



**MMU Students'
Union,
Higher Chatham
Street,
Manchester**

**Archaeological
Excavation**



Oxford Archaeology North

September 2014

**Manchester Metropolitan
University**

Planning Ref: 101104/FO/2012/C1

Issue No: 2014-15/1495

OA North Job No: L10614

NGR: 384240 396810

Document Title: MMU STUDENTS' UNION, HIGHER CHATHAM STREET,
MANCHESTER

Document Type: Archaeological Excavation

Client Name: University of Manchester

Planning Ref: 101104/FO/2012/C1

Issue Number: 2014-15/1495

OA North Job Number: L10614

National Grid Reference: 384240 396810

Prepared by: Graham Mottershead
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Date: August 2014

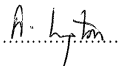
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SUMMARY

Manchester Metropolitan University (MMU) has obtained planning consent to erect a new Students' Union building on land at 12 Higher Chatham Street on the southern fringe of Manchester city centre (centred on NGR 384240 396810). The planning application (ref 101104/FO/2012/C1) allows for the construction of a new four-storey building that will house a shop, hall, cafe/bar, studios, meeting rooms and office spaces, and will occupy a site that is used currently as a car park.

The archaeological potential of the site was highlighted in a desk-based assessment produced by Dr Peter Arrowsmith. The demonstrated that the study area was developed during the first half of the nineteenth century as part of the expansion of Chorlton-upon-Medlock as a suburb of Manchester. Double- and single-depth workers' housing, together with a brewery and an associated store house had all been erected on the site by the 1840s, and two properties on Higher Cambridge Street were converted into the Bridgewater Music Hall during the second half of the nineteenth century. The assessment concluded that any surviving buried remains of these heritage assets would be of local significance, and would merit preservation by record. In the light of these conclusions, the Greater Manchester Archaeological Advisory Service (GMAAS) recommended that four trial trenches were excavated across the footprint of a representative sample of the nineteenth-century buildings as an initial stage of the archaeological investigation of the site.

In March 2013, Oxford Archaeology North (OA North) was commissioned by MMU to undertake the specified programme of archaeological evaluation. This was intended to establish the presence or absence of any buried remains of archaeological interest, and was targeted on the footprint of a range of workers' housing, the brewery, and a late nineteenth-century music hall. Extensive structural remains of archaeological interest were revealed in the trenches, leading to a recommendation that further excavation was carried out in advance of development to mitigate the ultimate loss of the archaeological remains. Further excavation was targeted on two parts of the site, and was carried out in May and June 2013.

The first excavation area was targeted on the footprint of a mid-nineteenth-century double-depth workers' house show fronting the east side of Cowcill Street, but also included elements of the adjacent house to the north. The second area was larger, and examined the north-western part of the development area. The archaeological remains comprised five distinct components: the workers' housing/former music hall in the southern part of the area; a house in the south-western corner; a complex series of houses and workshops to the north-west; a large cellared house at the northern corner; and a block of four possible back-to-back houses within the footprint of a mid-nineteenth-century brewery.

The archaeological investigation has provided a valuable opportunity to investigate the physical remains of the initial development and urbanisation of part of Chorlton-upon-Medlock during the early nineteenth century. The excavation has facilitated an examination of several different types of workers' housing, a key characteristic of this new urban landscape, and the evolution of the buildings up to their demolition in the twentieth century.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Damian Smith and Richard Parr for commissioning and supporting the project on behalf of Manchester Metropolitan University (MMU), and to Eleanor Donaldson and Ian Goodwin for logistical support. Thanks are also expressed to Norman Redhead, the Heritage Management Director with the Greater Manchester Archaeological Advisory Service (GMAAS), for his guidance and advice. OA North is also grateful to Dr Pete Arrowsmith for undertaking the historical research of the site, and to John Davis, the Visual Resources Curator for MMU, for sharing some of the historic photographs held by the Visual Resources Centre.

The excavation was directed by Graham Mottershead, who was assisted by Lewis Stitt and Phil Cooke, and the high-level photography was taken by Jamie Quartermaine. The report was written by Graham Mottershead and Ian Miller, and Mark Tidmarsh prepared the illustrations. The project was managed by Ian Miller, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Manchester Metropolitan University (MMU) has obtained planning consent to erect a new Students' Union building on land at 12 Higher Chatham Street on the southern fringe of Manchester city centre. The development proposals (planning reference 101104/FO/2012/C1) allows for the construction of a new four-storey building that will house a shop, hall, cafe/bar, studios, meeting rooms and office spaces, and will occupy a site that is used currently as a car park. The site was agricultural land to the south of Boundary Lane until the early nineteenth century. Thereafter, it was developed as part of rapid expansion of the township of Chorlton-on-Medlock and, by the mid-nineteenth century, the area was dominated by workers' housing.
- 1.1.2 The construction works required for the new Students' Union building will necessitate considerable earth-moving works, which will inevitably have a negative impact on any buried archaeological remains. The archaeological potential of the site was highlighted by a desk-based assessment produced by Dr Peter Arrowsmith during an early stage of the planning process (Arrowsmith 2012). This comprehensive study showed that the site had been occupied during the nineteenth century by various structures, largely comprising residential properties on Boundary Street West and Rosamond Street West. The desk-based assessment concluded that the site potentially contained heritage assets of local significance, which merited preservation by record in the event of their damage or destruction during the course of the proposed development. In particular, it was considered likely that the site may retain physical remains of early to mid-nineteenth-century buildings, including a small brewery and single-depth and double-depth houses, and of a late nineteenth-century music hall.
- 1.1.3 In the light of the conclusions drawn by the desk-based assessment, the Greater Manchester Archaeological Advisory Service (GMAAS), which provides archaeological advice to Manchester City Council, recommended that a scheme of evaluation trenching should be implemented. This was intended to determine the extent, depth, character and relative significance of any buried archaeological remains that survive, in line with the National Planning Policy Framework, Paragraph 128.
- 1.1.4 In March 2013, Oxford Archaeology North (OA North) was commissioned by MMU to undertake the required scheme of archaeological evaluation. This comprised the excavation of four trenches, which were targeted on the footprint of a range of workers' housing, the brewery, and a late nineteenth-century music hall. Extensive structural remains of archaeological interest were revealed in the trenches, leading to a recommendation that further excavation was carried out in advance of development to mitigate the ultimate loss of the archaeological remains (OA North 2013a). Further excavation was targeted on two parts of the site, and was carried out in May and June 2013.

1.2 SITE LOCATION AND GEOLOGY

- 1.2.1 The study area lies to the south of Manchester city centre, in the historic township of Chorlton-upon-Medlock (centred on NGR 384240 396810). It is bounded by Cambridge Street to the south-west, Boundary Street West to the north-west, Higher Chatham Street to the north-east, and Rosamond Street to the south-east (Fig 1). The Salutation public house lies within the northern corner of the study area (Plate 1). The site is surrounded by a fence with an entrance onto Higher Chatham Street, and at the time of the evaluation was in use as a car park operated by MMU.
- 1.2.2 Geologically, the area is underlain a series of glaciofluvial flood deposits of sand and gravel overlying the Chester Pebble Beds formation of the Sherwood Sandstone Group.
- 1.2.3 The site is of a uniform level, and lies at a height of *c* 36.4m above Ordnance Datum (aOD). The ground surface comprised a tarmac car park, which was crossed by a series of shallow (less than 500mm) drains, and also had several raised beds that contain small trees and shrubs (Plate 1).



Plate 1: Recent aerial view of the study area, with arrow marking the centre of the excavation area

1.3 HISTORICAL BACKGROUND

- 1.3.1 **Introduction:** the following section summarises the historical development of the study area, and is intended to place the excavated remains in their wider context. The historical information is drawn largely from the desk-based assessment of the site, compiled by Dr Pete Arrowsmith (Arrowsmith 2012), who also carried out further research of the site as part of the current project.
- 1.3.2 **Contextual background:** the character of Chorlton-upon-Medlock was transformed after the late eighteenth century by the rapid expansion of Manchester. Shortly after the opening of Oxford Road in the early 1790s, the Chorlton Hall estate on the north side of Boundary Lane was bought by local entrepreneurs with an intention to develop the land as a suburb to Manchester. The centrepiece of this development was to be a new square, originally known as Grosvenor Square, and later as All Saints after the church that was built there in 1819-20. Notwithstanding this impressive development, however, the initial growth of Chorlton-upon-Medlock was relatively slow, although the population of the township had reached 8209 by 1821 (Brumhead and Wyke nd, ii-iii). As a consequence of Chorlton's accelerated growth in population during the following decade, the township was included within the boundary of the new municipal borough of Manchester in 1838 (Farrer and Brownbill 1911, 252).
- 1.3.3 Johnson's *Map of the Parish of Manchester*, surveyed in 1818-19, shows a grid-iron of streets to have been laid out around the study area, and depicts a building in the position of the present Salutation Inn, together with neighbouring houses on Boundary Street West. Johnson's map also shows a row of houses on Cowcill Street to have been erected, although the rest of the plot was undeveloped. However, Swire's map of 1824 shows the remainder of this plot to have been largely developed with housing, leaving only a small vacant area at the corner of Cowcill Street and Rosamond Street West (Plate 2). Swire's map also shows two separate blocks of buildings to have been built in the western part of the study area. Bancks & Co's map of 1831 shows one of these to have comprised a pair of houses fronting Cowcill Street. The other block consisted of a pair of houses fronted by a garden. These were set back from a narrow routeway, which evolved subsequently into Higher Cambridge Street.
- 1.3.4 The Ordnance Survey map of 1850 shows that most the western half of the study area had been developed by the mid-nineteenth century (Plate 3). This map annotates two buildings in the north part of Cowcill Street: a 'Store House' is marked at the corner of Boundary Street West and Cowcill Street; and a rectangular building to its south is named as the Cowcill Street Brewery. In 1838, according to Potts, 'Edward Whitehead brewed at premises in Cowcil [sic] Street and this small brewery changed hands a number of times over the years. In the 1870s William Brookes, founder of the Albert Brewery in Moss Side, converted the Cowcill Street Brewery into stables for his horses' (Potts 1914). This is confirmed by entries in contemporary trade directories, which list ET Whitehead as brewers at Cowcill Street in 1838, Thomas Reeves Whitehead as brewer in 1841, and Thomas Clowes in 1850 (Pigot and Son 1838; Pigot and Slater 1841; Slater 1850).

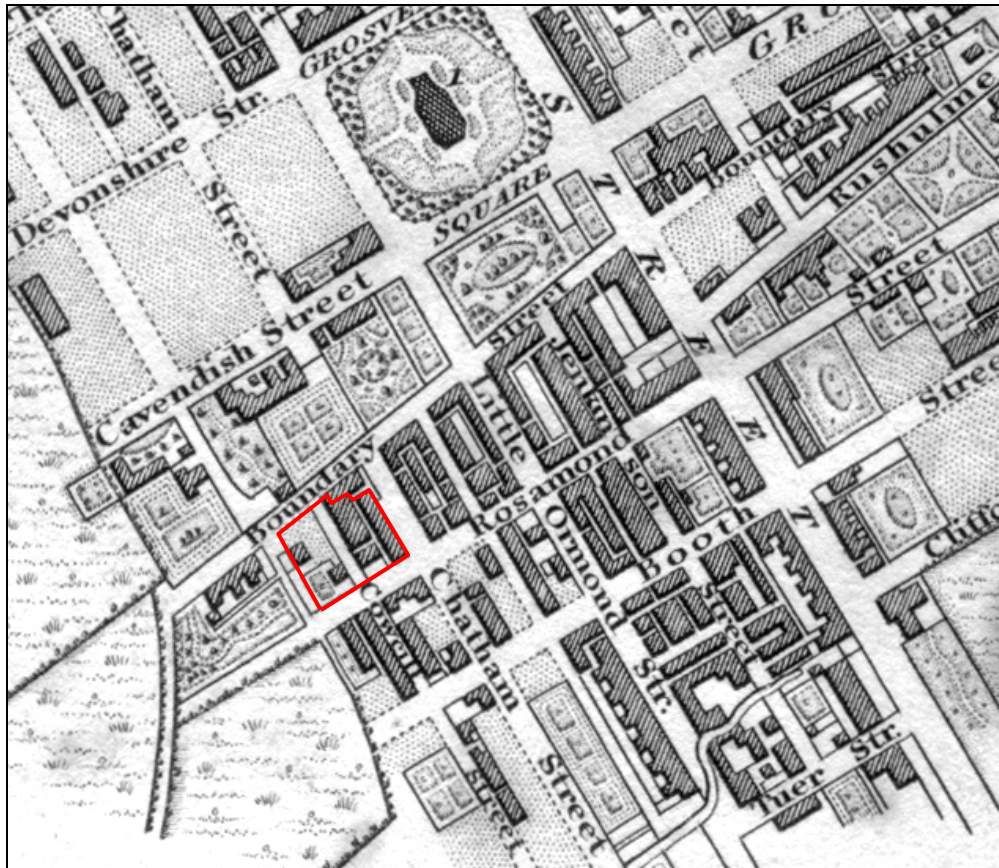


Plate 2: Extract from Swire's map of 1824, showing the position of the study area



Plate 3: Extract from the Ordnance Survey map of 1850, showing the position of the study area

- 1.3.5 The Ordnance Survey map of 1888-9 depicts several changes in the western part of the study area (Plate 4). The plot at the west corner of Cowcill Street and Rosamond Street West was now built upon with houses. The brewery building and store house are no longer named. The former had been divided into two houses and the brewery had either been replaced by or remodelled as a row of three houses. Conversely, the two houses on Higher Cambridge Street shown on earlier mapping have been replaced by a single rectangular building, which is identified as the Bridgewater Music Hall.



Plate 4: Extract from the Ordnance Survey map of 1888-9

- 1.3.6 Erected in *c* 1880, the Bridgewater Music Hall was one of many small theatres which opened in Victorian Manchester (Wyke and Rudyard 1994, 27). In the 1900s the building was put to new uses, first as the Bridgewater Chapel or City Mission, and then as a boxing stadium known as the City Athletic Club, before being converted to a cinema, the Bridgewater Electric Picture Palace, in 1914. It was later occupied by a firm of shopfitters and in the 1970s was acquired by Manchester Corporation on behalf of Manchester Polytechnic. The theatre measured less than 50ft deep by about 42ft wide, with a stage measuring 17ft by 10ft (Plates 5 and 6), but was said to be capable of seating around 750 people.
- 1.3.7 The Ordnance Survey map of 1951 shows that three houses on Cowcill Street to the south of the cinema had been remodelled as or replaced by a building named on mapping of 1960 as a 'works'. By that last date, two of the houses on the east side of Cowcill Street had also been converted to a works. Subsequent editions of Ordnance Survey mapping indicate that the eastern half of the study area was cleared of buildings between 1960 and 1978.

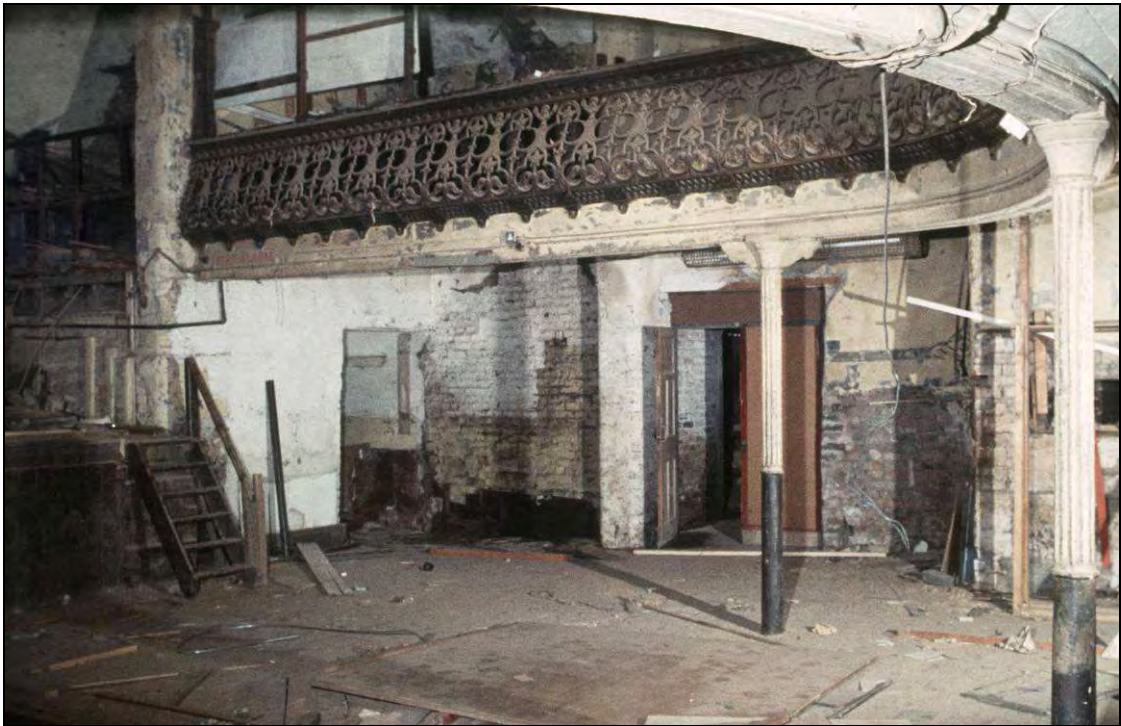


Plate 5: The Bridgewater Music Hall in 1974-5 (courtesy of the Visual Resources Centre at MMU)



*Plate 6: The Bridgewater Music Hall in 1974-5
(courtesy of the Visual Resources Centre at MMU)*

1.4 HISTORICAL BACKGROUND TO THE EXCAVATED BUILDINGS

- 1.4.1 The following relates to the remains excavated on the northern and eastern parts of the study area. The evidence derived from twentieth-century mapping indicates that these are known to have belonged to N^{os} 39-41 Boundary Street West on the north, and N^{os} 2-10 Cowcill Street on the east. The numbering sequence on both streets changed in the nineteenth century. In the case of the Cowcill Street buildings, this was principally due to a single property (the brewery building) becoming three (the houses at N^{os} 6-10). The numbering of properties on Boundary Street West underwent a more drastic revision in 1849-50.
- 1.4.2 Research undertaken for these particular buildings has mainly comprised examination of rate books, census returns and trade directories (*Appendix 2*). From this evidence, it is clear that these sections of Boundary Street West and Cowcill Street were first developed in *c* 1836. No buildings are listed there in the rate book of 1835, and whilst the rate book for 1836 is missing, that for 1837 records that the land on both streets had been built on.
- 1.4.3 N^{os} 6-10 Cowcill Street at this time lay on a small plot of land owned by Edward Beverley. The rate book for 1837 describes this property as a brewery, from 1838 to 1842 as a brewery, stable and yard, and from 1843 to 1853 as a brewery and stable (*Appendix 2*, Table 1). In 1853, when the site was advertised to let, it was described as a ten-barrel brewery and four-stall stable (*Manchester Guardian*, 1 October 1853). The stable can be identified as the small block shown abutting the north end of the brewery on the large-scale Ordnance Survey map of 1844 (Plate 3).
- 1.4.4 Between 1837 and 1853 the property went through a change of ownership, passing to Thomas Baldwin in 1842-3, and through several changes of occupancy. The documentary sources also imply that there were periods when it stood unoccupied. In the 1840s, successive tenants (James Royle, James Jessop and John Jessop) lived in the house immediately to the south of the brewery (later N^o 12 Cowcill Street).
- 1.4.5 In 1854 Thomas Baldwin replaced the brewery with three houses, although it is not known from the documentary sources how this was achieved. The census returns show that these houses were each occupied by a single household, with the exception of a shared occupancy at N^o 6 in 1901. To the north of the brewery, N^{os} 39-43 Boundary Street West lay on a plot of land owned in 1837 by James Yates, which extended from Cowcill Street to Higher Cambridge Street. By 1837 four houses fronted Boundary Street West on that plot, N^{os} 41-47 under the later numbering. The census returns show that these houses were each occupied by a single household.

- 1.4.6 The eastern end of James Yates's plot was occupied in 1840 by a shippon and yard, listed in the rate books under Cowcill Street. This property continues to appear in the rate books until 1848. In 1843-4 its ownership passed to William Jackson, and from this same period the shippon and yard were leased to the occupants of the brewery. On large-scale Ordnance Survey mapping of 1844 the building is named as a store house. It may have contained many of items put up for sale at the brewery in 1847 (*Appendix 2*).
- 1.4.7 In 1848-9 Jackson replaced the former shippon with two adjoining houses. One of these was the later N^o 39 Boundary Street West. The other was N^o 2 Cowcill Street, listed in the rate books as a house and yard (*Appendix 2*). The census returns show each house as occupied by a single household.
- 1.4.8 The stable building, N^o 4 Cowcill Street, was still in use after the demise of the brewery. It is explicitly named as a stable in the 1881 census, and the report that in the 1870s William Brookes of the Albert Brewery stabled his horses at the former Cowcill Street brewery (Potts 1984, 14) must also refer to this building.

2. METHODOLOGY

2.1 EXCAVATION

- 2.1.1 All work was carried out in accordance with the Written Scheme of Investigation (WSI), and was consistent with the relevant standards and procedures provided by the Institute for Archaeologists (IfA), and generally accepted best practice. The WSI allowed for the excavation of two targeted area across the proposed development area (*Appendix 1*). The trenches were excavated by mechanical excavator, and all archaeological deposits were cleaned manually to define their extent, nature, form and, where possible, date.

2.2 FINDS

- 2.2.1 All finds recovered during the excavations were lifted, cleaned, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds* (1998). Recovery and sampling programmes were in accordance with best practice (current IfA guidelines) and subject to expert advice.

2.3 ARCHIVE

- 2.3.1 A full archive of the work has been prepared to a professional standard in accordance with current English Heritage guidelines (1991) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The archive will be deposited with the Museum of Science and Industry in Manchester on completion of the project. In addition, a copy of the report will be forwarded to the Greater Manchester Historic Environment Record (HER).

3. RESULTS

3.1 INTRODUCTION

- 3.1.1 As an initial stage of the archaeological fieldwork programme, four evaluation trenches were placed in targeted locations across the site (OA North 2013a). The trenches revealed that well-preserved structural remains of early to mid-nineteenth-century domestic cellars, the brewery, and possibly elements of the music hall, survived *in-situ* across the site. The upper wall courses of these structures were exposed at depths of 500-700mm below the current ground level, whilst cellar floors were revealed at depths ranging from 1.8m to 2.6m. Most of the walls utilised hand-made bricks bonded in a lime-based mortar, consistent with an early- to mid-nineteenth-century construction date, whilst the cellar floors comprised brick or flagstones.

3.2 THE EXCAVATION

- 3.2.1 Following on from the results obtained from the evaluation trenching, two parts of the development site were targeted for open-area excavation (Fig 2). Area 1, occupying the southern part of the site, measured 12 x 5m and was excavated to a maximum depth of 1.8m. Area 2, located in the western corner of the site, was irregularly shaped, measured approximately 23.5 x 23m, and was excavated to a maximum depth of 2.4m.
- 3.2.2 Although the existing tarmac level within the car park was relatively flat with little variation in height across the area, it was found that the depth of levelling material sealing the archaeological remains increased from 0.7m in the north to 1.2m in the south. This gave a gradual slope across the site of 0.5m from north to south.
- 3.2.3 The fabric of the majority of the buried structural remains comprised either hand-made bricks with average measurements of 220 x 110 x 70mm and bonded with a crumbly lime-based mortar, or machine-made bricks measuring 230 x 100 x 70mm and set in hard dark grey cement. All walls described in the following text will be assumed to be one of these two types of brick unless stated otherwise.
- 3.2.4 The modern surfacing across the site comprised tarmac and bedding material. This overlay a hardcore levelling layer that had been rolled to compaction, presumably when the car park was laid out. Below this was looser hardcore levelling material giving a total depth of between 0.7m and 1.2m above the level of the archaeology. The cellars were filled, in all but two cases, with uniform demolition rubble resulting from the demolition of the buildings during the 1960s/1970s. Where cellars were not present, the foundations had been cut into compact, yellowish-brown clay that was slightly mixed at its surface but became a mid-brown and very clean and compact after c 0.15m. This layer clearly represented the natural drift geology.

3.3 AREA 1 RESULTS

- 3.3.1 This excavation area was aligned north-east/south-west across the eastern part of the site, incorporating evaluation Trench 1. It was targeted on the footprint of one of the double-depth workers' housing show fronting the east side of Cowcill Street on the Ordnance Survey map of 1850 (Fig 2), but also included elements of the adjacent house to the north. The excavated area measured 12 x 5m, and exposed the foundations and cellar of the two houses (Plate 7).



Plate 7: Aerial view across Area 1

- 3.3.2 A 3.43m wide room with a stone-flagged floor (**1001**) was exposed in the south-western part of the excavated area (Plate 8), forming a basement beneath the front room of the property. This cellar room was bounded by walls **1002** to the south-west, and **1003/1005/1006** to the north-west. Wall **1007** formed the north-eastern wall of the room, and also created a partition across the basement of the building. The south-eastern wall was not uncovered within the trench (Fig 3). A ceramic drain was set into the stone-flagged floor on the south-east side.
- 3.3.3 Wall **1003** ran from the south-western corner of the excavated trench along the north-west edge of the room for 0.56m. The surviving fabric comprised hand-made bricks, and contained clear evidence for two phases of alteration. The first rebuild (**1005**) was a 1.7m section in the centre of the wall, which comprised machine-made bricks (Plate 9). The earlier fabric on either side of this rebuild had been repointed in hard grey cement, presumably at the same time as the rebuild. Immediately to the north-east was an earlier rebuild (**1006**), comprising hand-made brick of varying size. This rebuilt appeared to be a repair to the wall using whatever bricks may have been at hand at the time, resulting in the non-uniformity of size.



Plate 8: Room containing flagstone floor 1001, looking south-east



Plate 9: Rebuilds 1005 and 1006 in wall 1003, looking north-west

- 3.3.4 A doorway built into the north-western end of wall **1002**, still retaining fragments of a wooden door (**1009**), afforded access into a small chamber with a stone-flagged floor (**1008**; Plate 10). This doorway was quite narrow, only 0.58m wide, and had been partially rebuilt at its edges to accommodate the wooden door, which had clearly been re-used from elsewhere and had been cut down to fit (Plate 11). Only the eastern side of this chamber was uncovered within the trench (Fig 3), although it is likely to have been a coal store that was served by a coal-drop from pavement level.



*Plate 10: Wall **1002** and doorway at south-west with small chamber beyond*



Plate 11: Remains of wooden door within rebuilt doorway, looking west

- 3.3.5 The remains of another basement room with a stone-flagged floor (**1023**) were revealed to the north-west, and probably represented part of the cellar beneath the front room of the adjacent property (Fig 3). It was bounded by walls **1004** to the south-west, with the corner of another small room beyond it, walls **1003/1005/1006** to the south-east, with wall **1013** representing a partition between the front and rear cellars. At this side of rebuild **1005** was a further single-course skin of hand-made brick walling standing up against the rebuild (Plate 12). This comprised machine-made fire brick, although the presence of firebrick suggested that there may have been a fireplace at this point on either side of the wall, one for each main cellar of two adjacent houses, the removal of which necessitated the rebuild. The fireplace on the north-west side may have remained longer, requiring the skin of firebrick between the two, finally being removed with the firebrick skin the only surviving part.



Plate 12: Cellar floor **1023**, showing firebrick 'skin' against rebuild **1005**

- 3.3.6 A 0.7m wide passage originally led north-east through wall **1013** for 1.8m, affording access into a room to the north-east (Plate 13). The passage had been blocked with machine-made bricks (**1014**) at its south-western end (Plate 14).



*Plate 13: Room to north-east of wall **1013**. Top left is the blocked passage with the remains of stone steps. Looking south-west*



Plate 14: Blocked passage between the south-western and central rooms

- 3.3.7 The room that the passage led into was 3.28m wide, and bounded by walls **1013**, **1012** and **1015**, all built from hand-made brick. Although the south-western and north-eastern walls were uniform, the south-eastern wall (**1012**), forming a partition with the adjacent property, was only a single-course wide, and may have been a rebuild. This room was not cellared, and the walls were cut into clay. The passage running into it from the south-west did descend to cellar level, but was too narrow to allow excavation safely. It was assumed that this passage contained steps rising up to the north-eastern room, and that a flagstone visible at the top of the passage was a part of this stair. The passage was filled with compact sandy gravel.
- 3.3.8 Situated to the rear of the front cellar of the southern house was smaller cellar, measuring 3.05 x 1.75m (Plate 15). The fabric of the floor comprised hand-made bricks (**1022**), and was bounded by hand-made bricks walls **1007** to the south-east and south-west, and **1024** to the north-west and north-east (Fig 3). The north-western and north-eastern walls may have been a rebuild contemporary with wall **1012**, as they were also a single-course wide and built from the same type of hand-made bricks. Between wall **1024** and wall **1012** to the north-east was a 0.7m wide passage, similar to that exposed in the adjacent building (Fig 3). No firm evidence of a doorway between the front and rear cellars was identified, although this may have been in wall **1024**, affording access from the passage.



Plate 15: Brick-floored cellar with north-west passage visible on left. Looking east

- 3.3.9 Flagstones were visible in the passage at cellar level at the entrance to the front cellar. The rest of the passage was filled in with compacted sandy gravel (Plate 16), but was too narrow to permit excavation. Again, this was assumed to have contained stone steps leading up to the ground-floor room.



Plate 16: Infilled passage along the rear cellar of the southern property, showing brick floor 1022. The ground-level yard is also visible to the rear, looking north

- 3.3.10 The room at the rear of the house, forming the outshut depicted on historical mapping, did not contain a cellar. This room measured 2.8 x 2.1m, and was bounded by walls **1024**, **1016**, **1018**, **1019** and **1020** (Fig 3). The fabric of all these walls comprised hand-made brick cut into the natural clay with gravel lenses. The remains of part of another room that was similarly without a cellar were exposed to the north-west, forming the outshut to the rear of the northern house. This room was 2.38m wide, although only the south-eastern part was uncovered within the excavated trench.
- 3.3.11 The partition wall between the two rooms (**1016**) appeared to have been rebuilt, also in hand-made brick, but in a different construction style. It seems likely that the partition wall between the two outshuts had been knocked-through at some point, and rebuilt subsequently, possibly during a period when the use of the buildings switched from domestic to commercial use.
- 3.3.12 Further sections of wall were exposed along the north-eastern edge of the excavated area. These probably represented the rear of the properties, forming a boundary to the rear passage.

3.4 AREA 2 RESULTS

- 3.4.1 This trench was aligned north-east/south-west across the north-eastern corner of the study area (Fig 2). It incorporated evaluation trenches 2, 3 and 4, and was targeted on the footprint of the Cowcill Street Brewery, its associated store house, and several different types of workers' housing, as shown on the Ordnance Survey map of 1850 (Fig 2). The area was roughly square (Plate 17), although the north-western and south-eastern corners were not excavated due to the presence of live services.



Plate 17: Aerial view of Area 2 fully excavated

- 3.4.2 The excavation area can be split into five distinct components: the workers' housing/former music hall in the southern part of the area; a house in the south-western corner; a complex series of houses and workshops in the north-west area; a large cellared house at the northern corner (within the footprint of the mid-nineteenth-century store house); and a block of four possible back-to-back houses within the footprint of the mid-nineteenth-century brewery in the eastern corner. Between the music hall and the possible back-to-backs was a narrow, stone-flagged passage, which was aligned north-west/south-east, and effectively divided the excavated area into two components.
- 3.4.3 ***The Bridgewater Music Hall:*** the two former double-depth houses in the southern corner of the site, which had fronted onto Cambridge Street in the mid-nineteenth century, were converted into the Bridgewater Music Hall in c 1880. This measured 11.4 x 10.7m (Plate 18), and was bounded at its outermost points by walls composed of hand-made bricks (2035, 2010, 2022, 2021, 2028 and 2033).



Plate 18: Aerial view of the excavated remains of the Bridgewater Music Hall

- 3.4.4 Two ground-floor rooms, bounded by walls **2021**, **2022**, **2018** and **2019**, were exposed in the southern corner of the site (Plate 19). The position of the walls lay within the footprint of the double-depth house shown on the Ordnance Survey map of 1850 (Fig 2), and formed two rooms measuring 2.5 x 2.6m and 2.5 x 1.6m (Fig 4). The partition between the two rooms was formed by wall **2020**. There was no cellar evident beneath these two rooms, and whilst all the walls were cut into a layer of compacted clay with lenses of gravel that was reminiscent of the natural geology, this may actually have represented material that had been backfilled into the cellar during the conversion of the property to the Bridgewater Music Hall. The south-western room was the largest of the two rooms, and contained a 0.78m square plinth in its northern part, which had been cut into the natural geology. Whilst the fabric of this plinth comprised hand-made bricks, it seemed likely that it had actually derived from the conversion of the houses into the music hall in c 1880, and may have formed the foundation for a column. No remains of floor surfacing survived *in-situ*.
- 3.4.5 Situated immediately to the north-west of these rooms was a small cellar, which measured 4.6 x 3.8m, and contained a flagstone floor (**2027**) that lay at a level 1.8m lower than the ground-floor rooms (Plate 20). The cellar was bounded by walls **2021/2028**, **2018**, and **2029**, with a partition (**2025**) dividing the cellar into two equal-sized components (Fig 4). Wall **2025** was two-courses wide, and comprised hand-made bricks bonded with lime-based mortar, consistent with an early nineteenth-century construction date. In addition to dividing the cellar, this wall also formed a partition between the two double-depth houses.



Plate 19: The foundations of ground-floor rooms in the south corner of the music hall, looking north



Plate 20: Cellar in the south-western part of the former music hall, looking north-east

- 3.4.6 Wall **2021/2028** did not extend across the south-western ends of the cellars completely, creating a gap of 3.06m in the approximate centre (Fig 4). This is likely to have resulted from the remodelling of the original double-depth houses for use as the music hall. Evidence for a remodelling of the cellars was provided by the fabric of the south-western end of partition **2025**, which was only a single-course wide and comprised machine-made bricks.
- 3.4.7 Situated immediately to the north-west of the cellars was an 'L'-shaped passage at ground-floor level. The passage was 4.6m long and 0.98m wide, aligned south-west/north-east before turning north-west for 1.64m (Fig 4). The foundations for the walls forming the sides of the passage were cut into gravel with clean clay below and, in line with plinth **2023**, a second hand made-brick plinth (**2030**) had been constructed. This also measured 0.78m², and had a square stone cap with a 0.35m² cast-iron column base with a cut-off 0.13m diameter column on top (**2040**).
- 3.4.8 Situated immediately to the north-west was another cellar, which measured 2.94 x 2.75m and was 1.8m deep. This cellar was connected to a passage that continued to the north-east (Plate 21). The cellar was bounded by walls **2028**, **2033**, **2035**, **2031** and **2034**, and had a stone-flagged floor (**2032**). A gap, possibly representing a doorway, leading through the outer wall of the cellar, and a short stub of a hand-made brick wall, was exposed along the south-western side, dividing the cellar in two. Along the south-eastern wall of the cellar, and set into the flagstone floor, was a small 0.68 x 0.38m rectangle of hand-made brick flooring; this may have been the base for an appliance or machine.



Plate 21: Cellar and passage at north-west side of former music hall, looking north-east

- 3.4.9 With the sole exception of that to the south-east, the fill of this cellar was different to that encountered elsewhere, as it contained large fragments of burnt timbers and ash amongst the demolition rubble. The north-western cellar also contained a large amount of broken glass, and several large glass sheets were stacked in the eastern corner. Whilst demolition had damaged most of these, the outer sheets seemed to have protected the three closest to the wall, which were recovered intact. Two were evidently part of the same large glass sign, both large sheets of black safety glass with gold lettering spelling 'AN' on one sheet, and 'S' on the other. The third sheet was smaller and was of frosted glass with 'Shire Pools Ltd' in gold letters. These almost certainly derived from the twentieth-century use of the building as a shopfitters.
- 3.4.10 The north-eastern end of the cellar-level passage originally opened out into a small 2.3m² room. The hand-made brick walls of this room remained intact, but it had been narrowed into an 'L'-shaped passage by the construction of a wall along its northern side (Plate 22). The fabric of this wall comprised machine-made engineering brick of twentieth-century date. This created a 0.62m wide passage, which ran north-east and then turned south-east into the room to its immediate south-east. The resultant passage was too narrow to allow machine excavation, but limited hand excavation revealed cast-iron pipes with high-pressure collars. These had been cut off at the south-western and south-eastern ends, but seemed to run up the passage and into the room to the south-east. The original passage also ran into the south-eastern room, but its function changed during the twentieth century and the later walls were built to narrow the passage, housing the pipes and cutting off access.



Plate 22: Modern walls narrowing the passage leading off the north-western cellar

- 3.4.11 Immediately to the south-east of the passage, and to the north-east of the other cellars within the former music hall, was a 5.17 x 3.14m cellared room that was 1.8m deep. It was bounded by walls **2010** and **2011** (Fig 4). The passage from the north-western cellar entered into this room at its northern corner. The western and southern corners of the room were rounded and the foundations splayed out by 0.3m into the room (Plate 23). Fragmentary remains of a stone-flagged floor (**2012**) were exposed. This room sat in the entre at the rear of the building, and may be some kind of pit below the stage of the music hall.



Plate 23: Remains of the pit below the stage of the music hall

- 3.4.12 Between this room and those to the south-west was a 9.1m long and 1.36m to 2.28m wide expanse of gravel overlying clay. This encompassed the pit below the music hall stage, and appeared to represent the natural geology.
- 3.4.13 **Double-depth house adjacent to the music hall:** in the western corner of the excavated area were the remains of a partially cellared building that appears on the Ordnance Survey map of 1850 as a double-depth house with an outshut and small yard to the rear (Plate 24). The front, south-western, part was excavated as far as was possible to the Cambridge Street frontage. This room comprised a cellar measuring 4.4 x 2.92m, which was 1.8m deep with a stone-flagged floor (**2037**). The room was bounded by hand-made brick walls **2035**, **2039** and **2074**. Against the inner north-western wall were the fragmentary remains of a 2.05 x 0.91m staircase (**2038**) with hand-made brick sides and stone steps leading up to the ground floor (Plate 25). Below this were the remains of a flagstone floor in which two cast-iron bolts had been set, their purpose unknown. Against the south-eastern wall was a 1.5 x 0.45 deep fireplace (**2036**) of hand-made bricks, with a brick arch above the hearth opening. The opening had been blocked subsequently with machine-made brick (Plate 26).



Plate 24: Excavated remains of the double-depth house occupying the north-western part of the site



Plate 25: Stairs 2038, looking north



Plate 26: Blocked fireplace in the cellar, looking east

3.4.14 In the north-eastern wall was a 0.8m wide cellar light window, 0.4m deep, which had been blocked, initially with a wooden board and then, later, with machine-made brick. This opened into a 4.86 x 1.98m open yard to the north-east (Plate 27), with the outer north-eastern wall of the former music hall to the south-east and the rear outshut to the north-west. The foundations of the outshut ran north-east from the north rear of the cellar for 4.85m, was 2.2m long with hand-made brick walls and a later privy of machine-made bricks inserted into its northern corner. An alleyway could be seen, defined by the surviving brick walls of the houses. This began at the rear of this house and ran between it and the slightly later houses to the northwest, alongside the house extension. It then turned southeast along the rear of the extension and the yard and then turned northeast. At this point it is likely that there was a gate into the rear yard of the western house. The alley then ran northeast alongside the northwest wall of the former music hall before turning southeast along the rear of the music hall, between it and the possible back to back houses to the northeast, and ran into the trench edge. From the point at which it turned the corner around the rear of the music hall it was stone flagged with a central drainage gulley and flags on either side sloping slightly down into it. These could not be cleaned properly due to the presence of a large amount of chrysotile asbestos, probably resulting from the alley being covered at some time with a corrugated asbestos sheet roof. The mapping also suggested that the alley continued northeast from the corner of the music hall between the possible back to back houses and the double depth house to the northwest of it, but this branch had been removed and the alley blocked with machine made brick, possibly at the same time that the smaller building between the north house and the back to backs had been removed.



Plate 27: The foundations of the outshut and rear yard with a privy. The flagstones at the top right are the remains of the alleyway, looking north-east

- 3.4.15 **Single-depth houses:** excavation of the north-western part of Area 2 exposed the foundations of three buildings (N^{os} 41-45 Boundary Street West; Plate 28) and the adjacent store house for the brewery, which all first appear on the Ordnance Survey map of 1850 as single-depth houses with various forms of outshuts. N^o 41 was situated adjacent to the store house shown on the Ordnance Survey map of 1850 (Fig 2), with N^o 43 in the centre and N^o 45 to the south-west. These houses remained in much the same form until their demolition during the 1960s, but seem to undergo a lot of small internal changes, including the partial demolition of N^o 43 between 1911-15.
- 3.4.16 The remains of N^o 45 comprised hand-made brick walls **2047** and **2048**, which formed the rear wall of the house, with wall **2044** representing the foundations of the wall of the rear yard. In the east corner of this yard, a small stub of machine-made brick walling may have been part of a privy, although this could not be established firmly. The house had contained a cellar, which was filled with rubble, indicating that the cellar had been intact until demolition.
- 3.4.17 The remains of N^o 43 were represented by two cellared rooms between N^{os} 41 and 45 (Plate 29). The main room was 2.3m wide and cellared, although the flagstone floor appeared to have been removed, as it was not encountered at a depth of 2.3m. It was bounded by walls of hand-made bricks (**2047**, **2048** and **2049**). Wall **2047**, at the south-eastern side of this room, contained a blocked-up cellar-level doorway. It was originally 1.22m wide, and had later been narrowed by having the south-west 0.36m blocked with hand-made brick.



Plate 28: Aerial shot of the excavated remains of N^{os} 41-45 Boundary Street West



Plate 29: The excavated remains of the single-depth houses, with N° 43 in centre, looking east

- 3.4.18 The doorway led into a 2.6 x 1.2m cellared room, which was bounded by walls **2047**, **2045** and **2052**, and retained a flagstone floor at a depth of 2m below the modern ground level. This floor could not be excavated fully due to the narrowness and depth of the room, but was observed in an exploratory sondage. Along the north-western side of the room, a new 'skin' of hand-made brick had been added, probably to strengthen the cellar walls, which continued through to N° 41.
- 3.4.19 The position of the blocked doorway in wall **2047** corresponded with this additional skin of bricks. After the original doorway had been narrowed by the addition of hand-made brick, the two openings were offset from each other giving a total available gap of 0.54m. The opening through the brick skin was blocked with machine-made brick, presumably at the same time as the original doorway.
- 3.4.20 Within the south-western wall of the main north room was a 0.11m wide and 0.23m deep upright slot running down the interior of the wall from top to bottom. This may have originally been for a downpipe leading from the ground floor to drains beneath the cellar floor. Both rooms of this building had been filled in with almost 2m of clay, possibly during the time of the buildings partial demolition between 1911 and 1915.

- 3.4.21 Situated to the north-east of N^o 43 was a series of brick walls forming the N^o 45 and its associated yard. This comprised a south-east/north-west-aligned complex, measuring 8.2 x 4.6m, with a main room to the north-east, two smaller rooms to the south-east, and a rear extension and yard with privy. Only the rear 1.75m of the main room lay within the excavated area and that portion lying closest to Boundary Street West was not exposed (Plate 30). Excavation revealed that a cellar existed beneath the front room of the building. The cellar was bounded by walls **2047**, **2049** and **2060**, and retained fragments of a stone-flagged floor (**2051**), which lay at a depth of 1.7m below the modern ground surface.
- 3.4.22 At the south-western side of the room, against wall **2049**, was a narrow structure (**2050**), composed of machine-made bricks. It comprised single-course width brick walling at the north-western and north-eastern sides, creating a 0.65m wide passage leading south-east along the wall for a distance of 0.95m. At the end of this was a 0.75m gap between the end of the passage and the rear south-eastern wall of the room. It is likely that this was a staircase leading down from the ground floor, although all the stone steps and doorway had been removed (Plate 31), probably at the same time that most of the floor was lifted.
- 3.4.23 At the north-east side of the room, in the section of the excavated trench, wall **2060** stepped out 0.49m into the room and was faced with a thin, upright, stone slab. This was the main fireplace (Plate 32), and will have been very similar to that exposed in the large double-depth house to the north-east.



Plate 30: The excavated part of the main room in N^o 45, looking east



Plate 31: Partially removed stairs within the front room of N° 45



Plate 32: Edge of the fireplace in N° 45

- 3.4.24 A 0.78m wide doorway affording access into the south-western of two small rear rooms was exposed in wall **2047**, some 0.64m from the corner with wall **2049**. This door had been blocked subsequently with machine-made brick. The south-western rear room measured 2.12 x 2m, and the adjacent room was 1.59 x 2m. The rooms were divided by wall **2053**, which was aligned north-west/south-east (Fig 4). Both of these small rooms were filled with demolition rubble, suggesting they were cellared until the demolition in the 1960s.
- 3.4.25 Situated to the rear of these rooms were the fragmentary foundations of a 3.5 x 2.12m extension (Plate 33), which comprised walls **2059** and **2062**. At the western corner at which the south-western room joined the extension was a 0.8m wide section of machine-made brick walling (**2054**), within hand-made brick wall **2055**. This is likely to have been the threshold through into the extension. The rest of the extension walls were also of machine-made brick, and seemed to include a small privy (**2057**) in its north-western corner, together with the remains of a stone-flagged floor (**2058**).
- 3.4.26 The flagstones were laid on compact clay of natural origin, and therefore the extension was not cellared. A 0.73m wide gap between the north-western end of wall **2059** and wall **2055** at the rear of the main building suggested a doorway from the yard. Two further stubs of machine-made brick running south-west from north-eastern extension wall **2059** suggested that it may have been further sub-divided, but the remains were very fragmentary in this area. At the north-eastern end of the extension, and south-east of the main rear rooms, was a 3.5 x 1.4m rear yard. This was bounded by machine-made brick walls **2059**, **2061** and **2062**. Part of the yard and wall **2061** had been truncated by later drainage.



Plate 33: Extension and yard at rear of N° 45, looking south-west

3.4.27 **N^o 2 Cowcill Street:** situated to the north-west of the single-depth house, and occupying the northern corner of Area 2, were the remains of a building shown on the historical mapping as a double-depth building, which first appears between 1831 and 1845. It is annotated on the Ordnance Survey map of 1850 as a store house with a small building to its rear, in its original yard. From 1888 onwards it is shown as a series of three small buildings. The Ordnance Survey map of 1960 shows the smaller south-western building to have been demolished, and the two remaining buildings as N^{os} 2 and 39. The main building uncovered within the trench was what became N^o 2 Cowcill Street, with part of the south-eastern edge of N^o 39 Boundary Street West just within the trench.

3.4.28 The remains of the main building, situated at the junction of Cowcill Street with Boundary Street West, comprised a single cellar that measured 4.6 x 3.73m and was 1.7m deep (Plate 34). It was bounded by walls **2064**, **2065**, **2069** and **2070**. The fabric of all these walls comprised hand-made bricks, and all were two brick-courses wide, except **2065** which was a single-course partition between this room and that to the north-west. Only 0.75m of this north-western room lay within the excavated area, but it contained the remains of a stone-flagged floor (**2066**) with a ceramic drain at the north-east side, a central partition (**2075**) of hand-made bricks, which was aligned north-west from the centre of wall **2065**, and a 0.54m wide doorway into the main room.



Plate 34: Aerial view of store house / N^o 2 Cowcill Street

- 3.4.29 The main cellar room had a stone-flagged floor (2067), with a 1.4m² inset of hand-made bricks (2068) in the northern corner (Plates 35 and 36). This was situated beneath a 0.45m wide and 0.64m deep aperture into the north-eastern wall of the cellar, with a stone sill 1m above floor level. The section of brick floor also appeared to have had a single-course wide wall around it. This was almost certainly the remains of a coal bunker, with the aperture in the wall represented a coal chute from Cowcill Street.



Plate 35: Main cellar room of N° 2 Cowcill Street, looking east

- 3.4.30 A 0.78m wide blocked doorway was identified in the western corner of the room, affording access to a 0.72m wide passage or small yard at the same level as the cellar (Plate 37). This area separated the N° 2 Cowcill Street from the adjacent property on Boundary Street West (Fig 2). Evidence from the sequence of historical mapping indicates that this originally continued to the south-east to connect with a passage that lay to the rear of the brewery building. This connection, however, must have included a stair, as the small yard to the south-west of N° 2 Cowcill Street was evidently at cellar level. This was not tested during the excavation, as the cellar-level passage could not be fully exposed safely, although the excavation did demonstrate that the passage had been blocked, as a short section of wall composed of machine-made bricks was exposed at its south-eastern end.
- 3.4.31 The Ordnance Survey map of 1850 (Fig 2) shows that a small rectangular building abutted the southern end of N° 2 Cowcill Street. This building appears to have been remodelled by the time of the next edition of mapping, which was surveyed in the late 1880s. This map also shows the yard area adjacent to the N° 2 Cowcill Street to have been covered over.



Plate 36: Coal bunker floor and coal chute, looking north



Plate 37: Blocked doorway in N° 2 Cowcill Street with passage beyond, looking south-west

- 3.4.32 A 1.12m wide cellar light window with a brick sill set 1.2m above the level of the flagstone floor was evident in the southern corner of the cellar, occupying the same elevation as the coal chute. This cellar-light window is absent from the Ordnance Survey map of 1850, but is shown on the 1891 edition map. The evidence derived from the cartographic sources, coupled with the results from the excavation, indicate that the cellar light and the coal chute were inserted when the store house was converted to a domestic property.
- 3.4.33 A fireplace (2072) composed of hand-made bricks was placed against the south-east wall of the cellar. This was 1.65m wide and 0.49m deep, and was slightly offset from the centre of the wall. It had been blocked with machine-made bricks. The cheeks of the fireplace were 0.32m wide, and faced with thin upright stone slabs (Plate 38). A 1m high boiler (2071) was situated adjacent to the fireplace. This measured 0.76 x 0.63m, and comprised machine-made bricks. It retained an iron grate at the foot of its front face, whilst a 0.44m diameter cast-iron pot was set into the upper surface (Plate 38).
- 3.4.34 Situated on the opposite side of the fireplace was a rectangular stone sink (2073), which measured 0.93 x 0.47m. It was 0.19m deep, and set 0.77m above the level of the flagstone floor. It was set slightly into the walls of the cellar, and also slightly into the north-eastern cheek of the fireplace. The sink had a lead-lined drainage hole in one corner, and a lead water pipe with stop tap above it, leading out from the north-eastern wall of the cellar. Below it the stone flags contained three small drilled holes in a line, presumably intended as a crude drainage feature, and the flagstone had begun to collapse beneath, suggesting a collapsing drain at depth.



Plate 38: Sink, fireplace and boiler in N° 2 Cowcill Street, looking south-east

- 3.4.35 The small building immediately to the south-east of N° 2 Cowcill Street is shown on the sequence of historical mapping to have been remodelled on several occasions before its ultimate demolition in the 1960s. No physical remains of this building were encountered during the excavation, confirming that it had not been fitted with a cellar.
- 3.4.36 **The Brewery:** the building in the north-western corner of Area 2 is shown on Banks & Co's map of 1831 as a rectangular block, and marked on the Ordnance Survey map of 1850 as the Cowcill Street Brewery. The next edition of Ordnance Survey mapping, published in 1891, shows the footprint of the brewery to have been occupied by a row of three houses (Plate 39).

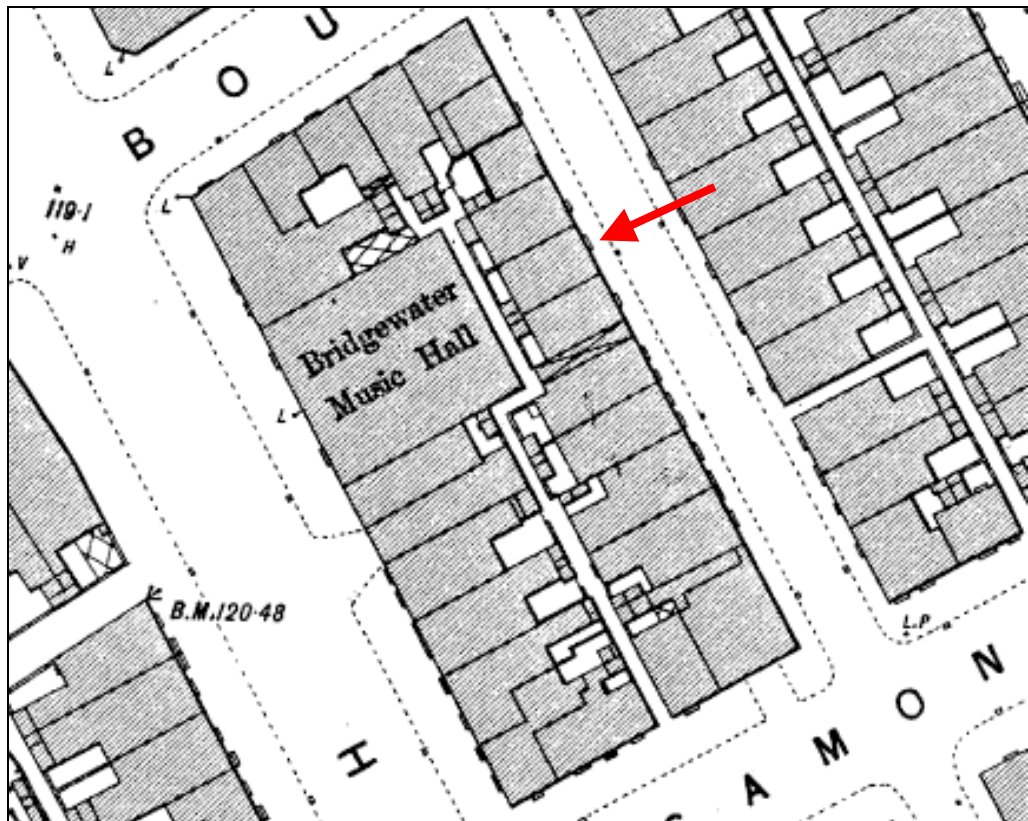


Plate 39: Extract from the Ordnance Survey 1:500 map, published in 1891, with arrow marking the three houses on the footprint of the former brewery

- 3.4.37 The evidence obtained from the excavation suggests that the building may have been intended originally as back-to-back cottages, although these appear to have been either short-lived, or were not occupied domestically, as the buildings were use as a brewery by 1837 (*Section 1.3.10 above*). However, they were in use for residential purposes by 1888, and were knocked through to create double-depth houses. The north-western and central houses lay within the excavated area, with each containing two rooms (Plate 40). The north-eastern rooms, fronting the former line of Cowcill Street, were fully exposed, whilst the rear rooms were left unexcavated for health and safety considerations. The total block of four cellar rooms measured 7.06 x 6.4m, with the fabric of all the component walls comprising hand-made bricks.

- 3.4.38 It appeared that the rear rooms were slightly smaller than those to the front, allowing a narrow 0.64m wide passage to run north-east/south-west from the alleyway. This had a short section of brick wall across it halfway along the western rear room, indicating the position of a stair descending to cellar level into the front cellar. A similar passage also seemed to be present at the south-east edge of the excavated area, although this part of the site had been heavily disturbed by modern service trenches.
- 3.4.39 The northern unexcavated room measured 3 x 2.75m, and was bounded by walls **2004**, **2005**, **2006**, and **2076**. A 1.27m wide, brick-brick fireplace was placed on the partition wall. The south unexcavated room was 2.8m², bounded by walls **2004**, **2005**, **2076** and **2077**, and had an identical fireplace built against wall **2005**. Both rooms contained demolition rubble.
- 3.4.40 Two short stubs of hand-made brick wall, aligned south-west and stopping at the alleyway, were exposed to the south-west, enclosing an area of 5.37 x 1.02m. This area was not excavated due to the presence of asbestos, but a passage infilled with rubble was identified. This may have gone down to cellar level, and contained steps for access to the rear cellars.



Plate 40: Aerial view of block of the houses occupying the site of the brewery

- 3.4.41 The north front cellar measured 3.7 x 2.8m, and was cellared to an estimated depth of 2m. No floor surface had survived in this room, and below the walls was compact natural clayey gravel. It was bounded by walls **2001**, **2003**, **2004** and **2007** (Fig 4). The passage from the alleyway entered this room at the north-western end of the south-western wall, and could be seen to have a cellar-level flagstone surface at the point it entered the room.
- 3.4.42 Coinciding with the entry point of the passage was a small chamfer in wall **2007** for a door jamb. On the north-eastern wall, fronting Cowcill Street, was a 1.7m wide and 0.64m deep cellar light window with a stone sill set 1.04m above the floor level. Against the internal partition was a 1.45m wide and 0.37m deep fireplace composed of hand-made bricks (Plate 41). It was not blocked and had a 1.3m open front with a brick arch over it. It had a slightly raised flagstone hearth stone, and housed a simple, raised, flat brick range. A fire-blackened hole led through the north-east side of the fireplace suggesting that it had a boiler inserted at that side, feeding into the chimney. There was no other evidence of the boiler surviving, but it seems likely that it was similar to the boiler in the east room. A lead water pipe fed into the room along the north-eastern wall of the cellar.



Plate 41: North cellar, looking east

- 3.4.43 The south front cellar was 2m deep. The south-eastern wall could not be reached during the excavation due to live cables, but is likely to have been a similar width to the north cellar with the passage from the alley entering it at its south corner. It was bounded by walls **2001**, **2003** and **2004** (Fig 4). In the north-eastern wall was a window similar to that in the north cellar, but more heavily damaged. Against the partition wall was a fireplace identical to that in the north cellar (Fig 4).

- 3.4.44 Some remains of a flagstone floor survived in the corners of this cellar, on either side of the fireplace. Placed on the surviving flagstones in the northern corner of the cellar was the machine-made brick base for an inserted boiler (2002). It was heavily truncated, but its basic square shape with internal front loading fire hole could be readily identified (Plate 42). At the back it survived just high enough to show the part of the cement-covered top, but no cast-iron pot had remained. A lead water pipe fed along the north-east wall.
- 3.4.45 Along the north-eastern side of the excavated area was the line of the original Cowcill Street (Fig 2). No evidence of this had survived, and its removal had caused much of the disturbance and damage to the adjacent cellars.



Plate 42: South cellar, looking west, with boiler to the right

4. FINDS

- 4.1 A small group of 110 fragments of artefacts were recovered from the initial evaluation trenches (eight fragments from Trench 4) and excavation (contexts **1000-1006**). The principal component of the group is 70 fragments of pottery (all from backfilled demolition layer **1000**), with much smaller amounts of clay tobacco pipe, glass and metalwork from other contexts; a full catalogue is presented in *Appendix 3*.
- 4.2 The pottery assemblage (Plate 43) comprises nine fragments of black-glazed redwares, including the horizontal lug of a large cylindrical storage vessel, two of late grey stonewares, and a limited range of plain and under-glaze transfer-printed refined white earthenwares (59 fragments), including a printed Keillers' marmalade jar commemorating the award of a grand medal of merit in Vienna in 1873, and thus placing the group after that date. The two clay tobacco pipe bowls from layer **1000** are of a similar date (Plate 44).



Plate 43: The pottery assemblage



Plate 44: The clay tobacco pipe assemblage

- 4.3 It is quite likely that the glass vessels from flagstone floor **1001** (Area 1) are all of twentieth-century date, one of them having a composition/vulcanite screw-threaded stopper. Such stoppers were invented c 1870, but did not come into general use for another decade (www.kenthistoryforum.co.uk) and continued in use well into the twentieth century. Undoubtedly the plastic signage from this context is of late date, most likely from the late twentieth century. Further plastic signage came from the immediate vicinity of wall **1004** (Area 1), and probably reflects manufacturing activity on the site.
- 4.4 The cellar in the south-western part of the Area 1 produced only two metal items, one a large horseshoe of late type, the other an electroplated teaspoon (Plate 45). The latter is marked 'T.W' probably being the Sheffield maker Thomas White, in production between 1872 and 1891. Both were found by wall **1002**. A gilded carved wooden flower found near wall **1003** (Plate 46) probably derived from a decorative picture or mirror frame, or overmantel. It cannot be dated with precision, but would not seem out of place in a late nineteenth to twentieth century context. A base metal earring from wall **1006** probably dates from the second half of the twentieth century (Plate 47).
- 4.5 Finally a small group of fragments of ceramic and stone building materials came from wall **2005** (Area 2). Amongst the ceramic tiles is one small fragment that could well derive from the late nineteenth-century Pilkington Tile and Pottery Factory Limited in Manchester, which opened in 1891 (www.sculpture.gla.ac.uk) and operated as a tile manufacturer in the early years of the twentieth century (Plate 48). Fragments of black and white marble veneers presumably reflect the décor of the building on the site, and a small fragment of stone mosaic must derive from its external entrance.



Plate 45: The iron horseshoe and electroplated teaspoon, with inset showing maker's stamp on the spoon handle



Plate 46: Wooded floral element discovered adjacent to wall 1003



Plate 47: An earring found by wall 1006



Plate 48: Small fragment of floor tile that may have been produced by Pilkingtons

5. DISCUSSION

5.1 INTRODUCTION

5.1.1 The archaeological investigation has provided a valuable opportunity to investigate the physical remains of the initial development and urbanisation of part of Chorlton-upon-Medlock during the early nineteenth century. The excavation has facilitated an examination of several different types of workers' housing, a key characteristic of this new urban landscape, and the evolution of the buildings up to their demolition in the twentieth century.

5.1.2 The results obtained from the excavation inform several of the initiatives for archaeological research of the industrial and modern periods stated in the current *Archaeological Research Framework for North West England* (Newman and McNeil 2007; McNeil and Newman 2007). In particular:

- *Initiative 7.6*: 'A study of the development of workers' housing in Greater Manchester and East Lancashire should be undertaken to examine the development of different housing types...' (McNeil and Newman 2007, 139);
- *Initiative 7.7*: 'Study the material culture of industrial workers' households...' (*ibid*);
- *Initiative 7.25*: 'Where threatened with possible redevelopment excavations are required of now undeveloped and cleared former working class areas regarded as slums' (*op cit*, 147);
- *Initiative 7.41*: 'The retention of later period artefacts and their routine analysis as part of all archaeological excavation projects' (*op cit*, 156).

5.2 OVERVIEW OF PHASING

5.2.1 The study area is shown on the available mapping as undeveloped fields until the 1818/19 map. From that point, a typical development pattern for the area can be seen with streets laid out in a grid, and open areas developed subsequently. Development gained rapid momentum with the whole of the study area filled in between 1824 and 1831. The buildings underwent alterations throughout the subsequent period until the demolition of all but the former music hall during the 1960s, and finally the demolition of the music hall itself during the early 1980s.

5.2.2 The earliest building on the site was the Salutation public house, appearing on Jonson's map of 1818/19. The grid pattern of streets had been laid out by then, although they are not named on the mapping until 1824. It has been possible to group the development of buildings within the study area into five phases, with dates based mainly on the map sequence and corroborated with structural evidence on site (Fig 5). The development of each complex will be discussed separately after the phasing.

5.2 PHASE 1: HOUSES BUILT 1819-31

- 5.2.3 Although a small building is possibly shown on Johnson's map of 1818-9 to the south-west of the Salutation public house, placed over the northern corner of Area 2, this building has gone by the time of the 1824 mapping and no evidence of it was uncovered during the excavation. It can be reasonably assumed that this was a small uncellared structure that was demolished at the beginning of the main thrust of development in the area, and all remains destroyed by the construction of the cellared houses a few years later.
- 5.2.4 Between 1818-9 and 1824 two double-depth houses with rear outshuts and yards, and walled front yards, were built in the area of the former music hall along Higher Cambridge Street. The cellars of these buildings could still be seen within the music hall footprint during the excavation, and it is most likely that they were remodelled and extended in order to build the music hall. The size and apparent layout of these houses was typical of larger terraced domestic properties of this period.
- 5.2.5 The remains of the building excavated in Area 1 had formed part of a house that was built between 1818-9 and 1824, with a yard to the south-east and an alleyway to the north-west. This was part of the infilling of the whole of this block on the north-east side of Cowcill Street.
- 5.2.6 There seems to have been a lull in construction between 1824 and 1831 with no new buildings appearing on the sequence of historical mapping. The form of the houses in both Areas 1 and 2 can be better seen on the 1831 mapping, with both shown as double-depth houses with an outshut and yard to the rear. The houses present along Higher Cambridge Street, on the site of the music hall, also had large front yards with the south-eastern yard wrapping around the south-eastern side of the house and ending at what may have represented another extension on the north-eastern corner. There also appeared to be an alleyway aligned north-east/south-west along the south-eastern side of this house, leading from Higher Cambridge Street to the rear of the properties, in the area that later became the main alleyway within Area 2.

5.3 PHASE 2: HOUSES BUILT 1831-45

- 5.3.1 The remainder of the plot within Area 2 was infilled with houses between 1831 and 1845 (Fig 5). Although shown just as shaded blocks, the western house, the single-depth houses to the north-west, the northern house and the south-eastern houses were all surveyed by the Ordnance Survey in the mid-1840s.
- 5.3.2 The Ordnance Survey map of 1850 identifies the northern property as a 'Store House', with the 'Cowcill Street Brewery' and associated stable situated to the south-east. During this phase of activity, the main alleyway seems to be formed running between all the houses from south-east to north-west, then heading north-east one way and south-west another, before turning to the north-west.

5.4 PHASE 3: CONVERSION AND REMODELLING 1849-88

- 5.4.1 The two houses fronting onto Higher Cambridge Street in the southern part of the study area were merged into a one large building during this period, and extended to form a large rectangular building identified by the Ordnance Survey as the 'Bridgewater Music Hall'. After 1888, the building underwent several changes in function, being annotated as a 'Hall' in 1905, the 'Bridgewater Hall City Athletics Club' in 1908, and as a 'Cinema' in 1915.
- 5.4.2 The house immediately to the north-west of the Bridgewater Music Hall also appeared to have been remodelled and merged with the smaller building to its north-west, on the corner of Cambridge Street and Boundary Street West, although this extension was beyond the excavated area.
- 5.4.3 The double-depth property occupying the northern corner of the study area, on the corner of Boundary Street West and Cowcill Street, was no longer labelled as a store house on the Ordnance Survey map of 1891. The detail provided by this mapping implies that the building had been converted into two single-depth houses.
- 5.4.4 The building annotated as the Cowcill Street Brewery on the Ordnance Survey map of 1850 had evidently been converted to a row of three domestic houses during the second half of the nineteenth century. These are shown on the Ordnance Survey map of 1891 to have been larger than single-depth houses, but smaller than the other double-depth properties that had occupied the study area. The three houses each had a small yard to the rear, which contained a small structure that is likely to represent a privy. The covered passage immediately to the south-east, which appeared on the Ordnance Survey map of 1850, appears to have remained in place.

5.5 PHASE 4: FURTHER CONVERSION 1932-51

- 5.5.1 During this period the former music hall was converted from a cinema to a structure identified by the Ordnance Survey as a 'Works'. The house excavated in Area 1 also appears to have been converted for commercial or small-scale industrial use, having been merged with the property situated immediately to the north-west. The western house in Area 2 is shown as being once more split into two houses with almost the same layout as shown on the mapping of 1849.
- 5.5.2 It appears from cartographic evidence that the alleyway between the houses was blocked in all directions during the second quarter of the twentieth century. The alleyway was converted latterly into a series of extended yards, presumably furnished with gates for access. A view of the local townscape during this period is provided by an aerial photograph taken in 1937 (Plate 49).

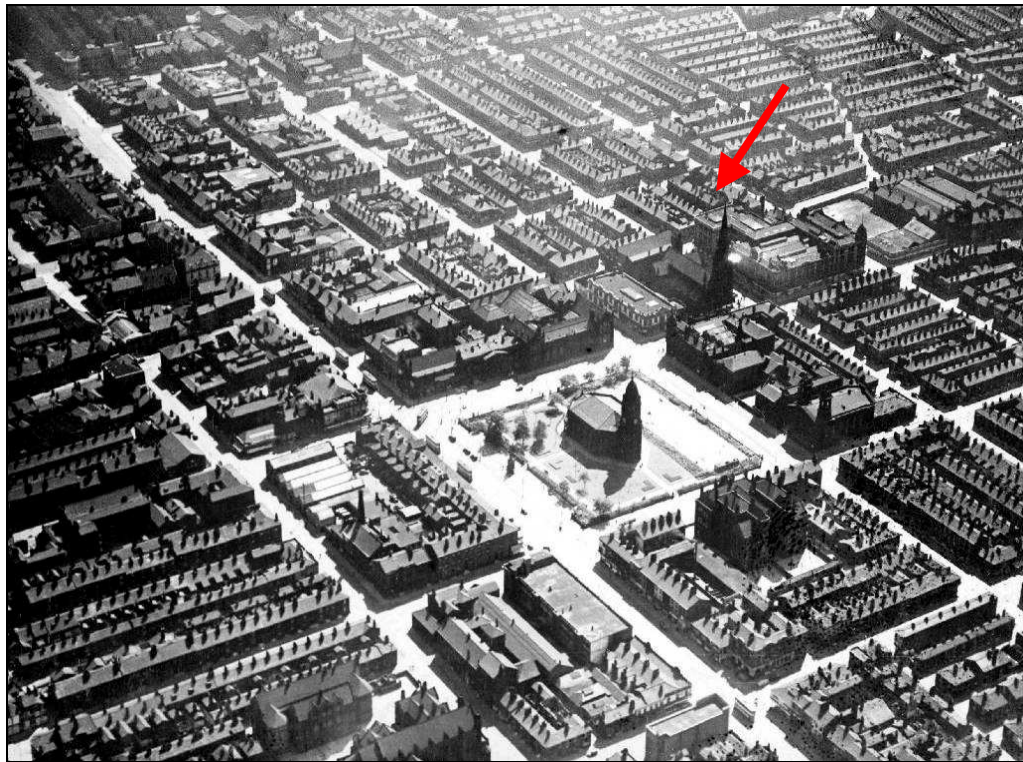


Plate 49: Aerial view looking south-west across All Saints in 1937, with arrow marking the study area in the background behind the church

5.6 PHASE 5: DEMOLITION 1960-80s

- 5.8.1 The overall layout of the buildings within the study area remained largely unaltered during the third quarter of the twentieth century, with some minor changes and conversions, from the construction between 1819 and 1845 until the 1960s.
- 5.8.2 Large-scale demolition of nineteenth-century buildings in this part of Manchester began during the later 1960s and, and by 1978, the only building left standing within the boundary of the present study area was the former Music Hall. However, this building had been demolished by 1982, and the site left as waste ground before being turned into a car park during the early twenty-first century.

5.7 DEVELOPMENT OF BUILDINGS IN AREA 1

- 5.7.1 The remains recorded in Area 1 were of double-depth cellared houses, with rear outshuts and yards. The houses were built between 1818-9 and 1924 fronting Cowcill Street, and remained in the same form until the south-eastern property was converted into a works between 1932 and 1951. This involved it being merged with an identical house to its immediate north-west. This layout remained until its demolition during the 1970s. The cellars appear to have been serviced originally by an external passage, suggesting that access may have been afforded separately from the remainder of the property. However, this access appears to have been disused at an early date, indicating that the cellar did form part of the same accommodation as the overlying floors.

5.8 DEVELOPMENT OF BUILDINGS IN AREA 2

- 5.8.1 **Houses/Hall/Works:** two double-depth cellared houses with rear outshuts and yards were first built along the east side of Higher Cambridge Street within the study area between 1818-9 and 1824. These originally had large front yards or gardens, although these had gone by 1845, possibly in order to widen Cambridge Street. In *c* 1880 these two houses were merged into a single structure, and remodelled as the Bridgewater Music Hall. It was at this time that the rear of the former houses was extended to form the rear of the rectangle and the curved-cornered pit was built, probably as a below-stage area. In consequence of this significant remodelling, little physical evidence for the original houses survived *in-situ*. However, the historical mapping shows that these double-depth houses were slightly larger than other similar houses in the immediate vicinity, and may have provided accommodation for slightly more affluent residents. There is no evidence from either the documentary sources or the excavation to indicate that the cellars were ever used as separate dwellings, which would seem unlikely.
- 5.8.2 The Bridgewater Music Hall was one of several small theatres that opened in Manchester during the later nineteenth century. It underwent several changes of name during the following years, including the Alhambra, the Alkazar, and the Empire Theatre. It is reported as seating up to 750 people, and had a horseshoe gallery with an ornate scrollwork cast-iron balustrade (Plates 50 and 51).
- 5.8.3 During the early 1900s the theatre became a mission, labelled as 'hall' on the 1905 edition of Ordnance Survey mapping, and then later as a boxing club, labelled 'Bridgewater Hall City Athletics Club' in 1908. In 1914, it became the Bridgewater Electric Picture Palace, and remained in use as a cinema until its conversion into a works between 1932 and 1951. It is likely that the long stone-flagged corridor on the north-western side of the building revealed during the excavation was narrowed, and the pipes inserted, either when it was converted into a cinema or a works.
- 5.8.4 The building was acquired by a firm of shopfitters in the 1970s, who were almost certainly responsible for the large printed glass panels found within the structure during the excavation. The building was eventually destroyed by fire in the early 1980s, resulting in the large amounts of ash and burnt timber excavated from the backfill of the cellar, and was demolished for safety reasons. During this demolition the cast-iron balustrade is reported to have been salvaged, and part was incorporated into Manchester Art Gallery, and another section into the Theatre Museum in Covent Garden.
- 5.8.5 **Western Cambridge Street House:** this was a double-depth house with a rear outshut and yard. It was built between 1831 and 1845. Between 1849 and 1888 the house was merged with a smaller building to the north-west, on the corner of Higher Cambridge Street and Boundary Street West, and remained in this larger form until between 1932 and 1951 when it was split once again into two separate buildings. This form remained until its demolition during the 1960s or 1970s.



Plate 50: Horseshoe gallery with cast iron scrollwork balustrade (courtesy of the Visual Resources Centre at MMU)



Plate 51: Ground floor of the former theatre shortly before demolition (courtesy of the Visual Resources Centre at MMU)

- 5.8.6 **North-western Boundary Street West Houses:** the complex of structures uncovered in the north-western part of Area 2 comprised three small, irregular, single-depth houses that had been built between 1831 and 1845. These are labelled on the mapping of 1951 as N^{os} 41, 43 and 45 Boundary Street West. The remains of N^o 45 only partially lay within the excavated area, and were represented by two small rooms uncovered at the very north-western edge of the excavation. The partially excavated cellared room to the north-east of this, and its smaller rear south-eastern room, was N^o 43. N^o 41 was a larger building encompassing the partially stone-flagged room to the north-east of N^o 43, and the smaller two rooms at its rear. Situated to the south-east was a square walled yard of N^o 41, with the outshut privy and washhouse. A covered alleyway is shown between N^{os} 45 and 43 on the Ordnance Survey map of 1891, and this layout remains until N^o 43 was demolished between 1908 and 1915, with the alleyway remaining. It is likely that the covered alleyway was at ground level, rather than at cellar level, as no evidence of it was observed during the excavation. The layout of N^{os} 41 and 45 remained static until the demolition of the buildings during the late 1960s or early 1970s.
- 5.8.7 **Northern Cowcill Street House:** the property in the northern corner of the site was built as a double-depth house between 1831 and 1845, with rear outshut and yard. Although this was labelled as a 'Store House' on the mapping of 1849, the excavated cellar was of an early nineteenth-century workers' house form, and it is likely that the house was being used as a store at the time of the mapping, and then converted back into housing later. The hearth revealed within the cellar was an original feature. It is uncertain whether the stone sink was an original century feature, or if it was inserted later. The hearth was offset slightly from the centre of the wall suggesting that either the sink was original, with the hearth placed to also support one side of the sink, or that the hearth was moved when the sink was inserted.
- 5.8.8 The Ordnance Survey map of 1891 no longer annotates the building as a store, which by that date had been converted into two houses, labelled subsequently as 39 Boundary Street West and 2 Cowcill Street. It is likely that this conversion was carried out during the 1860s as the dividing wall between the two rooms was of a similar brick to that in the inserted cast-iron boiler, a type added during housing improvements made in the late 1860s, and seen in a number of excavated workers' house cellars across Manchester (Miller and Wild 2010). The house was partially excavated, with only a small element of N^o 39 present within the trench. The whole of N^o 2 was uncovered, however, together with a cellar-level covered alleyway giving access into the rear of N^o 39 and into N^o 2.
- 5.8.9 From 1888 onwards a series of small outbuildings are shown on the historical mapping in the yard area to the south-east of N^o 2 Cowcill Street, between the house and the brewery. These are different on each map edition, and no physical evidence for them was identified during the excavation. The yard area was not cellared, and it would suggest that these were temporary outbuildings built from less sturdy materials, probably erected and demolished to fit the changing needs of the property.

- 5.8.10 **Cowcill Street Brewery/Back-to-Backs:** these buildings were first built between 1831 and 1845, and are labelled on the Ordnance Survey map of 1850 as 'Cowcill Street Brewery' (Fig 2). However, excavation revealed the footprint of the buildings to be a row of what appeared to be six small back-to-back workers' houses of an early nineteenth-century type, with three houses fronting Cowcill Street side and three situated to the rear. Of these, the north-western and central pairs were excavated, with the south-eastern pair inaccessible due to live service cables.
- 5.8.11 Apertures for cellar lights were present on the Cowcill Street side of the row. At the south-western side, each cellar had a small cellar-level alley in front of it, which was aligned north-west/south-east along the front of the houses, before turning north-east to provide access into the cellars fronting Cowcill Street. This suggests that steps led down to the south-western cellars, affording separate access into each cellar, and raising the possibility that they may have been used as individual dwellings, separate from the overlying floors of the house. However, this could not be tested archaeologically, as a large amount of asbestos sheeting that had been dumped into the backfill of the cellar precluded its excavation. Nevertheless, it was clear that each cellar had a fireplace, indicative of the rooms being intended for accommodation. The fabric of the cellars and their fireplaces comprised hand-made bricks in a lime-based mortar, consistent with an early/mid-nineteenth-century construction date rather than a later nineteenth-century remodelling. It is uncertain, however, whether these buildings were actually used for domestic accommodation originally, as the documentary research has provided compelling evidence for the existence of the Cowcill Street Brewery very shortly after the buildings had been erected. Their conversion for use as a brewery would not necessarily require much remodelling and, similarly, their conversion into houses following the closure of the brewery could potentially have been achieved without much structural alteration.
- 5.8.12 By the 1890s, the building comprised a row of three double-depth houses, which seemingly derived from merging the original back-to-back layout of two properties into one. It is likely that it was at this time the boilers were installed in the cellar, intended to provide domestic laundry facilities. This form of double-depth housing remained until their demolition during the late 1960s/early 1970s.
- 5.8.13 **Alleyway:** the alleyway giving access to all the rear yards and to Higher Cambridge Street and Cowcill Street appears to have begun to be defined by the rear of the house construction between 1818-9 and 1824. Although not present on the mapping until 1845, its initial line was determined by the rear of the house yards present at that time. By 1831, an alley was present at the south-east side of the houses, occupying the site of the music hall and leading from the rear of those houses to Cambridge Street. By 1845 the alleyway had been defined by the construction of all the buildings in study area. It ran from the south-eastern side of the site, between the houses at the south-west and the brewery at the north-east, ending at the rear yard wall of N^o 41 Boundary Street West.

- 5.8.14 Between 1849 and 1888, the alleyway had expanded further and split, turning one way to the north-east between the brewery building and the rear yard of the northern double-depth house, and another way to the south-west to the rear yard of the western double-depth house. It then turned to the north-west along the wall of N^o 41 Boundary Street West, and then turned south-west, terminating at a small communal square to the rear of N^o 45. By 1889, the south-western branch had been shortened, no longer entering the communal square but ending at the rear of N^o 43, and by 1908 rear yard walls had blocked off both branches of the alley so that it now ran between the music hall, the rear of N^o 41 Boundary Street West and the rear of N^o 2 Cowcill Street. By 1951, the alley within the study area had been blocked off entirely from the rest of the alleyway. Its area now comprised a narrow enclosed yard between the former music hall and the former brewery, with the alleyway now running north-west from Rosamond Street, and turning north-east to Cowcill Street.
- 5.8.15 It is not clear when the alley was first paved with flagstones, but the form suggests that it was during the 1840s. The large amount of asbestos sheeting present within the alley between the brewery building and the music hall probably resulted from a temporary chrysotile roof covering the former alleyway, presumably after it had been entirely blocked and incorporated into the works on the site of the former music hall.



Plate 52: The works to the rear of the former music hall shortly before demolition (courtesy of the Visual Resources Centre at MMU)

- 5.8.16 **Housing Quality:** the comparatively high-quality build of the houses suggests that they provided a better class of accommodation than workers' dwellings in the inner city areas, and this is borne out to some degree by the documentary evidence. From 1841 to 1911, the residents are mainly, although not exclusively, local, being listed as from Lancashire or Manchester, and very few of them were employed in the textile industries. Most of the listed professions were either sales people or craftsmen, such as a shoemaker, an organ builder and a cabinet maker. Each house appears to contain a single family, occasionally with a lodger, with no properties split into lodgings with multiple families. This would confirm that the cellars had not been used for the accommodation of individual households, as was common in the areas of low-quality housing in Manchester city centre. Nevertheless, there was certainly room for improvements in the standard of accommodation, particularly in respect of sanitation.
- 5.8.17 The remodelling of the houses in the second half of the nineteenth century was almost certainly effected in response to legislation that was introduced to address the sub-standard condition of much of the housing stock. Whilst previous efforts had been made to improve the health and conditions of the urban poor from the middle of the century, it was only in the final years of the nineteenth century that programmes of large-scale and relatively expensive urban regeneration were undertaken.
- 5.8.18 An important step forward in housing improvement was provided by the Manchester Borough Police Act of 1844, whereby all new houses were to be provided with a properly built privy, and all existing houses were to have one installed. Further legislation introduced in 1853 under the Manchester New Streets Act had sought to address specifically the problems of cellar dwellings. Renewed efforts commenced in 1867 with the introduction of the Manchester Waterworks and Improvement Act, which specified the minimum requirements for room sizes and window areas in dwellings, and also required that every new house had a yard at the rear, which had to be at least 70'². Importantly, the Act allowed buildings to be closed without the provision of compensation to their owners, an issue which had consistently been a sticking point in Manchester (Hylton 2003, 154). The enforcement of these new regulations was facilitated by the appointment of the first Medical Officer of Health, Dr John Leigh, by Manchester Council in 1868 as part of the Artisans' and Labourers' Dwellings Act (The Torrens Act) of that year, and the Building and Sanitary Regulations Committee then replaced the Health Committee.
- 5.8.19 Sanitation of workers' dwellings had become a major political issue by the mid-nineteenth century, as it had been identified as one of the main factors in the appalling mortality rates amongst the urban poor. As late as 1890 the Medical Officer for Health reported that he could find no other reason for these abnormally high rates of mortality than bad housing conditions (Pearlman 1956). The problem was brought to a head by the Public Health Act of 1875, which prohibited 'the conveyance of sewage and filth water into any natural water course', and the 1876 River Pollution Prevention Act, which strengthened the earlier Act by prohibiting 'drainage and the putting of solid materials into streams'.

- 5.8.20 In 1875, the Artisans' and Labourers' Dwellings Improvement Act was introduced to provide the mechanism of slum clearance, the first act of its kind, as others, such as the 1868 Torrens Act, only dealt with individual buildings (Pearlman 1956, 28). Finally, in 1890, the Artisans' and Labourers' Dwellings Improvement Act was reconsolidated, so that the council were to take responsibility for the construction of new dwellings. Slum clearance and regeneration then began in earnest in Manchester in the 1890s, almost 20 years after the government had envisaged it (*op cit*, 34). However, at the end of the nineteenth century, although approximately 6000 houses had been cleared, less than 3000 replacements had been built, resulting in a continued problem of overcrowding (*op cit*, 37).
- 5.8.21 The improvement in the housing stock in Manchester by the early Edwardian period is depicted on a plan produced in 1904 for the Citizens' Association for Manchester (Plate 53). Sub-standard housing, referred to as 'slum dwellings', are shown on the plan in dark brown which, despite the improvements implements to the sanitation, seems to include the present study area.

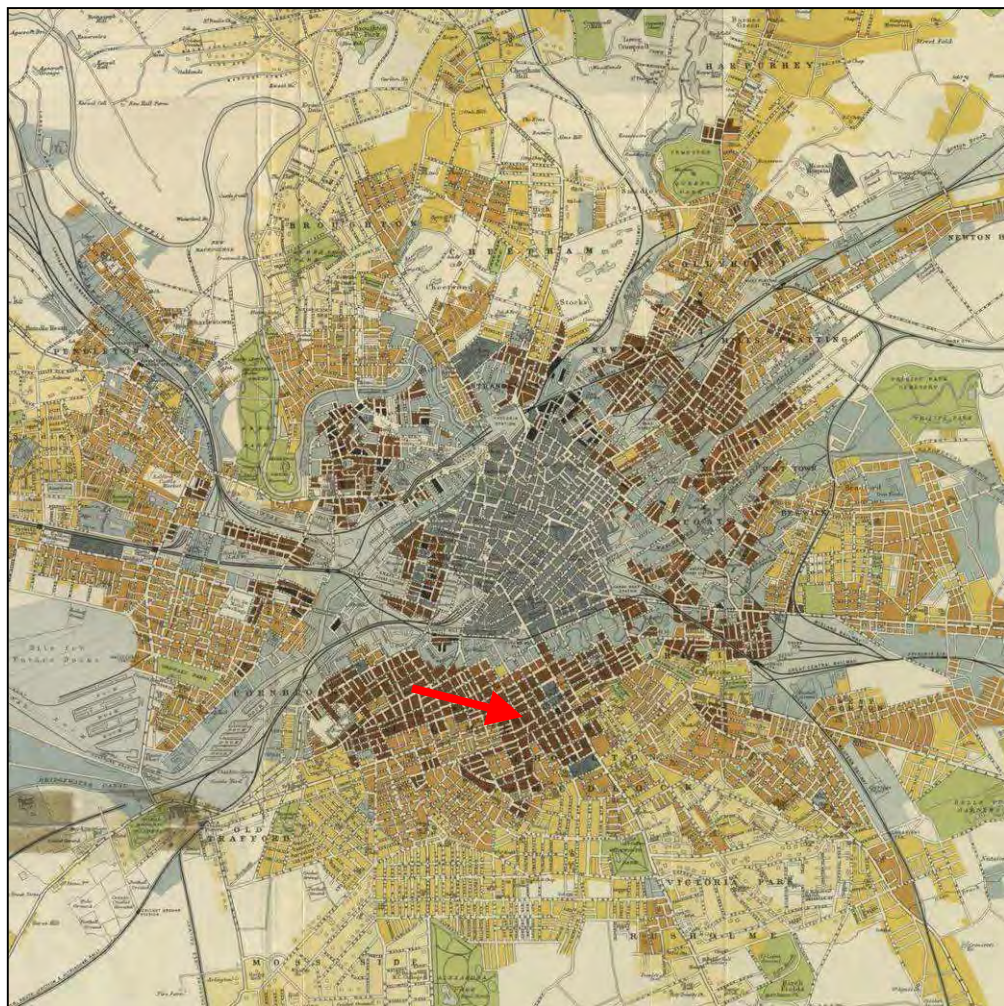


Plate 53: Citizens' Association of Manchester map of 1904, showing the distribution of slum property in the city (marked in dark brown). The red arrow marks the present study area

5.8.22 Improvements within individual properties are often recorded (*eg* OA North 2006; OA North 2007; Miller *et al* 2010), and have even be seen at municipal level (OA North 2008). Archaeological excavation of workers' housing on George Leigh Street in Ancoats, for instance, charted the demolition of blocks of houses in the 1890s, presumably to allow some improvement in air and light quality for the remaining properties. These houses also received new rear yards with outhouses, almost certainly containing a water closet, that were probably intended to reduce the spread of infection that was rife in areas of such close-quarter living (OA North 2008). The excavations carried out in 2009 on Miller Street in the Shudehill area of Manchester city centre examined the upgrading of the sanitation and drainage systems over a much larger area, and revealed quite extraordinary levels of disruption to individual properties, with large and often deep drains being excavated not only in yards and under pavements and passageways, as seen previously, but also beneath cellars, seen on both Charter Street and Angel Street (OA North 2011). The excavation of the properties in the present study area has provided a similar picture, with major remodelling of the existing housing stock to improve the sanitary conditions, and particularly the installation of laundry facilities in the cellars. Similar improvements have been recorded in workers' housing on Lawson Street, a short distance to the east (OA North 2013b).

6. CURATION AND CONSERVATION

6.1 RECIPIENT MUSEUM

- 6.1.1 The Museum of Science and Industry in Manchester has been nominated as the ultimate repository for the finds:

Museum of Science and Industry in Manchester,
Liverpool Road,
Manchester

6.2 CONSERVATION

- 6.2.1 There are no conservation requirements.

6.3 STORAGE

- 6.3.1 The complete project archive, which will include written records, plans, digital photographs, and artefacts, will be prepared for long-term storage following the guidelines set out in *Environmental standards for the permanent storage of excavated material from archaeological sites* (UKIC 1984, Conservation Guidelines 3), and *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990).

6.4 DISSEMINATION

- 6.4.1 The complete results obtained from the archaeological investigation are incorporated in this final excavation report. In addition to MMU, copies of the report will be forwarded to the Museum of Science and Industry in Manchester, Manchester City Council Planning Department, and the Greater Manchester Historic Environment Record.
- 6.4.2 The issue of the publication of archaeological reports and public accessibility to data has been stressed in the North West Region Archaeological Research Framework (Brennand 2007). Whilst this is a problem for the entire archaeological community, the visual nature of industrial period remains, and its link to the present population, increases the significance of prompt publication of studies of this nature. A summary of the results obtained from the excavation has been forwarded to *Post-Medieval Archaeology* for inclusion in their annual published compilation of fieldwork carried out on post-medieval sites in Britain and Ireland.
- 6.4.3 By way of providing a physical reminder of the site's rich heritage, the final design for the new building is currently being reconsidered to investigate the practicalities of enabling one of the excavated cellars to be retained *in-situ* and open to public view through a glass floor. Should this prove possible, interpretive material will be included with the displayed remains.

6.5 PUBLIC OPEN DAY

- 6.5.1 Upon completion of the main stage of the excavation, a public open day was held. This included guided tours around the exposed archaeological remains, together with displays of the artefacts discovered, and information boards containing historical mapping of the site and the results obtained from historical research.

BIBLIOGRAPHY

PRIMARY SOURCES

Maps

W Johnson's Map of the Parish of Manchester, surveyed 1818-19, published 1820

W Swire's Map of Manchester and its Environs, 1824

OS 6in First Edition Lancashire sheet 104, surveyed 1845, published 1848

OS 60in to 1 mile, Manchester and Salford sheet 38, surveyed 1844, published 1851

OS Manchester and Salford 5ft to 1 mile sheet 39, surveyed 1849, published 1851

OS 1:2500 First Edition, Lancashire sheet CIV.10 surveyed 1888-9, published 1896

OS 10ft to 1 mile First Edition 1891, sheet CIV.10.25, surveyed 1888

OS 10ft to 1 mile, Lancashire, Manchester, sheet CIV.10.25, published 1891

OS 1:2500 Edition of 1908, Lancashire sheet CIV.10, revised 1905

OS 10ft to 1 mile, Lancashire, Manchester, sheet CIV.10.25, revised 1908

OS 1:2500 Edition of 1922, Lancashire sheet CIV.10, revised 1915

OS 1:2500 Revision of 1932, Lancashire sheet CIV.10, revised 1932, published 1936

Trade Directories

Pigot J & Son 1838 *General, Classified and Street Directory of Manchester and Salford*.

Pigot J & Slater I 1841 *Classified, Commercial Directory of Manchester and Salford*.

Pigot J & Slater I 1843 *General and Classified Directory and Street Register of Manchester and Salford*.

Slater I 1845 *General and Classified Directory and Street Register of Manchester and Salford*.

Slater I 1850 *General and Classified Directory and Street Register of Manchester and Salford*.

Slater I 1851 *Alphabetical and Classified Directory of Manchester and Salford*.

Slater I 1852 *General and Classified Directory and Street Register of Manchester and Salford*.

Newspapers

Manchester Guardian, 1 October 1853

Rate Books and Census

Census returns for Chorlton-upon-Medlock, 1841, 1861-1901.

Rate books for Chorlton-upon-Medlock, 1835-55, 1860, 1870, 1880 (Manchester City Library Rate Book microfilms 67-72, 75, 81, 89).

SECONDARY SOURCES

Arrowsmith, P, 2012 *Manchester Metropolitan University: Archaeological Desk-based Assessment*, unpubl rep

Bradshaw, LD, 1985 *Origins of Street Names in the City Centre of Manchester*, Radcliffe

Brumhead, D, and Wyke, T, nd *A Walk round All Saints*, Manchester Polytechnic

Farrer, W, and Brownbill, J (eds), 1911 *Victoria History of the County of Lancaster*, **4**, London

Gray, SM, 1884 *Proposed Plan for a Sewerage System, and for the Disposal of the Sewage of the City of Providence*, London

Hylton, S, 2003 *A History of Manchester*, Chichester

Kenyon, D, 1991 *The Origins of Lancashire*, Manchester

Lloyd-Jones, R, and Lewis, MJ, 1993 Housing Factory Works: Ancoats in the Early 19th Century, *Manchester Region Hist Rev*, **7**, 33-6

Makepeace, C, 1995 *Looking Back at Hulme, Moss Side, Chorlton on Medlock and Ardwick*, Altrincham

Miller, I, and Wild, C, 2010 Piccadilly Place: Uncovering Manchester's Industrial Origins, *Greater Manchester's Past Revealed*, **1**, Lancaster

Moore, Colonel ECS, 1909 *Conservancy Systems, Sanitary Engineering*, Volume **I**, 3rd edition, Silcock, EJ, rev, Philadelphia

Nevell, M 2008 *Manchester: The Hidden History*, Stroud

OA North, 2006 *Piccadilly Place, Manchester: Archaeological Excavation*, unpubl rep

OA North, 2007 *32-38 Oldham Road, Ancoats, Manchester: Archaeological Buildings Investigation*, unpubl rep

OA North, 2008 *George Leigh Street, Ancoats, Manchester: Archaeological Excavation*, unpubl rep

OA North, 2011 *Co-operative Headquarters, Miller Street, Manchester: Archaeological Excavation*, unpubl rep

OA North 2013a *MMU Students' Union, Higher Chatham Street, Manchester: Archaeological Evaluation*, unpubl rep

OA North, 2013b *National Graphene Institute, Booth Street East, Manchester: Archaeological Excavation*, unpubl rep

Parkinson-Bailey, JJ, 2000 *Manchester: An Architectural History*, Manchester

Pearlman, W, 1956 *The Dwellings of Manchester*, unpubl RIBA thesis (MCL/MF 352)

Platt, HL, 2005 *Shock Cities: The Environmental Transformation and Reform of Manchester and Chicago*, London

Potts, B, 1984 *The Old Pubs of Chorlton-upon-Medlock, Manchester*, Swinton

Stanbridge, HH, 1976 *History of Sewage Treatment in Britain*, Maidstone

Wyke, T, and Rudyard, N, 1994 *Manchester Theatres*, Manchester

Vogele, J, 1998 *Urban Mortality Change in Britain and Germany, 1870-1910*, Liverpool

APPENDIX 1: WRITTEN SCHEME OF INVESTIGATION

May 2012

Oxford
Archaeology
North

MMU STUDENTS' UNION, HIGHER CHATHAM STREET, MANCHESTER



ARCHAEOLOGICAL EXCAVATION

Proposals

The following Written Scheme of Investigation is offered in response to a request from Mr Damian Smith, acting on behalf of Manchester Metropolitan University, for an archaeological excavation in advance of the proposed development of land bounded by Higher Cambridge Street, Rosamond Street West, Higher Chatham Street, and Boundary Street in Manchester.

1. BACKGROUND

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Manchester Metropolitan University (MMU) is developing proposals for a new Students' Union on land bounded by Higher Cambridge Street, Rosamond Street West, Higher Chatham Street, and Boundary Street, on the southern fringe of Manchester city centre. The land is used currently as a car park, although it was agricultural land on the south of Boundary Lane until the early nineteenth century. Thereafter, it was developed as part of rapid expansion of the township of Chorlton-on-Medlock. By the mid-nineteenth century, the area had been developed largely to accommodate workers' housing, but also included a small brewery.
- 1.1.2 The construction works required for the proposed development will necessitate considerable earth-moving works, which will inevitably have a negative impact on any buried archaeological remains. The archaeological potential of the site has been highlighted by a desk-based assessment produced by Dr Peter Arrowsmith in November 2012. This comprehensive study showed that the site had been occupied during the nineteenth century by various structures, largely comprising double-depth and some single-depth properties on Boundary Street West and Rosamond Street West. The desk-based assessment concluded that, in the first instance, the site merited intrusive evaluation by archaeological trial trenching.
- 1.1.3 In the light of this recommendation, the Greater Manchester Archaeological Advisory Service (GMAAS), which provides archaeological planning advice to Manchester City Council, recommended that four targeted trenches were excavated across the site. The trenches were intended to identify and characterise the surviving evidence for buried archaeological remains, and allow an informed decision to be reached regarding the need for further excavation to record buried remains that may be destroyed during the course of development groundworks.
- 1.1.4 The evaluation trenches were excavated in April 2013, and demonstrated conclusively that well-preserved buried remains of archaeological interest survived *in-situ*. These remains will be destroyed during the course of the proposed development, which necessitates the removal of buried obstructions. Following consultation with the Heritage Management Director with GMAAS, it was recommended that further archaeological investigation was merited in advance of development. This is intended to provide a detailed record of the buried remains, and mitigate their ultimate loss during the course of the development.
- 1.1.5 This Written Scheme of Investigation (WSI) has been formulated to meet the requirements of GMAAS for further archaeological excavation of the site.

1.2 OXFORD ARCHAEOLOGY

1.2.1 Oxford Archaeology (OA), which is an educational charity under the guidance of a board of trustees, has over 30 years of experience in professional archaeology, and can provide a professional and cost-effective service. We are the largest employer of archaeologists in the country (we currently have more than 200 members of staff), and can thus deploy considerable resources with extensive experience to deal with any archaeological obligations you or your clients may have. We have offices in Lancaster, Oxford and Cambridge, trading as Oxford Archaeology North (OA North), Oxford Archaeology South (OA South) and Oxford Archaeology East (OA East) respectively, enabling us to provide a truly nationwide service. OA is an Institute for Archaeologists Registered Organisation (No 17). All work on the project will be undertaken in accordance with relevant professional standards, including:

- IfA's *Code of Conduct*, (1999); *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*, (1999); *Standard and Guidance for Archaeological Evaluations*, (1999); *Standard and Guidance for Archaeological Watching Briefs*, (1999);
- English Heritage's *Management of Archaeological Projects (MAP2)*, 1991.
- *The European Association of Archaeologists Principles of Conduct for Archaeologists Involved in Contract Archaeological Work* (1998).

1.2.2 Given the geographical location of Manchester, it is intended to co-ordinate the project from our northern office in Lancaster, which has unrivalled experience of working on post-medieval sites, and is recognised as one of the leading archaeological units in the country with regard to dealing with Industrial Period archaeological projects. In recent years, OA North has undertaken numerous desk-based assessments, evaluations and excavations of former industrial sites and workers' housing in Manchester and Salford, providing us with specialist expertise in dealing with this type of site. Most recently, OA North carried out the initial archaeological evaluation of the present site.

2. AIMS AND OBJECTIVES

2.1 ACADEMIC AIMS

- 2.1.1 The main research aim of the investigation, given the commercial nature of the proposed scheme, will be to expose and record the buried remains of archaeological interest within the specified areas, and generate a complete record of the remains to mitigate their ultimate loss as part of the proposed development.

2.2 OBJECTIVES

- 2.2.1 The following programme has been designed to preserve by record any archaeological deposits or features that may be present that will be impacted on by the proposed development. The information will be finally disseminated through the deposition of the archive at The Museum of Science and Industry in Manchester, and a final report at the Greater Manchester Historic Environment Record. The work will be carried out in line with current IfA guidelines, and in line with the IfA Code of Conduct. The principal objectives of the project may be achieved via the following stages:

- **Archaeological Excavation:** the excavation of two areas, which will be targeted on the buried remains of archaeological interest that were exposed in the evaluation trenches;
- **Historical research:** a programme of historical research will be carried out to supplement the information gathered during a desk-based assessment for the site;
- **Post-excavation and Report Production:** the site records, finds and any samples from the excavation programme outlined below will form a checked and ordered site archive as outlined in the English Heritage guideline document *Management of Archaeological Projects* (2nd edition, 1991). Following compilation of the project archive a report will be produced;
- **Archive Deposition:** the results of the excavation will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project;

- 2.2.2 It is anticipated that the archaeological investigation will address several of the initiatives for archaeological research of the industrial and modern periods stated in the current *Archaeological Research Framework for North West England* (Newman and McNeil 2007; McNeil and Newman 2007). In particular:

- *Initiative 7.6:* 'A study of the development of workers' housing in Greater Manchester should be undertaken to examine the development of different housing types...' (McNeil and Newman 2007, 139);

- *Initiative 7.7*: 'Study the material culture of industrial workers' households...' (*ibid*);
- *Initiative 7.41*: 'The retention of later period artefacts and their routine analysis as part of all archaeological excavation projects' (*op cit*, 156).

2.2.3 In addition, the investigation may address the following research objectives:

- establish the plan form, chronology, and dating for a group of urban workers' cottages;
- examine the material culture associated with urban workers' cottages;
- establish the character of the early nineteenth-century brewery;
- establish the character of the late nineteenth-century music hall.

2.2.4 In order to address the aims and objective outlined above, it is proposed that two areas will be targeted for excavation (Figure 1).

3. METHOD STATEMENT

3.1 SITE SET-UP

3.1.1 The following work programme is submitted in line with the aims and objectives summarised above. As an initial stage in the programme of works, the two areas targeted for excavation will be marked out, and CAT-Scan will be carried out to locate any services present within the excavation areas.

- Area 1 will measure approximately 22 x 21m, and will investigate the footprint of the Cowcill Street Brewery, and associated store house, and a range of early to mid-nineteenth-century workers' houses, two of which were converted subsequently to a music hall;
- Area 2 will measure approximately 12 x 4m, and will investigate the footprint of a single domestic property depicted on the Ordnance Survey map of 1850.

3.2 FIELDWORK

3.2.1 Excavation of the uppermost levels of modern overburden/demolition material will be undertaken by a machine fitted with a toothless ditching bucket to the top of the first significant archaeological level. It is envisaged that a c 15-tonne rubber-wheeled excavator will be employed for this purpose. The work will be supervised closely by a suitably experienced archaeologist. Spoil from the excavation will be stored in a stockpile, and then returned to the excavation area upon completion of the archaeological works.

3.2.2 Machine excavation will then be used to define carefully the extent of any surviving structures and other remains. Thereafter, structural remains will be cleaned manually to define their extent, nature, form and function.

3.2.3 All information identified in the course of the site works will be recorded stratigraphically, using a system adapted from that used by the Centre for Archaeology Service of English Heritage. Results of the excavation will be recorded on *pro-forma* context sheets, and will be accompanied with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.

3.2.4 A full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the overall site at all stages of the excavation will be generated. Photography will be undertaken using 35mm cameras on archivable black and white print film, and all frames will include a visible, graduated metric scale. Extensive use of digital photography will also be undertaken throughout the course of the fieldwork for presentation purposes. Photograph records will be maintained on special photographic *pro-forma* sheets.

- 3.2.5 The precise location of the excavation areas, and the position of all archaeological structures encountered, will be surveyed by EDM tacheometry using a total station linked to a pen computer data logger. This process will generate scaled plans within AutoCAD software, which will then be subject to manual survey enhancement, as appropriate. The drawings will be generated at an accuracy appropriate for 1:20 scale, but can be output at any scale required. Sections will be manually drafted as appropriate at a scale of 1:10. All information will be tied in to Ordnance Datum.
- 3.2.6 Human remains are not expected to be present, but if they are found they will, if possible, be left *in-situ* covered and protected. If removal is necessary, then the relevant Home Office permission will be sought, and the removal of such remains will be carried out with due care and sensitivity as required by the *Burials Act 1857*.
- 3.2.7 Any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996.
- 3.2.8 ***Finds policy:*** finds recovery and sampling programmes will be in accordance with best practice (following current Institute for Archaeologists guidelines) and subject to expert advice in order to minimise deterioration. OA has close contact with Ancient Monuments Laboratory staff at the University of Durham and, in addition, employs in-house artefact and palaeoecology specialists, with considerable expertise in the investigation, excavation, and finds management of sites of all periods and types, who are readily available for consultation. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC). Emergency access to conservation facilities is maintained by OA North with the Department of Archaeology, the University of Durham. Samples will also be collected for technological, pedological and chronological analysis as appropriate.
- 3.2.9 ***Environmental Sampling:*** the strategy for palaeo-environmental sampling will be developed on site, in consultation with appropriate specialists, as necessary. The environmental sampling strategy will therefore evolve from a discussion between those specialists and the field team and will be in accordance with current best practice.
- 3.2.10 In broad terms, however, the sampling strategy will be aimed at recovering palaeo-botanical, palaeo-zoological and pedological evidence. It is anticipated that environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features, should any such features be identified during the course of the excavation.

3.3 POST-EXCAVATION

3.3.1 Post-excavation work will comprise the following:

- checking of drawn and written records during and on completion of fieldwork;
- production of a stratigraphic matrix of the archaeological deposits and features present on the site, if appropriate;
- cataloguing of photographic material, which will be mounted appropriately;
- cleaning, bagging and labelling of finds according to the individual deposits from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to an appropriate Conservation Laboratory. Finds will be identified and dated by appropriate specialists;
- assessment of any palaeo-environmental material and/or technological residues recovered will be undertaken, providing recommendations for further analysis.

3.4 ARCHIVE/REPORT

3.4.1 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991), and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long-Term Storage* (Walker 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the CSMR (the index to the archive and a copy of the report).

3.4.2 The Arts and Humanities Data Service (AHDS) online database project *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

3.4.3 **Report:** a draft copy of a written synthetic report will be submitted for comment to the archaeological curator (GMAAS) for comment within eight weeks of completion of the fieldwork. The report will include:

- a title page detailing site address, NGR, author/originating body, client's name and address;
- full content's listing;
- a non-technical summary of the findings of the fieldwork;
- a description of the archaeological background;
- a detailed account of the historical development of the site, accompanied with map regression analysis;
- a description of the topography and geology of the study area;

- a description of the methodologies used during the fieldwork;
- a description of the findings of the fieldwork;
- detailed plans of the excavated trenches, showing the archaeological features exposed;
- an overall phased plan with sections of the excavated archaeological features;
- interpretation of the archaeological features exposed and their context within the surrounding landscape;
- specialist analysis reports on the artefactual/ecofactual/industrial remains from the site;
- appropriate photographs of specific archaeological features;
- a consideration of the importance of the archaeological remains present on the site in local, regional and national terms.

3.5 OTHER MATTERS

3.5.1 **Health and Safety:** full regard will be given to all constraints during the course of the project. OA North provides a Health and Safety Statement for all projects and maintains a Safety Policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers.

3.5.2 OA North undertakes to safeguard, so far as is reasonably practicable, the health, safety and welfare of its staff and of others who may be affected by our work. This applies in particular to providing and maintaining suitable premises, ensuring the safety of all equipment supplied by the Company, and providing all reasonable safeguards and precautions against accidents. OA North will also take all reasonable steps to ensure the health and safety of all persons not in their employment, such as volunteers, students, visitors, and members of the public (this includes trespassers). OA North will ensure, as far as is reasonably practicable, that no one suffers injury because of dangers arising from the state of the premises, or things done, or omitted to be done, on the premises.

3.5.3 OA North is fully familiar with and will comply with all current and relevant legislation, including, but not limited to:

- The Health and Safety at Work Act (1974);
- Management of Health and Safety at Work Regulations (1999);
- Manual Handling Operations Regulations 1992 (as amended in 2002);
- The Construction (Design and Management) Regulations (2007);
- The Control of Asbestos Regulations (2006);
- Confined Spaces Regulations (1997);
- The Workplace (Health, Safety and Welfare) Regulations (1992);

- Construction (Health, Safety and Welfare) Regulations (1996);
- The Work at Height Regulations (2005);
- The Control of Substances Hazardous to Health Regulations (2002);
- The Health and Safety (First-Aid) Regulations (1981);
- The Regulatory Reform (Fire Safety) Order (2005);
- The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (1995);
- The Provision and Use of Work Equipment Regulations (1998);
- Lifting Operations and Lifting Equipment Regulations (1998).

4. WORK TIMETABLE

- 4.1 A three-week period has been allowed to carry out the excavation of the targeted areas.
- 4.2 A draft report will be submitted for comment within eight weeks of the completion of all element of the fieldwork.
- 4.3 OA North can execute projects at very short notice once an agreement has been signed with the Client.

5. STAFFING PROPOSALS

- 5.1 The project will be under the overall charge of **Ian Miller BA FSA** (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 5.2 The excavation will be directed by **Graham Mottershead** (OA North Project Officer). Graham has developed considerable expertise of industrial buildings and excavating historic industrial sites, particularly in Manchester. Most recently, Graham directed the archaeological evaluation of the site.
- 5.3 Assessment of any finds recovered from the excavation will be undertaken by OA North's in-house finds specialist **Christine Howard-Davis BA** (OA North Finds Manager). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England, and is a recognised expert in the analysis of post-medieval artefacts.

6. MONITORING

- 6.1 Monitoring meetings will be established with the Client and the archaeological curator at the outset of the project. The aims of monitoring are to ensure that the archaeological works are undertaken within the limits set by the Project Design, and to the satisfaction of the curatorial archaeologist at GMAAS. The curatorial archaeologist will be given at least five days' notice of when work is due to commence, and will be free to visit the site by prior arrangement with the project director.

APPENDIX 2: DETAIL OF OCCUPANTS

Table 1: Occupants of Nos 1-10 Cowcill Street, 1837-1901

Year/Source	No 2-4	No 6	No 8	No 10
1835 Rate Book	Not listed	Not listed		
1837 Rate Book		Own: Beverley Occ: Thomas Brailsford & William Shepley Lingard, Brewery		
1838 Dir		Edward & Thomas Reeves Whitehead, brewers, Cowcill Street		
1838 Rate Book		Own: Edward Beverley Occ: Thomas Reeves Whitehead, Brewery, Stables & Yard		
1839 Rate Book		Own: Edward Beverley Occ: Edward & Thomas Reeves Whitehead, Brewery, Stables & Yard		
1840 Rate Book	Own: James Yates Occ: James Yates, Shippon & Yard	Own: Edward Beverley Occ: Edward & Thomas Reeves Whitehead, Brewery, Stables & Yard		
1841 Dir		Thomas Reeves Whitehead, brewer, 4 Cowcill Street		

Year/Source	No 2-4	No 6	No 8	No 10
1841 Rate Book	Own: James Yates Occ: James Yates, Shippons & Yard	Own: Edward Beverley Occ: James Royle, Brewery, Stables & Yard, 4 Cowcill Street		
1842 Rate Book	Own: James Yates Occ: James Yates, Shippon & Yard, 4 Cowcill Street	Own: Edward Beverley Occ: James Royle, Brewery, Stables & Yard, 6 Cowcill Street		
1843 Dir		Not listed		
1843 Rate Book	Own: James Yates Occ: James Yates, Shippon & Yard, 2 Cowcill Street	Own: Edward Beverley Occ: James Jessop, Brewery, Stables &c, 4 Cowcill Street		
1844 Rate Book	Own: Jackson Occ: James Jessop, Shippon & Yard, 2 Cowcill Street	Own: Baldwin Occ: James Jessop, Brewery & Stable, 4 Cowcill Street		
1845 Dir		James Jessop, brewer, 6 Cowcill Street		
1845 Rate Book	Own: William Jackson Occ: James Jessop, Shippon & Yard, Cowcill Street	Own: Baldwin Occ: James Jessop, Brewery & Stable, Cowcill Street		
1846 Rate Book	Own: William Jackson Occ: John Jessop, Shippon & Yard, Cowcill Street	Own: Baldwin Occ: John Jessop, Brewery & Stable, Cowcill Street		

Year/Source	No 2-4	No 6	No 8	No 10
1847 Rate Book	Own: William Jackson Occ: John Jessop, Shippon & Yard, Cowcill Street	Own: Thomas Baldwin Occ: John Jessop, Brewery & Stable, Cowcill Street		
1848 Dir		Not listed		
1848 Rate Book	Own: William Jackson Occ: - Shippon & Yard, Cowcill Street	Own: Thomas Baldwin Occ: - Brewery & Stable, Cowcill Street		
1849 Rate Book	Own: William Jackson Occ: Joseph Wood House & Yard, 2 Cowcill Street	Own: Thomas Baldwin Occ: Thomas Clowes Brewery & Stable, 4 Cowcill Street		
1850 Dir	Joseph Woods, coal dealer, 2 Cowcill Street	Thomas Clowes, brewer, 4 Cowcill Street		
1850 Rate Book	Own: William Jackson Occ: John Knight, House & Yard, 2 Cowcill Street	Own: Thomas Baldwin Occ: Thomas Clowes, Brewery & Stables, 4 Cowcill Street		
1851 Dir		Thomas Clowes, brewer, 4 Cowcill Street		
1852 Dir		Thomas Clowes, brewer, Boundary Street		
1852 Rate Book	Own: W Jackson Occ: Samuel Whitehead, House & Yard, 2 Cowcill Street	Own: Thomas Baldwin Occ: Thomas Clowes, Brewery & Stable, 4 Cowcill Street		

Year/Source	No 2-4	No 6	No 8	No 10
1853 Rate Book	Own: William Jackson Occ: Walter Lea, House & Yard, 2 Cowcill Street	Own: Thomas Baldwin Occ: Thomas Lyth, Brewery & Stable, 4 Cowcill Street		
1854 Rate Book	Own: William Jackson Occ: Walter Lea, House & Yard, 2 Cowcill Street	Own: Thomas Baldwin Occ: - House, Cowcill Street	Own: Thomas Baldwin Occ: - House, Cowcill Street	Own: Thomas Baldwin Occ: - House, Cowcill Street
1855 Rate Book	Own: William Jackson Occ: Walter Lea, House & Yard, 2 Cowcill Street	Own: T Baldwin Occ: James Peddic House, Cowcill Street	Own: T Baldwin Occ: George Lamb House, Cowcill Street	Own: T Baldwin Occ: Jane Shinley House, Cowcill Street
1860 Rate Book	Own: Pye Occ: Joseph Pye, House & Yard, 2 Cowcill Street	Own: T Baldwin Occ: Jane Jones, House, 4 Cowcill Street	Own: T Baldwin Occ: George Lamb House, 6 Cowcill Street	Own: T Baldwin Occ: Levi Whitehead, House, 8 Cowcill Street
1861 Census See also Table 3	Richard Lear, 2 Cowcill Street; Uninhabited, 4 Cowcill Street	Jane Edward, 6 Cowcill Street		Levi Whitehead, 10 Cowcill Street
1870 Rate Book	Own: Exors J Pye Occ: William Aikin, House, 2 Cowcill Street; Occ: Francis Hughes Yard, 2 Cowcill Street	Own: Exors Thomas Baldwin Occ: Thomas Shepherd Hood, House, 6 Cowcill Street	Own: Exors Thomas Baldwin Occ: William Done, House, 8 Cowcill Street	Own: Exors Thomas Baldwin Occ: Robert Whitehead, House, 10 Cowcill Street

Year/Source	No 2-4	No 6	No 8	No 10
1871 Census See also Table 3	Richard Lear, 2 Cowcill Street; Uninhabited, 4 Cowcill Street	Colin Renfrew, 6 Cowcill Street	William H Done, 8 Cowcill Street	Robert Whitehead, 10 Cowcill Street
1880 Rate Book	Own: Richard Greenall Occ: Samuel Thornhill House & Yard, 4 Cowcill Street	Own: T & W Baldwin Occ: Henry Nixon, House, 6 Cowcill Street	Own: T & W Baldwin Occ: Harper, House, 6 Cowcill Street	Own: T & W Baldwin Occ: Robert Whitehead, House, 6 Cowcill Street
1881 Census See also Table 3	Sidney Mullock, 2 Cowcill Street; Stables, 4 Cowcill Street	Henry Nixon, 6 Cowcill Street	Martin Williamson, 8 Cowcill Street	Robert Whitehead, 10 Cowcill Street
1891 Census See also Table 3	Uninhabited, 2 Cowcill Street; Uninhabited, 4 Cowcill Street	Charlotte Ralphs, 6 Cowcill Street	Samuel Scott, 8 Cowcill Street	Dominic Degnan, 10 Cowcill Street
1901 Census See also Table 3	Isaac Bellis, 2 Cowcill Street	Alfred E Foden; Fred Copsey, 6 Cowcill Street	Edwin Shepley, 8 Cowcill Street	Robert Paton, 10 Cowcill Street

Table 2: Occupants of 39-43 Boundary Street West, 1837-1901

Year/Source	39	41	43
1835 Rate Book		Not listed	Not listed
1837 Rate Book		Own: James Yates Occ: Robert Weldon, 65 Boundary Street West	Own: James Yates Occ: James Thompson, 67 Boundary Street West
1841 Census See also Table 4		John Deakin, Boundary Street West	Elizabeth Johnson, Boundary Street West
1841 Rate Book		Own: Yates Occ: Deakin, 65 Boundary Street West	Own: Yates Occ: George Chalinor, 67 Boundary Street West
1845Dir			James Mellor, pattern designer, 67 Boundary Street West
1845 Rate Book		Own: Yates Occ: John Schofield, 65 Boundary Street West	Own: Yates Occ: James Miller, 67 Boundary Street West
1846 Rate Book		Own: William Jackson Occ: John Schofield, 65 Boundary Street West	Own: William Jackson Occ: Agnes Wright, 67 Boundary Street West
1848 Rate Book		Own: William Jackson Occ: William Johnson, 65 Boundary Street West	Own: William Jackson Occ: Agnes Wright, 67 Boundary Street West

Year/Source	39	41	43
1849 Rate Book	Own: William Jackson Occ: William Stott, 67 Boundary Street West	Own: William Jackson Occ: William Johnson, 67 Boundary Street West	Own: William Jackson Occ: Agnes Wright, 69 Boundary Street West
1850 Dir	William Stott, packer, 65 Boundary Street West		
1855 Rate Book	Own: William Jackson Occ: John Patterson, 39 Boundary Street West	Own: William Jackson Occ: John Boardman, 41 Boundary Street West	Own: William Jackson Occ: Richard Greenalls, 43 Boundary Street West
1860 Rate Book	Own: J Pye Occ: David Fletcher, 39 Boundary Street West	Own: J Pye Occ: Thomas Jones, 41 Boundary Street West	Own: J Pye Occ: Elizabeth Gun, 43 Boundary Street West
1861 Census See also Table 4	David Fletcher, 41 Boundary Street	Thomas Jones, 43 Boundary Street West	Elizabeth Gunn, 45 Boundary Street West
1870 Rate Book	Own: Exors J Pye Occ: Alfred Gunn, 39 Boundary Street West	Own: Exors J Pye Occ: Sarah Ann Bate, 41 Boundary Street West	Own: Exors J Pye Occ: William Wroe, 43 Boundary Street West
1871 Census See also Table 4	Harriet Williams, 39 Boundary Street West	Margaret Smith, 41 Boundary Street West	Maria Charlesworth, 43 Boundary Street West
1880 Rate Book	Own: Richard Greenall Occ: Michael McGrath, 39 Boundary Street West	Own: Richard Greenall Occ: William Plant, 41 Boundary Street West	Own: Richard Greenall Occ: William Wroe, 43 Boundary Street West

Year/Source	39	41	43
1881 Census See also Table 4	Benjamin Fiddler, 39 Boundary Street West	Robert Wardle, 41 Boundary Street West	William Wroe, 43 Boundary Street West
1891 Census See also Table 4	Mary Ann Cosgrave, 39 Boundary Street West	Richard Hesketh, 41 Boundary Street West	Edward Hall, 43 Boundary Street West
1901 Census See also Table 4	James Morris, 39 Boundary Street West	Peter Keany, 41 Boundary Street West	Albert Smith, 43 Boundary Street West

Table 3: Occupants of 2-10 Cowcill Street in Census Returns 1861-1901**1861**

Address	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
2 Cowcill Street	Richard Lear	Head	59	Overlooker of cotton mill	Salford
	Mary Lear	Wife	52	House works	Ireland
	Walter Lear	Son	30	Carter	Chorlton
	Peter Lear	Son	25		
4 Cowcill Street	Uninhabited				
6 Cowcill Street	Jane Edwards	Head	30	Charwoman	Holywell
	Catherine Grace	Visitor	22	Machine worker	Manchester
	Alsey Wright	Head	42	Carter's wife	Thelwall
	Ellen Wright	Daughter	18	Umbrella maker	Lymm
	Elizabeth Wright	Daughter	9	Scholar	Chorlton on Medlock
	Paper taken away				
10 Cowcill Street	Levi Whitehead	Head	44	Paper hanger	Ashton under Lyne
	Kate	Wife	44	House keeper	"
	Robert	Son	19	Paper hanger	"
	Mary Ann	Daughter	12		Manchester
	Hannah	Daughter	8		"
	Isabella	Daughter	3		"

1871

Address	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
2 Cowcill Street	William Aitkin	Head	29	Mechanic	Manchester
	Harriett	Wife	25	Housekeeper	"
	James	Son	6		"
	Mary	Daughter	4		"
	Jane	Daughter	2		"
4 Cowcill Street	Not listed				
6 Cowcill Street	Colin Renfrew	Head	61	Blacksmith	Scotland
	Catherine Brinley	Wife	33		"
	William Brinley	Son	7		Manchester
	Margret Brinley	Daughter	2		Bury
8 Cowcill Street	William H Done	Head	38	Brushmaker	Manchester
	Eliza Done	Wife	37	Serving cotton spool winder	Salford
	John T Caton	Nephew	19	Labourer	Manchester
10 Cowcill Street	Robert Whitehead	Head	29	Painter	Ashton under Lyne
	Maria Whitehead	Wife	28		Manchester
	Elizabeth Whitehead	Daughter	7		"
	Maria Whitehead	Daughter	5		"
	Levi Whitehead	Son	3		"
	Mary Whitehead	Sister	22	Dressmaker	"

1881

Address	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
2 Cowcill Street	Sidney Mullock	Head	22	Warehouseman	Manchester
	Emma Mullock	Wife	22		"
	Jessie Mullock	Daughter	2mths		"
	Thomas Hargreaves	Boarder	17	Warehouseman	"
4 Cowcill Street	Stables - uninhabited				
6 Cowcill Street	Henry Nixon	Head	30	Baker	Manchester
	Ellen Nixon	Wife	31		"
	Ada Nixon	Daughter	4		"
	Albert Nixon	Son	2		"
	John Henry Nixon	Son	1		"
8 Cowcill Street	Martin Williamson	Head	70	Plasterer's labourer	Clayton
	Mary Williamson	Wife	69	Laundress	Daresbury, Cheshire
10 Cowcill Street	Robert Whitehead	Head	39	Paper hanger	Ashton under Lyne
	Maria Whitehead	Wife	38		Manchester
	Elizabeth A Whitehead	Daughter	17	Warehouseman	"
	Maria Whitehead	Daughter	15		"
	Levi Whitehead	Son	13		"

1891

Address	No of Rooms Occupied	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
2 Cowcill Street		Uninhabited				
4 Cowcill Street		Uninhabited				
6 Cowcill Street	4	Charlotte Ralphs	Head	41	Braid tenter	Manchester
		John E Ralphs	Son	16	Cotton hooker	"
		Mary Ann Moreton	Lodger	40	Braid tenter	"
		Thomas Travis	Lodger	34	Cabdriver	"
8 Cowcill Street	4	Samuel Scott	Head	43	Paper hanger	Liverpool
		Olivia Scott	Wife	38	Piecer	Manchester
10 Cowcill Street	4	Dominic Degnan	Head	46	Painter	Manchester
		Sarah Degnan	Wife	45		"
		John Macnally	Lodger	41	Bricklayer	Liverpool
		William Carolon	Lodger	15	Blacksmith	Gorton
		Peter Murphy	Lodger	21	Shoemaker	Ireland
		Ada Hornby	Lodger	20	Barmaid	Manchester

1901

Address	No of Rooms Occupied	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
2 Cowcill Street	4	Isaac Bellis Margaret Bellis Elizabeth Bellis	Head Wife Boarder	66 59 68	Tailor	Ruabon Beaumaris
4 Cowcill Street		Not listed				
6 Cowcill Street	2	Alfred E Foden Lucy Foden Frank Foden	Head Wife Son	23 21 5mths	Printing machine man	Wellington, New Zealand Longsight Manchester
	2	Fred Copsey Isabella Copsey Elsie Copsey	Head Wife Daughter	26 21 8mths	Assistant metal work fitter	Manchester Downham Market, Norfolk Manchester
8 Cowcill Street	4	Edwin Shepley Amanda Shepley Frances Shepley Edith Shepley	Head Daughter Daughter Daughter	46 26 17 7	Cabinet maker Shop assistant	Manchester " " "
10 Cowcill Street	4	Robert Paton Bessie Paton Ellen Paton Annie Paton Jessie Paton	Head Wife Daughter Daughter Daughter	33 26 6 4 1	Porter, School of Art	Scotland Rochdale Manchester " "

Table 4: Occupants of 39-43 Boundary Street West in Census Returns, 1841, 1861-1901**1841**

Address	Occupants	Age	Occupation	Place of Birth
(41) Boundary Street West	John Deakin	20	Manufactor	Lancashire
	Ann Deakin	20		"
(43) Boundary Street West	Elizabeth Johnson	27	Female servant	
(45) Boundary Street West	James Taylor	30	Bookkeeper	Lancashire
	Mary Taylor	28		
	Hannah Gregory	13	Female servant	

1861

Address	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
41 Boundary Street West	David Fletcher	Head	46	Packer	Yorkshire
	Isabella Fletcher	Wife	40		[?] Lancashire
	B Fletcher	Son	7		Manchester
	F Fletcher	Son	4		"
	J Fletcher	Son	2		"
	William Law	Boarder	24		Rochdale
43 Boundary Street West	Thomas Jones	Head	29	Mechanic	Holywell
	Elizabeth	Daughter	5		Manchester
	William	Son	3		Thelwall
	John Edward	Son	1		Lymm
	Emma Edward	Wife	27		Chorlton on Medlock
45 Boundary Street West	Elizabeth Gunn	Head	48	Tailor Watch maker	Dereham
	James Gunn	Son	21		"
	William Gunn	Son	20		"
	Alfred Gunn		16		Wisbech

1871

Address	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
39 Boundary Street West	Harriet Williams	Widow	62	Dressmaker	Newcastle on Tyne
	Frederick Williams	Son	39	House painter	Salford
	John Jones	Lodger	24	Warehouseman	Manchester
	Sarah Ann Jones	Lodger	22		"
	Joseph Dunbar	Brother	13		"
41 Boundary Street West	Margaret Smith	Head	29	Housemaid	
	Joseph Smith	Son	12		
	Richard Smith	Son	15		
43 Boundary Street West	Maria Charlesworth	Head	51	Upholsterer	Cheadle, Cheshire
	Mary Ann McCall	Lodger	29	Charwoman	Manchester
	Martha McCall	Daughter	7		"

1881

Address	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
39 Boundary Street West	Benjamin Fiddler	Head	21	Plumber	Manchester
	Elizabeth Fiddler	Wife	21		"
	Jane Fiddler	Daughter	7mths		"
41 Boundary Street West	Robert Wardle	Head	55	Engine fitter	Manchester
	Mary Wardle	Wife	56	Dressmaker	Preston
	Annie Wardle	Daughter	20		Manchester
	James Wardle	Son	19		"
43 Boundary Street West	William Wroe	Head	64	Mechanics labourer	Manchester
	Elizabeth Wroe	Wife	68		Dearham, Norfolk

1891

Address	No of Rooms Occupied	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
39 Boundary Street West	4	Mary Ann Cosgrave	Head	60		Ireland
		Thomas Cosgrave	Son	26	Velvet finisher	"
		Mary Ann Cosgrave	Daughter	26		"
		Nettie Cosgrave	Daughter	21	Smallware weaver	"
		James Cosgrave	Son	24	Railway engine driver	"
41 Boundary Street West	4	Richard Hesketh	Head	52	Engine fitter	Salford
		Elizabeth Hesketh	Wife	49		Worcester
		Alexandra Fanny Hesketh	Daughter	19	Beed worker	Birmingham
		Gertrude Mary Hesketh	Daughter	11		Manchester
43 Boundary Street West	3	Edward Hall	Head	40	Warehouseman	Manchester
		Jane Hall	Wife	45		"

1901

Address	No of Rooms Occupied	Occupants	Relation to Head of Family	Age	Occupation	Place of Birth
39 Boundary Street West	3	James Morris	Head	58	Storekeeper	Gloucestershire
		Annie Morris	Wife	44		Herefordshire
41 Boundary Street West	4	Peter Keany	Head	35	Rubber worker	Manchester
		Elizabeth Keany	Wife	36		"
		Frances E Keany	Daughter	3		"
43 Boundary Street West	4	Albert Smith	Head	27	Storekeeper	Manchester
		Annie Smith	Wife	24		Leeds
		Thomas W Smith	Son	4		Manchester
		William Potts	Boarder	5		Wilmslow

APPENDIX 3: SUMMARY FINDS CATALOGUE

Context	Material	Category	No fragments present	Description	Period
1000	Ceramic	vessel	70	Nine fragments black-glazed redware, two fragments late grey stoneware, 59 fragments various refined white earthenwares, including willow pattern saucer and Keillers' marmalade jar dated to 1873 or after.	Mid-late nineteenth century on
1000	Ceramic	tobacco pipe	9	Two late bowls and seven stem fragments.	Nineteenth century
1001	Plastic	signage	3	Three large white plastic letters intended for signage.	Late twentieth century on
1001	Glass	vessel	8	Eight complete or almost complete bottles including a J and R Smith (of Morley) mineral water bottle with screw top and composition stopper.	Twentieth century
1002	Base metal	spoon	1	Electroplate teaspoon, maker's marks suggest Thomas White of Sheffield (1872-91). A stamped capital A indicates the plating to be of standard quality (2 gms silver per spoon).	Late nineteenth century
1002	Iron	horseshoe	1	Large worn horseshoe, countersunk nail holes and single calkin.	Late nineteenth century on
1003	Wood	carved	1	Gilt carved flower, probably from a decorative picture frame.	Nineteenth century
1004	Plastic	signage	3	Three large blue plastic letters intended for signage.	Late twentieth century on
1005	Stone	building material	3	One small fragment of stone mosaic, and two fragments of coloured marble veneers.	Nineteenth century on
1005	Ceramic	building material	2	Fragments of mottled brown fireplace tile embedded in cement. Single fragment of decorative tile, possibly Pilkingtons	Late nineteenth century on
1006	Base metal	earring	1	Small base metal earring for pierced ear.	Late twentieth century on

ILLUSTRATIONS

LIST OF FIGURES

Figure 1: Site location

Figure 2: Evaluation remains superimposed on the Ordnance Survey map of 1850

Figure 3: Plan of Area 1

Figure 4: Plan of Area 2

Figure 5: Phase plans

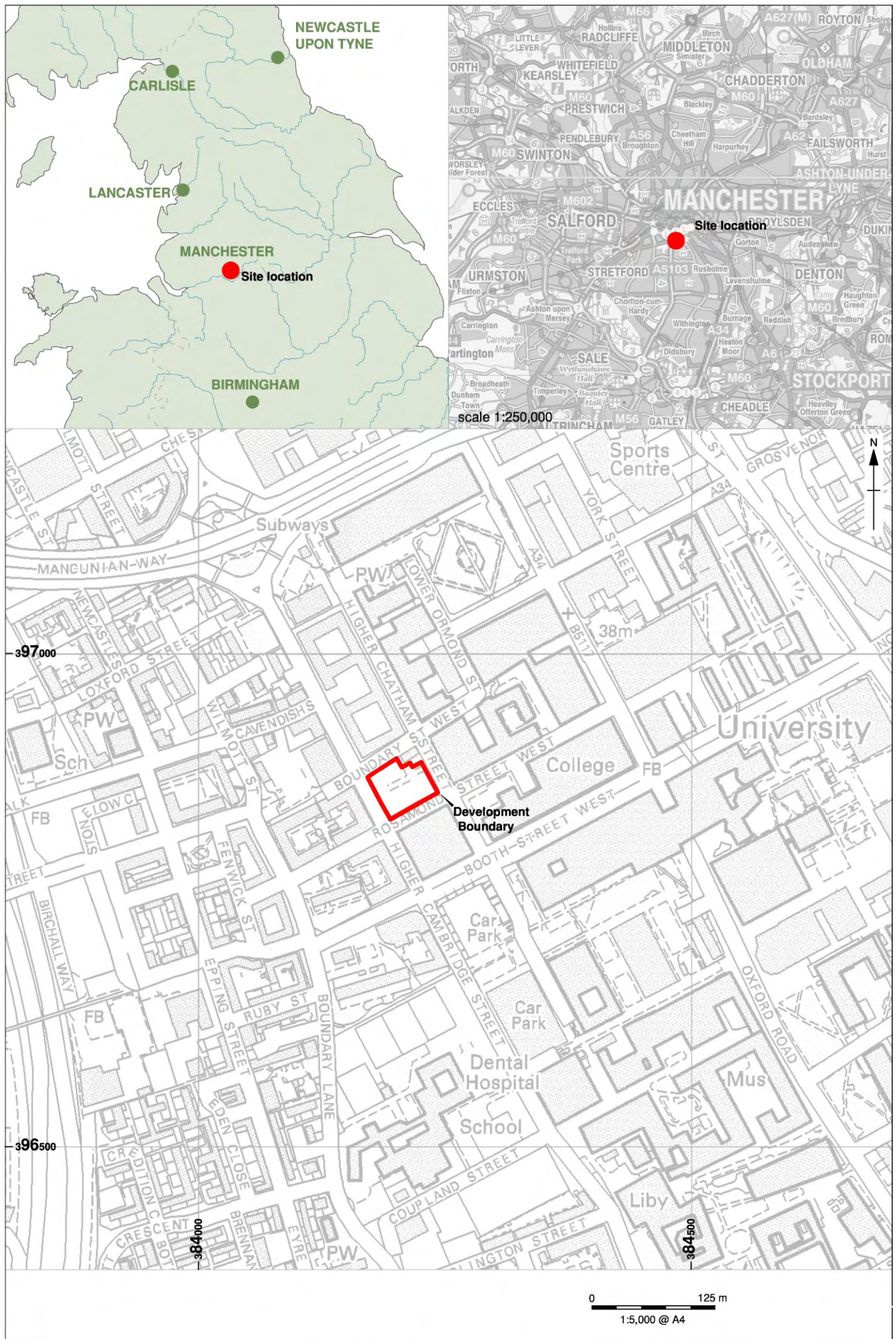
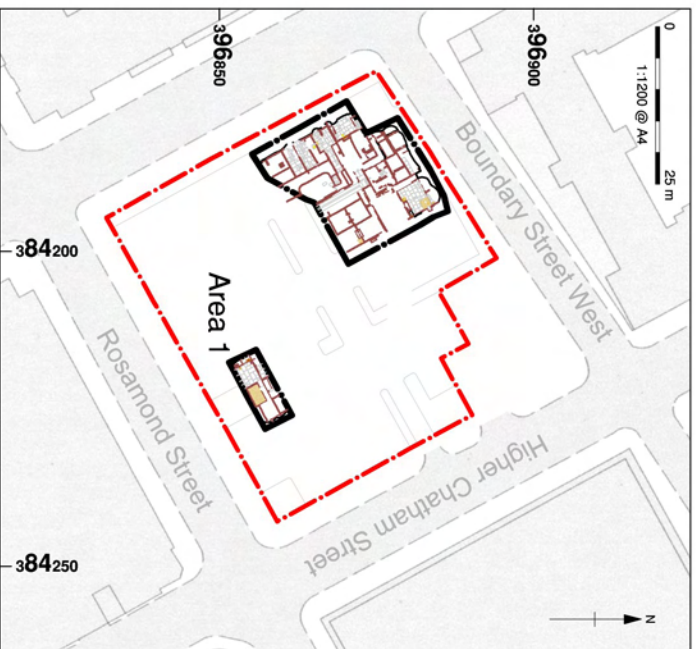


Figure 1: Site location



Figure 2: Excavated remains superimposed on the Ordnance Survey map of 1850



- Limit of excavation
- Development boundary
- Brick
- Brick floor
- Flags

Figure 3: Plan of Area 1



Figure 5: Phase plans