



WYAS
**Archaeological
Services**

**The Former Marina
Ropeworks,
Brunswick Street, Heywood
Greater Manchester**

Archaeological Strip, Map and
Plan

Report no. 4212
January 2025

Client: Lanpro Services Ltd/Westchurch
Homes



**The Former Marina Ropeworks,
Brunswick Street, Heywood
Greater Manchester
Archaeological Strip, Map and Plan**

Summary

Archaeological Services WYAS were commissioned by Lanpro Ltd on behalf of Westchurch Homes to carry out a programme of archaeological excavation. Two trenches were excavated revealing structural remains dating from the late 19th to mid-20th centuries. These structures relate to steam power generation, the movement of waste gases and the production and storage of gas on site. One of the two trenches was severely contaminated and, in this case, it was not possible to fully excavate and interpret the structures.



Report Information

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Address: One St Peter's Square, Manchester, M2 3DE/
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Contents

Report information	ii
Contents.....	iii
Document Issue Record	iv
List of Figures	iv
List of Plates.....	iv
List of Tables	v
1 Introduction.....	1
Site location, topography and land use	1
Soils and geology.....	1
2 Archaeological and Historical Background.....	1
3 Aims and Objectives	2
Research Framework	3
4 Methodology	3
5 Results	4
Trench 1	4
Trench 2	6
6 Artefact Record.....	8
Post-medieval finds	8
7 Recommendations for Further Work.....	9
8 Discussion and Conclusions	9

Figures

Plates

Appendices

Appendix 1: Project Design

Appendix 2: Inventory of primary archive

Appendix 3: Concordance of contexts

Appendix 4: Catalogue of consulted historic maps and plans

Appendix 5: OASIS Summary

Bibliography

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List of Figures

- 1 Site location
- 2 Site plan
- 3 Site plan overlaid on the Heywood Town Plan of 1891
- 4 Site plan overlaid on the 25" OS map of 1910
- 5 Site plan overlaid on the 25" OS map of 1929
- 6 Site plan overlaid on the 1973 OS National Grid Map
- 7 Trench 1 plan
- 8 Trench 2 plan and section

List of Plates

- 1 Trench 1, general photo, looking north-east
- 2 Trench 1, general photo, looking north
- 3 Trench 1, chimney 104, looking west
- 4 Trench 1, chimney 104, looking north
- 5 Trench 1, chimney 104, flue 105 and surface 106, looking south-west
- 6 Trench 1, structure 107, looking west
- 7 Trench 1, surface 111, looking north-east
- 8 Trench 1, wall 112, surface 113 and wall 114, looking north-east
- 9 Trench 1, gasometer 115, looking west
- 10 Trench 1, gasometer 115, looking north-west
- 11 Trench 1, gasometer 115, looking east
- 12 Trench 1, cast iron gas pipes associated with gasometer 115
- 13 Trench 1, surface 108 and wall 110, looking south-east
- 14 Trench 1, drain 103, looking east
- 15 Trench 1, ceramic pipe or boiler support in demolition deposits looking north
- 16 Trench 2, general photo, looking south
- 17 Trench 2, walls 203, 207, 208, 209 and 213, looking north
- 18 Trench 2, wall 208, looking north
- 19 Trench 2, wall 203, looking west

- 20 Trench 2, wall 212 and 215 and wall/surface 214, looking west
- 21 Trench 2, engine bed 202, looking south
- 22 Trench 2, wheel pit, looking south

List of Tables

- 1 Catalogue of the recovered artefacts

1 Introduction

Archaeological Services WYAS (ASWYAS) were commissioned by Lanpro Services Ltd (on behalf of Westchurch Homes) to carry out an archaeological strip, map and plan at the former Marina Ropeworks, Brunswick Street, Heywood, Greater Manchester. The work was undertaken prior to the redevelopment of the site to fulfil Condition 6 of planning permission (ref. 21/01796/FUL) issued by Rochdale Borough Council on 13th June 2023. The work was undertaken between the 23rd and 27th of September 2024, in accordance with the National Planning Policy Framework (NPPF), and a Project Design (PD, Appendix 1) produced by Lanpro Services Ltd and approved by Greater Manchester Archaeological Advisory Services (GMAAS).

Site location, topography and land use

Marina Ropeworks comprises two plots, divided by Wesley Street, which lie on the east side of Brunswick Street, within the town of Heywood, Greater Manchester (NGR SD 85290 10662, Fig. 1). The development site extends to a combined area of 1.114ha and includes the buildings of the former ropeworks along with concrete and tarmac and waste ground. The site is level and lies at approximately 121m aOD. The site is bounded by Fox Street to the north, Hill Street to the east, Brunswick Street to the west, and terrace housing to the south.

Soils and geology

The recorded bedrock geology within the development site consists of the Pennine Lower Coal Measures Formation overlaid by superficial deposits of Glaciofluvial Deposits (BGS 2024). The soils are unrecorded urban deposits (SSEW 1983).

2 Archaeological and Historical Background

The following background is based on information from the Heritage Statement and Impact Assessment (Dickinson Waugh Conservation 2021), a geotechnical desk study report (Betts Geo 2021) and the historic building recording (Salford Archaeology 2024).

The site was established by William Healey in 1843 as Cartridge Works and by 1891, they were advertising in Worrall's Directory as manufacturers of rope, twist, cotton and tubular banding (Grace's Guide 2024a). The Ordnance Survey Town Plan of 1851 shows the works was yet to be constructed suggesting Healey's Cartridge Works was producing rope on a small-scale in the mid-19th century. By 1874, they became Healey Brothers Limited when William's sons took over the business (Heywood History 2024). They had two other works at Broadfield Mill, Broadfield and Frankfort Mill, Oldham.

Cartridge Works is first depicted on the Ordnance Survey Map of 1891. It depicts a series of buildings towards the west of the site, including a boiler house and a detached square chimney and a ropewalk to the east. Also, in 1891 the works were advertised in Worrall's

Directory as ‘Manufactures of rope, twist, cotton and tubular banding’ (Heywood History 2024). By this time, they also made cotton main driving ropes for steam powered engines.

Then in the early 1900s a two-storey block with an attached engine house was added to the east, fronting the rear alleyway to the terraced housing on Hill Street. By the time of the Ordnance Survey Map of 1910 the works had extended, with additional buildings to the north of the site and a two-storey block with an attached engine house to the east. The ropewalk was also extended and enclosed in this period. By the time of Whitakers Red Book, 1914, they were manufacturing many different ropes, cords and twines and had 700 to 800 employees (Grace’s Guide 2024a). An advertisement in Worrall’s Yorkshire Textile Directory of 1917, lists the products but also contains an illustration of Cartridge Ropery. Further extensions are depicted on Ordnance Survey map of 1929.

Healey Brothers was acquired by British Ropes Ltd in 1968 (Grace’s Guide 2024a) and became British Twine and Rope in 1971 (Heywood History 2024). The company was acquired by Ibex Ropes in the later 20th century and the works renamed Ibex Marina Ropeworks. This continued in operation until 2020 when manufacturing moved to a purpose-built site. In January 2024, Salford Archaeology carried out a historic building recording on the standing buildings of the former Marina Ropeworks (Salford Archaeology 2024). By the time of the current strip, map and plan, the site was cleared of upstanding structures.

3 Aims and Objectives

The overall aim of the archaeological work was to obtain sufficient information to establish the presence/absence, character, extent, state of preservation and date of any archaeological remains relating to the features of the complex. This was achieved by:

- determining the location, extent, date, character, condition and significance of any archaeological remains;
- excavating and recording identified archaeological features and deposits to a level appropriate to their extent and significance;
- assessing the vulnerability/sensitivity of any exposed remains;
- assessing the impact of previous land use on the site;
- assessing the potential for survival of environmental/industrial evidence;
- informing a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;
- undertaking sufficient post-excavation assessment to confidently interpret identified archaeological features; and

- reporting the results of the investigation and place them in their local, regional or national context and making this record available by disseminating the results in an appropriate form.

The objective of the work was to excavate two trenches and assess the resultant areas for their archaeological potential. Any remains were then subject to archaeological excavation. Recovered artefacts were subject to analysis.

Greater Manchester Lives/Rochdale Local Studies and Archives was consulted for any materials relating to the remains on the site but no relevant records were found.

Research Framework

The programme of archaeological investigation and recording was to be conducted within the general research parameters and objectives defined by in the regional research agenda, the North West Regional Research Framework for archaeology (NWRF 2021). The previous research agenda The Archaeology of North West England: An Archaeological Research Framework for North West England, Vol 2 Research Agenda and Strategy (Brennand 2007) was also considered.

4 Methodology

The work involved the excavation of two trenches of varying size, positioned to target features of archaeological interest identified from historic mapping. The size of each trench is listed below:

- Trench 1 – 154m²
- Trench 2 – 80m²

All work was undertaken in accordance with accepted professional standards and guidelines (Historic England 2008; CIfA 2020), in accordance with the ASWYAS site recording manual (ASWYAS 2020) and in compliance with the PD (Appendix 1).

All trenches were set out and the limits resurveyed using a Trimble VRS differential GPS accurate to +/-0.01m. The trenches were opened in a controlled manner using a 360° excavator using a flat-bladed ditching bucket under direct archaeological supervision. A toothed bucket was permitted when breaking up and lifting large sections of concrete or brickwork. All deposits were removed in level spits (not more than 0.20m). Machining stopped at the first archaeological horizon or natural deposits, whichever was encountered first. Where it was safe, all excavations of archaeological deposits were undertaken manually with the stripped surface being cleaned and investigated for archaeological remains. Trench 1 was contaminated as it was not possible to fully clean the features in this area.

Feature plans were drawn recorded in plan at a scale of 1:20 or 1:50. All drawings include spot heights that relate to Ordnance Datum in metres. It was not possible to hand draw plans

of Trench 1 due to contamination but the area was planned digitally using a survey grade GPS and photogrammetry. Otherwise, a full written, drawn, and photographic record was made of all archaeological work undertaken. An inventory of the primary archive is presented in Appendix 2 and a concordance of contexts is given in Appendix 3. ASWYAS currently hold the site archive in a stable and secure location.

5 Results

Below is a description of the results of the excavations in each trench. The location of the trenches and archaeological features recorded are shown on Fig. 2 and overlain on historic mapping in Figs 3-6. The excavations immediately followed the demolition of the ropework structures, the subject of a historic building recording survey (Salford Archaeology 2024). Trench 1 was excavated in what was recently an open yard with a concrete slab surface. Trench 2 was excavated in the location of an existing engine house. The engine house was originally a double height structure but had been modified into a two-storey structure, likely following the removal of the steam engine and the conversion of the works to electric power.

Trench 1 (Fig. 7; Plates 1-15)

Trench 1 (Plates 1 and 2) measured 154m² in total. Overburden was machine excavated down to the uppermost archaeological horizon. The upper surfaces of the surviving structures were then hand cleaned. It rapidly became apparent that the lower deposits in the trench were contaminated with liquid elemental mercury, hydrocarbons and suspected asbestos containing materials. It was not possible to safely enter the excavation to further define the structures. It was also important not to spread any contaminants to the surrounding land and air and to avoid negative health effects for ASWYAS staff, local residents and other contractors on site by any further exposure. As such, the following represents a description the exposed structures based on the limited observations it was possible to carry out safely. Fortunately, the majority of the remains correlate with structures depicted on historic mapping which provides invaluable evidence on the date and, in some cases, the purpose of the structures.

The earliest deposit encountered in the trench was the natural geology (102) consisting of a mid-greyish-brown clay.

Chimney 104 (Plate 3) correlates with a square chimney depicted on late 19th and 20th-century mapping (Figs 3-6). The southern, western and northern sides of the chimney were exposed, stepping out towards its base on the southern side where it measured at least 2.40m wide and was 1.08m tall (Plate 4). In total, the chimney base was square and measured c. 2.40m across. It was constructed from red bricks bonded with a very light yellowish-grey mortar. Flue 105 (Plate 5) extended eastwards from the centre of the chimney, then to the north. It was constructed with a mixture of standard red brick and light yellow refractory bricks bonded with light grey mortar. The bricks were heavily sooted, suggesting it drew smoke from the east and/or north. A square concrete surface (106) partially sealed flue 105. It

may have either formed a covering for the flue or a floor surface which existed following the disuse of at least this part of the flue. It was constructed from a light grey concrete and measured at least 1.63m long and 1.43m wide.

The north-western corner of the trench contained structures that were not fully characterised (Plate 6), but clearly form a cellar of some kind, bounded by a set of brick walls (107, 116) and containing a brick surface (117), many of which were heavily truncated, likely during later demolition. Wall 106 was bonded by a dark grey mortar and exposed along the western edge of the trench for a length of 3.50m, turning south-eastwards for 1.30m, and then eastwards along the northern edge of surface 106. A trace of the eastern end of the cellar (116) was likely marked by another brick wall, abutted by a trace of a brick surface (117), with a cut into natural clays visible on its eastern side. Given the proximity to the chimney and direction of the flue, these remains likely represent a boiler house. The concentration of suspected asbestos containing materials in demolition deposits here adds weight to this interpretation. By 1929 (see Fig. 5), this building no longer existed.

By 1910 (Fig. 4) a further structure of similar proportions had been constructed immediately adjacent to the putative boiler house on its eastern side (111, Plate 7). In total, this surface measured 3.59m long and 3.10m wide. It was heavily truncated but best preserved on its eastern edge where the surface had three clear steps, descending to the south. It was constructed of both un-frogged and frogged bricks (L: 230.00 mm, W: 120.00 mm, H: 80.00 mm) bonded with a friable light pink mortar. By 1929 (see Fig. 5), this building no longer existed.

To the north of surface 111, a series of likely related structures (Plate 8) were recorded none of which are depicted on historic mapping suggesting they were remains associated with a structure after the site was surveyed by the Ordnance Survey in 1910. Wall 114 extended northwards from the north-east corner of surface 111 and beyond the edge of the trench. It was constructed from bright orangey-red bricks bonded with mid-whitish-grey mortar, laid in header bond. It measured 0.41m wide and 0.55m tall. Wall 112 extended northwards from close to the north-west corner of surface 111, separated by a gap of c. 0.35m. It was constructed from red bricks bonded with a mid-whitish grey mortar, laid in stretcher bond. It stepped out eastwards towards its base whilst its western side was vertical and it extended northwards beyond the trench. To its immediate east was a brick floor surface (113) constructed from bright orangey-red bricks.

Historic mapping illustrates that the gasometer (115) was added by 1910 (Fig. 4; Plates 9-11). The gasometer was circular in plan, 4.05m across, and was exposed during the excavation to a depth of at least 2.25m. It was formed by a brick wall, 0.50m wide, constructed with frogged red bricks (L: 230.00 mm, W: 120.00 mm, H: 70.00 mm) bonded with a light grey mortar. The circuit of the wall was broken by two brick niches, which stepped outwards from the centre. One lay to the west and one to the south. These represent the likely location of the gas inlet and outlet pipes. A pair of large cast iron pipes were removed from the overlying

demolition material, thought most likely to represent one or both of the gas inlet or outlets (Plate 12). Neither pipe was *in-situ* when encountered. Two external brick buttresses lay on the exterior side of the gasometer, one facing north-west and one south-west. By 1973 (see Fig. 6), this building no longer existed.

Further structures depicted on later historic mapping from 1929 to 1973 (Figs 5 and 6) correlate to some degree with other remains encountered in the trench. Surface 108 was only exposed over a small 1.50m long and 0.83m wide area and was constructed in red bricks (L: 230.00 mm, W: 120.00 mm, H: 70.00 mm). Whitish material facing the bricks may be an asbestos containing material or lime deposits, indicating a sub-surface structure such as a flue was more likely than a floor. By 1973 (see Fig. 6), no buildings in this location existed. To the south of surface 108, wall 110 (Plate 13) formed a rectangular area measuring 3.68m long and 1.75m wide, constructed with red frogged bricks bonded with dark grey mortar laid in common bond. Wall 110 bounded surface 109 and may form part of a cellar or flue. This was constructed in a light grey cement. Demolition deposits here contained high concentrations of elemental mercury forming beads throughout the overlying demolition deposits. This building may either relate to structures depicted on 1929 (Fig. 5) mapping to the east of the chimney or structures to the south of the chimney depicted on 1973 mapping (Fig. 6), though neither fully correlate with the form of the excavated remains.

No archaeological features were found in the southern part of the trench, south of wall 110 (Plate 14) aside from drain 103. This measured 1m wide and at least 0.86 long and formed the truncated base of a drain or manhole. It was constructed with two courses red frogged bricks, bonded with a very light grey mortar.

Demolition deposits (101) sealed the archaeological features in the trench. They largely comprised contaminated ash with brick, concrete and mortar rubble. One pipe boiler or support brick was noted in material overlying surface (111, Plate 15). This was not retained due to contamination potential but is likely to be related to the movement of gas into or out of the gasometer.

Trench 2 (Fig. 8, Plates 16-22)

Trench 2 (Plate 16) measured 80m² in total. In contrast to Trench 1, no contaminants were found and the structures were hand cleaned and recorded sufficiently to fully characterise the remains and their stratigraphic relationships.

The earliest deposits in the trench were the natural geology (201) comprising a mid-greyish-brown clay. Occasional brick inclusions are likely to represent some disturbance and intrusion of the overlying demolition rubble.

The earliest structures in the trench comprised two east-west oriented walls located towards the southern and northern edges of the trench (Plate 17), which were evidently the southern and northern walls of the engine house.. The central wall survived as footing (209) constructed with light grey concrete with crushed brick aggregate (c. 70mm). The footing

measured 0.6m wide and 0.8m deep. The footing was overlain with a brick wall (207/208), up to nine courses in height. Both walls were constructed in red bricks (L: 0.23 mm, W: 0.11-0.12 mm, H: 0.08 mm) bonded with a dark greyish-brown mortar. Wall 207 was laid in header courses whilst wall 208 (Plate 18) was laid in common bond with a dark grey mortar.

At the northern limit of the trench a concrete footing (213) was formed with a light grey concrete with crushed brick aggregate (*c.* 50mm). It measured *c.* 0.50m wide and at least 0.20m deep. This was overlain by brick wall 203 (Plate 19), constructed with up to seven courses of red frogged bricks (L: 240.00 mm, W: 130.00 mm, H: 70.00 mm) bonded with a dark grey mortar. Only stretcher bond was observed. The exposed section of the wall measured at least 0.5m wide and 1m in height.

Wall 212 was an irregularly coursed brick wall, found along the western edge of the trench. It was constructed with a mix of frogged and unfrogged red bricks (L: 110.00 mm, W: 230.00 mm, H: 80.00 mm), bonded with dark grey mortar. Its relationship with Walls 213/203 and 209/208 was unclear but they are presumed to be contemporary based on them forming the original external walls of the engine house.

Contexts 214 and 215 (Plate 20) abutted walls 207 and 213 and may represent several phases of construction. The stratigraphic relationships between contexts 212, 214 and 215 was unclear. Wall 215 lay to the east of and parallel with Wall 212 east and was constructed with frogged red bricks (L: 110.00 mm, W: 230.00 mm, H: 80.00 mm) and bonded with a dark grey mortar. It was laid in stretcher bond. The gap between the walls comprised a light grey concrete (214) which may represent a wall footing.

Abutting wall 212 was a surface (206) and two rectangular plinths (204 and 205, Plate 20). Each structural element was formed from a light yellowish-grey concrete with stone aggregate (*c.* 50mm). Plinths 204 and 205 measured approximately 0.6m long, 0.55m wide and 0.25 in height.

Abutting wall 203 and surface 206 was engine bed 202 (Plate 21), constructed in a light yellowish grey concrete with angular stone aggregate (up to 0.05m). The bulk of this structure was formed by a deep rectangular foundation extending eastwards beyond the edge of the trench, measuring 3.63m long, 4.5m wide and *c.* 1.1m deep. The northern edge of the engine bed was much shallower and, visible in the west-facing elevation, was seen to be constructed above a dark greyish-brown silty-clay levelling deposit (216). It was itself constructed above the natural geology. It was not visible at the surface. It is possible that this represents a later shallow surface abutting the large concrete engine bed but the concrete of the two surfaces appears continuous, albeit with cracks. Similarly the southern extent of the deposit is much shallower and forms an apparently contemporary low surface. In the centre of the engine bed, a trapezoid-shaped pit, was aligned west-south-west to east-north-east (Plate 22). It measured 3.04m long and 0.77m wide and was 0.70m deep and is considered likely to represent a fly wheel pit. It is, however, also possible that it provided clearance for

the engine crank-arm (Ian Miller, pers. comm.). In profile, it sloped steeply down from each edge at an angle of *c.* 45° with a flat base.

Later than and abutting the south side of engine bed 202 was a mid-grey concrete surface or foundation (211). The latest structural element in the trench was a light greyish brown concrete surface with crushed brick aggregate, laid on a dark greyish-brown silty-clay levelling deposit (210). It covered an area measuring 2.20m long, 0.50m wide and 0.7m deep, abutting wall 208 and surface 211. The final deposit in the trench was demolition rubble (200) which sealed the structures beneath.

6 Artefact Record

Post-medieval finds by Z Horn

An assemblage of twenty items of pottery, leather and ceramic building material were recovered. Due to known contamination, the finds were quickly examined (un-washed). Each item, consistent with finds from an industrial site, was quantified (Table 1).

No further analysis is required, and it is recommended that this assemblage is deselected from the site archive rather than being retained for museum deposition.

Table 1. Catalogue of the recovered artefacts

Context	Material	Description	Quantity	Date
105	Brick	Sandy coloured refractory brick (designed to endure extremely high temperatures) measuring 116 x 232 x 76mm. Not frogged	1	Industrial/Modern (after 1770)
200	Pottery	Sherd of brown glazed earthenware from a storage jar	1	Industrial/Modern (after 1770)
200	Pottery	Sherds from brown glazed teapot	2	Industrial/Modern (after 1770)
200	Pottery	Sherds from a blue and white banded ware jars or mugs	5	Industrial/Modern (after 1770)
200	Pottery	Sherds a of transfer printed plates	4	Industrial/Modern (after 1770)
200	Pottery	Sherds from a white glazed stoneware teapot	4	Industrial/Modern (after 1770)
200	Pottery	Sherd from a large black glazed pancheon or dairy bowl	1	Industrial/Modern (after 1770)

200	Drive Belt	A coiled leather drive belt measuring approximately 4000 x 90 x 8mm	1	Industrial/Modern (after 1770)
212	Brick	Red brick measuring 110 x 230 x 75mm. Double frogged. No makers stamp.	1	Industrial/Modern (after 1770)

7 Recommendations for Further Work

It is recommended that the material finds are discarded upon completion of the project. Due to the temporary closure of Touchstones, Rochdale, no local museums are available to accept the site archive. As a result, it is recommended that the physical archive is digitised and submitted to the Archaeology Data Service (ADS) in addition to the digital archive, including photographs and digital context records and registers. The report, once finalised, will also be submitted to OASIS.

8 Discussion and Conclusions

The excavations have revealed a series of structures relating to the development of the Ropeworks in the late 19th to mid-20th centuries.

The structures in Trench 1 were, in general, poorly preserved. Several structures indicated on historic mapping were not observed in the trench. The majority of remains in the trench were sub-surface structures or those with more substantial, deeper foundations that survived their levelling in the later 20th century. As described above, the trench was dangerously contaminated and it was not possible to fully excavated and record the remains here. These two factors hinder a full interpretation and discussion of the remains exposed, but useful conclusions can still be drawn.

The structures here clearly relate to at least part of the power generation infrastructure on the site in the late 19th century and early 20th century. The chimney and flue suggest a boiler house was close by, likely the structure to its north. This may have also housed the steam engine. Unfortunately, no evidence for power transmission was recorded in the surrounding extant structures during the historic building recording (Salford Archaeology 2024).

In the early 20th century this area of the ropeworks underwent significant development. Additional structures were added including a gasometer. This suggests this area of the ropeworks was used for the production of gas from coal and its storage. No direct evidence of gas production was observed, though it is thought likely that one of the adjacent structures was a retort house. Further stages of gas purification in the form of condensers, washers and purifiers may have also been located in adjacent structures, though again, no direct evidence was observed. It is likely that this material evidence, such as retorts, would be contained above ground and long since removed and their materials recycled. Gas production, however, is inferred through contamination by elemental mercury, concentrated around a structure to

the south-west of the gasometer (109/110). Elemental mercury is a trace element in coal and is released particularly through coal gasification (Altaf *et al.* 2022). An alternative source may be spillage from broken thermometers or similar instruments, though the volumes of mercury present suggest this is unlikely.

Trench 2 was located in order to investigate the sub-surface remains of the engine house which recently stood in this location. The structure was added in the early 20th century and was later modified and reused following the removal of the steam engine and the conversion of the ropeworks to electrical power.

There was some phasing of the structures in this area evidenced by stratigraphic relationships in the brick and concrete walls. The two northern and southernmost walls and presumably the western wall form the original foundations of the engine house, constructed in 1902, supported by the above ground structure recorded in the historic building recording (Salford Archaeology 2024). Two internal concrete plinths and a concrete surface may relate to an earlier engine bed, though no further evidence was found for an earlier engine. The latest structures in the trench relate to the large concrete engine bed with a possible flywheel pit.

The height and small footprint of the engine house suggest it contained a vertical or upright engine. The pit's shape, orientation and location are immediately suggestive of a flywheel pit, with the flywheel close to the base of the engine. This would be required if an inverted vertical engine were housed here. Typically, vertical engines have the flywheel at the top, such as a several preserved at Bolton Steam Museum, and doubt has been raised as to whether the pit would be sufficient to accommodate the flywheel. The pit is likely too small to represent a rope drum but may have accommodated another engine component such as the extension of the crank arm (Ian Miller pers. comm.). On balance the use of an inverted engine with a flywheel pit is considered more likely. Though comparative examples in such a setting are sparse, such engines are pictured in an advertisement by J. Chadwick and Sons in Manchester (Grace's Guide 2024b).

It is likely that the engine was powered by steam brought in from boilers to the west and powered machinery in the eastern wing of the ropeworks. This is supported by evidence of power transmission recorded during the historic building recording (Salford Archaeology 2024). The excavations at the former Marina Ropeworks have contributed to a fuller understanding of the operation and development of the Cartridge Ropery in the late 19th and early to mid-20th centuries, particularly when read alongside the historic building recording which could not investigate the below ground and demolished structures found in Trench 1 and further evidence of the design of the engine house recorded in Trench 2. Heywood's rope making industry was of great significance. It grew in the 19th century before declining in the later 20th century, in tandem with other local industries, such as shipping, mining and textiles, which supplied the bulk of the demand for ropes. Along with Broadfield Mill, The Cartridge Ropery was one of the most significant manufacturers in the region. No other ropeworks have been identified which incorporated its own gas plant.

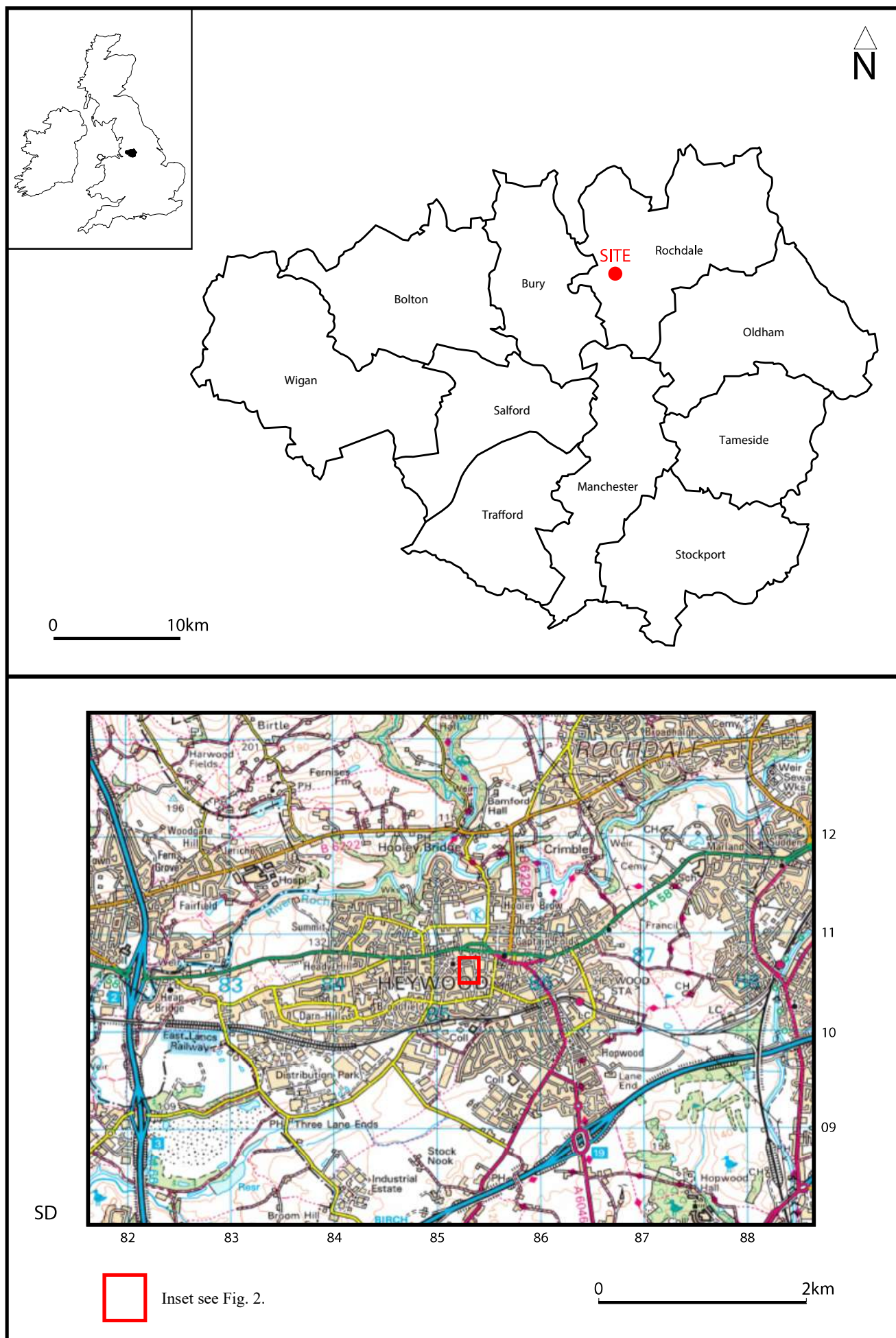
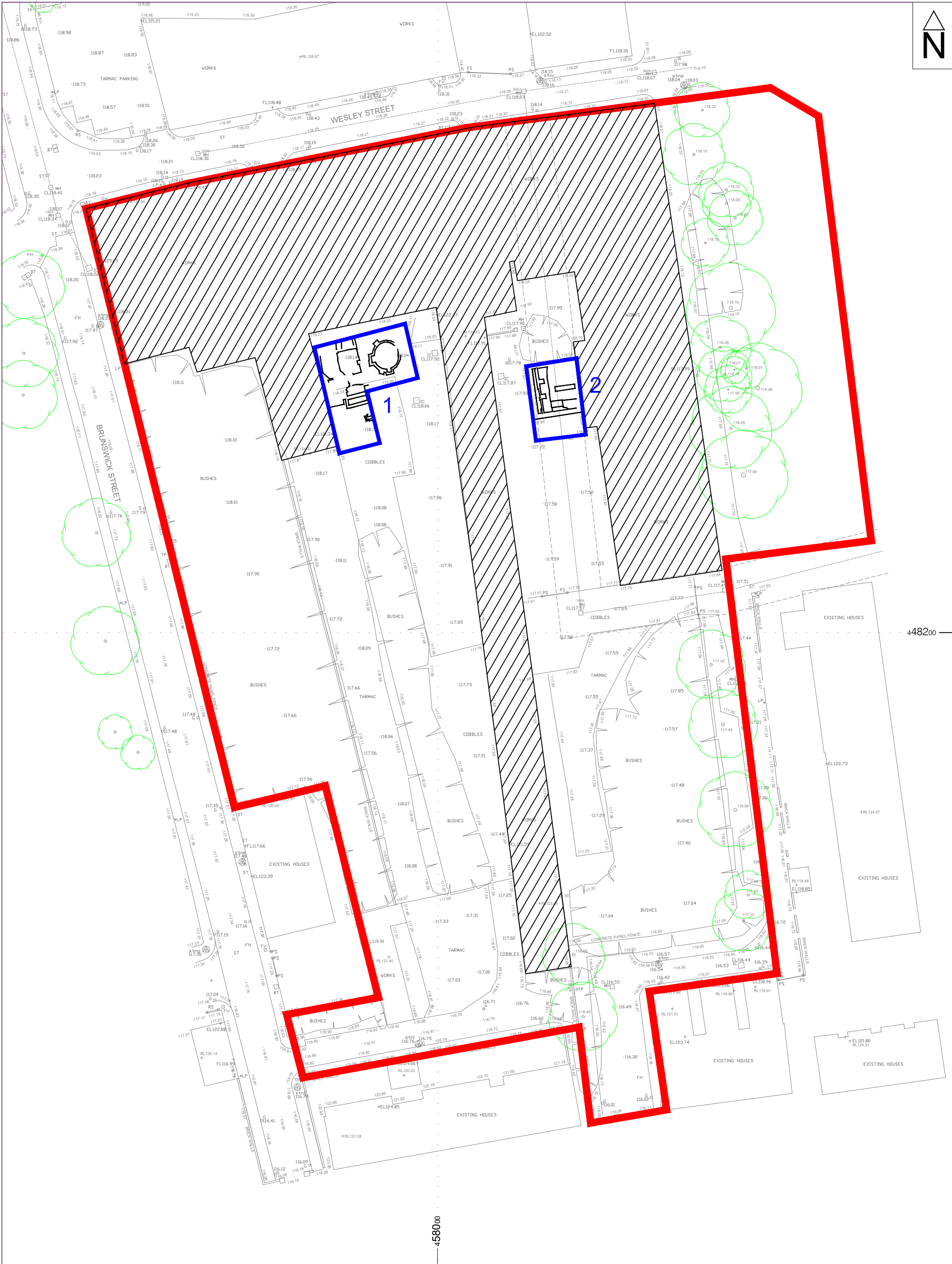


Fig. 1. Site location

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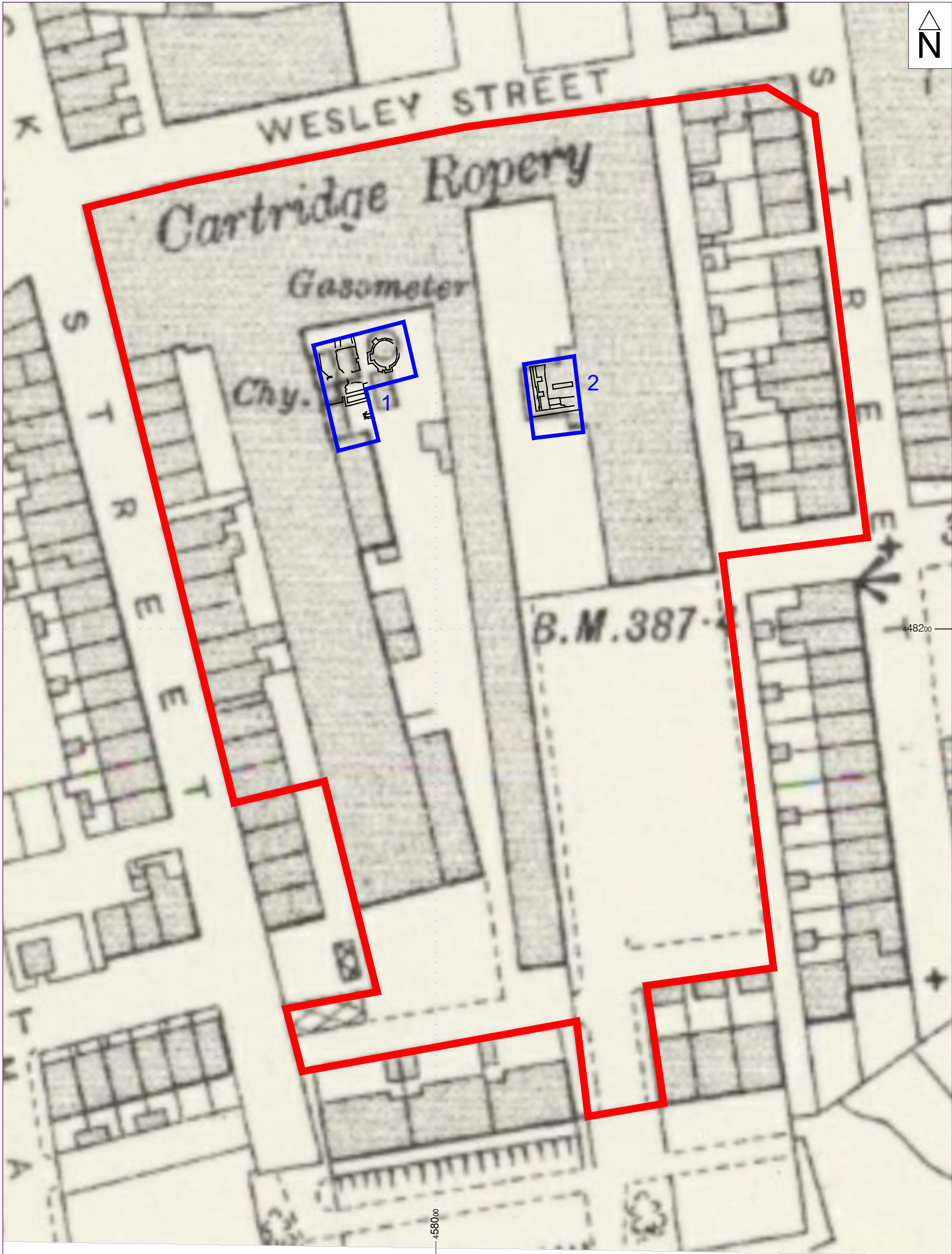
 © ASWYAS 2024. Archaeological Services W Y A S, Nepshaw Lane South, Morley, LS27 7JQ Tel: 0113 535 0163 Email: archaeology@wyjs.org.uk www.aswyas.com	Project No. XM64	 SITE BOUNDARY	 0 25m 1:500 @ A3
	Fig. 2.	 TRIAL TRENCH	
	Site plan	 ARCHAEOLOGICAL FEATURE	

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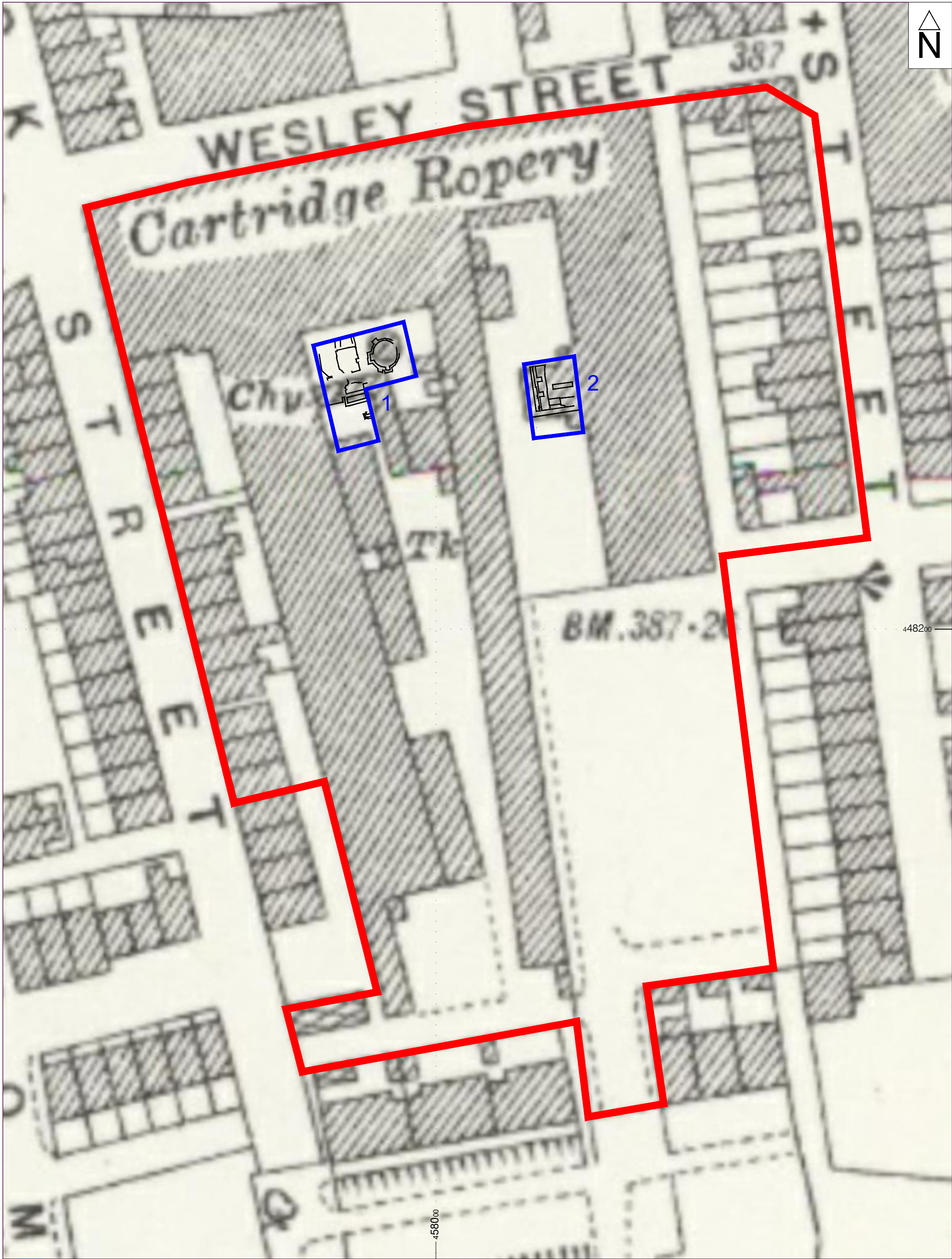


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 © ASWYAS 2024. Archaeological Services WYA S, Nepshaw Lane South, Morley, LS27 7JQ Tel: 0113 535 0163 Email: archaeology@wyjs.org.uk www.aswyas.com	Project No. XM64	 SITE BOUNDARY	 1:500 @ A3
	Fig. 3.	 TRIAL TRENCH	
	Site plan overlaid on the Heywood Town Plan of 1891	 ARCHAEOLOGICAL FEATURE	



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	Fig. 4.	 TRIAL TRENCH	
	Site plan overlaid on the 25" OS map of 1910	 ARCHAEOLOGICAL FEATURE	

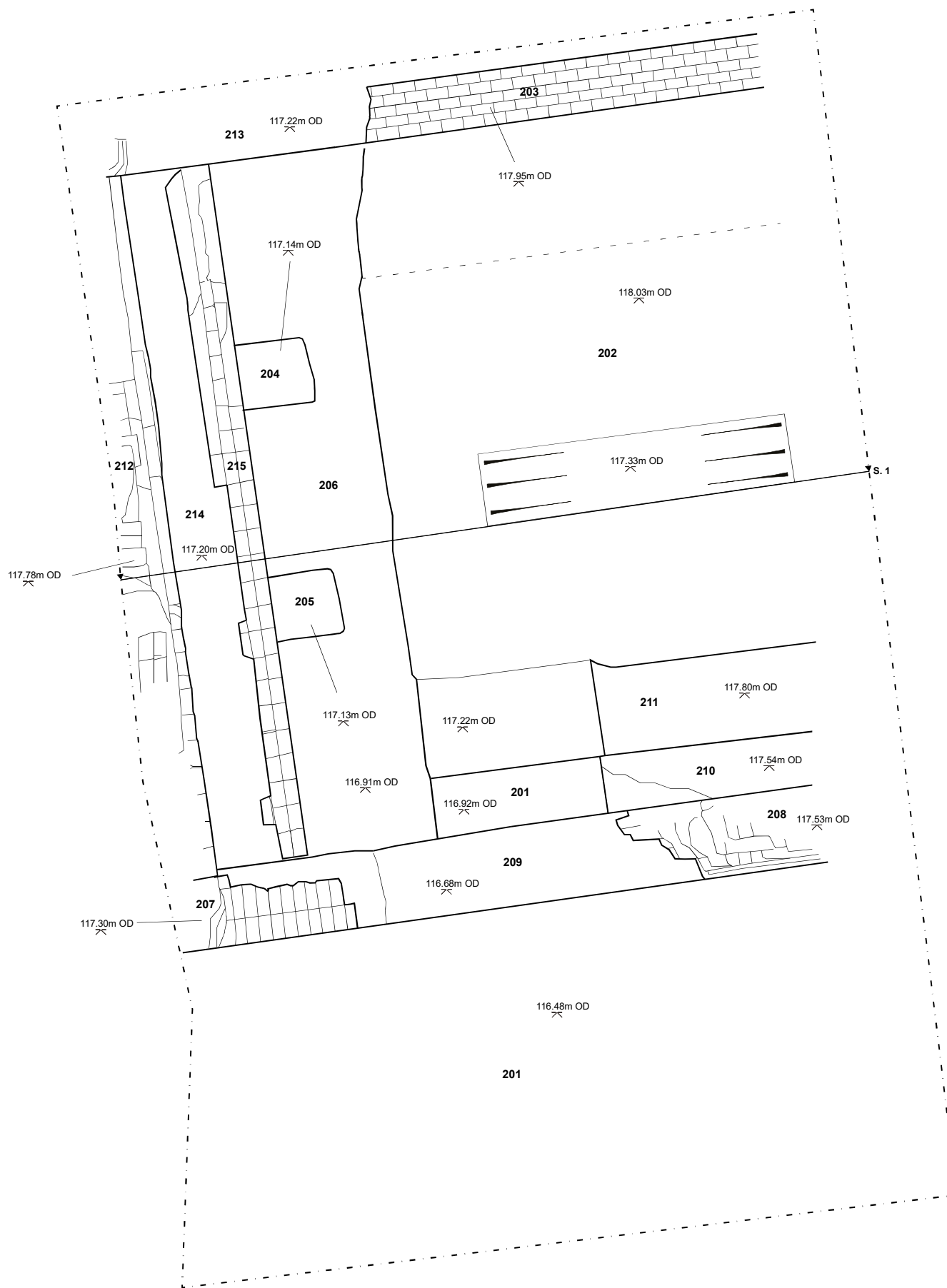


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	Fig. 5.	 TRIAL TRENCH	
	Site plan overlaid on the 25" OS map of 1929	 ARCHAEOLOGICAL FEATURE	

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	Fig. 6.	 TRIAL TRENCH	
	Site plan overlaid on the OS map of 1973	 ARCHAEOLOGICAL FEATURE	



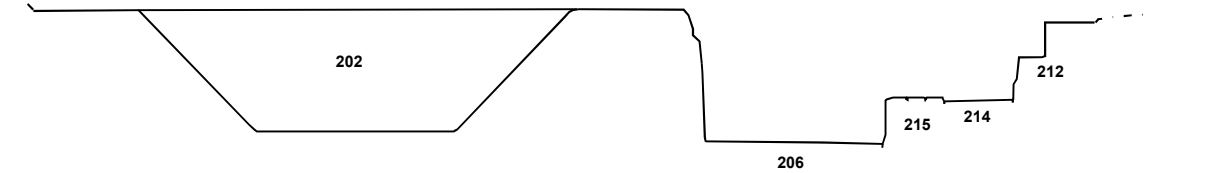
S. 1



SW



118.25m OD



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Project No. XM64

Project Code: MRM24

Fig. 8

Trench 2 plan

0 2m (1:50)



Plate 1. Trench 1, general photo, looking north-east



Plate 2. Trench 1, general photo, looking north



Plate 3. Trench 1, chimney 104, looking west



Plate 4. Trench 1, chimney 104, looking north



Plate 5. Trench 1, chimney 104, flue 105 and surface 106, looking south-west



Plate 6. Trench 1, structure 107, looking west



Plate 7. Trench 1, surface 111, looking north-east



Plate 8. Trench 1, wall 112, surface 113 and wall 114, looking north-east



Plate 9. Trench 1, gasometer 115, looking west



Plate 10. Trench 1, gasometer 115, looking north-west



Plate 11. Trench 1, gasometer 115, looking east



Plate 12. Trench 1, cast iron gas pipes associated with gasometer 115



Plate 13. Trench 1, surface 108 and wall 110, looking south-east



Plate 14. Trench 1, drain 103, looking east



Plate 15. Trench 1, ceramic pipe or boiler support in demolition deposits looking north



Plate 16. Trench 2, general photo, looking south



Plate 17. Trench 2, walls 203, 207, 208, 209 and 213, looking north



Plate 18. Trench 2, wall 208, looking north



Plate 19. Trench 2, wall 203, looking west



Plate 20. Trench 2, wall 212 and 215 and wall/surface 214, looking west



Plate 21. Trench 2, engine bed 202, looking south



Plate 22. Trench 2, wheel pit, looking south

Appendix 1: Project Design

**PROJECT DESIGN FOR HISTORIC BUILDING RECORDING
AND ARCHAEOLOGICAL STRIP, MAP AND PLAN**

**LAND AT MARINA ROPEWORKS, BRUNSWICK STREET, HEYWOOD,
GREATER MANCHESTER**

**PREPARED BY LANPRO SERVICES
ON BEHALF OF WESTCHURCH HOMES**

January 2024



Planning + Development | Design Studio | Archaeology + Heritage

Project Reference: 4947
 Planning Reference: 21/01796/FUL
 Document Prepared by: Karl Taylor BSc (Hons) MCIfA

Revision	Reason for Update	Document Updated
1	GMAAS Comment	January 2024

Contents

Contents.....	i
List of Figures	ii
1 INTRODUCTION	1
2 SITE LOCATION AND DESCRIPTION	1
3 PLANNING BACKGROUND	2
4 ARCHAEOLOGICAL BACKGROUND AND SITE DESCRIPTION	4
5 AIMS AND OBJECTIVES	4
6 STANDARDS AND GUIDANCE	6
7 METHODOLOGY	7
8 HISTORIC BUILDING RECORDING METHODOLOGY	7
9 STRIP, MAP AND PLAN METHODOLOGY	9
10 POST-EXCAVATION ASSESSMENT AND REPORTING	12
11 ARCHIVING AND DATA MANAGEMENT	14
12 TIMETABLE	16
13 STAFFING	16
14 MONITORING	17
15 COPYRIGHT AND PUBLICITY	17
16 INSURANCE.....	18
17 HEALTH AND SAFETY	18
18 REFERENCES	19
Figures.....	21

List of Figures

Figure 1. Site Location

Figure 2. Trench locations overlaid onto Ordnance Survey 1891 Town Plan

Figure 3. Trench locations overlaid onto Ordnance Survey 1910 25-inch map

1 INTRODUCTION

- 1.1 This Project Design (PD) has been prepared by Lanpro Services Ltd on behalf of Westchurch Homes (the client) and details the methodology for undertaking a programme of historic building recording (HBR) of existing standing buildings and structures to be removed, and a strip, map and plan exercise at Marina Ropeworks, Brunswick Street, Heywood, Greater Manchester. This work will be undertaken in compliance of two planning conditions (Conditions 4 and 6) attached to planning permission issued by Rochdale Borough Council as advised by Greater Manchester Archaeological Advisory Service (GMAAS).
- 1.2 This PD has been informed by a Heritage Statement and Impact Assessment (Dickinson Waugh 2021). The report did not consider below-ground archaeological remains. A geotechnical desk study report (Betts Geo 2021) was also consulted.
- 1.3 This PD has also been informed by consultation with the Heritage Management Director at the Greater Manchester Archaeological Advisory Service (GMAAS).
- 1.4 The HBR of the historic structures (Figure 2) will be undertaken generally in line with an Historic England Level 3 historic building survey (Historic England 2016).
- 1.5 The archaeological strip, map and plan comprises 1 trench (1 on Figures 2 and 3) which has been positioned over the chimney, possible boiler house, former engine house plotted on the 1891 Ordnance Survey Town Plan (Figure 2) and gasometer and two small buildings to the north of the chimney plotted on the 1910 Ordnance Survey map (Figure 3).
- 1.6 The second area outlined for investigation includes lifting the floor in a later engine house to create a plan of the engine beds if they survive in situ (2 on Figures 2 and 3) The programme will be followed by a post-excavation assessment of the results.
- 1.7 The results will inform decisions on the need for any further archaeological investigation. Should this be required, the scope of any additional archaeological works will be detailed in an addendum to this PD.

2 SITE LOCATION AND DESCRIPTION

- 2.1 Marina Ropeworks comprises two plots divided by Wesley Street, which lie on the east side of Brunswick Street, within the town of Heywood, Greater Manchester NJR SD 85290 10662 (Figure 1).
- 2.2 The proposed development site extends to a combined area of 1.114ha and includes the upstanding buildings of the former ropeworks along with concrete and tarmacadam hardstanding and waste ground. The site is level and lies at approximately 121m above Ordnance Datum (aOD).

- 2.3 The site is bound by Fox Street to the north, Hill Street to the east, Brunswick Street to the west, and terraces housing to the south.
- 2.4 The recorded bedrock geology within the proposed development site consists of the Pennine Lower Coal Measures Formation overlaid by superficial deposits of Glaciofluvial Deposits (BGS 2024).

3 PLANNING BACKGROUND

- 3.1 The proposed scheme of historic building recording and archaeological evaluation is designed to fulfil Conditions 4 and 6 of planning permission (ref. 21/01796/FUL) issued by Rochdale Borough Council on 13th June 2023.

Condition 4

No development shall take place (including any site clearance, demolition or preparation works) until a Building Record Survey to Historic England Level 3 has been submitted to and approved in writing by the Local Planning Authority.

For the avoidance of doubt, this shall include:

- *an introductory description*
- *a systematic account of the building's origins, development and use*
- *an account of the evidence on which the analysis has been based,*
- *drawn and photographic records that may be required to illustrate the building's appearance and structure and to support a historical analysis*

Reason: To record and advance understanding of the significance of the buildings to be demolished and to make this evidence (and any archive generated) publicly accessible, in accordance with the requirements of Core Strategy Policy P2 and the National Planning Policy Framework.

Reason for pre-commencement condition: As the proposals require the demolition of the existing buildings, it is necessary to record and understand the significance of such buildings before the development commences.

Condition 6

No development shall take place (including any site clearance, demolition or preparation works) until the implementation of a programme of archaeological works to be undertaken in accordance with a Written Scheme of Investigation (WSI) has been secured and which has been prepared by the appointed archaeological contractor and submitted to and approved in writing by the Local Planning Authority. The development shall not be occupied until the

site investigation has been completed in accordance with the approved WSI. The WSI shall cover the following:

(a) A phased programme and methodology of site investigation and recording to include:

- *targeted field evaluation trenching*
- *(depending upon the evaluation results) a strip map and record exercise*
- *targeted open area excavation*

(b) A programme for post investigation assessment to include:

- *analysis of the site investigation records and finds*
- *production of a final report on the significance of the archaeological and historical interest represented.*

(c) Provision for publication and dissemination of the analysis and report on the site investigation.

(d) Provision for archive deposition of the report, finds and records of the site investigation.

(e) Nomination of a competent person or persons/organisation to undertake the works set out within the approved WSI.

Reason: To protect the significance of any archaeological remains on the site in accordance with Policy P2 of the adopted Rochdale Core Strategy and the National Planning Policy Framework.

Reason for pre-commencement condition: There is a risk of disturbance to below ground features of archaeological importance on commencement.

3.2 The Greater Manchester Historic Environment Record was not consulted and there may be records included on the Greater Manchester Historic Environment Record within the site boundary. None of buildings is listed. The structures are currently deteriorating and not occupied.

3.3 This PD provides a detailed methodology for undertaking the programme of archaeological historic building recording and evaluation trenching aimed at identifying, recording and sampling any archaeological features that may be present, and assessing the need for further mitigation investigations, if required. If significant or complex archaeological remains are identified during the evaluation trenching, agreement of a further addendum to this PD with GMAAS will be required to establish the methodology for any further stages of work, if necessary.

4 ARCHAEOLOGICAL BACKGROUND AND SITE DESCRIPTION

- 4.1 The archaeological background is a part precis of information from the Heritage Statement and Impact Assessment (Dickinson Waugh Conservation 2021) and a geotechnical desk study report (Betts Geo 2021). The background concentrated upon the built heritage and the below-ground archaeological resource was not assessed. Other sources not listed in the Heritage Statement were also consulted.
- 4.2 The site was established by William Healey in 1843 as Cartridge Works and by 1891, they were advertising in Worrall's Directory, that they manufactured rope, twist, cotton and tubular banding (Grace's Guide 2024). By 1874, they became Healey Brothers Limited when William's sons, William, Robert and Jehu took over the business (Heywood History 2024). They had two other works at Broadfield Mill, Broadfield and Frankfort Mill, Oldham.
- 4.3 By the time of Whitakers Red Book, 1914, they were manufacturing many different ropes, cords and twines and had 700 to 800 employees (Grace's Guide 2024). A 1917 advertisement in Worrall's Yorkshire Textile Directory of 1917, lists the products but also contains an illustration of Cartridge Ropery (Graces Guide 2027).
- 4.4 The buildings within the site are according to historic mapping of differing phases, from c. 1850 to 1929 with later additions (Dickinson Waugh Conservation 2021, Figure 2, Betts Geo 2021). The original complex comprised three linear structures arranged around a courtyard concealed behind terraced housing along Brunswick Street (Dickinson Waugh Conservation 2021). The complex was extended and added to in the later 19th century and early 20th century.
- 4.5 Healey Brothers was acquired by British Ropes Ltd in 1968 (Graces Guide 2024) and became British Twine and Rope in 1971 (Heywood History 2024).

5 AIMS AND OBJECTIVES

Building Recording

- 5.1 The primary aim of the historic building recording is to record surviving evidence for the original use and subsequent historical form, function and development of the upstanding historic buildings comprising the Louisa Street frontage and northern extension, through the production of a record consisting of measured plans and a detailed photographic record, in line with Historic England Level 3 historic building survey standards (Historic England 2016).
- 5.2 The results will be provided in a report that will collate available documentary, cartographic and photographic evidence for the original use, and subsequent historical development, form and function of the buildings, as well as the results of a measured survey. The results of the survey will be analysed and interpreted to gain a clear understanding of the buildings' uses, and phases of alteration and addition to the structures, with focus on evidence

allowing the reconstruction of historical structural, functional and importantly, power and ropemaking processes.

- 5.3 An additional aim of the historic building recording is to potentially provide information that may help to define and finalise the locations of the proposed evaluation trenches. The historic building survey should, therefore, be carried out in advance of the evaluation trenching.

Archaeological Strip, Map and Plan

- 5.4 The overall aim of the archaeological evaluation in the form of trial trenching will be to obtain sufficient information to establish the presence/absence, character, extent, state of preservation and date of any archaeological remains relating to the features of the complex. This will allow reasoned and informed recommendations to be made on the application for development of the site, and any requirements for further archaeological mitigation, the scope of which would be detailed in a subsequent addendum to this PD in agreement with GMAAS.

- 5.5 This will be achieved through meeting the following objectives:

- To determine the location, extent, date, character, condition and significance of any archaeological remains;
- To excavate and record identified archaeological features and deposits to a level appropriate to their extent and significance;
- To assess vulnerability/sensitivity of any exposed remains;
- To assess the impact of previous land use on the site;
- To assess the potential for survival of environmental/industrial evidence;
- To inform a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;
- To undertake sufficient post-excavation assessment to confidently interpret identified archaeological features; and
- To report the results of the investigation and place them in their local, regional or national context and to make this record available by disseminating the results in an appropriate form.

Research Framework

- 5.6 The programme of archaeological investigation and recording will be conducted within the general research parameters and objectives defined by in the regional research agenda, the *North West Regional Research Framework* for archaeology (NWRF 2023). The previous research agenda *The Archaeology of North West England: An Archaeological Research Framework for North West England, Vol 2 Research Agenda and Strategy* (Brennand 2007) will also be considered.

5.7 The following initial research questions may be considered and should be revised both during and following the results of the investigation. The NWRF must be consulted during all phases of this work and the research agenda considered with regard to the results:

- Ind52: What Industrial and Modern period type sites need further study?
- Ind60: How can we make sense of the relative significance of historic industrial processes and building types perceived as poorly understood and recorded?

6 STANDARDS AND GUIDANCE

6.1 All work will be undertaken to fully meet the requirements of all nationally recognised guidance for such work, including standards laid down by the former English Heritage (now Historic England) and the Chartered Institute for Archaeologists (CIfA).

6.2 All historic building recording and subsequent reporting will be undertaken to fully meet the requirements of a Level 3 historic building record as defined by Historic England in their guidance document, *Understanding Historic Buildings* (2016).

6.3 The programme of archaeological evaluation will be managed in line with the standards laid down in the Historic England guideline publication *Management of Research Projects in the Historic Environment (MoRPHE): Project Managers Guide* (2015a) and the *MoRPHE Project Planning Note 3: Archaeological Excavation (PPN3)* (2008a), as well as to meet the requirements of the National Planning Policy Framework (NPPF; Chapter 16: 'Conserving and enhancing the historic environment'; revised 2023). All excavation will be undertaken using recording standards detailed in the *Archaeological Field Manual* (MOLAS 1994).

6.4 Guidance of particular relevance to the programme of works are:

- *Understanding Historic Buildings. A Guide to Good Recording Practice* (Historic England 2016);
- *Standard for archaeological field evaluation* (CIfA 2023a);
- *Standard for archaeological excavation* (CIfA 2023b);
- *Standard for archaeological monitoring and recording* (CIfA 2023c)
- *Universal guidance for archaeological field evaluation* (CIfA 2023d)
- *Universal guidance for archaeological excavation* (CIfA 2023e)
- *Universal guidance for archaeological monitoring and recording* (CIfA 2023f)
- *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (CIfA 2020); and
- *Management of Research Projects in the Historic Environment: PPN3: Archaeological Excavation* (English Heritage 2008a).

7 METHODOLOGY

Project Initialisation

- 7.1 Lanpro will inform GMAAS at least one week in advance of the commencement of fieldwork.
- 7.2 Touchstones Rochdale Museum will be contacted by the appointed archaeological fieldwork contractor to arrange for the project archive to be created and deposited in accordance with their deposition and archiving standards. Please note that the museum is closed until 2025. Until the museum is reopened, alternative arrangements should be explored by the archaeological contractor.
- 7.3 Before fieldwork commences an OASIS online record will be initiated and key fields completed on Details, Location and Creator forms.

8 HISTORIC BUILDING RECORDING METHODOLOGY

Background Historical Research

- 8.1 The Greater Manchester HER must be consulted prior to commencement of all fieldwork in order that the archaeological contractor will be informed about the history of the ropeworks and the site.

Plans and Drawings

- 8.2 Historic building recording will be undertaken of all the surviving buildings of the ropeworks (Figure 1) to the standard of an Historic England Level 3 survey (2016).
- 8.3 Measured floor plans will be produced of all upstanding buildings and spaces, showing the form and location of any structural features of historic significance, such as blocked doorways, windows and fireplaces, masonry joints, ceiling beams and other changes in floor and ceiling levels, and any evidence for fixtures of significance, power transmission, and processing. Cross-sections, elevations and other drawings may be produced where they contribute to the understanding of the building's design, development or function.

Photographic Record

- 8.4 An external photographic record will be made of all elevations of all the historic buildings, from as nearly parallel to the elevation as possible within the constraints of the site. A general external photographic record will be made including a number of oblique general views of the building from all sides, showing its setting.
- 8.5 An interior photographic record will be made to record the form, general appearance and manner of construction of each area. This may be limited by access restrictions and health and safety requirements due to the condition of the building.

- 8.6 Any external or internal detail, structural or decorative, which is relevant to the building's design, development and use, will be photographed. A scale must be included on all photographs within the constraints of the building.
- 8.7 Photographs will be taken of any dates or other inscriptions, signage, makers' plates or graffiti which contribute to an understanding of the building. A transcription will be made wherever characters are difficult to interpret. Any building contents which have a significant bearing on the building's history which are still present will also be photographed.
- 8.8 Photographs must be taken in 'RAW' format with a high resolution digital SLR camera and again, all photographs must include an appropriate scale where possible. All photography will conform to industry best practice (Historic England 2015b). Images will be converted to uncompressed baseline v.6 TIFF for archiving. All images will have accompanying metadata specifying; photo ID, capture device, converting software, colour space, bit depth, resolution, date of capture, photographer, caption, and any alterations made to the image. A tripod must be used where camera shake and blurring of photographs is potentially an issue, blurred images or out of focus images will not be acceptable as being of archival quality.
- 8.9 A register of the location, direction and subject of each shot will accompany the photographic record, and the position and direction will be recorded on copies of the building and site plans.

Historic Building Report

- 8.10 The results of the historic building recording will be presented in a fully illustrated descriptive report, containing at a minimum the following elements:
- A concise non-technical summary of the results of the work, and its aims and objectives;
 - A frontispiece including the site code/project number, planning reference number, dates when the fieldwork took place and a full National Grid Reference;
 - An introduction, including a site description, background on the development and reasons for the building survey and recording;
 - An account of the methodology and equipment used;
 - An architectural description of the buildings and structures;
 - A discussion placing the buildings and the results of the survey, into their historical, technological, regional and national context;
 - A description of the function(s) of the building, with attention to their historical plans and changes in layout and process flow ;
 - A site location map identifying the site at national, regional and street level;
 - Relevant historical plans, photographs or other material;

- Reproductions of selective photographs of the buildings;
- A complete set of building plans of all buildings marked with the position and location of each photograph cross referenced with the photographic register;
- Detailed photographic register cross-referenced with all plans; and
- A description of the site archive and name of the institution where it will be deposited.

9 STRIP, MAP AND PLAN METHODOLOGY

- 9.1 The archaeological strip, map and plan will comprise the excavation of 1 no trench in the location plotted on Figures 2 and 3 (1) and lifting of the floor in the later engine house (2) to record any surviving engine beds. Trench 1 comprises an area of approximately 154sqm. The final locations of the trench and floor lifting area may be informed by the results of the historic building recording. The proposed sizes and trench locations have been provisionally agreed in advance with GMAAS to characterise below ground remains.
- 9.2 Trench positions will be laid out using cm accurate survey-grade GPS equipment tied into the Ordnance Survey National Grid.
- 9.3 Concrete will be removed by mechanical excavation using a hydraulic breaker. Overburden will be stripped across the trench using a mechanical excavator fitted with a toothless, flat bladed, grading bucket down to the first archaeological horizon or natural deposits, whichever occurs first. A toothed bucket may be used to remove broken up concrete but this should be kept to an absolute minimum and be supervised by an archaeologist at all times. All excavation by mechanical excavator will be undertaken under direct archaeological supervision, by a suitably experienced and qualified archaeologist, with one archaeologist responsible for monitoring each excavator.
- 9.4 Where appropriate, any below ground voids encountered may be mechanically excavated using a toothless bucket down to base in order to avoid extensive manual excavation. Similarly, areas of brick, flagged or paved flooring may be cleaned using a toothless bucket, In both instances, this much be carried out under strict archaeological supervision at all times. Final cleaning will be carried out by hand.
- 9.5 All archaeological features and deposits revealed will be cleaned and excavated in an archaeologically controlled manner in order to establish their extent, form, date, function and relationship to other features.
- 9.6 Should the excavation of the trench be deemed necessary beyond 1.2m in depth (or limit of safe working depth), suitable stepping out will be employed. Deep features containing demolition debris may be present, requiring excavation below 1.2m. Stability of the trenches will be continually assessed and excavation will abandoned if safe excavation beyond 1.2m

is not achievable. Any areas below 1.2m will require demarcation with heras or netlon-type fencing as appropriate.

- 9.7 All identified finds and artefacts will be collected, retained, and bagged and labelled according to their context. Finds of significant interest will be given a 'small finds' number, and information on their location in three dimensions will be entered on a separate pro-forma sheet. No finds will be discarded without assessment by an appropriate finds specialist, and/or the approval of GMAAS.
- 9.8 A full written, drawn and photographic record will be made of all features revealed during the course of the archaeological evaluation. Plans will be completed at a scale of 1:20 (as appropriate), with section drawings at a scale of 1:10. All plans will be tied in with the Ordnance Survey National Grid with levels given to above OD.
- 9.9 The photographic record will utilise high resolution digital photography in RAW format. The photographic record will be maintained throughout the course of the fieldwork and will include as a minimum:
- The site prior to commencement of fieldwork;
 - The site during work, showing specific stages of fieldwork;
 - The layout of archaeological features within the trench;
 - Individual features and, where appropriate, their sections; and
 - Groups of features where their relationship is assessed to be important.
- 9.10 All photography will follow the Historic England guidance for digital image capture (Historic England 2015b). All images will have accompanying metadata specifying: photo ID, capture device, converting software, colour space, bit depth, resolution, date of capture, photographer, caption, and any alterations made to the image.
- 9.11 Following excavation and recording of any archaeological remains, and with the agreement of GMAAS, the trench will be backfilled with the previously excavated spoil or left open at the client's request. It is assumed that post-excavation fencing will be the responsibility of the client as will any requirement for reinstatement.

Environmental Sampling Strategy

- 9.12 Where necessary, soil samples will be taken from all suitable features or deposits for palaeoenvironmental and/or industrial residue sampling during the evaluation trenching. This will comprise the removal of a bulk sample from every securely sealed and hand-excavated context, excepting those with excessive levels of residuality or those with minimal 'soil' content (such as building rubble).
- 9.13 Bulk samples will comprise representative 40 litre samples. Where a context does not yield 40 litres of material, smaller samples will be taken (generally the maximum amount of material that it is practicable to collect). Bulk samples will be used to recover a sub-sample

of charred macroplant material, faunal remains and artefacts where necessary, as well as any significant industrial residues.

- 9.14 Environmental material will be stored in a controlled environment and specialists consulted during the course of the work if necessary.

Human Remains

- 9.15 There is no evidence to suggest that any human remains will be present on the site.
- 9.16 The client, the Ministry of Justice and GMAAS will be informed if human remains are found. Disturbance of human skeletal remains will be kept to a minimum, and remains will be left in situ, covered and protected as necessary.
- 9.17 Human remains will only be removed if necessary to protect and secure them. Removal of human remains will only take place under appropriate government and environmental health regulations, in compliance with the Burial Act 1857 and after obtaining a Section 25 exhumation licence obtained from the Ministry of Justice.
- 9.18 If required a qualified and experienced osteoarchaeologist will undertake site visits to discuss the recording and assist in the removal of any human skeletal remains. Human remains will be processed as part of the post-excavation assessment following national standards and guidance, including English Heritage (2004), Mitchell and Brickley (2017) and the Church of England/Historic England (2017).

Finds

- 9.19 All finds and samples will be treated in a proper manner during the excavation and post-excavation stage and to standards agreed in advance. Finds will be exposed, lifted, cleaned, conserved, marked, bagged and stored in accordance with the guidelines set out in United Kingdom Institute for *Conservation's Conservation Guidelines No. 2* (1990) and the ClfA guidelines *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2014c).
- 9.20 If required, conservation will be undertaken by approved conservators in line with the *First Aid for Finds* guidelines (Watkinson and Neal 1998). In accordance with the procedures outlined in English Heritage's MoRPHE PPN3 (2008), significant iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy should be X-radiographed before assessment.
- 9.21 All finds of gold and silver will be moved to a safe place. Where removal cannot be effected immediately, suitable security measures will be taken to protect the artefacts from theft or damage. All finds of gold and silver, and associated objects, will be reported to the regional Finds Liaison Officer, who will inform the coroner, according to the procedures relating to the Treasure Act 1996 and the act's amendment in The Treasure (Designation) Order 2002,

including prehistoric objects such as Bronze Age metalworking hoards and other non-precious metal items.

- 9.22 Ownership of any finds recovered during archaeological works rests with the landowner except where other law overrides this (e.g. Treasure Act 1996, Burial Act 1857). However, Lanpro will seek to obtain 'in principle' agreement from the landowner to donate the recovered artefacts to the museum.

Unexpectedly significant or complex discoveries

- 9.23 Should unexpectedly extensive, complex or significant remains be uncovered that warrant, in the professional judgment of the archaeologist on site and in consultation with GMAAS, more detailed recording than is appropriate within the terms of the PD, the scope of the PD will be reviewed.

Plant and equipment

- 9.24 The archaeological contractor on site will be responsible for provision of all required welfare, plant, and health and safety equipment during the building survey and evaluation trenching.

Strategy Review

- 9.25 The strategy for the archaeological evaluation will be held under continuous review. Should the strategy be considered unsuitable at any time by Lanpro, an alternative strategy will be proposed for agreement with GMAAS.
- 9.26 Pending the results of the strip, map and plan, further works may be required. The scope of this will be agreed with GMAAS and will be subject to an addendum to this PD.

10 POST-EXCAVATION ASSESSMENT AND REPORTING

- 10.1 The post-excavation assessment work will comprise the following:
- Checking of drawn and written records during and on completion of fieldwork;
 - Production of a stratigraphic matrix of the archaeological deposits and features present on the site, if appropriate;
 - Cataloguing of photographic material;
 - Cleaning, marking, bagging and labelling of finds according to the individual deposits from which they were recovered;
 - Processing and assessment of environmental samples; and
 - Finds requiring specialist conservation will be sent to appropriate specialists for assessment, including identification and initial dating;
- 10.2 The report will consist of:

- A title page detailing site address, site code and accession number, NGR, author / originating body, client's name and address;
 - Full contents listing;
 - A non-technical summary of the findings of the evaluation;;
 - A description of the topography and geology of the evaluation area
 - A description of the archaeological background to the site drawing on results of previous DBA and additional research;
 - A description of the methodologies used during the evaluation;
 - A description of the findings of the evaluation;
 - Assessment of the archaeological features exposed and their context within the surrounding landscape, and at a local, regional and national level as appropriate;
 - Site and trench location plans and plans of each of the trenches;
 - Section drawings of the excavated archaeological features;
 - Specialist reports on the artefactual / ecofactual remains from the site;
 - Appropriate photographs of specific archaeological features;
 - A full context list;
 - The OASIS reference and summary form; and
 - A copy of this PD as an appendix.
- 10.3 The results of the work will be related to the relevant known archaeological information held in the Greater Manchester HER. It will include, where relevant, examination of all readily available cartographic sources to record evidence for historic or archaeological sites and history of previous land uses. Where relevant and permitted, photographs, photocopies or traced copies will be presented in the report.
- 10.4 A copy of the report will be presented to GMAAS for approval within four weeks of the completion of fieldwork unless other arrangements are negotiated due to the complexity of the archaeology, or the quantity of finds or environmental samples required to be processed.
- 10.5 Following acceptance, a hard copy of the report will be presented to GMAAS for inclusion in the Greater Manchester HER as well as a digital copy of the approved report. Digital vector trench plan can be included with the report, compatible with industry standard GIS software for integration in the Greater Manchester HER.
- 10.6 Where positive results are drawn from the evaluation, a summary report will be prepared, in an established format, suitable for inclusion in a suitable journal, if required.
- 10.7 GMAAS will require a short (c. 300) word summary of the project results to be sent through to the editor of *Post Medieval Archaeology* for inclusion in their annual round-up of fieldwork, with a copy forwarded to GMAAS. This would not need to include the evaluation

results should the trenches prove to be sterile, but a summary of the historic building survey will need to be included. Please note that the deadline for submission is usually the end of March in the year following the completion of the fieldwork.

- 10.8 It is required that the results be disseminated which will be dictated by the significance of the findings which will be discussed with GMAAS following the completion of the fieldwork or subsequent reporting.

11 ARCHIVING AND DATA MANAGEMENT

Archive Content

- 11.1 The archive will be prepared in accordance with the ClfA guidelines detailed in the *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (ClfA 2020c). The preparation of the archive will also be informed by the *Guidelines for the preparation of Excavation Archives for long-term storage* (United Kingdom Institute for Conservation, 1990), *Standards in the museum care of archaeological collections* (Museums and Galleries Commission 1994), and in accordance with any museum deposition guidelines. Provision will be made for the stable storage of paper records and their long-term storage.
- 11.2 The appointed archaeological contractor will approach Touchstones Rochdale in advance of commencing any fieldwork to determine the preparation, and deposition of the archive and finds, and obtain an accession number for all archaeological works. The landowner will be encouraged to transfer ownership of the finds to the museum. The archive will be presented to the curator within 6 months of completion of the fieldwork, unless alternative arrangements have been agreed in writing with GMAAS.
- 11.3 Please note that Touchstones Rochdale is currently closed. Until the museum is reopened, alternative arrangements should be explored by the archaeological contractor.
- 11.4 Adequate resources will be provided during fieldwork to ensure that all records are checked and internally consistent. Archive consolidation will be undertaken immediately following the conclusion of fieldwork and will include the following work:
- the site record will be checked, cross-referenced and indexed as necessary;
 - all retained finds will be cleaned, conserved, marked and packaged in accordance with the requirements of Touchstones Rochdale;
 - all retained finds will be assessed and recorded using pro forma recording sheets, by suitably qualified and experienced staff. Initial artefact dating will be integrated within the site matrix; and
 - all retained environmental samples will be processed by suitably experienced and qualified staff.

- 11.5 The archive will consist of paper records and digital data, as well as finds and samples as selected. Not all material collected or created during the course of the works will require preservation in perpetuity, and the final contents of the archive will be subject to selection prior to the accession of the archive to the museum, in line with a selection strategy agreed with the client and GMAAS.
- 11.6 The selected contents of the archive will be appropriate to establish the significance of the results of the project and support future research, outreach, engagement, display and learning activities. Selection will be focused on selecting what is to be retained to support these future needs. Methods for disposing of de-selected material will be agreed with the landowner and other relevant stakeholders.
- 11.7 A copy of the digital archive will be submitted for integration into the Greater Manchester HER.
- 11.8 An OASIS form will be completed for the project and an electronic copy of the final report and the digital archive deposited with the ADS.

Data Management

- 11.9 A Data Management Plan will be created and managed by the appointed archaeological contractor on commencement of the project, which will outline the strategy for the sharing and preservation of the project's digital data.
- 11.10 The Data Management Plan will be produced in line with ClfA standards (2020c) and guidance produced by the ADS (2014), and will include:
- Details of data that will be generated during the work;
 - Type of file formats to be used (e.g. .doc, .pdf, .dwg, .shp, etc);
 - Methods of data collection or capture (e.g. GPS/Total Station/digitising from hard copies);
 - File naming conventions (e.g. ADS naming conventions);
 - Metadata, standards and quality assurance measures;
 - Plans for sharing data;
 - Ethical and legal issues or restrictions on data sharing (e.g. client confidentiality etc);
 - Copyright and intellectual property rights of data;
 - Data storage and back-up measures;
 - Data management roles and responsibilities; and
 - Costing or resources needed (ADS archiving costs etc.).
- 11.11 The digital archive will be produced using industry standard file formats, with a clear file structure that allows these to be easily shared with all stakeholders, and allows the data to continue to be preserved and shared with the public through, for example, the HER.

- 11.12 The data comprising the digital archive will comply with the English Heritage (now Historic England) guidance on historic environment data standards, *MIDAS Heritage; the UK Historic Environment Data Standard* (English Heritage 2012).
- 11.13 It is anticipated that the repositories to which the digital archive are submitted (i.e. HER/local museum/archive) will have in-house Data Management Plans to allow for the long term preservation of the digital archive data, including plans for data back-up and migration to new digital formats as these emerge.

12 TIMETABLE

- 12.1 GMAAS will be given at least one week's notice of the commencement of the fieldwork and will monitor implementation of the programme of works on behalf of the Local Planning Authority and evaluate the work being undertaken on site against the methodology detailed in this PD. They will be free to visit the site at any time by prior arrangement with Lanpro.
- 12.2 Fieldwork is anticipated to be carried out over a period of one week, depending on the nature of any archaeological remains encountered. A report will be produced within six weeks of completion subject to the complexity of any archaeological features or finds encountered.

13 STAFFING

- 13.1 Karl Taylor MCIfA (Technical Director, Lanpro) will oversee management of the project and will monitor the work on behalf of the client.
- 13.2 The archaeological evaluation trenching and post-excavation works will be undertaken by a suitably qualified and experienced professional archaeological contractor, that will adhere to the ClfA Code of Conduct and all appropriate standards and guidance. Details of the CVs of key personnel and specialists can be provided to GMAAS in advance of the commencement of fieldwork, following appointment of the archaeological contractor.
- 13.3 The appointed archaeological contractor's Project Manager for the project will be able to demonstrate competence and experience of managing archaeological projects of a similar size, nature and complexity. Assessment and analysis of finds, environmental samples and human remains will be undertaken by suitably qualified and experienced specialists, if required. The archaeological contractor will be responsible for the organisation and management of all plant, welfare and health and safety on site in line with national professional guidance.

14 MONITORING

- 14.1 GMAAS will monitor the implementation of the archaeological evaluation on behalf of the Local Planning Authority and evaluate the scope and progress of the work against the methodology detailed in the PD.
- 14.2 GMAAS will be responsible for considering any changes to the agreed scope of works including repositioning of trenches. Any such changes will be agreed in writing with relevant stakeholders prior to commencement of on-site works, or at the earliest opportunity.
- 14.3 The appointed archaeological contractor will provide at least weekly updates to Lanpro. Any issues that arise on site or during the post-excavation stages should first be addressed by the archaeological contractor directly to Lanpro, who will then liaise with the client, GMAAS and other stakeholders in order to resolve the matter. In the event of issues arising regarding the implementation of this PD, or the scope or methodology of the excavation, these will be resolved in the first instance by contacting Lanpro who will liaise with the client and the GMAAS to determine a solution. Should the issue not be resolved remotely a meeting will be held between key stakeholders to facilitate discussion of the issues and identification of a suitable strategy for progress to be agreed by all parties.

15 COPYRIGHT AND PUBLICITY

- 15.1 Copyright of the documentation prepared by the archaeological contractor and specialist sub-contractors should be the subject of additional licences in favour of the client, Lanpro, and the Greater Manchester HER to use such documentation for their commercial, statutory or educational functions, and to provide copies to third parties.
- 15.2 Under the *Environmental Information Regulations* (EIR 2005), information submitted to the HER becomes publicly accessible, except where disclosure might lead to environmental damage, and reports cannot be embargoed as 'confidential' or 'commercially sensitive'.
- 15.3 It is recognised that the project may identify remains which are of interest to the public and these may be publicised through appropriate media. Any publicity for the project proposed by the archaeological contractor should be approved by Lanpro and the client. The appointed contractor will not issue any information on the work through media, internet or social media without prior agreement with Lanpro and the client.
- 15.4 Care will be taken to ensure that any publicity does not compromise the security of archaeological remains that may have been identified or recovered. Any approaches by the press to the archaeological contractor should be referred to Lanpro in the first instance.

16 INSURANCE

16.1 The appointed archaeological contractor will hold Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance to at least the following amounts;

- Public Liability £5,000,000
- Employer's Liability £5,000,000
- Professional indemnity (for any single claim) £5,000,000

17 HEALTH AND SAFETY

17.1 The management of all health and safety on site during the fieldwork phase will be the responsibility of the appointed archaeological contractor. All works will be undertaken by the contractor in compliance with the Health and Safety at Work Act (1974) and all applicable regulations and Codes of Practice. All archaeological staff will undertake their operations in accordance with safe working practices and will be CSCS certified. At least one First Aider will be present on site at all times.

17.2 A site-specific risk assessment and method statement (RAMS) will be produced by the appointed archaeological contractor, prior to the commencement of work on site, which will be subject to regular review.

17.3 Documented procedures for safe working will be supplied by the appointed archaeological fieldwork contractor, in addition to the usual site specific RAMS.

17.4 Suitable Personal Protective Equipment (PPE) and welfare facilities will be provided by the archaeological contractor, including hi-visibility coats/vests, hard hats, safety boots and gloves, as well as safety glasses if required.

17.5 All staff will receive a health and safety induction prior to starting work on site to be provided by the archaeological contractor. Toolbox talks on health and safety issues will be conducted at minimum weekly intervals and/or after changes in working practices or identification of new threats/risks. The risk assessment will be reviewed and updated as necessary. Control measures will be implemented as required in response to specific hazards.

17.6 Regular audits of health and safety practices will be carried out during the course of the project by Lanpro and the archaeological contractor in consultation with the site workforce.

17.7 Safe working will take priority over the desire to record archaeological features or remains, and where it is considered that recording is dangerous, any such features will be recorded by photography at a safe distance.

- 17.8 All trench locations will be scanned with a Cable Avoidance Tool (CAT) and Genny prior to ground works commencing. Necessary measures will be taken to avoid disturbing any services.
- 17.9 Provision will be made, through grading of trench ends or provision of planks, to allow wildlife egress from trenches left open overnight.
- 17.10 Plant operators will be required to produce evidence of qualification within an industry accepted registration scheme. Sub-Contractors health and safety performance will be kept under review and action taken if necessary. All spoil will be stored and managed safely in line with the standards of the *Construction Code of Practice for Sustainable Use of Soils on Construction Sites* (DEFRA 2009).

18 REFERENCES

- ADS 2023, 'Data Management and Sharing Plans', v. 2, Archaeology Data Service website, <https://archaeologydataservice.ac.uk/advice/DataManagementPlans.xhtml> (last accessed 28/09/2023)
- Betts Geo 2021, *Westchurch Homes: Desk Study Report for Brunswick Street, Heywood*
- BGS 2024, British Geological Survey website, www.bgs.ac.uk/data/mapViewers/home.html (last accessed 15/01/2024)
- Brennand, M. 2007, *The Archaeology of North West England: An Archaeological Research Framework for North West England, Vol 2 Research Agenda and Strategy*
- Church of England/Historic England 2017, *Guidance for the Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England. Second Edition*
- CIfA 2014, *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials*
- CIfA 2019, *Code of Conduct*
- CIfA 2023a, *Standard for archaeological field evaluation*
- CIfA 2023b, *Standard for archaeological excavation*
- CIfA 2023c, *Standard for archaeological monitoring and recording*
- CIfA 2023d, *Universal guidance for archaeological field evaluation*
- CIfA 2023e, *Universal guidance for archaeological excavation*
- CIfA 2023f, *Universal guidance for archaeological monitoring and recording*
- CIfA 2020, *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*
- DEFRA 2009, *Construction Code of Practice for Sustainable Use of Soils on Construction Sites*

- Dickinson Waugh Conservation 2021, *Heritage Statement and Impact Assessment: Proposed demolition of existing buildings in preparation for new dwellings, Land at Marina Ropeworks, Brunswick Street, Heywood, Rochdale*
- EIR 2015, *Environmental Information Regulations*
- English Heritage 2004, *Human Bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports*
- English Heritage 2006, *Archaeological Science at PPG16 interventions: Best Practice Guidance for Curators and Commissioning Archaeologists*
- English Heritage 2008a, *Management of Research Projects in the Historic Environment (MoRPHE). PPN3: Archaeological Excavation*
- English Heritage 2008b, *Strategic Framework for Historic Environment Activities and Programmes in English Heritage (SHAPE)*
- English Heritage 2011, *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation*
- English Heritage 2012, *MIDAS Heritage; the UK Historic Environment Data Standard*
- Grace's Guide 2024, *Graces Guide to British Industrial History*:
https://www.gracesguide.co.uk/Healey_Brothers (last accessed 23/01/2024)
- Historic England 2015a, *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide*
- Historic England 2015b, *Digital Image Capture and File Storage. Guidelines for Best Practice*
- Historic England 2016, *Understanding Historic Buildings: A Guide to Good Recording Practice*
- Mitchell, P.D. and Brickley, M. 2017, *Updated Guidelines to the Standards for Recording Human Remains*, Chartered Institute for Archaeologists
- MOLAS 1994, *Archaeological Field Manual*
- MPRG 2001, *Minimum Standards for the Processing, Recording, Analysis and Publication of Post Roman Ceramics*, Medieval Pottery Research Group Occasional Paper 2
- Museums and Galleries Commission 1994, *Standards in the museum care of archaeological collections*
- NWRF 2024, *North West Regional Research Framework – The Research Framework for the North West*, <https://researchframeworks.org/nwrf/> (last accessed 15/01/2024)
- Society of Museum Archaeologists 1993, *Selection, Retention and Dispersal of Archaeological Collections*
- United Kingdom Institute for Conservation 1990, *Guidelines for the preparation of Excavation Archives for long-term storage*
- Watkinson, D. And Neal, V. 1998, *First Aid for Finds*

Figures



**Land at Marina Ropeworks,
Brunswick Street, Heywood**

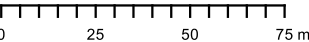
Title:
Fig 1:Site Location

Legend:
 Study Site



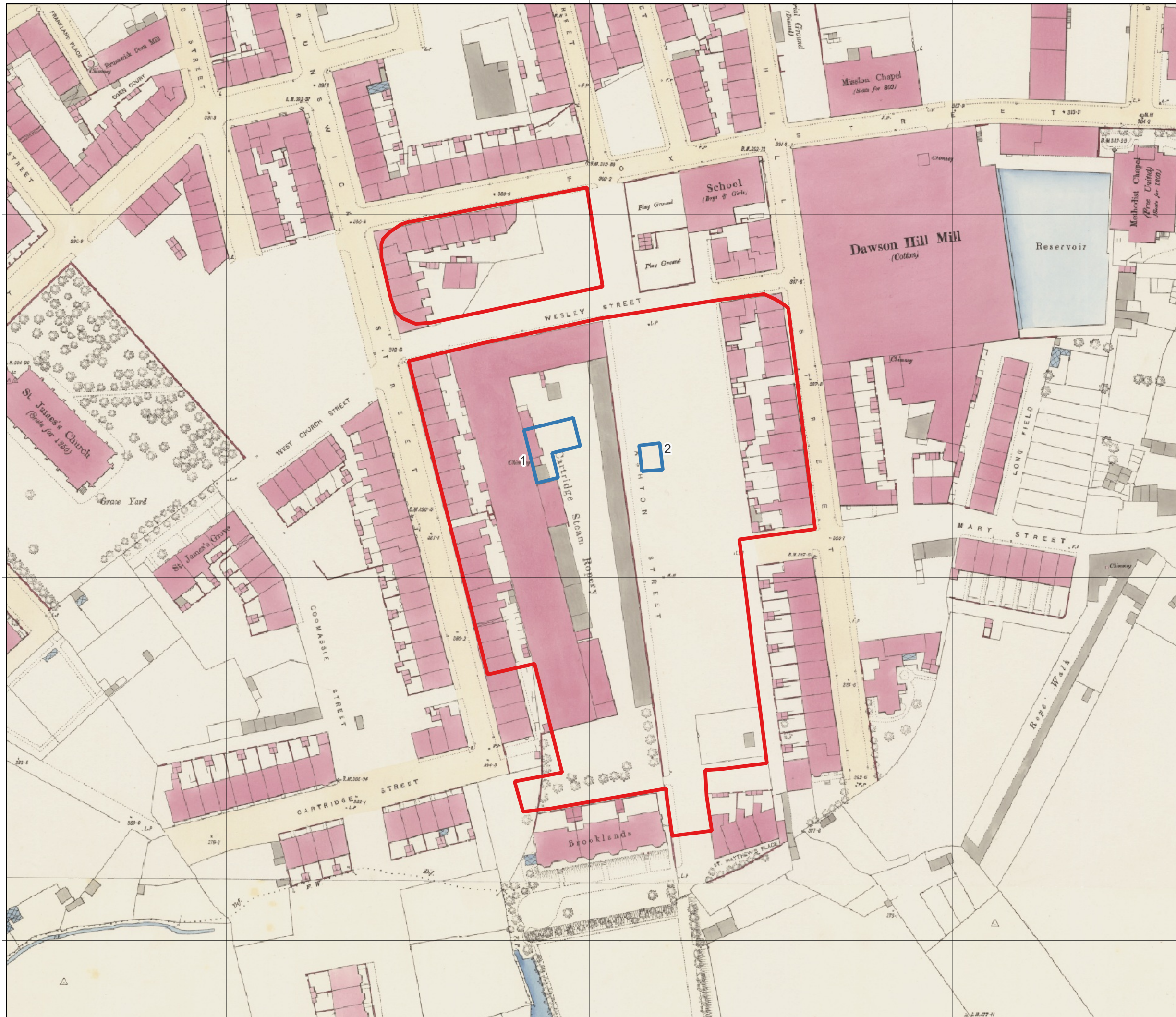
Co-ordinate system: OSGB36 / British National Grid

Scale: 1:2000 @ A3



Lanpro»

385400



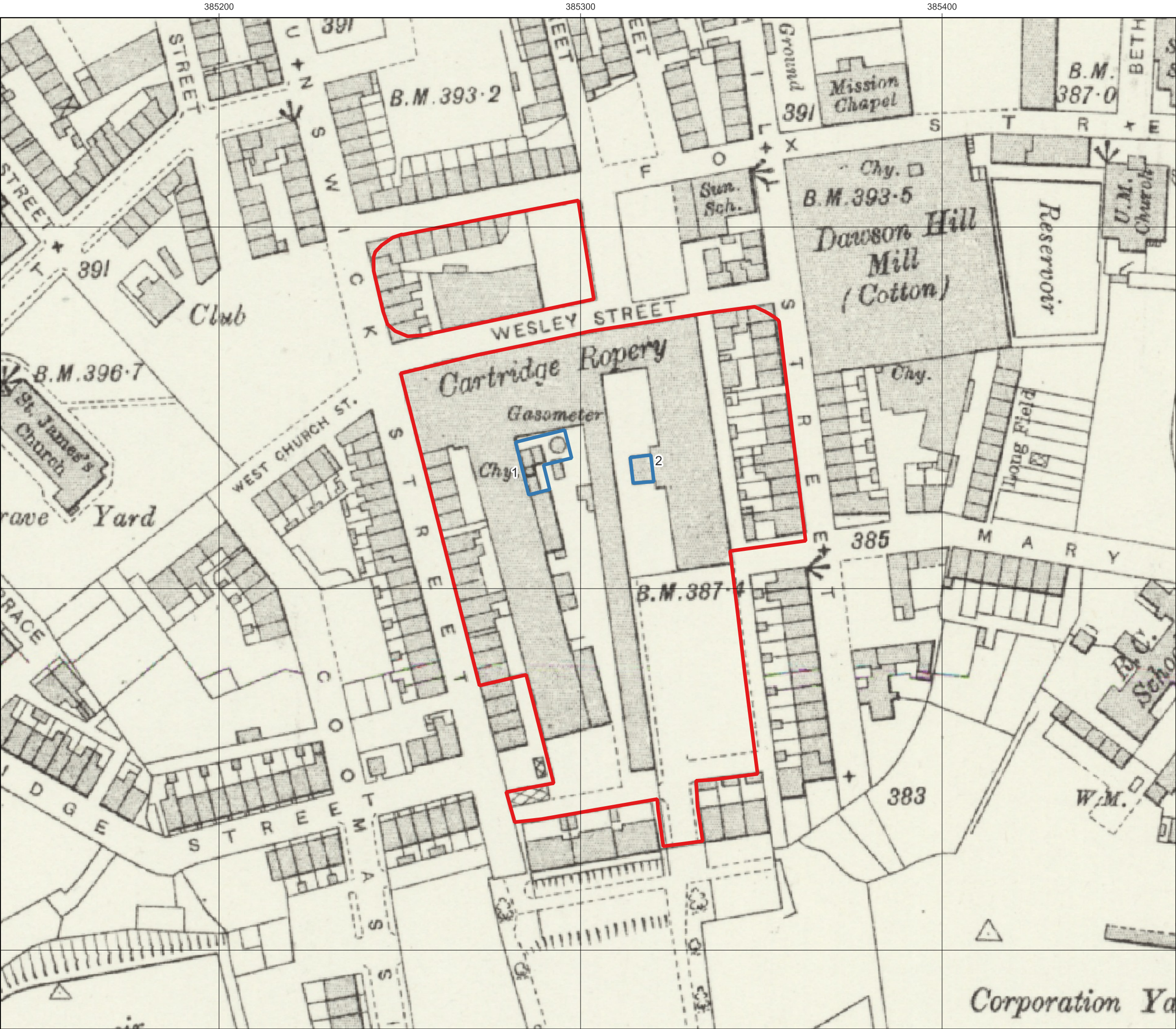
Title: Fig 2: Trench locations overlaid onto Ordnance Survey 1891 Town Plan

 Study Site
 Trenches



Lanpro»

410700
410600
410500



**Land at Marina Ropeworks,
Brunswick Street, Heywood**

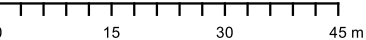
Title:
Fig 3: Trench locations overlaid onto Ordnance
Survey 1910 25-inch map

Legend:

- Study Site
- Trenches

Co-ordinate system: OSGB36 / British National Grid

Scale: 1:1000 @ A3



Norwich:

Brettingham House
98 Pottergate
Norwich
Norfolk
NR2 1EQ

01603 631 319

London:

8 Devonshire Square
London
EC2M 4JY

020 3011 0820

York:

Stanley Harrison House
The Chocolate Works
Bishopthorpe Road
York
YO23 1DE

01904 803 800

Manchester:

One St Peter's Square
Manchester
M2 3DE

0161 711 1740

Cambridge:

50 – 60 Station Road
Cambridge
Cambridgeshire
CB1 2JH

01223 776740



info@lanproservices.co.uk

Appendix 2: Inventory of primary archive

Physical records

File/Box No	Description	Quantity
File no.1	Drawing register sheets	1
	Photo register sheets	1
	Context register	2
	Context record	34
	Permatrace sheets	2

Appendix 3: Concordance of contexts

Context	Area	Type	Description	Artefacts
101	1	Deposit	Rubble / clinker	Brick sample (1)
102	1	Deposit	Natural geology	
103	1	Masonry	Service access	
104	1	Wall	Chimney	
105	1	Wall	Flue	
106	1	Surface	Surface	
107	1	Wall	Brick cellar?	
108	1	Surface	Brick surface	
109	1	Surface	Concrete surface	
110	1	Wall	Brick wall	
111	1	Masonry	Surface	
112	1	Wall	Wall	
113	1	Surface	Surface	
114	1	Wall	Wall	
115	1	Masonry	Gasometer	
116	1	Wall	Brick cellar?	
117	1	Surface	Brick surface	
200	2	Fill	Rubble layer	Pottery (17), leather drive belt (1)
201	2	Layer	Clay natural geology	
202	2	Surface	Engine bed	
203	2	Wall	Wall	
204	2	Buttress	Concrete buttress	
205	2	Buttress	Concrete buttress	
206	2	Surface	Concrete surface	
207	2	Wall	Wall	

Context	Area	Type	Description	Artefacts
208	2	Wall	Wall	
209	2	Masonry	Footing	
210	2	Surface	Surface butting wall 209 and overlain by surface 203	
211	2	Surface	Lower surface butting machine plinth 210	
212	2	Wall	Western side wall	Brick sample (1)
213	2	Wall	Wall	
214	2	Concrete wall/surface	Wall or surface	
215	2	Brick wall	Wall	
216	2	Deposit	Levelling deposit	

Appendix 4: Catalogue of consulted historic maps and plans

Ordnance Survey

Description	Date
Heywood Town Plan of 1891 (1:500)	Heywood - Lancashire LXXXVIII.11.7 Surveyed: 1890, Published: 1891.
Ordnance Survey 25" map of 1910 (1:2500)	Lancashire LXXXVIII.11 Revised: 1907, Published: 1910
Ordnance Survey 25" map of 1929 (1:2500)	Lancashire LXXXVIII.11 Revised: 1927 to 1928, Published: 1929
Ordnance Survey 1:1250 National Grid Map of 1973	Published 1973

Appendix 5: OASIS summary

OASIS Summary for archaeol11-530711

OASIS ID (UID)	archaeol11-530711
Project Name	Open Area Excavation at Marina Ropeworks, Heywood
Sitename	Marina Ropeworks, Heywood
Sitecode	MRM24
Project Identifier(s)	Marina Ropeworks, Heywood, Greater Manchester
Activity type	Open Area Excavation
Planning Id	21/01796/FUL
Reason For Investigation	Planning: Post determination
Organisation Responsible for work	Archaeological Services WYAS
Project Dates	23-Sep-2024 - 27-Sep-2024
Location	Marina Ropeworks, Heywood NGR : SD 85290 10662 LL : 53.592325792308664, -2.223710936737119 12 Fig : 385290,410662
Administrative Areas	Country : England County/Local Authority : Rochdale Local Authority District : Rochdale Parish : Rochdale, unparished area
Project Methodology	The work involved the excavation of two trenches of varying size, positioned to target features of archaeological interest identified from historic mapping. The size of each trench is listed below: •Trench 1 – 154m² •Trench 2 – 80m² All work was undertaken in accordance with accepted professional standards and guidelines, in accordance with the ASWYAS site recording manual and in compliance with the PD. All trenches were set out and the limits resurveyed using a Trimble VRS differential GPS accurate to +/-0.01m. The trenches were opened in a controlled manner using a 360° excavator using a flat-bladed ditching bucket under direct archaeological supervision. A toothed bucket was permitted when breaking up and lifting large sections of concrete or brickwork. All deposits were removed in level spits (not more than 0.20m). Machining stopped at the first archaeological horizon or natural deposits, whichever was encountered first. Where it was safe, all excavations of archaeological deposits were undertaken manually with the stripped surface being cleaned and investigated for archaeological remains. Trench 1 was contaminated as it was not possible to fully clean the features in this area. Feature plans were drawn recorded in plan at a scale of 1:20 or 1:50. All drawings include spot heights that relate to Ordnance Datum in metres. It was not possible to hand draw plans of Trench 1 due to contamination but the area was planned digitally using a survey grade GPS and photogrammetry. Otherwise, a full written, drawn, and photographic record was made of all archaeological work undertaken.

Project Results	Archaeological Services WYAS were commissioned by Lanpro Ltd on behalf of Westchurch Homes to carry out a programme of archaeological excavation. Two trenches were excavated revealing structural remains dating from the late 19th to mid-20th centuries. These structures relate to steam power generation, the movement of waste gases and the production and storage of gas on site. One of the two trenches was severely contaminated and, in this case, it was not possible to fully excavate and interpret the structures.
Keywords	Ropery - POST MEDIEVAL - FISH Thesaurus of Monument Types
Funder	Private or public corporation Westchurch Homes
HER	Greater Manchester HER - noRev - LITE
Person Responsible for work	Matt Wells
HER Identifiers	
Archives	Digital Archive - to be deposited with Archaeology Data Service Archive;

Report generated on: 09 Jan 2025, 09:50

Bibliography

- Altaf, A.Z., Adewuyi, Y. G., Haipeng Teng, H, Liu, G., Abid, F., 2022, 'Elemental mercury (Hg⁰) removal from coal syngas using magnetic tea-biochar: Experimental and theoretical insights', *Journal of Environmental Sciences* 122, 150-161, <https://doi.org/10.1016/j.jes.2021.09.033>
- ASWYAS, 2020, *Archaeological Recording Manual* (unpubl.)
- Betts Geo, 2021, Westchurch Homes: Desk Study Report for Brunswick Street, Heywood
- BGS, 2024, British Geological Survey website, www.bgs.ac.uk/data/mapViewers/home.html (last accessed 15/01/2024)
- Brennand, M. 2007, *The Archaeology of North West England: An Archaeological Research Framework for North West England, Vol 2 Research Agenda and Strategy*
- Chartered Institute for Archaeologists, 2020, *Standard and Guidance for Archaeological Field Evaluation*
- Dickinson Waugh Conservation 2021, Heritage Statement and Impact Assessment: Proposed demolition of existing buildings in preparation for new dwellings, Land at Marina Ropeworks, Brunswick Street, Heywood, Rochdale
- Grace's Guide 2024a, Graces Guide to British Industrial History: https://www.gracesguide.co.uk/Healey_Brothers (accessed 23/01/2024)
- Grace's Guide, 2024b, Graces Guide to British Industrial History: https://www.gracesguide.co.uk/J._Chadwick_and_Sons (accessed 18/12/2024)
- Heywood History, 2024, <https://www.heywoodhistory.com/> (accessed 23/01/2024)
- Historic England, 2008, *Management of Research Projects in the Historic Environment. Archaeological Excavation (PPN3)*
- NWRF, 2021, *North West Regional Research Framework – The Research Framework for the North West*, <https://researchframeworks.org/nwrf/> (accessed 28/09/2022)
- Salford Archaeology, 2024, Marina Ropeworks: Brunswick Street, Heywood, Greater Manchester: Historical Building Investigation Report
- Soil Survey of England and Wales, 1983, *Soils of Northern England Sheet 1*