

# Pinfold Works, Attercliffe, Sheffield

## Historic Building Recording



*Entrance to Pinfold Works, site of a former wire and steel works.*

**ARS Ltd Report 2019/197**

September 2019

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**ARCHAEOLOGICAL  
RESEARCH SERVICES LTD**

**Pinfold Works, Attercliffe, Sheffield  
Historic Building Recording**

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## **EXECUTIVE SUMMARY**

*Archaeological Research Services Ltd was commissioned in September 2019 by the Canal & River Trust (the client) to undertake a historic building recording of a former industrial structure and boundary wall that formed part of the Pinfold Works, Attercliffe, Sheffield, South Yorkshire. This report presents and discusses the on-site historic building recording carried out in September 2019 and includes a historic background, building description, photographic survey and drawn record of the above ground remains of brick-built structures along the northern perimeter of the site and a single extant building comprising an extension to a larger warehouse building. The aim of this historic building recording is to produce a descriptive, visual and drawn record of any significant architectural features and evidence for the original and subsequent historical form and functions of the structures, and to place this record in the public domain by depositing it with the South Yorkshire Sites and Monuments Record and the Waterways Archive.*

*The Sheffield and Tinsley Canal opened in 1819 and runs from the River Don in a south-westerly direction to the Sheffield Canal Basin (now Victoria Quays) in the city centre. Mills and steel works were located along the north side of Canal at this time. The first 'Wire Works' structures were erected on the Pinfolds Works site in the second half of the 19<sup>th</sup> century on the south side of the Canal. These comprised a long warehouse with a chimney to east side of the north wall, flanking the Canal. Further buildings were added adjoining this structure in the late 19<sup>th</sup> and early 20<sup>th</sup> century, and parts of these are still represented in the northern perimeter wall of the Pinfold Works site. The extant single storey structure was added in the early 20<sup>th</sup> century to the western end of the wire works. The wire works went out of use and some structures were demolished in the late 20<sup>th</sup> century.*

*The historic building recording indicates that the north boundary wall constitutes remnants from the sequence of structures built for the wire works. The wall was built in at least eight construction phases. Amongst the earliest buildings discernible in the boundary wall was a long warehouse (location of Structures 1 and 2), with a chimney to east and its north wall flanking the Canal, most likely representing a mid-20<sup>th</sup> century rebuilding of this structure which occupied the earlier building footprint. By the early 20<sup>th</sup> century to the south of the site the footprints of the first buildings remain in place but with the addition of a large linking building covering a larger proportion of site from north to south. Further buildings, probably represented in Structures 4 to 6 and 9, reveal the piecemeal but rapid construction of buildings on the site. The Attercliffe Steel Works had been established on the site on the opposite side of the Canal, run by a firm called Shipmans before Spartan took the site over in the latter half of the 20<sup>th</sup> century. The Pinfold Works site is still depicted as a Steel Works on the 1970 Ordnance Survey map. The steel works' buildings remained intact up to the early 1990s but clearance of many of the buildings occurred shortly after this date. This is probably when the north boundary wall was altered into its present form. In addition, the heights of the remaining walls were reduced and bricks reclaimed from the demolished structures to block the remaining window apertures on the canal side.*

*The historic building recording provides a descriptive, drawn and photographic record of the former industrial structure and boundary wall that formed part of the Pinfold Works.*

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## **1 INTRODUCTION**

1.1 Archaeological Research Services Ltd (ARS Ltd) was commissioned in September 2019 by the Canal & River Trust (the client) to undertake a historic building recording of a former industrial structure and boundary wall that formed part of the Pinfold Works, Attercliffe, Sheffield, South Yorkshire.

## **2 SITE LOCATION AND GEOLOGY**

2.1 The former Pinfold Works is situated on the south side of the Sheffield and Tinsley Canal. It is bordered by the Canal to the north and Ripon Street to the south. It is centred at NGR K 37612 88404.

2.2 The underlying geology of the site is consists of Pennine Middle Coal Measures Formation - Mudstone, Siltstone and Sandstone - formed in the Carboniferous Period with no overlying superficial deposits (BGS 2019).

## **3 AIMS AND OBJECTIVES**

### **Regional Research Aims and Objectives**

3.1 Research priorities advocated in the Yorkshire Archaeological Research Framework: research agenda (Roskams and Whyman 2007) for the early modern period/industrial archaeology are: “a post-medieval, rather than purely industrial, agenda covering landscape setting and environmental impact, urbanisation, transport, and the archaeology of elite and religious power, of class, and of migration and culture contact” (Roskams and Whyman 2007, 38).

3.2 The archaeological works were undertaken in accordance with the regional guidance document *Yorkshire, The Humber & The North East: a regional statement of good practice for archaeology in the development process* (SYAS 2018).

### **Historic Building Recording Aims and Objectives**

3.2 The aim of historic building recording is to produce a descriptive, visual and drawn record of any significant architectural features and evidence for the original and subsequent historical form and functions of the building, and to place this record in the public domain by depositing it with the South Yorkshire Sites and Monuments Record and the Waterways Archive.

3.2.2 The objectives of the historic building recording are as follows.

- ◆ To produce a formal description and analytical record which provides a systematic account of the building’s origins, development and use, including floor plans, elevations, roof structure, flooring, internal layout and spaces, detailing, form and fabric, and evidence for phasing and development.
- ◆ To produce a full visual photographic record with photographic scales with all photographs descriptively captioned and cross referenced to a plan, plans and/or elevations clearly showing the viewing position, direction and photographic image reference.



- ◆ To produce measured and annotated survey drawings showing the location of features of historic interest.
- ◆ To produce an historic context account for the building to outline its historic significance.
- ◆ The project should produce an archive suitable for long-term deposition in order to 'preserve by record' the building in its current form prior to demolition.

3.3 A full account of specific objectives is provided within the Written Schemes of Investigation (WSI) prepared by ARS Ltd (Appendix III).

## **4 METHODOLOGY**

### **Background research**

4.1 Historic maps and documents held by Sheffield City Archives & Local Studies Library were consulted in order to place the former industrial structure and boundary wall in their historical context and to provide an overall interpretation and phasing of the structures based on documents and historic mapping.

### **Historic Building Recording**

4.2 The historic building recording was carried out in September 2019 by Dr Ian Wyre of ARS Ltd.

4.3 The historic building recording was conducted in line with the aforementioned WSI (Appendix III) as well as the relevant guidance (i.e. ClfA 2014 and 2019; HE 2016). The records produced were used in order to create an interpretative discussion of the form, function and phasing of the structures concerned. The records consisted of the following.

- ◆ To produce a formal description and analytical record which provides a systematic account of the building's origins, development and use, including floor plans, elevations, roof structure, flooring, internal layout and spaces, detailing, form and fabric, and evidence for phasing and development.
- ◆ To produce a full visual photographic record with photographic scales with all photographs descriptively captioned and cross referenced to a plan, plans and/or elevations clearly showing the viewing position, direction and photographic image reference.
- ◆ To produce measured and annotated survey drawings showing the location of features of historic interest.
- ◆ To produce an historic context account for the building to outline its historic significance.
- ◆ To produce an analytical account of the building's origins, development and use.

4.4 A risk assessment was undertaken before commencement of the work and health and safety regulations were adhered to at all times.





## **5 HISTORICAL BACKGROUND**

5.1 The Sheffield and Tinsley Canal opened in 1819 and runs from the River Don in a south-westerly direction to the Sheffield Canal Basin (now Victoria Quays) in the city centre. Mills and steel works were located along the north side of Canal at this time.

5.2 The first 'Wire Works' structures were erected on the Pinfolds Works site in the second half of the 19<sup>th</sup> century on the south site of the Canal. These comprised a long warehouse with a chimney to east side of the north wall, flanking the Canal. Further buildings were added adjoining this structure in the late 19<sup>th</sup> and early 20<sup>th</sup> century, and parts of these are still represented in the northern perimeter wall of the Pinfold Works site.

5.3 The extant single storey structure recorded in Section 6 below was added in the early 20<sup>th</sup> century to the western end of the wire works. A footbridge across the Canal was also built by the 1920s, which linked the site to the steel works on the north side of the Canal. The wire works went out of use and some structures were demolished in the late 20<sup>th</sup> century.

## **6 BUILDING DESCRIPTION**

### **Setting of the structures**

6.1 The historic building recording covered the above ground remains of brick-built structures along the northern perimeter of the site and a single extant building comprising an extension to a larger warehouse building. The structures are all found to be constituent parts of the 19<sup>th</sup> and 20<sup>th</sup> century wire works. Consolidation works, which may include demolition, are required for the future operational management of the site which may impact on these structures that are covered by the historic building recording. The Pinfold Works site sits on an elevated position alongside the canal towpath with areas of earth embankment, interspersed with stone and brick retaining walls, forming sections of the northern perimeter (Plate 1). No direct line of access to the Canal is observed from the present site, nor would it seem that this was required in the past. A footbridge has been constructed to link with a large modern building on the north bank and to the east is Pinfold Bridge. To the south and west are areas of open land, left after clearance of workers' terraced housing and other former industrial premises. The majority of the Pinfold Works site remains in current use (presently for a plant hire company) from a large extant building occupying most of the southern boundary associated with the former Pinfold Works. The building has a modern roof and other later structural elements but it would also appear to include several historic structures within its bounds (Plate 3). To the east and west of this building are yard areas, some of which are ramped and split level. The ground surface of the yards are made up of a series of discrete concrete pads, some of which correspond to former interior floor surfaces; some of these related to the standing structures that were subjected to historic building recording (Plates 2 to 4).

6.2 The survey of the north boundary wall identifies remnants of a sequence of structures built for the wire works which comprised in excess of eight construction phases. The recording follows an extrapolated construction sequence of the structures, i.e. Structure 1 being the earliest and Structure 8 the latest. At the time of the survey some of the structures were in a poor state of repair with several areas obscured by vegetation and



other elements restrictive to field survey. Aspects of the perimeter wall were also recorded from the canal side, with additional site restrictions due to health and safety considerations, although it is considered that the lower abutments and retaining walls will remain *in situ*.



Plate 1: North aspect of the perimeter wall structures (indicated), the canal, towpath and footbridge.



Plate 2: Inside the Pinfold Works site showing part of the structures forming the north perimeter subject to recording.



Plate 3: South aspect of the structures (facing north). Note a truncated part of a building to the foreground which was not part of the survey.



Plate 4: The extent of former structures along the north perimeter of the site (facing west). Scale 2m.



## **Structure 1 – former building wall**

6.3 Structure 1 comprises a section of red brick wall which would have constituted part of a long building (orientated east to west) formerly aligned along the northern boundary of the site. The north face of the wall, fronting the Canal, represented the exterior of the building, with the south face originally being an interior wall. In this instance the brickwork appears to post-date abutting sections of wall denoted through clear construction breaks to the east and west (i.e. abutting Structures 2 and 4). The brick wall, when observed from the canal side, sits atop a concrete pad which is supported across five concrete piers. Between the concrete elements is a brick infill placed over sections of rough cut masonry (Plates 5 to 7). Some of the natural substrate is exposed along the upper edge of the earth embankment on which mature vegetation is growing. Above, the brickwork is laid to English garden wall bond.

6.4 The wall contains a series of eleven symmetrical window apertures that are blocked with single skin brickwork laid to a stretcher bond, similar in appearance to that surrounding the openings. The wall has been lowered (likely on demolition of the building) to a level below the heads of the windows. The former apertures, however, retain cills, composed of side-on bricks side, with headers revealed towards the outer faces. The wall is now capped with concrete slabs (Plates 8 to 9). The wall most likely formed part of a long single storey warehouse building. A vertical line of broken brick indicates a return for the building's west elevation (Plate 10). To the east, the wall abuts an earlier structure with no indication of a return for an eastern elevation (Plate 11). This may suggest the structure was originally open to an adjacent building or yard area.



Plate 5: The north aspect of Structure 1 (facing south east) with construction break indicated (with structure 7, left).



Plate 6: The north aspect of Structure 1 intermediate section (facing south east).



Plate 7: North aspect of Structure 1 (facing south west) with construction break indicated (with structure 2, right).



Plate 8: South aspect of Structure 1 (facing north east).



Plate 9: South aspect of Structure 1 (facing north west). Scale 2m.



Plate 10: Structure 1, the north western corner of the former building, with the return indicated (facing north).  
Scale 2m.



Plate 11: Structure 1, the north eastern corner of the former building, with construction break indicated (facing north). Scale 2m.

## **Structure 2 - former building wall**

6.5 Structure 2 is represented by a further discrete section of red brick built wall, also likely to be part of a demolished former building, which now constitutes part of the north perimeter to the west of Structure 1 (Plates 12 to 13). The wall is distinguished by clear construction breaks to the east and west with two blocked, symmetrical window apertures also being apparent. Internally the sides of the apertures, which have been repaired, have a notched appearance. This may have occurred when metal window frames which were set into the brickwork at the time of construction were removed. Again, the wall has been lowered to below the window heads and is now capped with concrete slabs. The cills were created from bricks, placed on their side with headers facing outwards, to the exterior (northern) aspect. These project from the exterior plane of the elevation. The north brick face extends below the level of the elevated site interior to meet a section of roughly coursed masonry. The brickwork laid above follows an English garden wall bond. The outer canal side wall also incorporates two brick piers which terminate at the window cill level. On the Works' side (the south, formerly the building's interior) a vertical line of broken brick indicates a return to the west elevation of the former building (Plate 14). The wall corresponds with a single storey building which formerly stood at this location. On the internal side are remnants of layers of white wash.



Plate 12: Structure 2, to right (facing south).





Plate 13: Structure 2 where it meets the projection for the footbridge (facing south).



Plate 14: South face of Structure 2. Scale 2m.

### **Structure 3 – parapet wall around footbridge**

6.6 Structure 3 is represented by sections of parapet wall either side the south end of the footbridge (Plates 14 to 17). In the past this linked the Pinfold Works site to the Spartan Steel Works building still situated on the north bank of the Canal. The bridge appears to be a later replacement, in part evidenced by the reconsolidated brickwork either side the gated access. At this location the Works site projects to the north over a stone built abutment supporting a concrete plinth. Above this is a brick parapet, laid to English garden bond, the wall being capped by bricks placed on in their side.



Plate 14: Structure 3, section of parapet walling to west of the footbridge.



Plate 15: Structure 3.



Plate 16: Structure 3.

#### **Structure 4 - former building wall**

6.7 To the west of the footbridge is a further discrete section of red brick wall constructed on top of a rough ashlar foundation/retaining wall originating from below the canal towpath (Plate 17). Above, the wall is punctuated by three blocked window apertures, which correspond with three symmetrical window openings at the ground level of the Pinfold Works site (Plate 18). The structure again is indicative of a former standing building. The wall has been truncated, likely at demolition, to below the window heads (although these could not be deciphered from the remaining material). The window apertures have been blocked by single skin brick laid to an overall stretcher bond. Bull nose bricks have been used to form the internal edges of the apertures. The section of wall, on the south side, had remains for returns corresponding to the east and the west elevations of the demolished building (Plate 19).



Plate 17: Structure 4 from the canal towpath (facing south east).



Plate 18: South aspect of Structure 4, facing north. Scale 2m.



Plate 19: Ground floor window and other features in Structure 4, facing north east. Scale 2m.

## Structure 5 - former building wall

6.8 Structure 5 was a long section of wall indicative of having been part of a demolished building. From the level of the canal towpath, on the north side, the elevation material is entirely constructed from brick which appears to have been built in a single episode. From the level of the canal towpath up to the level of the works site the wall is canted to comprise a brick built buttress. Above, at the ground level of the works, is a row of twelve blocked window apertures (Plates 20 to 21). Most of the openings are symmetrically formed except for a pair to the east, which are distinguished by the use of headers over the wooden lintels (this may have formed a separate structure at some point in the past). The apertures on the exterior side, the north aspect, have segmental heads formed from gauged and rubbed brick *voussoirs* over brick cills. At the base of the wall, set at the level of the towpath, is a series of arches, composed from three courses of headers, suggesting the use of vaulted foundations (Plate 22). From the inside of the Pinfold Works site, the south facing side of the window apertures have flat timber lintels in various states of deterioration (Plates 23 to 24). Internally most edges of the windows are finished with bull-nosed bricks, except the two already mentioned. The apertures have been blocked with a single skin of brick, which is similar in appearance to the surrounding material. The bricks are laid to a stretcher bond. The truncated wall has again been capped with concrete slabs. The height of the wall increases towards the west over the course of three steps. On the south face of the wall a possible beam slot for one of the roof trusses is evident (Plate 25).



Plate 20: Detail north face of Structure 5 (facing east). Note the deviation in the course of the wall.



Plate 21: Blocked apertures to the north face of Structure 5.



Plate 22: Vaulted arch at tow path level of Structure 5.



Plate 23: Oblique view of Structure 5. Scale 2m.



Plate 24: Blocked widows and east return of Structure 5. Scale 2m.





Plate 25: Blocked widows and truss slot (indicated) of Structure 5 (facing north). Scale 2m.



Plate 26: West return (indicated) to south side of Structure 5. Scale 2m.

## **Structure 6 - former building wall**

6.9 Structure 6 is a substantial section of red brick wall, which probably formed part of a since demolished building, completing the Pinfold Works site's northern boundary to the west. The brick portion of the wall, remaining extant at considerable height, sits atop a concrete retaining wall alongside the canal towpath. The concrete retaining wall is formed from shuttering and pouring (vertical lines in its surface are evidence for this), comprising a lip at its uppermost edge; the concrete portion of the wall may have been applied as later reinforcement for the canal bank's side. An architecturally distinct feature of Structure 6 is the presence of two large blocked apertures with segmental heads created by three courses of headers. These two openings are likely to have comprised large industrial windows. Again, internally the sides of the apertures have a notched appearance, which has been repaired, that would suggest metal window frames have been removed. Such frames would have been set into the brickwork on construction. Towards the middle of the south (interior) face is brick built pier, possibly for a principal beam or truss for a roof. The top of the pier retains a section of steel 'I' beam inset which is atop a large sandstone pad stone with three masonry packing pieces. To the west, in the north west corner of the yard, is a further pier. Towards the east, puncturing the wall face, is a series of four slots level with the head of the windows. These could have held beams for a mezzanine level or fixings for metal racks, for example to store strip and bar stock.

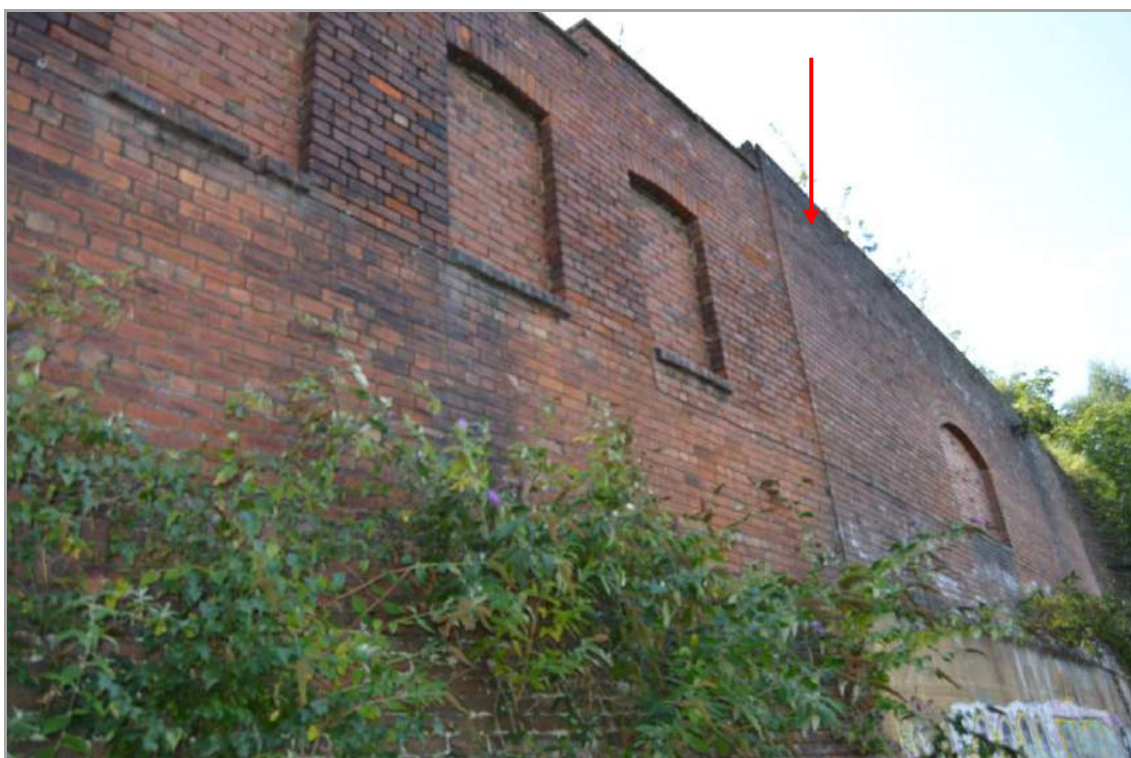


Plate 27: Structure 6 to the right (indicated), at the juncture with Structure 5 to the left.



Plate 28: One of two large arched aperture, to north face of Structure 6 (facing south).



Plate 29: Structure 6, brick built structure over a section of concrete retaining wall.



Plate 30: South side of Structure 6 (facing north east). Scale 2m.

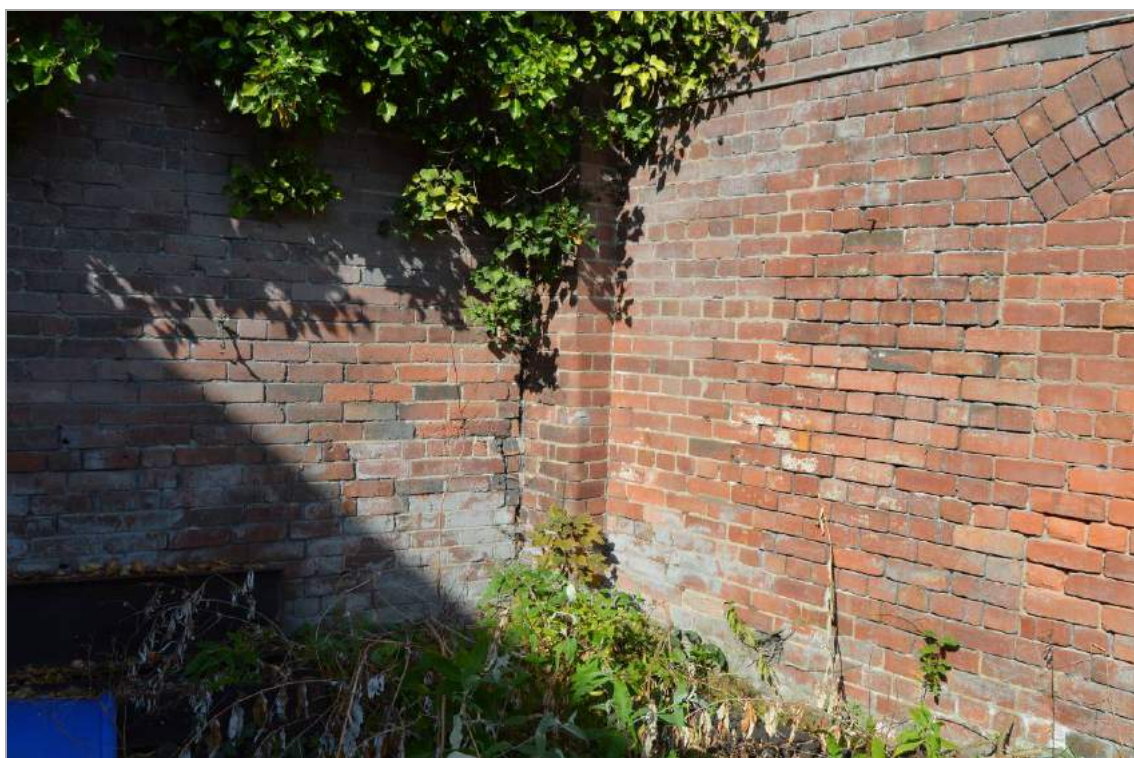


Plate 31: North west corner of the Pinfold Works yard, Structure 6 to the right (facing north west). Scale 2m.

### **Structure 7 – possible former building wall**

6.10 This element is a short section of discrete walling adjoining Structure 1 at its eastern edge (see Plate 5). The wall is equal in height to the latter structure (a former building now demolished) although the former appears to be composed from earlier red brick laid to English garden bond (three courses of stretchers to every course of headers). The brickwork, which is overall featureless, sits atop a section of rough masonry retaining wall.

### **Structure 8 – perimeter wall**

6.11 Structure 8 represents a brick-built parapet wall, the remainder of the northern boundary wall which extends to the east. The red brick, laid to a Flemish stretcher bond, sits atop a concrete rendered section of masonry wall on top of the canal embankment. The wall abuts a stone wall adjacent the rear of the neighbouring property plot to the east (Plate 33). The section of perimeter walling is built with mitred capping bricks along its top edge (Plate 34); otherwise it is devoid of any architectural features.



Plate 32: Structure 8, section of perimeter wall, from the canal towpath (facing south east)..



Plate 33: Structure 8 section of perimeter wall. Scale 2m.



Plate 34: Structure 8 perimeter wall detail.

## **Structure 9 – warehouse extension building**

6.12 Structure 9 represents the only extant building subject to historic building recording in this instance. In contrast to the previously described sequence of structures the building did not form part of the northern boundary of the site. The building was situated at the westernmost side of the site and formed part of its western boundary. The structure is a single storey warehouse extension building comprising three brick elevations (with interior steel frame), the east of the building being open to the adjacent, larger building. Here, a series of steel pillars support an upper brick wall which previously formed the east elevation of the larger building. The extension building has a steel truss roof, originally covered with corrugated sheets, which is double pitched with gables to the north and south end walls. The building is rectangular in plan, with its longest axis on a north to south alignment. The roof originally had two sets of skylights running either side; however these were in a collapsed state at the time of survey. The structure appears to have been built in a single construction phase with the overall use of uniform brickwork laid to English Garden Wall bond. According to historic maps the structure was one of the last additions to the wire works whilst it was in operation.

6.13 An architecturally distinct feature of the east elevation is the use of relief brickwork in the construction of its outside face: a part of the works which would be seen from the surrounding area. The wall is composed across eight bays, six of these having a recessed panel divided by brick relief piers. The panels are set beneath three corbelled courses comprising a row of headers set between rows of stretchers. Corbelled bricks are also employed to the parapet courses. Each panel contained an opening for a single large window set below a segmental arched head formed from two courses of headers. The window apertures are blocked in a contrasting red brick, laid to English garden bond, some with poorly finished pointing. These window apertures would have contained cast metal framed windows as indicated by the repaired notches either side the opening on removal of tabs set inside the brickwork. The two bays to the south appeared to have comprised a large opening, with steel framing as support. At some point this could have constituted a loading bay.

6.14 The interior was largely devoid of distinguishing features. At the time of survey the roof had deteriorated to a significant extent leaving the building open to the weather and pigeon infestation.





Plate 35: West elevation of Structure 9 (facing east).



Plate 36: Three bays of the building showing the relief brickwork to Structure 9. Scale 2m.





Plate 37: Two bays to the south of the east. Scale 2m.



Plate 38: South gable of the warehouse extension building (facing north east). Scale 2m.



Plate 39: Interior view of the extension building. Scale 2m.



Plate 40: Inside the extension building (facing north west). Scale 2m.

## **7 DISCUSSION AND CONCLUSIONS**

7.1 One of the key inventions of the Industrial Revolution was the development of the crucible method in the production of steel. This process had first been developed in Attercliffe, establishing Sheffield as a leading centre for steel and edge tool manufacture. Many of the first crucible shops were set up alongside Effingham Road (Bayliss 1995, 2). Crucible steel could also be used for making high quality steel wire for a multitude of uses, including for ropes, hawsers, piano wire, umbrella frames, crinolines, needles, etc. (Bayliss 1995, 29). Wire was produced from steel rods which would be drawn or pulled through a series of drawplates. The perforations on the drawplate corresponded with sizes ranging from Nos. 1 through to 20 for thicker wires, and from Nos. 20 through to 40 for finer wires, with increasing numbers signifying smaller diameters. The cost of making wire would increase with each successive draw so that finer wire was costlier to manufacture when compared with wire of thicker sizes. Drawing longer pieces of wire using steam power was carried out in the 1840s. To serve this burgeoning industry the Sheffield and South Yorkshire Navigation Canal opened 1819, with many mills and steel works established along the north side of canal.

7.2 On the south side of the canal, adjacent to Pinfold Bridge, the first Ordnance Survey (OS) map produced in 1853 depicts the future site of the Pinfold Works as fields. The 1890 OS map indicates that this had changed dramatically with the first of many large buildings in place operating as a wire mill. The historic building recording indicates that the north boundary wall constitutes remnants from the sequence of structures built for the wire works. The wall was built in at least eight construction phases. Amongst the earliest buildings would have been a long warehouse, with a chimney to east and its north wall flanking the Canal. The footprint correlates with Structure 1, although the fabric of the wall did not correlate with this earlier building. In this instance the brickwork appeared to post-date abutting sections of wall (i.e. Structures 2 and 4) which may have been part of the earlier long warehouse. The present wall sits atop a concrete pad which, observed from the canal side, was supported on concrete piers. Structure 1 most likely represented a mid-20<sup>th</sup> century rebuilding of this structure which occupied the earlier building footprint. Electric furnaces and continuous caster and rolling mills were in use at this time which, along with consolidation of the works along the canal bank, may have resulted in this rebuilding.

7.3 The 1890 OS map depicts an enlarged works structure defined with four chimneys, probably associated with steam engines or furnaces, to the south of the site. The efficiency of wire drawing could be increased by combining several blocks of wire drawing machines, an innovation which was introduced in the late 19<sup>th</sup> century. By the time of the 1905 to the south of the site the footprints of the first buildings remain in place but with the addition of a large linking building covering a larger proportion of site from north to south. This building is probably represented in Structures 4 to 6, which reveals the piecemeal but rapid construction of buildings on the site. By the time of the 1923 OS map Structure 9, the warehouse extension building, has been added to the west elevation of the large works building. On the same OS map a foot bridge from the site to the north bank is also depicted. The Attercliffe Steel Works had been established on the site on the opposite side of the Canal, run by a firm called Shipmans before Spartan took the site over in the latter half of



the 20<sup>th</sup> century. The Pinfold Works site is still depicted as a Steel Works on the 1970 OS map, although this is just prior to the clearance of the workers' terraced housing to the south east. This may suggest that industry was steadily withdrawing from the area. The 1993 OS map indicates that the steel works' buildings remained intact up to the early 1990s but clearance of many of the buildings occurred shortly after this date. This is probably when the north boundary wall was altered into its present form. In addition, the heights of the remaining walls were reduced and bricks reclaimed from the demolished structures to block the remaining window apertures on the canal side.

7.4 Sheffield's role as the nation's major steel producer along with its associated metal trades *'were of international significance, dominating the local economy and giving employment to thousands of men and women'* (English Heritage 2001, 2). Regarding their significance, the remains of the wire works' buildings of the Pinfold Works are characteristic of the principal building typologies indicative of Sheffield's important industrial heritage. The built remains contributed a complex of buildings designed as purpose-built workshops for powered processes for the manufacture of steel wire. The wire works when first built had a layout comprising large and long rectangular blocks set between connected internal yards. The design of such buildings is indicative for the housing of forging and rolling mills which required large working areas. Prior the 19<sup>th</sup> century mechanised processes had required water power (English Heritage 2001, 23), Sheffield's environs being particularly suited to a dense placement of water-driven enterprises. Steam power, however, widened the opportunity for site location and as was the case for the development of Attercliffe's steel works. Such complexes could expand into the surrounding countryside bringing with it a spread of workers' housing and additional infrastructure. Transport links from canals and railways made this expansion equally possible.

7.5 How materials moved around the rural and urban landscape of Sheffield is of particular interest and *'crucial to our understanding of how the metal trades operated and evolved'* (English Heritage 2001, 48). The City would thrive in the 19<sup>th</sup> and 20<sup>th</sup> centuries through the combination of mass production with high quality manufacturing. As found on the site of the Pinfold wire works the subdivision of linked processes brought with it a distinct range of building typologies. The works themselves did not operate via a direct link to the Canal suggesting the rods required for drawing into wire arrived locally and left in a similar fashion.

7.6 Once there, each part of the wire works' complex was designed to house a specific process in contrast to the more generic workshops in Sheffield. The buildings were designed to allow the passage of long lengths of wire through rolling stands. Maximising the use of natural light was also an important factor to consider in the design of 19<sup>th</sup> century industrial buildings, particularly those used as workshops. A common feature of industrial buildings in Sheffield built during this time is dual aspect windows and painted white interiors. These characteristics are particularly conveyed through the recorded remains of the former works buildings along the northern perimeter of the Pinfold site. These would ensure the maximisation of natural light in order to illuminate the work stations; evidence for benches and machines along the walls was observed during the historic building recording at the Pinfold site. Courtyards between the buildings had an additional benefit in that they allowed for movement of goods for transport, as well as providing natural light for surrounding structures. These distinct features were evidenced on the Pinfold works site.



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9.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

## **10 ARCHIVES**

10.1 A digital copy of the report in PDF format and the digital photographs will be submitted to the Canal & River Trust and deposited with the Waterways Archive and the South Yorkshire Sites and Monuments Record. A copy of the report will be uploaded as part of the OASIS record (see below) for online access via the Archaeological Data Service. An OASIS form has been completed and is included as Appendix IV of this report. A digital copy of the final report will also be uploaded to OASIS.

## **11 ACKNOWLEDGEMENTS**

11.1 Archaeological Research Services Ltd would like thank David Wooley of the Canal & River Trust who commissioned the project and provided access to the site.

## **12 REFERENCES**

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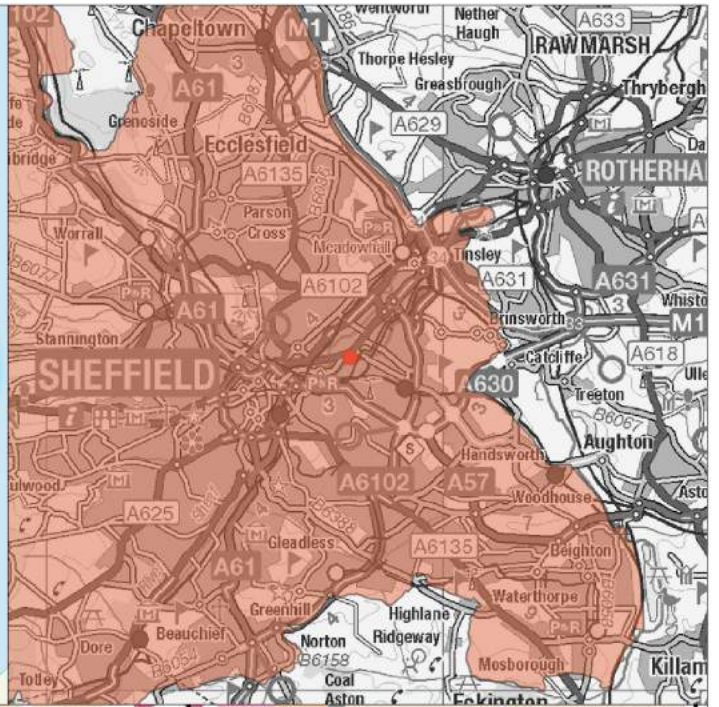
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**APPENDIX 1: FIGURES**



Site name: Pinfold Works, Attercliffe  
 Date: September 2019  
 Drawn by: ARJ  
 Scale: Varies

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Site Boundary	Site Location
Sheffield City Council	

**Figure 1:  
Site location**

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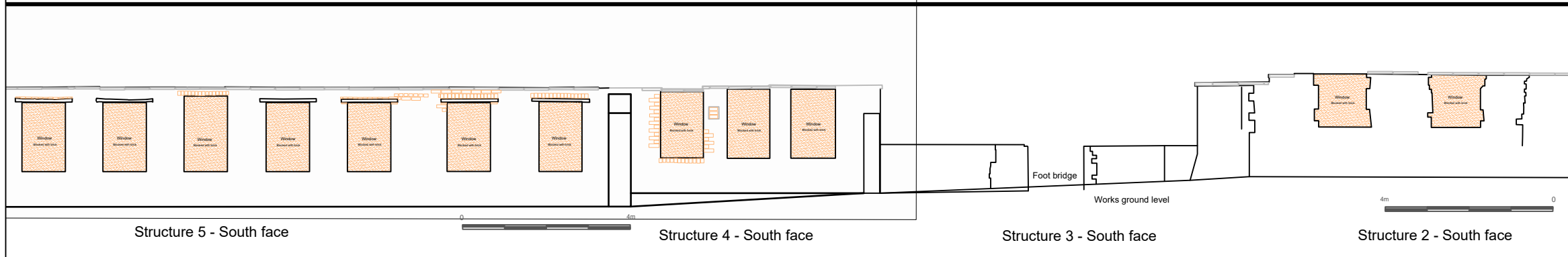




Ortho-image - South face



Site Name: Pinfold Works, Attercliffe, Sheffield  
 Date: 2019  
 Drawn by: ICW  
 Scale: N/A



Structure 5 - South face

Structure 4 - South face

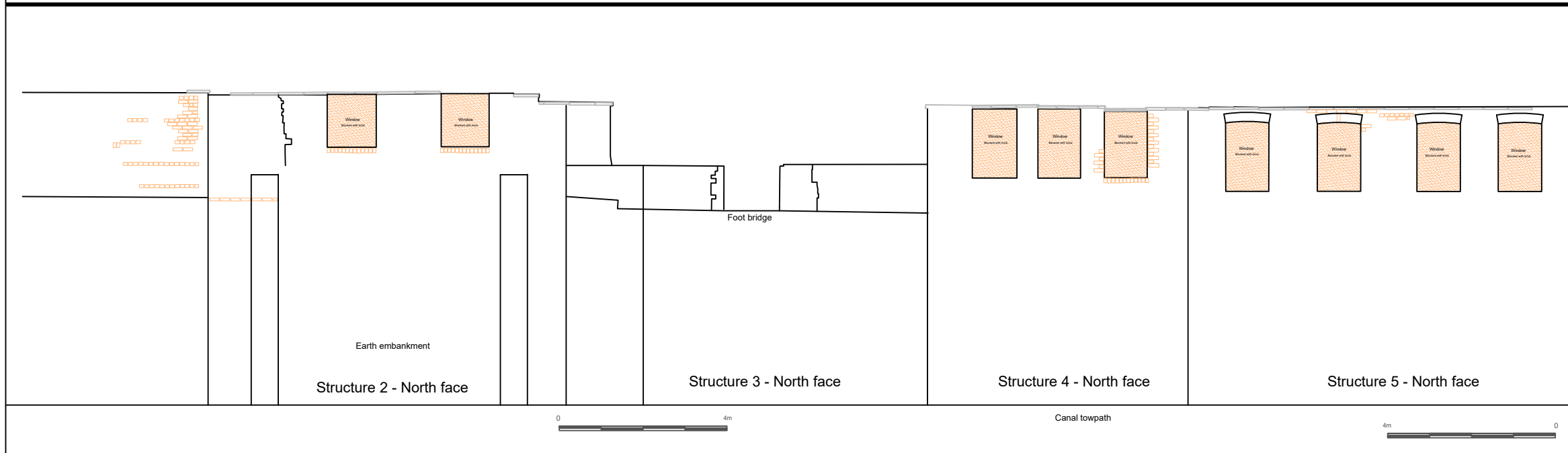
Structure 3 - South face

Structure 2 - South face

Structures 2, 3 and 4, Historic Building Recording 2019

Key:

- Stone/Concrete
- Brick bond detail



Structure 2 - North face

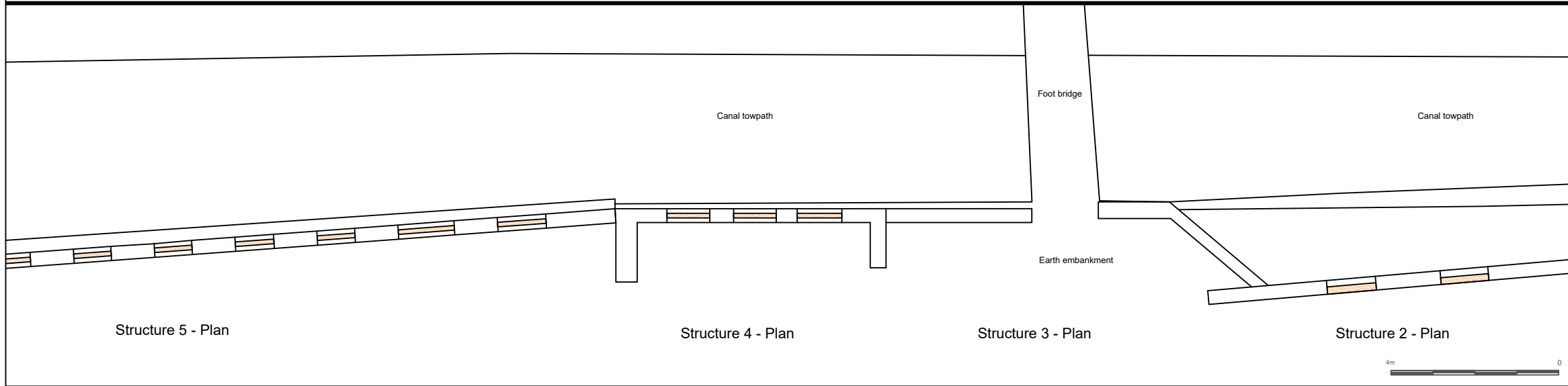
Structure 3 - North face

Structure 4 - North face

Structure 5 - North face



Canal towpath



Structure 5 - Plan

Structure 4 - Plan

Structure 3 - Plan

Structure 2 - Plan

Canal towpath

Foot bridge

Earth embankment

Canal towpath



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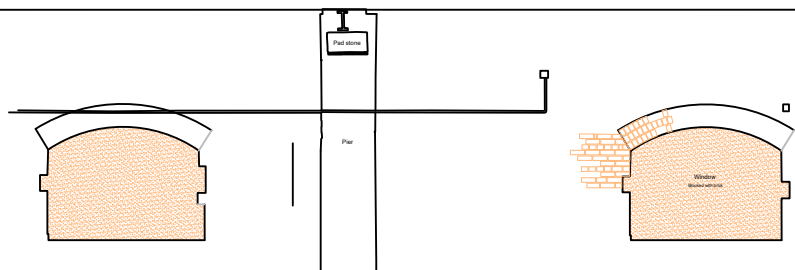




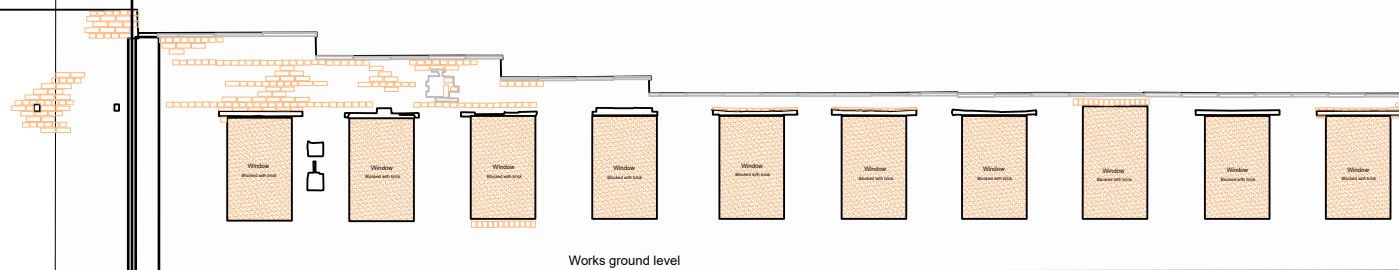
Ordnance image - South face

0 4m

Site Name: Pinfold Works, Attercliffe, Sheffield  
 Date: 2019  
 Drawn by: ICW  
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Structure 6 - South face



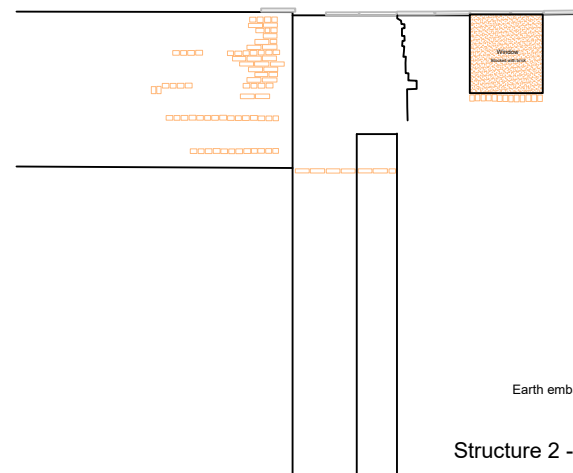
Structure 5 - South face

Structures 5 and 6, Historic Building Recording 2019

Key:

- Stone/Concrete
- Brick bond detail

Structure 5 - North face



Structure 2 -

Earth embankment

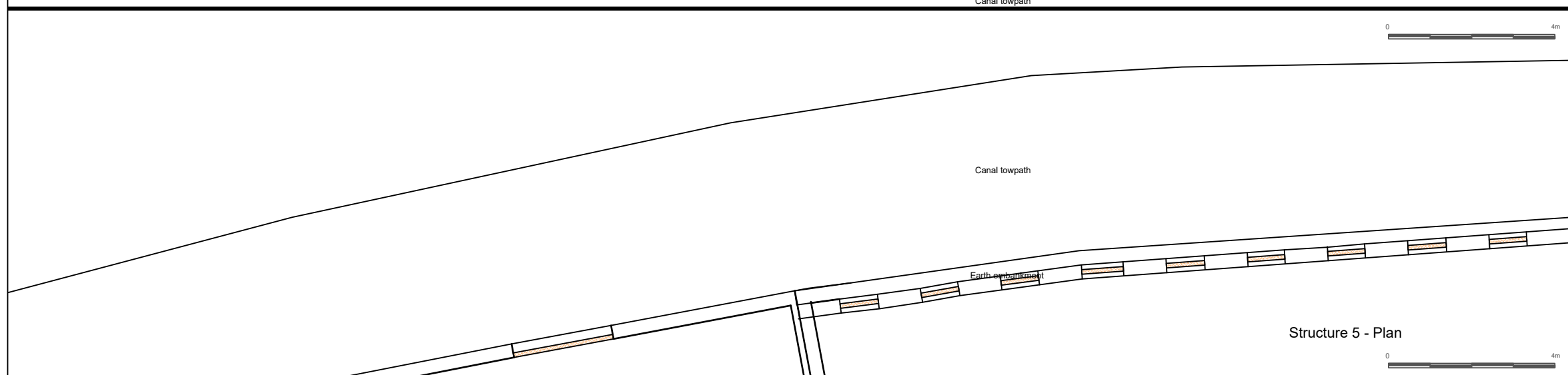
Earth embankment

Canal towpath

0 4m

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Structure 5 - Plan

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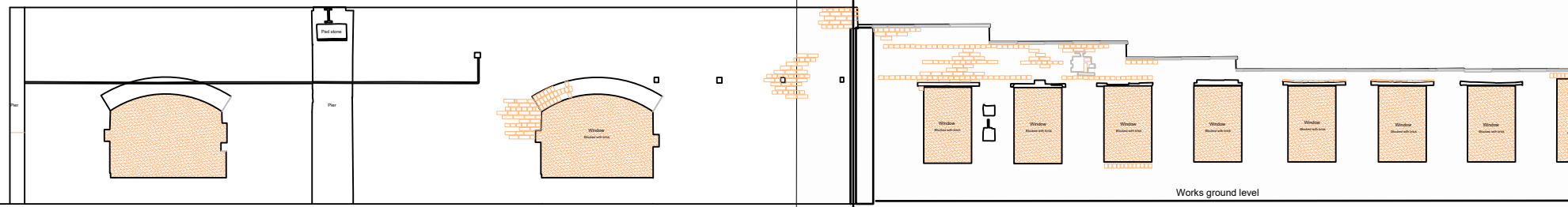
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Ortho-image - South face



Site Name: Pinfold Works, Attercliffe, Sheffield  
 Date: 2019  
 Drawn by: ICW  
 Scale: N/A



Structure 6 - South face

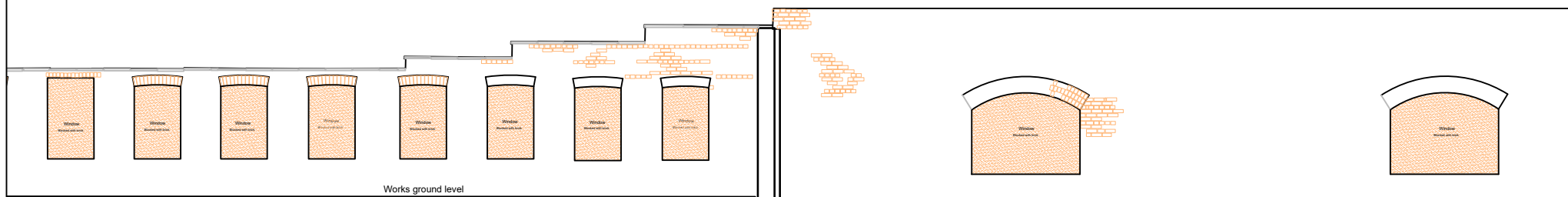
Structure 5 - South face



Structures 5 and 6, Historic Building Recording 2019

Key:

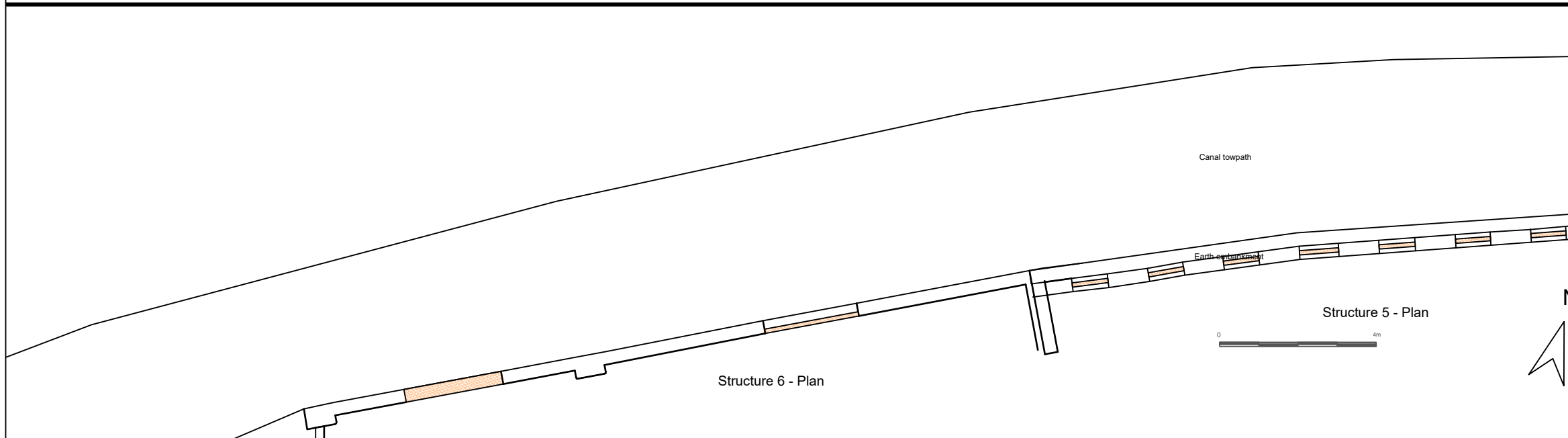
- Stone/Concrete
- Brick bond detail



Structure 5 - South face

Structure 6 - South face

Canal towpath



Structure 6 - Plan

Structure 5 - Plan



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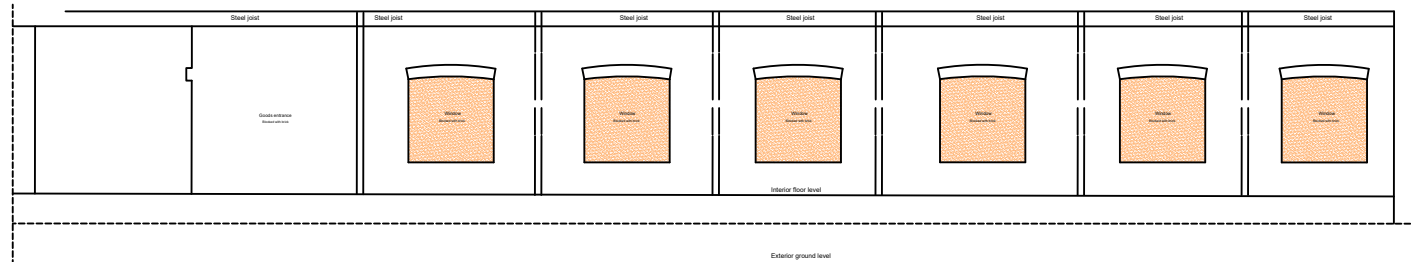
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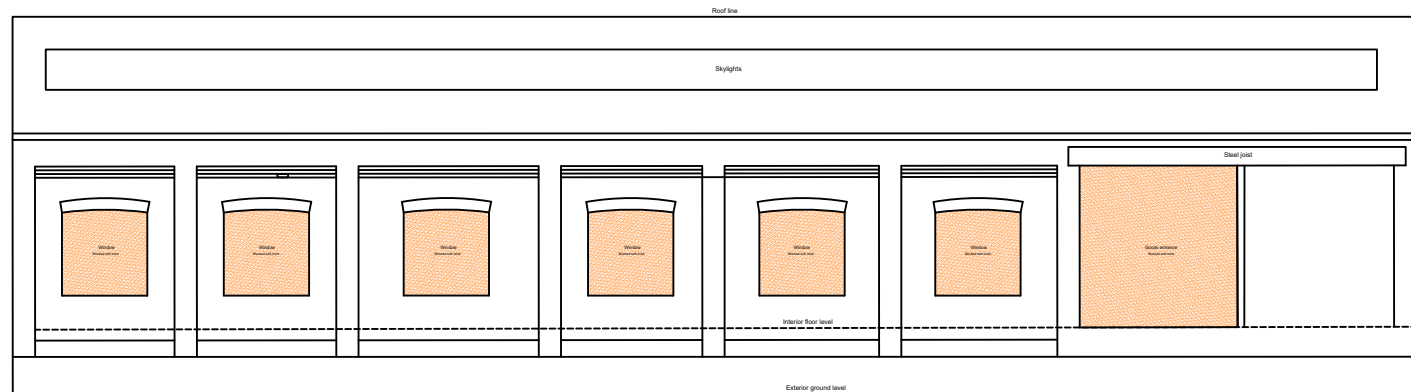




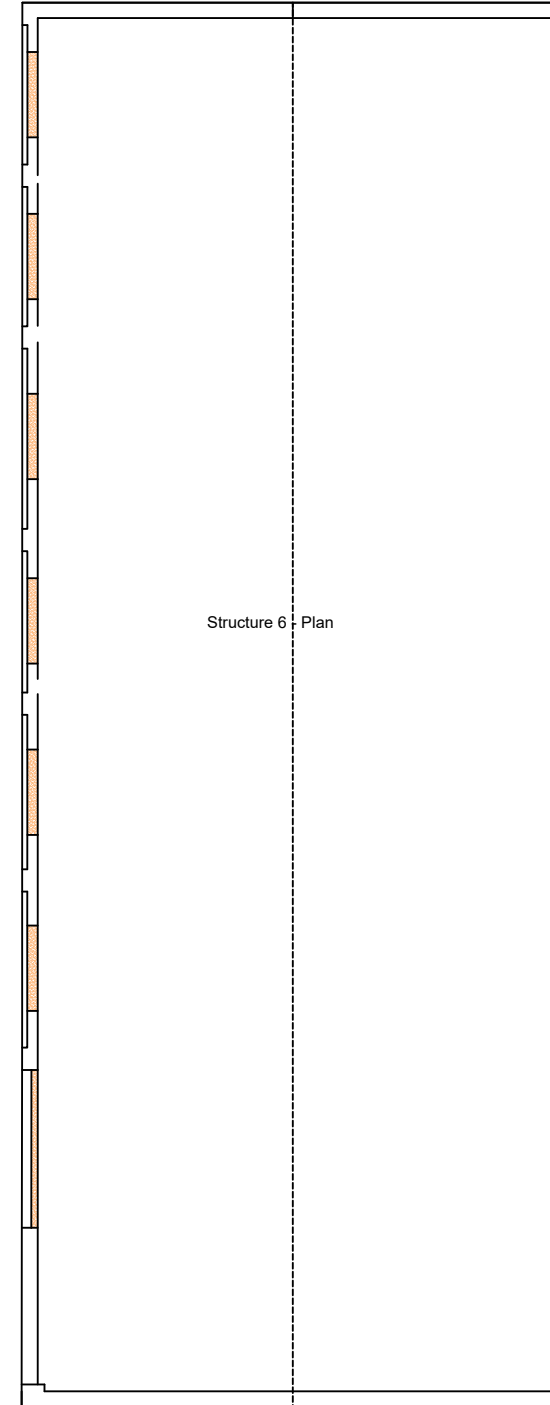
Ortho-image - South face



Structure 6 - West Elevation - Interior face



Structure 6 - West Elevation - Exterior face





Structure 6 - Plan



Site Name: Pinfold Works, Attercliffe,  
Sheffield  
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Structures 9, Historic Building Recording  
2019

Key:

-  Stone/Concrete
-  Brick bond detail

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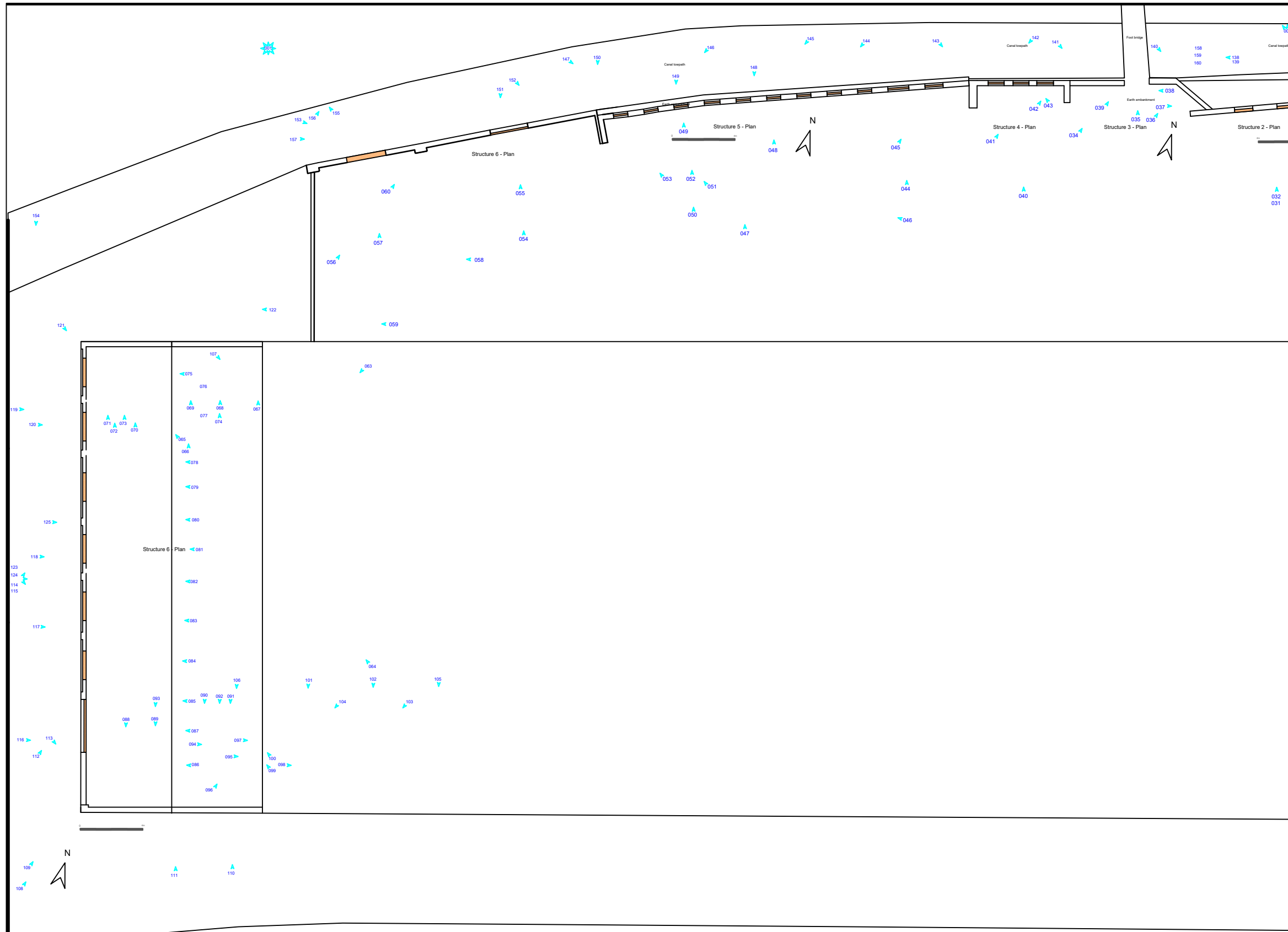
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**APPENDIX 2: PHOTOGRAPHIC REGISTER**

<b>Photograph No.</b>	<b>Orientation</b>	<b>Scale</b>	<b>Description</b>
1	NW	2m	Entrance to Pinfold Works, sign
2	NE	2m	North east corner of yard
3	N	2m	North east corner of yard, boundary wall (Structure 8)
4	N	2m	Boundary wall (Structure 8)
5	N	2m	Boundary wall (Structure 8)
6	W	2m	View along extent of perimeter wall
7	N	2m	Boundary wall (Structure 8), brick detail
8	NE	2m	Boundary wall (Structure 8)
9	N	2m	Boundary wall (Structure 8), west construction break
10	N	2m	Perimeter wall (Structure 1), east construction break
11	N	2m	Perimeter wall (Structure 1),
12	NW	2m	Perimeter wall (Structure 1), oblique
13	N	2m	Perimeter wall (Structure 1),
14	N	2m	Perimeter wall (Structure 1),
15	N	2m	Perimeter wall (Structure 1),
16	NW	2m	Perimeter wall (Structure 1),
17	N	2m	Perimeter wall (Structure 1), ground
18	NE	2m	Perimeter wall (Structure 1),
19	N	2m	Perimeter wall (Structure 1),
20	NW	2m	Perimeter wall (Structure 1), oblique
21	N	2m	Perimeter wall (Structure 1),
22	N	2m	Perimeter wall (Structure 1), machine block
23	N	2m	Perimeter wall (Structure 1), machine block
24	E	2m	Perimeter wall (Structure 1), machine block
25	NE	2m	Perimeter wall (Structure 1), machine block
26	NE	2m	Perimeter wall (Structure 1), oblique
27	N	2m	Perimeter wall (Structure 1),
28	E	2m	Perimeter wall (Structure 1), ground fixings
29	NE	2m	Perimeter wall (Structure 1), ground fixings
30	NE	2m	Perimeter wall (Structure 1), ground surface
31	N	2m	Perimeter wall (Structure 1), ground surface
32	N	2m	Perimeter wall (Structure 2),
33	W	2m	View along extent of perimeter wall
34	NE	2m	Parapet wall (Structure 3),
35	N	2m	Parapet wall (Structure 3),
36	NE	2m	Parapet wall (Structure 3),
37	SE	2m	Parapet wall (Structure 3), juncture to east
38	W	2m	Parapet wall (Structure 3), footbridge entrance
39	NE	2m	Parapet wall (Structure 3), footbridge entrance
40	N	2m	Perimeter wall (Structure 4),
41	NE	2m	Perimeter wall (Structure 4), oblique
42	N	2m	Perimeter wall (Structure 4), detail
43	NE	2m	Perimeter wall (Structure 4),

44	N	2m	Perimeter wall (Structure 5),
45	NE	2m	Perimeter wall (Structure 5),
46	NW	2m	View along extent of perimeter wall (Structure 5/6)
47	N	2m	Perimeter wall (Structure 5),
48	N	2m	Perimeter wall (Structure 5), window detail
49	N	-	Perimeter wall (Structure 5), window detail
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51	NW	2m	Perimeter wall (Structure 5), juncture to west
52	N	-	Perimeter wall (Structure 5),
53	NW	2m	Perimeter wall (Structure 5),
54	N	2m	Perimeter wall (Structure 6),
55	N	2m	Perimeter wall (Structure 6),
56	NE	-	Perimeter wall (Structure 6),
57	N	2m	Perimeter wall (Structure 6),
58	W	2m	Perimeter wall to west of site
59	W	2m	Perimeter wall to west of site
60	NE	-	Perimeter wall (Structure 6), pier detail
61	N	2m	Perimeter wall (Structure 6), pier detail
62	NW	2m	Perimeter wall (Structure 6), return detail
63	SW	2m	Interior warehouse extension (Structure 9) from principal warehouse
64	NW	2m	Interior warehouse extension (Structure 9), from principal warehouse
65	NW	2m	Interior warehouse extension (Structure 9) north west corner
66	N	-	Interior warehouse extension (Structure 9) north gable
67	N	-	Interior warehouse extension (Structure 9) north gable
68	N	2m	Interior warehouse extension (Structure 9) north gable
69	N	2m	Interior warehouse extension (Structure 9) north gable
70	N	-	Interior warehouse extension (Structure 9) north gable
71	N	2m	Interior warehouse extension (Structure 9) north gable
72	N	2m	Interior warehouse extension (Structure 9) north gable
73	N	2m	Interior warehouse extension (Structure 9) north gable
74	N	2m	Interior warehouse extension (Structure 9) north gable
75	W	2m	Interior warehouse extension (Structure 9) west wall
76	W	2m	Interior warehouse extension (Structure 9) west wall
77	W	2m	Interior warehouse extension (Structure 9) west wall
78	W	2m	Interior warehouse extension (Structure 9) west wall
79	W	2m	Interior warehouse extension (Structure 9) west wall
80	W	2m	Interior warehouse extension (Structure 9) west wall



81	W	2m	Interior warehouse extension (Structure 9) west wall
82	W	2m	Interior warehouse extension (Structure 9) west wall
83	W	2m	Interior warehouse extension (Structure 9) west wall
84	W	2m	Interior warehouse extension (Structure 9) west wall
85	W	2m	Interior warehouse extension (Structure 9) west wall
86	W	2m	Interior warehouse extension (Structure 9) west wall
87	W	2m	Interior warehouse extension (Structure 9) west wall
88	S	2m	Interior warehouse extension (Structure 9) south gable
89	S	2m	Interior warehouse extension (Structure 9) south gable
90	S	2m	Interior warehouse extension (Structure 9) south gable
91	S	2m	Interior warehouse extension (Structure 9) south gable
92	S	2m	Interior warehouse extension (Structure 9) south gable
93	S	2m	Interior warehouse extension (Structure 9) south gable
94	E	2m	Interior warehouse extension (Structure 9) south door
95	E	2m	Interior warehouse extension (Structure 9) south door
96	E	2m	Interior warehouse extension (Structure 9) south door
97	E	-	Interior warehouse extension (Structure 9), south door
98	E	-	Interior warehouse extension (Structure 9), south lobby
99	SW	-	Interior warehouse extension (Structure 9), south lobby
100	NW	-	Interior warehouse extension (Structure 9), south lobby
101	S	2m	Interior warehouse, gable end
102	S	-	Interior warehouse, gable end
103	S	2m	Interior warehouse, gable round vent/window
104	S	2m	Interior warehouse, gable
105	S	2m	Interior warehouse, blocked features
106	S	-	Interior warehouse extension (Structure 9), stock
107	SE	2m	Interior warehouse extension (Structure 9), east wall
108	NE	2m	Exterior warehouse extension (Structure 9), south west corner oblique
109	N	2m	Exterior warehouse extension (Structure 9), south gable
110	N	-	Exterior warehouse extension (Structure 9), south gable
111	N	-	Exterior warehouse extension (Structure 9), south gable
112	NE	2m	Exterior warehouse extension (Structure 9), west

			wall
113	SE	2m	Exterior warehouse extension (Structure 9), west wall
114	E	-	Exterior warehouse extension (Structure 9), west wall
115	E	-	Exterior warehouse extension (Structure 9), west wall
116	E	2m	Exterior warehouse extension (Structure 9), west wall
117	E	2m	Exterior warehouse extension (Structure 9), west wall
118	E	2m	Exterior warehouse extension (Structure 9), west wall
119	E	2m	Exterior warehouse extension (Structure 9), west wall
120	E	-	Exterior warehouse extension (Structure 9), west wall
121	S	-	Exterior warehouse extension (Structure 9), north west corner
122	W	2m	Exterior warehouse extension (Structure 9), north wall
123	N	2m	Exterior warehouse extension (Structure 9), west wall
124	N	2m	Exterior warehouse extension (Structure 9), west wall
125	N	-	Exterior warehouse extension (Structure 9), west wall
126	SE	-	Boundary wall (Structure 8), east construction break
127	SE	-	Boundary wall (Structure 8),
128	S	-	Boundary wall (Structure 1), east construction break
129	S	-	Boundary wall (Structure 1),
130	S	-	Boundary wall (Structure 1),
131	S	-	Boundary wall (Structure 1),
132	S	-	Boundary wall (Structure 1),
133	S	-	Boundary wall (Structure 1),
134	SW	-	Boundary wall (Structure 1),
135	SW	-	Boundary wall (Structure 1),
136	W	-	Boundary wall (Structure 1), canal and foot bridge
137	S	-	Boundary wall (Structure 1), juncture/construction break (Structure 2)
138	S	-	Boundary wall (Structure 2),
139	S	-	Boundary wall (Structure 3),
140	SE	-	Boundary wall (Structure 2),
141	SE	-	Boundary wall (Structure 3),
142	SW	-	Boundary wall (Structure 4),
143	SE	-	Boundary wall (Structure 4),
144	SE	-	Boundary wall (Structure 5),
145	SW	-	Boundary wall (Structure 5),
146	SW	-	Boundary wall (Structure 5),

147	SE	-	Boundary wall (Structure 5),
148	S	-	Boundary wall (Structure 5), vaulted foundation arch
149	S	-	Boundary wall (Structure 5), vaulted foundation arch
150	S	-	Boundary wall (Structure 5), window detail
151	S	-	Boundary wall (Structure 6), window detail
152	SE	-	Boundary wall (Structure 5),
153	SE	-	Boundary wall (Structure 6),
154	S	-	View through to warehouse extension (Structure 9),
155	NE	-	North canal bank from towpath
156	NW	-	North canal bank from towpath
157	E	-	Boundary wall (Structure 6), concrete retaining wall
158	NE	-	Boundary wall (Structure 4),
159	S	-	Boundary wall (Structure 3),
160	S	-	Boundary wall (Structure 3),
161	S	-	Boundary wall (Structure 3),
162	SW	-	Boundary wall (Structure 2),
163	S	-	Boundary wall (Structure 1),
164	SW	-	Boundary wall (Structure 1),
165	SE	-	Boundary wall (Structure 1/7),
166	SE	-	Boundary wall (Structure 7),
167	S	-	Boundary wall (Structure 8),
168	SE	-	Boundary wall (Structure 8),
169	SW	-	Boundary wall (Structure 8),
170	SW	-	Boundary wall (Structure 8),
171	NE	-	General view of yard
172	NW	-	General view of yard

## APPENDIX 3: OASIS FORM AND SPECIFICATION

### OASIS ID: archaeol5-369176

#### Project details

Project name	Pinfold Works, Attercliffe, Sheffield Historic Building Recording
Short description of the project	Archaeological Research Services Ltd was commissioned in September 2019 by the Canal and River Trust (the client) to undertake a historic building recording of a former industrial structure and boundary wall that formed part of the Pinfold Works, Attercliffe, Sheffield, South Yorkshire. This report presents and discusses the on-site historic building recording carried out in September 2019 and includes a historic background, building description, photographic survey and drawn record of the above ground remains of brick-built structures along the northern perimeter of the site and a single extant building comprising an extension to a larger warehouse building. The aim of this historic building recording is to produce a descriptive, visual and drawn record of any significant architectural features and evidence for the original and subsequent historical form and functions of the structures, and to place this record in the public domain by depositing it with the South Yorkshire Sites and Monuments Record and the Waterways Archive.
Project dates	Start: 04-09-2019 End: 04-09-2019
Previous/future work	Not known / Not known
Type of project	Building Recording
Monument type	INDUSTRIAL BUILDING Post Medieval
Monument type	INDUSTRIAL BUILDING Modern
Significant Finds	N/A None
Significant Finds	N/A None
Methods & techniques	"Annotated Sketch","Measured Survey","Photogrammetric Survey","Photographic Survey","Rectified photography","Survey/Recording Of Fabric/Structure"
Prompt	Planning condition

#### Project location

Country	England
Site location	SOUTH YORKSHIRE SHEFFIELD SHEFFIELD Pinfold Works, Attercliffe, Sheffield
Study area	0 Square metres
Site coordinates	SJ 51166 23959 52.810632673235 -2.724576006981 52 48 38 N 002 43 28 W Point

#### Project creators

Name of Organisation	Archaeological Research Services Ltd
Project brief originator	Archaeological Research Services Ltd
Project design	Archaeological Research Services Ltd

originator

Project director/manager Robin Holgate

Project supervisor Robin Holgate

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**Project archives**

Physical Archive Exists? No

Digital Archive recipient South Yorkshire SMR

Digital Contents "Survey"

Digital Media available "Images raster / digital photography","Images vector","Survey","Text"

Paper Archive Exists? No

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Entered by Dr Ian Wyre (ian@archaeologicalresearchservices.com)

Entered on 4 October 2019

## **Pinfold Works, Attercliffe, Sheffield, South Yorkshire**

### **Written Scheme of Investigation for historic building recording**

2019



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[www.archaeologicalresearchservices.com](http://www.archaeologicalresearchservices.com)

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Prepared on behalf of: Canal & River Trust

Date of compilation: September 2019

Compiled by: Robin Holgate MCIfA

Site central NGR: SK 37612 88404

## 1 INTRODUCTION

1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Research Service Ltd (ARS Ltd) for the Canal & River Trust (the Client). It details a historic building recording of the structure and boundary wall that formed part of the former Pinfold Works, Attercliffe, Sheffield, South Yorkshire.

1.2 This document comprises a Written Scheme of Investigation (WSI) confirming the nature of the site investigation and recording to be undertaken by Archaeological Research Services Ltd (ARS Ltd) of the former industrial structure and boundary wall at Pinfold Works.

1.4 The aim of the programme of works is in line with national guidelines set out in the National Planning Policy Framework *Section 12 – Conserving and enhancing the historic environment* (Ministry of Housing, Communities and Local Government 2019, 54-7).

## 2 BACKGROUND

### 2.1 Site Location and Geology

2.1.1 The former Pinfold Works is situated on the south side of the Sheffield and Tinsley Canal. It is bordered by the Canal to the north and Ripon Street to the south. It is centred at NGR K 37612 88404.

2.1.2 The underlying geology of the site is consists of Pennine Middle Coal Measures Formation - Mudstone, Siltstone and Sandstone - formed in the Carboniferous Period with no overlying superficial deposits (BGS 2019).

### 2.2 Historical and Archaeological Background

2.2.1 The Sheffield and Tinsley Canal opened in 1819 and runs from the River Don in a south-westerly direction to the Sheffield Canal Basin (now Victoria Quays) in the city centre. Mills and steel works were located along the north side of Canal at this time.

2.2.2 The first 'Wire Works' buildings were erected on the Pinfolds Works site in the second half of the 19<sup>th</sup> century on the south site of the Canal comprised a long warehouse with a chimney to east side of the north wall, flanking the Canal. The single storey structure to be recorded was added in the early 20<sup>th</sup> century to the western end of the wire works. A footbridge across the Canal was also built by the 1920s linking the site to the steel works on the north side of the Canal. The works went out of use and some structures were demolished in the late 20<sup>th</sup> century.

## 3 AIMS AND OBJECTIVES

### 3.1 Regional Research Aims and Objectives

3.1.1 Research priorities advocated in the Yorkshire Archaeological Research Framework: research agenda (Roskams and Whyman 2007) for the early modern period/industrial archaeology are: "a post-medieval, rather than purely industrial, agenda covering landscape setting and environmental impact, urbanisation,



transport, and the archaeology of elite and religious power, of class, and of migration and culture contact” (Roskams and Whyman 2007, 38).

3.1.2 The archaeological works will be undertaken in accordance with the regional guidance document *Yorkshire, The Humber & The North East: a regional statement of good practice for archaeology in the development process* (SYAS 2018).

## 3.2 Historic Building Recording Aims and Objectives

3.2.1 The aim of historic building recording is to produce a descriptive, visual and drawn record of any significant architectural features and evidence for the original and subsequent historical form and functions of the building, and to place this record in the public domain by depositing it with the South Yorkshire Sites and Monuments Record and the Waterways Archive.

3.2.2 The objectives of the historic building recording are as follows.

- ◆ To produce a formal description and analytical record which provides a systematic account of the building’s origins, development and use, including floor plans, elevations, roof structure, flooring, internal layout and spaces, detailing, form and fabric, and evidence for phasing and development.
- ◆ To produce a full visual photographic record with photographic scales with all photographs descriptively captioned and cross referenced to a plan, plans and/or elevations clearly showing the viewing position, direction and photographic image reference.
- ◆ To produce measured and annotated survey drawings showing the location of features of historic interest.
- ◆ To produce an historic context account for the building to outline its historic significance.
- ◆ The project should produce an archive suitable for long-term deposition in order to ‘preserve by record’ the building in its current form prior to demolition.

## 4 HISTORICAL BUILDING RECORDING

### 4.1 Coverage

4.1.1 The project will record the boundary wall and the exterior and interior that can be accessed of the single storey extension on the western end of the former Pinfold Works prior to their demolition. The structures will be recorded to the equivalent standard of Historic England’s (2016) *Understanding Historic Buildings – A guide to good recording practice* Level 2/3 standard.

### 4.2 Methodology

4.2.1 All aspects of the building recording will be conducted according to the guidelines in *Understanding Historic Buildings – A guide to good recording practice* by Historic England (2016) and the Chartered Institute for Archaeologists (CIfA) *Code*





of Conduct (2014) and *The Standards and Guidance for Archaeological Building Recording* (2019).

4.2.2 The background historic research requires consultation of historic maps and documents held by Sheffield City Archives & Local Studies Library in order to place the former industrial structure and boundary wall in their historical context and to provide an overall interpretation and phasing of the structures based on documents and historic mapping.

4.2.3 The archaeologist on-site will carefully examine all parts of the former industrial structure and boundary wall prior to the commencement of the photographic and drawn recording, in order to identify all features relevant to original and later use. As part of this exercise, the archaeologist on site will produce written observations (e.g. on phasing, on detailing, on building function), sufficient to permit the preparation of a report on the structure and features identified. Each external wall and as much of the internal space that is accessible should be examined individually and the results of that examination noted in a systematic fashion. These site records will be adequate to allow a full architectural and archaeological description of the building to be included in the subsequent report, as a walk around starting with setting, then progressing to all sides of the structure in sequence, and finally to the interior.

4.2.4 The photographic record comprising high resolution digital photography will cover the following as a minimum.

- ◆ Photographs of the exterior and setting of the structure and boundary wall, along with as much of the internal space of the structure that is accessible. A two metre ranging rod will be included in a selection of general shots in order that the scale of all elements of the building can be sufficiently established.
- ◆ The structure and boundary wall's external appearance is to be recorded. Typically a series of oblique views will show all external elevations of the structure and give an overall impression of size and shape. Where an individual elevation embodies complex historical information or have been conceived as formal compositions, views at right angles to the plane of the elevation may also be appropriate.
- ◆ Photographs of any internal or external detail, structural or decorative, which is relevant to the building's design, development or use over time and which does not show adequately on general views.
- ◆ Photographs of any internal or external fixtures, fittings or machinery or evidence of its former existence relevant to the building's use or development.
- ◆ Copies of any dates, decorative detail, masons' marks, historic graffiti or inscriptions present in the building which contribute to an understanding of the building or its fixtures.



4.2.6 A Nikon D3200 digital SLR (24.7 megapixels) camera will be used. Where possible, photographs will include a graduated scale and cameras will be mounted on tripods for extra stability. Details of the photographs will be recorded on pro-forma index sheets, which include location, subject and orientation.

4.2.7 The building recording drawn record will include the following.

- ◆ Site location plan at a suitable scale (preferably indicating the position of the site within the country, within the county and a clear plan of the precise location/outline of the building and its relation to other structures and to any related topographical and landscape features i.e. 1:50).
- ◆ A plan indicating the position and orientation of photographs/images included in the report.
- ◆ A set of measured survey drawings which includes the following.
  - ◆ Internal plans to all floors (where visible) with all structural features, doors and windows with cill and head heights, including the form and location of any structural features of historic significance such as earlier brickwork details.
  - ◆ Detailed elevations to all perimeter facades with all structural features, architectural and fenestration details, ground levels, roof profile and exposed pipework.

### **4.3 Report**

4.3.1 Within two months of the completion of the building recording, ARS Ltd will produce a report which will include the following as a minimum.

- ◆ Non-technical executive summary.
- ◆ A table of contents and a list of illustrations or figures.
- ◆ An introduction, setting out the circumstances in which the record was made, its objectives, methods, scope and limitations, and any constraints which limited the achievement of objectives.
- ◆ Aims and purpose of the project.
- ◆ Methodology.
- ◆ Precise location of as a National Grid reference and by address.
- ◆ The date when the record was made, the names of the recorders and the archive content/character and location.
- ◆ A note of any relevant statutory designations.
- ◆ An account of its history as given in the heritage assessment (Tegg 2008).
- ◆ A statement describing the building's plan, form, function, age and development sequence, including the names of architects, builders, patrons and owners, where known.



- ◆ An account of the building's overall form, its past and present use, the use of its parts and its successive phases of development, and the evidence supporting the analysis and interpretations, including an account of the fixtures or fittings associated with the building.
- ◆ Any evidence for the former existence of demolished structures or plan associated with the building.
- ◆ Copies of other records of the building, or a note of their existence and location.
- ◆ Discussion and conclusions.
- ◆ Full bibliographic and other references consulted.
- ◆ Statement of intent regarding publication.
- ◆ Acknowledgements to all those who made significant contributions.
- ◆ Supporting data – tabulated or in appendices.
- ◆ A register of photographs taken.
- ◆ Confirmation of archive transfer arrangements.
- ◆ A copy of the WSI and OASIS form.

4.3.2 The report illustrations will contain the following as a minimum.

- ◆ A location map at not less than 1:2500.
- ◆ A site plan at not less than 1:500.
- ◆ Photographs used to illustrate all key points and a complete set of site drawings, at an appropriate scale, executed to publication standard.
- ◆ The photographic record plan will also be included.
- ◆ In addition to those photographs used as illustrations, a complete set of all photographs, excluding duplications, will be included with the digital copy of the report and referenced as necessary.

## **4.4 Archive Deposition**

4.4.1 A digital copy of the report in PDF format will be submitted to the Canal & River Trust and deposited with the Waterways Archive and the South Yorkshire Sites and Monuments Record. A copy of the report will be uploaded as part of the OASIS record (see below) for online access via the Archaeological Data Service.

4.4.2 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> will be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included within the archive).



## 5 TIMETABLE, STAFFING AND RESOURCES

5.1 The outline timetable for the works is as follows. This will be updated by email as the project progresses.

Proposed Commencement Date	Task
W/c 9 <sup>th</sup> September 2019	Historical building recording
W/c 16 <sup>th</sup> September 2019	Historical building recording report

5.2 The Project Manager for the historic building recording will be Dr Robin Holgate MCIfA, Specialist Services Manager at ARS Ltd. The building recording will be carried out by Ian Wyre BA, MSc, PhD of ARS Ltd who has over 12 years' experience working on historic buildings with archaeological companies. Additional ARS Ltd Archaeological Officers will be allotted to the project as necessary and required.

## 6 GENERAL ITEMS

### 6.1 Health and Safety

6.1.1 All work will be carried out in accordance with The Health and Safety at Work Act 1973. Specific health and safety policies existing for all our workplaces and all staff employed will be made aware of the policy and any relevant issues. The particular risks involved with this project will be assessed, recorded and relevant mitigation measures put in place as part of a full risk assessment, which will be compiled in advance of fieldwork and will be read and signed by all on-site operatives. ARS Ltd retains Citation as its health and safety consultants and the appointed Health and Safety Officer for the company is Tony Brennan.

### 6.2 Insurance Cover

6.2.1 ARS Ltd has full insurance cover for employee liability (£10 million), public liability (£5 million), professional indemnity (£5 million) and all-risks cover.

### 6.3 Community Engagement and Outreach

6.3.1 Any opportunities will be sought for engaging the local community in any historical findings, for example a guided site tour and/or dissemination of information via ARS Ltd's website and local media.

### 6.4 Changes to the Written Scheme of Investigation

6.4.1 Changes to the approved methodology or programme of works will only be made in consultation with the Canal & River Trust.

### 6.5 Publicity and Copyright

6.5.1 Any publicity will be handled by the client. ARS Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).



## 7 REFERENCES

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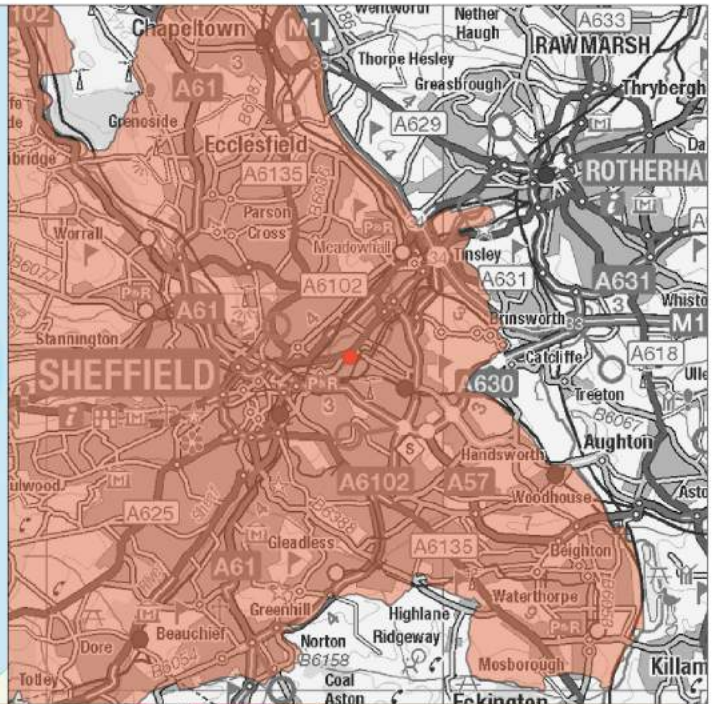
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South Yorkshire Archaeology Service 2018. Yorkshire, the Humber & the north east: A regional statement of good practice for archaeology in the development process. Available online at: [https://www.sheffield.gov.uk/content/dam/sheffield/docs/planning-and-development/archaeology/Good Practice Guide Rev Nov 18.pdf](https://www.sheffield.gov.uk/content/dam/sheffield/docs/planning-and-development/archaeology/Good%20Practice%20Guide%20Rev%20Nov%2018.pdf) [Accessed 7th March 2019].



**FIGURE**





Site name: Pinfold Works, Attercliffe  
 Date: September 2019  
 Drawn by: ARJ  
 Scale: Varies

Site Boundary
 
● Site Location
   
 Sheffield City Council

**Archaeological Research Services Ltd**

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**Figure 1:  
 Site location**