



Howarth Metals, Jersey Street, Ancoats, Manchester

Archaeological Building Survey

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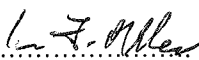
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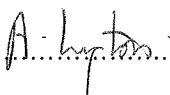
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SUMMARY

The North West Regional Development Agency (NWDA) has recently obtained planning consent to carry out the demolition of warehouse premises and alterations to the boundary walls of a site fronting Jersey Street and Poland Street in the Ancoats area of Manchester (centred on SJ 85147 98764). In 2009, as part of an initial stage in the planning process for these works, the NWDA commissioned Oxford Archaeology North (OA North) to carry out an archaeological desk-based assessment of the site. This report concluded that whilst the site had been redeveloped in the 1980s for use by Howarth Metals for the production of aluminium alloy ingots, the boundary walls along Jersey Street and Poland Street represented the remains of a nineteenth-century iron foundry and, as such, were of some archaeological interest (OA North 2009).

In order to secure archaeological interests, Manchester City Council attached a condition to planning consent that required an archaeological building survey to be carried out in advance of the proposed works. Following consultation with the Assistant County Archaeologist for Greater Manchester, it was recommended that the scope of archaeological survey should comprise an English Heritage Level II-type survey of the historic wall fronting Jersey Street. In July 2010, OA North was commissioned by the NWDA to carry out the building survey.

The survey revealed that the walls retained physical evidence for multiple phases of construction, and incorporates the remains of distinct structures. The western two bays of the wall fronting onto Jersey Street incorporate the only survival of a former four-storey office block, which displayed contemporary architectural styles, being constructed in fashionable Flemish Bond brickwork, with sandstone detailing to the windows and façade. Unusually, the same decoration was also applied to the large, single-storey foundry erected on its eastern side. Both structures appear to have been constructed in the latter part of the nineteenth century, representing a redevelopment of the site following the demolition of workers' housing that had lined the Jersey Street frontage.

Whilst the iron foundry had been redeveloped in the twentieth century, the Jersey Street façade retains much of its original characteristics, particularly at the western end. Similarly, although the rebuilt Poland Street façade is of much lower architectural quality, it does retain some stylings in the form of Staffordshire Blue brick decoration, and highlights the contrast between the more usual standard of architecture associated with such buildings, and the more decorative Jersey Street frontage.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Jenny Hope and Andrew Thompson of GVA Grimley Ltd for commissioning and supporting the project on behalf of the North West Regional Development Agency (NWDA). Thanks are also due to Andrew Myers, the Greater Manchester Assistant County Archaeologist, for his support and advice. Thanks are also expressed to Alistair Sinclair of The North West Development Agency for facilitating the site visit.

The building survey was undertaken by Chris Wild and Liz Murray. The report was written by Chris Wild, and the drawings were prepared by Marie Rowland and Chris Wild. The report was edited by Ian Miller, who was also responsible for project management.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 The North West Regional Development Agency (NWDA) has recently obtained planning consent to carry out the demolition of warehouse premises and alterations to the boundary walls of a site fronting Jersey Street and Poland Street in the Ancoats area of Manchester. The programme of works is also to include the installation of railings in the front of re-opened arches set within the boundary walls, and the inclusion of a capping course of brickwork.

1.1.2 In 2009, as part of an initial stage in the planning process for these works, the NWDA commissioned Oxford Archaeology North (OA North) to carry out an archaeological desk-based assessment of the site. This report concluded that whilst the site had been redeveloped in the 1980s for use by Howarth Metals for the production of aluminium alloy ingots, the boundary walls along Jersey Street and Poland Street represented the remains of a nineteenth-century iron foundry and, as such, were of some archaeological interest (OA North 2009). In the light of this conclusion, the Assistant County Archaeologist for Greater Manchester, who provides planning advice to Manchester City Council, recommended that the boundary walls should be subject to a measured archaeological building survey and recording prior to the commencement of the proposed works. It was recommended that the survey should include measured elevation drawings and a plan, a detailed written description and an interpretation of the building, evidence for phasing of construction, construction materials, decoration and detailing, and surviving fixtures and fitting. Acting on this advice, Manchester City Council attached a condition to the planning consent, which stated:

‘No demolition hereby approved shall commence until a programme of archaeological building survey has been implemented in accordance with a written scheme of investigation previously approved in writing by the City Council as local planning authority.’

‘Reason: To make a record of the upstanding historic building fabric for archive and research purposes, pursuant to Policy DC20.1 of the Unitary Development Plan for the City of Manchester and PPS5.’

1.1.3 In July 2010, GVA Grimley Ltd, acting on behalf of the NWDA, commissioned OA North to undertake the required archaeological building survey. The building survey was undertaken in August 2010, and was carried out in accordance with the requirements of the Assistant County Archaeologist.

1.2 SITE LOCATION

- 1.2.1 The study area (centred on SJ 85147 98764) is situated within the Ancoats area of Manchester, which lies on the north-east side of the city centre (Fig 1). The site forms the majority of a plot of land bounded by Jersey Street, Radium Street, Naval Street and Poland Street, and forms part of the Ancoats Conservation Area (Plate 1).
- 1.2.2 Topographically, the Manchester Conurbation as a region is within an undulating lowland basin, which is bounded by the Pennine uplands to the east and to the north. The region as a whole comprises the Mersey river valley, whilst the rivers Irwell, Medlock, and Irk represent the principal watercourses in Manchester (Countryside Commission 1998, 125). The topography of Ancoats, however, reflects the shallow valley of Shooter's Brook, a rivulet that flows westwards from Newton Heath, through Ancoats and into the river Medlock (Ashworth 1987, 22). Shooter's Brook was culverted during the early nineteenth century, and the topography of the valley has since been masked considerably by urban expansion. The study area lies some 200m to the north-west of Shooter's Brook.
- 1.2.3 The solid geology of the area comprises Carboniferous sedimentary material and a series of Permo-Triassic rocks, consisting mainly of New Red Sandstone. The overlying drift incorporates Pleistocene boulder clays of glacial origin, and sands, gravels, and clays of fluviatile/lacustrine origin (Hall *et al* 1995, 8).



Plate 1: Recent aerial view of the study area

2. METHODOLOGY

2.1 BUILDING SURVEY

- 2.1.1 The building survey aimed to provide an understanding of the historic fabric and key architectural features of the historic elevation. It has provided a drawn, photographic and textual record of the building to English Heritage (2006) Level II standard. Records were made of the internal and external elevations, as well as any features of historical or architectural significance. These records are essentially descriptive, although interpretation is carried out on site as required. All work was consistent with the relevant standards and procedures provided by the Institute for Archaeologists (IfA), and generally accepted best practice.
- 2.1.2 **Photographic Survey:** a photographic archive of the elevations was compiled, consisting of both general and detailed photographs, which were captured using both digital and black and white 35mm formats.
- 2.1.3 **Site Drawings:** elevations of the principal walls of the foundry were produced using a reflectorless total station, and photographic rectification software (PhotoPlan). The enhanced drawings were annotated subsequently, to show the form and location of any structural features of historic significance.
- 2.1.4 **Interpretation and Analysis:** a visual inspection of the structure was undertaken and a description maintained to English Heritage Level II standard. These records are essentially descriptive, and provide a systematic account of the origin, development and use of the building.

2.2 ARCHIVE

- 2.2.1 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 County Sites and Monuments Record (SMR), and a summary sent to the National Monuments Record (NMR).

3. BACKGROUND

3.1 DEVELOPMENT OF ANCOATS

- 3.1.1 Ancoats was rapidly transformed to an urban environment during the 1770s, and on an unprecedented scale. In 1775, George and Henry Legh of High Legh in Cheshire sold land between Newton Lane and Ancoats Lane to Thomas Bound (Swindells 1908, 203), representing an early stage in the development of the area. The process of development involved selling tracts of land to middlemen, often subject to a ‘perpetual’ rent and a covenant to build, to protect the rent income (Roberts 1993, 15-6). As with other parts of Manchester, such as the Chorlton Hall Estate and the Lever Estate to the south-east and north of Piccadilly respectively, the sale of land for development involved surveying and laying out streets in a grid-iron pattern, which effectively created development plots (Chalklin 1974). This layout is shown on several maps that were produced during the late eighteenth century, including Laurent’s *Map of Manchester and Salford*, published in 1793, which also shows the corner of Great Ancoats Street and Oldham Road to have been a focus for initial development.
- 3.1.2 The earliest textile factories in the area included several water-powered mills erected along Shooter’s Brook, to the south of Union (now Redhill) Street. There is some evidence to suggest, for instance, that New Islington Mill and Salvin’s Factory originated in the late 1780s as water-powered textile mills situated on the bank of Shooter’s Brook (Miller and Wild 2007). However, this was a small watercourse, and in seeking a solution to the inadequate power supplied to their waterwheels from the brook, some manufacturers experimented with steam power.
- 3.1.3 The completion of the Ashton-under-Lyne Canal in 1796, and the Rochdale Canal in 1804, was a key element in the phenomenal expansion of Ancoats, and led to its transformation from a semi-rural district to an industrial suburb. This was coupled with a breakthrough in the application of steam power to manufacturing, and the national demand for textiles, particularly cotton, which created the explosion of factory building. In Ancoats, this new breed of textile mills were built on an unprecedented scale, many depending upon the developing network of short branch canals for transport and a source of water for their steam-power plants (Williams 2002, 35).
- 3.1.4 Numerous trades ancillary to textile manufacturing were also established in Ancoats during the nineteenth century, including iron foundries and engineering works, many having been established to produce the machinery, fixtures and fittings demanded by the local textile mills. One of the largest engineering works was the Vulcan Works on Pollard Street, which was operated by John Hetherington & Sons Ltd, and produced a large range of machinery for the textile industry. There were, however, many other smaller iron works and foundries, which became a characteristic feature of Ancoats, and were of great importance to the local economy (Miller and Wild 2007).

3.2 THE DEVELOPMENT OF THE STUDY AREA

- 3.2.1 The study area was developed initially during the late eighteenth century, and a block of buildings fronting the northern side of Elliot Street in the south-western corner of the study area is shown on Green's map of 1794; the size of this block is consistent with a terrace of artisans' workshop dwellings. Maps produced by Pigot in 1819 and Johnson in 1820 show the Bengal Street branch of the Rochdale Canal to have been constructed across the study area
- 3.2.2 Banks and Co's *Map of Manchester and Salford*, published in 1831, provides the first detailed nineteenth-century survey of the study area. This confirms that the block of buildings fronting onto Elliott Street, which is now named Jersey Street, comprised a terrace of six houses, with a larger property at the eastern end, presumably representing retail or commercial premises. A second block of buildings, comprising nine workers' houses, is shown to have been erected to the east, infilling the street frontage as far as Poland Street. Development along the German Street frontage included a Sunday School, the site of which lies immediately beyond the western boundary of the study area. The remainder of the study area is shown as undeveloped land.
- 3.2.3 A small-scale map produced in 1841 indicates that the study area had attracted some development during the 1830s (Plate 2). In particular, a large, rectangular block is shown to have been erected in the western part of the study area. Whilst the building is not named on the map, it is likely to represent the first element of an iron foundry that dominated the site from the mid-nineteenth century.



Plate 2: Extract from Pigot's map of 1841

3.2.4 The layout of the study area during the mid-nineteenth century is depicted on two detailed plans: the Ordnance Survey 60": 1 mile map of 1850; and Adshead's *Plan of the Townships of Manchester*, published in 1851 (Plate 3). Both maps show that the study area was subject to considerable development during the 1840s. The area to the rear of the houses fronting onto Jersey Street, as far as the southern bank of the canal arm, is shown to have been occupied by the Phoenix Iron Works. This comprised a casting shop fronting onto Poland Street, a large central yard, another large building, with all the elements of a steam-power plant, comprising an engine house, boiler, chimney and cistern, situated to the west. Adshead's map also shows the Phoenix Iron Works to have incorporated an additional building, situated parallel and immediately adjacent to the southern bank of the canal arm. A directory for 1851 lists John Elce & Co as iron and brass founders at the Phoenix Iron Works (Slater 1851, 35).

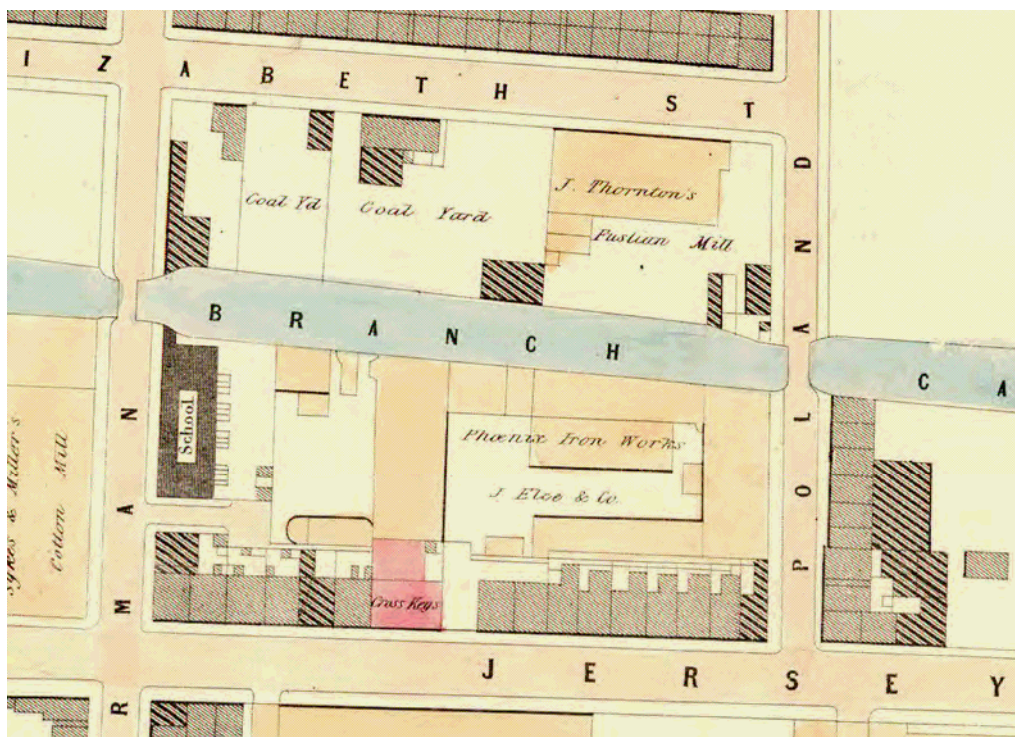


Plate 3: Extract from Adshead's map of 1851

3.2.5 In 1891, the Ordnance Survey published the detailed first edition 5': 1 mile map of the area, which was surveyed in 1888-9; the survey was also published in 1894 at a scale of 25": 1 mile (Plate 4). The houses that had occupied the south-western part of the study area appear to have been replaced by an expansion of the Phoenix Iron Works. Conversely, the part of the iron works that occupied the western part of the study area is named on the 5': 1 mile map as a glass works. Entries in a trade directory for 1895 list the firm of Guest & Brookes is listed as machine makers in the northern part of the study area (Slater 1895, 317), with William Allen, a brassfounder, seemingly occupying John Elce & Co's former premises on Jersey Street (*op cit*, 229).

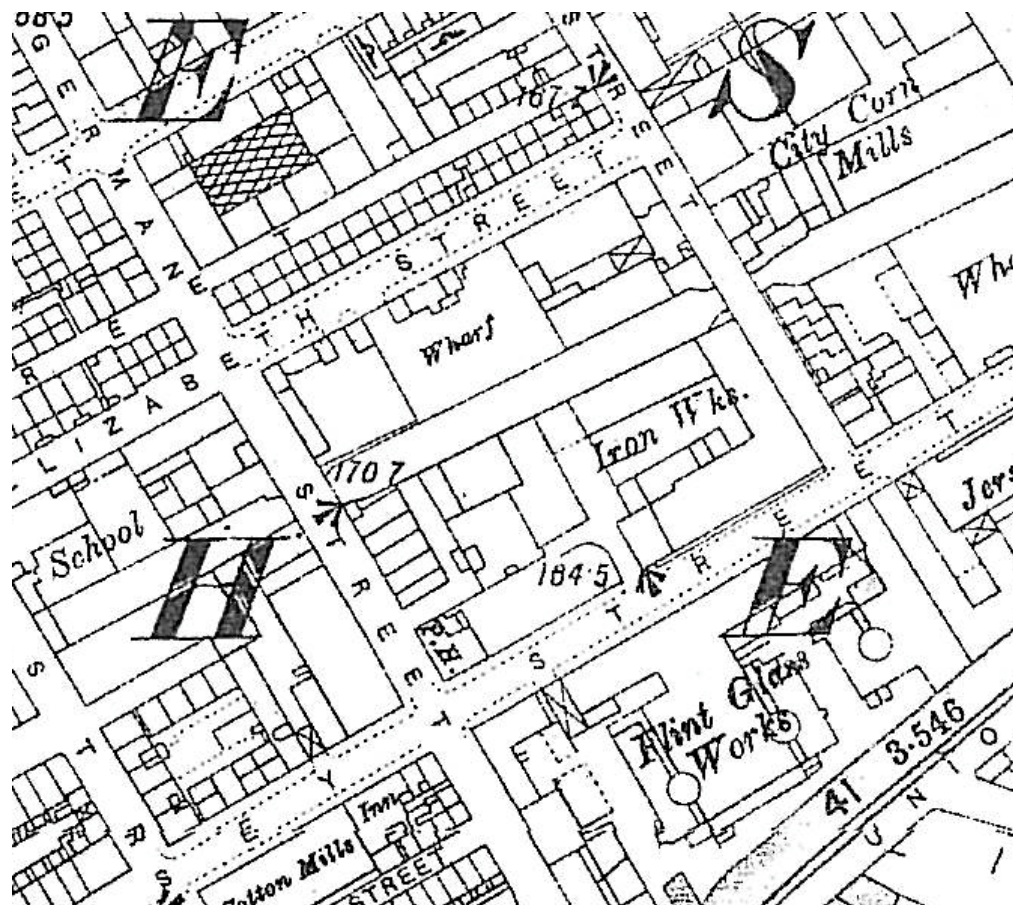


Plate 4: Extract from the Ordnance Survey 25": 1 mile map of 1894

- 3.2.6 Charles Goad's insurance map, surveyed in 1928, provides a useful plan of the study area. This shows that the south-eastern part of the study area was occupied by W Allen's engineering works and foundry. The buildings comprised a four-storey structure and a single-storey range along the Jersey Street frontage; the four-storey building was used as offices. The adjacent building probably represented the main processing area of the foundry, incorporating a chimney at its western end, and two cupola furnaces in its north-eastern corner. A long, single-storey building along the Poland Street frontage contained a travelling crane, and may have been used as an erecting shop. The buildings to the north of the canal arm are named on Goad's plan as the Phoenix Iron Works, occupied by Mabbott & Co Ltd, engineers.
- 3.2.7 The Ordnance Survey map of 1948 shows the canal arm as being disused, and had seemingly been partially subsumed by an expansion of the Phoenix Iron Works. The remodelling of the iron works also appears to have resulted in the infilling of the central yard area. A range of three new buildings was erected along the Jersey Street frontage; these buildings are depicted on a photograph of Jersey Street dated to 1962 (Plate 5).



Plate 5: Looking south-west along Jersey Street in 1962, showing the single-storey iron foundry and the adjacent four-storey office

- 3.2.8 The majority of the study area was occupied from 1988 until 2009 by Howarth Metals, which produced aluminium alloy ingots and other silicon aluminium alloys. Several new industrial processing units were erected on the site as part of this works, and the buildings first shown on the 1948 Ordnance Survey map were adapted; an aluminium-melting furnace was installed inside one of these buildings, and the furnace chimney can be seen protruding through the roof of one of these buildings on an aerial photograph of the area taken in 1988 by the former Royal Commission on the Historical Monuments of England (RCHME). The aerial photograph also shows the four-storey office block on Jersey Street to have been derelict and without a roof; this building was demolished subsequently.

4. BUILDING SURVEY RESULTS

4.1 INTRODUCTION

- 4.1.1 The building survey was targeted at the extant elevations of the nineteenth-century iron foundry, as these formed the principal elements of archaeological interest. These elevations survive along Jersey Street, with a return fronting onto Poland Street.

4.2 THE JERSEY STREET ELEVATION

- 4.2.1 **External description:** the Jersey Street elevation formed the main façade of the complex (Fig 2). It comprised a single-storey brick wall (Plate 6), which retained physical evidence for multiple phases of development.



Plate 6: Looking north along the Jersey Street frontage

- 4.2.2 The wall was 14 bays long (Fig 3), with a large entrance into the complex placed at its western end. However, this represented a relatively late entrance, as a photograph dated to 1965, shows a building in this position (Plate 5).
- 4.2.3 The two bays to east of this entrance form a single phase, constructed in Flemish bond, and comprised the remains of a four-storey office portrayed in the photograph of 1965 (Plate 5). The brick has a smoother, rubbed finish to that to the east, and incorporates projecting ashlar sandstone quoins at ground level, presumably reflecting the higher status of the probable offices (Plate 6). The projecting, continuous sandstone sill of the former first-floor windows presently forms a coping stone for the reduced wall (Fig 3).



Plate 7: Architectural detailing of the Jersey Street façade

- 4.2.4 Each of the ten western bays originally had a recessed aperture with a segmental brick arch (Fig 3), and a projecting dropped and rusticated sandstone key (Plate 7). Each also had a projecting sandstone impost, and a continuous projecting sandstone sill. Within each aperture, the jamb was recessed in brick (Plate 7), with those in the western two bays being much smaller than to the east (Fig 3). This was almost certainly undertaken to allow all the apertures within the wall to be of the same size, whilst giving the impression that those in the eastern part were larger, balancing the façade of the taller ground floor of this part of the structure (Plate 5). At its western end, the continuous sandstone sill terminated in a projecting pyramidal boss (Plate 8), suggesting that an entrance into the building lay in the bay to the west. The taller ground floor of the single-storey element of the wall, which was constructed in a more utilitarian English Garden Wall bond, was capped with dentilated brickwork, and had a brick plinth (Plate 7). This again demonstrates a relatively high level of architectural detailing in an industrial building within the area.
- 4.2.5 The wall was remodelled extensively, apparently on several occasions, and whilst a precise developmental sequence is difficult to establish, the different types of material employed suggests a relative chronology.



Plate 8: Detail of sandstone boss at western end of continuous sill

- 4.2.6 The earliest phase of remodelling appeared to comprise the insertion of a doorway, placed to the left of centre of the elevation, in the sixth bay from the western end (Fig 3; Plate 7). This is unlikely to be original, as the surrounding brickwork within the similarly sized aperture to others in the façade, was of a later style. Furthermore, it is probable that an original doorway would have incorporated the style of the imposts into the door lintel, and the aperture is likely to have been flush with the projecting continuous sill on either side, rather than half a brick narrower (Fig 3).



Plate 9: Looking west along the Jersey Street and Poland Street facades

- 4.2.7 To the east, the most substantial rebuild comprised the eastern four bays (Plate 9), and probably the entire length of the Poland Street elevation (*Section 4.3 below*). This was rebuilt entirely beyond a new two-brick wide projecting buttress, in a shallower version of English Garden Wall bond, comprising only three rows of stretchers instead of four, and contained no windows. A similar buttress was placed at its eastern return with the Poland Street elevation. To the west of the buttress, the rebuild also incorporated the wall above the continuous sill, to the aperture of the adjoining bay (Fig 3). Above the window aperture, it abutted what appeared to be an original rectangular aperture, blocked subsequently, and representing the remains of a ventilation opening. A similar blocked aperture was observed above the doorway (Plate 7), and the photograph taken in 1965 (Plate 5) suggests that a further aperture was placed in the western bay of the single-storey structure. The historical photograph also depicts clearly the louvered shuttering of the eastern ventilation aperture, and that above the door having been blocked at an earlier date, almost certainly contemporarily with the insertion of the door.
- 4.2.8 Prior to 1965, the recessed apertures were all blocked, although some architectural integrity was maintained, as the blocking was recessed behind the jambs. The doorway appears to have been retained at this time (Plate 5), suggesting a change of process or machinery within the building. The blocked apertures were remodelled further, being infilled flush with the window jambs (Plate 7). However, those to the west of the doorway were only infilled to the height of the springing point of the segmental arch (Plate 7).
- 4.2.9 Three further episodes of remodelling were undertaken using different materials. The earliest of these appeared to be the removal of the face of the arch from the third bay (from the western end of the elevation (Plate 6)). Part of the removed brickwork was rebuilt with machine-made red brick, presumably to stabilise the surrounding wall. The purpose for this remodelling is unclear, although it probably relates to internal remodelling at first floor level in this position (*Section 4.2.11, below*). The western end of the extant wall was also remodelled in red brick, incorporating some grey brick, and comprised the creation of a gatepost for a new entrance that was formed following the partial demolition of the four-storey office block. The blocking of the doorway with clinker blocks to the east was probably a contemporary episode, the entrance having become redundant.
- 4.2.10 **Internal description:** the south wall was of 1½ bricks thickness (0.36m), and its internal face was in a poorer state of repair, with several section of wall core exposed (Plate 10). The majority of this was within the projecting bull-nosed brick buttresses placed between each bay (Fig 4).
- 4.2.11 The western three bays were infilled flush with wall face (Plate 11), with the buttresses surviving only as either wall scars or core rubble (Fig 4). The adjacent three bays retained part of an inserted concrete floor, forming a first floor, 2.2m above ground level (Fig 4). The third and fourth bays at this level retained remnants of white tiling, and clinker block walls scars, suggesting use as washrooms. The two bays to the west of the doorway retained 16-light windows, with cast-iron frames and each with a two-light, top-hung vent centrally in the top row (Plate). A 1½ brick-wide dividing wall between these

two bays at ground floor level was presumably inserted contemporarily with the floors, forming an internal dividing wall, and supporting the concrete floor above. The inserted doorway to the east also had remnants of surviving cheeks, presumably forming a lobby into the building (Plate 12).



Plate 10: Looking south-east at the rear of the Jersey Street elevation



Plate 11: Infilled apertures and removed buttresses at the remodelled south-western end of the Jersey Street elevation



Plate 12: Inserted mezzanine floor at rear of the Jersey Street elevation



Plate 13: Rebuilt wall at north-eastern end of the Jersey Street elevation, with original fabric retained at the junction with Poland Street

4.2.12 The four bays to the west of the doorway retained the original segmentally arched apertures, constructed of bull-nosed brick (Plate 10). The continuous sandstone sill, observed externally, projected to the wall face and ran behind the buttresses that separated the bays; the buttresses were also of original bull-nosed construction. The copings of these buttresses were remodelled with plain, machine-made brick, and had been capped with concrete to support a replacement roof. At the eastern end of the sandstone sill the buttress was a half brick (0.12m) larger in each dimension, and was constructed with standard-shaped brick (Plate 13). Two further buttresses projected only a single skin from the wall face, with the western 2m of the elevation having been refaced above a small stub of original fabric (Plate 13), presumably contemporaneous to the main body of the Jersey Street elevation (Fig 4). This early fabric continued around the south-east corner of the structure onto the Poland Street elevation (Plate 13).

4.3 THE POLAND STREET ELEVATION

4.3.1 **External description:** the Poland Street façade rose relatively steeply to the north (Plate 9), up an incline to a bridge over a redundant arm of the Rochdale Canal (Plate 4). The return from the Jersey Street elevation had a projecting buttress to the corner (Plate 14). The wall, which was constructed in English Garden Wall bond in a similar ratio of stretchers (3:1) to the eastern end of the Jersey Street elevation, appeared to have comprised four pitched gables, with projecting parapets between (Plate 14). The southern, widest gable, had been truncated to the height of the Jersey Street elevation, and had a large, central triple window aperture (Fig 5), which had been blocked subsequently, probably concurrently with the blocking of the apertures along Jersey Street (*Section 4.2.8, above*). This had a continuous concrete lintel, flush with the external wall face, and three interrupted chamfered projecting concrete sills (Plate 15). Each jamb was picked out with bull-nosed Staffordshire Blue engineering bricks (Plate 15).



Plate 14: Looking north-west up Poland Street to the Rochdale Canal arm bridge



Plate 15: Detail of the southern window on the Poland Street elevation

4.3.2 To the west, the raised parapet had projecting concrete copings with only the apertures and staining of the wall, denoting the presence of rainwater goods servicing the valleys of the roof. The southern of the three bays had a wide doorway, again with a concrete lintel and Staffordshire Blue brick jambs (Plate 16). The two northern bays of the façade had an asymmetrical arrangement of apertures (Fig 5), comprising a large window, a narrow door, and three further windows, each with Staffordshire Blue brick jambs, steel-faced sills, and a continuous concrete lintel (Plate 16). The lintel had been painted white, and retained part of the text "Hill & Son.....Ltd Phoenix Foundry" (Plate 16).



Plate 16: Detail of the Poland Street façade, with 'Phoenix Foundry' nameplate painted on lintel

- 4.3.3 At its northern end, the façade was abutted by a similarly constructed brick wall, which appeared to represent an enlargement of the original sandstone block parapet of the canal bridge (Plate 17).



Plate 17: Detail of remodelled bridge over the arm of the Rochdale Canal

- 4.3.4 **Internal description:** the interior of this façade was located mainly within several large processing sheds (Plate 18); no safe access was afforded to this area to allow archaeological recording to be carried out. The exposed area of wall within the demolished building fronting Jersey Street was of English Garden Wall bond, and had been painted white. The remains of the window lights survived, comprising a 12-light, fixed cast-iron frame, flanked by two eight-light variants (Plate 19).
- 4.3.5 At its southern end, the internal elevation retained fabric that formed the south-east corner of an earlier structure (Fig 6; Plates 13 and 19). A concrete-capped, brick buttress in the south-eastern corner of the structure appeared to represent the base of an original buttress, similar to those in the southern internal elevation, but reduced in height during the rebuilding of the Poland Street façade.



Plate 18: Internal face of the Poland Street frontage, mainly within later steel-framed sheds



Plate 19: In-situ window frames in the internal face of Poland Street elevation

5. DISCUSSION

5.1 INTRODUCTION

- 5.1.1 As a direct result of the burgeoning textile industry, Manchester developed a pre-eminence in engineering, and large numbers of foundries and engineering firms were established during the nineteenth century (McNeil and Nevell 2000, 8). Whilst some examples of these foundries still survive in districts surrounding Manchester, such as Gorton, Newton Heath and Openshaw, very few, if any, survive in the inner suburbs such as Ancoats. These areas of the city were dominated by buildings associated with the textile industry, particularly the large spinning mills and the ornate warehouses (Taylor *et al* 2002), and it is easy to overlook the contribution that many other associated industries made to the character of this important industrial townscape.
- 5.1.2 Recent archaeological work at the large Soho Foundry, less than 500m to the south-east in Ancoats (NAA forthcoming), and at the Bradford Ironworks, approximately 2km to the east (OA North, forthcoming), revealed well-preserved sub-surface remains of large-scale iron works, but without surface buildings. A former iron and brass foundry on Piercy Street in Ancoats, which was recorded in advance of its demolition, is likely to have been more typical of the smaller foundries that were numerous in the area (North 2004). However, this was an utilitarian structure, bearing few features that could be identified as characteristic architectural elements of an iron foundry. Similarly, there are remarkably few descriptions or images portraying nineteenth-century foundries in Manchester, and those that are available tend to focus on the larger and better-known works (*eg* Plates 20 and 21), rather than the small works that were numerous throughout the industrial districts.

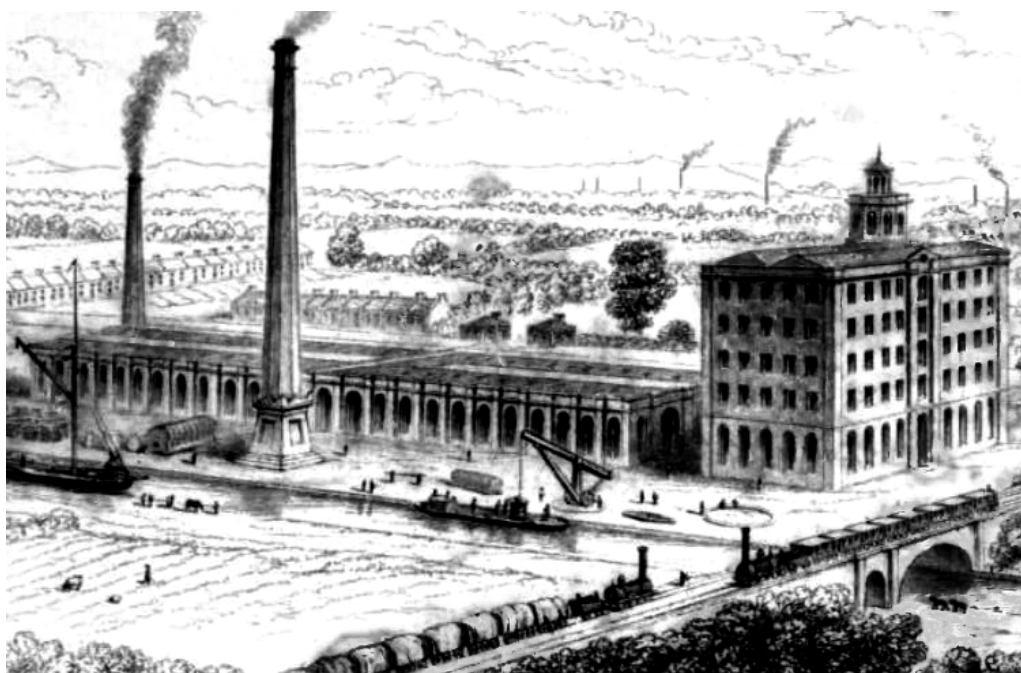


Plate 20: The Bridgewater Foundry at Patricroft, built in of 1836-7

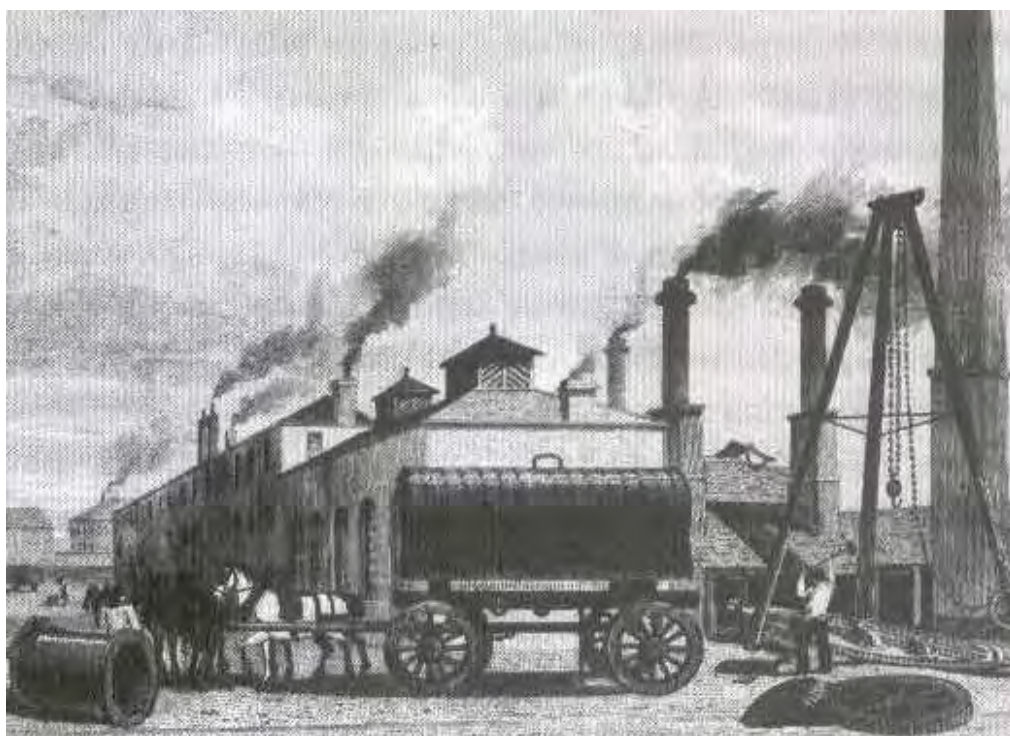


Plate 21: Engraving of Hick & Rothwell's Union Foundry in Bolton in 1832

5.2 PHASE 1: MID-/LATE NINETEENTH CENTURY

- 5.2.1 The extant fabric of the Phoenix Iron Works represents several phases of activity, relating both to the expansion of the concern, and developments in technology. The cartographic evidence suggests that the earliest elements of the iron works lay to the north of the extant buildings fronting Jersey Street (*Section 3.2, above*), whilst the survey has demonstrated that the fabric fronting Poland Street represents later rebuilding of the complex.
- 5.2.2 The earliest surviving structural remains appear to date from the latter part of the nineteenth century, between the production of Adshead's map of 1851, which clearly depicts domestic properties fronting Jersey Street, and the Ordnance Survey edition of 1894, which shows the two structures identified within the fabric (*Sections 3.2 and 4.2, above*). Of the two structures, the four-storey building at the western end of the wall, referred to as 'offices' in an insurance plan of the 1920s, was seemingly the earlier, although the two may have been contemporary. The three-bay office was constructed at considerable expense, with the use of the more fashionable Flemish bond in the brick frontage, and the liberal use of dressed sandstone. Such architectural detailing, although not uncommon in industrial buildings within the locality, was certainly well above the standard utilitarian style associated with the area, reflecting the building's function as an office. What is somewhat more surprising is the continuation of much of this architectural embellishment into the façade of the 14-bay main processing building constructed to the east. Whilst the brickwork reverted to a more functional English Garden Wall bond, the dropped sandstone keys of the aperture arches were retained, and dentilation was even added at parapet level. It is probable that the relatively large apertures to each bay served the purpose of affording light into the

building. Whilst it may be expected that they were also provided to allow the escape of some of the considerable heat produced within, the extant window frames only had a very small two-light opening, suggesting that the heat may have been effectively dissipated by the three ventilation holes in the upper part of the elevation, presumably in conjunction with a louvered roof.

5.3 PHASE 2: LATE NINETEENTH/EARLY TWENTIETH CENTURY

- 5.3.1 This second phase of activity represents a remodelling of the eastern part of the complex, with the rebuilding of the eastern four bays of the Jersey Street frontage, and the entire length of the Poland Street façade. The new construction was undertaken without windows in the Jersey Street frontage, but instead incorporated a relatively large window in the Poland Street wall. This suggests that new machinery was installed, and had different spatial requirements. The probable insertion of a contemporaneous doorway in the Jersey Street elevation shows that access was required directly into the structure from the south at this time, probably replacing an entrance on Poland Street. It is likely that the internal mezzanine floor, observed at the western end of the Jersey Street wall, was added at this time, apparently with further partitions below. Those on the first floor appeared to represent cloakrooms or washrooms, whilst it is likely that those on the ground floor were used as offices, or workshops, reflecting changes in working practices, the greater implementation of middle-management during this period, and the improvement in sanitary and working conditions.
- 5.3.2 The apertures at the northern end of the Poland Street elevation appear to suggest the use of the incline of the road to load materials, through the metal-silled openings, into storage areas to the rear.

5.4 PHASE 3: LATER ALTERATIONS

- 5.4.1 The final phase comprises several alterations, probably spanning several decades, and culminating in the demolition of the building behind the façade, and the reduction in height of the external walls.
- 5.4.2 The most significant of these modifications was the infilling of the apertures in the Jersey Street elevation. This has several possible explanations, most probable of which was either the change of the buildings function to a warehouse or store, or further re-orientation of machinery to processes where natural light was not important. In either circumstance, this would appear to reflect a greater need for security, rather than aesthetics, perhaps reflecting the economic and social decline of the Ancoats area.
- 5.4.3 This emphasis on security was further highlighted by a final phase of blocking to all the apertures on Poland Street, and also an additional skin of brick blocking to the apertures on the Jersey Street frontage. This may also have been undertaken with structural considerations, in order to stabilise the wall after the demolition of the remainder of the building behind the street façades.

5.5 CONCLUSION

- 5.5.1 The survey has recorded the multi-phase external brick walls of the former Phoenix Iron Works, a nineteenth-century iron foundry. Whilst such structures were once commonplace within the industrial suburbs of Manchester, this important type of industrial building is disappearing rapidly from the modern townscape.
- 5.5.2 The structure on Jersey Street, albeit only surviving as a façade, thus represents a rare surviving example of nineteenth-century foundry buildings in Ancoats. Of most interest is the quality of construction, and the expense undertaken for architectural embellishment, in an industry and an area associated with more utilitarian stylings.

6. BIBLIOGRAPHY

PRIMARY SOURCES

Published Cartographic Sources

Map of Manchester and Salford, C Laurent, 1793

Map of Manchester and Salford, W Green, 1787-94

A Map of Manchester and Salford, G Bancks and Co, 1831

Plan of Manchester and Salford, J Pigot, 1841

Illustrated Plans of the Townships of Manchester, J Adshead, 1851

Ordnance Survey First Edition 60":1 mile, surveyed 1848, published 1850

Ordnance Survey First Edition 10":1 mile, Lancashire Sheet CIV.7.17, surveyed 1888-9, published 1891

Ordnance Survey First Edition 25":1 mile, Lancashire Sheet CIV.7, surveyed 1888-9, published 1893

Ordnance Survey 25":1 mile, Lancashire Sheet CIV.7, revised 1905-6, published 1908

Ordnance Survey 25":1 mile, Lancashire Sheet CIV.7, revised 1915, published 1922

Ordnance Survey 25":1 mile, Lancashire Sheet CIV.7, published 1933

Ordnance Survey 6":1 mile, Sheet SJ 89 NE, published 1956

Charles Goad Insurance Plans, Volume 2, Sheet 217, surveyed 1928

Trade Directories

Slater, I, 1851 *Manchester and Salford Directory*, Manchester

SECONDARY SOURCES

Ashworth, G, 1987 *The Lost Rivers of Manchester*, Altrincham

Chalklin, CW, 1974 *Provincial Towns of Georgian England*, London

Countryside Commission, 1998 *Countryside Character; the Character of England's Natural and Manmade Landscape, vol 2: the North West*, Cheltenham

English Heritage, 1991 *Management of Archaeological Projects*, 2nd edn, Swindon

English Heritage, 2006 *Understanding Historic Buildings: A Guide to Good Recording Practice*, Swindon

Hall, D, Wells, CE, and Huckerby, E, 1995 *The Wetlands of Greater Manchester*, Lancaster Imprints 3, Lancaster

McNeil, R, and Nevell, M, 2000 *A Guide to the Industrial Archaeology of Greater Manchester*, Leicester

Miller, I, and Wild, C, 2007 *A & G Murray and the Cotton Mills of Ancoats*, Lancaster

OA North, 2004 *New Islington Archaeological Works, Ancoats, Manchester: Interim Report*

OA North, 2009 *Howarth Metals, Jersey Street, Ancoats, Manchester: Desk-based Assessment*, unpbl rep

OA North, Forthcoming *Sportcity, Bradford, Manchester, Greater Manchester: Final Excavation Report*, unpbl rep

Roberts, J, 1993 The Residential Development of Ancoats, *Manchester Region Hist Rev*, 7, 15-26

Swindells, T, 1908 *Manchester Streets and Manchester Men*, Manchester

Taylor, S, Cooper, M, and Barnwell, PS, 2002 *Manchester: The Warehouse Legacy*, London

Williams, M, 2002 Ancoats - Where the Steam-Powered Textile Mill Began, in R McNeil and D George (eds), *The Heritage Atlas 4: Manchester - Archetype City of the Industrial Revolution*, Manchester, 34-8

Williams, M, and Farnie, DA, 1992 *Cotton Mills in Greater Manchester*, Preston

ILLUSTRATIONS

FIGURES

Figure 1: Location Map

Figure 2: Site Plan

Figure 3: Jersey Street elevation

Figure 4: Internal wall of Jersey Street frontage

Figure 5: Poland Street elevation

Figure 6: Internal wall of Poland Street frontage

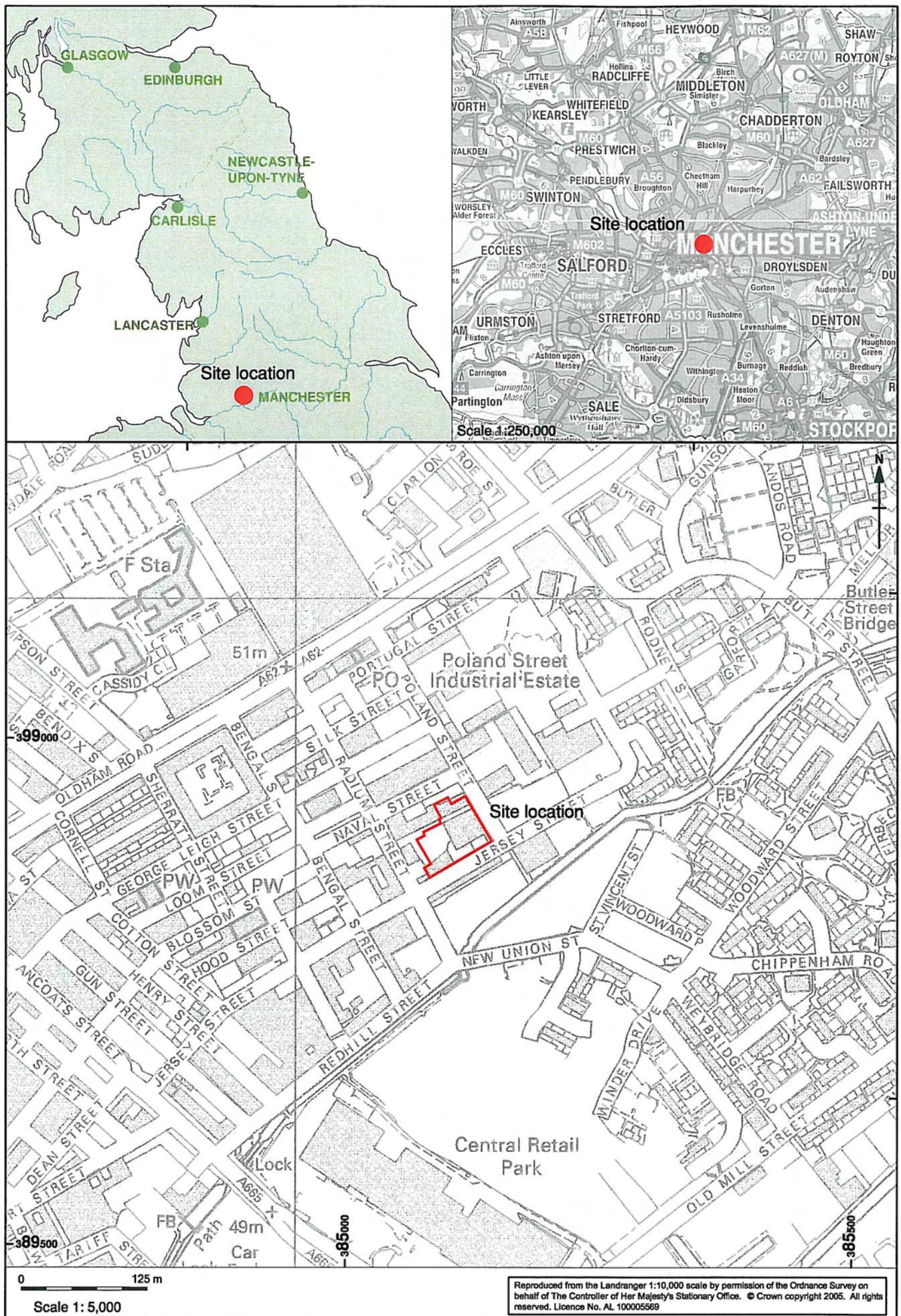


Figure 1: Site Location

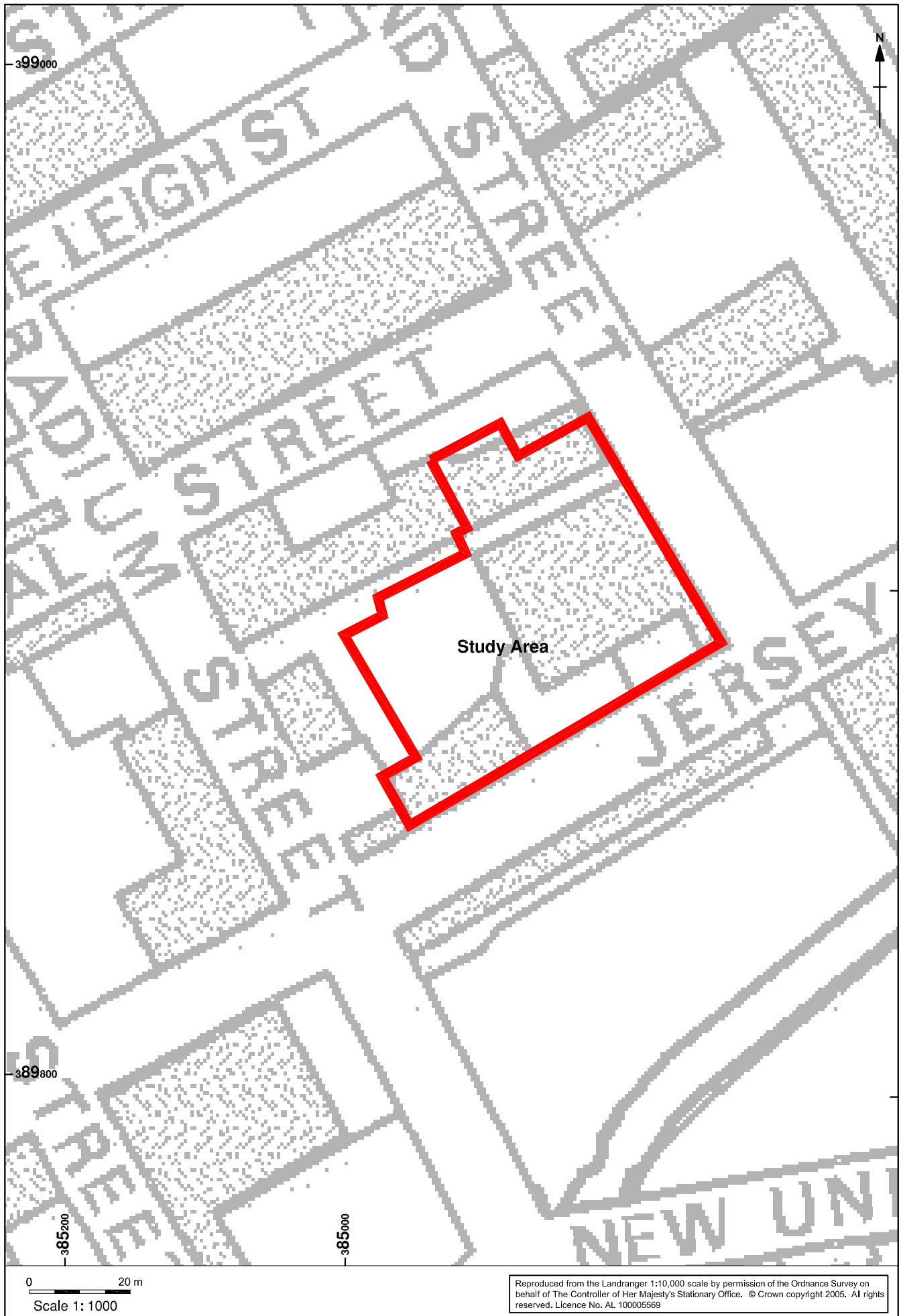
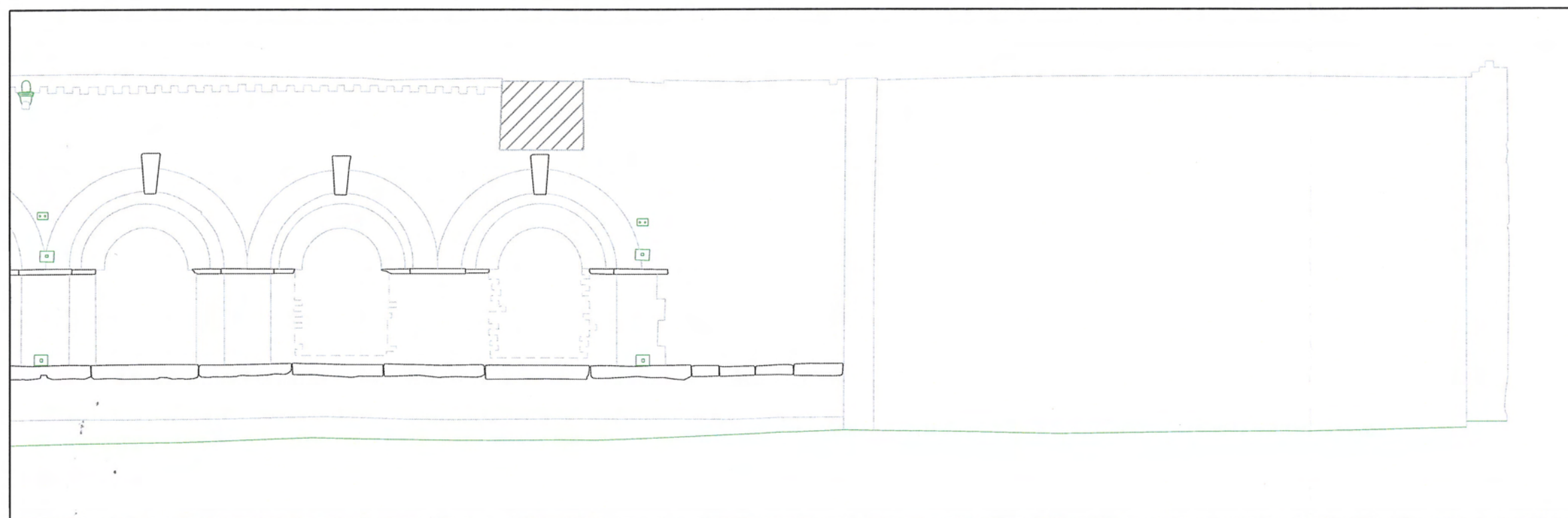
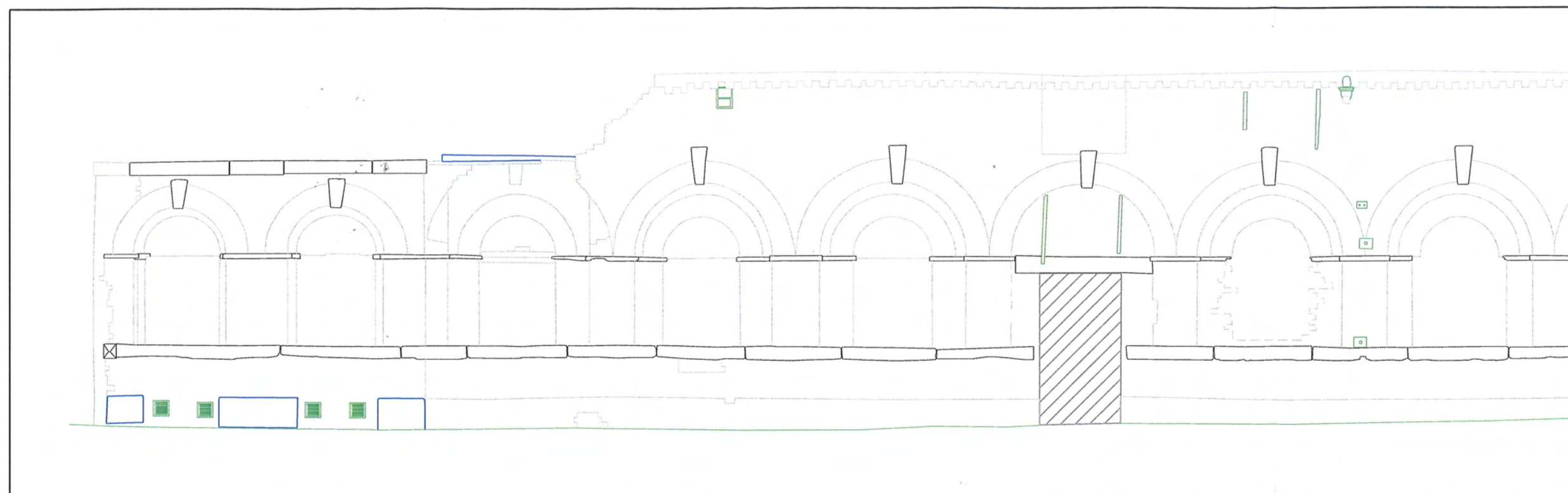








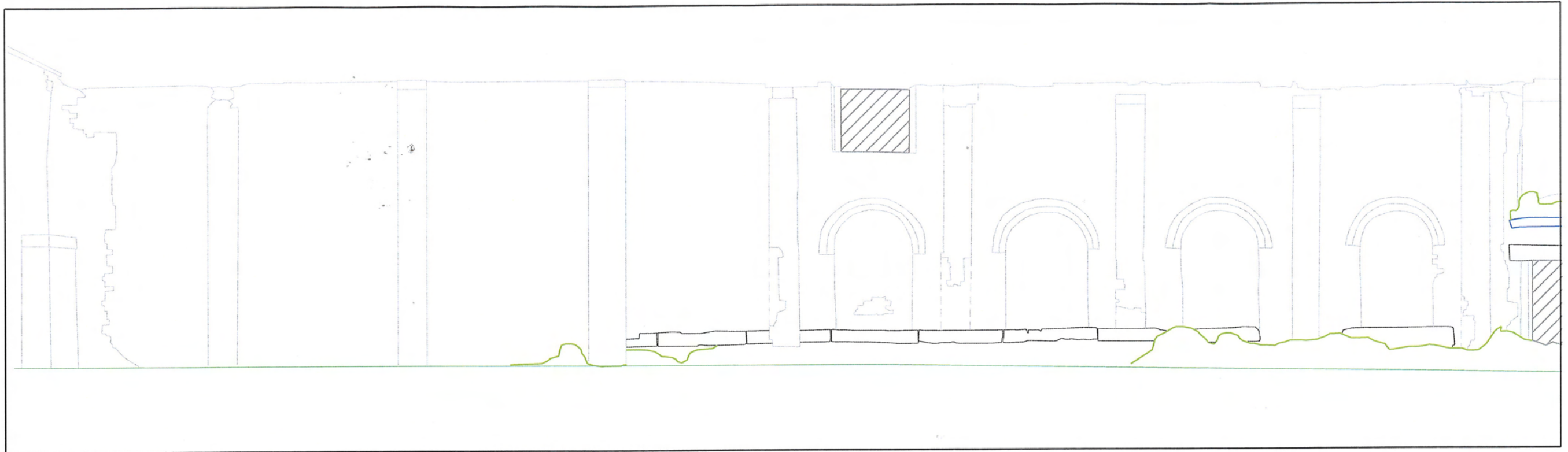
Figure 2: Site plan








- | | | | |
|---|---------------|---|----------------|
|  | Brickwork |  | Stone |
|  | Concrete |  | Metal |
|  | Breeze blocks |  | Uncertain edge |

0 2 m
1:75 @ A3

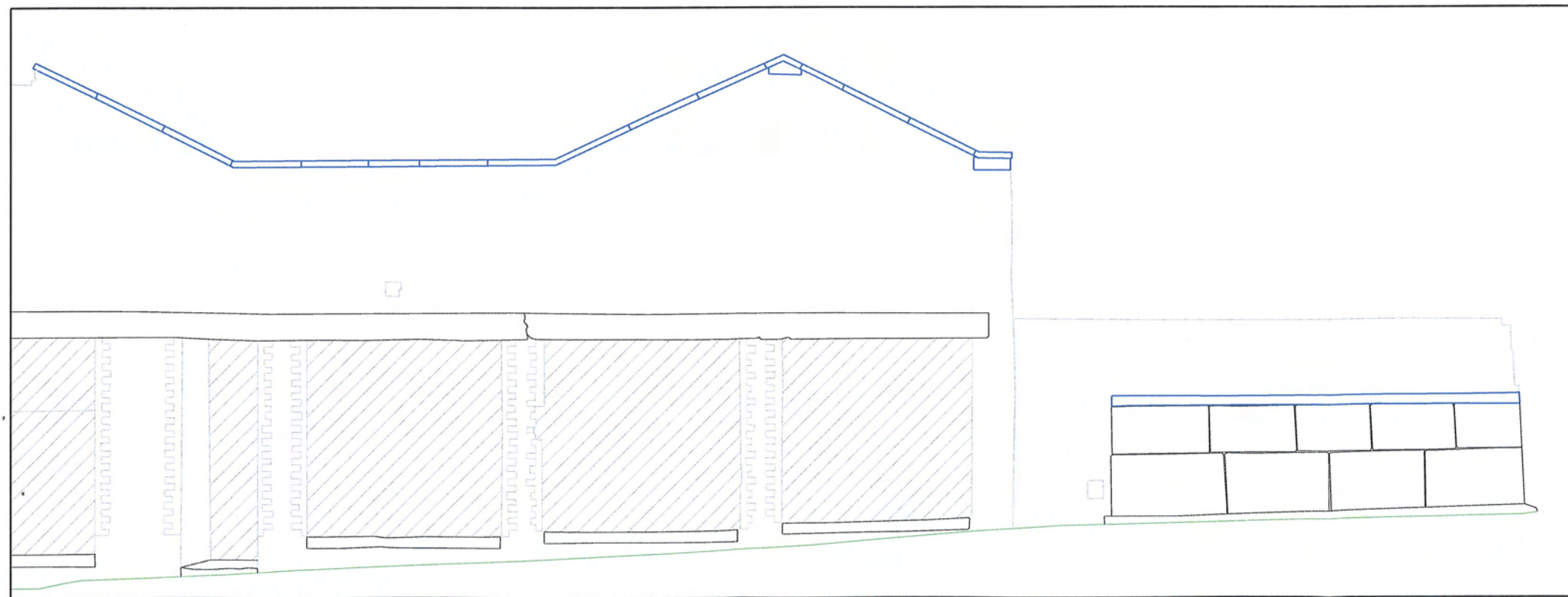
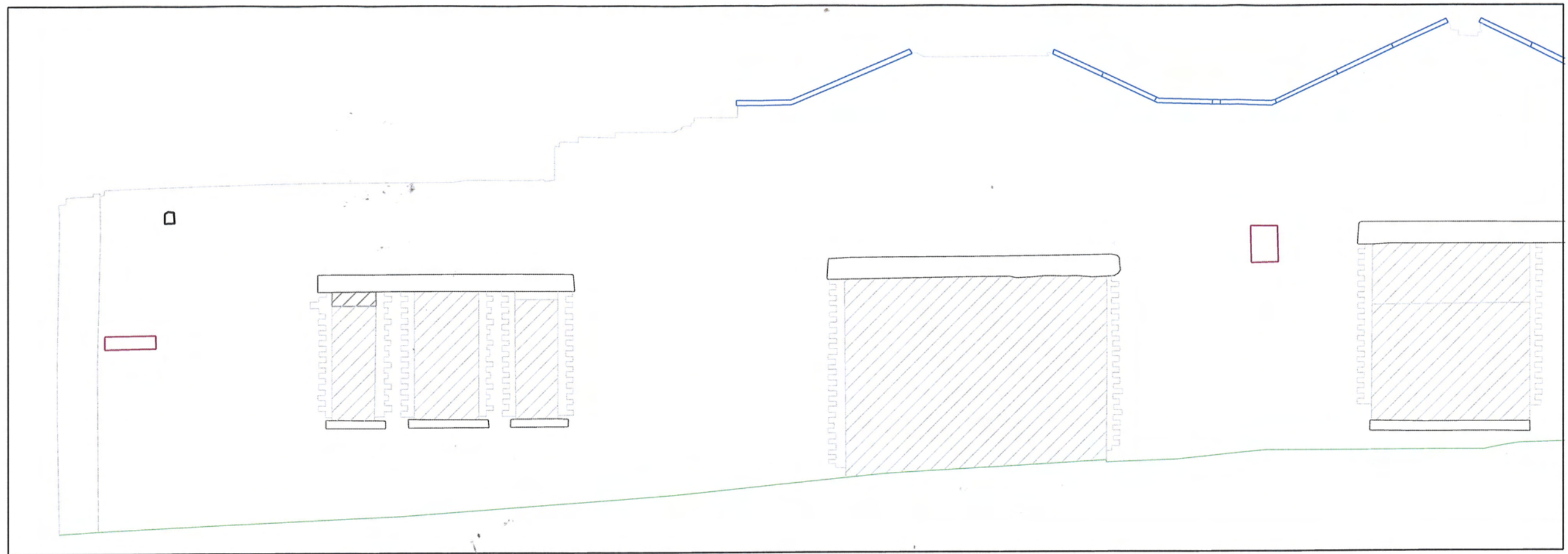
Figure 3: Jersey Street elevation








- | | | |
|---|---|---|
|  Brickwork |  Stone |  Vegetation/rubble |
|  Concrete |  Tile |  Uncertain edge |
|  Breeze blocks |  Sign | |

0 2 m
1:75 @ A3

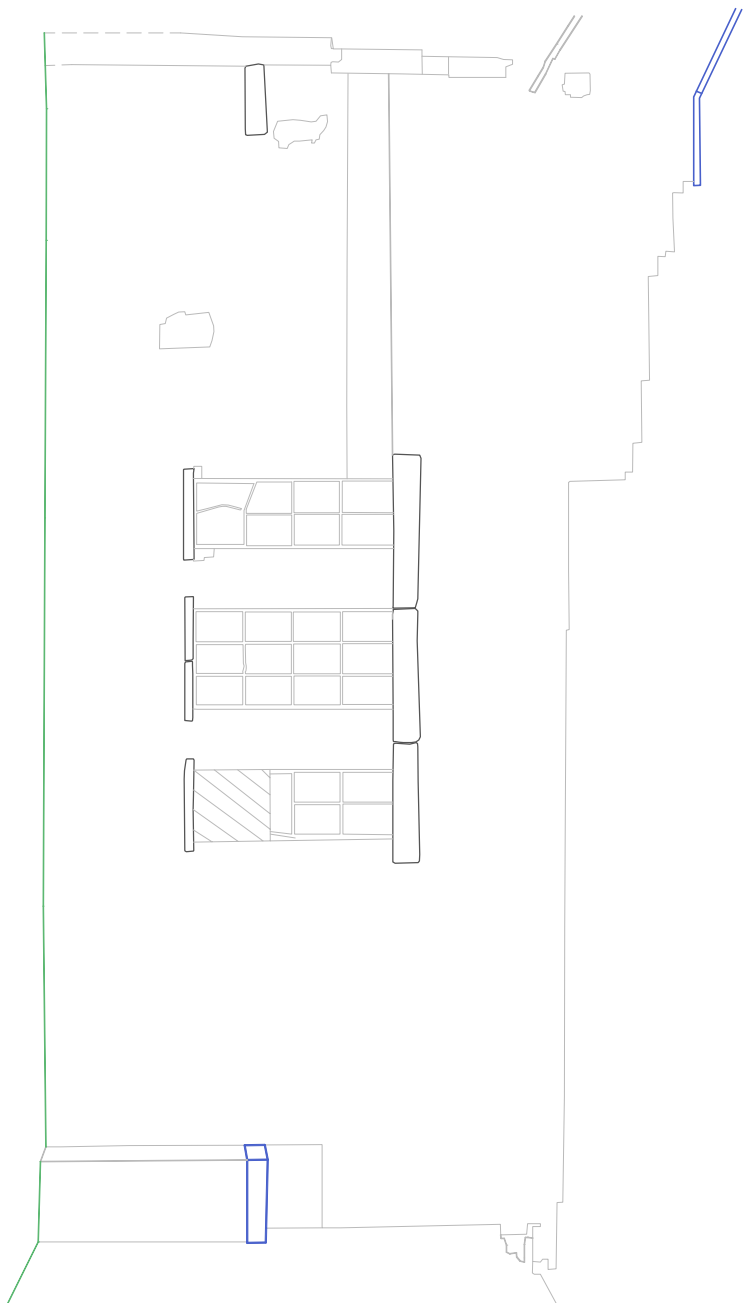
Figure 4: Internal wall of Jersey Street frontage



- | | | | |
|---|---------------|---|--------------------|
|  | Brickwork |  | Blocked with brick |
|  | Concrete |  | Stone |
|  | Breeze blocks | | |

0 2 m
1:75 @ A3

Figure 5: Poland Street elevation



Brickwork
Concrete



Blocked with brick
Stone



Uncertain edge

0
1:75 @ A4
2 m

Figure 6: Internal wall of Poland Street frontage

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