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Salford
MANCHESTER

Archaeological Evaluation

Lawson Quay,
Bulk Road,
Lancaster.

Client:

Eric Wright Group Ltd

Planning Ref:

16/01084/FUL

Technical Report:

Mandy Burns

Report No:

SA/2017/52



Site Location: The study area comprises a brownfield site, bounded to the north, east and south and north by Bulk Road, and Caton Road to the west.

NGR: Centred at NGR 348080 462140

Project: Lawson Quay, Bulk Road, Lancaster: Evaluation

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Summary

In May 2017, Salford Archaeology was commissioned by Eric Wright Group Ltd to carry out an archaeological evaluation of a site situated between Bulk Road and Caton Road on the north-eastern fringe of Lancaster (centred on NGR 348080 462140). The work was required to satisfy a condition (Condition 10) attached to planning consent for a proposed new student village (Planning Ref: 16/01084/FUL).

The evaluation was carried out in the light of the conclusions drawn from an archaeological assessment of the site, and comprised the excavation of nine trenches of various lengths, which were placed across various accessible locations across the proposed development site, with the intention of locating any buried remains of a medieval leper hospital, its associated cemetery and any evidence for medieval and post-medieval agricultural activity and associated settlement. The principal objective of the evaluation was to determine the presence, extent, depth, state of preservation and significance of the archaeological resource to enable informed recommendations to be made for the future treatment of any surviving remains, in line with the guidance provided by the National Planning Policy Framework.

No firm evidence for the leper hospital was identified in any of the excavated trenches, adding weight to the annotation on mid-nineteenth-century mapping that indicates that St Leonard's Hospital lay the on the eastern side of what is now Bulk Road. The only archaeological remains revealed during the evaluation comprised a short section of stone wall, which possibly represents part of a seventeenth-century building, although this appeared to have been subject to repair or reconstruction. This wall may have been broadly contemporary with the vestiges of an agricultural soil, although this had clearly been subject to disturbance as excavation yielded artefacts to which a twentieth-century date may be attributed.

The results obtained from the evaluation indicate that most, if not all, of the site has been subject to considerable development and earth-moving works since the late nineteenth century that have removed any archaeological remains. The only part of the site that has any potential for surviving archaeological remains lies along the eastern boundary, adjacent to Bulk Road. However, the remains encountered during the evaluation in this area appeared to be fragmentary and are considered to be of only local significance. As such, it is concluded that there is little merit in undertaking any further archaeological investigation in advance of development.

1. Introduction

1.1 Background

Lancaster City Council has approved planning consent for a proposed development, referred to as Lawson Quay, adjacent to Bulk Road on the north-eastern fringe of Lancaster city centre (Planning Ref: 16/01084/FUL). The development proposals allow for the construction of a new student village, which will comprise the erection of eight buildings up to 11 storeys in height to create 125 studios (C3), 50 cluster flats (C3/sui generis), 19 shared townhouses (sui generis), with ancillary communal facilities, study library (D1), gymnasium (D2), new vehicular and pedestrian accesses, car parking, servicing bays, public realm and landscaping.

The construction programme required to deliver the proposals will inevitably require considerable earth-moving works, which have a potential to impact on any below-ground archaeological remains. The archaeological interest in the site was highlighted in a desk-based assessment, which concluded that proposed development area had some potential to retain buried archaeological remains of local significance, which would merit recording should they be damaged or destroyed by the construction works. In particular, it was considered that the site had potential to contain a medieval leper hospital and associated cemetery (CgMs Consulting 2016).

In the light of the conclusions drawn by the desk-based assessment, the Lancashire Archaeological Advisory Service (LAAS), which provides planning advice to Lancaster City Council, recommended that an archaeological investigation should be carried out in advance of the construction work. In the first instance, the investigation was intended to determine the presence, extent, depth, state of preservation and significance of the archaeological resource to enable informed recommendations to be made for the future treatment of any surviving remains, in line with the National Planning Policy Framework, Paragraph 128. In line with this advice, Lancaster City Council attached a condition to planning consent (Condition 10), which stated:

‘No development shall commence until the applicant, or their agent or successors in title, has secured the implementation of a phased programme of archaeological investigation, recording and mitigation works. This must be carried out in accordance with a written scheme of investigation, which shall first have been submitted and to and agreed in writing by the Local Planning Authority. The final written report containing the results of the recording shall be supplied to the local planning authority in advance of the occupation of the development.

Reason: To ensure and safeguard the recording and inspection of matters of archaeological/historical importance associated with the site.’

In May 2017, Salford Archaeology, within the Centre for Applied Archaeology at the University of Salford, was commissioned by Eric Wright Group Ltd to carry out the recommended scheme of archaeological investigation, which comprised the compilation of a Written Scheme of Investigation (*Appendix 1*), and the implementation of the programme of works contained therein.

The programme of archaeological works comprised the excavation of nine evaluation trenches, which were placed across various accessible locations across the proposed development area with the intention of locating any buried remains of a medieval leper hospital and associated cemetery. The evaluation was carried out in June 2017.

2. Setting

2.1 Location, Geology and Topography

The site of the proposed student village (centred on NGR 348080 462140) lies on the north-eastern fringe of Lancaster city centre (Plate 1). It is bounded to the north, east and south by Bulk Road, with Caton Road forming the western boundary. The study area has lain derelict for a period of around 10 years, although initial ground investigative works were carried out to inform a previous development proposal in 2009, which necessitated considerable earth-moving works. The site has also been subject to fly-tipping.

The solid geology comprises sandstone and siltstone of the Pendle Grit Member. The overlying geology across the centre of the site is sand and gravel of the glaciofluvial sheet deposits (British Geological Survey 1995).



Plate 1: Proposed development area boundary superimposed on a recent aerial view, looking west

The natural topography of the study area is difficult to assess due to development works carried out since the nineteenth century, although it evidently sloped towards the south-west, reflecting a former river terrace parallel to the River Lune. The eastern part of the site, adjacent to Bulk Road, lies at a higher level than the area flanking Caton Road along the western boundary. The northern part of the site, however, forms the lowest part level, lying at a height of approximately 8m above Ordnance Datum,

3. *Historical Background*

3.1 *Introduction*

The archaeological and historical background to the study area has been summarised in a desk-based assessment produced in 2016 to support the planning application for the current development (CgMs Consulting 2016). The following section is drawn largely from this previous study, and is intended to provide a contextual background in which to place the results obtained from the evaluation trenching.

3.2 *Prehistoric Period*

Firm evidence for prehistoric activity in and around Lancaster consists mainly of Bronze Age burials found in the immediate vicinity of King Street, although no evidence can be found for settlement activity (Penney 1981). Earlier finds, potentially dating to the Mesolithic and Neolithic periods, have been discovered during archaeological excavations in Dalton Square (OA North 2010), whilst Early Bronze Age finds of flints from Vicarage Fields show possible transient occupation of the area, which would have potentially exploited coastal and riverine resources (Penney 1981).

3.3 *Roman Lancaster*

Lancaster and its environs are well represented during the Roman period. A Roman fort was founded on Castle Hill in the AD 70s, when the conquest and pacification of northern Britain by Cerialis was already under way. The fort was certainly in existence by the last years of that decade, when Agricola, as Governor, pushed northwards along the west coast into Scotland. A sequence of forts on the site followed (Shotter 1993) and the latest of these, in the fourth century, seems to have been realigned parallel to the Lune; it has been suggested that its form was similar to the Saxon Shore forts of southern Britain and that it would potentially have served as a fleet supply base, and ensured the security of the harbour (*ibid*).

Evidence from numerous excavations along Church Street, situated some 450m the south-west of the study area, is thought to show the main road leading to the fort and linking it to the overall road system. Excavations have also demonstrated that the beginnings of extramural settlement were almost contemporary with the foundation of the first fort, with a time lag of only a few years between the two. Few, if any, structures are known from this early activity, and it may well have been ephemeral or on a small scale. It was not until the early years of the second century, probably during the reign of the Emperor Hadrian, that the settlement grew and thrived. It has been suggested that the route of St Leonard's Gate originates during this period as a road leading north-east along the Lune Valley (Shotter 2010, 5), although there is no known evidence for Roman activity in the study area.

3.4 The Medieval Town

Little is known of settlement in the Lancaster area following the Roman period. By the later medieval period, place names and documentary sources provide the main source of evidence, although excavations have also indicated the physical form of the settlement at Lancaster (White 1988; Penney 1981). The centre of the Lordship was moved to Lancaster shortly after 1086 and Lancaster Castle, on the site of the earlier Roman forts, was established by 1094, along with a priory on the church site (White 2001). A borough was created in 1193, with Church Street, Market Street and Penny Street being the main thoroughfares (*ibid*); ‘*Penistret*’ is first referred to in 1280 in a land transaction between Furness Abbey and Willelmo Stotte, and is frequently mentioned in the thirteenth and fourteenth century (Penney 1981, 16). This may imply a continuation of settlement pattern, surviving from the Roman period, when activity was concentrated in these same areas.

The Domesday reference to a church suggests that this formed the centre of a vill (‘*Chercaloncastre*’, Church Lancaster; Faull and Stinson 1986) which was at that time dependent on the manor of Halton, and comprised six carucates of land (Penney 1981, 13-14). In addition, another vill existed (*Loncastre*), comprising two carucates of land (*ibid*), although its precise location is uncertain, and more recently has been suggested as being located at Bowerham (White 2001, 41). Penney (1981, 14) suggests it may have been centred in the vicinity of Stonewell, St. Leonard’s Gate and Moor Lane.

An undated document of c 1200 refers to a plot of land in ‘Old Lancaster’ which, from its description, was located to the north and east of Stonewell (*ibid*). The distinction between the two parts of the town appears only to have been removed after the Scottish raids in 1322; Leland, visiting the town in the sixteenth century, states ‘the old towne, as thei say ther, was almost al burned, and stood partly beyond the black Freres [Black Friars, the Dominican Friary]. The new town as thei ther say, builded hard by yn the descent from the Castle’ (*ibid*). Camden, writing in 1610, states: ‘yet for prooffe of Romane antiquity they find otherwhiles peeces of the Emperours coine, especially where Friery stood: for there, they say was the plot upon which the ancient City was planted, which the Scots ...in...1322 set on fire and burnt. Since which time they have begunne to build nearer unto a greene hill by the river side...’ (cited in White 2001, 41).

The study area lies to the north of Lancaster’s historic town boundary, within the township of Bulk, which was recorded in the Domesday Survey as ‘Neutun’, a small landholding of two plough lands belonging to Earl Tostig under his Halton Manor. Newton became obsolete and was replaced by ‘Bulk’, which was first recorded in the fourteenth century (Farrer and Brownbill 1914). It was in Bulk, on the northern fringe of the medieval town, that St Leonard’s Hospital was founded in c 1189-94, providing the name for the road on which it was built. The precise location of the hospital is uncertain, although it is thought to have had separate accommodation, known as Spitele House, for leper inmates. The hospital was recorded as being ruinous by 1531.

3.5 The Post-medieval and Industrial Periods

Notwithstanding St Leonard's Hospital, the study area almost certainly remained largely in use for agricultural purposes on the fringe of Lancaster through the sixteenth and seventeenth centuries. This is semi-rural prospect is captured on the earliest survey of the study area, provided by John Speed's map of Lancaster of 1610 (Plate 2). This shows two buildings in a location that corresponds broadly with the eastern boundary of the study area. The function of these buildings is not identified on Speed's map, although it seems possible that they may have been associated with St Leonard's Hospital. Conversely, it has been suggested that a building shown by Speed to the south of the study area, close to the junction of St Leonard's Gate with Bulk Road, represents the site of the hospital. This suggestion is supported to some degree by the reputed discovery of the hospital cemetery during the nineteenth century.

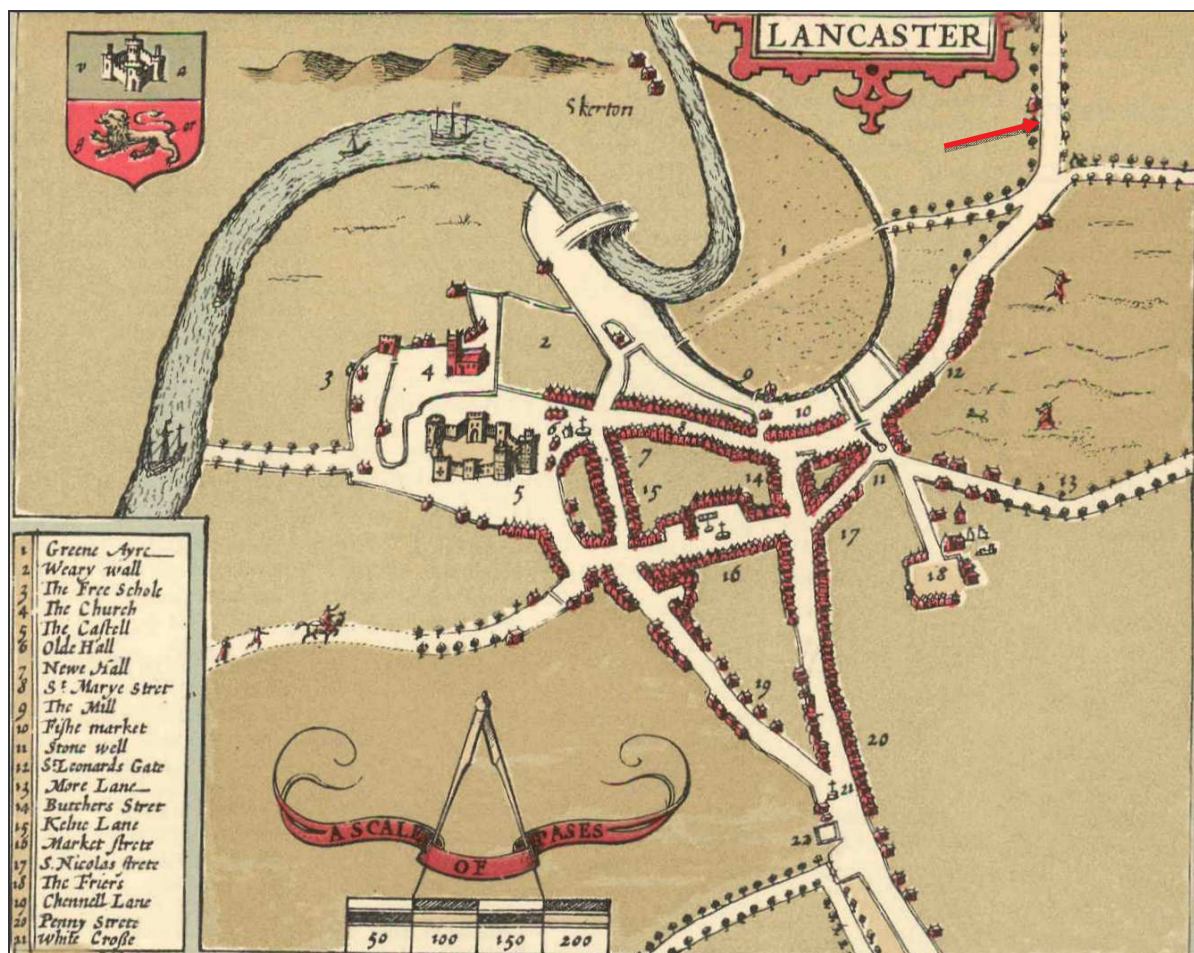


Plate 2: John Speed's map of Lancaster of 1610, with arrow marking the two buildings along the probable eastern boundary of the study area

The emergence of a shipping trade with the Americas during the seventeenth century created a new dimension to Lancaster's economy, which had hitherto been dependent largely on agriculture, and was a significant catalyst to generating industrial development in the city (White 2001). This was coupled with significant improvements in the local transport network, including the Bulk Road Turnpike in the mid-eighteenth century, the opening of New Bridge across the River Lune in 1788, and the completion of the Lancaster Canal in 1798.

The next available map to capture the study area is Mackreth's map of 1778, which shows a single building with two separate back plots in approximately the same location as the two buildings depicted on Speed's map of 1610, together with an additional building on the south-east side of the study area. Bulk Road, forming the eastern edge of the study area, is marked as 'From Hornby', whilst the inclusion of a toll house to the south confirms that the road was a turnpike.

Binn's map of 1821 represents the first detailed layout of the study area, showing that the central and northern parts to have comprised formal garden plots (Plate 3). These appear to have respected an embankment, possibly a relict river terrace, which extends along the west and curves around the south-west perimeter of the study area. The only buildings on the site, however, are those captured on earlier mapping.



Plate 3: Binn's map of Lancaster of 1821, showing the boundary of the study area

The layout of the study area in the mid-nineteenth century is shown on the Bulk Tithe map of 1845, and the detailed Ordnance Survey 60": 1 mile map of 1849 (Fig 2). The latter indicates that much of the study area was divided into numerous garden plots, with several buildings occupying the street frontages. These include the buildings along the eastern boundary of the study area shown on the seventeenth- and eighteenth-century maps, and two later, small, farm buildings.

Significantly, the Ordnance Survey annotates the ‘Site of St Leonard’s Hospital’ to the east of the study area. This site is devoid of any buildings, implying that the hospital had been completely demolished by the mid-nineteenth century. The pace of industrialisation in Lancaster during the second half of the nineteenth century is implicit on the detail provided by the next edition of Ordnance Survey mapping, published at a scale of 1:500 in 1892 (Plate 4) and 25”: 1 mile in 1893 (Fig 3). The study area, however, remained largely in use as garden plots, and several greenhouses and other small structures are shown across the northern part of the site.

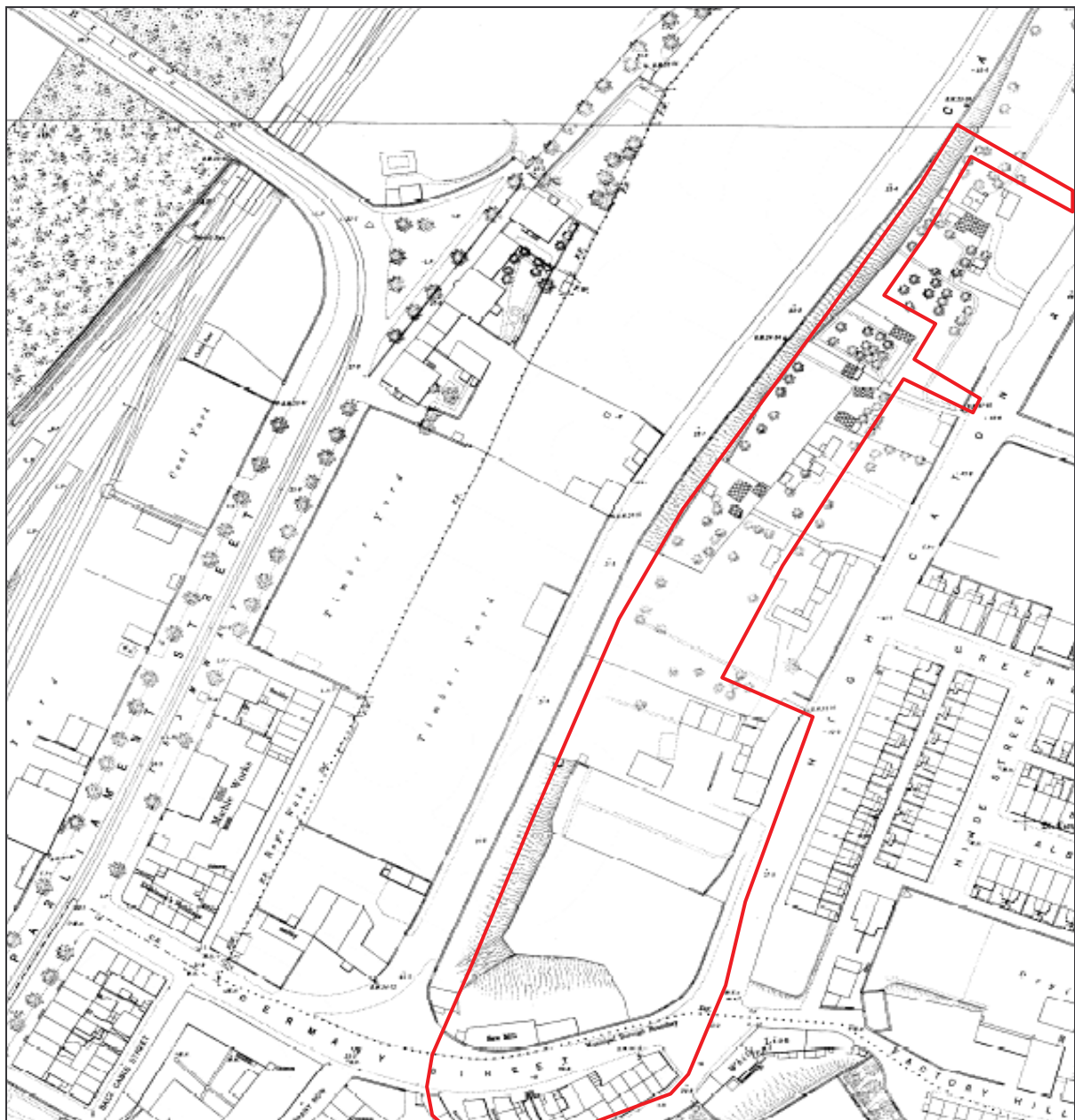


Plate 4: Extract from the OS 1:500 Town Plan of 1892, showing the boundary of the study area

The 1890s Ordnance Survey maps also show that the building along the southern boundary of the site had been extended and converted for use as a saw mill. The land immediately to the north of the saw mill appears to have been subject to quarrying activity, creating the steep slope to the north that is clearly visible in the modern topography. The natural slope along much of the western boundary of the site similarly appears to have been quarried into, again creating the steep slope that is visible today. The two small farm buildings along the eastern boundary of the site had been demolished by the early 1890s, although the range of buildings slightly to the northern remained extant, together with some additional structures.

By 1913, more buildings had been added to the saw mill in the southern part of the site, together with a terrace of housing fronting onto Cato Road in the northern part of the site. New buildings had also been constructed across the garden plots that occupied the central part of the site, presumably representing industrial premises. This complex is identified as the Netherlune Works on the next edition of Ordnance Survey mapping, published in 1933.

This footwear factory expanded subsequently, and is shown on the Ordnance Survey map of 1956-7 to occupy most of the southern part of the site, extending between Caton Road and Bulk Road. The saw mill had no longer in use by the mid-twentieth century and its site was redeveloped, possibly as part of the expanded Netherlune Works. This works was eventually occupied by K Shoes, and remained in production until 1990. All buildings on the site have been demolished subsequently (Plates 5-7).



Plate 5: View looking north-east across the footprint of the former saw mill in the southern part of the site



Plate 6: View looking south-west across the central part of the site prior to the evaluation trenching

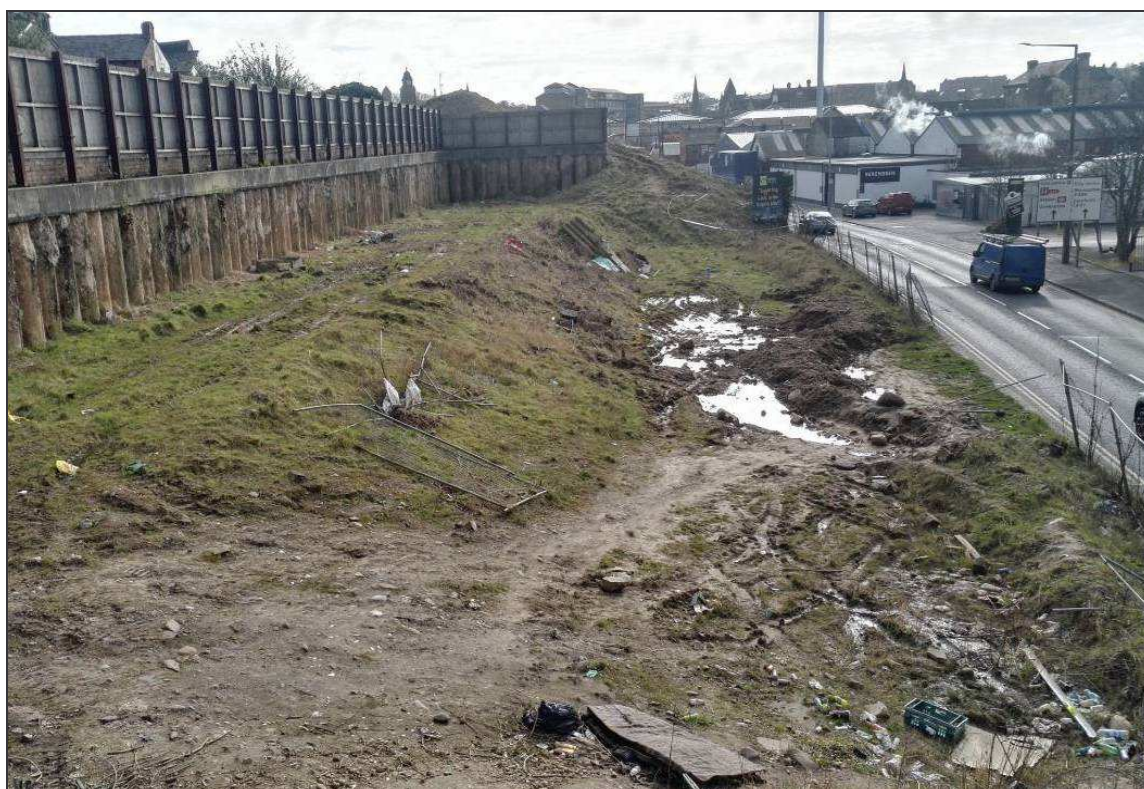


Plate 7: View looking south-west along the Caton Road frontage of the site prior to the evaluation trenching

3.6 Previous Archaeological Work

In 2009, various intrusive site investigation and earth-moving works were undertaken for geo-technical purposes in support of a previous planning application for the site. Whilst this application was not taken forward subsequently, the preliminary site investigation work was subject to archaeological monitoring by Oxford Archaeology North. This comprised close archaeological monitoring during the excavation of a series of trial pits over a period of three days. A report of the results generated from this watching brief was not produced, as it had been anticipated that further investigation was to be undertaken in 2009-10. However, no significant archaeological remains were identified during the watching brief.

4. Methodology

4.1 Excavation Methodology

Before excavation, the Client provided Salford Archaeology with service plans for the area, and the position of the evaluation trenches and surrounding areas were scanned with a cable avoidance tool to ensure that no live cables would be disturbed during the programme of works. Nine trenches were excavated using a tracked mechanical excavator fitted with a toothless ditching bucket down to the level of surviving archaeological features or natural geology. A breaker was used initially to remove areas of hard standing. The machine excavation was supervised by a professional archaeologist at all times. The locations of the trench are shown on the trench location plan (Figs 1-3).

4.2 Recording Methodology

Separate contexts were recorded individually on Salford Archaeology *pro-forma* trench sheets. The trenches were located and planned by total station theodolite using EDM tacheometry. Levels were established using an Ordnance Datum height taken from a station used for the Client's initial topographic survey of the site area.

Photography of all relevant phases and features were undertaken in digital format using a digital SLR camera. General working photographs were taken during the archaeological works, to provide illustrative material covering the wider aspects of the archaeological work undertaken.

All fieldwork and recording of archaeological features, deposits and artefacts were carried out to acceptable archaeological standards. All archaeological works carried out by the CfAA are carried out to the standards set out in the Code of Conduct of the Chartered Institute for Archaeologists.

5. *Evaluation Results*

Introduction

In total, nine evaluation trenches were placed across the proposed development site (Figs 1-3). These were intended to provide a representative sample of the entire study area and aimed to determine the presence or absence of any surviving archaeological remains. In particular, any physical evidence for features associated with the medieval hospital, or medieval and post-medieval agricultural activity, were considered priorities.

5.1 Trench 1 (3 x 2m) aligned north/south

Trench 1 was placed in the far north-east corner of the northernmost narrow strip of the study area, adjacent to modern piling sheets that retain the raised land to the east. The trench was intended to determine the presence or absence of any physical evidence for medieval or post-medieval agricultural activity, such as surviving plough soils. The topography and ground conditions in this area were indicative of considerable modern earth-moving works, suggesting that the potential for any surviving archaeological remains was remote. This was borne out by the results obtained from the trench.



Plate 8: The east-facing section of Trench 1 during excavation, looking south-west

The results obtained from Trench 1 indicated that the upper terrace along the eastern side was natural sand and river gravel banked up against late twentieth-century retaining structures. The excavated material was very loose, and the sides of the trench were unstable and prone to collapse (Plate 8). As such, the trench was not subject to manual cleaning, although was very clearly devoid of any archaeological remains.

The fill of the trench consisted of very mixed natural sand and dark silt with lumps of stone and red sandstone and fly-tipping rubbish, including car wheels and plastic bags. Natural, undisturbed sand and gravel was reached at a depth of 2.50m.

5.2 Trench 2 (10.50 x 1.80m) aligned east/west

Building on the negative results obtained from the excavation of Trench 1, it was intended that Trench 2 should seek to confirm that the entire bank in the north-western part of the site was man-made and derived from the construction works associated with the bank-retaining works carried out in the twentieth century (Plate 9). Trench 2 was aligned south-east/north-west across the bank to the lower terrace, where natural sand and gravel are exposed as the surface (Plate 10).

The nature of the excavated deposits in Trench 2 confirmed that the upper terrace consisted of a bank of re-deposited natural sand and gravel topped with a modern deposit of topsoil and fly-tipping. At the eastern end of the trench, through the raised bank, natural bedrock was found at a depth of 1.50m from the existing surface. The western end of the trench was somewhat shallower with bedrock reached at a depth of 0.50m (Plate 10). No further trenching was placed in this area.



Plate 9: The northernmost strip of land within the study area showing the locations of Trenches 1 and 2, looking north



Plate 10: The western end of Trench 2 on the lower terrace adjacent to the Caton Road, showing natural sand and gravel and bedrock, looking west



Plate 11: The eastern end of Trench 2 through the bank up against the modern concrete piling, looking east

5.3 Trench 3 (7.60 x 1.90m) aligned east/west

Trench 3 was placed across the western side of the wider, upper terrace, in a location that does not appear on the historic map sequence to have sustained intensive development as part of the Netherlune Works. The natural deposit was almost certainly sand and gravels as previously observed in Trenches 1 and 2, which was reached at a depth of 1.72m from the existing surface or 1.12m from the top of the concrete layer.

The natural geology had been cut at the eastern end of the trench by a large, relatively shallow pit (301; Plate 12). The fill (302) comprised light greyish-brown sandy clay that contained inclusions of small river pebbles, charcoal and fragments of seventeenth- to twentieth-century pottery and glass, and fragments of animal bones. A 0.12m thick lens of mixed, fine sands formed the upper fill of the pit, which was sealed beneath 0.30m of mid-greyish-brown sandy clay containing inclusions of small river pebbles and small, infrequent pieces of coal. This was overlain by 0.26m of very dark grey, silty, gritty sand containing inclusions of charcoal, small river pebbles, animal bone, domestic pottery, glass sherds and coal. This layer lay directly below the concrete floor of the former twentieth-century footwear factory, which consisted of 0.06m of light grey concrete topped with 0.04m of pink concrete, seen predominantly throughout the area of the footwear factory. Above the concrete floor was 0.60m of modern topsoil (Plate 13).



Plate 12: Pit 1 and 2/linear as they first appeared in Trench 3, looking east



Plate 13: Pit 301 as seen in the south-facing section at the western end of Trench 3, looking north-east

Another feature (303) was also identified along the southern edge of Trench 3, which was resolved to be a 0.4m wide linear drain cut. The drain cut was much deeper than pit 301, and the bottom was not reached at 3m below the existing surface, after which no deeper excavation took place in this area due to the threat of collapse of the southern edge of the trench. The fill contained a mixed assortment of ceramic and glass fragments, ranging from eighteenth-century domestic pottery (including a sherd of slipware), twentieth-century pottery, animal bone and two fragments of modern glass (one stippled and one reinforced).

The western end of the trench consisted of only the concrete surface in the northern edge of the trench, almost certainly associated with the footwear factory. Natural sand and gravel was found at 1.60m from the modern surface, 1m below the top of the concrete.

5.4 Trench 4 (12.70 x 1.90m) aligned east/west

Trench 4 was located directly east of Trench 3 in order to examine any archaeological remains at the far northern end of the wider, upper terrace on the eastern side, within the footprint of the footwear factory. The trench was excavated to a maximum depth of 1.10m, although natural sand and gravel was revealed at a depth of 0.70m below the top of the concrete floor of the factory (Plate 14).

The natural geology was overlain by a deposit of demolition rubble associated with the footwear factory with a high content of machine-made, frogged bricks, stamped with 'Claughton Manor Brick Co. Caton' (Plate 16). Some of the grey and pink concrete floor survived at the north-east corner with a modern, machine-made brick wall below (Plate 15).



Plate 14: Trench 4 fully excavated, looking east towards Gladstone Terrace



Plate 15: Remains of the twentieth-century footwear factory as seen in the south-facing section at the eastern end of Trench 4, looking north-east



Plate 16: Two types of machine-made, froged bricks found in the demolition rubble, likely associated with the footwear factory

5.5 Trench 5 (18 x 1.90m) aligned north/south

Trench 5 was placed along the eastern side of the upper terrace area, adjacent to Bulk Road, in the approximate position of the buildings shown on Speed's map of 1610. Approximately 1.50m of modern overburden had to be removed by the mechanical excavator before reaching the concrete floor of the footwear factory (Plate 17).



Plate 17: Mechanical excavation of the overburden to the concrete floor of the footwear factory, looking south

The natural geology exposed in the trench comprised sands and gravels. The earliest archaeological remains encountered comprised a stone-built wall (**501**), which was revealed in the eastern section of the trench at a depth of 0.16m below the bottom of the concrete floor (Plate 18). Whilst the component stones could have formed part of an early seventeenth-century building, the fabric of the wall also contained a few bricks, suggesting either a later construction date or evidence for repair or rebuilding works. The wall had been constructed directly on top of natural sand and gravel, no foundation cut was detected.

The fragmentary remains of a pebbled surface were found on the western side of the top of the stone wall. Further excavation yielded a fragment of an unglazed floor tile beneath the pebbled surface. The tile measured 0.11m in width and was 0.04m thick (Plate 19), and was consistent with a late medieval or post-medieval date.



Plate 18: Stone wall 501 found in the east-facing section of Trench 5, looking north-west



Plate 19: A possible post-medieval floor tile found in Trench 5

At approximately 1m to the south of the stone wall, substantial remains of the twentieth-century factory were uncovered, including machine-made brick walls, a cobbled floor surface (removed) and internal concrete surfaces (Plates 20 and 21). These were removed where possible to determine the presence of any earlier archaeological remains below. However, none was found, only natural sand and gravel.

At the southern extent of the trench, a cellar was found reaching to a concrete floor at a depth of 2.70m from the top of the grey/pink concrete floor found throughout this area, presumed to be the ground-floor level (Plate 22). It was not possible to excavate below the cellar floor due to the instability of the eastern baulk. The cellar was recorded by photography and measured survey, and the trench was then backfilled for health and safety purposes.



Plate 20: Remains of the twentieth-century factory found at the northern end of Trench 5, looking south



Plate 21: A concrete internal floor and wall of the factory in Trench 5, looking south



Plate 22: The remains of a cellar of the factory found at the southern end of Trench 5, looking south-west

5.6 Trench 6 (35 x 1.80m) aligned north/south

Trench 6 was placed partly through the southern bank of the upper terrace and across the lower terrace of the south-eastern corner of the study area (Plate 23). This trench proved that the upper terrace was a natural feature consisting of sand and gravel, and the lower terrace had been cleared onto the same, probably after the demolition of the former nineteenth-century saw mill.

Solid bedrock was reached at a depth of less than 0.50m throughout the trench, at which point water ingress made the ground too soft to walk on. A small sondage was dug at the southern end of the trench, which confirmed solid bedrock had been reached (Plate 24). No archaeology had survived. The trench was recorded by GPS, photographed and backfilled.



Plate 23: The location of Trench 6 on the lower terrace at the south-eastern corner of the study area, looking north-east



Plate 24: The southern end of the trench on the lower terrace, looking south

5.7 Trench 7 (15 x 1.80m) aligned east/west

Trench 7 was placed at right-angles to Trench 5, and aimed to locate a return to the west of stone wall **501** that was revealed in the east-facing section of Trench 5. Trench 7 was joined to Trench 5 at the western end of the stone wall, to the west (Plate 25). Natural sand and gravel was reached at an average depth of 1.50m from the top of the pink/grey concrete floor. Unfortunately, there was no return to wall **501**, but the pebbled floor was found to continue west (Plate 26). A few sherds of modern glass and twentieth-century pottery were found in a black cinder deposit, which lay between the pebbled floor and a black tarmac-like deposit. Below the pebbled floor were a series of ceramic drain pipes, probably associated with an earlier phase of the factory as seen on the OS 1913 or OS 1933 maps and possibly the location of toilets (Plate 27).



*Plate 25: Trench 7 fully excavated from the southern end of the stone wall **501**, in Trench 5, looking west*



Plate 26: Part of a pebbled floor surface found in Trench 7 on the western side of stone wall 501 found in Trench 5, looking west



Plate 27: Ceramic drain pipes found below the pebbled floor surface, probably associated with toilets from the early phase of the footwear factory, looking east

5.8 Trench 8 (6 x 1.80m) aligned north/south

Trench 8 was placed at the southern extent of the upper terrace, along the eastern side, and aimed to test for the survival of any medieval or post-medieval remains below the factory structures. Natural sand and gravel was reached at a depth of approximately 1.5m below the presumed ground-floor level of the factory. The steep sloping southern side of the bank made access to the trench difficult so the trench was recorded remotely using GPS and photographs.

Along the eastern edge of the trench a three course wide machine-made brick wall was found, which was almost certainly associated with the former factory. To the east of the wall were the remains of a light grey concrete floor surface, below which drains were found (Plates 28-30). The dark layer seen in the east-facing section probably represents the last working surface of the footwear factory, above which re-deposited natural sand and gravel has been placed on top during groundworks around 2009.



Plate 28: Trench 8 fully excavated, looking south-east



Plate 29: Modern factory wall found in the eastern section of Trench 8, looking south-east



Plate 30: Ceramic drains found below the concrete surface associated with the footwear factory, to the east of the factory wall, looking south-east

5.9 Trench 9 (16.20 x 1.80m) aligned east/west

Trench 9 was placed across the central area of the upper terrace, west of Trench 5, encompassing the end of a modern spoil heap created in 2009, to check that the spoil heap was indeed the result of modern groundworks. The natural deposit was sand and gravel as seen in all trenches.

The western two-thirds of the trench had a 0.30m deep layer of mid-brown, sandy clay above the natural sand and gravel, which could possibly have been the last remnants of agricultural soils (Plate 31). The deposit was cut by five circular negative features starting at 7m from the western end of the trench, filled with greyish-brown silty sand, one of which was half-sectioned and the fifth (not surveyed) fully excavated. The half-sectioned feature (**901**; Plate 33), which measured 0.35m in diameter and 0.08m in depth, contained only small pieces of charcoal and heavily corroded iron objects. The fully excavated feature lay to the south-east, measured 0.33m in diameter and was 0.22m deep, and contained fragments of modern glass, plastic and sweet wrappers in the upper fill and a cache of snail shells, coal, and charcoal.

The eastern quarter of the trench contained remains of the modern footwear factory (Plate 34). A machine-made brick wall was found at the far eastern end of the trench and associated drains and surfaces to the west of the wall.



Plate 31: The western end of Trench 9 showing two of the circular negative features as they first appeared, looking west



Plate 32: Two circular features found around the centre of Trench 9, pre-excavation, looking south



Plate 33: A half-sectioned circular feature (901) in the centre of the photo and a fully excavated similar feature (not surveyed) towards the top-right corner, looking east

The south-facing section towards the centre of the trench, partly through the modern spoil heap, clearly showed a layer of coarse, black tarmac, overlain with re-deposited natural sand and gravel, which again confirms that the existing, grassed-over mound is the result of groundworks in 2009 (Plate 39).



Plate 34: The eastern end of Trench 9 showing modern walls associated with the footwear factory, looking east

5.10 The Finds

A small assemblage of artefacts was recovered from sealed contexts in the trenches. This included six small and abraded fragments of pottery, together with a single ceramic floor tile of probable post-medieval date from Trench 5, and several fragments of nineteenth- and twentieth-century glass vessels and window glass, iron objects, and animal bone.

The group of pottery fragments for the most part comprised dark-glazed earthenware, almost certainly represent utilitarian kitchenware vessels, together with sherds of under-glazed transfer-printed ware plates. These fragments had a date range spanning the second half of the nineteenth and early twentieth centuries, although two sherds recovered from pit **301** in Trench 3 were of an earlier date (Plate 35). These comprised a small and abraded sherd of Metropolitan-type slipware with a pale fabric and cream-coloured slip decoration. In broad terms, these wares provided some of the most attractive and affordable decorated household ceramics available between the sixteenth and eighteenth centuries, and the example recovered from pit **301** is likely to be of a seventeenth- or early eighteenth century date. This date range is consistent with the fragment of an iron-glazed vessel with a buff fabric that was recovered from the same feature, together with nineteenth- and twentieth-century artefacts.

The small assemblage of glass comprised several small and abraded sherds of nineteenth- or twentieth-century glass vessels of little interest. The few fragments of animal bone were too small to be identified confidently on a species level, and the heavily corroded iron objects are likely to have been nails.



Plate 35: Fragments of seventeenth- or eighteenth-century pottery recovered from pit 301, Trench 3



Plate 36: Corroded iron object, probably a nail, recovered from feature 901, Trench 9

In summary, the small assemblage of artefacts recovered from the evaluation trenches were of little intrinsic or archaeological interest. The two sherds of pottery from pit 301 hint at some post-medieval activity on the site, although they are likely to have been residual given the abrasion on the surface of these sherds, coupled with the nineteenth- and twentieth-century artefacts that were also recovered from pit 301. It is recommended that the artefacts are not retained, but disposed of in an appropriate manner.

6. Discussion

Discussion

In total, nine evaluation trenches were placed across targeted locations, and were intended to establish the presence or absence of buried remains pertaining to a medieval leper hospital, its related cemetery and any surviving physical evidence for medieval or post-medieval agricultural activity and associated settlement. The leper hospital is thought to have formed a separate part of St Leonard's Hospital, the site of which is marked on nineteenth-century Ordnance Survey mapping on the eastern side of what is now Bulk Road.

The only archaeological remains of any interest revealed during the evaluation were discovered in Trench 5, along the eastern boundary of the site, and comprised elements of a stone wall, together with the vestiges of a possible agricultural soil horizon of pre-eighteenth-century date that was identified in part of Trench 9. The early twentieth-century footwear factory and other modern development works appeared to have obliterated any archaeological remains across the areas investigated by the remaining trenches.

Trenches 1 and 2 on the northernmost strip of land within the study area contained no archaeological remains, having been redeveloped and stripped onto natural sand and gravel on the lower terrace and the upper bank against the concrete piling. Similarly, Trench 6 positioned on the southern, lower terrace in the location of the former saw mill shown on the 1893 OS map and again on the OS 1913 map, almost certainly contains no surviving archaeology, probably due to modern redevelopment of the land in 2009, when a ramp appeared to have been constructed using excavated natural material in order to reach the upper terrace. Otherwise, this ramp formed part of the twentieth-century footwear factory.

Trenches 3, 4, 5, 7, 8 and 9 were positioned on the upper terrace in the central part of the study area. This was considered to be the most likely area of the buildings shown on early seventeenth-century mapping. A stone wall found in the east-facing section of Trench 5 had presented the most likely remains of the foundation of one of these buildings. However, upon further cleaning and examination of the wall, at least three hand-made bricks were found within the fabric of the wall, suggesting an eighteenth-century construction date. Whilst a pebbled surface appeared in Trench 7, directly west of the stone wall, ceramic drain pipes were found below, which suggests these remains were probably part of an early phase of the footwear factory, possibly dating to the late nineteenth century, when a cluster of small buildings appear on the OS map.

Trench 7 was placed to look for a western return to the stone wall, although none was found. There remains a possibility that the wall could have continued north, below the pink/grey concrete floor. At the time of excavation, it was not possible to extend the trench north due to spoil management issues.

Along the length of the eastern side of the upper bank in the location of Trenches 4, 5 and 8, the expanding footwear factory appeared to have removed almost all of any earlier remains. In particular, at the southern end of Trench 5, where a cellar 2.70m deep was found.

The western side of the of the upper terrace had the most potential for surviving ploughsoil, in particular at the western end of Trench 3, where a possible pit (**301**) was found, and in Trench 9 where shallow circular features appeared. However, the stratigraphic and dating evidence available from these features indicated that they were of nineteenth- or twentieth-century origin.

7. Conclusion

7.1 Conclusion

The evaluation trenches were intended primarily to establish the presence or absence of buried remains pertaining to a medieval leper hospital, its related cemetery and any surviving physical evidence for medieval or post-medieval agricultural activity and associated settlement. However, no firm evidence for the leper hospital was identified, adding weight to the annotation on mid-nineteenth-century mapping that indicates that St Leonard's Hospital lay to the east of what is now Bulk Road.

The only archaeological remains of interest to be revealed during the evaluation comprised a short section of stone wall, which possibly represented part of a building shown on early seventeenth-century mapping that had been repaired or remodelled subsequently, or was actually of an eighteenth-century date. The wall may have been broadly contemporary with the vestiges of an agricultural soil, although this had clearly been subject to disturbance as excavation yielded artefacts to which a twentieth-century date may be attributed.

The results obtained from the evaluation indicate that most, if not all, of the site has been subject to considerable development and earth-moving works since the late nineteenth century that have removed any archaeological remains, and it is concluded that there is low potential for any such remains to survive *in-situ*. The only part of the site that seems to have any archaeological potential is along the eastern boundary, adjacent to Bulk Road (Fig 7), although any buried remains that do survive are likely to be fragmentary and of low significance. As such, it is considered that there is little merit in undertaking any further archaeological investigation in advance of development.

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The on-site excavations were conducted by Mandy Burns, who was assisted by Elizabeth Statham. This report was compiled by Mandy Burns, and illustrated by Richard Ker and Elizabeth Statham. The report was edited by Ian Miller, and Graham Mottershead was responsible for project management.

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Appendix 1: Figures

- Figure 1: Site location
- Figure 2: Trench location plan
- Figure 3: Trench locations superimposed on the Ordnance Survey map of 1849
- Figure 4: Trench locations superimposed on the Ordnance Survey map of 1893
- Figure 5: Plan of Trenches 5 and 7
- Figure 6: East-facing elevation of wall **501**, Trench 5
- Figure 7: Areas of archaeological potential

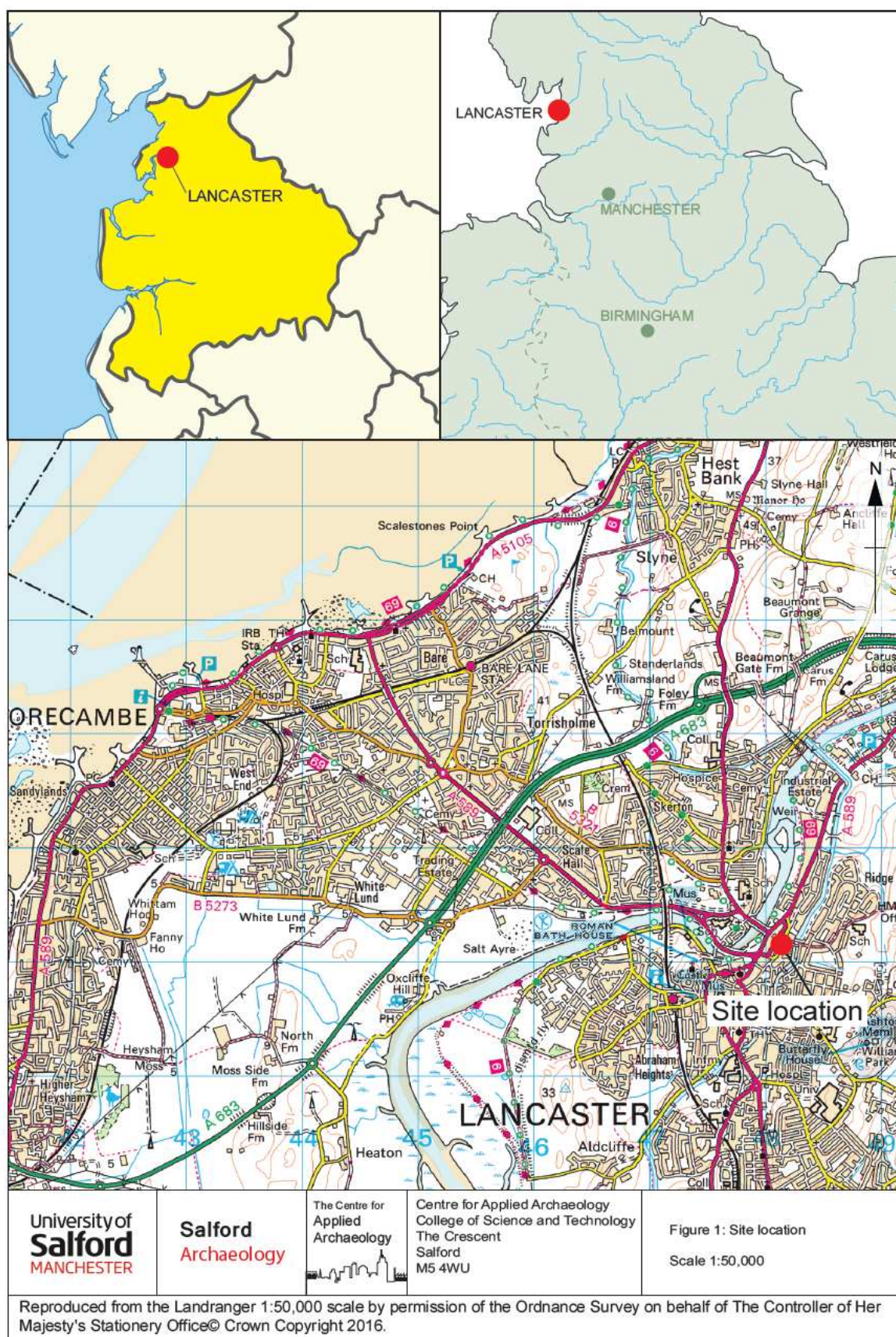


Figure 1: Site location



Figure 2: Trench location plan

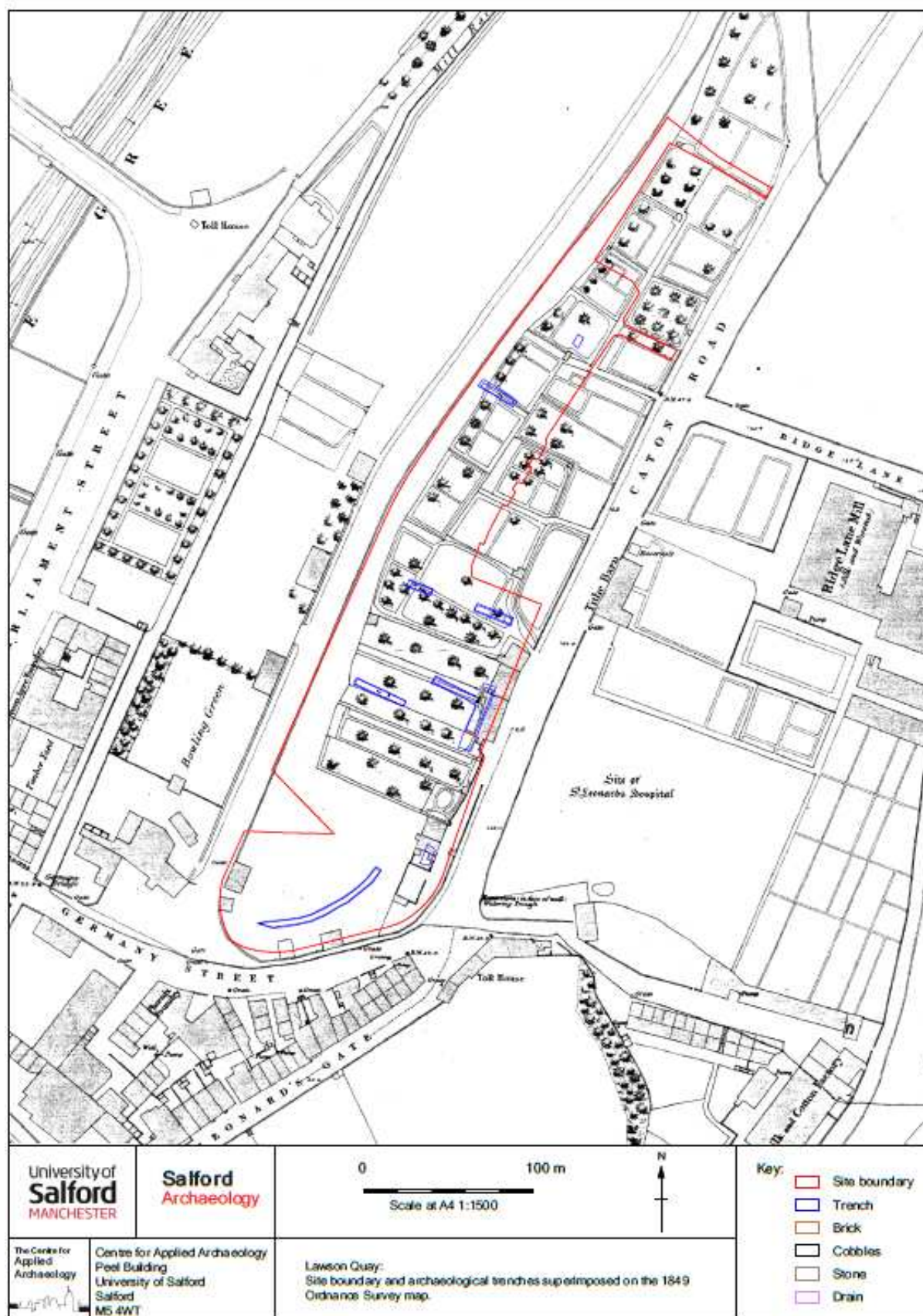


Figure 3: Trench locations superimposed on the Ordnance Survey map of 1849

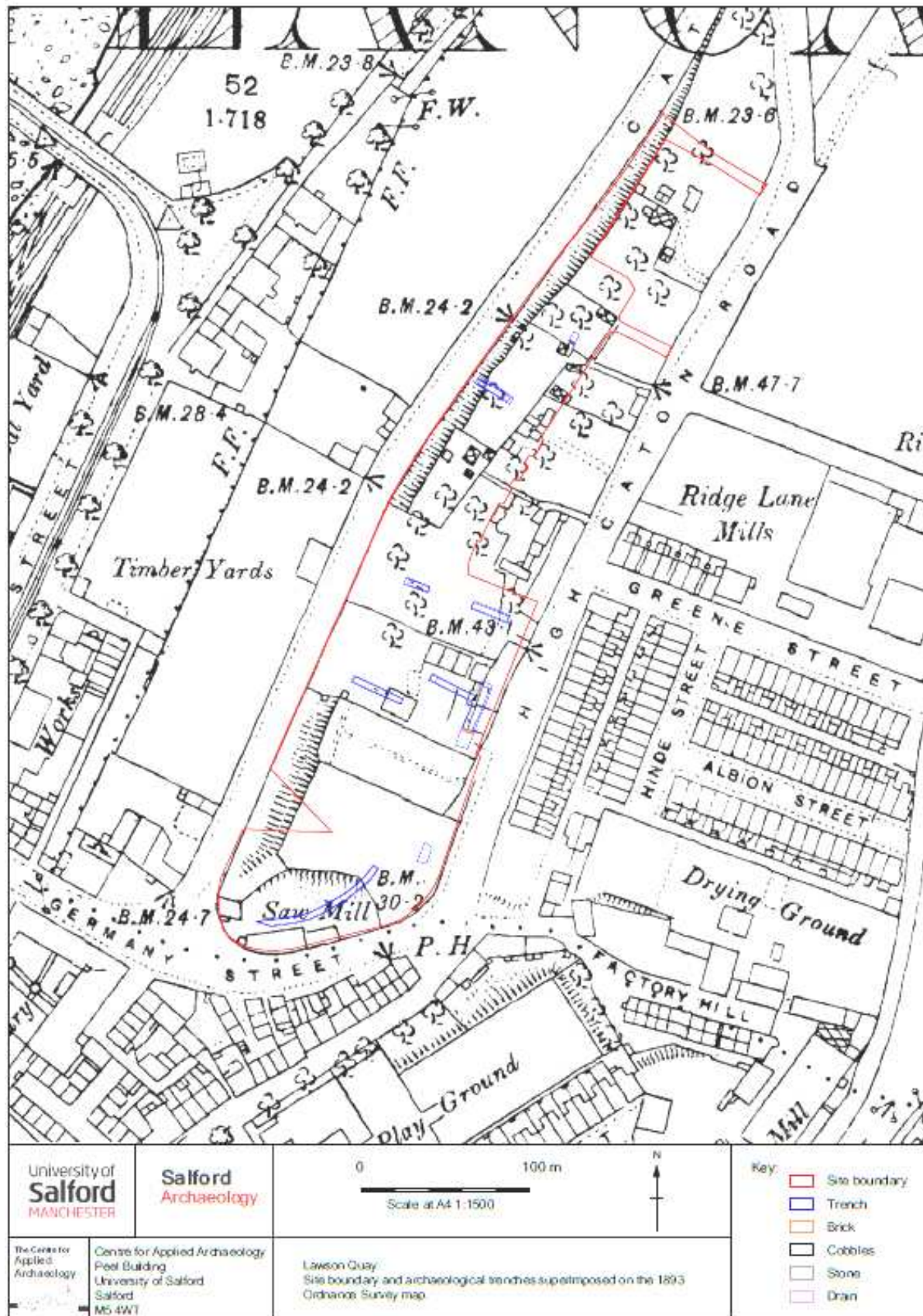


Figure 4: Trench locations superimposed on the Ordnance Survey map of 1893

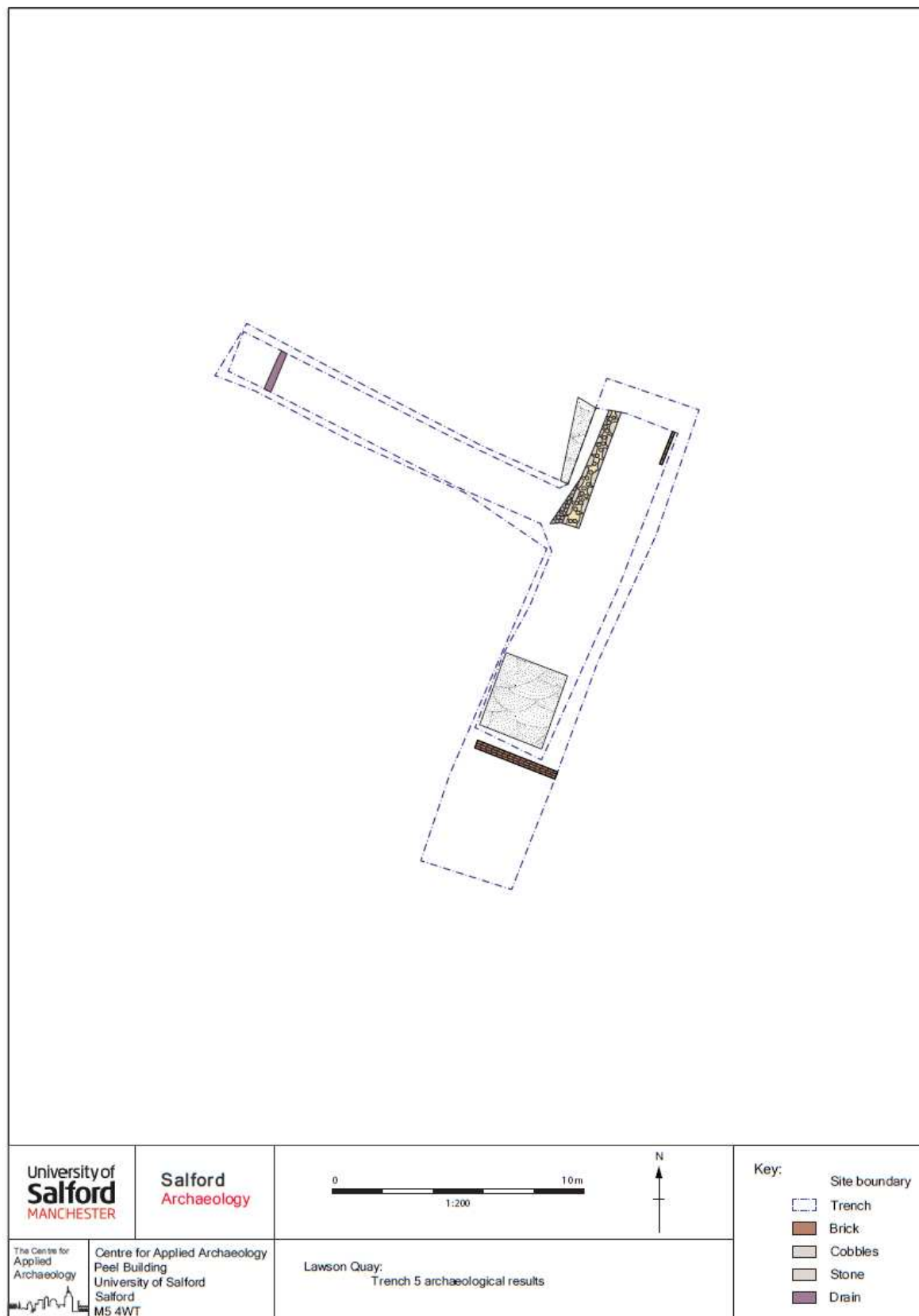


Figure 5: Plan of Trenches 5 and 7

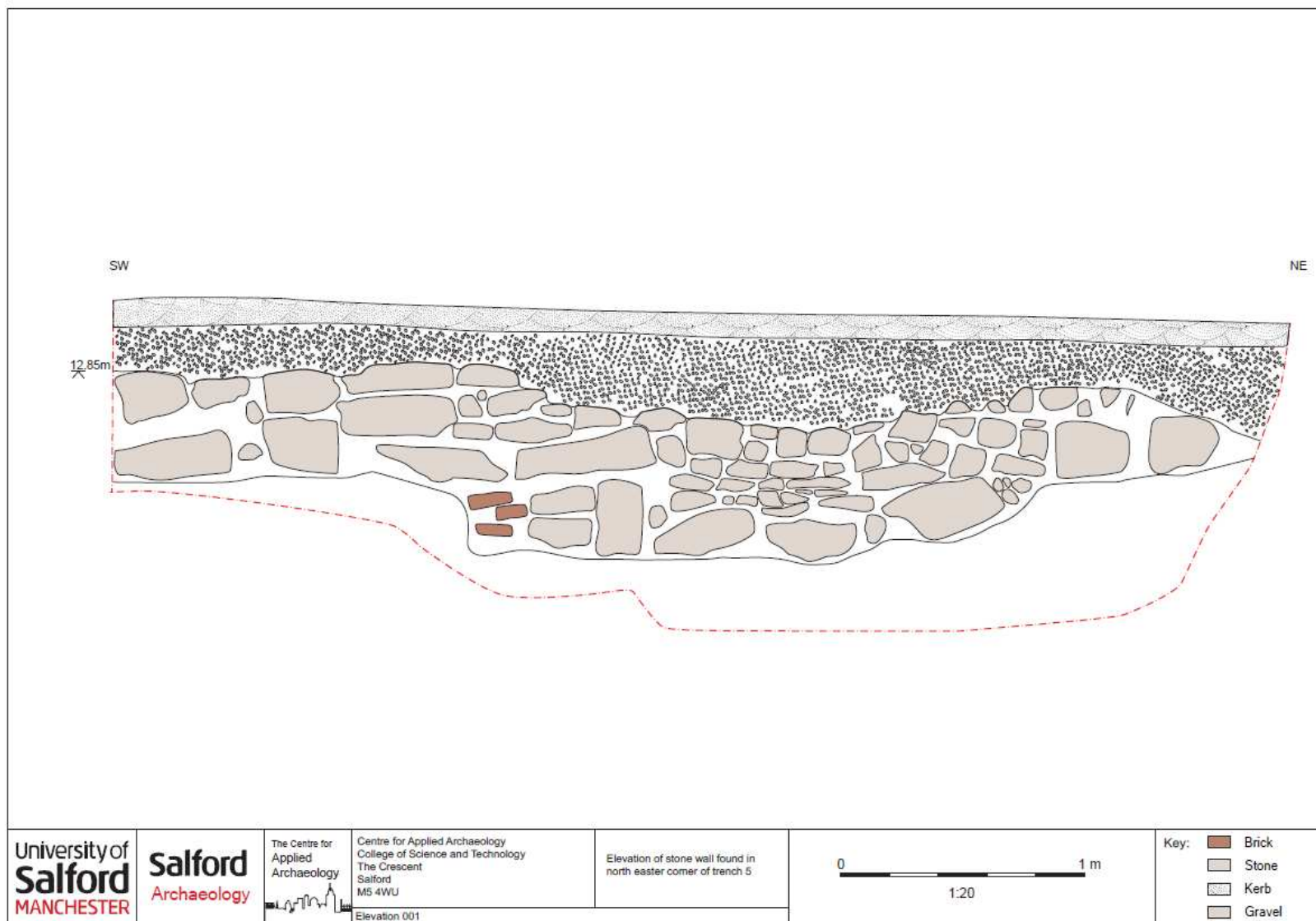


Figure 6: East-facing elevation of wall 501, Trench 5

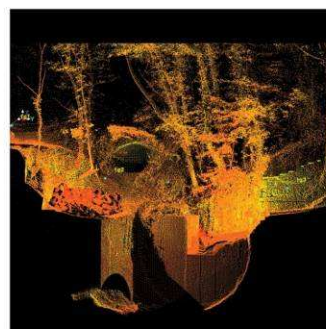


Figure 7: Areas of archaeological potential

WATCHING BRIEF & EVALUATION



3D LASER SCANNING



GEOPHYSICAL SURVEYS



SEMINARS, DAYSCHOOLS CPD EVENTS

