

Archaeological Mitigation on Land at Neighbourhood, Richard Street, Rochdale

Report No. 22/566

Author: K Griffiths & S Birchall



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Phase 1

Report No. 22/566

Project Manager: Blair Poole

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Authors: K Griffiths & S Birchall

Illustrator: Joyce Heberden

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STAFF

Project Manager: Blair Poole

Supervisor: Sam Birchall

Fieldwork: Kelly Griffiths & John Baker

Digital: Kit Ackland

Text: Kelly Griffiths & Sam Birchall

Illustrations: Joyce Heberden

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Archaeological Mitigation at Neighbourhood, Richard Street, Rochdale

ABSTRACT

Archaeological Mitigation works were carried out at land off Richard St, Rochdale OL11 1DU. The Mitigation was implemented as the results of the Archaeological Evaluation carried out by MOLA in October 2022 showed good preservation of some of the canal walls and areas of the cotton warehouses to the south and centre of the site. The central area of the non-designated heritage asset of the Rochdale Canal Basin (691.1.0) was subject to an ongoing watching brief to identify and record any abandoned canal vessels.

The work was carried out by MOLA between November 2022 and March 2023. This report has been written and prepared by Sam Birchall and Kelly Griffiths of MOLA on behalf of Willmott Dixon Ltd.

Two Mersey flat type vessels were recorded in the boat holes of the central warehouse, the sterns were largely intact with the bows of both vessels fragmented and truncated by later development. A further Mersey flat type vessel orientated east to west with the stern post and knees of the vessel removed as part of the backfill, likely by machine excavators at the infilling of the basin. Further fragments of large oak timbers were seen in the backfill in the second arm of the basin and correspond to two abandoned flats visible in the aerial photograph of 1923. A short composite vessel likely a pontoon or float was excavated and recorded having been abandoned adjacent to the central warehouse.

None of the vessels found had been adapted for engine use and were horse drawn except for the float which was likely man powered. The omission of adapted or specialised vessels such as tugs or icebreakers suggest that when the Rochdale Canal Company ceased to trade; the dumb flats were not able to be sold and therefore were deliberately abandoned in the Rochdale branch basin, which by 1923 was isolated and decommissioned from the rest of the still working Rochdale canal.

1. INTRODUCTION

- 1.1. This report details the results of Archaeological Mitigation Works carried out by MOLA on behalf of Willmott Dixon. The report supports an approved planning application (22/00336/FUL) for initial enabling works for further development of the site into affordable residential units and associated recreational spaces.
- 1.2. The site is located off Richard Street, Rochdale, OL11 1DU. The site is located at grid reference NGR 389957, 412963 (**Figure 1 & Figure 2**).
- 1.3. The site code allocated by MOLA is 3403C.
- 1.4. Following on from the Archaeological Evaluation works completed in October 2022, on advice from the planning archaeologist at GMAAS; further archaeological mitigation was agreed with the client, Willmott Dixon. The site was divided into areas of high, medium and low interest (**Figure 8**) with the areas of high interest being the focus of two strip and map areas and works in the medium interest areas being subject to an archaeological watching brief over the site of the historic canal basin to identify and record any abandoned canal vessels.
- 1.5. The Archaeological Mitigation works were undertaken between 7th November 2022 and March 2023 by Kelly Griffiths, Sam Birchall, John Baker and Kit Ackland of MOLA and overseen by Blair Poole of MOLA.
- 1.6. The work was carried out in accordance with the Written scheme of Investigation prepared by Sam Birchall of MOLA and in conjunction with the Chartered Institute for Archaeologists (CIfA) Code of Conduct (2021) and Standard and Guidance for Archaeological Excavation (CIfA 2020a).

2. SITE BACKGROUND

2.1.Planning

2.1.1. In July 2021 the Ministry for Housing Communities and Local Government (HCLG) issued the Revised National Planning Policy Framework (NPPF) (2021). Chapter 16 of this document sets out policies for the conservation and enhancement of the historic environment.

2.1.2. The NPPF indicates planning decisions should be made based on the significance of Heritage Assets. These are defined as buildings, monuments, sites, places, areas or landscapes positively identified as having a degree of significance meriting consideration in planning decisions.

2.1.3. In considering any planning application for development for the Local Planning Authority (LPA) is Rochdale Borough Council and are bound by Rochdale Core Strategy (2016). In this case policy 2 and 'Protecting and enhancing character, landscape and heritage'.

2.1.4. On matters concerning archaeology the LPA takes advice from Greater Manchester Archaeological Advisory Service (GMAAS). Following consultation with GMAAS the following conditions were agreed:

No development shall take place until the applicant or their agents or their successors in title has secured the implementation of a programme of archaeological works in accordance with a Written Scheme of Investigation (WSI) which has been 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 programme set out in the approved WSI and provision made for the completion of all elements of that programme. The WSI shall cover the following:

1. A phased programme and methodology of site investigation and recording to include:

a) an archaeological evaluation through trial trenching;

b) pending results of the above, targeted open-area excavation and recording and / or a watching brief during remediation works.

2. A programme for post-investigation assessment to include:

a) analysis of the site investigation records and finds;

b) production of a final report on the significance of the heritage interest recorded.

3. Deposition of the final report with the Greater Manchester Historic Environment Record.

4. Dissemination of the results of the site investigations commensurate with their significance, including the installation of a permanent information panel.

5. Provision for archive deposition of the report, finds and records of the site investigation.

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

Reason: In accordance with NPPF policy 16, paragraph 205: To record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) and to make this evidence (and any archive generated) publicly accessible

2.1.5. Planning permission has been approved (22/00336/FUL) for the initial enabling works including drainage, infrastructure and piling ready for further development of mixed residential and recreational spaces.

2.1.6. The site does not lie within a Conservation Area, Area of Archaeological Importance, nor is it within any Registered Parks and Gardens or Battlefields; there are no Listed buildings or Scheduled monuments on the site.

2.1.7. There is a non-designated asset within the site of the Rochdale Canal Basin (691.1.0).

2.2. Previous Works

2.2.1. A Desk based assessment was undertaken by L-P Archaeology (Matthews 2020) detailing the evolution of the canal basin and associated structures in

documentary sources.

2.2.2. An Archaeological Evaluation was completed by MOLA in October 2022 (Birchall & Griffiths 2022). The evaluation confirmed good preservation of wharf and basin structures and identified two areas of high archaeological potential (**Figure 8**); in the footprint a large cotton warehouse in the south of the site area and targeting the earlier warehouse on the central wharf with *boat holes*. The holes representing one of the most likely places for remains of boats to be encountered. Areas of medium potential were identified as within the canal basin and low potential to the east and north, where later development had truncated the underlying structures.

2.3. Geology

2.3.1. The British Geological Survey geindex records the superficial deposits as glacial deposits of Devensian sand and gravel overlaying bedrock of Pennine Lower Coal Measures formation – Mudstone, Siltstone and Sandstone (BGS 2022).

2.3.2. The stratigraphy was noted during the Archaeological Evaluation works as tarmac and bedding to a depth of 0.3-0.6m below ground level (bgl), demolition to a depth of 0.3- 1.2m bgl and the natural geology of mid brown yellow sand encountered between 0.6m and 1m bgl.

2.3.3. Over the central area of the Historic Canal Basin the stratigraphy was tarmac, bedding to a depth of 0.3m-0.6m bgl backfill of stone work, bricks, industrial waste such as hydrocarbons and waste to a depth of 0.3-2m overlaying the black canal silt.

2.4. Location and Topography

2.4.1. The site is located close to the centre of Rochdale, adjacent to a commercial and retail area (**Figure 2**).

2.4.2. The site has been raised in the north and south by modern development with two large concrete slabs remaining from the recently demolished structures. The centre of the site is dominated by the old retail carpark which visibly

bows towards the centre, to a level of 137mOD. This area is directly over the central part of the historic canal basin.

2.4.3. The site is an irregular polygon 2.291 ha in size (**Figure 2**).

2.5.Archaeology and History

2.5.1. The site and wider area have been subject to a desk-based assessment and for a comprehensive history of the site consult (Matthews 2020)

2.5.2. The Rochdale line of the canal network was designed and built in the period of *Canal Mania*; a time of rapid development and expansion from 1791. Rochdale Canal line was approved on the third application. The decision was also made to widen the route and locks to accommodate vessels 74ft long (22.56m) and 14ft wide (4.4m) contrary to neighbouring through lines, which only allowed access for smaller vessels such as Calder and Hebble Navigation (Ransom 1979).

2.5.3. During 1788 and 1804 the Rochdale canal between Manchester and Sowerby Bridge was constructed, being the first of three Transpennine lines, with the principal goods being transported as coal, agricultural produce and material for the textile industry. The canal formed part of the industrial infrastructure of the North West, with the later Manchester to Leeds railway opening in 1848 (Canal and River Trust 2022).

2.5.4. The Rochdale Canal was successful and by 1819 it was carrying 317,050 tonnes annually of goods such as stone, limestone, coal and corn. By 1839 it had exceeded 800.000 tonnes but declined from the mid 1840s. Loss incurred by the railway was subsidised with rent, allowing the canal to continue trading successfully until after the first world war. The higher costs and loss of men to the military caused the largest fleet, the Rochdale Canal Company, to disband in 1921 and the sale of seven reservoirs by 1923 (Clarke 2008).

2.5.5. Some short trade continued in the Manchester area until the early 1960s, the canal basin at Rochdale Branch remained open until the 1960s when the buildings were demolished, and the area backfilled.

2.6. Map regression

- 2.6.1. The earliest map for the canal basin is an undated plan 'Plan of canal Basin at Rochdale' (RO: GB124.B2/plans/box/1/3) thought to predate 1822 (**Figure 3**). It shows a single terminus, labelled as basin, to the west is a single warehouse and to the east is noted as 'Coal Wharf', clearly indicating the types of cargo being delivered and offloaded to the area. The site appears underdeveloped with a few scant buildings just out of the site but fronting the surrounding roads.
- 2.6.2. The 1851 Ordnance Survey OS Map 1:1,056 scale (**Figure 4**) shows the basin, with a further arm to the east and changes to the warehouses around the basin with annotations showing cranes, the majority of which line the canal wharf and four set back from the canal basin walls in the south of the site. In the central area of the site off the main canal basin arm; the warehouse is shown to have two boat holes. This type of canal warehouse has been identified as a *Type 1* (Nevell 2003), an early form of warehouse which was prevalent in the northwest. This type of warehouse had internal hoists which were able to directly unload cargo from the barges beneath. It is likely this warehouse was needed for high value or perishable goods such as agricultural or textiles.
- 2.6.3. The 1891 OS Map 1:2,500 scale (**Figure 5**) shows redevelopment of the warehouses in the southeast of the site with the new larger structure extending up to the canal basin wall. A structure is also shown in the canal basin side and may represent fenders or a docking area.
- 2.6.4. On the Goad fire Insurance plan 1899-c1910 (**Figure 6**); the buildings on the canal sides and wharf are detailed. Industry such as iron working, blacksmith and dry dock are all detailed. The cotton warehouse in the south (212.H) is owned by the *Manchester Ship Canal Co* and is annotated to be a brick building with windows on all floors on the western elevation and windows from the 2nd floor to the northwestern elevation. The central warehouse (212.K) is shown to have five storeys and stone and brick built with the boat holes clearly marked.

- 2.6.5. Changes to the site after 1910 occur when the canal warehouses go out of use but remain standing on the site. In 1930, the site remains the same to the south and in the centre of the site. The buildings in the north, fronting Drake Street are reduced and a new cinema built.
- 2.6.6. The 1982-7 OS Map (**Figure 7**) shows the canal basin has now been infilled with the site area mainly laid to a car park and warehouses in the southeast and the north.
- 2.6.7. By 2020, google earth shows the whole area of the site laid to a car park with the buildings now demolished.

3. AIMS AND OBJECTIVES

3.1. The aims of the Archaeological Mitigation were:

- To determine the presence or absence of archaeological deposits or features on the site.
- To record the character, date, location and preservation of any archaeological remains on the site.
- To record the nature and extent of any previous damage to archaeological remains on the site.

3.2. The specific aims of the Archaeological Mitigation were:

- To identify, locate and record any Canal Wharf infrastructure.
- To Identify, locate and record possible scuttled boats within the basin.

3.3. Research Framework

3.3.1. The North West Regional Research Framework identifies the Industrial urban landscape as a research priority <https://researchframeworks.org/nwrf/industrial/> :

- **Ind98** relates to canals; *How well understood and recorded are the North-Wests canals, waterways and basins?*
- **Ind68** relates to the warehousing; *What can archaeological studies tell us about commodity storage and exchange buildings?*

4. METHODOLOGY

4.1. For a full description of the archaeological methodology please refer to section 5 of the Written Scheme of Investigation (WSI) (Birchall 2022).

4.1.1. In the two high interest areas, the tarmac or concrete slab and associated overburden was removed by mechanical excavator at a depth between 0.6 – 0.9m below ground level (bgl).

4.1.2. Archaeological features and structures were manually cleaned, excavated and recorded to determine extent, function, date and relationship to adjacent features.

4.1.3. All finds recovered were cleaned and recorded in accordance with Standards and Guidance for the collection, documentation, conservation and research of Archaeological Materials (ClfA 2020b).

4.1.4. Recording of the canal boats were carried out in accordance with Standard and Guidance for Nautical Archaeological Recording and Reconstruction (ClfA 2014).

4.1.5. All works were carried out in accordance with the Code of Conduct as set out by the Chartered Institute for Archaeologists (Chartered Institute for Archaeologists 2021), the Standard and Guidance for an Archaeological Excavation (ClfA 2020a), as well as the Historic England guidance document *MoRPHE (Historic England 2015)*.

4.1.6. The site code 3403C was allocated by MOLA. This site code was used on all documentary archives.

4.1.7. Following completion of the fieldwork and reporting, born-digital data, such as this report, digital photographs, 3D models, database and GIS data, with appropriate metadata, will be deposited with a CoreTrustSeal Repository, currently the Archaeology Data Service (ADS), making the archive publicly accessible. Each report, once approved, is subsequently made available for inclusion and publication by digital means through the Archaeological Data Service (ADS) via OASIS. Digital archiving will follow the requirements of the

receiving Museum and guidelines outlined in MOLA's Digital Data Management Policy and Procedures (MOLA forthcoming).

5. RESULTS

5.1. Results of the archaeological mitigation are given below. Not all context numbers referred to in the text are illustrated, but all are in the archive. Deposit numbers are given in (parentheses) and cut numbers and masonry are given in [square brackets].

5.2. The high interest areas (**Figure 8**) were designated as Area 15, the southern cotton warehouse and Area 16 over the warehouse on the central wharf. The areas of medium interest were monitored as a watching brief in the central part of the canal basin in the event of there being the remains of abandoned vessels.

5.3. The majority of Area 15 was directly overlayed by 0.4m of concrete (15000) and 0.6m of stone crush (15003) with an area of tarmac (15001) and stone crush (15001) on the east side of that was slightly thinner, measuring 0.2m & 0.3m thick respectively. Archaeological structures began to be encountered at 139.5mOD.

5.4. The remaining structures in Area 16 were beneath 0.2m of tarmac (16001) and a 0.3m thick layer of stone crush (16002), with archaeological structures being encountered at 138.9mOD.

5.5. Area 15

5.5.1. An area of 1235.51m² was opened by mechanical excavator in the south of the site, over the footprint of the cotton warehouse visible on the 1891 OS map (**Figure 5**) and Goad Insurance plan (**Figure 6**). During the evaluation phase, trenches 5 & 12 identified good preservation in this area. Trench 5 demonstrated that the basin wall was substantial and constructed of large sandstone blocks alongside a small surviving area of cobbled surface measuring 1.9m x 1m. Trench 12 revealed the floor surface of Yorkstone slabs of the southern warehouse.

5.5.2. The overall footprint of the warehouse extended beyond the limit of excavation, with an overall footprint of 3345.5m², with 2502.5m² falling

inside the site boundary. This estimate includes the structure that extended over/ into the canal (**Figure 5**).

- 5.5.3. Within the limit of excavation, the warehouse structures were overlain by a concrete slab [15000] and contemporary tarmac carpark surface [15001] with a substantial levelling layer of stone crush (15003) below. The overburden ranged in total thickness from 0.5m in the south to 1m in the north and west.
- 5.5.4. Despite good preservation overall, a sizable portion of the area had been truncated by modern drainage. This affected 375.35m² or 30.38% of the total excavation area, with the worst affected areas in the north-east, through the line of the canal basin and centre within the warehouse floor (**Figure 9**).
- 5.5.5. The canal basin wall was identified in the east of the area, running from the eastern limit of excavation towards the north-west for 9.5m before being truncated by modern drainage (**Plate 1**). The basin wall was constructed of large, sandstone blocks [15003] measuring a maximum of 1.15m x 0.65m x 0.5m with at least 5 courses surviving. The blocks were bonded with lime mortar and reinforced with iron braces across each sandstone block on the upper course. The upper course sat at 139.65mOD, was better finished than the lower courses and directly integrated into the warehouse floor to the south-east. Alongside the iron banding reinforcing the joints between each block other metal fixtures were still evident. The base of three round metal fixtures [15005, 15006, 15007], likely represent the remains of iron railings running along the edge of the wharf.



Plate 1 - Canal basin wall - Cotton Warehouse- direction southeast-scale 2 x 1m

- 5.5.6. The warehouse floor was comprised of a substantial York stone slab surface [15011, 15012] with some areas of granite setts [15020, 15027]. The Yorkstone flags ranged in size 1.2m x 0.9m to 0.8m x 0.5m forming the main body of the floor surface.
- 5.5.7. A 1.2m wide path or road of granite setts [15020] ran north-east to south-west through the middle of the warehouse for 28m but had been truncated by the modern drainage in places. Due to the orientation, it is likely that it ran directly from the canal wharf to the road to the south-west. Although this cannot be confirmed as the area has either been truncated or lay beyond the site boundary.
- 5.5.8. A timber or iron structure is visible on the map (**Figure 5**) protruding 7m into or over the canal basin. A brick stanchion [15030] was uncovered within the basin. The stanchion measured 2.4m x 1.24m with 12 courses of brick visible surviving to a level of 139.28mOD with the upper courses likely having been truncated during demolition works (**Plate 2**). While none of the supported structure survives it is likely this was the base of a support for an overhanging roof that covered barges as the goods were unloaded directly from the basin, into the warehouse.



Plate 2 [15030] brick support in basin- direction- northeast-scale 1m

- 5.5.9. The internal area of the warehouse proved to be a large open expanse with no evidence of internal dividing walls within the main area (**Plate 3**). The remains of seven iron column bases [15013, 15014, 15015, 15016, 15017, 15018, 15019] were evenly distributed in two rows running east to west.

These would most likely have supported the roof and internal hoists and cranes for moving cargo.



Plate 3 - Yorkstone slabs- direction west- scale 2x1m

5.5.10. Remains of possible internal dividing structure was visible in the south-west corner of the site, characterised of a rectangular brick and flag structure [15024] oriented south-west to north-east along with the base of a square iron support column [15031] and remains of redbrick wall protruding from the limit of excavation. This lines up well with the dividing wall present on the 1891 OS map.

5.5.11. While most of the external walls have either been destroyed by later development or lie beyond the limit of excavation, two small runs of unfrogged red brick wall [15022, 15023], ran north-east to south-west out of the south-western limit of excavation. These two short runs of wall are directly in-line with the two parallel rows of iron columns that run through the centre of the warehouse.

5.6. Area 16

5.6.1. A total area of 1220.20m² was opened directly to the west of area 15, over the central warehouse. The evaluation (c) established good preservation of

the warehouse wall in trench 4 along with the presence of internal foundations in trench 13. The location of the boat holes was also confirmed in trench 14 showing good preservation below a layer of demolition debris.

5.6.2. Similar to area 15, this area was also marred by modern truncation. Of the total excavation area 239.06m² was affected by truncation, equating to 19.59% of the total excavation area. Unfortunately, the boat holes and boats were affected but the preservation overall was still good.

5.6.3. The footprint of the warehouse survived to a level of 139.43mOD showing signs of truncation across the whole structure (**Figure 10 & Plate 4**). This likely occurred during the demolition of the wharf buildings and infilling of the canal basin in the 1960s. This is further supported by the high quantity of rubble and assorted demolition material included in the basin and the boat holes infill.



Plate 4 - Drone footage showing footprint of warehouse and boat holes.

5.6.4. The warehouse was aligned north to south at the southern end of the central wharf between the main basin and the later eastern arm. The warehouse measured 56.54m by 17.92m with two boat holes in the centre effectively dividing the warehouse in three, a north and south storage area with the boat holes in the middle. Each boat hole had direct access into the main canal basin on the west side of the warehouse.

5.6.5. The outer foundation walls [16002,16003, 16004, 16019] and boat hole walls [16005, 16006, 16007] form the body of the foundation, constructed with large sandstone blocks, bonded with lime mortar. The walls were constructed with a cut [16020] of 0.30m in width and the depth not found, into the body of the wharf, which was formed of multiple layers of redeposited sand (16013, 16014). This made extra reinforcement of the foundations necessary. Three unfrogged red brick walls ran parallel through each end of the warehouse on a north to south alignment (**Plate 5**). Each wall had inverted arches at regular 3m intervals along its length and were bonded onto the external sandstone foundation wall. The arches spread the weight of the upper floors and roof into the large sandstone foundations around the periphery.



Plate 5 - Inverted brick foundation arches-direction north- scale 2x 1m

5.6.6. While the west side of the warehouse fronted straight onto the canal, doubling as the basin wall, to the south and north the basin wall continued. South of the warehouse the basin wall [16017] had a return to the south-east before continuing beyond the limit of excavation. The construction is identical to the sandstone foundations in of the warehouse; sandstone blocks and lime mortar and is keyed into the south-western corner of the warehouse.

5.6.7. After area 15 and 16 were stripped the canal basin was subject to a watching brief. The remains of six boats were seen: two in the boat holes of the central

warehouse, one adjacent to the warehouse, one in the central area of the main basin and two in the eastern arm of the basin (**Figure 11**).

5.7. Boat hole A & Boat A

- 5.7.1. Boat hole A was the southern most of the two boat holes, measuring 4.5m in width, 17.5m length and to a depth of 137.7mOD or to 2.5m bgl.
- 5.7.2. The partial remains of a vessel was seen at 139.4mOD to the west and fragmentary remains at the east at a level of 137.85mOD. The vessel was carefully machine excavated under guided supervision. It was apparent that the vessel had not survived in the east of the boat hole, where very fragmented and decayed remains of wood were seen.
- 5.7.3. The western end of the vessel, with the most preservation was hand excavated to reveal a rounded stern with eight knees in a fan shaped frame with a length of 2.7m to the end of the central rider keelson. The height of the stern survived to 0.62m and was apparent it had been truncated from the top likely from later development (**Plate 6 & Figure 12**).
- 5.7.4. The planking to the outside and inside were carvel built, laid edge to edge and the vessel could be seen to be flat bottomed.
- 5.7.5. Boat A had a length of 20.94m and a width of 4.2m; as the top of the bow and stern were truncated it is highly likely that the vessel could have measured down the centre line as 21.9m or 72ft as the cited length of barges on the Rochdale Canal, the width of the vessel likely represents the full beam width of 14ft as the vessel had straight sides.
- 5.7.6. No name plates were seen on the vessel or backfill, and no small finds were retrieved from the vessel. Metal rubbing strakes were apparent in the backfill as was a likely stove pipe and possible dolly winch. These were contaminated with hydrocarbons from the canal silt so were not retained.
- 5.7.7. The rudder with stern post attached (**Plate 7**) was machine excavated out and retained with draught markings to VI.



Plate 6 - Stern of boat A- direction northwest



Plate 7 - Rudder from boat A with stern post-scale 2 x 1m

5.8. Boat hole B & Boat B

- 5.8.1. Boat hole B was the northern most of the two boat holes, measuring 4.5m width, 17.5m length and to a depth 137.05mOD or to 2.7m bgl.
- 5.8.2. Boat B similarly to Boat A was fragmented at the eastern end but remained in good preservation at the western end. The vessel was carefully machine excavated under guided supervision and then hand excavated at the stern.
- 5.8.3. The vessel survived to a length of 19.87m, a width of 4.2m and a maximum depth of 0.63m.
- 5.8.4. The rounded stern of the vessel had the stern post, five fan shaped knees and both inner and outer planking were carvel built. A curved wooden 0.85m by

0.3m x 0.25m wooden brace or deadwood (Stammers 1993, 204) was bolted to the apron and likely represented a repair to reinforce the end of the boat (Plate 8). As with Boat A there was a central rider keelson and two wide beams either side running down the deck of the boat. Where the vessel had been truncated it was possible to see that the vessel was flat bottomed.



Plate 8 - Boat B stern with brace- direction southwest- scale 2x1m



Plate 9 - Boat hole B- full length of vessel- direction west- scale 2x 1m

5.8.5. Both boats A and B were oak built with an inner planking of pitch pine painted green at the stern and a red at the inner sides.

5.8.6. As the boat had been truncated and the top the full length of the boat could not be measured, as with boat A; with stern and bow both intact it could be

estimated that the full length would be 72ft and the full beam width 14ft (**Plate 9**).

5.8.7. No small finds were retrieved from boat B but the rudder, stern post and keelson were retained.

5.9. Boat C

5.9.1. Boat C was identified by a steel knee attached to a wooden arm in the southeast of the basin whilst the ground in the area was being turned over (**Plate 10**). It was aligned north to south, adjacent to the central warehouse south of the boat holes.



Plate 10 - Steel arms and wooden planking- direction northwest- scale 1m

5.9.2. Boat C was carefully machine excavated, recorded and then due to hazardous conditions moved and turned over (**Plate 11**); whereby it was apparent the whole length of the boat was present. Measuring the length of underneath from bow to stern was 9.6m in length and 3.9m in width. The vessel had 0.3m of canal sediment beneath (**Figure 14 & Figure 15**).



Plate 11 - Boat C turned over showing flat transom ended- direction west.

- 5.9.3. Stern appeared to be at southern end as there was damage in the centre indicating a possible rudder placement. The vessel appeared very crude in comparison with vessels A and B and had a maximum height of 0.94m which was the maximum depth of the vessel, as a steel arm was wholly intact. The vessel had a flat transom bow and stern in contrast to boats A and B.
- 5.9.4. As boat was turned over, it was seen that bricks had been laid entirely across the hull, steel frames overlain and then the Portland type cement on top, therefore, the bricks were used to repair or provide a flat deck as opposed to wood and making it unlikely they were there to scuttle the boat; more likely providing ballast for such a flat vessel (**Plate 12**).



Plate 12 - Brick and Portland type cement in hull- plan- scale 1m

5.10. Boats D & E

5.10.1. In the area of the western arm of the canal basin long wooden beams were seen at a depth of 138.319mOD. Identified as two possible vessels: with Boat D orientated north to south and Boat E orientated northeast- southwest (**Figure 11**).

5.10.2. Stern posts, wooden knees and rubbing strakes came out with the backfill immediately beneath the bedding layer. They were not *in situ* and likely had been removed from the vessels when the area had been levelled and the basin had been backfilled.

5.10.3. The lengths of the beams at 9.5m (Boat D) and 10.9m (Boat E) did not represent the full length of the barges and likely the northern ends and southern ends had been truncated by the later development.

5.11. Boat F

5.11.1. Boat F was orientated east to west in the central area of the main basin (**Figure 16**). It had a length of 20.218m, width of 4.2m and a level of 137.62mOD at the west and a level of 137.97mOD at the east. This

corresponds to the likely full size of the vessel, measured from top of bow to stern down the centre line, being 72 ft and by the full beam as 14ft.



Plate 13 - Bow of Boat F showing metal strake attached - direction east- scale 1m



Plate 14 - Boat F - working shot - direction south.

5.12. The bow of the vessel was present (**Plate 13 13**), during excavation the stern post was seen laid across the most intact with the stern post not *in situ* within

the backfill. The bow included a brace or deadwood (**Figure 16**) similar to Boat B, likely a repair to strengthen the bow.

5.13. It is probable that the vessel had been damaged by the development of laying the carpark, whereby the need to level the ground resulted in the east end of the vessel being reduced.

5.14. Due to weather conditions of rain and snow the vessel had access problems as after it was machine excavated, the ground on three sides became inaccessible and the water level rose covering the cargo hold (**Plate 14**).

5.15. No finds were retrieved from the vessel.

5.16. Boats A, B, C and F were all 3D modelled with photogrammetry on site and models will form part of the digital archive.

6. DISCUSSION

6.1. Three archives have been consulted in the preparation of this report: Rochdale Local Studies, Manchester Archives and The Canal and Rivers Trust Archive at Ellesmere Port.

6.1.1. Detail from Goad's insurance plan shows how the warehouse buildings were constructed and the goods that they stored (**Plate 15**). The central warehouse (212.K) in the late 19th and early 20th century stored; oils, cotton, flour, paper and grain, all perishable goods which would require cover. A photograph (**Plate 16**) undated but likely when the warehouse was not in use shows three carts likely used by the basin warehouses. The remains of the cart onsite with four wheels was very likely similar.

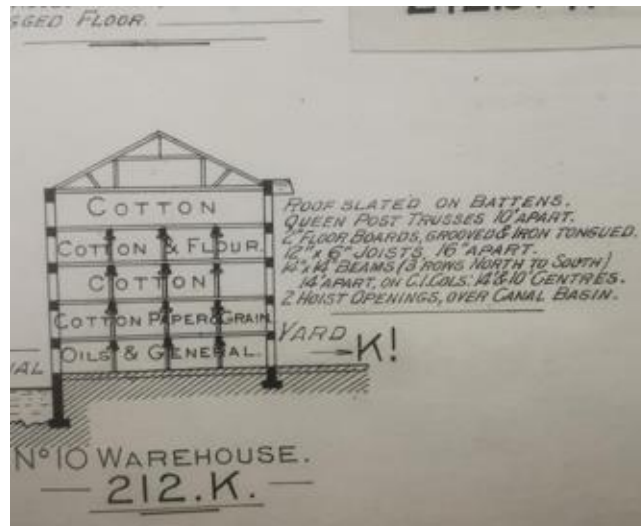


Plate 15 - Detail from Goad Plan- warehouse 212.k



Plate 16 - Eastern elevation of central warehouse- Rochdale Local Studies

6.1.2. The brick stanchion built in the canal basin was one of six pictured (**Plate 17**) with the pent roof overhanging the wharf wall and basin. Two wide beam flats are shown with their hatch boards on but possibly waiting to offload. In the foreground there is a wooden crane, all the cranes on the Rochdale Basin site were wooden and no remains were seen in the works.



Plate 17 - Cotton warehouse and pent roof into the canal with two flat barges against the quay (Clarke, 2008, 16)

6.1.3. Identifying the type of canal barge, three of the six vessels had diagnostic ends; the sterns and one bow, both were seen as being rounded therefore, the boats were double ended. The barges were flat bottomed, carvel built with oak beams and knees. The size of the rudders at 1.55m x 1.75m indicate a horse drawn barge or dumb flat (Stammers 1993). This type can be classed as a wide flat dumb barge or more accurately a Mersey Flat type. Sources agree that Mersey Flat type barges were the main make up of the carrying fleet of the Rochdale Canal Company (Stammers 1993), (Clarke 2008), (Edward Paget- Tomlinson 1974).

6.1.4. The vessels scuttled in the basin are documented as being part of the fleet of Rochdale Canal Company and are in part named;

“ ...Rose and Foxglove and about six other boats, including one by the name of Harry (or Holly) had been interned in the Rochdale basin by 1921, and remain today submerged beneath pile of timber and concrete, most of the waters having been filled inshows the vessels (including an old crane boat) afloat...” (Beckett 1956).

6.1.5. These named boats of *Rose* and *Foxglove* are also described as *Mersey Flats* or *Long Boats* with *Rose* having the adage of being “*An older vintage*” (Beckett 1956). Further sources also cite the scuttled and abandoned vessels left in the basin as being part of the Rochdale Canal company fleet (Edward Paget- Tomlinson 1974), (Clarke 2008). A detailed diagram shows a Rochdale Canal Company dumb flat complete with three rope fenders which were particular to Rochdale Canal Company vessels. The livery of the company was red white and light blue, possibly corresponding to the coloured wood seen in boats A and B.

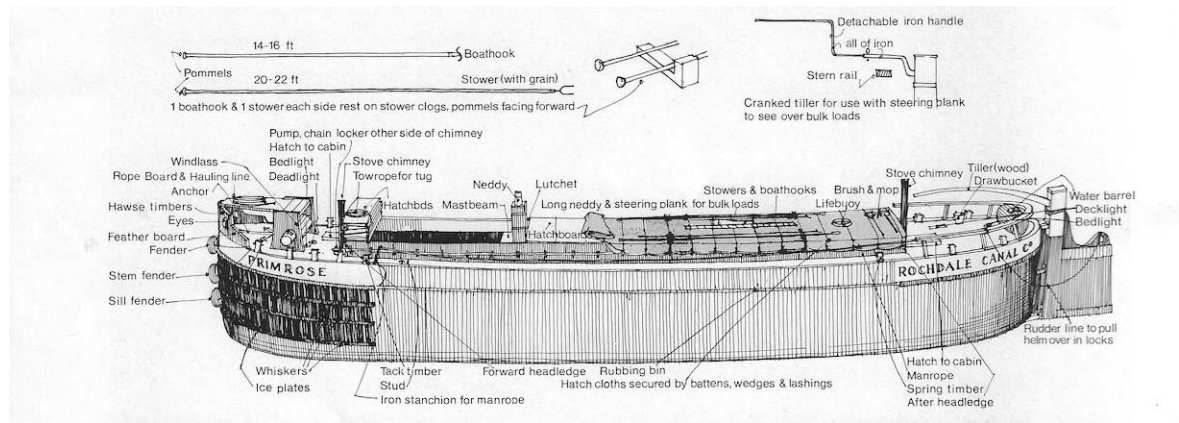


Plate 18- Rochdale Canal Company's flat Primrose (Paget-Tomlinson, 1974, 31)

6.1.6. In dating the vessels at their deposition; Rochdale Canal Company purchased their initial fleet from various already established carriers such as Wm Jackson & Sons in 1888, it is therefore likely the vessels were made in the mid 19th century and at the time of their abandonment may have been between 50 and 100 years old with the former being a conservative guess, as two of the boats showed signs of repair it can be assumed that the latter figure is more accurate.

6.1.7. The boats were abandoned in 1921 and an aerial photograph shows their placement two years later (**Plate 19**). All seven visible boats appear to be dumb flats, with steamers and icebreakers not present. The Rochdale Canal Company had seven steamers in 1916 and two motor motored boats (Clarke 2008), it is likely that these high value vessels were easily sold, therefore not abandoned in the basin. Although some dumb flats may have been sold to private boatmen, it is probable that the flats were in a bad state and possibly would have represented a high cost to repair.



Plate 19 1923 Aerial photograph- Manchester archives (GB127.m67955)

6.2. Boat C was likely a pontoon or float (identified as such from the team at The Canal and River Trust Archive); a small vessel with a functional purpose designed to travel shorter distances. Likely this float was designed to be a platform working wholly in the basin. An undated but attributed to the Rochdale Canal photograph (**Plate 20**) shows men aboard a pontoon using a steel rod to navigate. The bricks and Portland type cement in the hull of the craft may have been used to repair the vessel in the first world war when resources such as wood and steel were scarce.



Plate 20 - Men working on pontoon on Rochdale Canal (date and author unknown) The Canal and River Trust Archives.

6.2.3. Further research into the lives of the boat families and people who worked on the boat would be a valuable insight into this period of Rochdale's Industrial past but is beyond the scope of this report.

7. CONCLUSION

- 7.1. A site at Richard Street Rochdale, is proposed for redevelopment. This report supports an approved planning application (22/00336/FUL) for initial enabling works for further development of the site into affordable residential units and associated recreational spaces.
- 7.2. The site does not lie within a Conservation Area, Area of Archaeological Importance, nor is it within any Registered Parks and Gardens or Battlefields; there are no Listed buildings or Scheduled monuments on the site.
- 7.3. The site does not lie within a Conservation Area, Area of Archaeological Importance, nor is it within any Registered Parks and Gardens or Battlefields; there are no Listed buildings or Scheduled monuments on the site.
- 7.4. The site was divided into areas of high, medium and low interest with the areas of high interest being the focus of two strip and map areas and works in the medium interest areas being subject to an archaeological watching brief over the site of the historic canal basin (691.1.0); to identify and record any abandoned canal vessels.
- 7.5. Two foundations of warehouses were stripped and recorded; the central warehouse was a type 1 warehouse with two boat holes used to directly take cargo off barges with internal hoists. The warehouse consisted of sandstone blocks bonded with lime mortar and the whole footprint of the building was uncovered. The sandstone of the warehouse on the western side was keyed into the eastern side of the arm of the canal wharf. Brick inverted arches aligned north to south were part of the internal foundations.
- 7.6. The Goad Insurance plan 1899-c1910 shows the warehouse to be five stories and indicating what cargo was stored: produce, flour, oil and cotton; valuable goods that would require them not to get damaged in the loading and offloading unlike the nearby slate wharf which would not need cover as the material was not perishable.
- 7.7. The southern cotton warehouse was uncovered in part with the entire of the footprint of the building falling outside the limit of excavation. The flooring of

large Yorkstone slabs was largely intact with minimal truncation. There were both interior and exterior pathways of granite setts, indicating that the goods could be offloaded and moved to factories in the area. Six brick stanchions in the basin, of which one was excavated in the watching brief; held a pent roof, positioned so that wide beam barges could load and off load the cotton under cover.

7.8. During the watching brief on the canal basin the partial remains of six vessels were uncovered. Two types of vessels were recorded; three machine and hand excavated showing them to be double ended flat barges with large rudders indicating they had been pulled by horse. One vessel was identified as a pontoon or float and had a composite structure of wood with steel arms. The hull of the vessel was packed with bricks and Portland type cement and likely used as ballast but also to provide a flat surface to work on. There is tentative evidence that this vessel had a rudder but likely it was moved around the basin by manned rods as seen in archival photographs. A further two boats were identified from oak planking with aerial photography showing that there two were wide beam flat barges in the area of the second, eastern canal arm.

7.9. There was no evidence that any of these six vessels had been adapted for an engine.

7.10. Three of the five vessels can be classified as Mersey flat type boats: a distinctive double-ended, carvel-built barge typical of the North West region. Such styled boats were made across the region such as at Rathbone's in Stretford and Yarwood's in Northwich and were designed to be seaworthy on the Mersey and to be able to have a good cargo capacity of between 60 and 90 tonnes, even with the shallow draught (4ft) of the Rochdale canal and locks.

7.11. The vessels have been cited as being deliberately abandoned by the Rochdale Canal Company carrying fleet in June 1921 when the company disbanded and sold the fleet. These vessels left in the basin represent low value flat barges which would likely not be able to be maintained or repaired without considerable expense.

- 7.12. The vessels were left in the basin until it was backfilled in the 1960s; as no mast beams, stowers or fenders were retrieved from the boats or the backfill it is likely that these vessels were stripped of such reusable items.
- 7.13. Some items such as the boat name plates, and Rochdale Canal Co plates may have been taken as a memento.
- 7.14. Although the vessels have not been able to be definitively named, secondary sources cite the names of three abandoned vessels in the basin to be *Rose*, *Foxglove* and *Holly (or Henry)*. Although they cannot be attributed, they indicate the age of the vessels at deposition. Rochdale Canal Company purchased their initial fleet from various already established carriers such as Wm Jackson & Sons in 1888, it is therefore likely the vessels were made in the mid 19th century and at the time of their abandonment may have been between 50 and 100 years old.
- 7.15. It is probable the composite pontoon or float was made later and will have been made specifically to be utilised at the basin.
- 7.16. It could be tentatively suggested that the two barges in the boat holes of the central cotton warehouse may have been worked in tandem due to being abandoned together, aligned the same and both with the visible remains of painted green and red inner planking.
- 7.17. Identification of the wood in vessels A and B show that the beams, and knees of the boats were oak, and the inner planking was pitch-pine this further strengthens the argument for them to be Mersey Flat type vessels.
- 7.18. Four of the vessels were recorded with photogrammetry with the 3D models ready for deposition at a digital depository.
- 7.19. These excavated vessels represent a discrete time in Rochdale's industrial past, signifying the decline and demise of the canal carrying fleets after WWI.
- 7.20. Some stonework from the wharf and both the rudders from boats A and B have been retained for possible use in the development's landscaping scheme. A four wheeled horse drawn cart was retrieved from the backfill and has also been retained.

7.21. The information detailed above and it's relation to the historic canal basin at Rochdale with the excavation of the foundations of canal warehouses, canal wharf walls and partial remains of flat barges contribute to the North West Regional Research Framework with reference to the following Industrial Agenda <https://researchframeworks.org/nwrf/industrial/>:

- Ind68 – What can archaeological studies tell us about commodity storage and exchange buildings?
- Ind98 - How well understood and recorded are the north-west's canals, waterways and basins?

8. ARCHIVES

8.1. Paper

8.1.1. The paper archive consists of:

- 1 x Drawing Register
- x Drawing Paper
- 8 x Photographic Register
- 566 x Digital Photographs
- 3 x Context Register
- 92 x Context sheets

8.1.2. The paper archive will be deposited with Rochdale Local Studies.

8.2. Digital

8.2.1. A copy of the report will be digitally deposited with the HER and OASIS.

8.2.2. For sites with a digital only archive, a full (selected) archive will be deposited with the Archaeological Data Service (ADS); for sites with a companion paper archive, only selected born digital data will be deposited with the ADS.

BIBLIOGRAPHY

- BGS, 2022. 'British Geological Survey Geoindex'. Available at: <http://www.bgs.ac.uk/geoindex>.
- BIRCHALL, S. & GRIFFITHS, K., 2022. *Archaeological Evaluation at Neighbourhood, Richard Street, Rochdale*.
- CANAL AND RIVER TRUST, 2022. 'Rochdale Canal'. Available at: canalrivertrust.org.uk.
- CHARTERED INSTITUTE FOR ARCHAEOLOGISTS, 2021. 'Code of Conduct: professional ethics in archaeology'.
- CHARTERED INSTITUTE FOR ARCHAEOLOGISTS, 2014. 'Standard and Guidance for nautical archaeological recording and reconstruction'.
- ClfA, 2020a. 'Standard and Guidance for Archaeological Excavation'.
- ClfA, 2020b. 'Standard and guidance for the collection, documentation, conservation and research of archaeological materials'. Available at: https://www.archaeologists.net/sites/default/files/ClfAS%26GFinds_2.pdf.
- CLARKE, M, 2008. 'The Rochdale Canal and its Carrying Department'. *Waterways Journal*, **10**, pp.5–19.
- EDWARD PAGET- TOMLINSON, 1974. *Mersey & Weaver Flats: The sailing river and canal flats of north-west England*. Robert Wilson Publication.
- J, BECKETT, 1956. *History of the Rochdale Canal*.
- MATTHEWS R, 2020. 'Archaeological Desk Based Assessment Nowhaus, Richard Street, Rochdale'.
- NATIONAL ARCHIVES, 2019. 'Census Transcript Search, 1841-1911 [database online]'. *The Genealogist*. Available at: www.thegenealogist.co.uk [Accessed May 18, 2019].
- NEVELL, M, 2003. 'The Archaeology of the Canal Warehouses of Nort-West England and the Social Archaeology of Industrialisation'. *Industrial Archaeology Review*, **25**(1), pp.43–57.
- R, J. PARR, 1910. 'Canal Boat Children'.
- RANSOM, P J, 1979. *The Archaeology of Canals*. World's Work Ltd, Tadworth.
- STAMMERS, M, 1993. *Mersey Flats and Flatmen*. Terence Dalton Ltd & National Museums and galleries on Merseyside.
- BRITISH GEOLOGICAL SURVEY, 2022. 'British Geological Survey GeoIndex'. Available at: <http://www.bgs.ac.uk/geoindex>.
- ClfA, 2021. 'Code of Conduct: professional ethics in archaeology'. Available at: <https://www.archaeologists.net/sites/default/files/Code%20of%20conduct%20revOct2021.pdf>.

CIFA, 2020a. 'Standard and Guidance for Archaeological Excavation'.

CIFA, 2020b. 'Standard and guidance for the collection, documentation, conservation and research of archaeological materials'. Available at:

https://www.archaeologists.net/sites/default/files/CIfAS%26GFinds_2.pdf.

DLUHC, 2021. 'National Planning Policy Framework'. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004408/NPPF_JULY_2021.pdf.

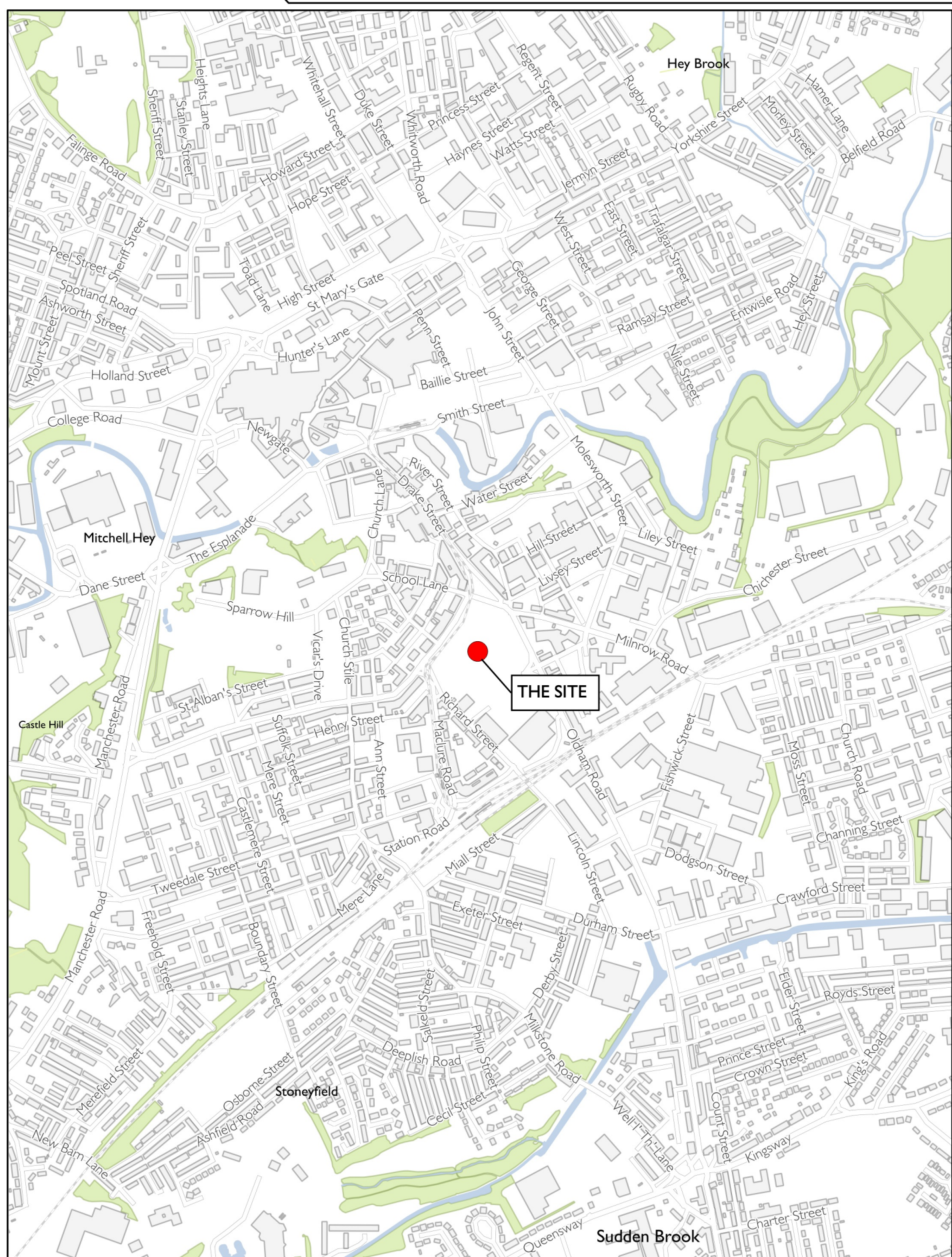
HISTORIC ENGLAND, 2015. 'Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide'. Available at: <https://historicengland.org.uk/images-books/publications/morphe-project-managers-guide/>.

APPENDIX 1 – GLOSSARY

Glossary of terms used within the report from (Stammers, M 1993):

Apron	Inner timber of the stern post
Deadwood	A timber in the bow or stern to reinforce the stem or stern post
Rider kelson	A line of timber fastened to the kelson in the centre of the boat.
Hatch Boards	Wooden Planking used to cover the cargo hold
Strakes	Metal strakes as rubbing strakes on the bow

FIGURE I // Site Location - General



0 250 m



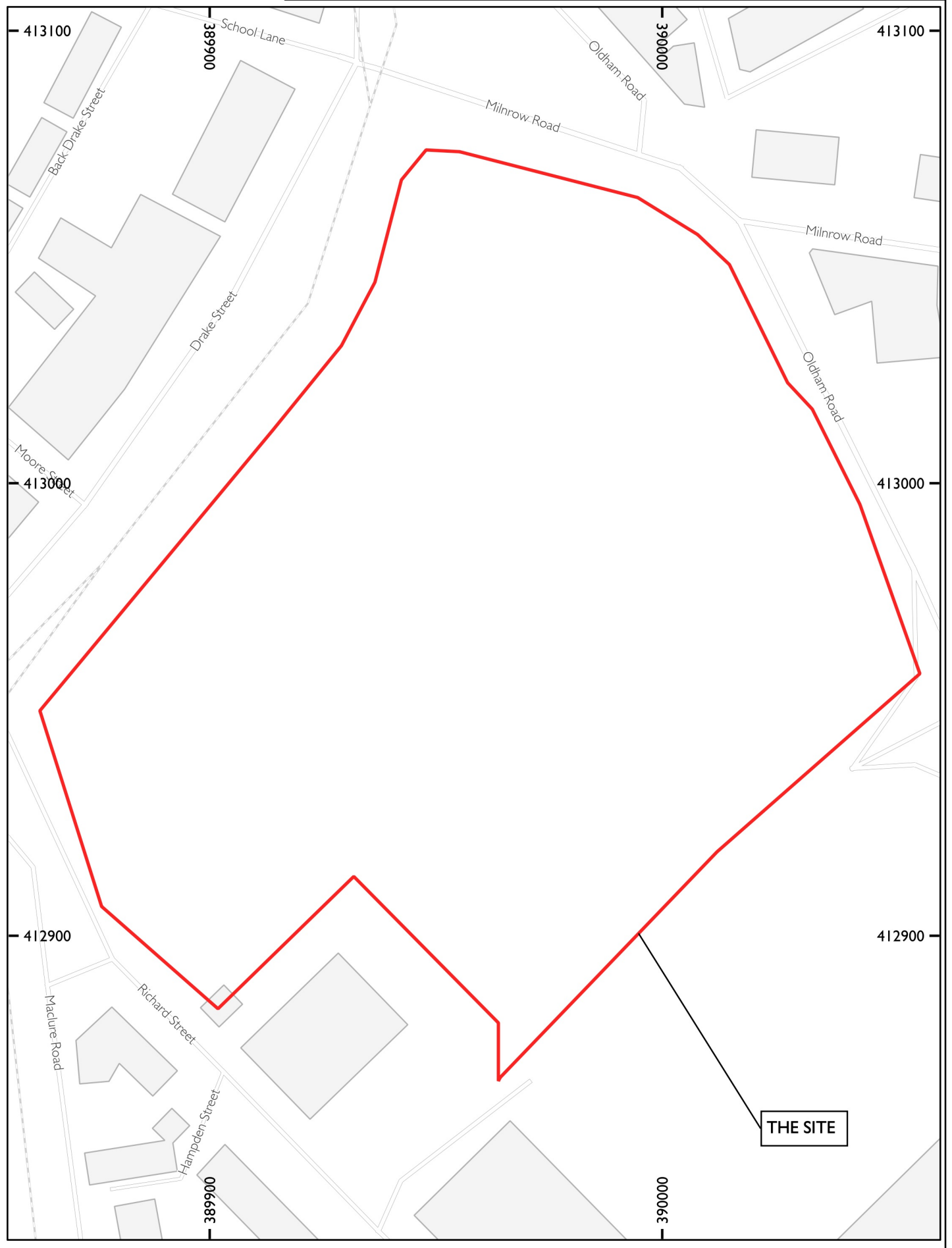
PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // Site Location

Contains OS data © Crown Copyright 2023 Open Government Licence 3.0

DOC REF: LP3403C-AMR

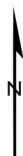
FIGURE 2 // Site Location - Detail



Redline boundary

0

50 m



PROJECT // 3403C - Neighbourhood Rochdale

DESCRIPTION // Site Location

Contains OS data © Crown Copyright 2023 Ordnance Survey 100041041

DOC REF: LP3403C-AMR

00068E

00006E

413000

413000

412900

412900

389900

390000

THE SITE

Redline boundary

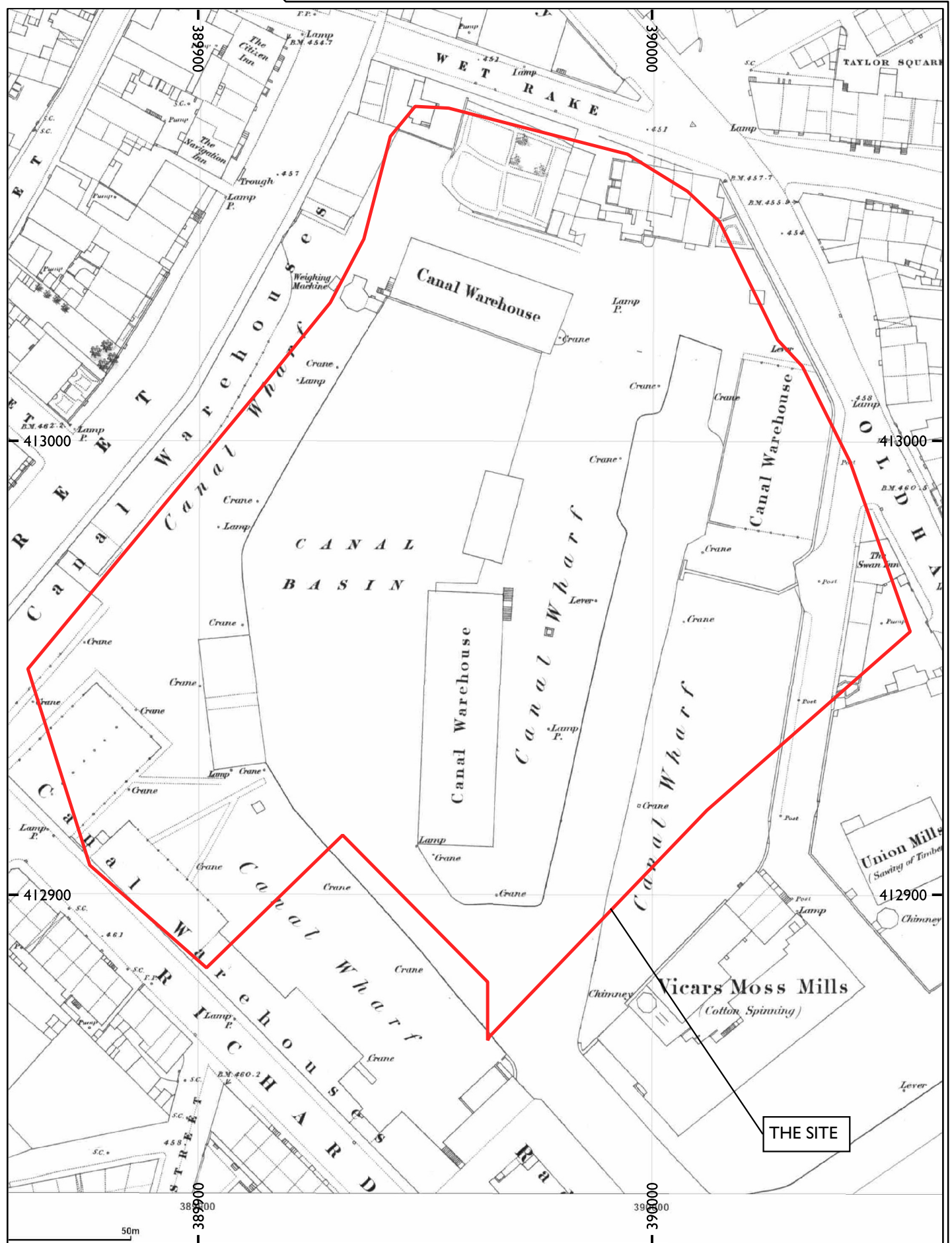
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DESCRIPTION // Archive map of Rochdale Canal Basin Pre-1822

DOC REF: LP3403C-AMR

FIGURE 4 // 1851 OS Map



 Redline boundary

0 50 m

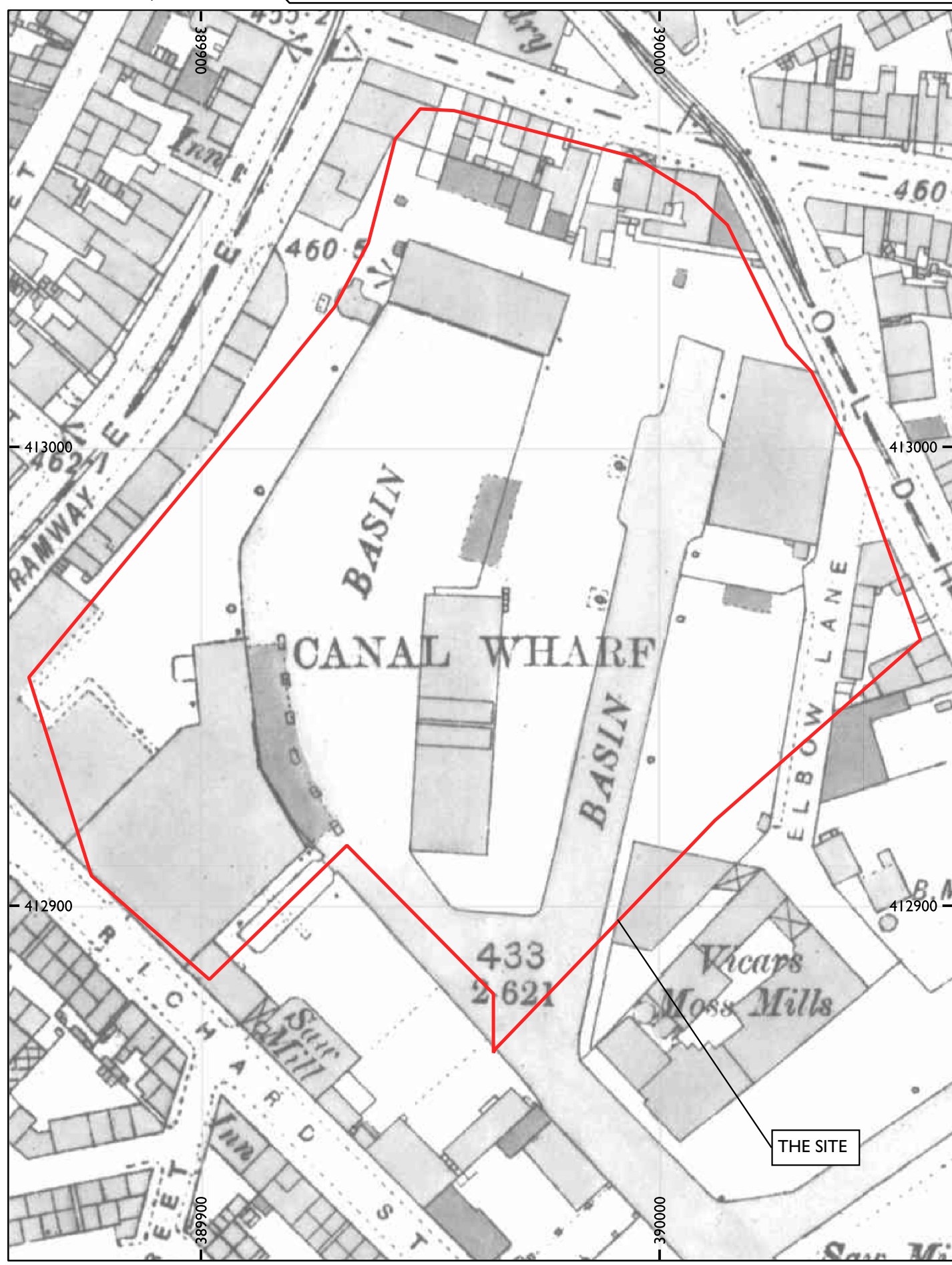


PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // 1851 OS Map

DOC REF: LP3403C-AMR

FIGURE 5 // 1891 OS Map



Redline boundary

0 50 m



PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // 1891 OS Map

DOC REF: LP3403C-AMR

A historical map of a canal basin area, likely from the 19th century. The map shows a central canal basin with several buildings and structures. A red line outlines a specific area labeled "THE SITE" in a white box. The map includes various labels such as "DRAKE ST.", "CANAL BASIN", "WHSE.", "MAN. SHIP CANAL CO.", "ELBOW LANE", and "FLANNEL FAC.". There are also numerical coordinates along the edges: 413000, 412900, 389900, and 390000.

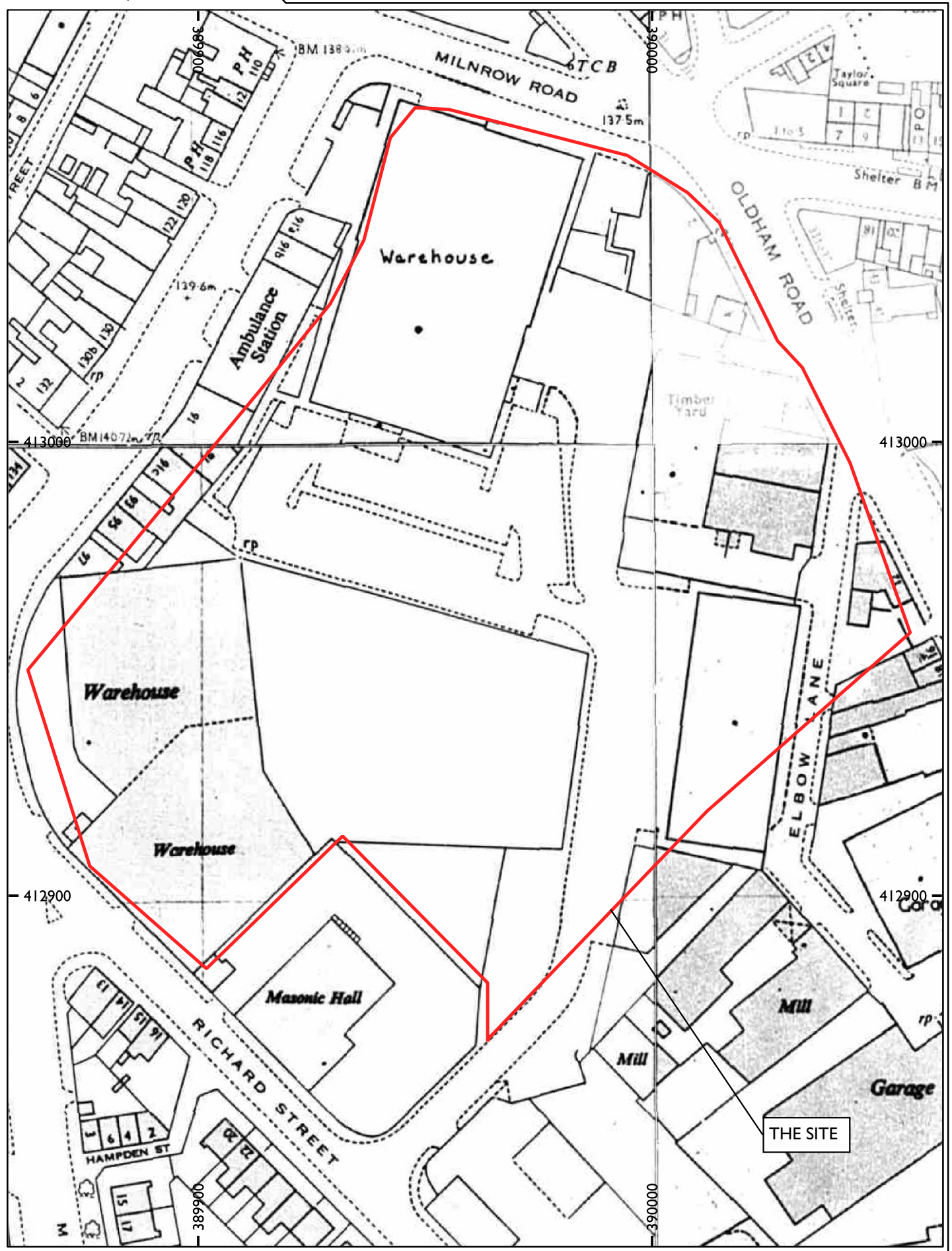
Redline boundary

50 m

DESCRIPTION // Goad Insurance Map 1899-c.1910

DOC REF: LP3403C-AMR

FIGURE 7 // 1982 Map



Redline boundary

0 50 m

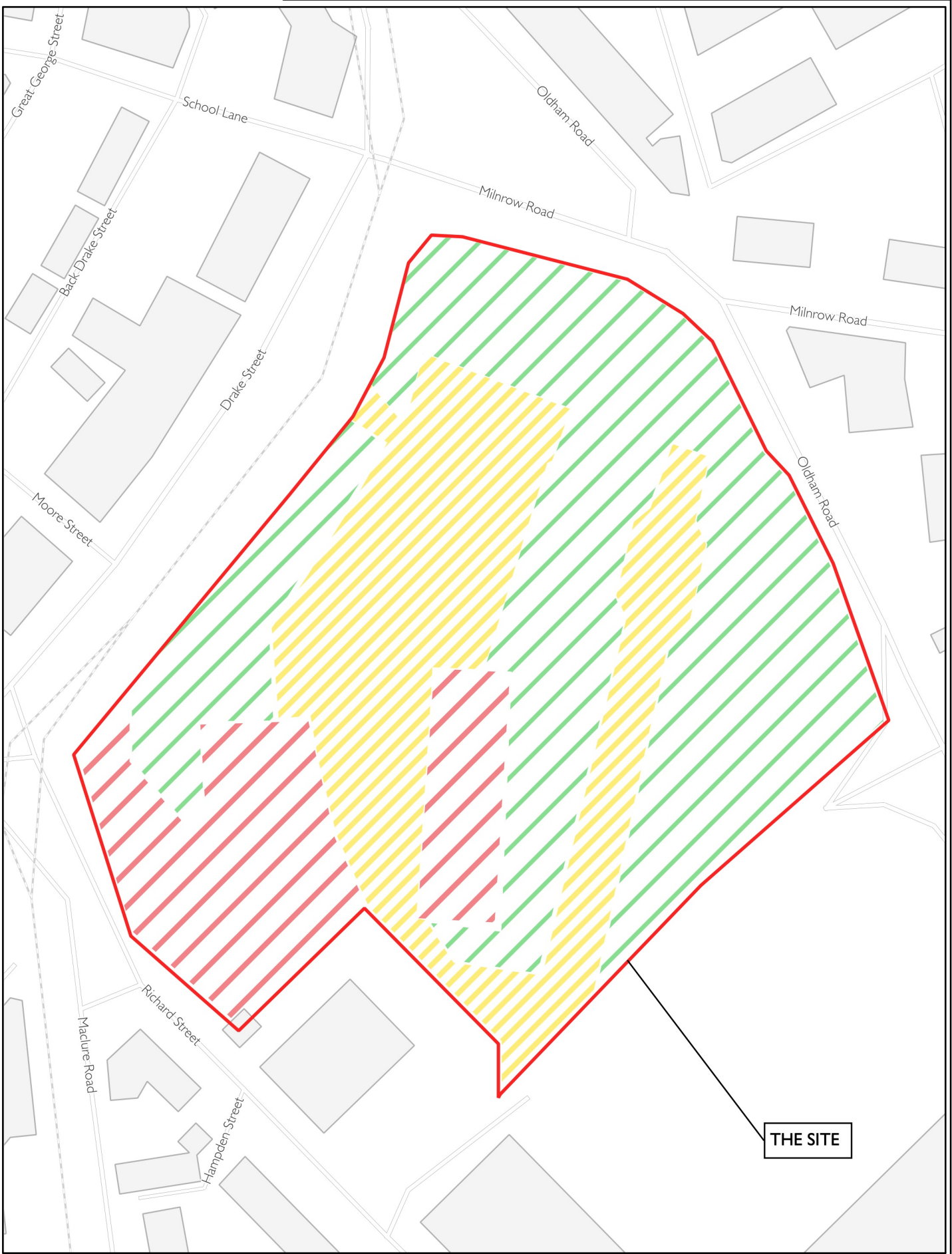


PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // 1982 Map

DOC REF: LP3403C-AMR

FIGURE 8 // Areas of Archaeological Interest



Areas of Interest

- High Archaeological Interest
- Medium Archaeological Interest
- Low Archaeological Interest

0 25 m



PROJECT // 3403C - Neighbourhood, Rochdale

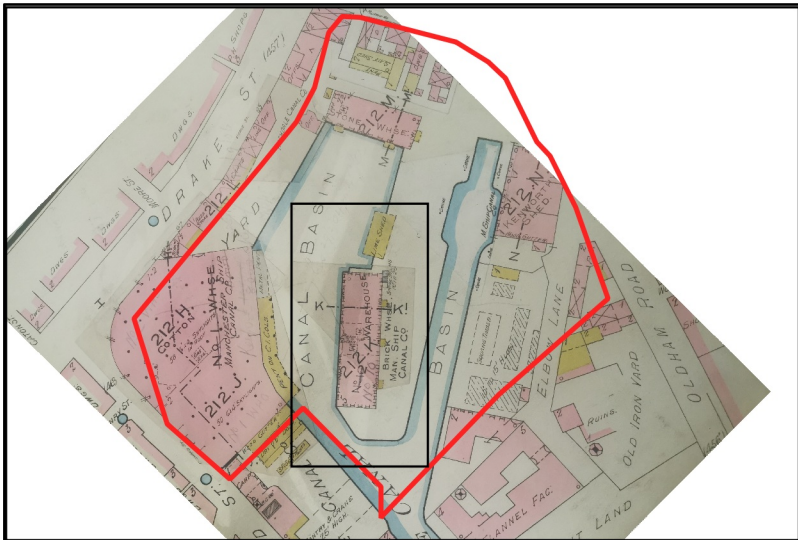
DESCRIPTION // Areas of Archaeological Interest

DOC REF: LP3403C-AMR

FIGURE 9 // Cotton Warehouse

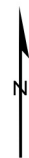


FIGURE 10 // Boathole Warehouse



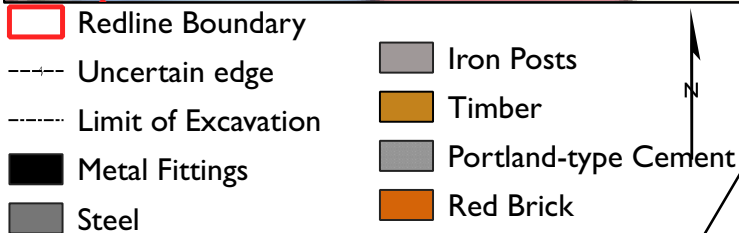
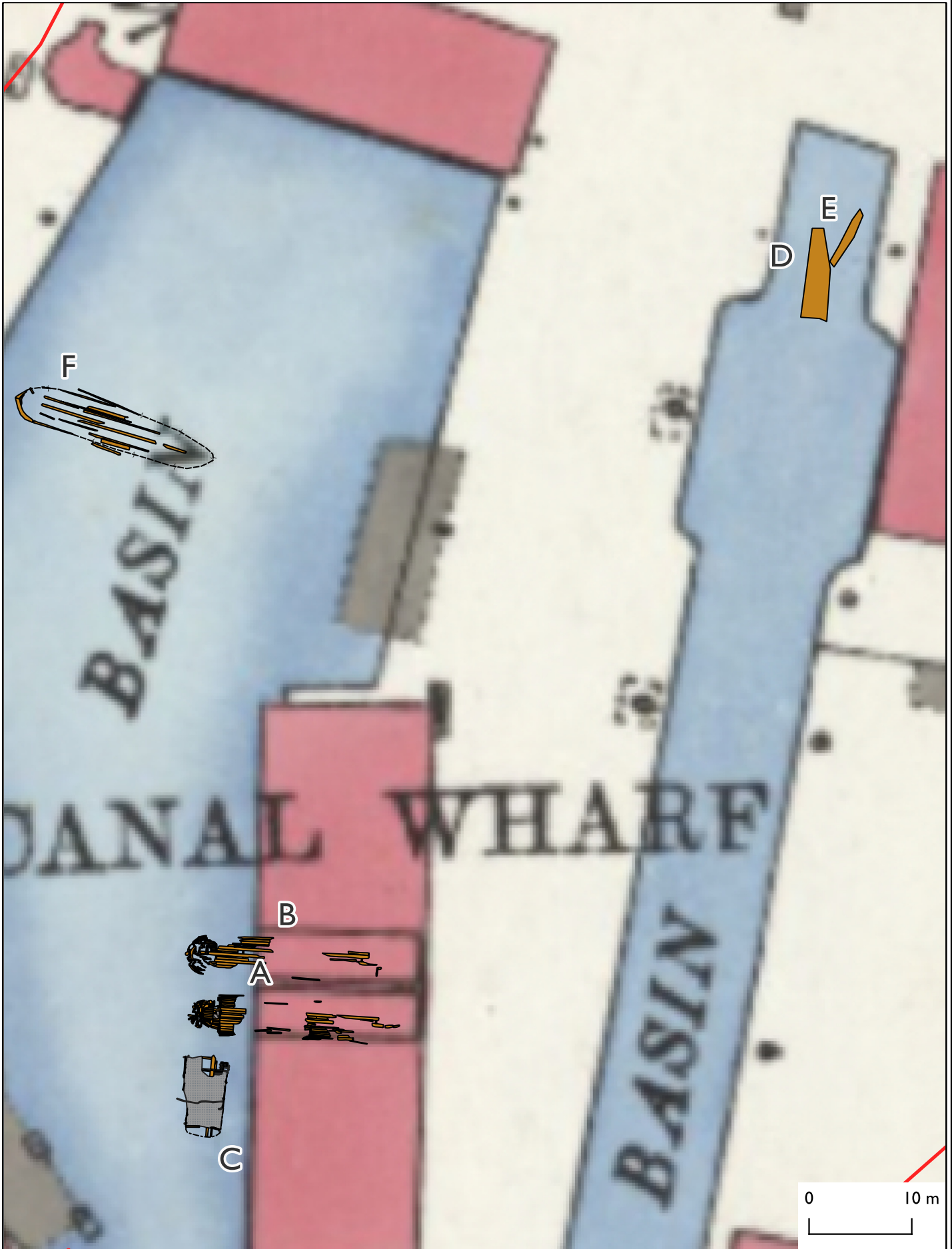
- Red Brick
- Iron
- Mortar
- Stone
- Extent of Context
- Limit of Excavation
- Truncation

0 10 m



PROJECT // 3403C - Neighbourhood, Rochdale
DESCRIPTION // Boathole Warehouse
DOC REF: LP3403C-AMR

FIGURE 11 // Boats A, B, C, D, E and F

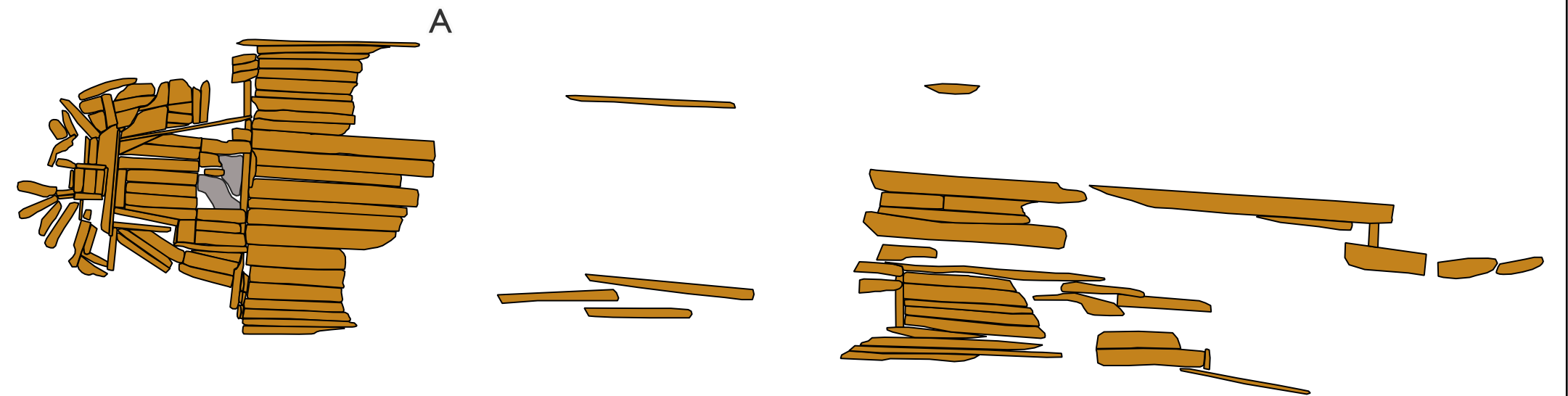


PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // Boats A, B, C, D, E and F

DOC REF: LP3403C-AMR

FIGURE 12 // Boat A



Iron Posts
Timber

0

5 m

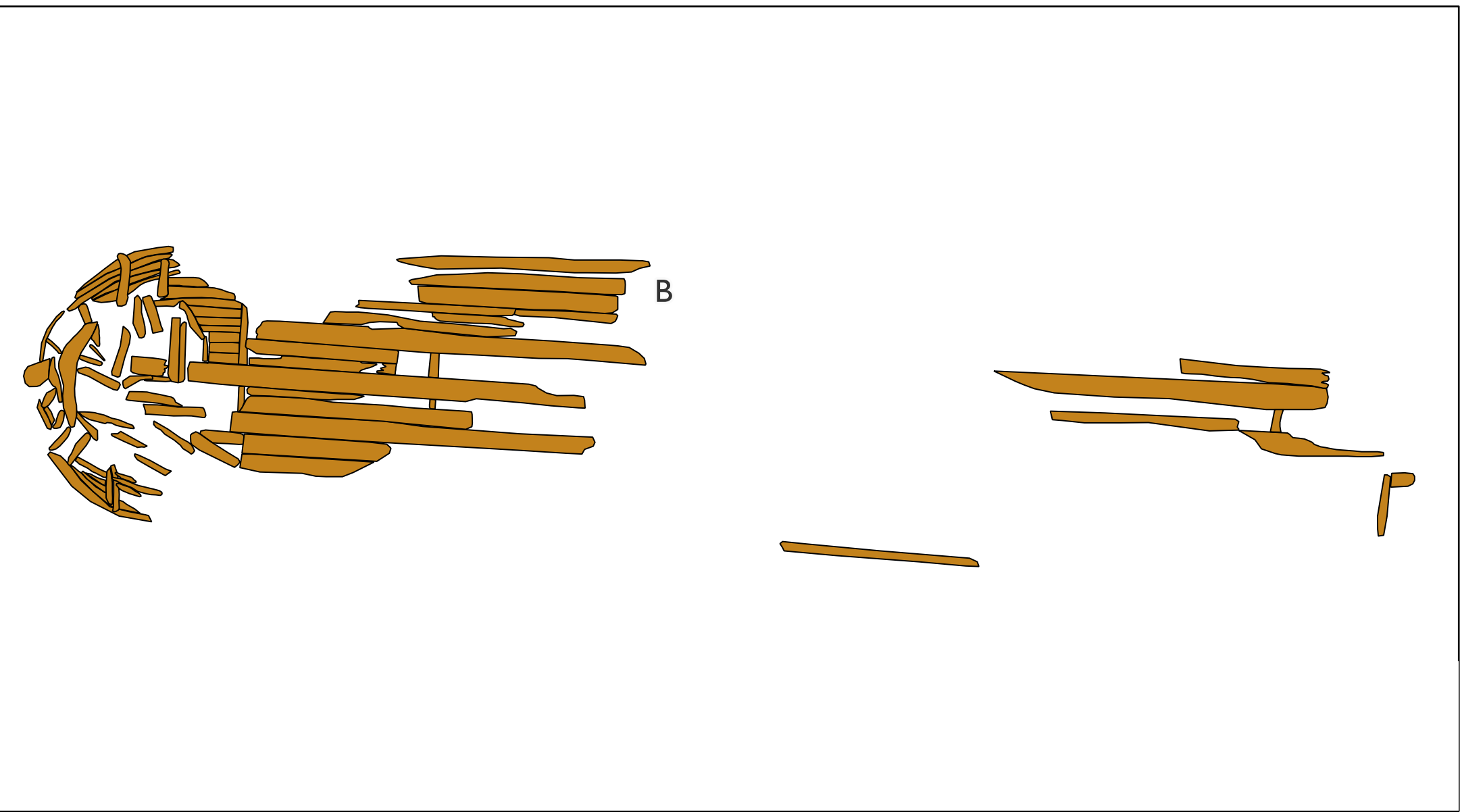


PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // Boat A

DOC REF: LP3403C-AMR

FIGURE 13 // Boat B



 Timber

0

5 m

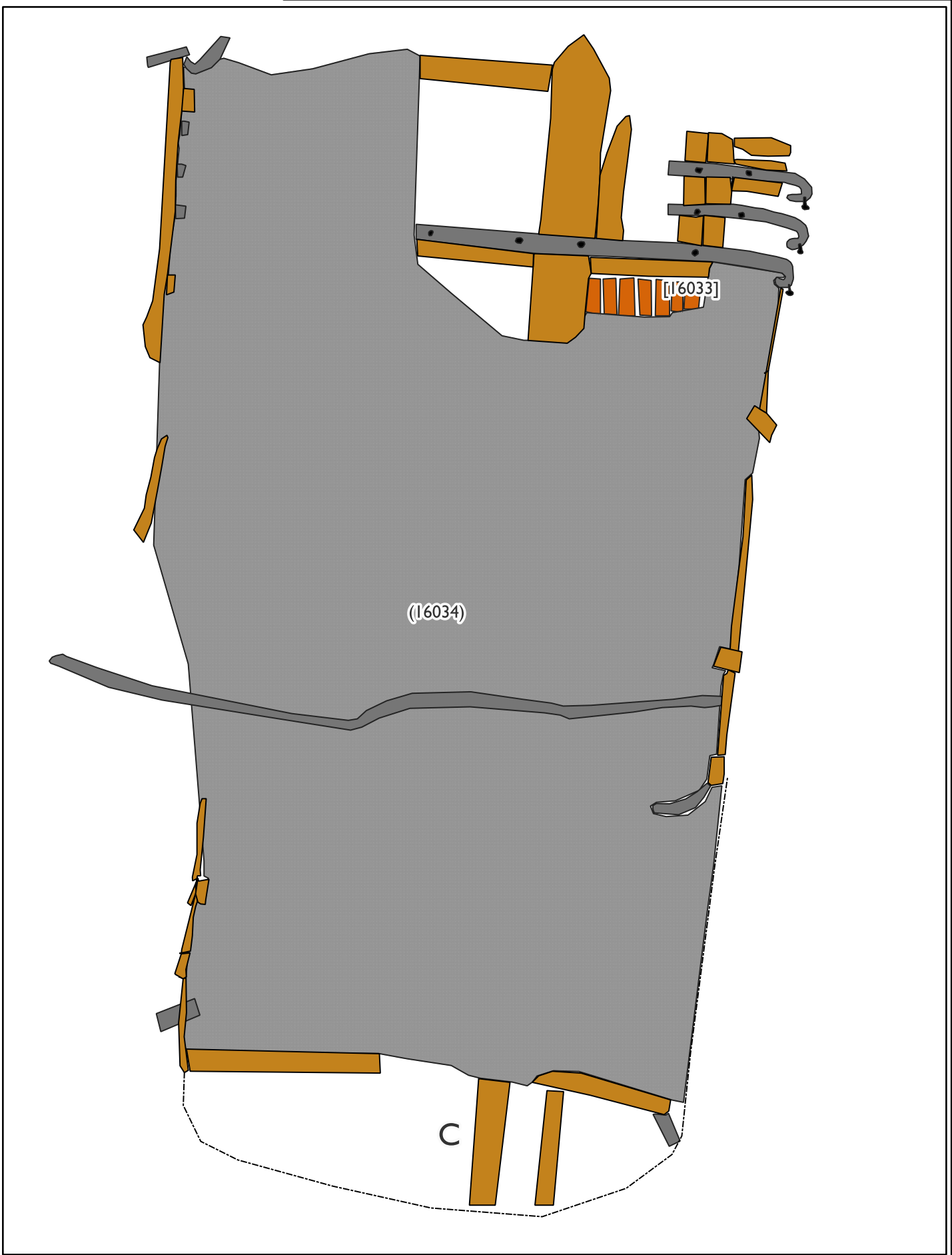


PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // Boat B

DOC REF: LP3403C-AMR

FIGURE 14 // Boat C



----- Limit of Excavation

■ Metal Fittings

■ Steel

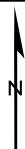
■ Timber

■ Portland-type Cement

■ Red Brick

0

1 m

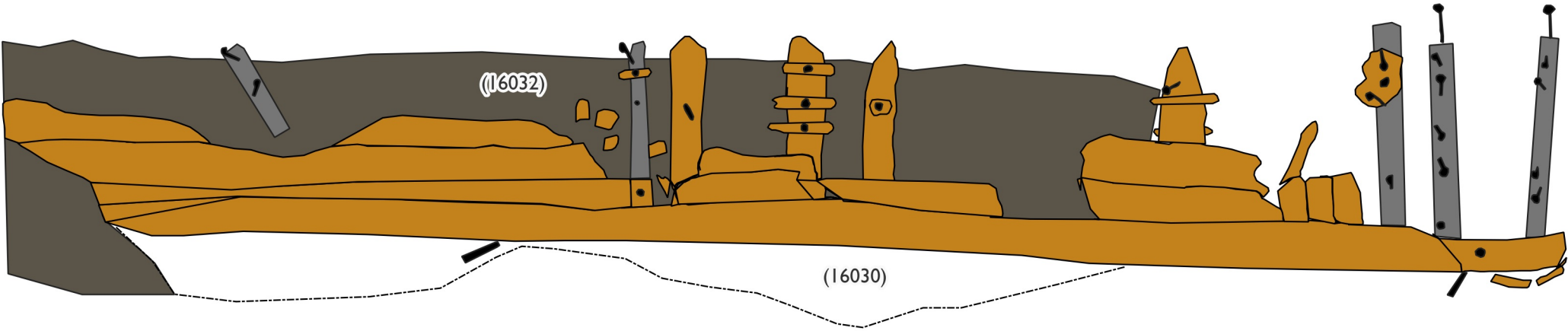


PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // Boat C

DOC REF: LP3403C-AMR

FIGURE 15 // East section of Boat C



----- Limit of Excavation

■ Metal Fittings

■ Timber

■ Steel

■ Spoil

0 1 m

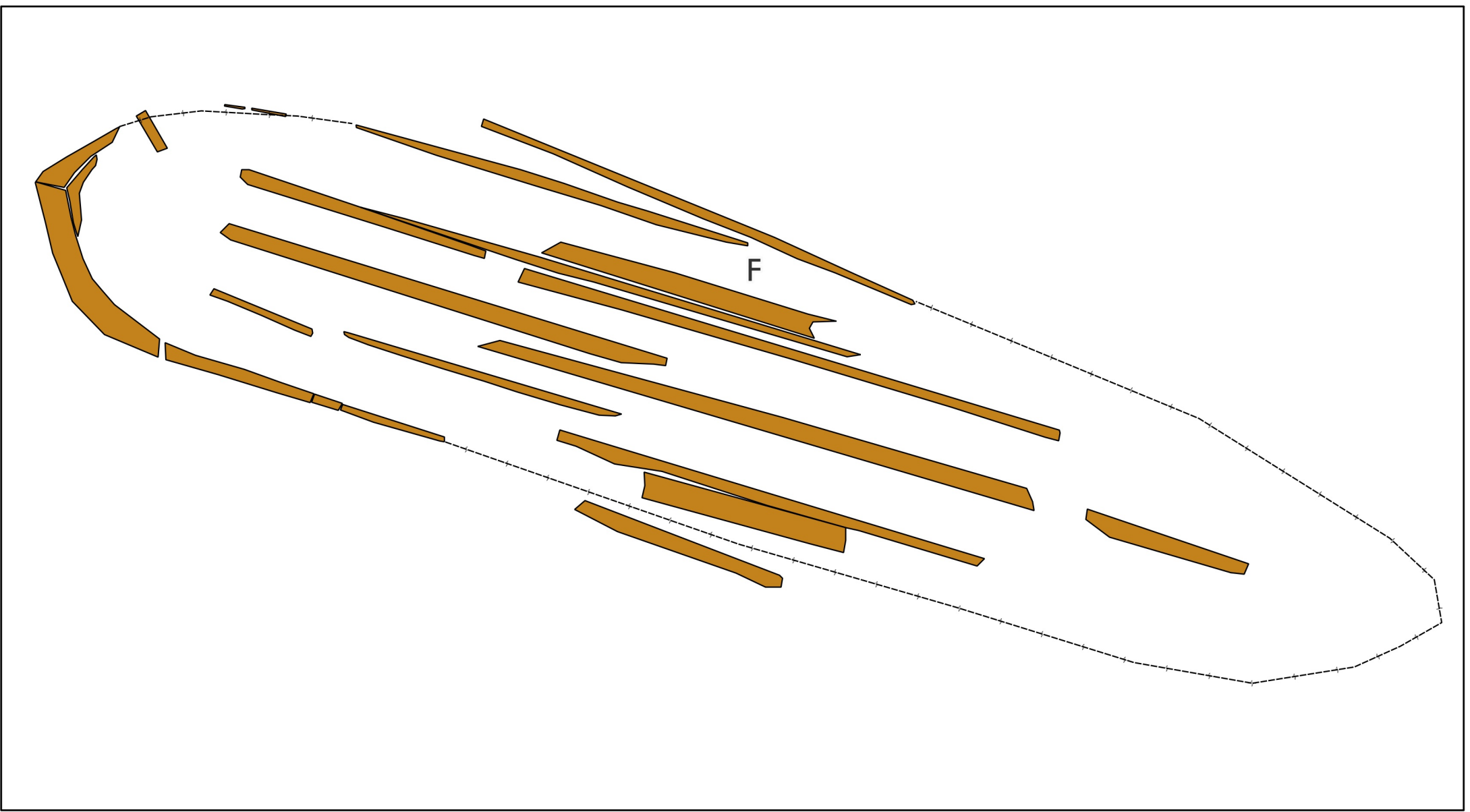


PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // East section of Boat C

DOC REF: LP3403C-AMR

FIGURE 16 // Boat F



--- Uncertain edge
■ Timber

0

5 m



PROJECT // 3403C - Neighbourhood, Rochdale

DESCRIPTION // Boat F

DOC REF: LP3403C-AMR