# **ARCHAEOLOGICAL INVESTIGATIONS**

Enfield wharf, Clayton-le-Moors, Hyndburn, Lancashíre

ARS Report N°: 2023/26 OASIS ID: archaeol5-509794



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# Archaeological Investigations at Enfield Wharf, Clayton-le-Moors, Hyndburn, Lancashire

ARS LTD REPORT 2023/26



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Site central NGR:	SD 74819 30641
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Enfield Wharf, Clayton-Le-Moors |i|

### **EXECUTIVE SUMMARY**

Project Name:	Archaeological Investigation at Enfield Wharf, Clayton-le-Moors, Hyndburn, Lancashire
Site Code:	ECW22, EWC23
Planning Authority:	Hyndburn Borough Council
Planning Reference:	11/27/0047
Location:	Mill Entrance, Whalley Rd, Clayton-Le-Moors, Accrington, BB5 5HD
Parish:	Unparished
Hard Geology:	Pennine Lower Coal Measures Formation
Superficial Geology:	Diamicton Devensian till
Soil Type:	Slowly permeable seasonally wet acid loamy and clayey soils
NGR:	SD 74819 30641
Date of Fieldwork:	10/10/22-10/02/23
Date of Report:	March 2023

Archaeological Research Services Ltd were commissioned by Watson Construction Ltd to undertake a scheme of archaeological works on land within the industrial town of Clayton-le-Moors.

The Proposed Development Area (PDA) presented a high chance of industrial archaeological remains, due to the known presence of two mills and a soapworks on the site. This necessitated a scheme of archaeological investigations. Trial trenching was undertaken initially to evaluate the nature of any buried archaeological remains present, followed by scalable watching brief mitigation of four archaeologically significant areas in order to contribute to the aims and objectives outlined in the correspondent Written Scheme of Investigation (Appendix II).

The archaeological work was undertaken between October 2022 and February 2023 and in accordance with a written scheme of works agreed with the Planning Officer (Archaeology) for Lancashire County Council.

Remains of the 19<sup>th</sup> century mills, soapworks, and associated industrial buildings were uncovered throughout the site during the evaluation and these were further explored in the scalable watching brief, during which a heavily truncated boiler bed and building foundations associated with Albion Mill; as well as a chimney, culverts and truncated building remains associated with Canal Mills were encountered. Watching brief around the soapworks building demonstrated particularly high levels of truncation associated with a later 20<sup>th</sup> century building in the area.



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### **I** INTRODUCTION

#### 1.1 Background and Scope of Work

1.1.1 A planning application 11/27/0047 was submitted to Hyndburn Borough Council for development at two parcels of land at Enfield Wharf, Clayton-le-Moors, Lancashire comprising erection of 74no. houses and 53no. apartments with associated infrastructure (100% affordable). Condition number 37 of the planning permission states that:

37. No works shall take place on the site until the applicant, their agent or successors in title, has secured the implementation of a programme of researching and recording archaeological works. This must be carried out in accordance with a written scheme and programme of investigation, which shall first have been submitted to and approved in writing by the Local Planning Authority. All archaeological works shall be undertaken by an appropriately qualified and experienced professional archaeological contractor and comply with the standards and guidance set out by the Chartered Institute for Archaeologists (CIfA) and a record of the findings shall be submitted to the Local Planning Authority in accordance with the approved scheme and programme.

Reason: To ensure that the heritage assets of the site are properly investigated and recorded in accordance with Policy DM22 of the Development Management DPD and the National Planning Policy Framework.

- 1.1.2 Archaeology is a material consideration in the planning process under paragraph 189 of the National Planning Policy Framework (NPPF 2021), "where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation."
- 1.1.3 In accordance with the NPPF and the planning condition, Archaeological Research Services Ltd (ARS Ltd) was commissioned by Watson Construction Ltd to compile a Written Scheme of Investigation (WSI) and subsequently to undertake an archaeological evaluation, comprising eight trenches, on Site 1 at Enfield Wharf, Clayton-le-Moors, Hyndburn, Lancashire (Figure 1), centred at NGR SD 74819 30641. The results of the evaluation trenching revealed archaeological remains of significance in four parts of the site, following consultation with Douglas Moir, Planning Officer (Archaeology) at Lancashire County Council an addendum to the original WSI was produced, and subsequently those four areas were subject to a scalable watching brief in order to mitigate the archaeological remains present.
- 1.1.4 A heritage impact assessment (HIA) was produced in January 2022 by ARS Ltd in support of the planning application for proposed development (Rigby 2022). This identified a series of former 19<sup>th</sup> century sites: Henfield Mill/Canal Mills (PRNs 7009 & 14764), the Enfield Soap Works (PRN 14762), a School on Canal Street (PRN 14765), and Albion Mill (PRN 23567). Historic map regression of the site also revealed the former site of Millfield House (ARS01) and workers' housing on Canal Street (ARS03), Mill Street (ARS05) and Whalley Road (ARS03), and back-to-back housing along Mill Street (ARS04).
- 1.1.5 Works were undertaken in compliance with the WSI (See Appendix III) which was produced in consultation with Douglas Moir, Planning Officer (Archaeology) for Lancashire County Council and was approved by Hyndburn Borough Council. The works took place between 10/10/22-10/02/23.



#### 1.2 Site Location and Description

- 1.2.1 The proposed development area (PDA) is indicated in red on Figure 1. It comprises two adjacent sites located within the industrial town of Clayton-le-Moors. Site 1 is bounded to the north, south, and east by residential housing, and several commercial and industrial structures and to the west by the Leeds and Liverpool Canal. Site 2 is bounded to the north and west by industrial and commercial structures and to the west by the Leeds and Liverpool Canal. Site 2 is bounded to the north Liverpool canal. Site 1 was roughly centred on NGR SD 74819, 30641 and encompassed a total area of 2.32 ha. Site 2 was centred on NGR SD 74882, 30739 with an area of 0.04 ha. Only Site 1 was subject to archaeological investigation.
- 1.2.2 The PDA is positioned between 128.5m and 139.65m aOD. It is situated on a slight southwest looking slope directly east of the Leeds Liverpool Canal, 950m west of Hyndburn brook tributary of the river Calder. Prior to works, it comprised of areas of hardstanding, overgrown with vegetation to the west of Site 1 and an area of grass and wooded land to the east along the A680.

#### 1.3 Geology and Soils

- 1.3.1 The underlying solid geology of the PDA consists of mudstone, siltstone, and sandstone of the Pennine Lower Coal Measures Formation, sedimentary bedrock formed approximately 318 to 319 million years ago in the Carboniferous Period when the local environment was dominated by swamps, estuaries, and deltas. The superficial geology comprises Diamicton Devensian till, superficial deposits formed up to 2 million years ago in the Quaternary Period when the local environment was dominated by ice age conditions (British Geological Survey 2023).
- 1.3.2 The soils of the PDA are classified as Soilscape 17 as slowly permeable seasonally wet acid loamy and clayey soils (Cranfield University 2023).

#### 1.4 Archaeological and Historical Background

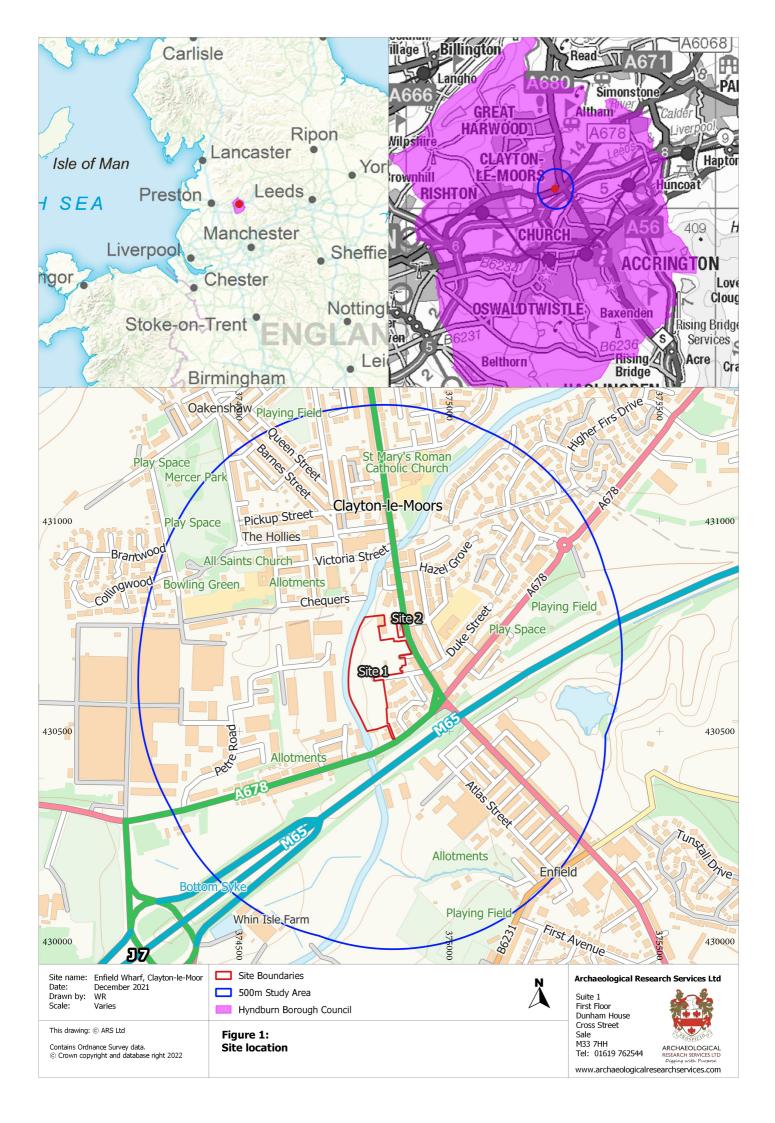
- 1.4.1 The archaeological and historical background for the site is set out in the HIA (Rigby 2022) and is summarised in section 1.4 of the WSI contained in appendix II.
- 1.4.2 The Lancashire Historic Environment Record details five non-designated archaeological sites within the PDA, related almost entirely to the area's industrial heritage. A further seven features of archaeological interest were identified from historic map regression, which represent the residential growth of the area happening in tandem with the industrial expansion of Clayton-le-Moors. Part of a west-east aligned wall in the southern part of Site 1 is the only surviving feature on site today, and possibly relates to one of the former mill complexes.
- 1.4.3 A desk-based assessment (DBA) produced for the site in 2009 is the only archaeological work to have happened within the 500m search radius of the site. This identified the remains of three mills (PRN7009, PRN14764, PRN23567), a soap works (PRN14762), and a school (PRN14765). The HIA (Rigby 2022) further identified sets of terraced residential housing (ARS02, ARS03, ARS05, ARS07), one larger house and grounds (ARS01), one set of back-to-back housing (ARS04), and a series of pre-modern field boundaries (ARS06).
- 1.4.4 Henfield Cotton Mill (PRN7009), later known as Canal Mills (PRN14765), was built as a spinning mill and weaving shed between 1834 and 1835, and is noted by the Lancashire HER as the first large mill built within Clayton-le-Moors. It was located within the northern

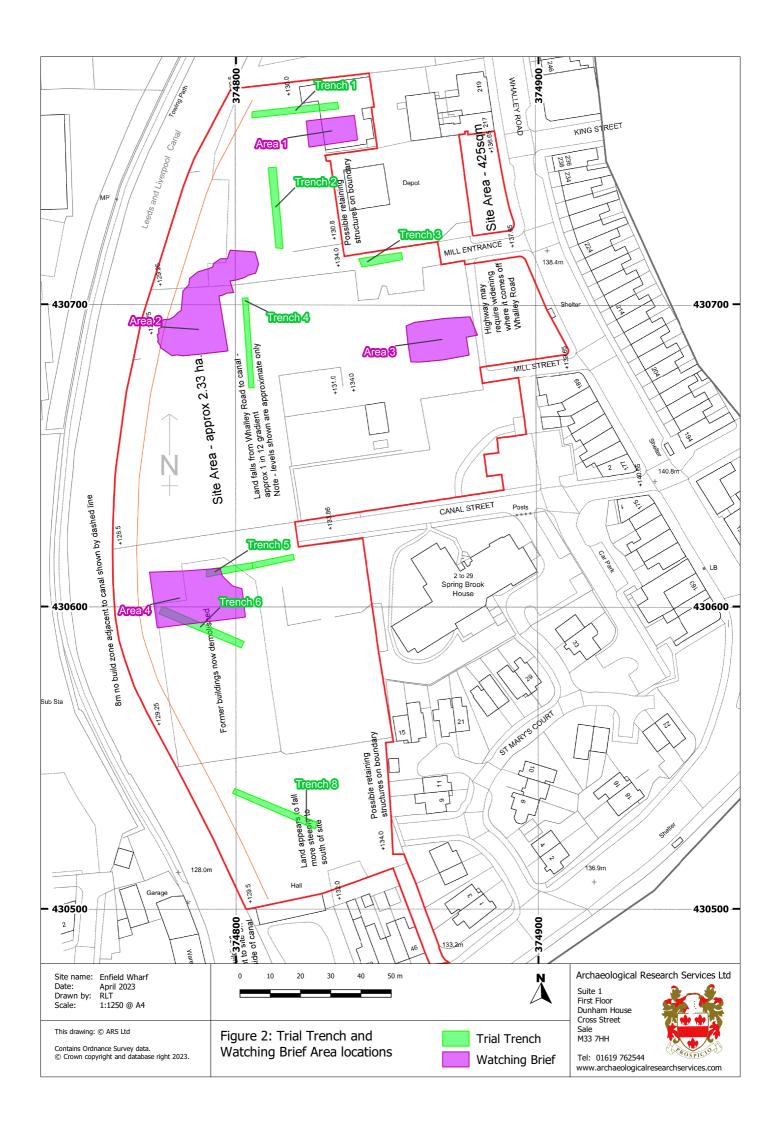


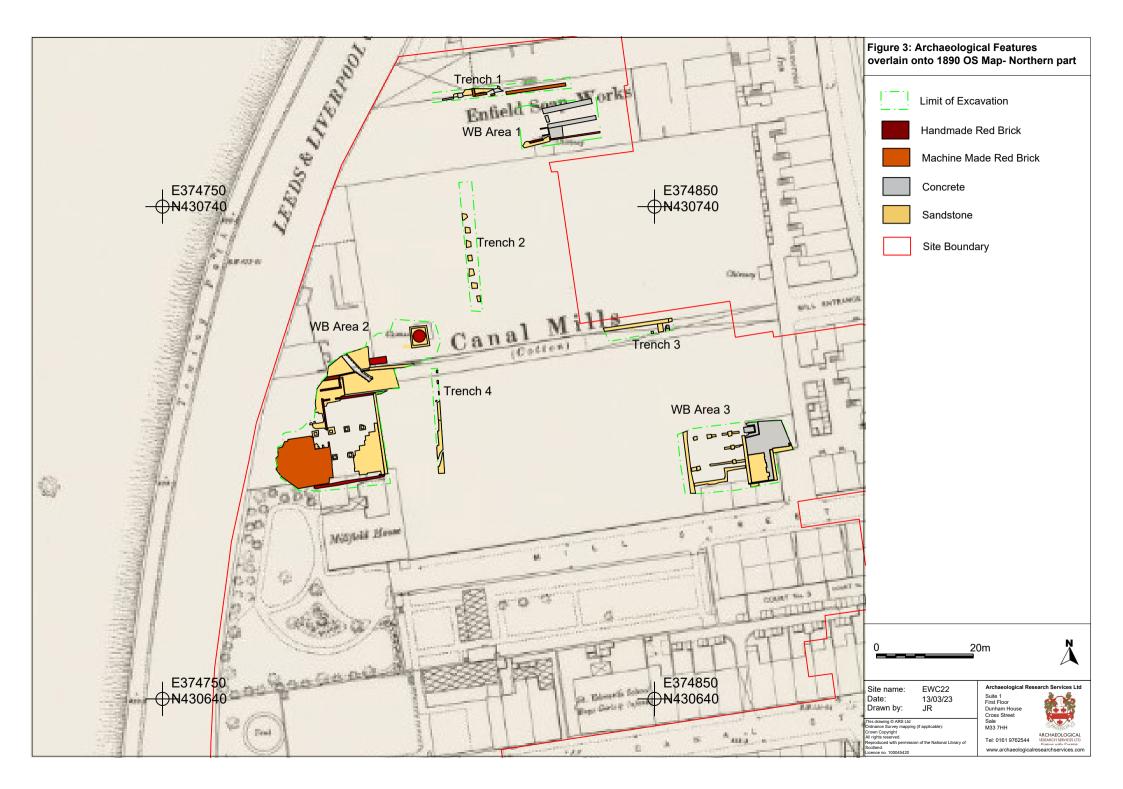
part of Site 1. A Soap Works (PRN14762), off Enfield Street in the northern part of Site 1, was built before 1848. On the 1893 map, a school (PRN14765) is noted on Canal Street, in the east of Site 1. Albion Mill (PRN23567) was constructed before 1861 as a cotton weaving mill, and was located within the southern part of Site 1.

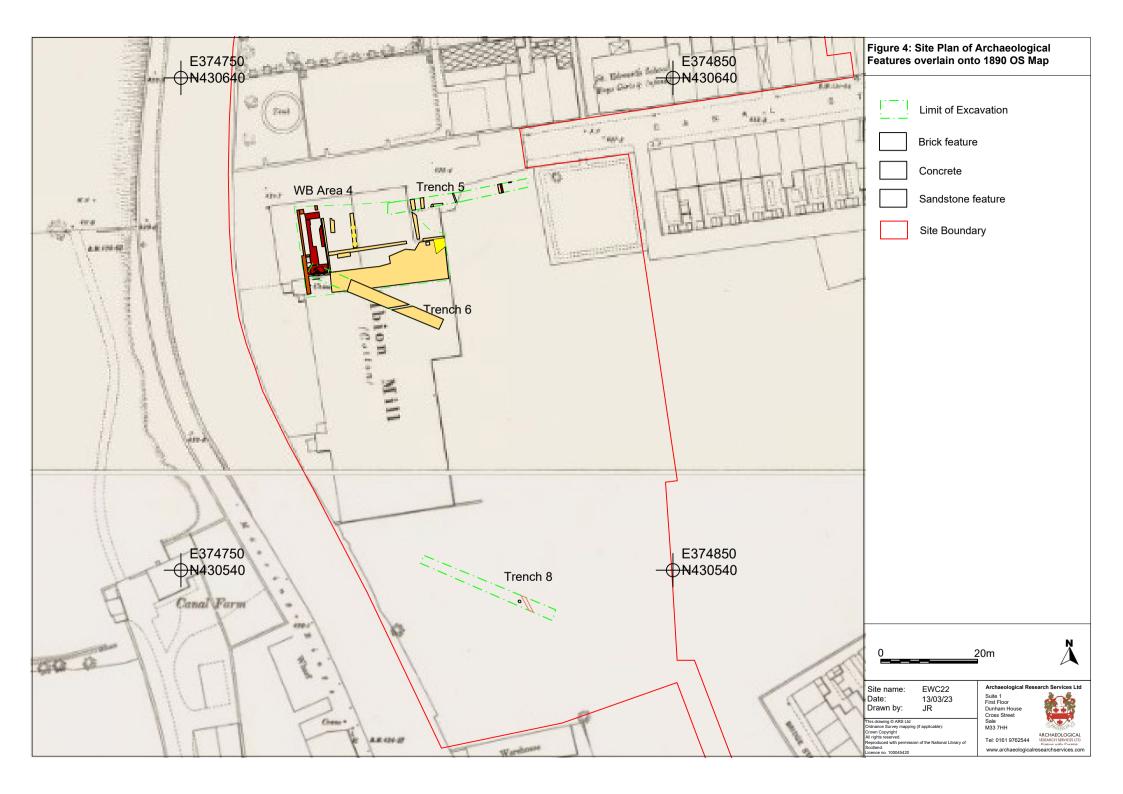
1.4.5 The Canal Mills buildings were demolished in the 1950s, with the Soap Works demolished in the late 1960s. Albion Mill continued cotton production until around 1960 then afterwards the mill buildings were repurposed for other uses. The footprint of the Albion Mill building changed in the 1980s probably associated with a refurbishment and partial rebuild of the structure associated with its later use. The Albion Mill went out of use in the early 2000s and was severely damaged by fire in 2011, after which it was demolished due to being structurally unsound.











# 2 AIMS AND OBJECTIVES

#### 2.1 Research Aims and Objectives

- 2.1.1 The aims and objectives of the archaeological evaluation are outlined in detail in the WSI (see Appendix III) prepared by ARS Ltd in consultation with Douglas Moir, Planning Officer (Archaeology) for Lancashire County Council prior to the commencement of the works. They are summarised below.
- 2.1.2 Research topics identified in the North West Regional Research Framework (2022) with relevance to the site include:
  - Ind21: How did industrial period towns affect pre-existing historic landscapes?
  - Ind52: What Industrial and Modern period type sites need further study?
  - Ind91: How were transport infrastructures improved and how was this related to the developing urban and market hierarchy during the industrial period?
  - Ind98: How well understood and recorded are North-West canals, waterways, and basins?

#### 2.2 Project Aims

- 2.2.1 The archaeological works aimed to:
  - Establish the presence or absence of any archaeological remains.
  - Establish the significance of any such archaeological remains.
  - Delimit and characterise any surviving archaeological remains within the limit of the site.

#### 2.3 Project Objectives

- 2.3.1 The objectives of archaeological works were as follows:
  - Evaluate the PDA via evaluation trenching for the presence of archaeological remains.
  - Establish the character extent and function where possible, of any archaeological remains present.
  - Identify, sample and fully record archaeological deposits and features within the evaluation trenches.
  - Establish the condition of preservation of any archaeological remains and palaeoenvironmental deposits present.
  - Obtain, dating and phasing or archaeological deposits where possible.
  - Establish the significance, where possible, of any archaeological remains present.
  - Mitigate the damage to surviving archaeological remains in watching brief areas through record



# **3 METHOD STATEMENT**

#### 3.1 Introduction

3.1.1 The methodology for the evaluation and subsequent scalable watching brief mitigation is set out in detail in the Written Scheme of Investigation (Appendix III).

#### 3.2 Coverage

- 3.2.1 The evaluation comprised eight trial trenches measuring 30m in length and 1.8m in width, the locations of which are depicted in Figure 2.
  - Trench 1: Targeting the Soap Works and its courtyard.
  - Trench 2: Targeting Canal Mills.
  - Trench 3: Targeting Canal Mills.
  - Trench 4: Targeting Canal Mills.
  - Trench 5: Targeting Canal Street and the area NE of Albion Mill.
  - Trench 6: Targeting the interior of Albion Mill.
  - Trench 7: This trench was not investigated due to the presence of asbestos floor tiles and potential asbestos lagging beneath the concrete.
  - Trench 8: Targeting the area south of Albion Mill.

#### 3.3 Professional Standards

3.3.1 The archaeological fieldwork was undertaken in accordance with the Chartered Institute for Archaeologists (CIfA) *Code of Conduct* (2022), *Standard and Guidance for archaeological field evaluation* (2020a) and *Standard and guidance for an archaeological watching brief*.

#### 3.4 Health and Safety

- 3.4.1 All works were undertaken in full compliance with the Health and Safety at Work Act 1974 and with the Management of Health and Safety Regulations 1992.
- 3.4.2 A risk assessment (RA No. 74/22/S) was produced before commencement of the work and was adhered to throughout the course of the fieldwork.

#### 3.5 Fieldwork

- 3.5.1 The trenches were sited in accordance with the WSI (Appendix III) using survey grade equipment. The same equipment was used to record known points on drawn plans and sections and to take spot heights within the trenches and within the watching brief areas.
- 3.5.2 Overburden was removed in level spits down to the first archaeological horizon using a 360° mechanical excavator equipped with either a 0.6m or 1.8m toothless bucket, under continuous archaeological supervision. In necessary areas, concrete hardstanding was broken with a hydraulic breaker prior to stripping.
- 3.5.3 Each trench and excavation area was cleaned by hand to expose and define archaeological features. Pre-excavation photographs were taken of each trench any exposed archaeology within them.



### 4 **RESULTS**

#### 4.1 Overview

- 4.1.1 An overall plan of trench locations is presented in Figures 2, 3 and 4. Individual plans and photographs for those trenches where archaeological features were present are included as subsequent figures.
- 4.1.2 The context records are summarised in the table in Appendix I. The table should be viewed in association with the figures, photographs and text for each trench.
- 4.1.3 The overburden across the area was machine excavated to the start of the archaeological horizon or depth of development, whichever was the shallower, under continuous archaeological supervision.

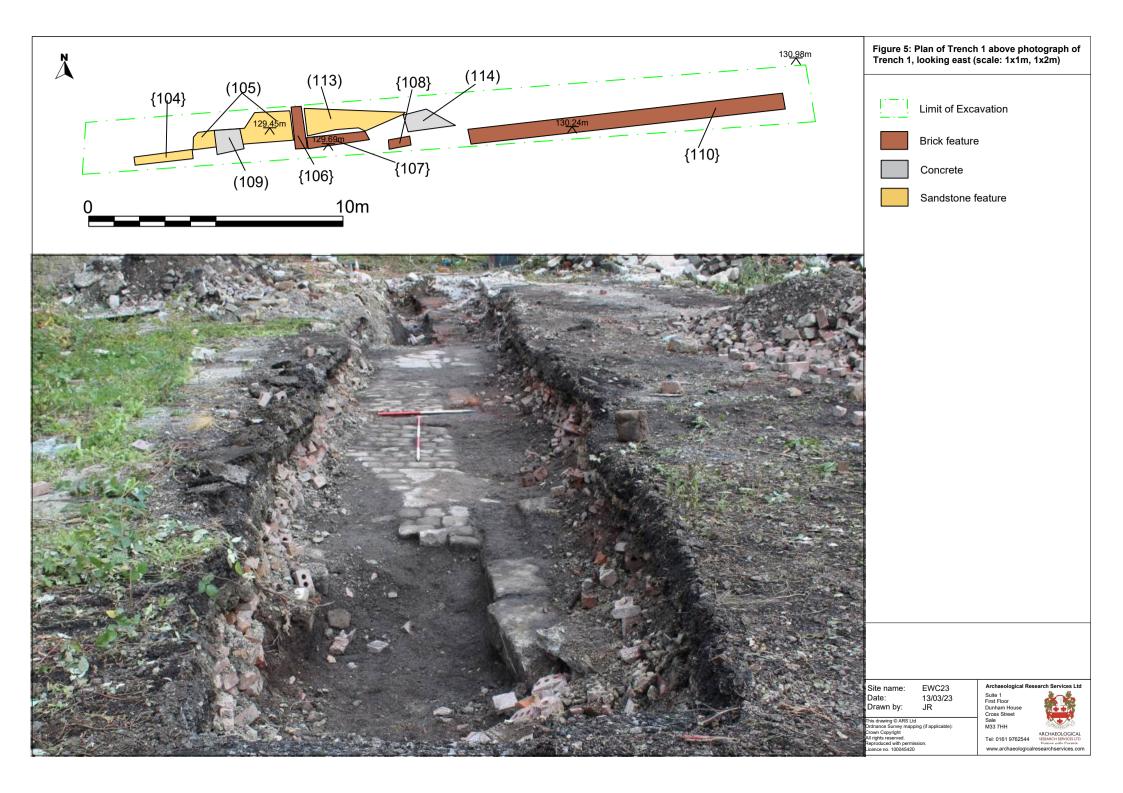
#### 4.2 Trial Evaluation Trenching

- 4.2.1 A total of seven evaluation trenches were excavated, which measured 30 m by 1.8 m. All evaluation trenches were sited to provide appropriate coverage of the proposed development area and were located specifically to target features identified in the HIA. Trench 7 was not excavated due to the presence of asbestos immediately below the concrete overburden.
- 4.2.2 The table below summarises the remains encountered in each trial trench.

Trench no.	Archaeology Y/N	Excavated features	Period	Overburden thickness
1	Y	Cobbled surface, brick walls, modern services	Late 19 <sup>th</sup> to late 20 <sup>th</sup> Century	0.24m
2	Y	Pillar bases	Mid-19 <sup>th</sup> Century	0.07m
3	Y	Stone wall footing, culverts	Mid-19 <sup>th</sup> Century	0.23m
4	Y	Pillar bases, stone surface	Mid-19 <sup>th</sup> Century	0.24m
5	Y	Land drain, wall footing, culvert, brick walls, stone surface	Mid to late 19 <sup>th</sup> Century	2m
6	Y	Flue, stone surface	Mid to late 19 <sup>th</sup> Century	0.2m
8	Y	Drain, pit	Mid to late 20 <sup>th</sup> Century	0.32m

Table 1. Trench information summarised by trench number.



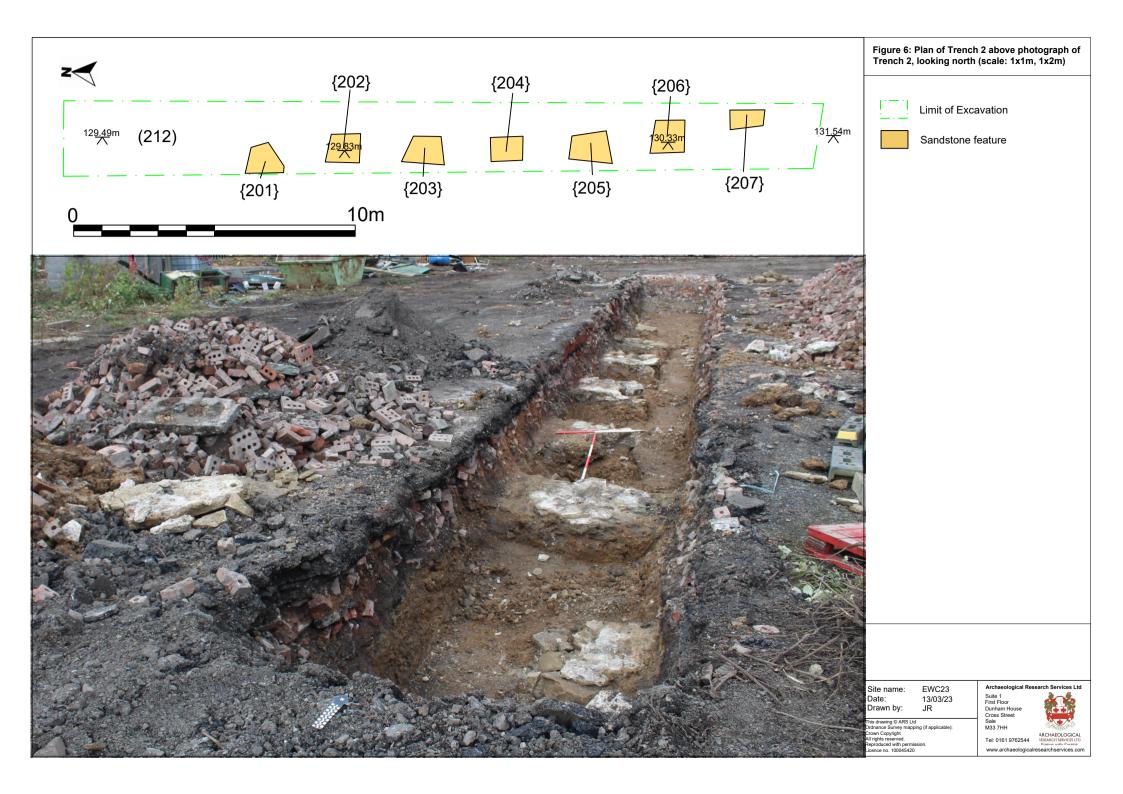


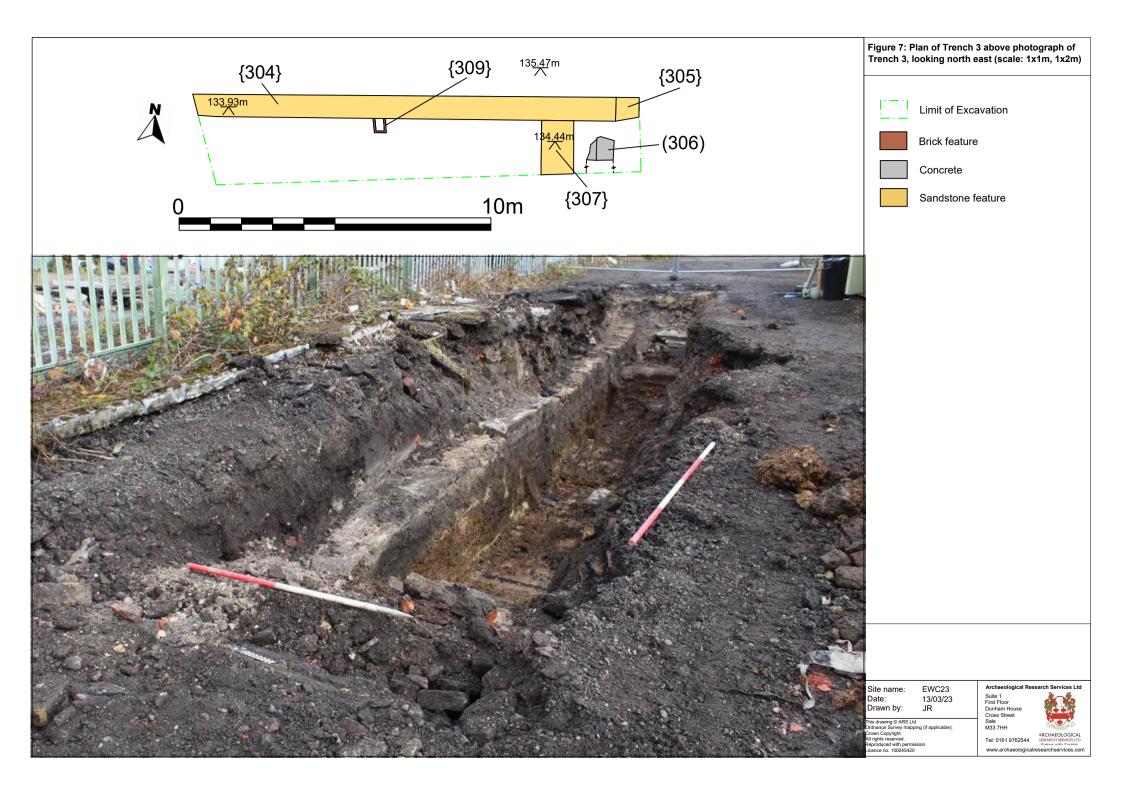
- 4.2.3 Trench 1 (Figure 5) was aligned east to west and targeted the Soap Works and its surrounding buildings and courtyard. A surface laid with sandstone setts (105) was present in the western half of the trench. This surface had been patched with concrete (109), probably in the early 20<sup>th</sup> century. A line of east to west aligned kerbstones (104) continued beyond surface (105) towards the west and these appeared to have been robbed in the past as there was a similarly aligned space continuing eastwards along the southern edge of the setts, although no stone was present here. The westernmost end of surface (105) had been truncated, and a sondage in this area revealed a modern cable running northeast to southwest. A north to south wall, {106}, four skins thick and laid with machine made frogged red bricks and black ash mortar, abutted the eastern edge of surface (105) and appears to be the western wall of the soap works building, where it meets a covered passage to the canal. Wall {106} abutted an east to west wall {107} at its southern end, also laid with machine made red bricks and probably forming part of a corridor marked on the 1890 OS map (Figure 3).
- 4.2.4 A second surface laid with sandstone setts, (113) abutted the east and north faces of walls {106} and {107} respectively, forming the floor of this corridor. A short fragment of an east to west wall, {108} was located against the southern section of the trench, in line with the eastern end of surface (113). A gap of 2.1m separated this wall from a further wall on the same alignment, wall {110}, which was a substantial, five skin thick wall foundation, aligned east to west and laid with machine made red bricks. Wall {110} was probably the dividing wall between the north and south ranges of the soap works building. The gap between {108} and {110} may have been a doorway, with a broken patch of concrete, (114), of almost the same width, located adjacent to the gap, possibly representing a threshold slab. The trench was covered by asphalt (101), followed by a layer of demolition material that overlaid the archaeological features.

#### Trench 2

4.2.5 Trench 2 (Figure 6) was aligned north to south and targeted the southern building of the Soap Works and the adjacent building of Canal Mills. A series of sandstone pillar bases were encountered {201}, {202}, {203}, {204}, {205}, {206}, {207}, likely relating to the weaving sheds of the mill. These were laid directly onto natural clay (212). The trench was covered by an asphalt overburden (208), overlaying a layer of demolition rubble (209). Underneath this was another layer of asphalt (210) and another demolition layer (211).







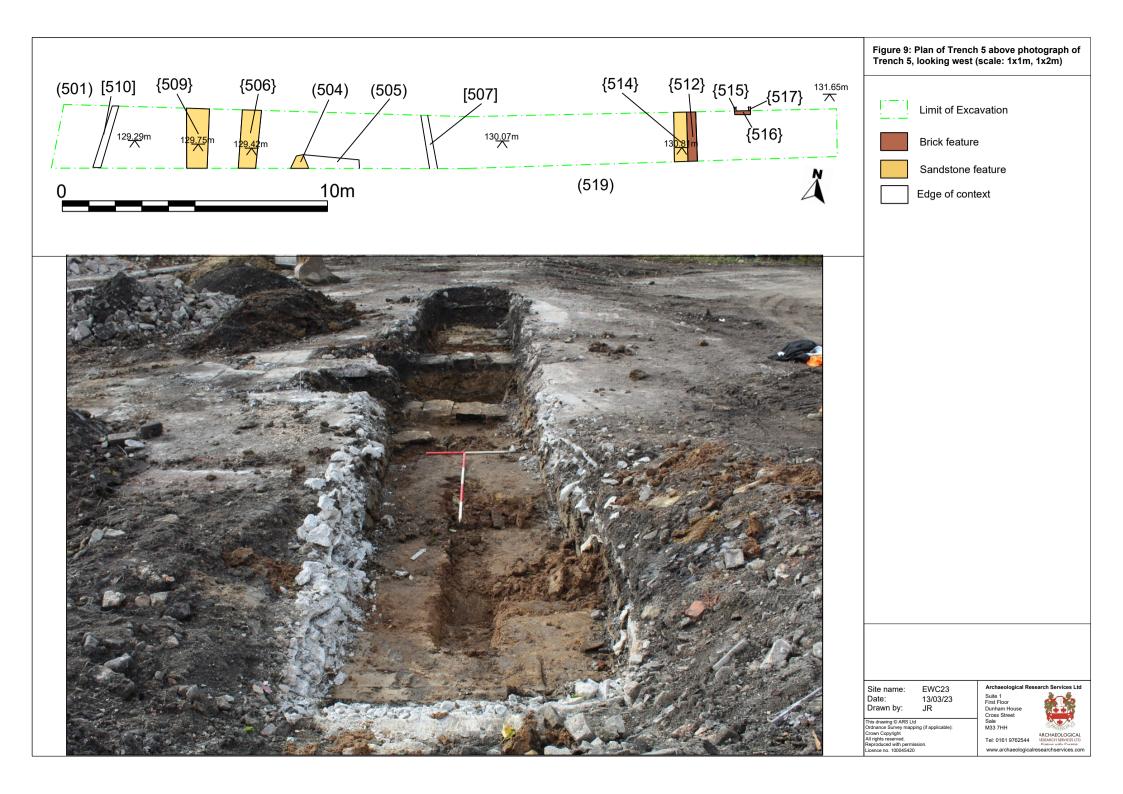
4.2.6 Trench 3 (Figure 7) was aligned east to west and targeted the southeast corner of the northern Canal Mills building. The trench was covered by an asphalt overburden (301), followed by a light grey demolition deposit (302) and a dark grey demolition deposit (303). These overlaid the stone walls {304} and {305} in the northern part of the trench. Wall remnant {305} was directly on top of wall {304} and probably represents the dressed stone superstructure, although only this single block remains, with wall {304} representing the more roughly constructed foundation course. The base of wall {304} which was founded on clay, stepped downwards towards the west, possibly following a natural slope. A single flagstone, (306), was located in the eastern end of the trench, which was at the same level as the top of wall {304}. This may have been a remnant of a surface at that level. A levelling deposit underneath the surface (308) separated it from a stone culvert {307}, which was constructed with handmade redbrick walls with large stone slabs on top, running south to north possibly into an east to west culvert beneath or to the north of wall {304}. Another south to north structure, {309}, made of brick and adjacent to, and leading beneath wall {304}, was present in the central/western part of the trench. This may have been part of a downpipe for surface drainage from Mill Entrance surface to the culvert system.

#### Trench 4

4.2.7 Trench 4 (Figure 8) was aligned north to south and targeted the southern Canal Mills building. It was covered by an asphalt overburden (401), which lay on top of a layer of sand (402) in the northern part of the trench. In the southern part of the trench these two layers were separated by a layer of rubble (412). The northern part of the trench also contained a surface (404), which abutted a more fragmented surface (405), this latter sitting c.40mm lower than the former. Surface (404) was truncated by a modern service trench containing a cable. A single flat lying piece of flagstone (406), was located to the north west of the surfaces and was tentatively identified as a surface remnant. To the north of the surfaces lay three possible pillar bases {407}, {408} and {409} laid onto natural substrate (403).





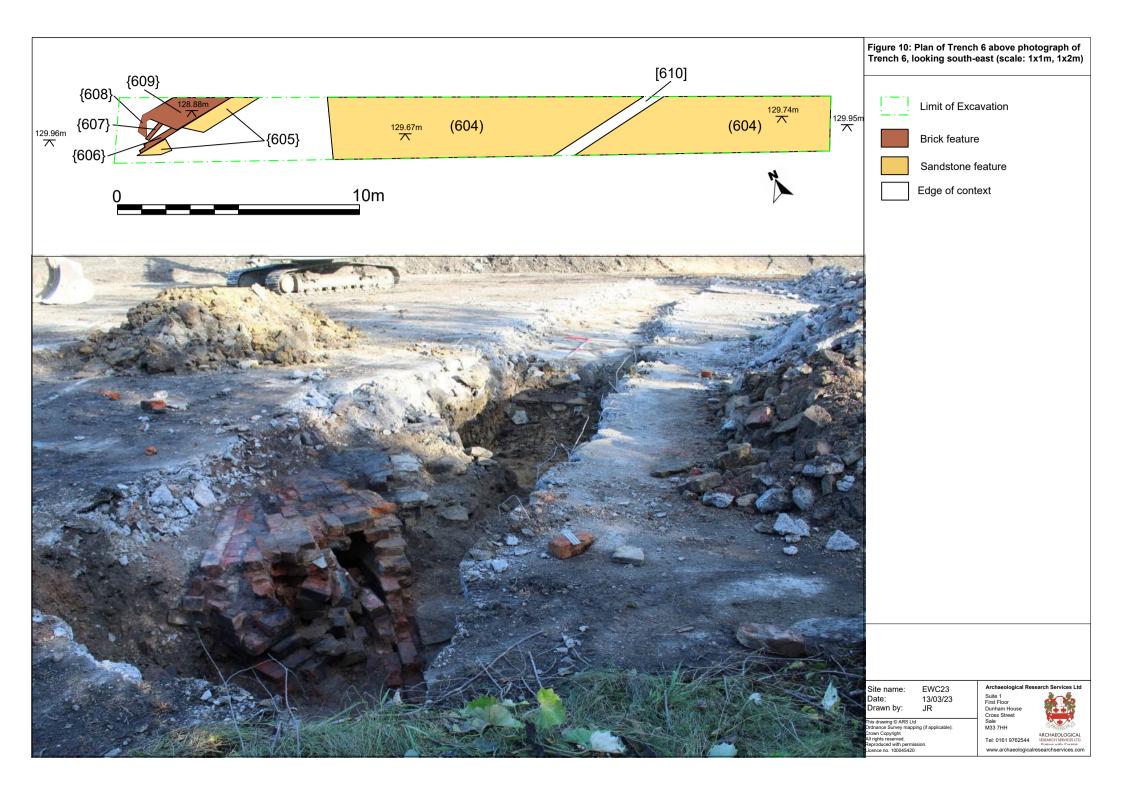


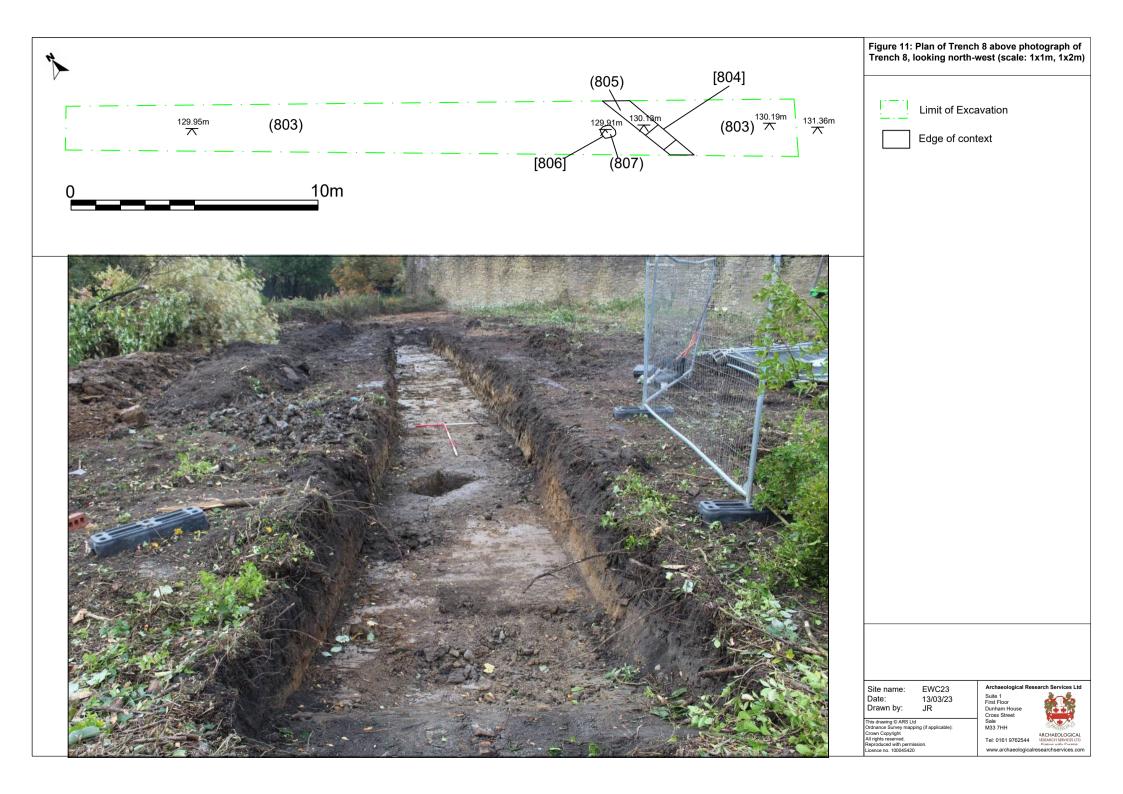
- 4.2.8 Trench 5 (Figure 9) was aligned east to west and targeted Canal Street and the area north east of Albion Mill. The western half of the trench was covered by a concrete slab (501), associated with the latest incarnation of Albion Mills, demolished around 2011. The eastern half of the trench was sealed by a made ground deposit (519), overgrown with weeds. Underneath the concrete was a layer of demolition rubble (502), which overlaid the archaeology in the trench. Towards the western end of the trench was a north to south aligned linear feature, [510], a vertically sided cut containing angular gravels, probably a French drain which may have predated Albion Mill. To the east of this was a stone wall foundation, {509}, laid with roughly squared sandstone blocks, running north to south and appeared to be the foundation of the eastern wall of Albion Mill. A culvert {506}, ran north to south and was constructed from stone cobbles and chinks capped with sandstone slabs. This culvert was parallel to wall {509} and c.1m to the east of it within what would have been the yard of the mill. A possible surface (504) was represented by a single flagstone adjacent to the southern baulk of the trench, around 1m to the east again of culvert {506} and also within what had been Albion Mill's yard. Beneath flagstone (504) the clay (505) was dark and discoloured, possibly a result of water logging beneath the stone. Continuation of deposit (505) to the east of surface (504) suggests it continued at least 2m to the east.
- 4.2.9 In the eastern half of the trench lay four brick walls. Three of these {515}, {516}, and {517}, formed the bottom of a possible manhole seen only the northern section of the trench. A wall foundation, {514} ran north to south across the trench in this area, laid with rough hewn sandstone and bonded with black ash mortar. This was abutted on its eastern side by a brick built culvert {512} which contained a segmented ceramic field drain dating to the later 19<sup>th</sup> or early 20<sup>th</sup> century. In the middle part of the trench a possible linear feature was excavated (507), although on excavation it became apparent that this was a natural geological feature, probably the result of water action on the natural clay (503).

#### Trench 6

4.2.10 Trench 6 (Figure 10) was aligned northwest to southeast, and targeted the interior of Albion Mill. It was covered by a concrete overburden (601), associated with the later version of Albion Mill, followed by a levelling deposit (602) and a demolition deposit (603). A sandstone surface {604} covered the southeast extent of the trench, laid with large flagstones of varying sizes and cut by a modern drain [610]. The northwest part of Trench 6 contained an east-west aligned structure formed of three parallel brick walls {606}, {607} and {608}, forming two passages capped with bricks {609}. This structure had been constructed in a single event and was constructed from handmade red bricks and firebricks, bonded with lime mortar that was discoloured bright red due to heat exposure. This was identified as a flue, probably leading to a chimney marked on the historic maps and located to the south-west of the trench. A truncated stone wall, {605} ran along the southeastern edge of the flue. This wall aligns with the southern wall of the building in the northwest corner of Albion Mill as shown on the 1890 map.





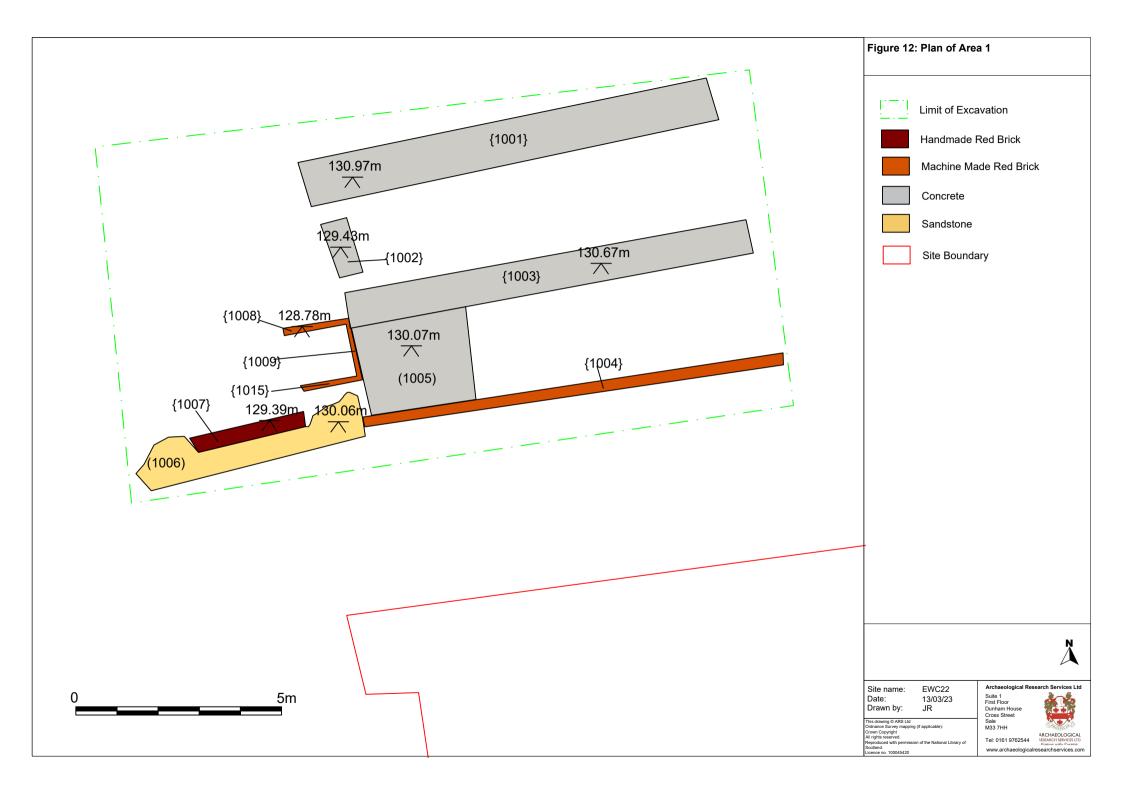


4.2.11 Trench 8 (Figure 11) was aligned northwest to southeast and targeted the area south of Albion Mill. The first layer encountered was the topsoil (801), followed by the subsoil (802) and the natural substrate (803). Two features were discovered in the southeast part of the trench – a very shallow potential pit containing a broken sheet of plate glass [806] and a linear cut for a late 19<sup>th</sup> century salt-glazed drain [804]. The drain had been removed and only broken pieces of it remained. The possible pit, [806], was so shallow that it may more likely simply be the result of the fallen piece of glass having pressed into the natural clay and retaining water beneath.

#### 4.3 Scalable Watching Brief Mitigation

4.3.1 The good survivability of archaeological remains in the trenches, namely floors and a flue in trenches 4, 5 and 6 and building foundations in Trench 1 in the vicinity of a chimney, meant that it was deemed necessary to further investigate four areas (Figures 2-4) via a scalable watching brief mitigation. All four areas targeted the historical footprints of the 19<sup>th</sup> century industrial buildings, but also contained a multitude of later structures related to more recent developments and renovations.





#### Area 1

4.3.2 Area 1 (figure 12, figure 13) targeted the remains of the Soap Works positioned towards the northern extent of the site, as Trench 1 yielded the adjacent cobbled roadway and exterior wall of the structure and it was therefore considered likely that a chimney and associated features would also survive, informing about the power systems of the soap works. However, once excavated, the area proved to have been heavily altered and truncated by later developments with limited evidence of 19<sup>th</sup> century structures surviving.



Figure 13. Working Photograph of the Area 1 excavation showing modern concrete foundations {1001} and {1003}, looking south west (scale: 1x1m, 1x2m)

4.3.3 Mid-20<sup>th</sup> century concrete wall footings were present throughout the area, with three concrete foundation beams running east to west across the majority of the area, the southernmost still with the lower courses of the brick wall, {1004}, intact on top (Figure 14). Foundations {1001} and {1003} measured c.1 m in depth. Between Foundation {1003} and wall {1004} was a concrete surface (1005), laid partly on natural clay and partly overlying a probable culvert at the western end.





Figure 14. Overview of southern part of Area 1 showing culvert walls {1009} and {1015}, following removal of concrete slab (1005), with chimney wall {1007} in background and Wall {1004} in left foreground, looking west (scale: 1x1m)

4.3.4 In the south-western part of the site a four-skin thick, handmade red brick wall with stepped foundation, {1007}, ran east to west, bonded with lime mortar (Figure 15). This wall had been truncated at either end and abutted a large piece of sandstone (1006) which may have been a bedrock outcropping which appeared to have been chiselled away to form a recess within which wall {1007} was laid. This wall is in the correct location to be associated with the soap works chimney depicted on late 19<sup>th</sup> century maps, however it showed no evidence of heat affectation on the bricks or mortar. This may have been the very base of the chimney foundation, using the bedrock outcrop as a convenient natural foundation for the remainder of the chimney which was therefore at a higher level and truncated during later activity on the site.





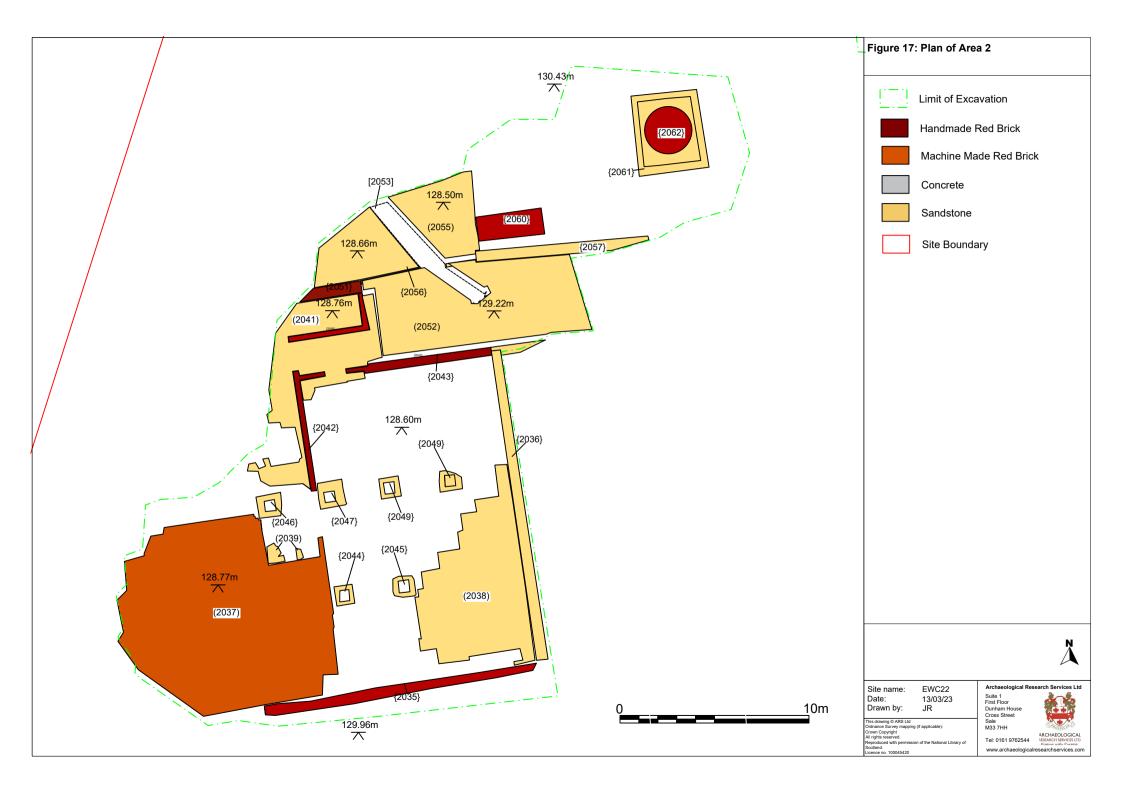
Figure 15. Photograph of 19th century wall {1007}, possible chimney foundation, looking south-west (scale: 1x1m)

4.3.5 A truncated structure laid with machine made, frogged red bricks, probably of mid 20<sup>th</sup> century date (Figure 16) was located to the north of the potential chimney foundation {1007} and lay *c*.1.8m below current ground level. The structure comprised walls {1008}, {1009}, and {1015}, all frogged machine made red brick walls bonded with cement mortar, forming the end of a channel. This appeared to be a culvert and was probably associated with the building post-dating demolition of the soap works in the 1960s.



Figure 16. Photograph of 20th century culvert remains {1008}, {1009} and {1015}, looking north (scale: 1x1m)





#### Area 2

4.3.6 Area 2 (Figure 17 and Figure 18) targeted the section of the site surrounding the chimney depicted on the OS mapping of the Canal Mills. Unlike the first watching brief area, an abundance of 19<sup>th</sup> century structures were uncovered displaying multiple phases of renovation and repair to the mill's superstructure. Additionally, a relatively intact and large-scale culvert was uncovered in close proximity to the targeted chimney base.



Figure 18. Overview of Area 2, looking south-west with culvert {2064} beneath surface (2055) in foreground and walls {2035}/{2042}/{2043} in background (scale: 1x1m, 1x2m)

- 4.3.7 The largest room uncovered during the Area 2 investigation was rectangular and found at the southern limit of the excavation, bounded by walls {2035}, {2036}, {2042} and {2043} on the south, east, west and northern sides respectively. This room was a brick built addition to the southern, main, stone built mill building
- 4.3.8 Stone wall {2036} was the western wall of the southernmost of the two main Canal Mills buildings and also formed the eastern edge of the room (Figure 19). This wall was laid with rough hewn stone blocks and bonded with lime mortar. There was a blocked up doorway, {2066}, towards the northern end of the wall, suggesting later alterations to the structure.





Figure 19. 19th century stone wall {2036}, looking east (scale: 1x2m)

4.3.9 Wall {2035} (Figure 20) was a 19<sup>th</sup> century handmade red brick wall which bounded the room to the south and abutted stone wall {2036} at the eastern end. The wall was laid to an English bond with lime mortar.



Figure 20. Photograph of 19th century wall {2035}, looking south (scale: 1x2m)

4.3.10 The northern extent of the room, and thus the southern boundary of the adjacent room, comprised another plastered wall {2043} also laid with handmade red bricks and lime mortar. The eastern end of the wall had an opening with jambs and a lintel formed with stone slabs (Figure 21). This opening was too small for a pedestrian doorway and seems to be too low for a window but was perhaps instead a loading door as it was adjacent to the



road surface between the two mill buildings. This doorway was blocked up at a later date, probably early 20<sup>th</sup> century, with machine made bricks and cementitious mortar, {2065}.



Figure 21. Photograph showing wall {2043} with former blocked access {2065}, looking north (scale: 1x1m)

4.3.11 There was a truncated floor present in the southeastern corner of the room, floor (2038), which as laid with sandstone flagstones in various sizes. It seems likely that the floor would have continued across the entire room, but seems that a large number of the flagstones had been removed, probably during later developments or demolition of the mill. Two rows of stone pillar bases (e.g. {2048}, Figure 22) were set into the clay across the central part of the room in an east to west alignment. These stone structures were well preserved with the recess for the former uprights, probably cast iron pillars, visible on the surface of each.





Figure 22. Photograph of stone pillar base {2048}, looking north (scale: 1x1m)

4.3.12 A 20<sup>th</sup> century brick surface (2037), laid with frogged machine made red bricks, formed the western limit of the room, and continued westwards to the edge of the bank down to the canal (Figure 23).



Figure 23. Photograph of 20th century surface (2037), looking south towards wall (2036) (scale: 1x2m)

4.3.13 A small rectangular structure was unearthed in a poorly preserved state within the northwestern part of the area (Figure 24). This structure comprised an east to west wall {2051}, a whitewashed handmade red brick structure consisting of two courses of stretchers atop a line of rowlock bricks bonded with lime mortar, as well as the foundation course of wall



{2050}, an L-shaped wall running southwards from wall {2051} and returning westwards. The two walls were likely built at the same time and were both set into stone surface (2041), which was laid with sandstone flagstones and abutted the road (2052).



Figure 24. Photograph of structure with wall {2051} in background and wall foundation {2050} in foreground, looking north (scale: 1x1m)

4.3.14 Cobbled stone road surface (2052) ran east to west across the centre of Area 2, laid with stone setts. Surface (2052) was truncated by a modern drainage cut, [2053], from northwest to south-east, an interaction also apparent in the neighbouring cobbled surface (2055). Surface {2052} represents the road between the two Canal Mills buildings, whilst surface (2055) represented the yard between the northern building and the canal, probably used as a loading/unloading area connecting the mill to the canal wharf.





Figure 25. Photograph of truncated cobbled surfaces {2055} in background and {2052} in foreground, with metal rail (2056) separating them, looking south (scale: 1x1m, 1x2m)

4.3.15 Surfaces (2052) and (2055) were separated by a thin metal rail (2056) running east to west (Figure 25). The positioning of this bar at a possible entrance to the section of the mill uncovered in Area 2 suggests that it would have acted as the fitting for a sliding door or gate perhaps securing the yard from the road.



Figure 26. Detail of metal rail (2056), looking south (scale: 1x1m)

4.3.16 The eastern end of (2056) abutted a further 19<sup>th</sup> century plastered sandstone wall {2057}, running east to west and forming the southern wall of the northern Canal Mill (Figure 27). A large, brick built culvert {2064} was exposed to the east of surface (2055) and to the



north of wall {2057} (Figure 27) which appeared to have been a main drain beneath the mill building, possibly connected to the culverts seen in Trench 3. It is probable that this culvert drained into the canal. The culvert was constructed with red bricks, to create a cylindrical tunnel, exposed during the excavation of a sondage into the area. The area around the culvert was filled with blocks of stone rubble. Unfortunately, due to the depth of this sondage the details of the culvert and its base were unable to be recorded further.



Figure 27. Photograph of culvert {2064} with stone wall {2057} on left and chimney {2061} on right, looking west (no scale)

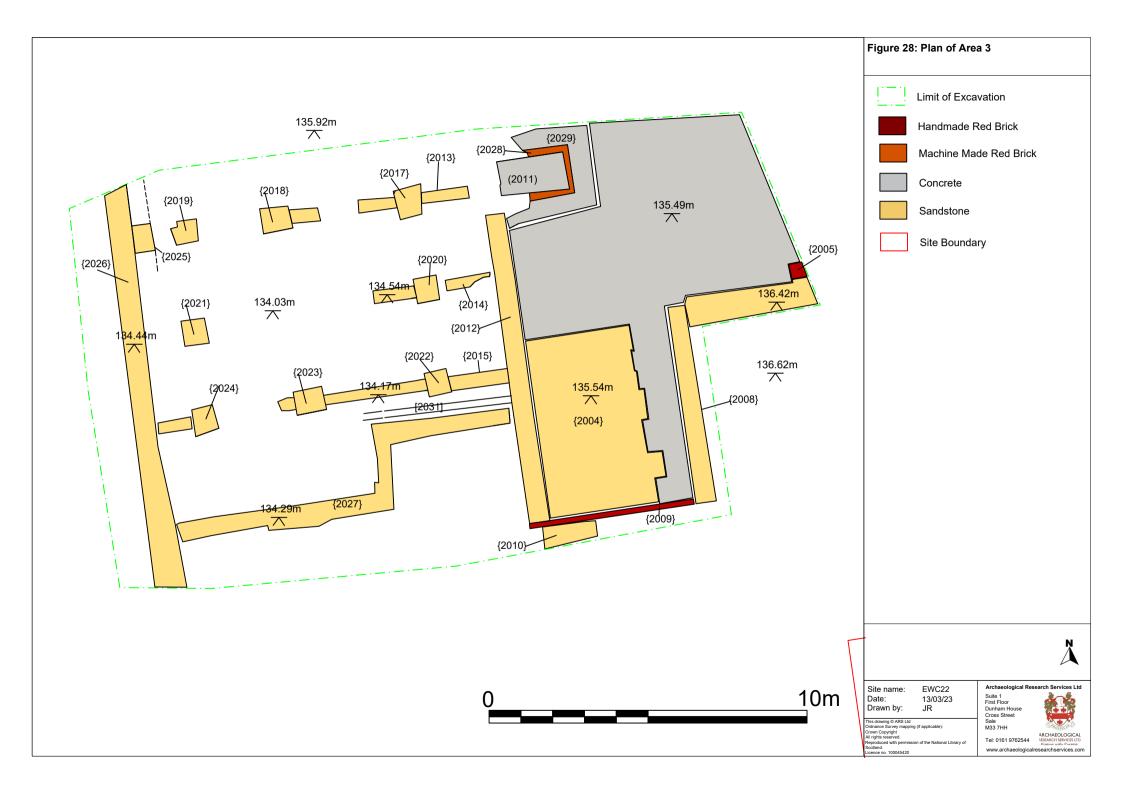
4.3.17 The stone base {2061} of a chimney (Figure 28) was uncovered to the northeast of the culvert at a considerable depth below ground level and thus it was not possible to investigate it in detail. Like the majority of contemporary structures, chimney {2061} was constructed in the 19<sup>th</sup> century primarily with a series of cut stone blocks. These were laid in four square columns atop a stepped base. The base of the vertical flue of the chimney was visible between the stone columns {2062}. On the northern side of the structure was an arched, brick built flue opening with an arched ceiling. This appeared to be built of firebricks which were heavily sooted.





Figure 28. Photograph of chimney base {2061} with brick flue {2062} visible between columns, looking east (scale: 1x2m)





Area 3

4.3.18 Area 3 targeted the south-easternmost section of the Canal Mills footprint, targeting an Lshaped room abutting the southern main mill building shown on OS mapping (figure 29 and figure 30). Whilst material evidence of the main building was in poor condition, the Lshaped room at the south-eastern limit was comparatively well preserved. The L-shaped room sat at a higher level than the western room, with a difference in floor levels of c. 0.5m.



Figure 30. Overview of Area 3, looking east (scale: 1x1m, 1x2m)

4.3.19 The majority of Area 3 comprised three sets of stone foundations set into natural clay running northwards into mill boundary wall {2012}. These foundations, though heavily truncated, comprised a series of stone beams (e.g. {2015}) with inset stone stanchion bases (e.g. {2017}) (Figure 31). These were probably under-floor supports for suspended wooden flooring in the Canal Mills building, with the larger stone blocks parts of pillar bases, probably for cast-iron uprights supporting a saw-tooth roof.





Figure 31. Photograph of stone foundation beam {2015} with stone stanchion base {2022} in foreground, looking east towards wall {2012} (scale: 1x2m)

4.3.20 The interpretation of this area as below flooring level is further supported by the presence of two 19<sup>th</sup> century drains cut into the clay base of the excavations, below what would have been floor level. A ceramic pipe {2031} ran east to west along the south side of stone beam {2015} possibly continuing beneath wall {2012}. A stone wall {2025} formed the western edge of the area (Figure 32), with a stone built culvert running along the eastern side of it with an inserted ceramic pipe, possibly a later addition.



Figure 32. Stone wall {2025} looking south (scale: 1x2m)



4.3.21 The upper section of Area 3 contained a series of surfaces and walls contributing to the Lshaped room depicted on the OS mapping. The southern section comprised 19<sup>th</sup> century sandstone flagstone surface (2004) bounded by stone mill boundary wall {2008} to the east, heavily truncated single skin, handmade redbrick wall {2009} to the south, and wall {2012} to the west (Figure 33). Wall {2009} was laid to a stretcher bond with lime mortar and containing a raised sandstone step (2010) providing an entrance to the room from Mill Street, this lends itself to the suggestion that the room provided an entrance into the mill complex from the road to the south.



Figure 33. Photograph of surface (2004), walls {2008} and {2009}, and step (2010), looking south-east (scale 1x1m, 1x2m)

- 4.3.22 The remainder of Area 3 was dominated by late 19<sup>th</sup>/early 20<sup>th</sup> century smoothed concrete surface (2003), forming the latest phase of the floor of the Canal Mills superstructure, possibly within an office/entrance hall structure. This concrete floor contained a brick lined rectangular "pit", of *c*. 0.5m depth (Figure 34). The pit comprised a single skin of machine made red bricks, bonded with black ash mortar {2028} abutting concrete blocks (2029). It had a floor of poured concrete (2011). The structure abutted the end of the wall {2012} in the western part of this L-shaped building. The function of this is unclear but it may have been part of a stairwell given the size and difference in floor levels between the two rooms, and that it seems to form a break in wall {2012}.
- 4.3.23 Stone wall {2012} ran north to south and separated the easternmost room with floors (2003) and (2004), from the western room with the stone floor beams. The wall was laid with randomly coursed sandstone blocks bonded with lime mortar. The western face was rendered with an ashy grey plaster.





Figure 34. Photograph of concrete surface (2003) and brick lined feature {2028}/{2029}/(2011), looking south-east (scale: 1x1m, 1x2m)

4.3.24 Floor (2003) was also bounded by stone wall {2006}, another segment of the 19<sup>th</sup> century footprint of the site. Wall {2006} was laid with roughly hewn stone blocks bonded with lime mortar also patched in two places with 20<sup>th</sup> century machine made red bricks and black ash mortar possibly during a phase of repairs to the original building.



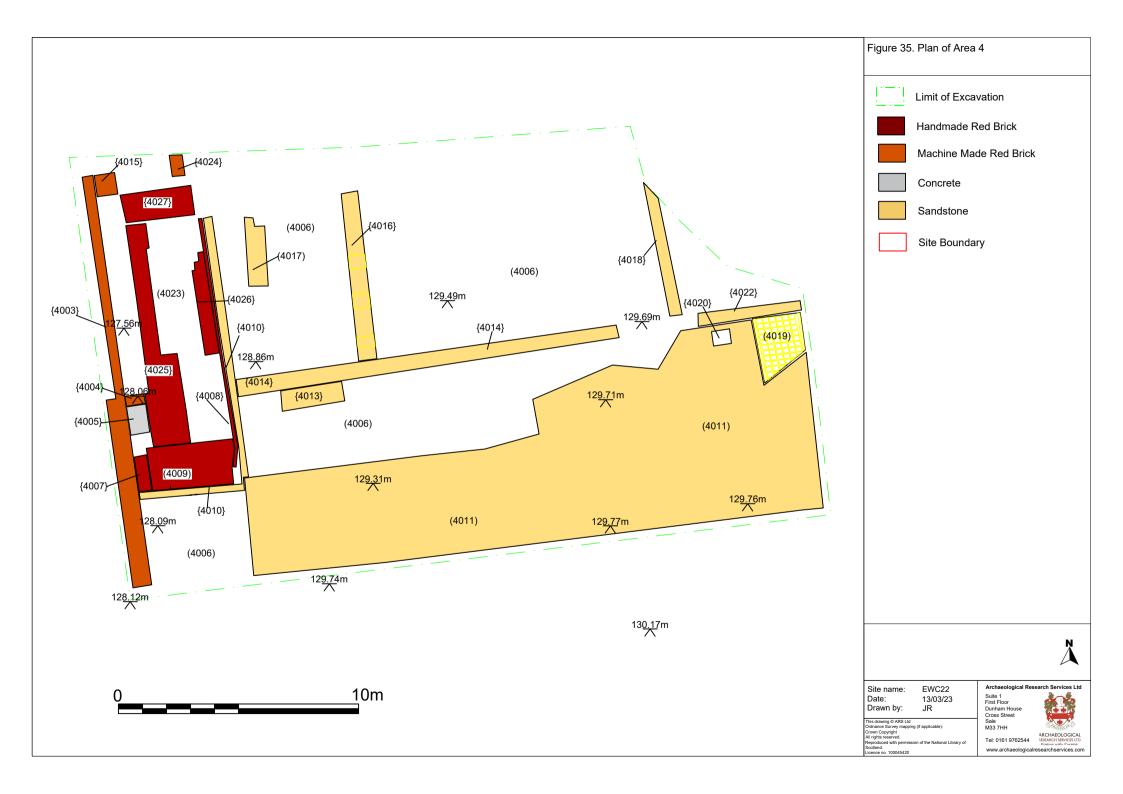




Figure 36. Overview of Area 4, looking southeast (no scale)

4.3.25 Area 4 (Figure 35 and Figure 36) was the final area to be excavated, targeting the seemingly well-preserved Albion Mill uncovered during the excavation of trenches 5 and 6. The primary interest of this area was the tracing of the flue (comprising {606}-{609}) uncovered at the western end of trench 6, and any associated boiler beds which may have been present. The area was overlain with recent demolition/construction debris (4001) atop varying depths of concrete (4012) capping demolition deposit (4002).





Figure 37. Photograph of cobbled surface (4019), looking west (scale: 1x1m, 1x2m)

4.3.26 The eastern limit of the area had a small square of stone setts, (4019) (Figure 37), beside 19<sup>th</sup> century internal flagstone surface (4011). This sandstone sett surface was also bounded by truncated 19<sup>th</sup> century wall {4022}, a 2-3 course sandstone structure running east to west to form an unclear interaction with contemporary walls {4018} and possibly {4014}. The setts may represent an entrance to the mill building.





Figure 38. Photograph of mill floor surface (4011), looking east (scale: 1x1m, 1x2m)

4.3.27 The Albion Mill's sandstone floor itself (4011) was exposed on a much larger scale during the watching brief than during the trenching. This flooring comprised a layer of sandstone overlain with a c. 0.05m thick concrete skim to produce a smoother surface some time in the 20<sup>th</sup> century (Figure 38). Whilst heavily truncated in areas (particularly in Trench 6), (4011) spanned a large section of Area 4. Floor (4011), like much of the surviving 19<sup>th</sup> century archaeology in the area, had been altered during the 20<sup>th</sup> century, a large section of (4011) was truncated. It is probable that this was the floor of the main weaving shed of Albion Mill.





Figure 39. Photograph of machine fitting embedded into surface (4011), looking north (scale: 1x1m)

4.3.28 Towards the eastern end of floor (4011), one of the flagstones contained four metal fittings which most likely acted as a machine bed dating from the 19<sup>th</sup> century (Figure 39). Similarly, a much larger stone machine bed, comprising a single block raised above floor level with metal fittings {4013} was uncovered just over five metres to the east (Figure 40).



Figure 40. Photograph of machine bed {4013} and stone wall {4014}, looking northwest (scale: 1x1m)



4.3.29 Machine bed {4013} was situated alongside 19<sup>th</sup> century wall {4014} (Figure 40), a stone structure comprising varying sizes of small stone blocks bonded with lime mortar and keyed into a similar wall {4016} at a 90-degree angle. Despite truncation at both ends, wall {4014} appeared to connect to a further three stone walls, {4018} and {4022} in the west and {4010} in the east (Figure 41).



Figure 41. Photograph of interaction between stone walls {4016} and {4014}, looking south (scale: 1x1m)

4.3.30 Wall {4016} ran from the northern limit of Area 4, terminating at the keyed intersection with wall {4014} at its southern extent. This stone wall contained three regular insets at intervals of 1.1m apart (Figure 42). They may have been openings for transmissions and pipes associated with the power system of the mill. They were all patched with slate on the western side and 20<sup>th</sup> century bricks on the eastern half of the inset. This is representative of two phases of alterations to the wall, at least one of which possibly coincided with the removal of boilers and associated steam pipes from the north-westernmost rooms during the renovations of the Albion Mill buildings during the 20<sup>th</sup> century.





Figure 42. Photograph of insets within wall {4016}, looking east (scale: 1x2m)

4.3.31 The former boiler room and engine house was thought to be located in the north-western section of Area 4, with the wall alterations and neighbouring boiler-bed lending credence to this. Unfortunately, this part of the site had undergone significant alterations associated with the later demolition and remodelling of the Albion Mill in the mid to late 20<sup>th</sup> century, leading to its lack of archaeological features. Whilst bounded by {4014} to the south, {4010} to the west, and {4016} to the east, the only remaining internal characteristic of the room was a small section of its sandstone flooring (4017). It seems likely that the majority of the flagstones had been robbed, probably during demolition.





Figure 43. Photograph of poorly preserved boiler-bed wall {4008} against the background of stone wall {4010}, looking east (scale: 1x1m)

4.3.32 Wall {4010} formed an L-shape abutted by the handmade red brick and fire-brick structure of the surviving boiler-bed {4008} (Figure 43) and was the dividing wall between the boiler room in the northwestern corner of the mill with the rest of the mill to the east.



Figure 44. Photograph of boiler-bed wall {4008} and surviving base {4026}, looking north-east (scale: 1x2m)



4.3.33 The boiler-bed itself, though heavily truncated, was a soot-stained handmade redbrick and fire-brick structure bonded with lime mortar. The eastern limit of the boiler-bed was best preserved, with north-to-south stretcher bonded wall {4008} stepping down onto a mixed red and fire brick base {4026} (Figure 44) which formed the surviving eastern side of the boiler bed. The western side of the boiler-bed was truncated to the point that only surface {4025} remained, containing shallow stepping on its eastern edge and largely following the same brickwork as {4026}. This surface ran north to south and connected to east to west flue base {4009} at the southern end (Figure 45). All of the elements of the boiler bed would have been built in a single event.



Figure 45. Photograph of base of flue {4009}, looking north with western side of boiler bed {4025} in background (scale: 1x2m)





Figure 46. Photograph of sondage through material below boiler bed, looking east with {4008}/{4026} in background and {4025} in foreground (scale: 1x1m, 1x2m)

4.3.34 A sondage into the 0.61m+ deep demolition material (4023) was excavated in an attempt to test whether any further remains were present below; however, contaminated ground water present within the sondage meant it was not possible to investigate further (Figure 46). Nonetheless, a red brick structure {4027} was briefly observed at *c*. 0.5m lower than the base of the boiler bed as the sondage was being excavated. Given the culvert systems observed in Areas 1 and 2, as well as in Trench 3, it is likely that this was the top of another culvert leading under the mill building.





Figure 47. Photograph of exposed boiler-bed with {4025} on left and {4026}/{4008} on right, looking north (scale: 1x1m, 1x2m)

- 4.3.35 At the southern end of the boiler bed was the flue {4007}/{4009} encountered in Trench 6. This was constructed using standard handmade red bricks and firebricks, as well as including some "squint" bricks made using firebrick clay in wall {4008}, to create a change of orientation of the flue towards the south west. This south-western end of the flue was severely truncated by a mid-late 20<sup>th</sup> century wall laid with concrete bricks {4003}. This was the foundation of the modern building in this area that replaced the older mill building, although evidently reused parts of the foundations for it. It is likely, given the size of this northwestern room on the OS map, that a second boiler bad would have been located to the west of the surviving example, but if that was the case then it had been entirely truncated during the construction of the later 20<sup>th</sup> century building {4003} in this area.
- 4.3.36 The 19<sup>th</sup> century boiler-bed had clearly been severely truncated during later developments, probably during the removal of the boilers and the redevelopment of the Albion Mill during the 20<sup>th</sup> century. Multiple grey beaufort brick walls laid with cement mortar in stretcher bonds truncated earlier structures across the western limit of Area 4.





Figure 48. Photograph of 20th century wall {4003} truncating the boiler-bed present in Area 4, looking south (no scale)

4.3.37 Further 20<sup>th</sup> century structures included large concrete stanchion {4005} and its neighbouring buttress {4004}, itself keyed into {4003} (Figure 48). Also keyed in was a larger buttress {4015} at the northern extent of the wall, possibly forming an entranceway with wall {4025} of the most recent building footprint.



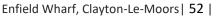
## 5 DISCUSSION

#### 5.1 Site Context

5.1.1 The residential construction outlined in the planning consent warranted archaeological investigation in order to explore the aims and objectives outlined in the WSI (Appendix II), initially to evaluate any archaeological remains present on site, then subsequently to mitigate the damage to those remains through a watching brief of ground works in specified areas.

#### 5.2 Summary of archaeology present by period and area of site

- 5.2.1 The varying depths of made ground across the site, coupled with the fact Whalley Road to the east of the site sat at a higher level than the site as a whole, which itself was much higher than the canal, suggests that this was a natural slope which had been artificially terraced to create building platforms. It is feasible that material excavated during construction of the canal may have been used to level out the site for building.
- 5.2.2 Parts of the central western section of the site was overlain with hardstanding ground, namely concrete slabs ranging from 0.3m to 1.6m in thickness and associated with later renovations and buildings. The southern and eastern limits of the site proved to contain significantly less made ground, with the natural substrate being reached in both areas. The preservation of surviving archaeology varied across the site.
- 5.2.3 The earliest remains on site were stone walls associated with the Henfield Cotton Mill (Later Canal Mill) buildings identified in the northern half of the site. This mill was constructed between 1834 and 1835 and was the first large mill built within Clayton-le-Moors. The remains associated with these buildings were poorly preserved and had been heavily truncated during demolition work in the 1950s with only the foundation courses of external walls and internal pillars within the weaving sheds surviving. A chimney foundation encountered in watching brief Area 2 was probably contemporary with the original build of the mill but this survived in isolation and no flues or associated boilers were present. Later additions to these buildings, probably dating to the later 19<sup>th</sup> and early 20<sup>th</sup> centuries were present in some areas and represented by machine made red brick repairs and additions as well as some concrete surfaces.
- 5.2.4 The soap works building at the northern edge of the site was built in the second half of the 19<sup>th</sup> century and some of its walls and associated yard survived, however, 20<sup>th</sup> century activity in the north-east corner of the site following the demolition of the soap works in the late 1960s/early 1970s within watching brief Area 1 had largely removed any earlier features with the exception of a short stretch of wall that may have been part of the former chimney.
- 5.2.5 The Albion Mill was built in the southern part of the site around 1861 as a cotton weaving mill. Some of the external stone wall foundations as well as parts of an internal sandstone floor were present in Trenches 5 and 6 as well as in watching brief Area 4. The preservation of the floor was patchy and mostly it survived within what was probably the main work shed in the southern part of the building. Within the northern part of the building the floor had been largely removed. Parts of a flue and heavily truncated boiler bed were present within this northern part of the building although these had been severely truncated by a mid-late 20<sup>th</sup> century building with thick concrete brick walls, probably dating to the later 1970s or 1980s when the old mill buildings were renovated and partially rebuilt after





cotton production there ceased. The footprint of the mill changed between the OS maps of 1974 and 1986 suggesting that these later walls may have dated to this period. Only part of a single boiler bed survived, probably the bed for a Lancashire boiler given the date of the mill's construction.

#### 5.3 Significance

5.3.1 The archaeological remains uncovered during the evaluation trenching at of Enfield Wharf suggested a greater deal of preservation than that encountered during the scalable watching brief mitigation. On excavation of the watching brief areas it became apparent that later 20<sup>th</sup> century demolition and development had truncated and removed many of the more significant 19<sup>th</sup> century features. The archaeological remains on the site do hold some local significance due to their association with the industrial development of Clayton-le-Moors and the rise and fall of the cotton industry in the town in the 19<sup>th</sup> and 20<sup>th</sup> centuries. However, the poor preservation of the archaeological remains on site means that they have a very limited contribution to regional research objectives outlined in section 2.1.

## 6 PUBLICITY, CONFIDENTIALITY AND COPYRIGHT

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

## 7 STATEMENT OF INDEMNITY

7.1.1 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.

### 8 ARCHIVE

- 8.1.1 A paper and digital archive will be prepared by ARS Ltd, consisting of all primary written documents, plans, sections, photographs and electronic data, which will be deposited digitally with the Archaeological Data Service (ADS).
- 8.1.2 The archive will follow the recommendations provided by CIfA's (2020) 'Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives', and the Society of Museum Archaeologists' (1993) 'Selection, Retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland'.
- 8.1.3 A set of annotated, illustrative pictures of the site and watching brief area is contained within the digital archive.
- 8.1.4 An OASIS online record http://ads.ahds.ac.uk/project/oasis/ has been initiated and completed for this work and all parts of the OASIS online form completed for submission to the HER. This will include an uploaded pdf version of this report. The site has produced a paper and digital archive which will be deposited, along with this report, in digital form



with Archaeological Data Service (ADS). In addition, a copy of this report will be deposited with Lancashire Historic Environment Record (HER).

#### **9 ACKNOWLEDGEMENTS**

9.1.1 ARS Ltd would like to thank everyone who contributed to the outcome of this project, especially Watson Construction Ltd for commissioning the work and facilitating site access and Douglas Moir, Planning Officer (Archaeology) at Lancashire County Council for his help and advice during the planning and implementation of this project.



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# APPENDIX I CONTEXT DESCRIPTION TABLE

Trench	Context	Description	Interpretation	Dimensions	
		01 Coarse black asphalt		W: 2m+ L:	
Tr 1	101		Overburden- modern asphalt surface	15m+ D:	
				0.24m	
Tr 1	102	Coarse dark greyish brown silty clay with very frequent inclusions of	Demolition deposit	W: 2m+ L:	
11 1	102	machine-made red brick		30m+ D:0.71m	
Tr 1	103	103 Fine mid yellowish brown silty clay	Natural substrate	W: 2m+ L:	
11 1	105			30m+	
		.04 Limestone blocks aligned E-W		W: 0.35m L:	
Tr 1	104		Possible kerb of (105), 19 <sup>th</sup> century	2.25m D:	
				0.22m	
Tr 1	105	Cobbled surface laid from sandstone setts.	Late 19 <sup>th</sup> century yard surface between soap works	W: 1.2m L:4.2	
	105		and canal	D:0.12m	
Tr 1	106	Keyed into wall {107}	Late 19 <sup>th</sup> century wall associated with soap works	W: 1.2m L:	
11 1			building	0.5m D: ?	
	107	<ul> <li>Machine-made frogged redbrick wall, 3 skins thick, laid with one skin of</li> <li>stretchers and one of headers, probably base of 3 skin English Garden wall bond.</li> </ul>	Late 19 <sup>th</sup> century wall associated with soap works building	W:0.35m	
Tr 1				L:2.45m D: ?	
		Short fragment of machine-made frogged redbrick wall laid with black ash	Late 19 <sup>th</sup> century wall foundation associated with	W:0.27m	
Tr 1	108	mortar, possibly east side of doorway	soap works	L:0.87m D:?	
			Material used to repair road (105)-early 20 <sup>th</sup>	W: 1.47m L:	
Tr 1	109	Concrete skim overlaying surface (105)	century	2m D: 0.02m	
		Machine-made frogged redbrick wall, black ash and repaired with	Late 19 <sup>th</sup> century wall associated with soap works	W: 0.6m L:	
Tr 1	110	110 cementitious mortar. 5 skins thick laid in mix of headers and stretchers		4.8m D: 0.58m	
			Overburden in West part of Tr 1- mid 20 <sup>th</sup> century	W: 2m L: 5m	
Tr 1	111	111 Coarse light grey reinforced concrete slab		D: 0.4m	
T.: 4	112	Coarse dark blueish grey silty clay, with inclusions of clinker and		W: 2m L: 4.3m	
Tr 1	112	demolition rubble	Made ground deposit/backfill over services in Tr1	D: 0.5m+	
			Surface associated with alley/corridor marked on	W: 1.2m,	
Tr1	113	113 Cobbled surface laid with sandstone setts, continuation(?) of (105) to the		L:3.8m,	
			east of wall {106}	OS map, mid-late 19 <sup>th</sup> century.	D:0.12m



Trench	Context	Description	Interpretation	Dimensions
		Patch of concrete to the immediate east of surface (113). In line with gap		W: 0.79m;
Tr1	114	between walls {108} and {110}	Possible threshold, late 20 <sup>th</sup> century	L:1.8m; D:
				0.09m
		201 Rough hewn sandstone pieces laid randomly with no mortar		W: 0.75m
Tr 2	201		Pillar base	L:1.06m D:
				0.26m
Tr 2	202	Dough hown conditions pieces laid randomly with no mortar	Pillar base	W: 1.1m L:
Ir Z	202	Rough hewn sandstone pieces laid randomly with no mortar	Pillar base	1.26 D: 0.9
				W: 1.1m
Tr 2	203	03 Rough hewn sandstone pieces laid randomly with lime mortar bonding	Pillar base	L:1.4m
				D:0.29m
		04 Rough hewn sandstone pieces laid randomly with lime mortar bonding		W: 1.07m
Tr 2	204		Pillar base	L:1.15
				D:0.34m
	205	Rough hewn sandstone pieces laid randomly with lime mortar bonding	Pillar base	W:1.19m
Tr 2				L:1.4m D:
				0.66m
	206	Rough hewn sandstone pieces laid randomly with lime mortar bonding	Pillar base	W: 1.23 L:1.33
Tr 2				D: 0.36m+
		Rough hewn sandstone pieces laid randomly with lime mortar bonding	Pillar base	W:0.9m
Tr 2	207			L:1.2m D:
				0.44m+
			Overburden- modern surface	W: 2m+ L:
Tr 2	208	Coarse dark greyish black asphalt		30m+ D:
				0.07m
				W: 2m+ L:
Tr 2	209	Coarse light beigey white crushed mortar and white limestone gravel, with	Demolition deposit used as loose subbase for	30m+ D:
		whole and fragmented modern engineering bricks.	asphalt (208)- later 20 <sup>th</sup> century material	0.32m
				W: 2m+ L:
Tr 2	210	Coarse dark greyish black gravelly asphalt	Previous ground level surface- mid to late 20 <sup>th</sup>	30m+ D:
			century.	0.05m
		211 Coarse dark brownish grey gravelly and sandy mortar	Demolition deposit- 1950s demolition of Canal Mills	W: 2m+ L:
Tr 2	211			30m+ D:
				0.51m



Trench	Context	Description	Interpretation	Dimensions
Tr 2	212	Fine mid brownish yellow silty clay with sandstone inclusions	Natural substrate	W: 2m+ L: 30m+
Tr 3	301	Coarse dark blueish black asphalt	Overburden	W: 2m+ L: 17m+ D: 0.23m
Tr 3	302	Light yellowish grey sand with inclusions of broken limestone slabs, concrete, and demolition rubble	Subbase/Levelling associated with surface (301)	W: 2m+ L: 17m+ D:0.32m
Tr 3	303	Coarse dark brownish grey sand with inclusions of mortar, plastic, wires, broken bricks and stone slabs.	Demolition deposit associated with 1950s demolition of Canal Mills	W: Extent of Tr 3 L: Extent of Tr 3 D: 0.35
Tr 3	304	Sandstone wall foundation bonded with lime mortar and laid with roughly hewn sandstone blocks laid to random coursing	Foundation of southern wall of northern Canal Mills building, c. 1830s	W: 0.5m+ L: 13.49m+ D: 0.32m+
Tr 3	305	Sandstone wall bonded with lime mortar, large squared blocks. Only small remnant survives but this is probably the superstructure of wall {304} rather than a separate wall.	Superstructure of southern wall of northern Canal Mills building, c. 1830s	W: 0.45m+ L:0.5m+ D:0.1m+
Tr 3	306	Limestone flagstone- single broken flagstone probably at former floor level which is in line with the top of the wall foundation {304}. Possibly part of former surface.	Possible remnant of 19 <sup>th</sup> century surface.	W: 0.7m L:0.8m D: 0.09m
Tr 3	307	Handmade redbrick walls, 2 skins thick, bonded with lime mortar. Two parallel walls c. 1m apart, topped with thick sandstone slabs and running north to south. Appears to continue through wall foundation {304} and possibly connects with east-west culvert beyond trench limits.	19 <sup>th</sup> century culvert	W: 1.1m L: 1.16m D: 0.73m
Tr 3	308	Coarse dark greyish brown clayey sand with small inclusions of broken red brick and mortar framgents	Possible levelling deposit for flagstones (306)	W: 2m+ L: 17m+ D: 0.51m
Tr 3	309	Small brick culvert probably joining to {307}, possible surface drainage downpipe from alley between the two Canal Mill buildings, then feeding into the main culvert	Drain adjacent to mill wall.	W: 0.48m+ L: 0.37m D: ?
Tr 3	310	Concrete slab in section, may represent part of surface but not enough exposed to determine. May be part of the demolition deposit	Possibly part of the 20 <sup>th</sup> century demolition deposit?	W: 0.4m L:0.6m D: ?
Tr 3	311	Mid brownish yellow silty sand with sandstone inclusions	Natural substrate	W: 2m+ L: 17m+



Trench	Context	Description	Interpretation	Dimensions
Tr 4	401	01 Dark blueish black asphalt	Overburden- modern surface	W: 2m+ L: 30m+ D:
	401			0.08m
Tr 4	402	Coarse dark yellowish brown clayey sand with inclusions of broken bricks	Made ground deposit with redeposited natural,	W: 2m+ L:
11 4	402	and stone slabs	used as levelling for surface (401)	30m+ D:1.1m
Tr 4	403	Fine mid brownish yellow silty clay with sandstone inclusions	Natural substrate	W: 2m+ L: 30m+
Tr 4	404	Sandstone flagstones of varying sizes laid to create surface in eastern side of trench 4. Truncated by service trench [410]	Floor of southern Canal Mills building, early to mid 19 <sup>th</sup> century	W: 2m L:15m D:0.07m
Tr 4	405	Broken sandstone flagstones sitting slightly lower level than floor (404) for unknown reason	Floor of southern Canal Mills building, early to mid 19 <sup>th</sup> century	W:0.77m L:5.29m D:0.07m
Tr 4	406	Sandstone fragment within deposit (402). Single flagstone within demolition	Possible accidental inclusion in (402)	W: 0.25m, L:0.31m, D: 0.06m
Tr 4	407	Roughly hewn sandstone slabs bonded with lime mortar creating squared structure	Pillar base 19 <sup>th</sup> century	W: 1.1m L:0.18m+
Tr 4	408	Roughly hewn sandstone slabs bonded with lime mortar creating squared structure	Pillar base 19 <sup>th</sup> century	W: 0.37+ L: 1m
Tr 4	409	Roughly hewn sandstone slabs bonded with lime mortar creating squared structure	Pillar base 19 <sup>th</sup> century	W: 0.39m+L: 98m
Tr 4	410	Linear cut for modern services running east to west	Service trench- 20th century	w: 0.7m L: 5m
Tr 4	411	Coarse dark grey gravel mixed with yellow sand within cut [410]	Fill of service trench [410]	W: 0.7m L:5m
Tr 4	412	Coarse dark blackish grey sandy rubble with broken pieces of brick, mortar and concrete. Lens of darker more gritty demolition material overlying deposit (402) in the northern part of the trench	Demolition deposit 20 <sup>th</sup> century	W: 2m L: c. 15m D: 0.5m
Tr 5	501	Coarse light grey reinforced concrete slab sealing western part of trench.	Overburden- mid-late 20 <sup>th</sup> century surface associated with later refurbishment in Albion Mill	W:2m L: 13m D:0.21m
Tr 5	502	Dark blackish brown silty clay with moderate inclusions of demolition material sealing eastern half of trench.	Demolition deposit mixed with old topsoil.	W:2m L: 13m D:0.48m
Tr 5	503	Mid light blueish yellow to brownish yellow silty clay	Natural substrate	W: 2m+ L: 30m+



Trench	Context	Description	Interpretation	Dimensions
Tr 5	504	Single sandstone flagstone, possible remnant of floor or culvert, no trace of continuation in section.	Possible floor level or bottom of culvert	W: 0.47m L:0.51m
Tr 5	505	Fine dark greyish brown silty clay, natural clay substrate discoloured due to presence of flagstone (504). Continues beyond (504) so may be evidence of continuation of that stone which was removed during demolition.	Waterlogged natural clay under 504	W: 0.43m L:2.6m D: 0.1m
Tr 5	506	Culvert constructed with rough hewn sandstone cobbles and chink stones, dry laid and capped with sandstone slabs c. 60mm-80mm thick. Ran north-south parallel to outer wall of Albion Mill and within its yard.	Culvert, possibly associated with Albion Mill, probably mid 19 <sup>th</sup> century	W: 0.5m L:0.96m D: 0.14m
Tr 5	507	Possible linear cut with uneven concave sides oriented NE-SW. Feature is irregular and undercutting with diffuse horizon between fill and natural substrate, possibly vein within natural.	Possible natural feature	W: 0.47m L: 2m+ D:0.13m
Tr 5	508	Fine dark yellowish brown sandy clay. Diffuse interface with natural substrate. Well sorted and same composition as natural substrate except slight darker colour.	Possible natural feature	W: 0.47m L: 2m+ D:0.13m
Tr 5	509	Single course of roughly squared sandstone blocks bedded on natural substrate, running north-north-west to south-south-east along line of Albion mills outer wall- same as {4018}	Foundation for the external wall of Albion Mills- mid 19 <sup>th</sup> century	W: 0.88 L: 2m+ D: 0.21m
Tr 5	510	Cut for French drain filled with gravel (511)	Land drain possibly predating mill	W: 0.24m L: 2m+ D: ?
Tr 5	511	Coarse light greyish yellow gravels with small amount of sandy clay filling cut [510]	Land drain possibly predating the mill	W: 0.24m L: 2m+ D: ?
Tr 5	512	Handmade redbrick culvert with ceramic pipe inside running north to south and adjacent to wall foundation {514}.	Wall housing later 19 <sup>th</sup> or early 20th century ceramic drain	W: 0.36m L:2m+ D: 2.1m
Tr 5	513	Orange unglazed drain	Drain running under 512-L19th/E20th century	0.1m diam
Tr 5	514	Rough hewn irregular sandstone blocks bonded with black ash mortar in irregular pattern. Unknown function, appears to be wall foundation although not marked on any historic maps, possibly a short-lived external wall or outbuilding. Probably contemporary with culvert {512} as the two abut each other.	Wall foundation, probably late 19 <sup>th</sup> or early 20 <sup>th</sup> century	W: 1m L:2m+ D:?
Tr 5	515	Wall seen in section running north-south, machine made red bricks and cementitious mortar forming W side of possible manhole. Keyed into walls {516} and {517}	20 <sup>th</sup> century manhole	W: 0.11m L: 1.2m D: 1.5m

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Trench	Context	Description	Interpretation	Dimensions
Tr 5	516	Wall seen abutting section running east-west, machine made red bricks and cementitious mortar forming S side of possible manhole. Keyed into walls {515} and {517}	20 <sup>th</sup> century manhole	W: 0.11m L:1m D: 0.66m
Tr 5	517	Wall seen in section running north-south, machine made red bricks and cementitious mortar forming E side of possible manhole. Keyed into walls {515} and {516}	20 <sup>th</sup> century manhole	W: 0.11m L: 1.2m D:1.8m
Tr 5	518	VOID	VOID	VOID
Tr 5	519	Coarse dark blackish brown silty clay with 30% demolition material and 40% waste material	Made ground deposit	W: 2m+ L: 17m+ D: 1.9m
Tr 6	601	Coarse light grey reinforced concrete	Surface associated with 20 <sup>th</sup> century use of Albion Mill	W: 2m+ L: 30m+ D: 0.2m
Tr 6	602	Coarse light yellowish grey gravelly sand subbase beneath concrete (601)	Subbase for concrete (601), 20 <sup>th</sup> century	W: 2m+ L:30m+ D:0.34m
Tr 6	603	Levelled medium dark yellowish brown sandy clay with infrequent demolition material overlying 19 <sup>th</sup> century remains of Albion Mill and underlying 20 <sup>th</sup> century surface and subbase (601)/(602)	Demolition deposit associated with partial demolition and refurbishment of Albion Mill in 20 <sup>th</sup> century	W: 2m+ L:30m+ D:0.78m
Tr 6	604	Sandstone flagstone floor, scarring on some from metal machine feet. Truncated by modern service trench [610].	Mill flooring- probably part of weaving shed floor associated with 19 <sup>th</sup> century Albion Mill	W: 2m+ L: 20.66m D:
Tr 6	605	3 small sandstone blocks adjacent to flue {606}-{609}, Aligned to former wall of northwesternmost Albion Mill building which was possibly the boiler house.	Remnant of heavily truncated wall foundation associated with 19 <sup>th</sup> century Albion Mill	W: 0.56m L: 1.3m D: 0.17m
Tr 6	606	Handmade redbrick and firebrick wall forming southern side wall of underfloor flue, bonded with lime mortar.	Wall associated with mid-late 19 <sup>th</sup> century flue in Albion Mill	W:0.23m L: 3m D: 0.75m
Tr 6	607	Handmade redbrick and firebrick wall forming dividing wall between north and south flues of underfloor flue system, bonded with lime mortar.	Wall associated with mid-late 19 <sup>th</sup> century flue in Albion Mill	W: 0.24m L: 1.88m D: 0.72m
Tr 6	608	Handmade redbrick and firebrick wall forming northern side wall of underfloor flue, bonded with lime mortar. Occasionally patched with slate.	Wall associated with mid-late 19 <sup>th</sup> century flue in Albion Mill	W:0.33m L:1.73m D:0.53m
Tr 6	609	Handmade redbrick and firebrick "ceiling" of flues, bonded to walls {606}- {608} and built in a single event. Lime mortar bonding.	Ceiling of mid-late 19 <sup>th</sup> century flue in Albion Mill	W:1.45m L: 1.48m D: 0.18m



Trench	Context	Description	Interpretation	Dimensions
Tr 6	610	Linear cut of a modern drain truncating sandstone floor (604)	Cut of modern drain	W:0.4m L: 3.25m+ D:?
Tr 6	611	Coarse mid greyish red sand with 2% gravel filling drain [610]	Fill of modern drain [610]	W:0.4m L: 3.25m+ D:?
Tr 6	612	Fine mid yellowish brown silty clay	Natural substrate	W: 2m+ L:30m+
Tr 8	801	Medium dark brown silty loam with modern rubbish inclusions	Modern Topsoil	W: 2m+ L:30m+ D: 0.2m
Tr 8	802	Fine mid yellowish sandy clay with c 10% sandstone inclusions	Subsoil	W: 2m+ L:30m+ D: 0.4m
Tr 8	803	Medium mid bluish yellow silty clay	Natural substrate	W: 2m+ L:30m+
Tr 8	804	Linear cut with near vertical sides aligned north-south.	Cut of 19th century drain	W: 0.7m L:2m+ D: 0.43m
Tr 8	805	Coarse dark yellowish brown clay, with 5% plastic, 5% glass, 1% ceramics and 10% stone filling cut [804]. Also contained smashed salt glazed drain pipe (808)	Modern fill of possible 19 <sup>th</sup> century drain, possibly opened to remove old pipe?	W: 0.7m L: 2m+ D: 0.43m
Tr 8	806	Sub-circular depression with concave sides and uneven base. Very shallow slight depression in natural containing glass deposit (807), single sheet of broken glass	Slight depression in natural clay containing smashed plate glass	W: 0.56m L:0.58m D:0.07m
Tr 8	807	Coarse dark blueish yellow silty clay with 70% plate glass of 20 <sup>th</sup> century date. Redeposited natural with single sheet of glass pressed in and shattered. May be discoloured natural due to glass holding water beneath.	Possible water affected clay under pressed in glass	W: 0.56m L:0.58m D:0.14m
Tr 8	808	Ceramic salt glazed drain pipe in pieces within cut [804]	Late 19th century drain	-
Area 1	1001	Concrete beam wall foundation running East to West	Late 20th Century wall foundation	W0.20m x L0.90x D0.11m
Area 1	1002	Concrete stanchion base with sheared off steel upright embedded	Late 20 <sup>th</sup> century foundation	W.1.1m, L: 1.1m, D: 0.9m



Trench	Context	Description	Interpretation	Dimensions
Area 1	1003	Concrete beam wall foundation running East to West	Late 20th Century wall foundation	L1.0m x W0.20+m x D0.80m
Area 1	1004	East-west 2 skin wall laid with modern red engineering brick and cementitious mortar, founded on concrete beam	Late 20th Century wall	L: 1.1m, W 0.24m, D 0.35m
Area 1	1005	Concrete slab between concrete beam {1003} and wall {1004}, partly overlaying possible culvert walls {1008}, {1009} and {1015}.	Late 20 <sup>th</sup> century surface	0.20+m x 2.60m x 0.10m
Area 1	1006	Sandstone outcropping(?) abutted by wall {1007}. Weathered sandstone, unworked, has appearance of bedrock outcropping possibly used to build off	Possible bedrock outcropping	0.4+m x 1.5+m x 0.39m
Area 1	1007	Remnant of wall laid with handmade red bricks and lime mortar. Four skins thick and abutting sandstone (1006). Probably last remnant of soap works chimney, probably deeper foundation outside of bedrock outcropping with main chimney base and flues above this level since no evidence of flues or heat damage to bricks/sandstone within excavation	Probably part of 19 <sup>th</sup> century chimney foundation	0.50m x 1.15+m x 0.55m
Area 1	1008	Frogged machine made redbrick wall bonded with cementitious mortar, 2 skins thick. Possibly part of a later culvert in this area. Keyed into wall {1009}	20th Century culvert wall	L: 2.1m, W: 0.25m, D: 0.6m+
Area 1	1009	Frogged machine made redbrick wall bonded with cementitious mortar, 2 skins thick. Possibly part of a later culvert in this area, keyed into wall {1008}	20th Century culvert wall	L: 1.5m, W: 0.25m, D: 0.6m+
Area 1	1010	Light grey reinforced concrete slab sealing western part of area to west of concrete foundations {1001} and {1003}	20 <sup>th</sup> Century concrete surface	L: 8.2m+ W: 8.5m+
Area 1	1011	Loose demolition rubble deposit contained within possible culvert {1008} and {1009]	20th Century demolition material	L: 7.6m+, W: 8.1m+ D: 3.5m+
Area 1	1012	Mid greyish brown/brownish yellow silty clay, beneath concrete foundations in eastern part of area, trampled natural substrate	Natural substrate	L:10m+, W: 8m+
Area 1	1013	Construction cut of concrete foundation {1001}	20th Century construction cut	L0.50m x W0.20m x D0.11m+

Trench	Context	Description	Interpretation	Dimensions
Area 1	1014	Fill of construction cut [1013], around concrete beam.	Fill of construction cut	L0.5m x W0.03m, D0.11m
Area 1	1015	Void	Void	Void
Area 2	2035	Handmade redbrick wall running east-west, 2 skins thick and bonded with lime mortar to a stretcher bond. Abuts north-south wall {2036}. Appears to be addition to Canal Mills between western end of main sandstone building and canal.	19th Century Canal Mills wall	L: 19.78m, W: 0.25m, D: 1.15m
Area 2	2036	Sandstone block wall containing blocked door and rendered with skim of plaster on western face. Blocks are irregular and roughly hewn and laid in irregular courses. Bonded with lime mortar. The door, at northern end of wall, appears to have had brick jambs and was c. 0.9m wide, later blocked by stone insert {2066}	19th Century wall, western wall of southern Canal Mills building.	L: 22.7m, W: 0.83m, D: 1.05m
Area 2	2037	Machine made, frogged red brick surface, All bricks laid on bed with frogs upwards laid in north-south rows. No evidence of bonding material. Forming yard(?) surface between canal mills building and canal? Probably an area for loading/unloading onto barges in canal below.	20th Century laid brick surface	L: 15m, W: 13m, D: 0.07m
Area 2	2038	Sandstone surface laid with flagstones of various sizes directly onto clay. Abuts walls {2035} and {2036}	19th Century surface associated with Canal Mills	L:14.5m, W: 11.6m, D: 0.06m
Area 2	2039	Sandstone surface remnant abutting north edge of brick surface (2037) and flush with it, may be remnant of earlier surface replaced by brick surface (2037) in 20 <sup>th</sup> century as flagstones are flush with bricks	19th Century internal canal mill floor	L: 2.6m, W: 1.4m, D: 0.06m
Area 2	2040	Void	Void	Void
Area 2	2041	Sandstone surface laid with flagstones in northern part of area 2, located within westernmost building adjacent to canal.	19th Century internal canal mill floor	L: 5.7m, W: 4.5m, D: 0.05m
Area 2	2042	Heavily truncated wall laid with handmade red bricks and lime mortar in random mix of headers and stretchers, 2 skins thick. Forming western wall of room added to western end of Canal Mill building, contemporary with wall {2035}	19th Century wall- extension to main building adjacent to canal- possibly covered loading/unloading/temporary store area	L: 6.4m, W: 0.24m, D: 0.14m



Trench	Context	Description	Interpretation	Dimensions
Area 2	2043	East to west wall laid with handmade red bricks and lime mortar. Stretcher bonded and whitewashed on southern (internal) face. Eastern end has opening c. 0.5m wide, formed by sandstone slab jamb and lintel abutting perpendicular wall {2036}. The opening is too small for pedestrian doorway and too low for window, possibly loading doors since opens onto cobbled road 2052.	19th Century canal mill wall- northern wall of possible extension/outbuilding abutting southern canal mill building.	L: 12.2m, W: 0.39, D: 1.4m
Area 2	2044	Stone stanchion base located in possible loading area/room to west of main canal Mill building.	19th Century canal mill pillar base	L1.07m x W0.82m x D0.06m
Area 2	2045	Stone stanchion base located in possible loading area/room to west of main canal Mill building.	19th Century canal mill pillar base	L1.14m x W1.15m x D0.06m
Area 2	2046	Stone stanchion base located in possible loading area/room to west of main canal Mill building.	19th Century canal mill pillar base	L1.21m x W1.28m x D0.05m
Area 2	2047	Stone stanchion base located in possible loading area/room to west of main canal Mill building.	19th Century canal mill pillar base	L1.40m x W1.40m x D0.03m
Area 2	2048	Stone stanchion base located in possible loading area/room to west of main canal Mill building.	19th Century canal mill pillar base	L1.08m x W1.10m x D0.03m
Area 2	2049	Stone stanchion base located in possible loading area/room to west of main canal Mill building.	19th Century canal mill pillar base	L1.05m x W1.18m x D0.04m
Area 2	2050	Handmade redbrick wall foundation bonded with lime mortar. L-shaped wall, 2-skins, abutting wall {2051} and forming open ended rectangular structure with sandstone floor (2041) laid around both sides. Unknown function, possibly small room for storage or part of corridor/staircase (?).	19th Century wall foundation	L4.3m x W0.25m x D0.07m
Area 2	2051	Handmade red brick wall bonded with lime mortar. Maximum 4 courses survive, 3 skins thick. Foundation courses are stretcher and rowlock laid alternating courses, surviving parts of upper courses are laid in stretcher bond. East to west aligned. Abutted on south face by wall {2050} and on north face by cobbled yard surface (2055)	19th Century wall- external wall of building between main mill and canal.	L3.3m x W0.59m x D0.32m



Trench	Context	Description	Interpretation	Dimensions
Area 2	2052	Surface laid with stone setts, located adjacent to canal, forming yard to west of Northern canal mill building. Probably loading area.	19 <sup>th</sup> century yard area between Canal Mill and canal.	L12.3m x W4.4m x D0.15m
Area 2	2053	Modern service cut, truncating stone surfaces (2052) and (2055)	Late 20th Century truncation	L9.9m+ x W0.86m
Area 2	2054	Fill of modern service cut [2053]	Fill of late 20th Century service cut	L9.9m+ x W0.86m
Area 2	2055	Stone surface laid with rectangular stone setts. Forms road between the two main canal mill buildings linking yard surface (2052) with the mill entrance and Whalley Road to the East.	19th Century road surface	L10.6m x W3.6m D0.15m
Area 2	2056	Stone blocks separating surfaces (2052) and (2055). Has inset iron rail. Possibly foundation for sliding gate/door securing the yard	19th Century sliding door foundation	L6.2m x W0.2m
Area 2	2057	Stone wall laid with roughly hewn stone blocks and rendered with lime plaster. Forms southern wall of the northern canal mill building and abutted by road surface	19th Century mill external wall	L9.1m+ x W0.5m x D2.5m+
Area 2	2058	Row of stone blocks at base of wall {2057} on northern side, possibly part of stepped wall foundation although not possible to investigate due to H&S concerns over depth.	Possible wall foundation, 19 <sup>th</sup> century	L9.1m x W0.4m
Area 2	2059	VOID	VOID	VOID
Area 2	2060	VOID	VOID	VOID
Area 2	2061	Stone chimney foundation. Square foundation built with sandstone rough hewn blocks of various sizes with flue opening in northern side Flue opening had arched top and are lined with handmade red bricks and firebricks bonded with lime mortar.	19th Century chimney foundation	L4.3m x W3.9m x D2m
Area 2	2062	Base of brick built circular upright flue of the chimney, only the bottom course bedded on the stone foundation {2061} survives, handmade red bricks and traces of lime mortar	19th Century chimney foundation	Diam. 1.25m
Area 2	2063	Stone rubble above culvert {2064} and beneath surface (2055)	Packing around 19th Century culvert	L9.1m+ x W4.2m+ D1.9m
Area 2	2064	Brick built culvert. Circular profile, 2 skins thick. Appears to be handmade red bricks and lime mortar but only observed from distance due to depth. Bricks are laid on edge along the length of the culvert.	19th Century culvert	Diam. c.1.5m, L9m+

Trench	Context	Description	Interpretation	Dimensions
Area 2	2065	Blocking of opening within brick wall {2043}. Blocked with machine made red bricks bonded with cementitious mortar.	20th Century blocking of opening	Ht 0.9m x W0.7m
Area 2	2066	Stone blocked up doorway in wall {2036}. Stone is same type as that used in main wall and bonded with lime mortar so possible 19 <sup>th</sup> century date.	19th Century(?) wall alteration	Ht1.1m x w0.9m
Area 3	2001	Demolition deposit	on deposit 20th Century demolition material D2	
Area 3	2002	Natural Clay	Natural substrate in WB area	L26m+ x W13m+
Area 3	2003	Poured concrete surface in northwest part of Area 3, abutting walls {2006}, {2007}, {2008}. Level with sandstone surface (2004) so probably later replacement of continuation of that within part of the room.	Early 20th Century concrete surface within possible offices at eastern end of Canal Mill.	L12.2m x W8.3m x D0.09m
Area 3	2004	Sandstone surface laid with large flagstones c. 70mm thick but of varying sizes. Abutted by surface (2003), in southern part of room.	19th Century mill flooring	L5.6m x W3.5m x D0.08m
Area 3	2005	2 skin machine made red brick structure, seen only in eastern section, possible pillar, abuts wall {2006} and painted on western face.	Late 19th century structure	L0.25m+ x W0.24m x D0.35m
Area 3	2006	East to west wall laid with roughly hewn sandstone blocks laid to random courses and bonded with lime mortar. Abutted wall {2008} at eastern end but probably part of same construction event.	19th Century sandstone wall associated with Canal Mill.	L4.1m x W0.76m x D0.8m
Area 3	2007	Void	Void	
Area 3	2008	North to South wall laid with roughly hewn sandstone blocks laid to random courses and bonded with lime mortar. Abutted wall {2006} at northern end but probably part of same construction event.	19th Century sandstone wall associated with Canal Mill.	L6.3m x W0.75m x D0.77m
Area 3	2009	Single skin wall laid with handmade red brick stretchers and occasional half bat offcuts bonded with lime mortar. Aligned east to west and abutted wall {2008} at eastern end.	Internal dividing wall within Canal Mill building, 19 <sup>th</sup> century.	L5.2m x W0.11m x D0.78m
Area 3	2010	Sandstone flagstones visible in southern baulk. Two flagstones only, either remnant of another surface at higher level or possibly part of entrance step as external street level is higher than interior floor level.	19th Century floor/entrance step	L1.7 x W0.6m x D0.07m
Area 3	2011	Concrete surface laid onto natural clay within rectangular "pit" formed by wall {2028}.	Early 20th Century concrete surface	L2.1m x W1.2m x 0.06m



Trench	Context	Description	Interpretation	Dimensions
Area 3	2012	Sandstone block wall running north to south laid with rough hewn blocks in a randomly coursed pattern and bonded with lime mortar. Rendered on western face with an ashy grey plaster. Abutted by wall {2009} and floors (2004) and (2003) on eastern face and stone beams {2013}-{2015} on western face. External wall of southern canal mill building, probable weaving shed.	19th Century sandstone mill wall	L9.8m x W0.56m x 1.2m
Area 3	2013	Stone beam with inset stanchion bases, rough hewn stones bonded with lime mortar	19th Century underfloor support beam, possibly for weaving shed	L6.2m x W0.52m x D0.25m+
Area 3	2014	Stone beam with inset stanchion bases, rough hewn stones bonded with lime mortar	19th Century underfloor support beam, possibly for weaving shed	L3.8 m x W0.52m x D0.25m+
Area 3	2015	Stone beam with inset stanchion bases, rough hewn with lime mortar	19th Century underfloor support beam, possibly for weaving shed	L11.1m x W0.52m x D0.25m+
Area 3	2016	Void	Void	
Area 3	2017	Stone stanchion base inset into beam {2013}	19 <sup>th</sup> century stanchion base inset into underfloor beam- pillar base for saw tooth roof support	0.83m x 0.82m
Area 3	2018	Stone stanchion base inset into beam {2013}	19 <sup>th</sup> century stanchion base inset into underfloor beam- pillar base for saw tooth roof support	0.83m x 0.82m
Area 3	2019	Stone stanchion base inset into beam {2013}	19 <sup>th</sup> century stanchion base inset into underfloor beam- pillar base for saw tooth roof support	0.83m x 0.82m
Area 3	2020	Stone stanchion base inset into beam {2014}	19 <sup>th</sup> century stanchion base inset into underfloor beam- pillar base for saw tooth roof support	0.82m x 0.82m
Area 3	2021	Stone stanchion base inset into beam {2014}	19 <sup>th</sup> century stanchion base inset into underfloor beam- pillar base for saw tooth roof support	0.82m x 0.82m
Area 3	2022	Stone stanchion base inset into beam {2015}	19 <sup>th</sup> century stanchion base inset into underfloor beam- pillar base for saw tooth roof support	0.83m x 0.83m
Area 3	2023	Stone stanchion base inset into beam {2015}	19 <sup>th</sup> century stanchion base inset into underfloor beam- pillar base for saw tooth roof support	0.83m x 0.83m
Area 3	2024	Stone stanchion base inset into beam {2015}	19 <sup>th</sup> century stanchion base inset into underfloor beam- pillar base for saw tooth roof support	0.83m x 0.83m



Trench	Context	Description	Interpretation	Dimensions
Area 3	2025	Stone capped culvert running north to south along base of eastern side of wall {2026} containing clay pipe. Constructed with small sandstone upright slabs forming the side walls and capped with flat stone slabs. Early 20 <sup>th</sup> century buff ceramic pipe inserted later	19th Century mill culvert with 20th Century pipe inserted	L12.7m+ x W0.38m x D0.33m
Area 3	2026	Sandstone block wall running north to south and constructed with rough hewn sandstone blocks in random courses and bonded with lime mortar. Abutted on eastern side by sandstone beams {2013}-{2015}.	19th Century wall within canal mills building	L13.8m x W0.75m x D0.32m
Area 3	2027	Sandstone block wall running east to west and constructed with rough hewn sandstone blocks in random courses and bonded with lime mortar. Forms south wall of room and keyed to wall {2026} at the western end.	19th Century wall within canal mills building	L11.1m x W0.75m x D1.1m
Area 3	2028	Machine made redbrick wall lining rectangular "pit" in western edge of concrete surface (2003). Single skin of stretcher laid bricks lining north, east and south sides of pit, abutting concrete blocks {2029}. Bonded with dark cementitious mortar. Abutted on inside by concrete surface (2011).	20th Century structure – possibly part of stairwell between different floor levels weaving shed and offices?	L1.4m x 0.11m D 0.4m
Area 3	2029	Concrete blocks forming outside of rectangular sunken "pit" on western edge of surface (2003), lined on inside by bricks {2028}.	20th Century structure – possibly part of stairwell between different floor levels weaving shed and offices?	L1.4m x 0.45m x D0.4m
Area 3	2030	Fill of drain cut [2031] containing salt glazed drain pipe	Late 19 <sup>th</sup> century drain	L5.0m+ x W0.32m x D0.10m
Area 3	2031	Drain cut, linear, vertical sided, containing fill (2030)	Late 19 <sup>th</sup> century drain	L5.0m+ x W0.32m x D0.10m
Area 4	4001	Slurry/Mud. Modern topsoil, rubble, trample associated with demolition/site clearance activities.	Modern overburden	L29.4m+ x W18.8m+ x D0.3m
Area 4	4002	Grey-brown demolition material comprising rubble associated with 20 <sup>th</sup> century demolition of Albion Mill.	20th Century demolition	L29.4m+ x W18.8m+ x D1.3m
Area 4	4003	North to south wall, 6 skins thick, constructed with grey bricks laid to English garden wall bond with cementitious mortar. Has buttress part way along. Truncated 19 <sup>th</sup> century mill foundations	Late 20th Century Wall associated with later refurbishment of Albion Mill	L10+m x W0.80m x D1.60m



Trench	Context	Description	Interpretation	Dimensions
Area 4	4004	Buttress, part of wall {4003}. Laid with grey bricks laid to English garden wall bond. Abutted by concrete stanchion on southern side.	Late 20th Century buttress/wall associated with refurbishment of Albion Mill	L7.0m x W0.45m x D1.60m
Area 4	4005	Reinforced concrete stanchion block with central upright, abutted wall and buttress {4004}/ {4003}		
Area 4	4006	Natural clay	Natural clay	L29.4m+ x W18.8m+
Area 4	4007	Brick built flue. Constructed with handmade red bricks and lime mortar, 2 skins thick and stretcher laid. Internal (western face) heavily sooted. Truncated by modern wall {4003}	Flue leading from back of boiler towards southwest and probable chimney location, mid-late 19 <sup>th</sup> century	L0.90m x W1.0m x D0.90m
Area 4	4008	Side wall of boiler bed. Handmade red brick and lime mortar laid to stretcher bond and surviving to maximum 5 courses. Joins to flue {4007} at southern end.	Mid-late 19 <sup>th</sup> century	L4.5m x W0.15m x D0.90m
Area 4	4009	Floor of flue {4007} laid with handmade red bricks and lime mortar. Same construction event as {4007}.	Base of mid-late 19 <sup>th</sup> century flue	L2.30m x W4.50m x D0.07m
Area 4	4010	L-shaped stone wall with long "arm" aligned north to south, then returning westwards. Laid with rough hewn sandstone blocks, randomly coursed and bonded with lime mortar. Square room marked on OS 1891 map in northwest corner of mill. Probably the boiler/engine house.	Outer wall of probable engine/boiler house associated with later 19 <sup>th</sup> century Albion Mill.	L4.50m x W3.90m x D1.10m
Area 4	4011	Paved stone floor of mill laid with sandstone flagstones and sitting within the southern part of the building, probably the weaving sheds.	19th Century mill floor	L10+m x W10+m x D0.14m
Area 4	4012	Reinforced concrete slab sealing entire area, part of the later refurbishment of the Albion Mill Building.	Concrete floor added to the Albion Mill in 20 <sup>th</sup> century during refurbishment.	L29.4M+ x W18.8m+ x D0.15m
Area 4	4013	Cut stone block- large rectangular sandstone block with drilled holes and metal fittings. Abutted south side of wall {1014}	19th Century machine bed within Weaving Shed(?) of Albion Mill	L2.65m x W0.90m x D0.45m
Area 4	4014	Wall laid with rough hewn sandstone blocks and lime mortar aligned east to west. Abutted wall {4010} although probably part of same construction. Divides northern range of Albion Mill from the southern range which was probably the weaving shed.	19th Century dividing wall within Albion Mill	L5+m x W0.60m x D0.53m



Trench	Context	Description	Interpretation	Dimensions
Area 4	4015	Buttress at northern end of wall {4003} and also laid with grey bricks and cementitious mortar.	20 <sup>th</sup> century buttress associated with later refurbishment of Albion Mill.	L0.90m x W0.90m x D0.44m
Area 4	4016	Sandstone wall laid with rough hewn blocks and randomly coursed. North to south aligned and keyed to {1014} at southern end. Bonded with Lime mortar but also repaired with cementitious mortar. Divides northwestern square room of Albion Mill, from the northeastern room. Has 3 equally placed holes (0.2x0.2m) through the base of the wall at floor level, possibly transmission holes for belts or pipes(?). These holes were later blocked with machine made bricks, probably mid 20 <sup>th</sup> century possibly representing disuse of boilers and transition to electricity?	19th Century mill wall, repaired and altered in 20 <sup>th</sup> century.	L8+m x W0.53m x D0.85m
Area 4	4017	Remnant of sandstone surface within room formed by walls {4016}, {4014} and {4010}. Irregular sized flagstones laid directly onto natural clay.	19th Century mill floor remnant	L2.88m x W1.02m x D0.11m
Area 4	4018	substrate, running north-north-west to south-south-east along line of 19th Century wall, eastern outer wall of Albion Mill		L5.40+m x W0.57m x D0.23m
Area 4	4019	Cobbled surface laid with stone setts. Small square of setts adjacent to eastern wall of Albion Mill, internal to building, possible entrance(?).	Cobbled surface associated with 19th Century Albion Mill	L2.0+m x W2.16+m x D0.08m
Area 4	4020	Modern manhole with steel cover, truncating floor (4011)	20th Century manhole	L0.75m x W0.60m x D0.5+m
Area 4	4021	Void	Void	
Area 4	4022	Wall laid with rough hewn sandstone blocks and lime mortar aligned east to west. Probably a continuation of wall {4010} but truncated.	Internal wall associated with 19 <sup>th</sup> century albion Mill.	L1.70+m x W0.34m x D0.08+m
Area 4	4023	Silty mixed demolition material, contained in and around boiler bed.	20 <sup>th</sup> century demolition material	L5.0m x W2.0m x D0.71m
Area 4	4024	Grey Brick wall with cement mortar in northern section of area. Associated with later 20 <sup>th</sup> century refurbishment.	20th Century wall associated with later refurbishment	L0.80+m x W0.33m x D0.60m

Trench	Context	Description	Interpretation	Dimensions
Area 4	4025	Wall of fire bricks and heat affected lime mortar. Part of boiler wall and same as {4008}. Forms western side wall of boiler bed with the firebricks lining central flue.	Part of 19 <sup>th</sup> century boiler bed.	L10.0m x W1.33m x D0.51m
Area 4	4026	Part of floor of boiler bed laid with mix of handmade red bricks and firebricks. Keyed into {4008}, all part of same construction.	Part of 19 <sup>th</sup> century boiler bed.	L4.14+m x W0.70m x D0.30+m
Area 4	4027	Red brick structure observed in sondage at northern end of boiler bed, possible culvert beneath the mill structures.	Possible 19 <sup>th</sup> century culvert.	L2.0+m x W2.0+m x D0.14M





# Summary for archaeol5-509794

OASIS ID (UID)	archaeol5-509794
Project Name	Trial Trench, Watching Brief at Enfield Wharf, Clayton-le-Moors, Hyndburn, Lancashire
Sitename	Enfield Wharf, Clayton-le-Moors, Hyndburn, Lancashire
Activity type	Trial Trench, Watching Brief
Project Identifier(s)	
Planning Id	
Reason For Investigation	Planning: Between application and determination
Organisation Responsible for work	Archaeological Research Services Ltd
Project Dates	10-Oct-2022 - 15-Oct-2022
Location	Enfield Wharf, Clayton-le-Moors, Hyndburn, Lancashire
	NGR : SD 74777 30618
	LL: 53.7712853346722, -2.38416966050863
	12 Fig : 374777,430618
Administrative Areas	Country : England
	County : Lancashire
	District : Hyndburn
	Parish : Hyndburn, unparished area
Project Methodology	8 trial trenches 30mx1.8m excavated using suitable machinery. Any archaeological remains will be recorded.
Project Results	Archaeological Research Services Ltd were commissioned by Watson Construction Ltd to undertake a scheme of archaeological works on land within the industrial town of Clayton-le-Moors.
	The Proposed Development Area (PDA) presented a high chance of industrial archaeological remains, due to its longstanding history as a canalside mill and soapworks. This, and the added potential of post- medieval archaeological remains in areas necessitated a scheme of archaeological investigations. Trial trenching was undertaken initially to evaluate the nature of any buried archaeological remains present, followed by scalable watching brief mitigation of four archaeologically significant areas in order to contribute to the aims and objectives outlined in the correspondent Written Scheme of Investigation (Appendix II).
	The archaeological work was undertaken between October 2022 and February 2023 and in accordance with a written scheme of works agreed with the Development Control Archaeologist for Lancashire.
	Remains of the 19th century canalside mill, soapworks, and associated industrial buildings were uncovered throughout the site, leading to the scheme of further works which allowed a closer analysis of the phasing, drainage, and internal structures of the buildings.
Keywords	Cotton Mill - POST MEDIEVAL - FISH Thesaurus of Monument Types
	Boiler House - POST MEDIEVAL - FISH Thesaurus of Monument Types
	Flue - POST MEDIEVAL - FISH Thesaurus of Monument Types
	Chimney - POST MEDIEVAL - FISH Thesaurus of Monument Types
	Soap Factory - POST MEDIEVAL - FISH Thesaurus of Monument
	Туреѕ

Funder	
HER	Lancashire SMR - noRev - LITE
Person Responsible for work	Britt, Tomsen, Joe, Robb
HER Identifiers	
Archives	



# WRITTEN SCHEME OF INVESTIGATION Enfield Wharf, Clayton-le-Moors, Hyndburn, Lancashire Trial Trenching and Watching Brief with Addendum for Scalable Watching Brief Mitigation



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Evaluation • Excavation • Watching Briefs • All Aspects of Fieldwork Environmental Impact Assessment • Desk-Based Assessment • Heritage Statements • Historic Buildings Geophysics • Geochemistry • Geoarchaeology • Palaeoenvironment • Remote Sensing & Mapping

## Enfield Wharf, Clayton-le-Moors

**ARS LTD REPORT 2022** 



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Issue	Author	Checked by	Approved by	Date approved	Reason for issue
1	John Lavender	Jim Brown	Robin Holgate		Initial draft for consultation
2	John Lavender	Rebecca Trow	Rebecca Trow	31/8/22	Revised draft following LPA comment
3	Rebecca Trow	Jenny Doole	Rebecca Trow	26/10/22	Reissued with addendum for mitigation

Prepared on behalf of: Watson Construction Ltd Planning Reference: 11/22/0047 Local Authority: Hyndburn Borough Council Site 1 central NGR: SD 74819, 30641 Site 2 central NGR SD 74882, 30739



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## I INTRODUCTION

## 1.1 Project and Planning Background

1.1.1 This is a Written Scheme of Investigation (WSI) for evaluation trenching and watching brief that has been prepared by Archaeological Research Services Ltd (ARS Ltd) on behalf of Watson Construction Ltd.

1.1.2 The WSI sets out a scheme of evaluation trenching work in support of a planning application for development at an area of land at Enfield Wharf, Clayton-le-Moors, Lancashire comprising a proposed residential development comprising 14no. 4 bed three-story houses, 43no. 3 bed houses, 17 two bed houses, 8 two bed apartments, and 45 one bed apartments, with associated access, parking and landscaping. On the advice of Douglas Moir, Planning Officer (Archaeology) for Lancashire County Council, the Local Planning Authority has requested a programme of archaeological works comprising an initial stage of trial trenching to identify any surviving areas of archaeological interest across the site followed by, depending on the results of this initial assessment, further below-ground archaeological work which may be considered necessary. Any variations to this scope of works will be by agreement of the Client and the archaeological planning advisor to the Local Planning Authority (LPA). If further work is required by the LPA beyond this phase of trial trenching will be subject to a separate WSI.

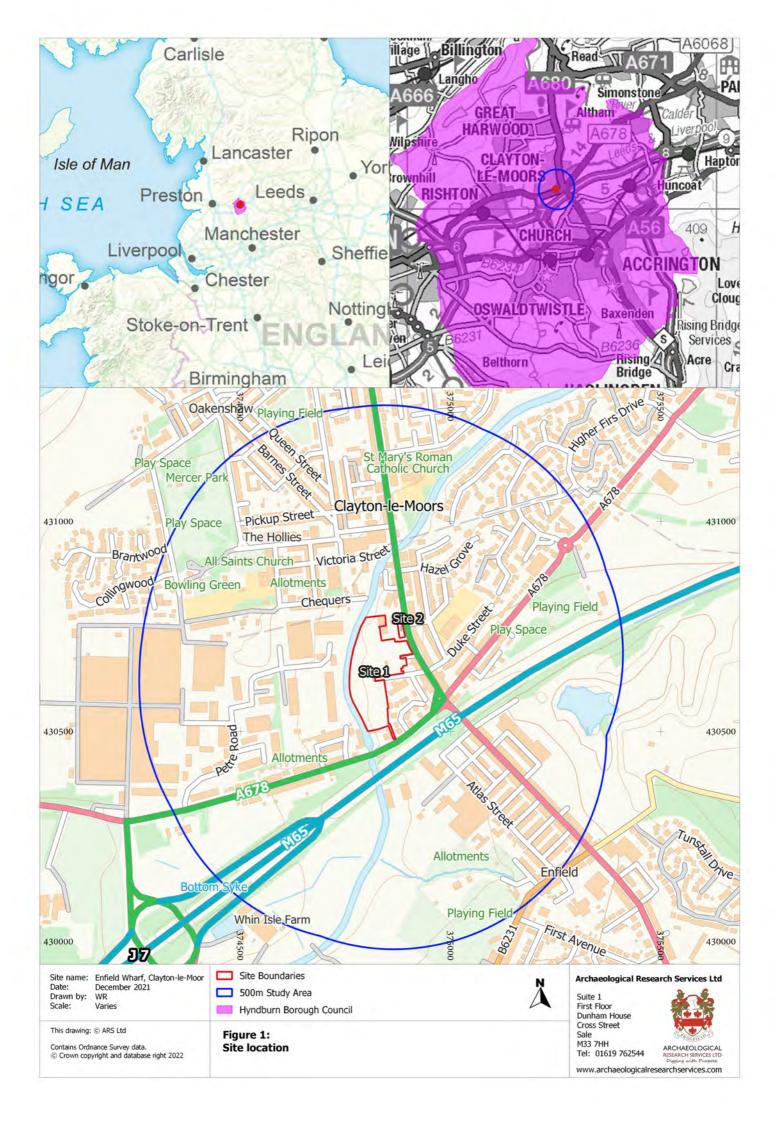
1.1.3 The proposed development area is considered to have potential to host buried archaeological remains relating to the industrial development of Clayton-le-Moors in the late 18<sup>th</sup> and 19<sup>th</sup> century, in particular to one of the former mill complexes. An archaeological evaluation is required in line with the *National Planning Policy Framework (NPPF)*. "...Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation" (MHCLG 2022, paragraph 194).

1.1.4 A heritage impact assessment (HIA) was produced in January 2022 by ARS Ltd in support of the planning application for proposed development (Rigby 2022). The HIA identified a series of former 19<sup>th</sup> century sites, which are also recorded on the Lancashire Historic Environment Record: Henfield Mill/Canal Mills, also known as The Old Factory, built in the 1830s (PRNs 7009 & 14764), the Enfield Soap Works built *c*.1844 (PRN 14762), a School on Canal Street (PRN 14765) and Albion Mill built in 1861 (PRN 23567). Historic map regression of the site undertaken as part of the HIA also revealed the former site of Millfield House (ARS01) and workers' housing in the form of terraced housing on Canal Street (ARS03), Mill Street (ARS05) and Whalley Road (ARS03), and back-to-back housing along Mill Street (ARS04).

## 1.2 Site Location and Description

1.2.1 The proposed development comprises area 1 which is 2.32ha and area 2, which is 0.04ha, located within the industrial town of Clayton-le-Moors (Figure 1; NGR SD 74819, 30641 and SD 74882, 30739). The site currently comprises areas of hardstanding, which is overgrown with vegetation to the west of site 1 and an area of grass and wooded land to the east along the A680. Site 1 is bounded to the north, south and east by residential housing and several commercial and industrial structures, and to the west by the Leeds and Liverpool Canal. This site is accessible from Canal Street and Mill Street. Site 2 is bounded to the north and west by industrial and commercial structures, to the east by the A680/Whalley Road and to the south by Mill Entrance. Site 2 is accessible from Whalley Road.







Site name: Enfield Wharf Date: June 2022 Drawn by: Scale: JL 1:1500 @ A4

#### Figure 2: Proposed Trench Layout

25 0 50 75 Archaeological Research S ices Ltd

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100 m

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Cross Street Sale M33 7HH



Tel: 01619 762544 www.archaeologicalresearchservices.com

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1.2.2 A spot point within the northeastern part of the boundary registered at c. 139.65m above Ordnance Datum with a slope down to c. 128.5m above Ordnance Datum in the southwest. The site is therefore situated on a slight southwest facing slope directly east of the Leeds Liverpool Canal, 950m west of Hyndburn brook a tributary of the river Calder.

## 1.3 Geology and Soils

1.3.1 The underlying solid geology of the site consists of mudstone, siltstone and sandstone of the Pennine Lower Coal Measures Formation, sedimentary bedrock formed approximately 318 to 319 million years ago in the Carboniferous Period when the local environment was dominated by swamps, estuaries and deltas. (British Geological Survey 2022). The superficial geology is described as Diamicton Devensian till, superficial Deposits formed up to 2 million years ago in the Quaternary Period when the local environment was dominated by ice age conditions.

1.3.2 The soils are characterised by the Cranfield Soil and Agrifood Institute as Soilscape 17 which is Slowly permeable seasonally wet acid loamy and clayey soils (Cranfield University 2022).

## 1.4 Archaeological and Historical Background

1.4.1 A summary of the archaeological and historical background for the site drawn from the HIA produced by ARS Ltd to accompany the planning application for the proposed development (Rigby 2022) is outlined below.

1.4.2 The Lancashire Historic Environment Record records five non-designated archaeological sites within the site boundaries, which almost entirely represent the area's industrial heritage. A further seven features of archaeological interest were identified during the historic map regression which largely represent the areas residential growth, which occurred in tandem with the industrial expansion of Clayton-le-Moors. Whilst the sites today are largely devoid of features of historic interest, having been cleared at two separate points during the mid-late 20<sup>th</sup> and early 21<sup>st</sup> centuries, part of a large wall, aligned west-east within the southern part of Site 1, was identified during the site walkover, which is thought to be related to one of the former mill complexes.

1.4.3 The Historic Environment Record (HER) information provided by Lancashire HER is described below, supplemented with information from previous archaeological works. A nominal search radius of 500m was applied, which produced 29 archaeological sites/findspots for analysis. There are no archaeological interventions that have taken place within the search radius although one archaeological desk-based assessment was produced for Enfield Wharf Warehouses itself.

HER Reference	Description
Listed Buildings	
PRN5162	Building in garden of Henfield House, Grade II
PRN5156	Canal warehouses with attached office and house, on west side of Leeds- Liverpool Canal, Grade II
PRN5152	All Saints Vicarage, Grade II
PRN5151	Church of All Saints, Grade II
PRN5157	Stable block on east side of Leeds-Liverpool Canal opposite canal company warehouses, Grade II
PRN5164	War Memorial, Grade II
Non-designated assets	
Medieval	

#### Table 1: Historic Environment Record data



HER Reference	Description	
PRN3556	Clayton-le-Moors Cross	
Post-medieval		
PRN7006	Methodist Chapel and Graveyard, Wellington Street	
PRN7007	Limekiln and Sandstone Quarry, Whalley Road	
PRN7008	Smithy and Well, Whalley Road	
PRN7009	Henfield Cotton Mill, Oak Street. Possible duplicate of PRN14764.	
PRN14751	Chapel, George Street	
PRN14753	All Saints C of E Primary School, Winckley Road	
PRN14760	Victoria Mill, Victoria Street	
PRN14762	Soap Works, off Enfield Street	
PRN14764	Canal Mills (The Old Factory) (formerly Henfield Mill)	
PRN19201	Enfield Brickworks	
PRN24991	Wellfield Mill, Whalley Road	
PRN30771	Henfield TP, Burnley Road	
PRN34830	Chequers Chemical Works, Victoria Street	
PRN41702	Copper Disc/Lid, Hyndburn	
PRN41738	Pot Stand, East of Henfield House, Hermitage Street	
PRN41739	Pot, East of Henfield House, Hermitage Street	
PRN41740	Iron Chisel, East of Henfield House, Hermitage Street	
PRN41741	Shilling, East of Henfield House, Hermitage Street	
PRN14765	School, Canal Street	
PRN23567	Albion Mill, Canal Street	
Modern		
PRN14756	Mechanics Institute, Pickup Street	
PRN14758	Barnes Square Church	
PRN14759	Clayton or Fern Mill, Victoria Street	
PRN14763	Inn, Enfield Street	
PRN14766	Public House, Enfield Street	
PRN22508	Methodist Mission, Sydney Street, Enfield	
PRN24993	Prospect Mill, Maple Street	
PRN24997	Canal Saw Mill, Oak Street	
PRN26501	Slater's Confectionary Works, Duke Street/Whalley Road	
PRN26506	Atlas Foundry	
Undated, other		
PRN7036	Sandstone Quarries and Wells, Henfield, near Bold Venture Farm	
Events		
Surveys/assessments		
PRN35511	Desk Based Assessment done at Enfield Wharf Warehouses	

1.4.4 One previous desk-based assessment (DBA) produced for the site in 2009 is the only archaeological work to have happened within the 500m search radius. This DBA Identified the site also hosts the remains of 5 known post-medieval archaeological sites. These comprise 3 mills (PRN7009; PRN14764; PRN23567), a soap works (PRN14762) and a school (PRN14765).



The HIA (Rigby 2022) also identified a further seven potential archaeological features from historic map regression including for sets of terraced housing (ARS02; ARS03; ARS05; ARS07), one larger house and grounds (ARS01), one set of back to back housing (ARS04) and a series of pre-modern field boundaries (ARS06).

1.4.5 Henfield Cotton Mill (PRN7009), which is probably the same as Canal Mills (PRN14764), was built as a spinning mill and weaving shed between 1834-5 and is noted by the Lancashire HER as the first large mill built within Clayton-le-Moors. This mill was located within the northern part of Site 1. A Soap Works (PRN14762), off Enfield Street in the northern part of site 1 is recorded to have been built before 1848. A school (PRN14765) is noted on Canal Street in the east of site 1 by the time of the 1893 map. Albion Mill (PRN23567) was constructed before 1861 as a cotton weaving mill and was located solely within the southern part of Site 1.

## 2 AIMS AND OBJECTIVES

## 2.1 Trial Trenching Aim

2.1.1 The aim of archaeological trial trenching is to determine the presence or absence of archaeological remains that may be affected by the proposed development, and where possible to establish their significance.

## 2.2 Trial Trenching Objectives

2.2.1 The objectives of trial trenching are to investigate the extent of the proposed development area in order to:

- record evidence for the absence/presence, location and extent of any archaeological features or deposits that may be present;
- identify, where possible, the broad date and sequence of the remains;
- establish the integrity and condition of preservation of any remains present;
- assess potential for recovery of artefactual and/or environmental remains;
- assess any palaeoenvironmental or other ecofactual potential of deposits;
- where possible, establish the significance of any archaeological remains.

## 2.3 Relevant Research Aims and Objectives

2.3.1 The investigations will be conducted with a view to addressing objectives suggested by the published research priorities set out for the North West Regional Research Framework (2022)

2.3.2 Research priorities that might become relevant are those that focus upon post-medieval industrial development, the growth of industrial towns and the association between canal infrastructure and industrial expansion. Examples of Research objectives likely to arise include:

- Ind21: How did industrial period towns affect the pre-existing historic landscape?
- Ind52: What Industrial and Modern period type sites need further study?
- Ind98: How well understood and recorded are the North-Wests canals, waterways and basins?
- Ind91: How were transport infrastructures improved and how was this related to the developing urban and market hierarchy during the industrial period?



## **3** TRIAL TRENCHING STRATEGY

### 3.1 Coverage

3.1.1 The site will be subject to archaeological trial trenching. This comprises the excavation of 8 trial trenches measuring 30m in length by 1.8m in width, positioned in close approximation to those depicted on Figure 2.

3.1.2 The exact location of each trench may be subject to minor repositioning to avoid utilities, overhead services, drains, tree preservation orders and/or other constraints (i.e. no more than 1.0m, or allowing for exclusion). Any substantive change will be by agreement of the archaeological planning advisor. The trenches and any archaeological features within them will be planned and tied into the Ordnance Survey National Grid using survey grade equipment operating to an accuracy of ±0.05m.

3.1.3 Trenches will target both locations where archaeological remains may be expected, and areas where archaeological remains are less likely in order to evaluate for presence or absence.

### 3.2 Methodology

3.2.1 Trenches will be accurately tied into the National Ordnance Survey Grid and located at a suitable scale. Survey data of features will be collected using survey grade equipment typically providing accuracy of ±0.05m (Historic England 2016). Digital data will be surveyed with equipment using Real Time Kinematic (RTK) corrections from a Global Navigation Satellite System (GNSS) network. The same equipment will be used to record known points on drawn plans and sections and to take spot heights to supplement other available planning/survey techniques as applicable.

3.2.2 A suitably experienced archaeologist will direct machine excavation. The machine works will be undertaken using a toothless ditching bucket. Topsoil, subsoil, and non-archaeological modern overburden will be removed to the surface of the first archaeological horizon, or where this is absent the natural substrate. Where excavation requires digging through hard standing or tarmac, a breaker will be used. No trench will be excavated below 1.2m without stepping out the sides for safe working.

3.2.3 Each trench will be machined cleanly, sufficient to identify and establish the extent of any archaeological features present. Any modern features will be mapped in extent, profile and recorded photographically before removal to reach earlier deposits. Pre-excavation photographs will be taken of each trench and any exposed archaeology within them.

3.2.4 During evaluation, unexpected, complex, or undated archaeological remains may be encountered. Care will be taken not to compromise the integrity of the archaeological record without first undertaking a full investigation. Where archaeological remains are encountered that are of greater significance, complexity or quality and preservation than anticipated (*e.g.* human burial, kiln *etc.*), then the client will be informed, and the archaeological planning advisor will be consulted. Burials are not typically excavated as part of evaluation work.

3.2.5 Any cellars exposed during machine excavation will be checked for potentially hazardous waste or other contaminants and will be cordoned off/excluded if they are considered a risk to health. Where cellars are filled with soil or rubble without contaminants, the cellars will be emptied, cleaned up and a rapid record undertaken. They will then be available during hand excavations for safely disposing of loose spoil.



#### Monitoring of concrete removal on the site

3.2.6 In addition to trench evaluation, Douglas Moir (Planning Officer) has advised that the removal of the concrete on site should be monitored by archaeological watching brief, in order to mitigate damage to potential archaeological remains directly beneath the concrete which would be truncated or destroyed by its removal.

3.2.7 In addition to trench evaluation, the removal of the concrete on site will be monitored by archaeological watching brief.

3.2.8 Sufficient time should be allowed for in the Clients' programme for archaeological recording to avoid impact on the overall delivery of groundworks.

3.2.9 Should human remains, structures or deposits of archaeological interest be uncovered during the removal of the concrete, the archaeological planning advisor to the LPA will be consulted on the acceptable course of action.

3.2.10 Removal of all concrete will be conducted under archaeological supervision. The archaeologist will be given the opportunity to stop excavation to investigate potential archaeological features/deposits where they arise, and adequate time will be allowed for recording any such remains.

3.2.11 There is to be no disturbance of archaeological remains until archaeological investigation and recording has been undertaken, and the archaeologist confirms that this has been completed.

3.2.12 As a minimum (*i.e.* where no archaeology is found) there will be an accurate site plan and photographic record. The stratigraphy of the site will be recorded even where no archaeological deposits have been identified.

#### Investigation and Recording

3.2.13 A representative proportion of all archaeological features and deposits will be sample excavated to achieve the evaluation objectives. Archaeologically sensitive horizons will be subject to limited hand excavation and/or auguring in the following ways.

- Isolated discrete features such as non-structural pits or features representing industrial activities, will be half sectioned in the first instance (50% of each feature).
- Archaeological linear features, such as ditches and gullies that are not of a structural nature will be sample excavated (minimum 10% by length of each linear). Where possible, interventions will be 0.5–1m in width.
- Postholes and stakeholes will be half-sectioned (50% of each feature).
- Where it is desirable to understand the relationship of more than one intersecting feature, this will be investigated and recorded in section.

3.2.14 Where more structured deposition occurs, this may be subject to a variation in sampling strategy and/or quantity subject to the nature of the archaeological remains and in discussion with the archaeological planning advisor (i.e. pottery middens, cereal processing waste, demolition spreads etc.).

3.2.15 Features requiring specialist attention such as burials, kilns, wells, buildings, structures, floor levels and other significant industrial or domestic features or deposits will be cleaned, planned, and photographed but will be left intact pending a more suitable method of investigation.



Samples or finds will only be retrieved for assessment purposes, leaving the majority undisturbed unless otherwise agreed with the archaeological planning advisor.

3.2.16 All excavated spoil will be visually scanned to retrieve any artefacts. Artefacts will be collected by hand and retained, provided they are uncontaminated, receiving appropriate care prior to removal from site (CIFA 2020b; Walker 1990; Watkinson & Neal 2001). No contaminated finds or samples will be retained. Unstratified animal bones and modern material will not be collected, but noted on relevant context sheets. Selected examples of material that comprise a large quantity of a standard product, such as brick or tile, will be retained for assessment by a specialist.

3.2.17 Limited representative samples of bricks from brick-built structures, and selective products of the brick working proves will be retained for specialist analysis where appropriate. For brick structures, the record will include details of brick dimensions, and type (handmade/machine made, plain/frogged), mortar (colour, composition, hardness) and the extent of structures (number of courses, thickness in skins). Brick samples will be taken for structures likely to pre-date the mid-19<sup>th</sup> century.

3.2.18 Archaeological features will be recorded on individual trench plans at a scale of 1:50 or 1:100, appropriate to their complexity. Buildings and other significant remains (*i.e.* kiln, stone structures *etc.*) will be planned individually in greater detail. Sections or profiles through features and stratigraphic sequences will normally be drawn at a scale of 1:10, or 1:20 for long sections. All levels will be related to Ordnance Datum.

3.2.19 All archaeological deposits and artefacts encountered during the investigation will be fully recorded. Recording will follow the Company's field recording practices appropriate to the archaeology under investigation (ARS Ltd 2020). All archaeological features will be given a separate context number. Deposits will be described on *pro-forma* trench recording logs, and if stratigraphic detail is needed, on context record sheets. The information given will include details of the context, its relationships, interpretation and a checklist of associated finds and samples. Stratigraphic matrices will be compiled where archaeological sequences can be discerned.

3.2.20 Digital photographs will form the principal photographic record for report purposes. A photographic record will be maintained by high resolution digital photography. Overall images of the site will be taken prior to excavation. Detailed images of individual features will be recorded. All photographs, except general site images or specific images for publication, will include a north arrow and suitable photographic scale.

#### Soil Samples

3.2.21 Deposits of clear archaeological origin, with the potential to provide paleoenvironmental evidence, industrial residues, small animal/fish bones, datable charred remains and/or micro artefacts significant to the interpretation of the site will be reviewed by the project manager and archaeological planning advisor to agree an appropriate sampling strategy. Should a sequence of superimposed deposits of note be present, column sampling may be considered.

3.2.22 Where there is evidence for industrial activity, macroscopic residues will be collected by hand as a sample. Separate samples (*c*.10ml) will be collected from micro-slags (*i.e.* smithing hammer scale or glassworking spherical droplets) in accordance with best practice (Historic England 2015b; 2018).



3.2.23 Sampling methods will typically follow guidelines issued by Historic England (Campbell *et al.* 2011) and will be targeted in order to assess the quality of organic preservation that may be present.

3.2.24 Typically, bulk environmental samples will be collected from contexts that have potential for further analysis. Bulk sample sizes will be 40 litres per context or the entire excavated portion of smaller features if less than 40 litres and collected and stored in sealable buckets.

3.2.25 Should other types of environmental deposits be encountered, appropriate specialist advice will be sought, and an appropriate sampling strategy devised. Specialist sampling techniques such as column sampling, geoarchaeological sampling, organic residue analysis, luminescence dating, archaeomagnetic dating or other alternative scientific methods will not typically be applied during evaluation without a specific requirement to do so, and the agreement of the Client. If such a variation is required by the LPA, advice from the Historic England Regional Scientific Advisor (RSA) may be sought. Close attention will be paid to retrieve samples that have the potential to contribute to the proposed mitigation objectives.

#### Human Remains

3.2.26 If any human remains are encountered, they will be investigated sufficient to confirm identification and then left *in situ*. They will not be exposed, disturbed, cleaned, or recorded in detail. The client, local Coroner and the archaeological planning advisor will be informed immediately upon discovery of human remains by the Project Manager.

3.2.27 If removal is deemed necessary and appropriate on the requirement of the LPA it will be completed following the issue of the relevant Ministry of Justice license in accordance with the relevant legislation and according to the conditions set out therein. Any exhumation will be undertaken following current best practice guidelines (APABE/Historic England 2017; Mitchell and Brickley 2017).

#### Treasure

3.2.28 Finds coming under the definition of 'treasure' as defined by the Treasure Act 1996 will be reported to the Portable Antiquities Finds Liaison Officer within 48 hours of discovery by the Project Manager and dealt with under the procedures of the Treasure Act and Code of Practice (DCMS 2008). This includes both precious metals and base metals where they are of prehistoric date. Suitable measures will be taken to ensure their security where removal cannot take place (*e.g.* they are within a human burial).

3.2.29 The archaeological planning advisor will also be notified and, if necessary, a meeting arranged to determine if further investigation in the vicinity of the find spot is required.

## 4 **MONITORING ARRANGEMENTS**

4.1.1 Notice is given prior to commencement of the archaeological works upon submission of this WSI to the archaeological planning advisor. The proposed start date will be a minimum of 10 working days from submission. Work will not commence until the WSI has been approved.

4.1.2 If the start date is not known, then the archaeological planning advisor will be kept informed of progress and will be notified when a start date has been set within 5 working days, assuming that the WSI has already been approved and there have been no changes to the proposal.



4.1.3 The archaeological planning advisor for the LPA is Douglas Moir, Planning Officer (Archaeology) for Lancashire County Council.

4.1.4 ARS Ltd will consult with the archaeological planning advisor at regular intervals throughout the course of the work. The archaeological planning advisor is invited to attend for monitoring purposes by appointment. It is expected that archaeological monitoring will take place on a regular basis for large projects.

4.1.5 The client will afford reasonable access to the Douglas Moir, Planning Officer (Archaeology) for the LPA or representative officers, for the purposes of monitoring the trenching works.

4.1.6 A visit on completion may be needed to advise on requirement for any mitigation stage. Backfill will not proceed without the agreement or prior arrangement of the archaeological planning advisor.

## 5 VARIATIONS TO THE SCOPE OF WORKS

5.1.1 Any variations to the coverage, methodology or scope of works will be made in agreement with the Client and the archaeological planning advisor.

5.1.2 Variations prior to the commencement of works will be agreed in writing by updating and resubmitting the WSI or an addendum. Variations on site will be tracked by the Project Manager as part of the course of monitoring the works.

5.1.3 Additional works that trigger contingency items or extra overs will be notified to the Client and agreed before they are implemented. Where no contingency agreement exists such works will only be implemented where they are reasonably practicable with the resources already available, or unless the Client grants further resource.

## **6 TIMETABLE, STAFFING AND RESOURCES**

6.1.1 ARS Ltd is a Chartered Institute for Archaeologists (CIfA) Registered Organisation. Registered Organisations are regularly assessed to ensure that high standards of work, processes and training are embedded in the organisation, in line with the professional *Code of Conduct* (CIfA 2021) and the Chartered Institute's Standards and Guidance documents.

6.1.2 The fieldwork will be managed and conducted by a suitably qualified Project Manager and Team Leader, supported by a team of archaeological staff and assistants, as necessary.

6.1.3 All staff employed on the project will be suitably qualified and experienced for their respective project roles and will be briefed on the archaeological context of the area and the work required by this specification.

6.1.4 The archaeological works are scheduled to commence in September. The trial trenches will be opened in a continuous process and archaeological investigations will commence immediately in each trench once it is safe to do so.

6.1.5 It is expected that archaeological investigation can proceed at a rate that will allow for monitoring and sign off of completed trenches promptly with minimal delay to backfill.



6.1.6 All artefact and sample processing will be undertaken swiftly following the completion of fieldwork, whilst archive consolidation and post-excavation analysis of the plans and records are brought together.

6.1.7 Information will be provided to specialists by context and site location, appropriate to the relevant assemblages.

6.1.8 Specialist analysis will be undertaken by the following individuals where needed, subject to availability and if not, other specialists will be found as appropriate:

Worked flint and prehistoric pottery:	Dr Robin Holgate
Iron Age/Roman pottery:	Dr Jerry Evans, Dr Phil Mills, Ian Rowlandson, or Dr Jane Timby
Medieval and post-medieval pottery:	Paul Blinkhorn or Dr Chris Cumberpatch
Ceramic Building Materials:	Dr Phil Mills
Faunal remains:	Milena Grzybowska
Plant macros, charred wood, and pollen:	Maryne Baylet

6.1.9 Sufficient time will be given for adequate specialist assessment of the materials recovered, and the production of the accompanying specialist reports.

## 7 FINDS AND SAMPLE PROCESSING

7.1.1 All finds processing, conservation work and storage of finds will be conducted in accordance with the *Standard and guidance for the collection, documentation, conservation, and research of archaeological materials* (CIfA 2020b) and the *Guidelines for the preparation of archives for long-term storage* (Walker 1990).

7.1.2 Artefact collection and discard policies will be appropriate to the contextual and stratigraphic circumstances of the material identified, its quality as a resource and the practicality of retention (*e.g.* stone gate posts would be photogrammetrically recorded and not retrieved).

7.1.3 Bulk finds worthy of retention will be washed and marked. Bone will only be marked where required by the receiving repository. Marking and labelling will be indelible and irremovable by abrasion. Bulk finds will be appropriately bagged, boxed, and recorded.

7.1.4 All small finds will be recorded and appropriately packaged according to context (*e.g.* lithics in self-sealing plastic bags, ceramic in acid-free tissue paper *etc.*). Vulnerable objects will be specially packaged and textile, painted glass and coins stored in appropriate specialist systems. Ceramics will be bagged by context, whereas small finds such as chipped lithics, coins *etc.* will be recorded as individual finds by context.

7.1.5 Bulk soil samples taken for environmental purposes will be sieved and scanned during processing by ARS Ltd using the flotation technique to retrieve botanical macrofossils, charcoal and mollusc remains. All the resultant residues will then be hand sorted to retrieve any other items such as bone, flint, and other finds.



7.1.6 During and after the fieldwork, all objects will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information. ARS Ltd undertake controlled storage, correct packaging, regular monitoring, and immediate selection for conservation of vulnerable material as part of the archive process. All storage will have appropriate security provision.

7.1.7 All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of the Lancashire Museum (Lancashire County Museum Service).

## 8 **R**EPORTING

8.1.1 Following completion of the fieldwork, ARS Ltd will produce a report that will comprise:

- Non-technical summary
- Introductory statement
- Aims and objectives
- Method statement
- A location plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads
- An objective summary statement of results
- Illustrations of all archaeological features with appropriately scaled plans and sections
- Specialists' assessments of artefacts and samples, where found
- Discussion outlining conclusions
- Supporting data tabulated or in appendices to include
  - Trial trench data and/or context information
- Index to archive and details of archive location
- Bibliography
- Confirmation of archive transfer arrangements
- A copy of the OASIS form

8.1.2 A draft report will be submitted to the archaeological planning advisor for checking and comment before being issued as a planning document to the client.

8.1.3 One bound copy of the final report (if required) and a digital copy of the report in PDF/A format will be deposited with the Historic Environment Record (HER). A copy of the report will be uploaded as part of the OASIS record.

#### 8.2 Provisions for publication

8.2.1 Any publication requirements contained within the archaeological planning brief will be reviewed between the Project Manager, client, and archaeological planning advisor prior to preparation of the site report. In general, the publication of an evaluation would appear as a short note in an appropriate journal.

8.2.2 As a minimum publication would be as a *c*.300-word summary of the project with, if appropriate, selected illustration for inclusion in the annual round-up of fieldwork within the region. More significant sites may warrant a light article in a relevant county or period journal with, if appropriate, selected illustrations and photographs.

## 9 **PROJECT ARCHIVE**



### 9.1 Archive Selection Strategy

9.1.1 Selection of the working project archive will be guided by the aims and objectives of the project, as set out in this WSI.

#### 9.2 Documentary Archive

9.2.1 All original documentary material created and collected during the archaeological works will be selected according to the ARS Ltd Retentions and Discard Policy for inclusion in the final archive. Any duplicates (including photocopies) of original documents will not be included in the final archive.

### 9.3 Digital Archive

9.3.1 All digital data created over the course of this project will be collected, stored, and selected for final deposition in line with the project's Data Management Plan.

Туре	Data
Text	Digital copies of the WSI and final report
Images	Site photographs, scans of site drawings, report illustrations, digital drawings
Finds data	Finds reports and tables, conservation records, images

9.3.2 The key types of digital data produced will include:

9.3.3 Only the final copies of any digital data will be selected and deposited in the final project archive.

9.3.4 Digital data to be included in the final archive will be reviewed during the post-excavation and archiving phase of works. Digital photographs will be assessed and selected in line with Historic England guidelines (Cole and Backhouse 2015). Any data to be excluded from the archive will be removed in accordance with the ARS Ltd Retention and Discard Policy.

#### 9.4 Material Archive

9.4.1 The deposition and disposal of artefacts will be agreed with the legal owner prior to the works taking place. All finds except treasure trove are the property of the landowner.

9.4.2 No material will be discarded without processing and recording. Deselected material may be retained as part of a handling or teaching collection, returned to the landowner, or discarded.

9.4.3 The selection of material finds for final deposition in the archaeological archive will be decided in line with the ARS Ltd Retention and Discard Policy during the post-excavation phase. This policy draws on guidance provided by the Chartered Institute for Archaeologists (CIFA 2019).

## 9.5 Archive Deposition

9.5.1 The archaeological archive will be deposited with the Lancashire Museum (Lancashire County Museum Service). Should the archaeological works produce no archaeologically significant finds, then it is not deemed necessary to deposit an archive with the repository museum.

9.5.2 Archaeologically significant finds and project archives will be prepared for deposition by ARS Ltd. The archive will comprise the primary record and synthetic works arising from the project,

including documents, plans, sections, photographs, and electronic data and an accompanying metadata statement.

9.5.3 High resolution digital photographs will typically be submitted to the Archaeological Data Service (ADS) digital archive repository with the associated photographic registers and metadata. The digital archive will be prepared in line with current best practice (ADS/Digital Antiquity 2011).

9.5.4 The archive will be deposited in line with industry standards and best practice guidelines (SMA 1993; Brown 2011; CIFA 2020b). In addition, the recommendations of the receiving repository will be adhered to. The archive will be deposited at the next available opportunity agreed with the museum after completion of the report.

9.5.5 All projects have an Online Access to the Index of Archaeological Investigations (OASIS III) registration form within the report. All parts of the OASIS online form will be completed for submission to the Historic Environment Record (HER). This will include an uploaded PDF/A version of the entire report. Upon final completion of the project, a final copy of the report will be deposited with the county HER in an agreed format.

## **10 PUBLICITY, ENGAGEMENT AND COPYRIGHT**

10.1.1 The Client will manage any publicity. ARS Ltd will not undertake media engagement except where approved and directed by the Client.

10.1.2 Any form of public community engagement, presentations, exhibitions or otherwise lie outside the scope of this WSI. Any such opportunities will by separate agreement with the Client.

10.1.3 ARS Ltd will retain the copyright of all documentary, photographic and video material under the Copyright, Designs and Patent Act (1988).

## II PROFESSIONAL STANDARDS

11.1.1 The project will be managed according to the Historic England guidance for research projects (Historic England 2015a).

11.1.2 As a Registered Organisation Archaeological Research Services Ltd follows the Chartered Institute for Archaeologists (ClfA) *Code of conduct* (2021). All archaeological works will follow the ClfA *Standard and guidance for archaeological evaluation* (2020a).

## **12 HEALTH AND SAFETY**

12.1.1 All works will be undertaken in full compliance with the Health and Safety at Work Act 1974 and with the Management of Health and Safety Regulations 1992.

12.1.2 A risk assessment will be produced before commencement of the work that will be updated and adhered to throughout the course of the project.



### 13.1 Introduction

13.1.1 The evaluation trenching found archaeological remains associated with the former mill buildings on the site. In trenches 4, 5 and 6 in particular, intact floors and a flue, as well as stone built culverts were excavated, attesting to the good survival rate of the mill buildings in those areas. Based on the results of the evaluation trenching, and in consultation with Doug Moir, Planning Officer (Archaeology) for Lancashire County Council, it has been deemed necessary to further mitigate the impact of the proposed development on buried archaeological remains by undertaking further investigations on the site in the areas illustrated in Figure 3. Due to the presence of asbestos in these areas, it has been agreed that this further mitigation may be in the form of a scalable watching brief during remediation works in those areas in order to mitigate the health and safety risk from the ground contamination. The four areas identified as of interest are associated with two former mill buildings in the vicinity of evaluation trenches 4, 5, 6 and 7. In those trenches were found *in situ* floors and walls as well as evidence of flue systems all of which has the potential to inform about the power systems and internal layout of the mill buildings.

#### 13.2 Aims and Objectives

13.2.1 The aims and objectives of the scalable watching brief remain as those outlined for the evaluation trenching outlined in section 2 of this WSI. In addition, the results of the evaluation trenching have demonstrated that there is the potential to understand more about the internal layout of the mill buildings, as well as investigating power systems and drainage, evidence for which is present beneath internal surfaces.

13.2.2 Additional themes from the *Northwest Regional Research Framework* (Historic England 2022) that may be relevant for the scalable watching brief are:

- Ind60: How can we make sense of the relative significance of historic industrial processes and building typed perceived as poorly understood and recorded?
- Ind62: What are the key themes relating to the technology of construction and how can we record them?

#### 13.3 Methodology

13.3.1 The broad methodology in terms of recording and sampling remain unchanged from the evaluation and watching brief methodologies outlined in section 3 of this WSI. Remediation work will be undertaken across the entire site in advance of the construction work starting. All below ground obstructions will be removed and any contamination, such as asbestos, will be removed and dealt with by the developer's remediation team. In order to mitigate the impact that this remediation has on areas with potentially significant archaeological remains, a scalable watching brief will be maintained during remediation work in the areas outlined on Figure 3. All remediation work in those areas will be observed by a qualified archaeologist. When safe to do so, i.e. once contaminants have been removed, any archaeological remains will be cleaned and recorded. If significant remains are found then provision is made that the watching brief be scaled up to an open area excavation during which archaeological remains can be further investigated by hand excavated interventions and/or sampling as appropriate.

13.3.2 No archaeological remains in the areas subject to the scalable watching brief will be removed until the on-site archaeologist, in consultation with Doug Moir, has given permission and confirmed that all recording and investigation is complete.

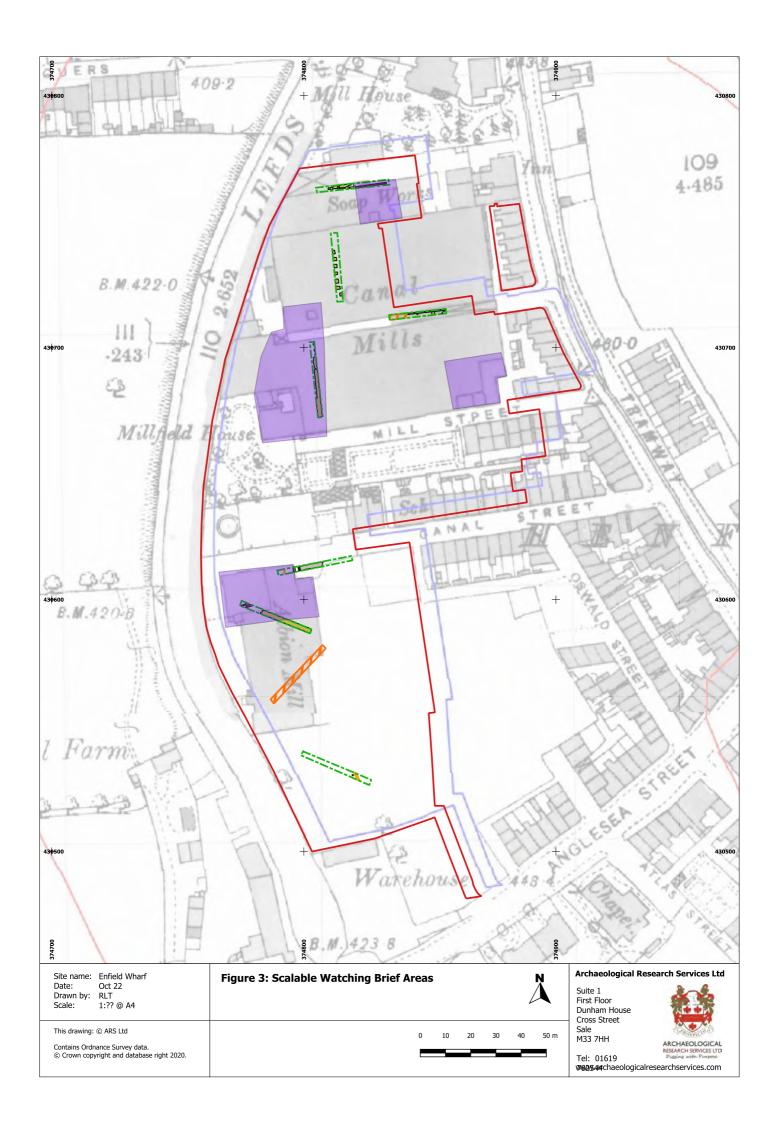


### 13.4 Post-excavation and archiving

13.4.1 The post-excavation, reporting and archiving process will be the same as that outlined in section 7-9 of this WSI. Since the scalable watching brief is to commence shortly after the completion of the evaluation trenching it is deemed appropriate that the results of both phases of work are analysed, reported on and archived together since all form part of the same site record.

13.4.2 As per section 8.2 of this WSI, provisions are to be made for at the least a 300 word summary for inclusion in an appropriate journal. Dependent on the results of the scalable watching brief and their significance, it may be appropriate to produce a more formal publication in a journal, such as *Industrial Archaeology* or *Post-Medieval Archaeology*. Any such publication requirements would be discussed and agreed with the planning archaeologist and the client.





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