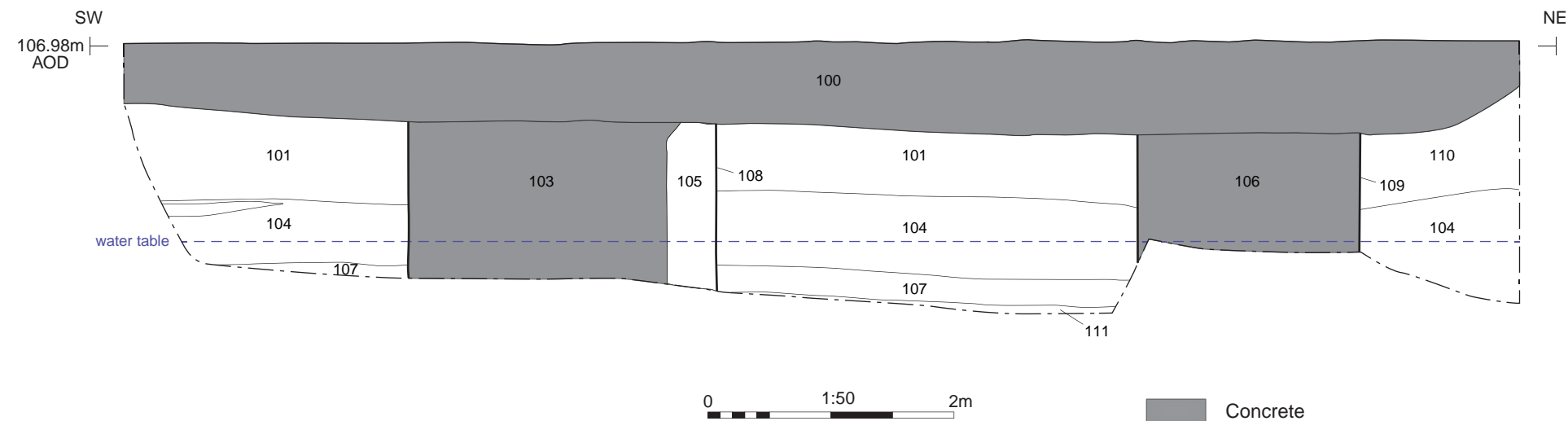


Trench 1, looking north-east



Trench 1, looking north-east

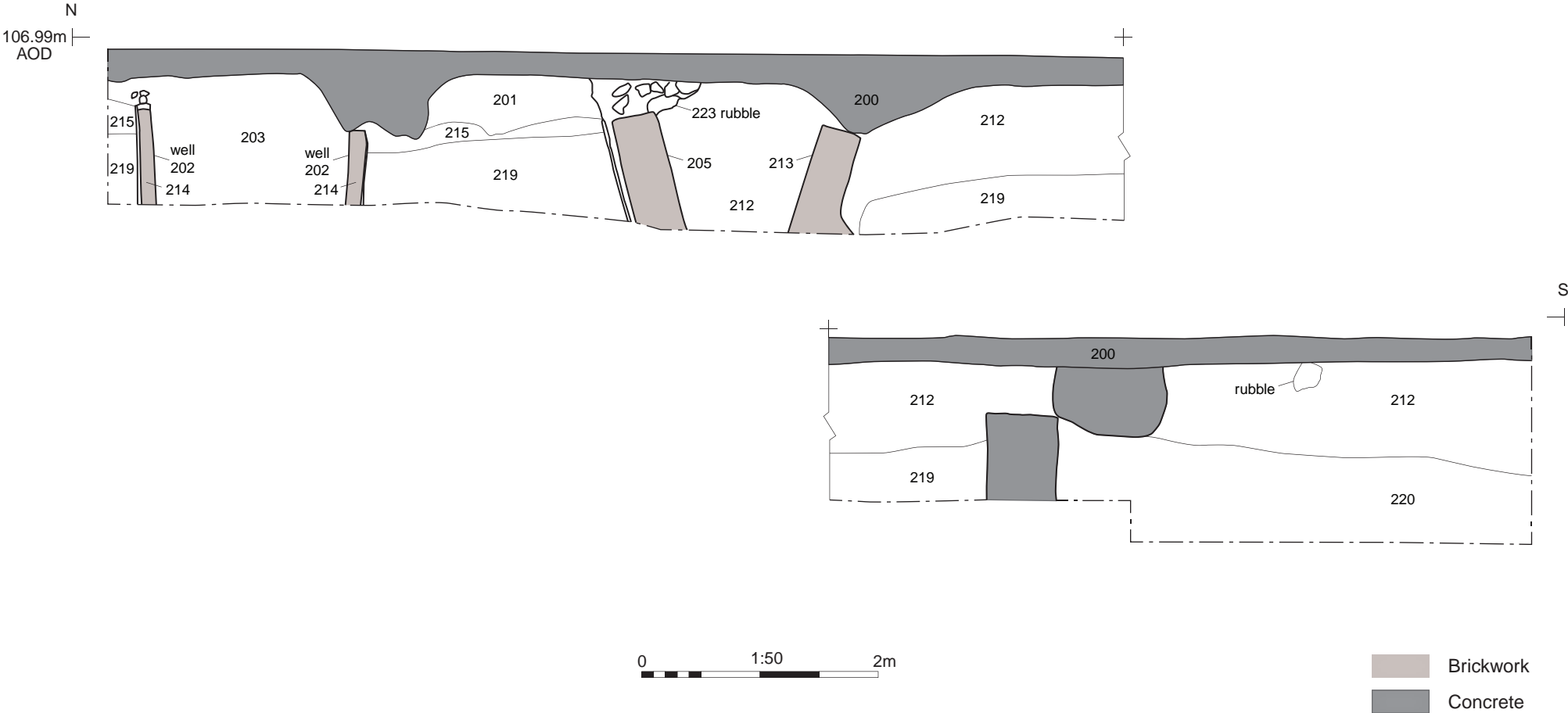
Section AA





Well 202 and walls 205 and 213 looking south-east (1m scales)

Section BB



Well 202, looking east (1m scales)



Walls 205 and 213, looking east (1m scales)


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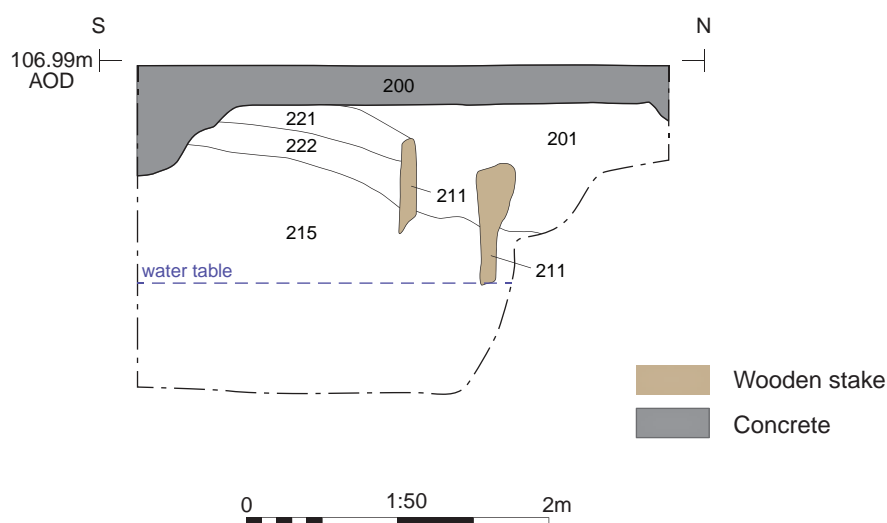
PROJECT TITLE
**Smithfield Market Development,
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 FIGURE TITLE
Trench 2: section and photographs

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Stakes 211, looking south-west (1m scale)

Section CC



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FIGURE TITLE

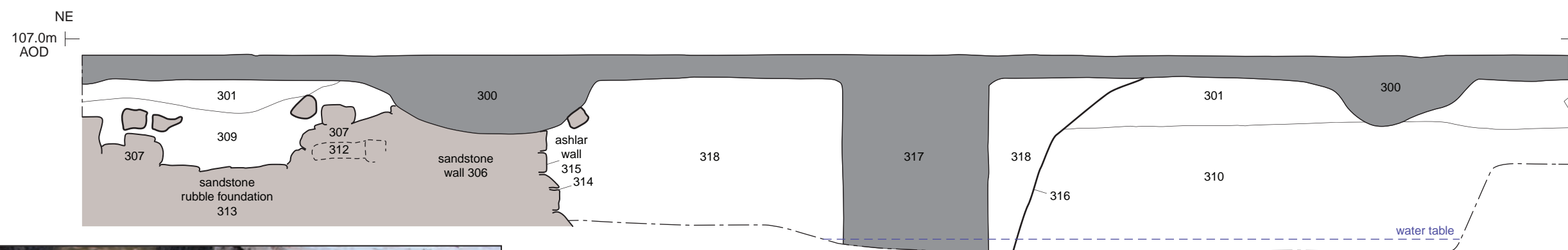
Trench 2: section and photograph

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FIGURE NO.

9

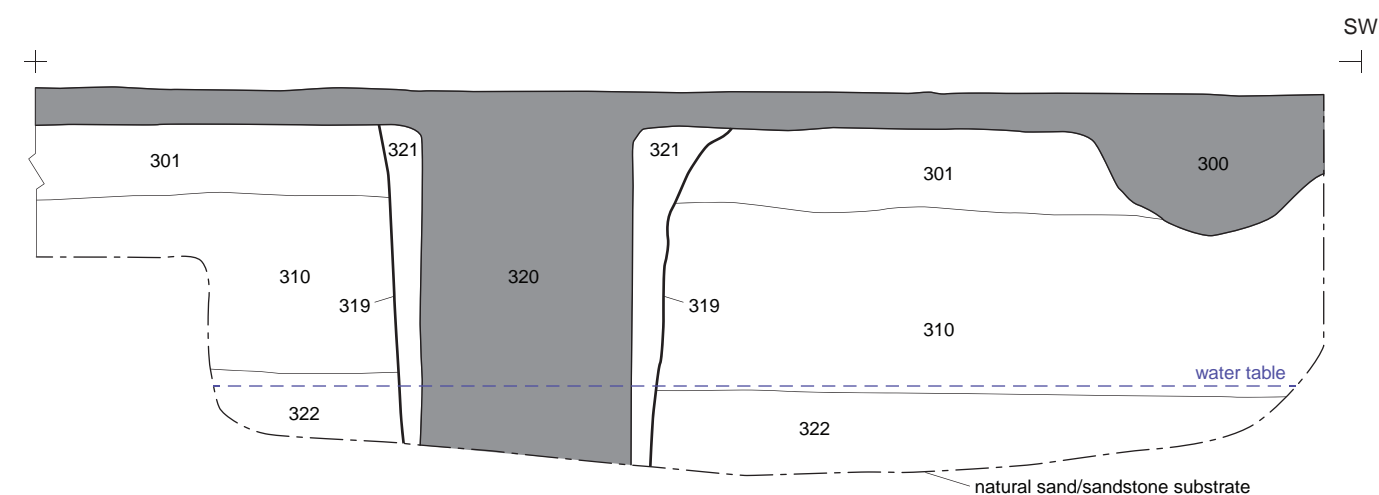
Section DD



Trench 3 containing possible rubble foundation 313 and wall 306, looking south (scales 1m)



Wall 306 with ashlar face 315 and part of west-facing section, looking north-east (scale 1m)



0 1:50 2m

Brickwork
Concrete

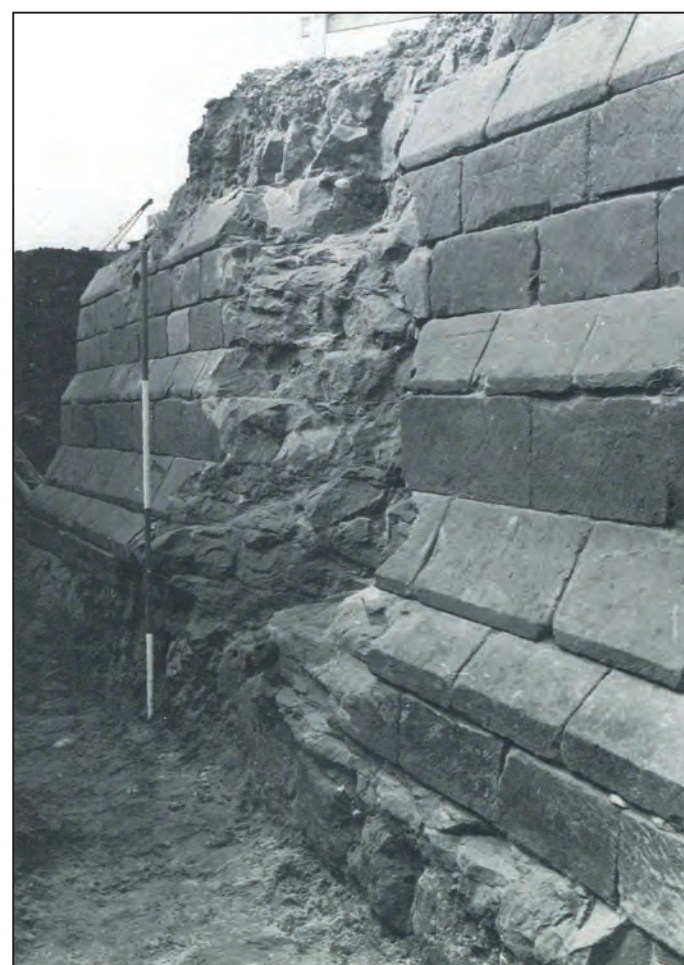


Plate II(b) Birmingham Moat: structure 1, Wall B (Watts 1980, p.75)

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FIGURE TITLE
Trench 3: section and photographs

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FIGURE NO.
10



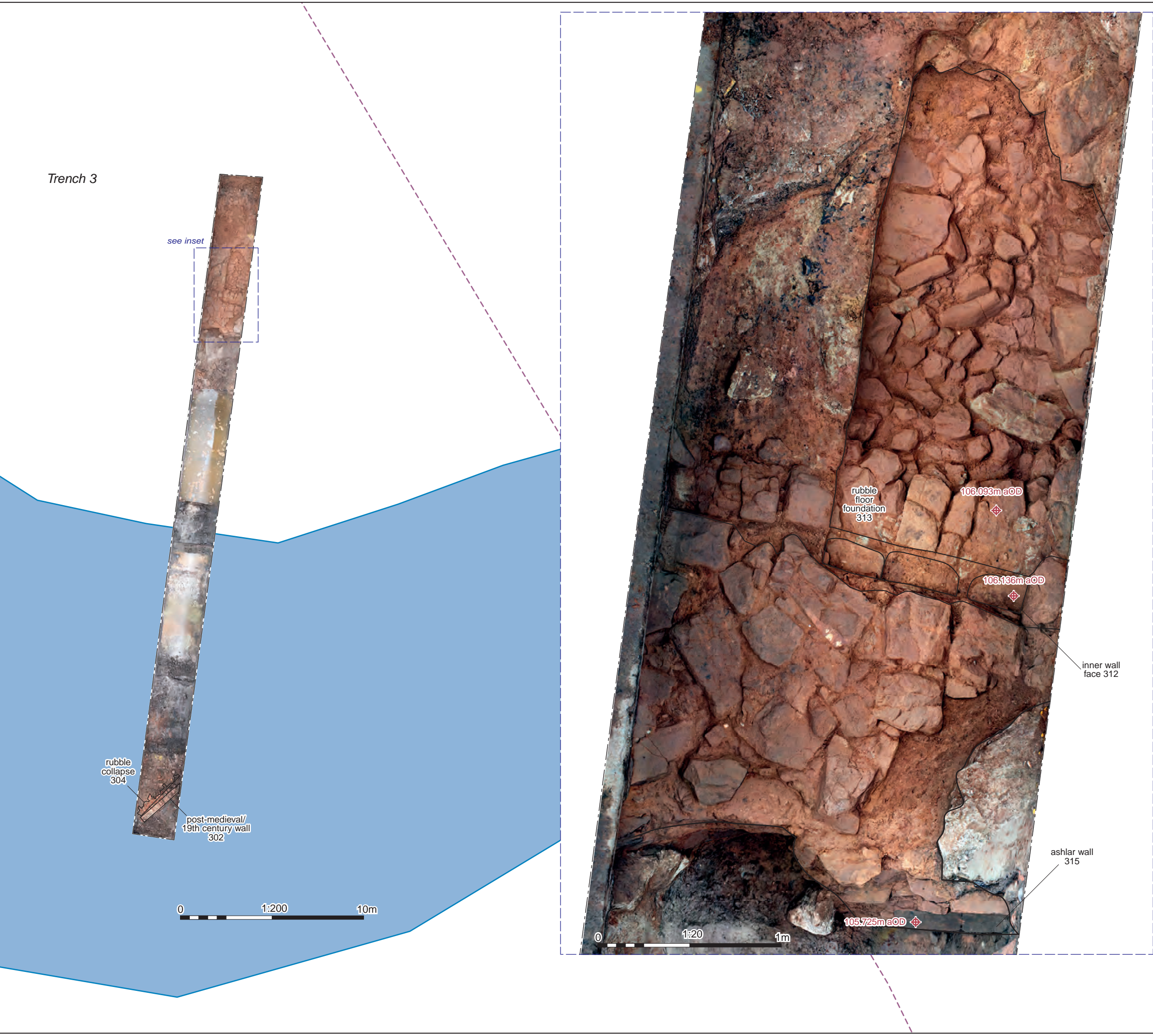
Trench 3 natural soft sandstone substrate and overlying deposits, looking north-west



Trench 3 natural soft sandstone substrate and overlying deposits, looking north-east



Trench 3 natural soft sandstone substrate and overlying deposits, looking south-east

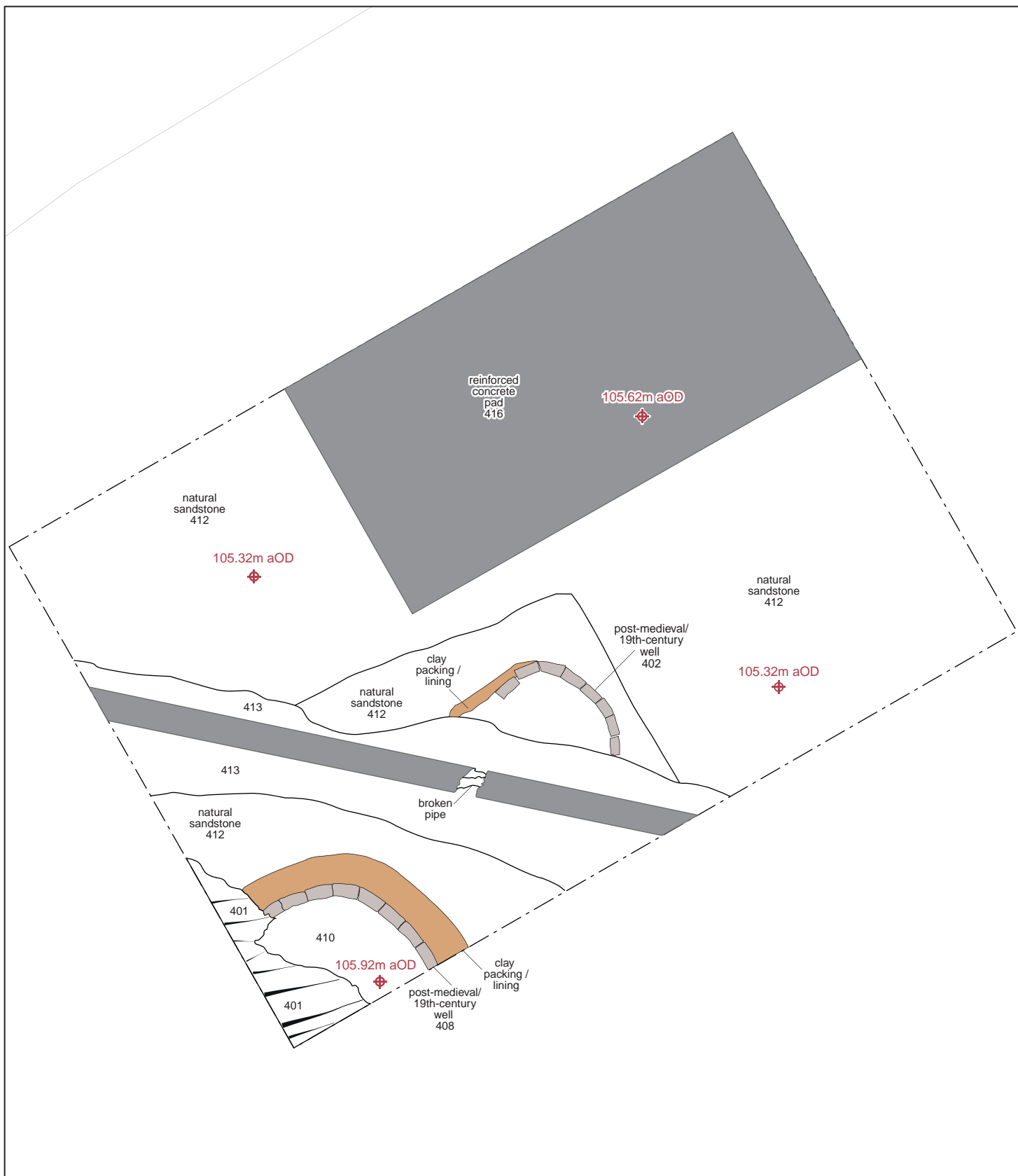






- Evaluation trench
- Approximate location of moat
- Outline of former market buildings
- Height

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FIGURE TITLE
Trench 3: photogrammetry



-  Limit of excavation
-  Brickwork
-  Clay packing/lining
-  Modern



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PROJECT TITLE

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FIGURE TITLE

**Lift Pit Watching Brief area with
features**

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FIGURE NO.

13



Working photograph, looking north-east



Working photograph, looking north-east



Working photograph, looking north-west



Working photograph, looking south-west

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PROJECT TITLE
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Birmingham**

FIGURE TITLE
Photographs: Watching Brief location

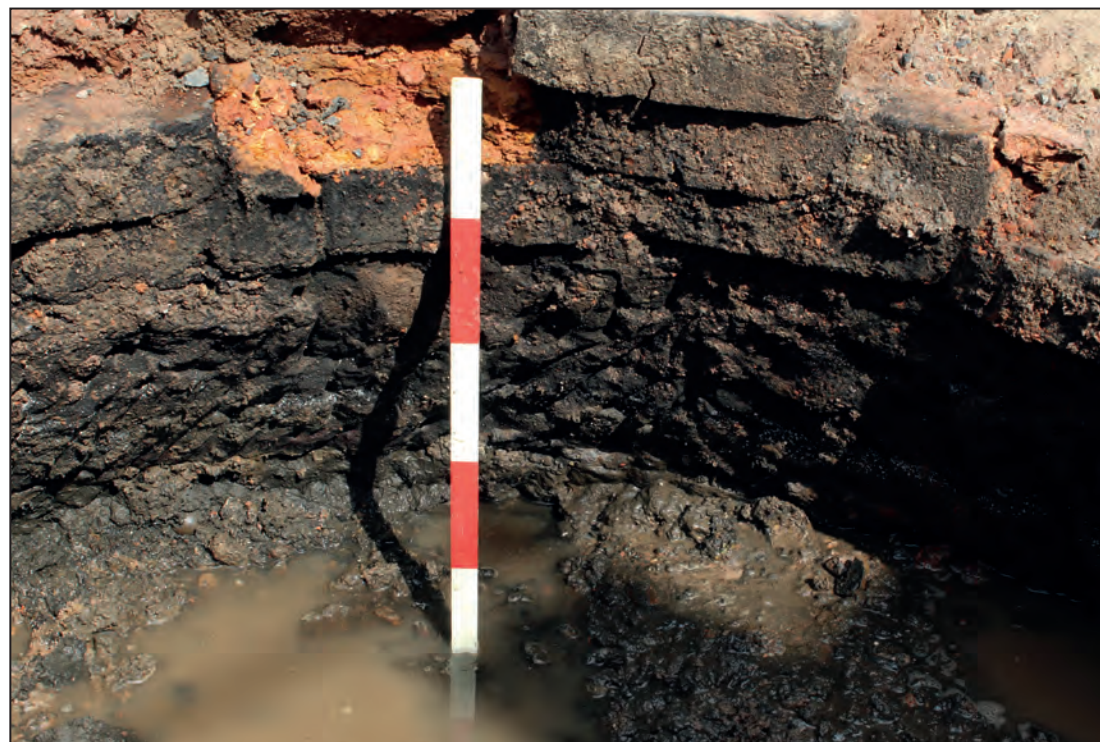
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Post-medieval/19th century well 402, looking south-west (scale 1m)



Post-medieval/19th century well 402, looking north-west (scales 1m and 0.5m)



Post-medieval/19th-century well 402, detail, looking north west (scale 0.5m)



Post-medieval/19th-century well 402, looking north



Post-medieval/19th century well 408, looking north-west (scale 1m)



Post-medieval/19th century well 408 looking south-east



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PROJECT TITLE

Smithfield Market Development,
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FIGURE TITLE

**Photographs: Post-medieval/19th
century well 408**

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FIGURE NO.

16



Post-medieval/19th century wells 402 and 408, looking east



Post-medieval/19th century wells 402 and 408, looking west (scales 1m)



Post-medieval/19th century wells 402 and 408, looking south (scales 1m)

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