

Milliners Wharf, Ancoats, Manchester Archaeological Excavations



The remains of basement dwellings uncovered in Trench 2.

ARS Ltd Report No. 2014/61
OASIS No: archaeo15-179935

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Executive Summary

Project Name: Milliner's Wharf

Site Code: MWM 14

Planning Authority: Manchester City Council

Location: Milliner's Wharf, Manchester, M4 7AW

Geology: Devensian till (superficial) and Manchester Marls Formation/ Openshaw sandstone (bedrock geology) (British Geological Survey 2014).

NGR: SJ 385635 398371

Date: April 2014

In July 2014 Archaeological Research Services Ltd. was commissioned by GMI Construction Group to undertake archaeological excavations on land at Milliners Wharf, Manchester prior to development. The proposed development is the second phase of construction at Milliners Wharf and involves the construction of two new apartment buildings.

The proposed development area and the wider development area was subject to a Desk-Based Assessment (DBA) and historic building survey (UMAU 2006), evaluation trenching and selective area excavation under a previous planning application (UMAU 2007). It was not possible at that time to complete the full development and works were ended following the construction of the current building 'Milliners Wharf'. The proposed development area for Phase II was also included within the previous archaeological investigations and it is not intended to repeat the previous in-depth research in this report. Therefore, the reader is referred to the previous reports (UMAU 2006; UMAU 2007).

A further Assessment was carried out for Phase II by Archaeological Research Services Ltd. This assessment determined that within the proposed development area there are 11 undesignated archaeological remains of early workers' housing which date from 1795 – 1897; these were demolished between 1824 and 1999 (Tong 2014).

Currently, the sample of excavated domestic dwellings within Manchester is limited. Archaeological exploration of workers' housing in the city of Manchester and its region is a relatively new field of investigation and research, and forms part of the process of understanding Manchester's rich industrial heritage. There is a growing body of data which is increasing the understanding of 18th-20th centuries construction methods and occupation. For these reasons, any remains of workers' housing within the proposed development area are of local and potentially regional significance.

The archaeological evaluation was carried out to build on the results of the previous DBAs and the 2007 evaluation trenches (UMAU 2007). In total four trenches were excavated during the excavation, which revealed evidence of back-to-back workers' housing with associated utilitarian wares. Evidence for a canal wharf and later mill complex was also recovered.

1 Introduction

1.1 In April 2014 Archaeological Research Services Ltd. was commissioned by GMI Construction Group to undertake archaeological excavations at Milliners Wharf, Ancoats, Manchester. The excavations were carried out as condition 22 of the planning consent (planning reference 100991/OO/2013/N2) prior to the construction of two new apartment buildings. An Assessment carried out by Archaeological Research Services Ltd (Tong 2014) determined that within the proposed development area there are 11 undesignated archaeological remains of early workers' housing which date from 1795 – 1897 and that these were demolished between 1824 and 1999.

1.2 The site is situated in Manchester and is centred at SJ 385635 398371. It sits approximately 1.3km east from the centre of Manchester.

2 Historical and Archaeological Background

2.1 Prehistoric Period

2.1.1 No prehistoric finds have been recorded within the wider study area.

2.2 Romano-British Period

2.2.1 One Roman find is recorded within the wider study area, being approximately 135m north of the proposed development area. It comprises a Roman road (MGM 47) running from Manchester to Castleshaw and is believed to have run through Ancoats along the route of the road now known as "Old Mill Road". It is considered that there is a low potential for surviving Roman archaeology to survive in the vicinity of the proposed development area due to the intensively developed nature of the wider study area during the industrial period.

2.3 Medieval Period

2.3.1 Cartographic evidence showed that prior to the Industrial period the proposed development area lay within agricultural land beyond the built-up area of Manchester. The proposed development area was shown as fields until Green's map of 1787-94 (Figure 60). Due to the disturbance and development of the ground during the Industrial period it is likely that any pre-existing buried archaeological remains have been obliterated, although there is a small probability that some deeply buried medieval, Roman or prehistoric remains could survive in those pockets of the site least affected by the Industrial period development. Therefore, it is most likely remains dating to the Industrial Period are most probable to survive (see below).

2.4 Late 18th to 20th Century (Industrial Development)

2.4.1 The last quarter of the 18th century saw a large increase in the population of Manchester, fuelled by an upsurge in the textile industry in which Manchester was involved as both a manufacturer and commercial centre. The proposed development area is situated within the region of Ancoats which became Manchester's first industrial suburb, where land was assigned to factories and workers' housing. The Ashton Canal was completed in 1796, and provided the necessary transport links to make the construction of new mills and other works within the region feasible.

2.4.2 Swire's map of 1824 (Figure 61) indicates that the land within the proposed development area had been extensively developed, including a cotton spinning mill complex (MGM 2707), a brewery (MGM 18144), an engine house (MGM 18145) and a warehouse (MGM 12441). An arm of the Ashton Canal was also depicted extending southwards from the canal into the proposed development area which was possibly constructed to service the industrial buildings within the proposed development area (MGM 18140). A discussion of the development of these industrial buildings is provided in the previous desk based assessment (UMAU 2006).

2.5 Late 18th to 20th Century (Domestic and Commercial Development)

2.5.1 It is believed that Ancoats was "the first residential district in the modern world intended for occupation by one social class, the new urban working class" (Roberts 1993, 1). There is evidence for both residential and commercial development within the proposed development area which attests to growth within the early to mid-19th century.

2.5.2 Swire's map of 1824 depicted workers' housing within the proposed development area. However, the small scale of this map makes it difficult to determine individual plots or their composition. By the late 1970s/early 1980s all of these buildings had been demolished. As such, the cartographic evidence for the buildings provides much of the record of these buildings. Extensive research of the cartographic record for the workers' housing is contained within the previous DBA (UMAU 2006).

3 Method Statement

3.1 The aims of the archaeological excavations were as follows.

- Excavate and record archaeological deposits and features within the development area.
- Produce relative and absolute dating and phasing for deposits and features recorded on the site.
- Establish the character and delimit the extent of deposits in order to define functional areas on the site such as burial, industrial, domestic *etc.*
- Produce information on the economy and local environment.

The trench-specific objectives were as follows.

- Trench 1: uncover any remains of workers' housing which may have been constructed between 1836 and 1848.
- Trench 2: uncover any remains of workers' housing which may have been constructed by 1821.
- Trench 3: uncover any remains of worker's housing which may have been constructed between 1821 and 1824.
- Trench 4: uncover any remains of workers' housing and an arm of a canal which first appears in 1821 and recover any information relating to the industrial activity which is known to have existed in the area in the early 19th century. The workers' housing may have been constructed between 1836 and 1848.

3.2 The trenches were opened by machine using a toothless ditching bucket. All machine excavation was carried out under careful archaeological supervision.

3.3 The deposits were recorded according to the normal principles of stratigraphic excavation. Each context was recorded on pro-forma records which included the following: character and contextual relationships; detailed description (dimensions and shape; soil components, colour, texture and consistency); interpretation and phasing as well as cross-references to the drawn, photographic and finds registers.

3.4 Each trench was planned at 1:50. Trench sides were also drawn in section at a scale of 1:20. All deposits and the base of each trench were levelled and heights are expressed in metres above Ordnance Datum.

3.5 A photographic record was maintained including photographs of each trench. All images were taken in colour digital format, and contain a graduated photographic scale.

4 Results

Four trenches were excavated in total. With the exception of Trench 1, all of the trenches produced archaeological remains. As a contingency for the lack of archaeological evidence present in Trench 1, and in order to fully understand the remains present in Trench 2, Greater Manchester Archaeological Advisory Service's Heritage Management Director (Archaeology) requested that Trench 2 be extended in order to expose one complete unit of a back-to-back dwelling.

4.1 Trench 1

4.1.1 Trench 1 measured 9.50m in length (north-west to south-east) by 4.90m in width (north-east to south-west) and achieved a maximum depth of 1.90m. The trench was placed to uncover any remains of workers' housing which may have been constructed between 1836 and 1848.

4.1.2 The stratigraphic sequence of Trench 1 comprised a thin mixed layer of topsoil and made-ground (100) comprising medium brown silty clay with frequent demolition material, present throughout the entirety of the trench with a maximum depth of 0.08m.

4.1.3 Immediately underlying the topsoil/made-ground layer (100) was a thick demolition deposit (101), comprising a mottled mix of brown, yellow and grey silt and clay with very frequent inclusions of brick, timber, concrete and fragmented utilitarian waste. This deposit was across the entirety of the trench and generally exceeded the base of the trench, although in small patches the natural clay (102) comprising soft and sticky grey and yellow mottled clay was encountered at approximately 1.8m BGL. This natural clay was present intermittently throughout the trench and was commonly cut into by demolition deposit (101) (Figure 3).

4.1.4 No finds or features of archaeological interest were encountered in Trench 1. It seems likely that the demolition of the houses, and perhaps the construction and extension of a nearby mill (present on 1958 OS map) (Figure 63), removed any trace of the former dwellings.

4.2 Trench 2

4.2.1 Trench 2 was excavated and extended in order to reveal one complete unit of back-to-back housing. As a result, the trench measured a maximum of 13.5 metres in length (north-east to south-west) by a maximum of 8.5 metres in width (north-west to south-east) and achieved an overall maximum depth of 2.20m. The trench was placed in order to uncover any remains of workers' housing which may have been constructed by 1824.

4.2.2 The stratigraphic sequence of Trench 2 comprised a mixed topsoil / made-ground deposit (200) comprising dark red-brown clay silt with frequent inclusions of brick and other demolition debris. This was present across the entirety of the trench, with a maximum thickness of 0.10m. Directly underlying (200) was demolition deposit (201), comprising dark red-brown clay-silt with frequent demolition debris including bricks, concrete, timber, textile and stone. This deposit was observed to be a maximum thickness of 3.10 metres and cut into the natural clay (238). In the north-eastern half of the trench the upper horizon of the natural clay (238) was encountered at a depth of approximately 0.65m. Cut within the natural clay several red-brick walls and floor surfaces were present.

4.2.3 The first wall encountered was a north-west to south-east aligned man-made red brick structure with lime mortar bonding. The wall was a maximum of seven courses high and displayed signs of being heavily truncated by a toothed mechanical digger, likely to have occurred during demolition of the houses. The wall was double-skinned and was cut into the natural clay, with an additional veneer of header bricks for those courses constructed over the natural horizon. It is considered that wall (220) served as an outer structural wall of back-to-back houses. An evident cut [222] was apparent on the along the outer face of the wall into the natural clay (221), which was filled with clinker, slag and other industrial waste (221) as a packing material. Built within wall (220) was a small red-brick structure of identical construction to the wall, measuring 0.9m by 1.15m externally, with an internal measurement of 0.50m by 0.50m. The function of this structure is unclear; however, it is plausible that it may have served as a light-well in order to allow some natural light to enter into the underground rooms.

4.2.4 A series of internal partition walls (212) were present, which were single skin and varied between one to five courses high. These were bonded with lime mortar and constructed out of identical man-made red-bricks. Those walls which abutted wall (220) were found to be actually keyed-in to the structural wall, proving that they are contemporary, and likewise, the internal partition walls themselves were keyed-in to each other. An interesting point to note is that the single skin nature of the internal walls suggests that they were not suitable for load bearing, hence large supporting beams are likely to have been used in order to support the building. The confines of the trench and the internal walls observed exposed or partially exposed four separate rooms.

4.2.5 A number of floor surfaces were observed within the structure, mostly comprising red brick with no clear bonding material (214), (217), (218) and (223), which were present in three of the four rooms. In all cases these were observed to be overlaying very dark brown/black silt with frequent inclusions of clinker and crushed

brick (216) which was spread directly over the natural. It seems likely that this material (216) was used as both a levelling material and as insulation. Floor (218) was noticeably higher than the other brick floor surfaces, and this was found to be laid upon a sandy-mortar deposit (215) which was overlying the insulation layer (216). It is likely that this has been placed over the original brick surface (217) with the mortar deposit (215) used as a bedding layer for the later raised surface (218).

4.2.6 A flagged floor surface was also apparent (219), which was again directly overlying the insulation layer (216). A possible later brick floor (223) was evident, although only one brick of this survived abutting and internal partition wall (212), hence its function cannot be fully determined.

4.2.7 Set with brick surface (218) was a square-cut sandstone drain cover (224), measuring 0.28m by 0.34m, with an inset circular depression containing five holes. A ceramic drain pipe (235) was observed cut into the natural, aligned in the general direction of the drain cover and the two may be connected, although the relationship is unclear. It is possible that the ceramic drain pipe may be a later addition to the structure, as the internal partition wall (212) has been truncated at the point when the pipe appears to pass under it, and may indicate that the pipe was inserted after the walls were built, hence the truncation. However, it may be that the wall was simply disturbed during demolition and its position in relation to the drain pipe may be a coincidence.

4.2.8 An east to west irregularly built brick-lined drain (226) was laid onto the natural clay which ran parallel to (212) and created an abutment. The drain was composed of hand-made standard orangey bricks laid in stretcher bond. The drain deliberately slopes towards the west where it meets a brick-line drain hole which received several drains. The drain was encased by (225) and capped by rectangular shaped York sandstone (232).

4.2.9 A York sandstone flagged surface (229) was located between the 'front wall' (202) and the later wall (230) which may represent a passageway into the cellars. This interpretation is supported by the presence of a sandstone doorpost with a square cut recess for a post or locking mechanism which was built into the internal partition wall (212). Later Wall (230) was a north to south brick wall abutting passageway (229).

4.2.10 A 'Front' wall (202) was present in the western edge of the trench which likely fronted onto Beckett Street. The wall was cut into natural clay. This wall also had four single course walls (204, 206, 208 and 210) which were constructed into the wall at right angles which were also cut into the natural clay.

4.2.11 Where the internal partition walls were clearly keyed-in to the 'back' wall (220) of the dwellings, the same was not observed at the front (202) wall. The internal partition walls (212) were clearly a different structure. The courses were built at different heights and there was a small gap where (212) and (202) did not quite meet. In addition, the construction material of the two walls was quite different, with wall (202) appearing older.

4.3 Trench 3

4.3.1 Trench 3 measured a maximum of 20m in length (north-east to south-west) by 5m in width (north-west to south-east) and reached a maximum depth of 1.15m. The trench was placed to uncover any remains of worker's housing which may have been constructed between 1821 and 1824.

4.3.2 The stratigraphic sequence of Trench 3 comprising a mixed topsoil / made-ground deposit (300) comprising dark red-brown clay silt with frequent inclusions of brick and other demolition debris. This was present across the entirety of the trench, with a maximum thickness of 0.10m. Directly underlying (300) was demolition deposit (301), comprising dark red-brown clay-silt with frequent demolition debris including bricks, concrete, timber, textile and stone. This deposit exceeded the depth of the trench along the north-east edge and appeared to be cut into the natural clay (319) (Figure 32). In the south-eastern half of the trench the natural clay (319) was encountered at the depth of approximately 0.65m. Within the natural clay (319) several red-brick walls were present. All of the walls uncovered were found to be on the same alignment (north-west to south-east), and were all truncated at the north-western end.

4.3.3 The first wall encountered was (302) (Figure 33), comprising a single skin, single course structure constructed from standard sized plain red bricks with lime mortar, placed end-on. The wall measured 1.45m in length by 0.24m wide and 0.09m high and is clearly truncated at the north-western end. The wall (302) was cut [304] into the natural clay (319), with yellow clay (303) packing filling the gap between the edge of the cut of the brick wall. The nature of the packing material (303) suggests that it is re-used natural clay. Approximately 1.5m to the north-east, adjacent to wall (302) was a thin spread of mortar, the dimensions of which were identical to that of wall (302). It seems likely that this spread of mortar represents a wall that was completely removed during demolition.

4.3.4 Wall (305) (Figure 35) was located approximately 3m to the north-east of wall (302), on an identical alignment. This wall measured 1.38m in length by 0.24m in width and was a single skin wide with a maximum of two courses, the bottom course being header bonded and the upper course stretcher. The wall was constructed with standard-sized, man-made bricks with lime mortar bonding. This was again truncated at the north-western end and was cut into the natural clay (319), with clay packing (306), similar to the cut and packing fill observed for wall (302).

4.3.5 Wall (308) (Figure 34) was a north-east to south-west aligned wall, that looked as if it originally abutted wall (305), however the relationship has been lost, probably during the demolition of the buildings. At the north-eastern end of the wall, it abutted wall (311) (Figure 34). Both of these walls were constructed out of identical material to the other walls observed in the trench a maximum of only two courses survived on each wall. Both of these walls were cut into the natural clay (317), however unlike the other walls observed in the trench there was no packing material in the cut, and it would appear that the cut was cut precise to the measurement of the wall, hence no packing was required. Within the confines of walls (305), (308), and (311), a very dark brown clay silt surface was observed. As this deposit was confined only with the three walls, it seems likely that this represents a primary floor surface.

4.3.6 One metre from wall (311) was wall (313) (Figure 38), on an identical alignment to (311) and constructed from the same materials, although notably thicker, measuring 1.26m in length by 0.48, wide. The construction of the wall was rather irregular; however, it seems likely that many of the bricks have been removed or disturbed during the demolition process. As with walls (302) and (305), wall (311) was cut [315] in to the natural clay (319) with a clay packing material (314), likely to be re-used natural clay. As with all the other walls, the north-western end was truncated.

4.3.7 A small brick-built drain (Figure 39) was present in the north-eastern end of the trench, constructed from plain red man-made bricks and bonded with cement mortar. Externally the drain measured 0.50m by 0.62m, with the internal opening measuring 0.28m by 0.18m. The drain was lined internally with bricks and sandstone slabs and was filled with damp dark brown/black silt clay containing glass and plastic fragments. The drain was cut into the natural clay (319) and located at the very edge of the natural clay (319) and demolition deposit (301) interface. The location of the drain suggests that it may be associated with the later mill building (Figure 63) and was located on the outer face of the building.

4.3.8 The walls recorded in Trench 3 were all aligned north-west to south-east, or on a perpendicular alignment of north-east to south-west. These walls were all constructed out of hand-made red bricks with lime bonding, suggesting that they are contemporary. The walls are all truncated at roughly the same location at their north-eastern ends, at roughly the same location that the demolition deposit cuts in the natural clay, which is thought to be the demolition backfill of the later mill. The square brick-built drain is also constructed out of man-made red brick, however the cement bonding is indicative of a later date than the other walls, and it is likely that this is related to the mill. It seems likely that the construction of the mill demolished many of the houses in the area, with the walls observed in the trench being the only remains. The large demolition area which cuts into the natural clay is likely to be the demolition backfill of the mill, with the brick-built drain still surviving.

4.4 Trench 4

4.4.1 Trench 4 measured 18m in length and 5m in width. The trench was extended by 8m to the northwest in order to further investigate rectangular structure (407). It was situated to uncover any remains of workers' housing and an arm of a canal which first appears on maps from 1824, as well as to recover any information relating to the later industrial activity which is known to have existed in the area in the early 19th century. The workers' housing may have been constructed between 1836 and 1848.

4.4.2 The stratigraphic sequence of Trench 4 comprised a mixed topsoil/ made-ground deposit (400) comprising dark red-brown clay silt with frequent inclusions of brick and other demolition debris. This was present across the entirety of the trench, with a maximum thickness of 0.20m. Directly underlying (400) was demolition deposit (401), comprising dark red-brown clay-silt with frequent demolition debris including bricks, concrete, timber, textile and stone. This deposit was observed to be a maximum thickness of 2.10 metres BGL.

4.4.3 The first phase of archaeological remains encountered was a curved north to west canal wharf constructed of man-made red bricks (403) and capped with large sandstone blocks (404). The brick structure (403) was constructed of four bricks width and extended to an unknown depth as the feature could not be fully exposed due to water within the wharf. The construction cut of the canal wharf [418] was visible cutting into the natural clay. Cut [418] was filled by shoring deposits of packing cinder/clinker (419) and clay (420). This wharf was labelled on the 1849 Ordnance Survey map (Figure 61) as "Manor Wharf" although it first appeared on Swire's 1824 map of Manchester (Figure 60).

4.4.4 Canal wharf (403) and (404) were cut by later mill buildings (409) and (411) to the west, and engine room/boiler room to the north by the later mill building (407).

4.4.5 Later mill building (409) was a humanly-constructed brick built rectangular structure. It was filled by clinker and ash rich deposit (410), indicating that structure (409) was a fireplace or chimney, serving an unknown purpose for surrounding structures (407) or (411).

4.4.6 Structure (411) was located to the west of (409) and was constructed of three leaf machine-made bricks which were bonded by a light brown lime mortar laid parallel to (409) and onto concrete floor surface (414) in English bond. The interior face of the brick wall was painted green and contained an east to west single leaf partition wall (413). This structure had been truncated to the west and north by demolition backfill deposit (401). An exploratory sondage was excavated through (401) to the west of the structure and found that the fill contained a large quantity of Accrington Nori bricks, the first of which were manufactured in 1887 (Accrington Observer 2008). The sondage aimed to determine whether the wharf continued beneath structure (411). However, backfill deposit (401) continued well below the depth of the canal wharf and thus the backfill deposit likely demolished and any remnants of the wharf. Cartographic evidence suggests that the Wharf was demolished between 1889 (Figure 62) and 1958 (Figure 63).

4.4.7 No remains were found of "Buchan's Buildings" which were labelled on the 1849 Ordnance Survey map to the west of Manor Wharf.

5 Finds Assessment – Joseph Tong PfA

5.1 Pottery

5.1.1 Method Statement

The pottery was examined in context groups alongside the other categories of artefacts recovered from the excavations. The pottery was washed and sorted by type and recorded in Appendix II. A total of 109 sherds and complete vessels were recovered from the excavations. A tabulation of the ceramic assemblage is presented below (Table 1).

Context	Description	No. of fragments	Comments	Date
201	Black/brown-glazed earthenware	1	Body 'sherd	19 th – 20 th century
	Salt-glazed earthenware	3	1 bottle top 'sherd, 1 jar rim 'sherd, 1 bottle base 'sherd decorated "...ANCHEST..., CHEETHAM, ...NDELION"	19 th – 20 th century
214	Brown-glazed earthenware	3	Watering can, 1 spout 'sherd, 1 handle 'sherd, 1 base 'sherd	19 th – 20 th century
	Black-glazed earthenware	3	Jug body 'sherds	19 th – 20 th century
	Brown-glazed stoneware	1	Bottle body sherd	19 th – 20 th century
	Banded ware	3	Body 'sherds	19 th – 20 th century
	Blue-glazed earthenware	1	Body 'sherd	19 th – 20 th century
	Transfer-printed earthenware	12	Bowl (1 base 'sherd, 1 rim 'sherd, 3 body 'sherds), plate (4 rim 'sherds, 1 body 'sherd), cup (2 body sherds)	19 th – 20 th century
White-glazed earthenware	2	1 handle sherd, 1 body 'sherd	19 th – 20 th century	
215	Transfer-printed earthenware	1	Plate 'sherd	19 th – 20 th century
216	White-glazed earthenware	2	1 base 'sherd, 1 handle 'sherd	19 th – 20 th century
	Yellow-glazed earthenware	2	2 base sherds	19 th – 20 th century
217	Brown-glazed speckled ware	2	2 body 'sherds	19 th – 20 th century
	Transfer-printed earthenware	5	1 plate (3 body 'sherds), 1 cup (1 rim, 1 base)	19 th – 20 th century
	White-glazed earthenware	3	1 plate (1 rim 'sherd, 2 body 'sherds)	19 th – 20 th century
	Pearl-glazed earthenware	2	Body 'sherds	19 th – 20 th century
219	Black/brown-glazed earthenware	6	Watering can, 1 spout, 2 base, 3 body 'sherds	19 th – 20 th century
	Banded ware	2	Flowerpot body and rim 'sherd	19 th – 20 th century
	White-glazed stoneware	1	Base sherd decorated "THE PR..."	19 th – 20 th century
	White glazed earthenware	1	Plate rim 'sherd decorated with nautical scene	19 th – 20 th century
	Pearl-glazed earthenware	2	Body 'sherds	19 th – 20 th century
230	Brown-glazed speckle-ware	1	Body 'sherd	19 th – 20 th century
303	White-glazed earthenware	1	Plate rim 'sherd	19 th – 20 th century
305	Brown-glazed earthenware	1	Base 'sherd	19 th – 20 th century
	White-glazed earthenware	8	3 rim 'sherds, 3 body	19 th – 20 th century

			'sherds, 1 base 'sherd and 1 handle 'sherd	
	White salt-glazed stoneware	1	Jar base 'sherd	19 th – 20 th century
310	Black/brown-glazed ware	1	Handle 'sherd	19 th – 20 th century
	Transfer-printed earthenware	12	1 plate (2 rim, 2 body 'sherd, 1 large dish (4 rim, 2 base 'sherds) and 1 bowl (2 body 'sherd).	19 th – 20 th century
311	Pearl-glazed earthenware	2	1 body 'sherd. 1 green-leaf decorated body 'sherd	19 th – 20 th century
313	Black/brown-glazed ware	2	Body 'sherds	19 th – 20 th century
	Brown-glazed stoneware	2	Roll stamp decorated rim 'sherds	19 th – 20 th century
	Banded ware	1	Body 'sherd	19 th – 20 th century
	Transfer-printed earthenware	2	1 plate rim 'sherd decorated with gold leaf, 1 plate rim 'sherd.	19 th – 20 th century
	White-glazed earthenware	1	Base 'sherd	19 th – 20 th century
401	Salt-glazed stoneware	2	1 jug, 1 bottle decorated "P DOWD, MANCHESTER, P.D"	19 th – 20 th century
	White-glazed earthenware	4	Minimum of 3 vessels. 1 jar rim 'sherd, 1 bowl rim 'sherd and 2 body 'sherds	19 th – 20 th century
410	Pearl-glazed earthenware	1	Half of a dish with gold banded decoration.	20 th century
417	Salt-glazed stoneware	1	Complete bottle decorated "DALES & SON, MANCHESTER. PHILLIPS, PARK ROAD, BESWICK". Retains cork	19 th – 20 th century
419	Black/brown-glazed earthenware	3	Body 'sherds	19 th – 20 th century
	Banded ware	1	Body 'sherd	19 th – 20 th century
	Transfer-printed earthenware	3	Bowl (1 rim 'sherd, 2 body 'sherd)	19 th – 20 th century
	White-glazed earthenware	1	Body 'sherd	19 th – 20 th century

Table 1: Pottery recovered from the Milliners Wharf excavation.

5.1.2 Description of Ceramic Types Found

The pottery represents 19th and 20th centuries utilitarian wares (black/brown-glazed ware, stoneware) and refined earthenwares (whiteware, both plain and transfer printed) used for the storage, preparation and consumption of food and drink. The presence of largely intact stoneware bottles (Figure 1) indicates consumption of mineral water, carbonated cordials and ginger beer; such beverages were often drunk in preference to the local well water which was often contaminated (Nevell 2008, 159). The manufacturer of one of these bottles was located at Park Road, Beswick, less than a mile away from the site. The other bottle was also produced by a Manchester company and reflects the dominance of the local economy for these products.

The mass-produced potsherds recovered from the excavation are in no way unusual and parallels can be found on most sites producing 19th and 20th century material.



Figure 1: Stoneware bottles retrieved from the demolition backfill of Trench 2 (right) and Trench 4 (left).

The pottery assemblage recovered from Milliners Wharf is not unusual in any respect for a site of this nature. The assemblage is dominated by late 19th/early 20th century pottery which aligns well with the cartographic dating of the features located during the excavation.

There is limited research value within the assemblage, with the possible exception of the two stoneware bottles (Figure 1). The potsherds could, therefore, be returned to the landowner, retained in a teaching collection, archived or not retained.

5.2 Clay Pipe Fragments

Context	Description	No of fragments	Stem Ø	Date
216	Stem fragment	1	Stem 6mm, bore 3mm	19 th – 20 th century
	Stem fragment	1	Stem 5mm, bore 3mm	19 th – 20 th century
	Bowl fragment	2	Small fragments of pipe bowl	-
	Bowl fragment	1	Small fragment of pipe bowl with fluted decoration	19 th - 20 th century
	Stem fragment	3	Stem 7mm, bore 2mm	19 th - 20 th century
	Stem fragment	1	Stem 6mm, bore 2mm	19 th - 20 th century
217	Stem fragment	2	Stem 7mm, bore 2mm	19 th - 20 th century
219	Stem fragment	1	Stem 7mm, bore 3mm	19 th - 20 th century
230	Stem fragment	2	Stem 7mm, bore 3mm, one mouth-piece	19 th - 20 th century
303	Clay pipe bowl	1	Small fragment of pipe bowl	-
313	Stem fragment	3	Stem 7mm, bore 2mm	19 th - 20 th century
	Stem fragment	1	Stem 5mm, bore 2mm, decorated "...ASGOW"	19 th - 20 th century
	Stem fragment	1	Stem 8mm, bore 3mm	19 th - 20 th century
	Bowl. Roll stamp decorated "18" within horseshoe decorated	1	33mm in length by 22mm in width	19 th - 20 th century

The clay pipe assemblage was dominated by stem fragments and broken bowls. Nevertheless, the clay pipes recovered from the excavation at Milliners Wharf are of typically 19th – 20th century dates. Clay pipe is commonly found on sites of this period.

5.3 Glass Fragments

Context	Description	No. of fragments	Comments	Date
216	Glass object	1	Indistinct glass object	-
217	Bottle glass	1	Body shard, beer bottle	20 th century
230	Vessel glass	1	Rim shard	20 th century
305	Vessel glass	1	Body sherd	20 th century
313	Vessel glass	1	Body sherd, burned on one edge, decorated with a red band.	20 th century
401	Vessel glass	1	Body shard	20 th century
	Bottle glass	1	Base and body sherd decorated "CORNBRO..., ...ERY Co Ltd, MANCHESTER"	19 th – 20 th century

The glass bottle fragments are 20th century in date and typical of those commonly found on most sites of this period.

5.4 Metalwork

Context	Description	No. of fragments	Comments	Date
212	Bronze coins	2	Heavily abraded copper coins	-
216	Bronze button	1	Heavily abraded copper button	-
230	Bronze button	1	Heavily abraded copper button	-

The metal items recovered during excavations at Milliners Wharf were heavily abraded and rusted which meant that confident dating of the copper objects was not possible.

5.5 Ceramic Building Materials (CBM)

Context	Description	No. of fragments	Comments	Date
214	CBM	1	Tile fragment	20 th century
217	CBM	4	Tile fragments	20 th century
230	CBM	3	Brick fragments	-
311	CBM	1	Roof tile	20 th century

The CBM recovered from excavation at Milliners Wharf are mostly tiles recovered from the interior of the structure found in Trench 2. Although the small quantity of this material means that it is not possible to suggest that the tiles were interior decoration and were possibly deposited during demolition and backfilling of the buildings.

As with the pottery, the assemblage of clay pipe, glass, metalwork and CBM is small in size and not unusual in any respect for a site of this nature. The finds could, therefore, be returned to the landowner, retained in a teaching collection, archived or not retained.

6 Comparative study

6.1 The nature and quality of the housing recorded as a result of this evaluation may be compared to other such archaeological investigations into 19th and 20th century workers' housing in Greater Manchester. From the late 18th century onwards the growth of the cotton industry in Greater Manchester and eastern Lancashire led to the rapid growth and development of some existing towns and suburbs (McNeil and Newman 2006, 177). As noted by Nevell (2008, 135), the 'rapid factory-based industrialisation of the late 18th and early 19th centuries coincided with a phenomenal rise in population...this new population required huge amounts of housing.' Certainly the dwellings uncovered at Milliner's Wharf coincides with this period of housing boom in Greater Manchester.

6.2 The early housing for the workers, as a result of this industrial boom, was erected with very little legislative control. Very few of the houses were built by the factory owners, with the vast majority erected by third party property speculators. This led to unregulated expansion, with blocks of housing built at differing angles, following the alignment only of intervening streets. By 1819, several early maps of Manchester show that this had already led to the creation of many small alleys and blind courtyards, with plots of land subdivided into rows. This encouraged the construction of back-to-back and blind-back houses which were often only a single room wide and deep, with windows found only on their front walls (Miller *et al.* 2010b, 25). The intention to locate housing close to the mill was probably deliberate as social control could be subtly exercised and coerced if necessary whilst reinforcing notions of dependence and communal loyalty. The conservative use of space also indicates that land was fully utilized in order to maximize profits for the builder. Back-to-back houses provided high returns but with low material costs, with speculative developments maximizing the return on land (Martin 2009, 19).

6.3 In recent years numerous archaeological investigations into workers' housing has taken place in Greater Manchester, notably within the city of Manchester itself and also in Ancoats to the north-east of the city centre, at several sites extremely close to Milliner's Wharf. Ancoats has particular relevance for the study of workers' housing as it was 'the first residential district of the modern world intended for occupation by one social class, the new urban class' (Redhead 2010, 56), and thus provides a 'spectacular illustration of urban industrial architecture in the late 18th and early 19th centuries' (McNeil and Newman 2006, 174). A dominant feature which was present in many of the previous excavations of worker's housing is the presence of cellar dwellings, as evidenced at Piccadilly Place (Miller *et al.* 2010b) in Manchester, Earl Street (Miller *et al.* 2010a) in Bury, and George Leigh Street (Gregory 2007), Bradley Street, Jersey Street and Bengal Street (Miller and Wild 2007), all in sites which are located in Ancoats. The cellar dwellings thus far present in the archaeological record have demonstrated no uniformity in either their structure or size, although they were often incorporated into back-to-back housing and often accessed via staircase from the street level or, in the some cases, by a trapdoor from the ground level of the building. The cellar rooms at Bradley Street were 1.8 metres below street level and measured 3.5 by 3.2 metres with flagged stone flooring (Miller and Wild 2007). At Piccadilly Place, the excavation of the

'Syes Buildings' cellars revealed each dwelling measured 4.27 metres by 4.57 metres with flagstone floors and a brick and stone stairway (Miller *et al.* 2012b). Cellar dwellings on George Leigh Street in Ancoats exposed well-preserved back-to-back cellar accommodation, with the front room measuring 4.7 metres by 2.5 metres and the rear room measuring 4.5 by 3.5 metres, with a single course internal division between the dwellings (Gregory 2007). Larger cellar accommodation was recorded at Earl Street, where 3 single-roomed back-to-back cellar dwellings measuring 5 metres by 4.5 metres each, again with flagged flooring (Miller *et al.* 2010a, 36). A description of these houses by Dr J Farriar (1805, cited in Miller *et al.* 2010b, 25) indicated that the average dwelling consisted of '2 rooms, the first of which is used as a kitchen, and though frequently noxious by its dampness and closeness, is generally preferable to the backroom. The latter has only one small window, which, though on a level with the outer ground, is near the roof of the cellar.' The cellar dwellings uncovered in Trench 2 at Milliner's Wharf are suggestive of two-roomed dwellings, one at the front of the structure and one at the back. The presence of primary and secondary brick floors with underlying ash and clicker foundations may be indicative of a damp problem, with the clinker acting as insulation and damp-proofing, with the evidence of later brick floors perhaps used as a repair of earlier damp floors. The largest complete room uncovered in Trench 2 at Milliner's Wharf measured 4.4m by 3.7m, equalling an area roughly equivalent to such dwellings at other sites in Ancoats, discussed above. Not all previous investigations into workers' housing have comprised cellar accommodation, but generally it would seem that the cellars offered the smallest and most cramped living conditions. Internal dwelling space at street level recorded at Middleton Road, Oldham, was 6.10 metres by 4.25 metres (Martin 2009), notably bigger than the cellar dwellings discussed above.

6.4 Another similarity between the dwellings uncovered during this evaluation and those comparable sites is the use of materials. Excavations in Manchester at sites such as Copperas Street, Southern Street (Nevell 2008) and Miller Street (Wild 2013) revealed brick and flagstone flooring as observed in part in the cellar dwellings observed in Trench 2 at Milliner's Wharf. At Bradley Street, Ancoats, and Middleton Road, Oldham, construction was formed by a triple brick skin forming a rectangular plan shell divided by a single skin central partition and further sub divided by internal partitions of single skin, a technique similarly repeated at Piccadilly Place, Loom Street (Martin 2009) and Miller Street (Wild 2013), an again observed in the cellar dwellings of Trench 2 at Milliner's Wharf.

6.5 Single skin partitions were evident in the cellar dwellings observed in Trench 2 and from what can be inferred from the partial remains observed in Trench 3 at Milliner's Wharf. Many of the comparable dwellings discussed above also demonstrated single skin partitions and, in addition, when discussing worker's housing, Engels (1845, cited in Nevell 2008, 157) noted '...it becomes evident that the walls of these cottages are as thin as it is possible to make them. The outer walls, those of the cellar, which bear the weight of the ground-floor and roof, are one brick thick at most...' The outer and foundation walls of all the dwellings observed across the site at Milliner's Wharf were generally thicker than one brick, which suggests that they may in fact not have been the lowest form of housing available.

6.6 Finds recovered from Loom Street, Ancoats (Gregory 2007) included pottery, glass, metalwork, clay pipes and shell. Such finds are directly comparable to those recovered from within the floor and wall deposits, and also the demolition backfill at Milliner's Wharf. The pottery assemblage recovered from Piccadilly Car Park (Mora-Ottomano 2012) and Derker Street, Oldham (Strafford 2013) is also very similar to that from Milliner's Wharf, with white stoneware preserve jars (usually produced to contain jam or marmalade), brown salt-glazed stoneware, white earthenware and dark-glazed coarse earthenware. Like Piccadilly Car Park, Loom Street and Derker Street, the finds from Milliner's Wharf mostly represented finds from the 19th to 20th centuries and are highly indicative of a Victorian working-class domestic deposit.

6.7 Workers' housing in Greater Manchester has not been favoured with a high reputation, as observed by Bradshaw (1987, 24, cited in Nevell 2008, 146) who noted 'the dwellings of the labouring manufacturers are in narrow streets and lanes, blocked up from light and air...crowded together because every inch of land is of such value, that room for light and air cannot be afforded to them.' A similar dismal view was offered Engels (1845, cited in Nevell 2008, 135), who observed '350, 000 people of Manchester and its environs live, almost all of them, in wretched, damp, filthy cottages, that the streets which surround them are usually in the most miserable and filthy condition, laid out without the slightest reference to ventilation, with reference solely to the profit secured by the contractor.' Due to the limited housing remains observed throughout this investigation, it is not possible to determine the sanitary conditions within the houses uncovered, although certainly the dwellings were generally small and, if considered that they would have housed a large family, would have offered cramped conditions. The dwellings observed across the Milliner's Wharf site do suggest an economically poor area; however, there was no direct evidence for extreme poverty. The range of finds uncovered also suggests some consumer goods were in circulation.

6.8 The 1848 Ordnance Survey map shows that the cellar dwellings evident in Trench 3 were aligned along Beckett Street at the front end and Burke Street to the rear, with the partial housing remains uncovered in Trench 3 situated close to Halton Street. Census data for these streets for the dates between 1841 and 1881 show that the dwellings were occupied generally by a family unit, usually with a number of lodgers, often a second family unit. It was not uncommon for 12 or 13 people to occupy one dwelling, and so conditions must have been cramped and somewhat unsanitary. In some cases just one family unit of 4 or 5 occupied one dwelling, but these instances appear to be rare. Occupations sated on the census for the head of the household living at the dwellings include labourers, dyers, strikers, house keepers, spinners, brewers, weavers, painters and salt hawkers, all professions which offer little economic prospect. Interestingly, there is quite a mix of trades, however most of these could have been applied at the cotton mill, iron mill or brewery that were all situated within very close proximity to the houses. People residing in the houses were predominantly local, however a large amount of families came from Ireland, with further families originating from Malta and at least one family coming from the East Indies.

7 Discussion

7.1 Trench 1

7.1.1 Trench 1 was located to uncover any remains of workers' housing which may have been constructed between 1836 and 1848. However, no remains have survived within the area of the trench possibly as a result of the demolition of housing for the expansion of the later mill (Figure 63).

7.2 Trench 2

7.2.1 Trench 2 was situated over a unit of back-to-back workers' housing which first appeared on mapping dated to 1824. However, remains of the housing were limited to the cellar dwellings of this housing. The first phase within the building appeared to relate to the initial construction of the back-to-back housing. Exterior walls (220) and (202) are on a roughly north-west to south-east alignment and, within this, four partitioning walls were located (212). Within two of these partitions, notably the easternmost cells, primary brick floor surfaces were laid with examples of early 20th century pottery including amongst the fill of the bricks, probably representing the phase of the buildings' demolition. The two westernmost cells contained different floor surfaces; the north-west cell contained only a beaten clay surface and the south-west cell contained traces of a flagstone floor.

7.2.2 A secondary phase was visible within the northeast cell which contained a raised secondary brick floor (218). This had a clay and sand base which may have been laid in an effort to improve conditions within the cellar dwelling (Figure 25).

7.2.3 The cellars would probably have been accessible via the flagged passageway to the west of the cellars (229). A stone-cut door post (Figure 24) was identified to the southwest of the trench. The door post appeared to be in-situ and the doorway led onto the beaten clay floor surfaced cellar; a passageway may have been situated where a break in partition wall (212) is situated, indicating that each cellar dwelling may have contained two cells each. It was not possible to confirm this interpretation for the southernmost cellar due to the trench edge terminating close to the adjacent tramway fence.

7.2.4 The flagged passageway appears to have been blocked in the southwest corner of the trench, although it is unclear why the entranceway might have been blocked.

7.2.5 Currently, the sample of excavated domestic dwellings within Manchester is limited. Archaeological exploration of workers' housing in the city of Manchester and its region is poorly understood and recording this early industrial housing forms a significant part of the process of documenting and understanding Manchester's rich industrial heritage (Redhead 2010-11). There is a growing body of data which is increasing the understanding of 18th – 20th centuries construction methods and occupation. For these reasons, the remains of workers' housing uncovered in Trench 2 are of local and regional significance.

7.3 Trench 3

7.3.1 Trench 3 was placed to uncover any remains of workers' housing which may have been constructed between 1821 and 1824.

7.3.2 The remains of five walls (314), (311), (305), (302), (308) and one floor surface (310) were identified which represent the incomplete remains of structures which may have dated from 1821-1824.

7.3.3 The structures within Trench 3 were likely to have been removed prior to the final phase of the mill's construction (Figure 63). The fragmentary nature of buildings located within Trench 3 may be as a result of the demolition to make space for the mill building. This suggests that other buildings connected with those situated within Trench 3 may have also been removed at that time.

7.4 Trench 4

7.4.1 The earliest phase of activity situated within Trench 4 were remains of the canal wharf which first appeared on Swire's map of 1824 (Figure 60), labelled as "Manor Wharf" on the Ordnance Survey of 1849 (Figure 61).

7.4.2 Remains of Manor Wharf had been severely truncated to the west and north by later mill buildings. A survey of the mill buildings was conducted by the University of Manchester Archaeological Unit in 2007 and the reader is referred to this document for a discussion of the mill buildings (UMAU 2007). It was not possible to interpret what activities were carried out within the mill buildings due to a lack of finds, although the rectangular structure to the north of Trench 4 has been tentatively interpreted as a boiler or engine room.

8 Conclusion

8.1 This programme of archaeological works has provided a valuable opportunity to investigate the physical remains of workers' houses in Ancoats from the early 19th century onwards. The site has served to address some research aims highlighted by the Archaeological Research Framework for the North West, which notes that '...urbanisation and industrialisation has little been studied from an archaeological perspective' (McNeil and Newman 2006, 170). This site also partly addresses initiatives 7.6, to carry out a study of the development of workers' housing in Greater Manchester to examine the development of different housing types, and 7.7, to study and compare the cultural material of industrial workers' households in rural and industrial communities with those of farm labourers, to identify and explain similarities and differences and possibly identify ethnic as well as cultural affinities (Newman and McNeil 2007, 139). Clearly such aims and initiatives cannot be fully addressed by one site alone; however, the recording of the dwellings and associated material remains at Milliner's Wharf add to the small portfolio of similar such sites in Ancoats and the wider Manchester area and allow for an increasingly detailed picture of workers' housing in Manchester to become established. The remains uncovered at Milliner's Wharf and other such sites within the area demonstrate that this particular archaeological resource is well preserved, however the potential for damage caused by demolition is significant. Other similar remains of workers' housing undoubtedly lie beneath the present towns

and cities of Greater Manchester and every opportunity to study them should be taken in order to improve and better understand the current dataset relating to workers' houses in Greater Manchester and, more broadly, Northern England.

8.2 The later 18th to 20th centuries witnessed radical changes in urban settlement that were unprecedented in the scale and speed of transformation (McNeil and Newman 2006, 170). It is likely that the dwellings recorded as part of this investigation were built to address the need for more housing for the workers of newly-created mills. Between 1740 and 1840, Manchester was in a period of industrial transition which coincided with the period of greatest population growth within the city (Hartwell 2001, 17). Housing constructed during this period included a broad range of building types comprising Georgian town houses, vernacular workshops, early terraced merchant class houses, back to back workers' housing and cellar dwellings. The no longer extant housing within the proposed development area appeared on maps during this period and was likely to have been constructed to meet the demand of a rapidly growing population.

8.3 It is believed that Ancoats was 'the first residential district in the modern world intended for occupation by one social class, the new urban working class' (Roberts 1993, 1). There is evidence for both residential and commercial development within the proposed development area which attests to growth within the early to mid-19th century. The conversion of Ancoats from open farmland to a densely-populated suburb containing some of the largest factories in the world took place between the 1780s and the 1820s. The nature of the development which took place in Ancoats differed considerably from that which had taken place earlier in rural areas, signifying the urbanisation of the factory system. A particularly distinctive feature was the creation of areas of laid-out streets and plots for urban expansion. The planning of a whole suburb of streets in advance of factory building and related development did not occur in the late 18th century towns where industry was dependant on water power. The scale of mill building in Ancoats was also exceptional, and the extant mill complexes can all be said to represent some of the limits reached by mill builders in the early 19th century. In spite of their individual significance, however, the mills of Ancoats are perhaps best appreciated as the largest and most technically-advanced buildings of an urban industrial landscape (Williams 2002).

8.4 Documentary and cartographic research has confirmed that the entirety of the site at Milliner's Wharf was built-up with industry and back-to-back or terraced housing during the 19th and early 20th centuries and was subject to substantial piecemeal demolition from the later 19th century up until very recently. The 2007 excavation at Milliner's Wharf carried out by the Manchester University Archaeological Unit identified two separate phases of construction of housing within the proposed development area: one phase of construction dated to 1818-1824 and the second from 1824-1831 with the phases being separated by a paved alleyway (UMAU 2007). It was possible to suggest a change in construction attitudes and methods between the two phases with the earlier phase being better constructed than the latter phase. The structure uncovered in Trench 2 could potentially be attributed to the earlier phase of construction in 1818-1824. This interpretation is suggested due to the substantial construction of outer walls

(202) and (220). However, as only one unit of housing was uncovered a comparative with other structures is not possible and the dating of the structure remains tentative.

8.4 The size, material and construction methods of the workers' housing uncovered across the Milliner's Wharf site reflects their unregulated construction by different property speculators, designed without the benefit of architects. This is similarly reflected in the diversity of the internal layout employed in their build. These factors perhaps highlight that urban workers' housing was a new element of the townscape, although the rows of back-to-back and terraced dwellings came to typify working class accommodation throughout the industrialised north in the 19th century (Muthesius 1982, 107, cited in Miller and Wild 2007).

8.5 The findings are deemed to be of regional and national interest: the sequence of buildings observed at Milliner's Wharf has provided an insight into industry, living conditions, material culture and the fast pace of change in accommodation type in Ancoats during the 19th and 20th centuries.

9 Publicity, Confidentiality and Copyright

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

10 Statement of Indemnity

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

11 Archive Deposition

11.1 A digital and paper copy of the report will be submitted to the Greater Manchester HER.

11.2 The OASIS record for the site will be completed and a copy of the report uploaded to OASIS.

12 Acknowledgements

12.1 Archaeological Research Services Ltd would like to thank all those involved with this work, in particular Paul Tew of GMI Construction Group PLC for commissioning the work and Norman Redhead, Heritage Management Director (Archaeology) of the Greater Manchester Archaeological Advisory Service, for monitoring the excavations and his advice.

13 References

Accrington Observer. 2008. *End of an Era as 80 Jobs go to the Wall*. Available online at: <http://www.accringtonobserver.co.uk/news/local-news/end-of-an-era-as-80-jobs-go-1270277> [Accessed 20th May 2014].

British Geological Survey. 2014. Geology of Britain Viewer. Available online at: <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html?src=topNav> [Accessed 29th March 2014].

Gregory, R. 2007. *Loom Street, Ancoats, Manchester. An Archaeological Excavation of Late 18th and 19th Century Workers Housing*. Manchester: The University of Manchester Archaeological Unit.

McNeil, R. and Newman, R. 2007. The Industrial and Modern Period Research Agenda. In: Brennan, M (ed.). 2007. *Research and Archaeology in North West England. An Archaeological Research Framework for North West England. Volume 2. Research Agenda and Strategy*. Manchester: The Council for British Archaeology North West.

Hartwell, C. 2001. *Manchester*. Penguin Pevsner Guides.

Martin, G. 2009. *Archaeological Watching Brief at Land off Middleton Road, Royton, Oldham, OL2 5LS*. Carlisle: Gerry Martin Associates. Unpublished client report.

McNeil, R. and Newman, R. The Industrial and Modern Period Resource Assessment. In: Brennan, M (ed.). 2006. *The Archaeology of North West England. An Archaeological research Framework for the North West Region. Volume 1. Resource Assessment*. Manchester: The Council for British Archaeology North West.

Medieval Pottery Research Group. 2001. *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*. Available online at: <http://www.medievalpottery.org.uk/docs/Standards.pdf> [Accessed 19th May 2014].

Miller, I. and Wild, C. 2007. *A and G Murray and the Cotton Mills of Ancoats*. Lancaster: Oxford Archaeology North.

Miller, I., Gregory, R., Newman, R. and Rowland, M. 2010a. *The Rock Triangle, Bury. The Archaeology of an Industrial Suburb*. Lancaster: Oxford Archaeology North.

Miller, I., Wild, C., Gregory, R., Rowland, M. 2010b. *Piccadilly Place. Uncovering Manchester's Industrial Origins*. Lancaster: Oxford Archaeology North.

Mora-Ottomano, A. 2012. *Manchester Piccadilly Car Park, Manchester. Archaeological Evaluation/Excavation*. ARS Ltd Report No: 2012/4. Bakewell: Archaeological Research Services Ltd. Unpublished client report.

- Nevell, M. 2008. *Manchester: The Hidden History*. Stroud: The History Press.
- Redhead, N. 2010. Archaeological Investigations of Worker's Housing in Manchester. In: Little, L. 2010. *North West Labour History. Journal of the North West Labour History Group* 35. 55-57.
- Redhead, N. 2010-11. Archaeological Investigation of Workers' Housing in Manchester, *North West Labour History*, 35, 53-57.
- Roberts, J. 1993. A Densely Populated and Unlovely Tract: The Residential Development of Ancoats, *Manchester Region History Review*, 7, 15-26.
- Strafford, L. 2013. *Derker Street, Oldham, Greater Manchester. Archaeological Evaluation*. ARS Report No: 2013/40. Bakewell: Archaeological Research Services Ltd. Unpublished client report.
- Tong, J. 2014. *An Historic Environment Desk Based Assessment of land at Munday Street, Manchester (Milliners Wharf Phase II)*. Unpublished Report
- University of Manchester Archaeology Unit. 2006. *Victoria Works, Ancoats, Manchester: An Archaeological Building Survey and Desk Based Assessment*. Unpublished Report.
- University of Manchester Archaeology Unit. 2007. *Victoria Works, Pollard Street, Ancoats: An Archaeological Evaluation and Excavation*. Unpublished Report.
- Wild, C. 2013. *NOMA Regeneration, Miller Street, Manchester. Archaeological Excavation*. Lancaster: Oxford Archaeology North.
- Williams, M. 2002. Ancoats – Where the steam-powered textile mill began. In: McNeil, R and George, D. *The Heritage Atlas 4: Manchester – Archetype City of the Industrial Revolution. A Proposed World Heritage Site*. PP34 – 38.

Appendix 1- Site Records

Context Register

Trench No.	Context No.	Type	Description
1	100	Deposit	Topsoil
1	101	Deposit	Demolition backfill
1	102	Natural	Natural Clay
2	200	Deposit	Topsoil
2	201	Deposit	Demolition backfill
2	202	Structure	Front wall
2	203	Cut	Cut for (202)
2	204	Structure	E-W aligned wall
2	205	Cut	Cut for (204)
2	206	Structure	E-W aligned wall
2	207	Cut	Cut for (206)
2	208	Structure	E-W aligned wall
2	209	Cut	Cut for (208)
2	210	Structure	E-W aligned wall
2	211	Cut	Cut for (210)
2	212	Structure	Interior partition walls
2	213	Cut	Cut for (212)
2	214	Surface	Brick surface
2	215	Deposit	Sandy clay bedding of brick surfaces
2	216	Deposit	Dark silty clinker insulation of brick surfaces
2	217	Surface	Lower brick surface
2	218	Surface	Raised brick surface
2	219	Surface	Partially flagged surface
2	220	Structure	Brick wall
2	221	Fill	Clinker padding of wall cut [222]
2	222	Cut	Cut of back wall (220)
2	223	Surface	Possible raised brick surface above (219)
2	224	Drain Cover	Stone-carved drain cover within (218)
2	225	Structure	Brick-built possible drain joined to drain (226)
2	226	Drain	Large drain with brick covering. Aligned E-W
2	227	Structure	E-W aligned partitions disappearing into baulk
2	228	Door Post	Stone cut door post
2	229	Floor	Flagstones against (202) (later addition)
2	230	Structure	Wall abutting (229) and truncating inner partition
2	231	Light Well	Light well for cellar dwelling
2	232	Drain Cover	Flagged drain cover
2	233	Structure	N-S aligned wall (truncated)
2	234	Structure	N-S aligned wall (truncated)
2	235	Drain Pipe	Salt-glazed drain pipe
2	236	Fill	Fill of [237]
2	237	Cut	Cut for drain pipe (235)
3	300	Deposit	Topsoil
3	301	Deposit	Demolition backfill
3	302	Structure	N-S aligned wall in west of trench

An Archaeological Evaluation at Milliner's Wharf, Ancoats, Manchester

3	303	Fill	Dark fill of cut [304]
3	304	Cut	Cut of wall (202)
3	305	Structure	N-S aligned wall
3	306	Fill	Light yellow fill of cut [307]
3	307	Cut	Cut for wall (305)
3	308	Structure	E-W aligned wall
3	309	Cut	Cut for wall (308)
3	310	Surface	Floor surface within walls (305), (308) and (311)
3	311	Structure	N-S wall abutting (309)
3	312	Cut	Cut for (311)
3	313	Structure	N-S aligned wall
3	314	Fill	Fill of cut [315]
3	315	Cut	Cut for wall (313)
3	316	Structure	Brick built drain
3	317	Fill	Fill of drain (316)
3	318	Cut	Cut for drain (316)
3	319	Natural	Natural clay
4	400	Deposit	Topsoil
4	401	Deposit	Demolition backfill
4	402	Structure	Machine (?) platform with cut drain
4	403	Structure	Brick foundation of sandstone wharf
4	404	Structure	Sandstone coping of wharf
4	405	Structure	Concrete foundation of (407)
4	406	Cut	Construction trench for (407)
4	407	Structure	Rectangular building
4	408	Surface	Concrete surface of (407)
4	409	Structure	Rectangular brick structure, possible chimney
4	410	Fill	Clinker and ash rich fill of (409)
4	411	Structure	N-S wall parallel to chimney
4	412	Structure	3 course, end-on-end brick wall between (406) and (411)
4	413	Structure	E-W aligned wall abutting (411)
4	414	Surface	Concrete floor surface within (411) and (413)
4	415	Structure	E-W wall visible in trench edge. Abutting (411)
4	416	Deposit	Orange layer upon which chimney (409) is constructed.
4	417	Fill	Black clay/alluvial fill within wharf.
4	418	Cut	Cut of wharf construction
4	419	Deposit	Cinder/clinker packing material of wharf
4	420	Deposit	Clay to pack wharf construction
4	421	Surface	Concrete floor of (409)
4	422	Structure	E-W aligned brick wall

Finds Register

Pottery

Context	Description	No. of fragments	Comments	Date
201	Black/brown-glazed earthenware	1	Body 'sherd	19 th – 20 th century
	Salt-glazed earthenware	3	1 bottle top 'sherd, 1 jar rim 'sherd, 1 bottle base 'sherd decorated "...ANCHEST...", CHEETHAM, ...NDELION"	19 th – 20 th century
214	Brown-glazed earthenware	3	Watering can, 1 spout 'sherd, 1 handle 'sherd, 1 base 'sherd	19 th – 20 th century
	Black-glazed earthenware	3	Jug body 'sherds	19 th – 20 th century
	Brown-glazed stoneware	1	Bottle body sherd	19 th – 20 th century
	Banded ware	3	Body 'sherds	19 th – 20 th century
	Blue-glazed earthenware	1	Body 'sherd	19 th – 20 th century
	Transfer-printed earthenware	12	Bowl (1 base 'sherd, 1 rim 'sherd, 3 body 'sherds), plate (4 rim 'sherds, 1 body 'sherd), cup (2 body sherds)	19 th – 20 th century
215	White-glazed earthenware	2	1 handle sherd, 1 body 'sherd	19 th – 20 th century
	Transfer-printed earthenware	1	Plate 'sherd	19 th – 20 th century
216	White-glazed earthenware	2	1 base 'sherd, 1 handle 'sherd	19 th – 20 th century
	Yellow-glazed earthenware	2	2 base sherds	19 th – 20 th century
217	Brown-glazed speckled ware	2	2 body 'sherds	19 th – 20 th century
	Transfer-printed earthenware	5	1 plate (3 body 'sherds), 1 cup (1 rim, 1 base)	19 th – 20 th century
	White-glazed earthenware	3	1 plate (1 rim 'sherd, 2 body 'sherds)	19 th – 20 th century
	Pearl-glazed earthenware	2	Body 'sherds	19 th – 20 th century
219	Black/brown-glazed earthenware	6	Watering can, 1 spout, 2 base, 3 body 'sherds	19 th – 20 th century
	Banded ware	2	Flowerpot body and rim 'sherd	19 th – 20 th century
	White-glazed stoneware	1	Base sherd decorated "THE PR..."	19 th – 20 th century
	White glazed earthenware	1	Plate rim 'sherd decorated with nautical scene	19 th – 20 th century
	Pearl-glazed earthenware	2	Body 'sherds	19 th – 20 th century
230	Brown-glazed speckle-ware	1	Body 'sherd	19 th – 20 th century
303	White-glazed earthenware	1	Plate rim 'sherd	19 th – 20 th century
305	Brown-glazed earthenware	1	Base 'sherd	19 th – 20 th century
	White-glazed earthenware	8	3 rim 'sherds, 3 body 'sherds, 1 base 'sherd and 1 handle 'sherd	19 th – 20 th century
	White salt-glazed stoneware	1	Jar base 'sherd	19 th – 20 th century
310	Black/brown-glazed ware	1	Handle 'sherd	19 th – 20 th century
	Transfer-printed earthenware	12	1 plate (2 rim, 2 body 'sherd, 1 large dish (4 rim, 2 base 'sherds) and 1 bowl (2 body 'sherd).	19 th – 20 th century
311	Pearl-glazed earthenware	2	1 body 'sherd. 1 green-leaf	19 th – 20 th century

An Archaeological Evaluation at Milliner's Wharf, Ancoats, Manchester

			decorated body 'sherd	
313	Black/brown-glazed ware	2	Body 'sherds	19 th – 20 th century
	Brown-glazed stoneware	2	Roll stamp decorated rim 'sherds	19 th – 20 th century
	Banded ware	1	Body 'sherd	19 th – 20 th century
	Transfer-printed earthenware	2	1 plate rim 'sherd decorated with gold leaf, 1 plate rim 'sherd.	19 th – 20 th century
	White-glazed earthenware	1	Base 'sherd	19 th – 20 th century
401	Salt-glazed stoneware	2	1 jug, 1 bottle decorated "P DOWD, MANCHESTER, P.D"	19 th – 20 th century
	White-glazed earthenware	4	Minimum of 3 vessels. 1 jar rim 'sherd, 1 bowl rim 'sherd and 2 body 'sherds	19 th – 20 th century
410	Pearl-glazed earthenware	1	Half of a dish with gold banded decoration.	20 th century
417	Salt-glazed stoneware	1	Complete bottle decorated "DALES & SON, MANCHESTER. PHILLIPS, PARK ROAD, BESWICK". Retains cork	19 th – 20 th century
419	Black/brown-glazed earthenware	3	Body 'sherds	19 th – 20 th century
	Banded ware	1	Body 'sherd	19 th – 20 th century
	Transfer-printed earthenware	3	Bowl (1 rim 'sherd, 2 body 'sherd)	19 th – 20 th century
	White-glazed earthenware	1	Body 'sherd	19 th – 20 th century

Metal

Context	Description	No. of fragments	Comments	Date
212	Bronze coins	2	Heavily abraded copper coins	-
216	Bronze button	1	Heavily abraded copper button	-
230	Bronze button	1	Heavily abraded copper button	-

CBM

Context	Description	No. of fragments	Comments	Date
214	CBM	1	Tile fragment	20 th century
217	CBM	4	Tile fragments	20 th century
230	CBM	3	Brick fragments	-
311	CBM	1	Roof tile	20 th century

Glass

Context	Description	No. of fragments	Comments	Date
216	Glass object	1	Indistinct glass object	-
217	Bottle glass	1	Body shard, beer bottle	20 th century
230	Vessel glass	1	Rim shard	20 th century
305	Vessel glass	1	Body sherd	20 th century
313	Vessel glass	1	Body sherd, burned on one edge, decorated with a red band.	20 th century
401	Vessel glass	1	Body shard	20 th century
	Bottle glass	1	Base and body sherd	19 th – 20 th

An Archaeological Evaluation at Milliner's Wharf, Ancoats, Manchester

			decorated "CORNBRO..., ...ERY Co Ltd, MANCHESTER"	century
--	--	--	--	---------

Animal Bone

Context	Description	No. of fragments	Date
216	Animal bone	1	-
217	Animal bone	2	-
219	Animal bone	3	-
236	Animal bone	1	-
419	Bone object/handle (?)	1	-
419	Animal bone	3	-
401	Oyster shell	1	-

Clay Pipe

Context	Description	No of fragments	Stem Ø	Date
216	Stem fragment	1	Stem 6mm, bore 3mm	19 th - 20 th century
	Stem fragment	1	Stem 5mm, bore 3mm	19 th - 20 th century
	Bowl fragment	2	Small fragments of pipe bowl	-
	Bowl fragment	1	Small fragment of pipe bowl with fluted decoration	19 th - 20 th century
	Stem fragment	3	Stem 7mm, bore 2mm	19 th - 20 th century
	Stem fragment	1	Stem 6mm, bore 2mm	19 th - 20 th century
217	Stem fragment	2	Stem 7mm, bore 2mm	19 th - 20 th century
219	Stem fragment	1	Stem 7mm, bore 3mm	19 th - 20 th century
230	Stem fragment	2	Stem 7mm, bore 3mm, one mouth-piece	19 th - 20 th century
303	Clay pipe bowl	1	Small fragment of pipe bowl	-
313	Stem fragment	3	Stem 7mm, bore 2mm	19 th - 20 th century
	Stem fragment	1	Stem 5mm, bore 2mm, decorated "...ASGOW"	19 th - 20 th century
	Stem fragment	1	Stem 8mm, bore 3mm	19 th - 20 th century
	Bowl. Roll stamp decorated "18" within horseshoe decorated	1	33mm in length by 22mm in width	19 th - 20 th century

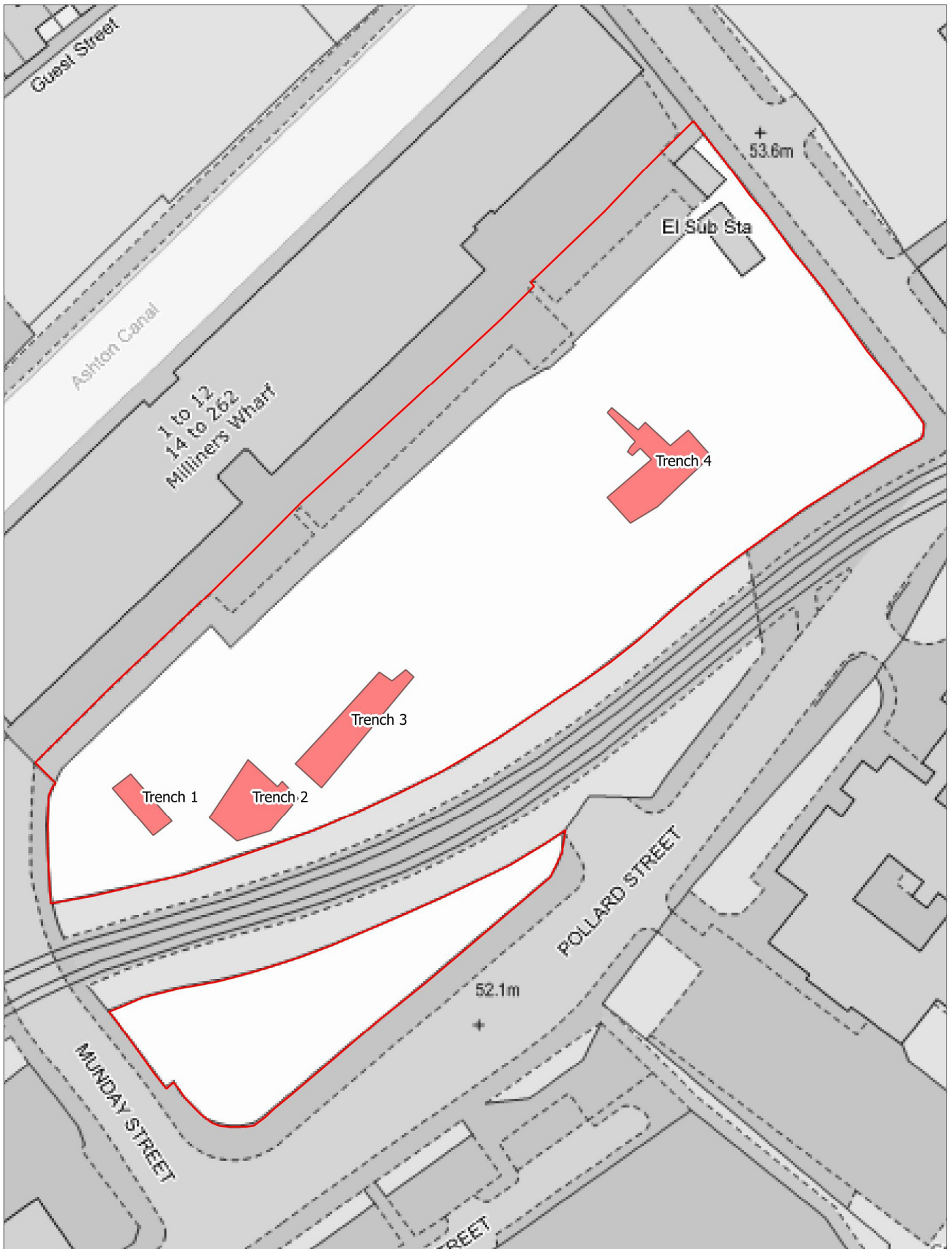
Misc. Finds

Context	Description	No. of fragments	Date
401	Coconut shell	1	-
419	Leather strap	1	-
419	Plastic comb	1	-

Appendix 2 – Figures



Figure 2. Site Location



Site name: Milliners Wharf
 Date: April 2014
 Drawn by: JT
 Scale: 1:750 @ A4

Key
 Red Line Boundary Trenches

0 5 10 15 20 25 m



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Figure 3.
Trench locations



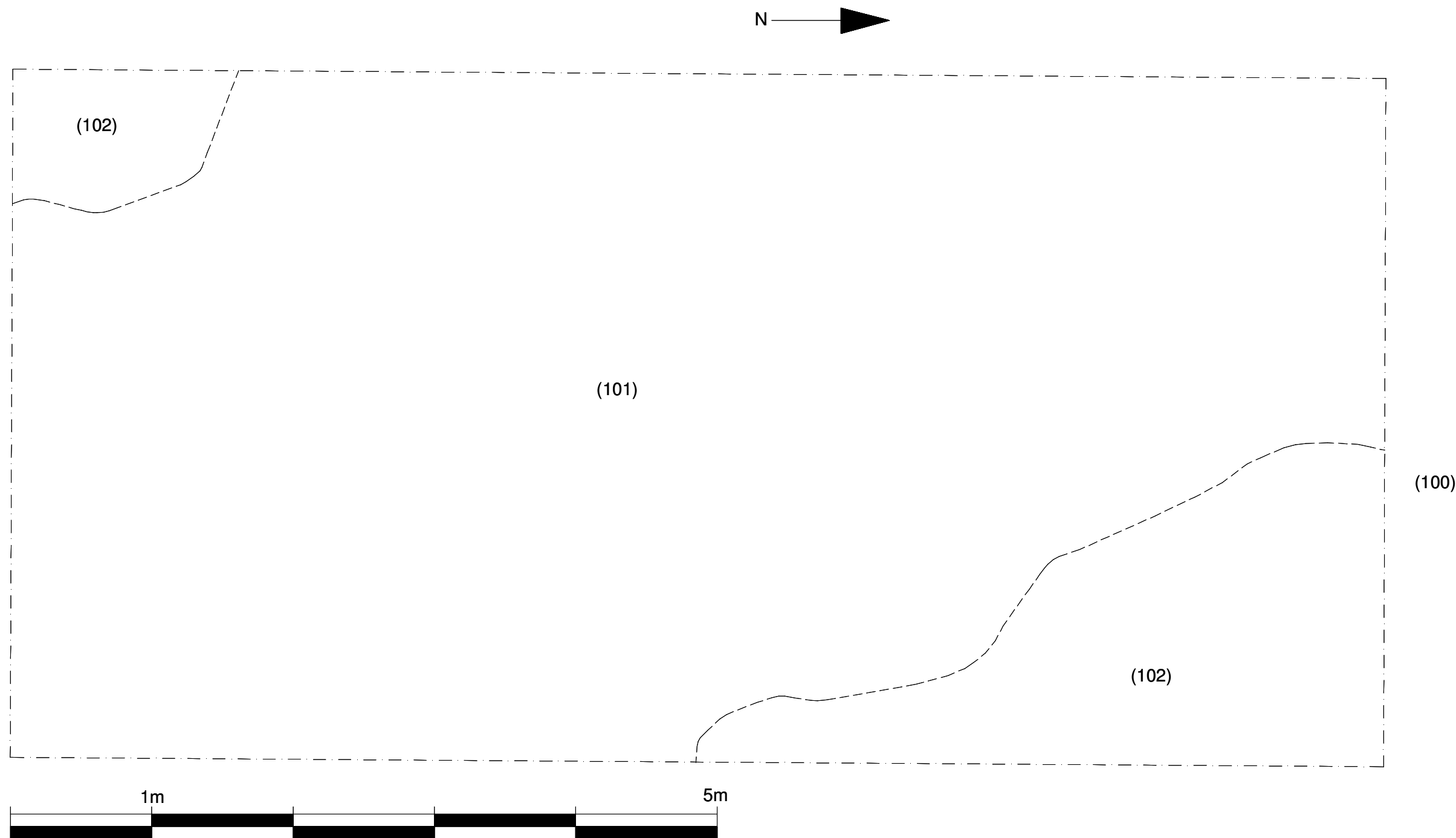
Figure 4. Trench 1, post-excitation. Scale = 2x2m.



Figure 5. Example section of Trench 1. Scale = 2x2m

Figure 6: Trench 1 Plan

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Figure 7. Trench 2, post-excitation, facing west. Scale = 2x2m.



Figure 8. Trench 2, post-excitation, facing east. Scale = 2x2m.



Figure 9. . Possible light-well (231) and wall (220), clearly showing construction cut [222], Trench 2.
Scale = 1m.



Figure 10. Wall (222), facing north, Trench 2. Scale = 1m.

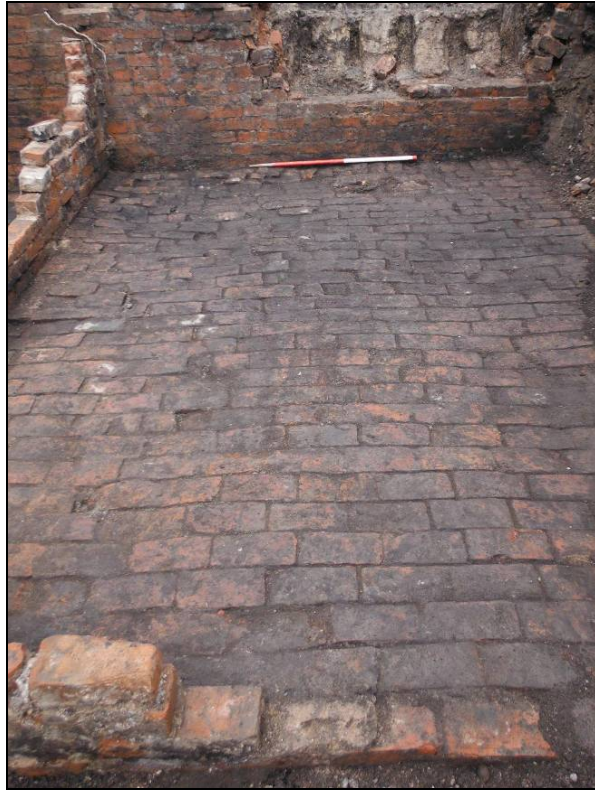


Figure 11. Brick surface (214) with structural wall (220) and internal partition walls (212), Trench 2. Scale = 1m. Note the demolition damage to wall (220) caused by a large, toothed bucket.



Figure 12, Internal partition walls (212) and the remnants of flagged floor surface (219) and later brick surface (223), Trench 2. Scale = 1m.



Figure 13. Brick surfaces (214), (217), and (218) within structural wall (220) and internal partition walls (212), Trench 2. Scale = 1m.



Figure 14. Brick structure (217), Trench 2. Scale = 1m.



Figure 15. Stone drain cover (224) within brick surface (218), Trench 2. Scale = 0.25m.



Figure 16. Possible purpose-built inset built into wall (220) to be used as a shelf, Trench 2. Scale = 0.25m.



Figure 17. Wall (220) with brick surfaces (217) and (218), Trench 2. Scale = 1m.



Figure 18. Internal partition walls (212) resting upon the natural clay, Trench 2. Scale = 0.25m.



Figure 19. Possible drain structure (225), Trench 2. Scale = 0.25m.



Figure 20. Drain (226) abutting internal partition wall (212), Trench 2. Scale = 2m.



Figure 21. Internal partition wall (212), drain (226) and drain capping slabs (232), Trench 2. Scale = 2m.



Figure 22. Drain capping slabs (232) lifted to reveal a further brick-built drain, Trench 2. Scale = 1m.



Figure 23. Structural wall (202) with flagged surface (229) and wall (230), Trench 2. Scale = 2m.



Figure 24. Structural wall (202) with flagged surface (229), wall (230) and drain capping slabs (232), Trench 2. Scale = 2m.



Figure 25. Door setting (228), Trench 2. Scale = 0.25m.



Figure 26. Sondage revealing the sequence of deposits underneath brick surface (218), Trench 2. Scale = 0.25m.



Figure 27. Drain pipe (235) cut into the natural clay and running beneath the partition walls (212), Trench 2. Note the gap within the partition wall which may suggest the drain was added at a later date.



Figure 28. Internal partition wall (212) and 'front' wall (202), Trench 2. Note the mis-alignment of the courses of the walls, and the difference in bricks used. The implication is that wall (202) was constructed at an earlier date, before walls (212) were added. Scale = 0.25m.



Figure 29. The brick on the left is taken from wall (202), whilst that on the right from internal partition walls (212), Trench 2. The difference in colour of both the bricks and the mortar suggest different construction events.

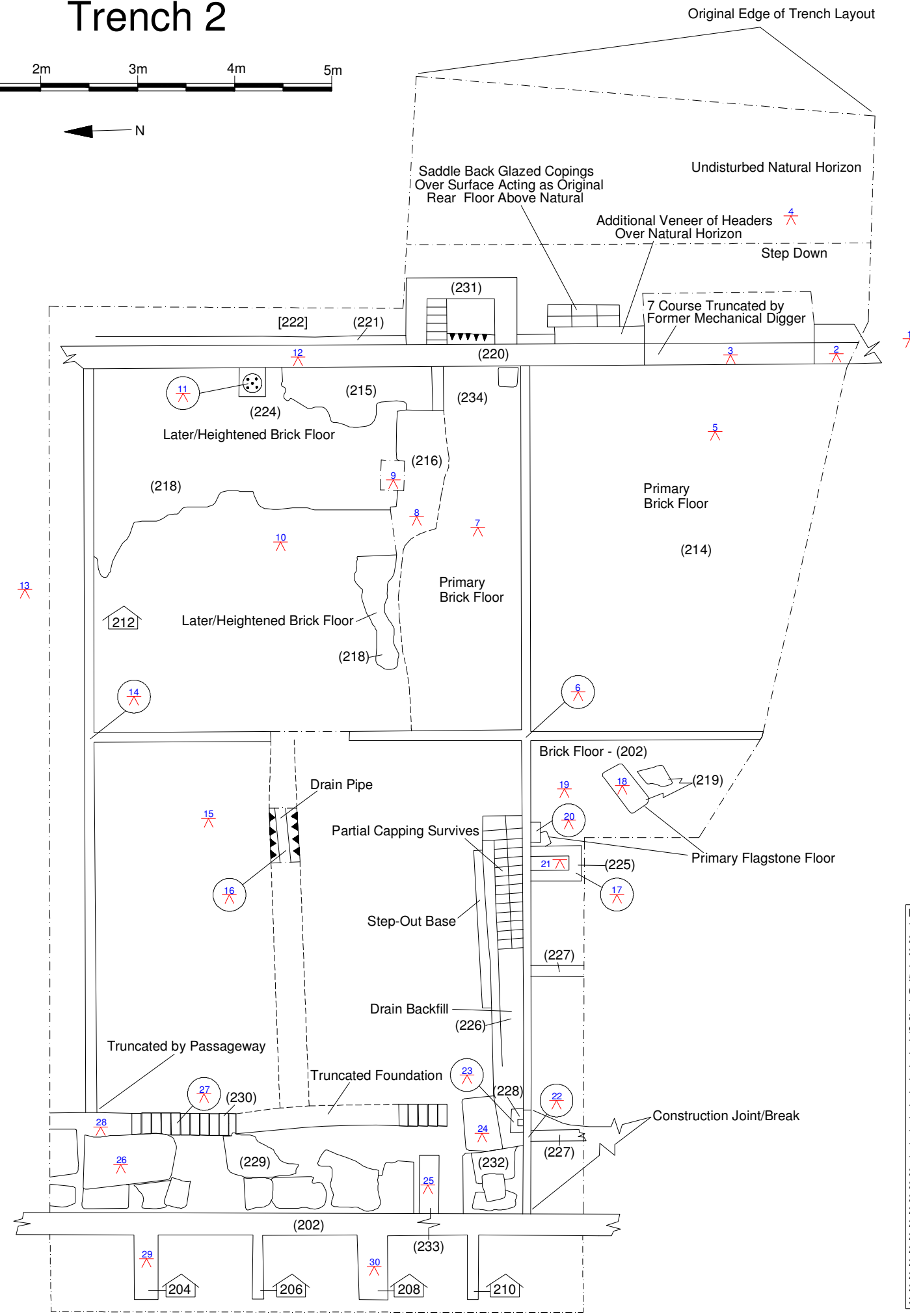


Figure 30. Structural wall (220) with internal partition wall (212) keyed into it, proving these walls were constructed at the same time. This is in contrast to wall (202) and internal partition walls (212). Trench 2. Scale = 0.25m.



Figure 31. Structural wall (202) with walls (204 and (206), Trench 2. Scale = 0.25m.

Trench 2



Levels:

1:	53.43
2:	52.42
3:	51.68
4:	52.08
5:	51.17
6:	51.47
7:	51.09
8:	51.06
9:	50.86
10:	51.13
11:	51.20
12:	52.17
13:	53.48
14:	51.20
15:	50.87
16:	50.76
17:	51.46
18:	51.08
19:	51.03
20:	51.21
21:	50.97
22:	51.56
23:	51.20
24:	51.12
25:	51.16
26:	51.05
27:	51.05
28:	50.97
29:	51.42
30:	51.59

Figure 32: Trench 2 Plan

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Figure 33. Trench 3, post excavation. Scale = 2x2m.



Figure 34. Wall (302), Trench 3. Scale = 1m.



Figure 35. Walls (305), (308), (311) and (313), Trench 3. Scale = 1x2m and 1x1m.



Figure 36. Wall (305), Trench 3. Scale = 1m.



Figure 37. Wall (306) and (312), Trench 3. Scale = 1m.



Figure 38. Walls (313), (312), (308), (305) and (302), Trench 3. Scale = 1m.

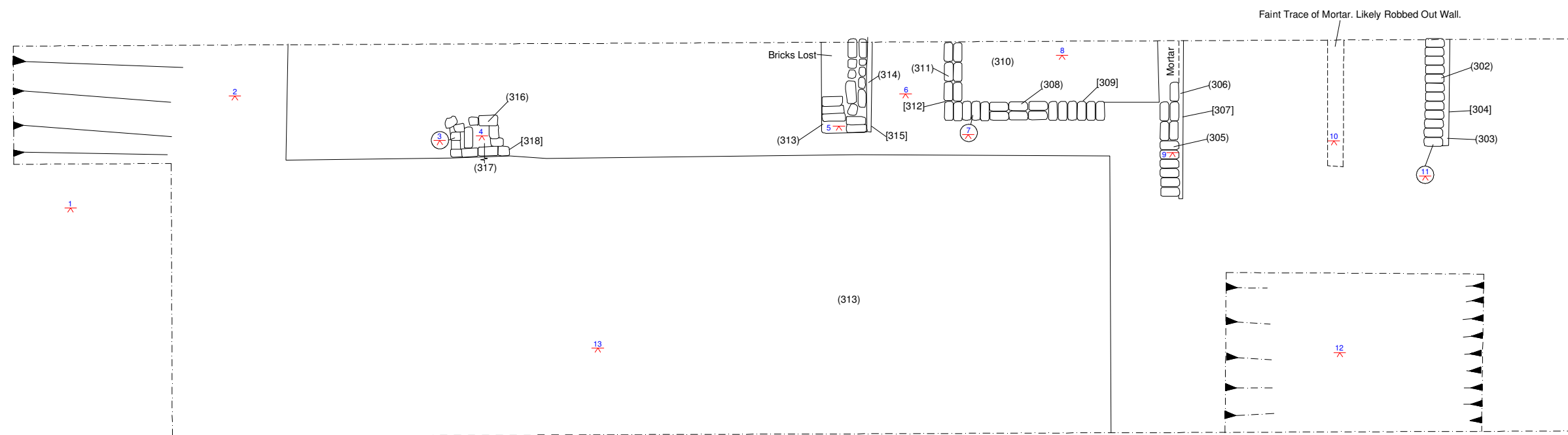


Figure 39. Wall (313), Trench 3. Scale = 1m.



Figure 40. Drain (316), Trench 3. Scale = 1m.

Figure 41: Trench 3 Plan



Key:

Levels:	
1:	52.76
2:	51.55
3:	51.56
4:	50.61
5:	51.98
6:	51.50
7:	51.68
8:	51.70
9:	51.70
10:	51.55
11:	51.68
12:	50.94
13:	51.43
14:	52.12
15:	52.20
16:	52.15

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Figure 42. Trench 4, post-excitation. Scale = 2m.



Figure 43. Structure (409) and concrete base (421), Trench 4. Scale = 1m.



Figure 44. Canal wharf in the foreground with the later mill building in the background, Trench 4. Scale = 1m.



Figure 45. Wharf coping stones (404) with brick platform (402), Trench 4. Scale = 1m.



Figure 46. Wharf coping stones (404) with structure (409) and (407) in the background, Trench 4. Scale = 1m.



Figure 47. Walls (411) and (413) with concrete floor (414), Trench 4, pre-exploratory sondage. Scale = 1m.



Figure 48. Walls (411) and (413) with concrete floor (414), Trench 4, post-exploratory sondage. Note that the curve of the canal wharf does not continue into this area. It is likely that the construction of the mill destroyed this area of the wharf – the area where the coping stones look as though they should continue was filled by Accrington Nori bricks, which post-date the construction of the wharf. Scale= 1m.



Figure 49. Example of Accrington Nori bricks retrieved from Trench 4. Scale = 0.10m.



Figure 50. Evidence of a heavy door having existed over concrete floor (414), Trench 4. Scale = 1m.



Figure 51. Possible fitting within concrete floor (414), Trench 4. Scale = 0.25m.



Figure 52. Structure (407) and concrete floor (408), Trench 4. Scale = 1m.



Figure 53. Structure (407) and concrete floor (408), Trench 4. Scale = 1m.



Figure 54. Southern end of structure (407) with the canal wharf coping stones (404) in the background, Trench 4. Scale = 1m.



Figure 55. Detail of recess within structure (407), Trench 4. Red portion of scale = 0.5m.



Figure 56. Possible doorway within structure (407), Trench 4. Scale = 1m.

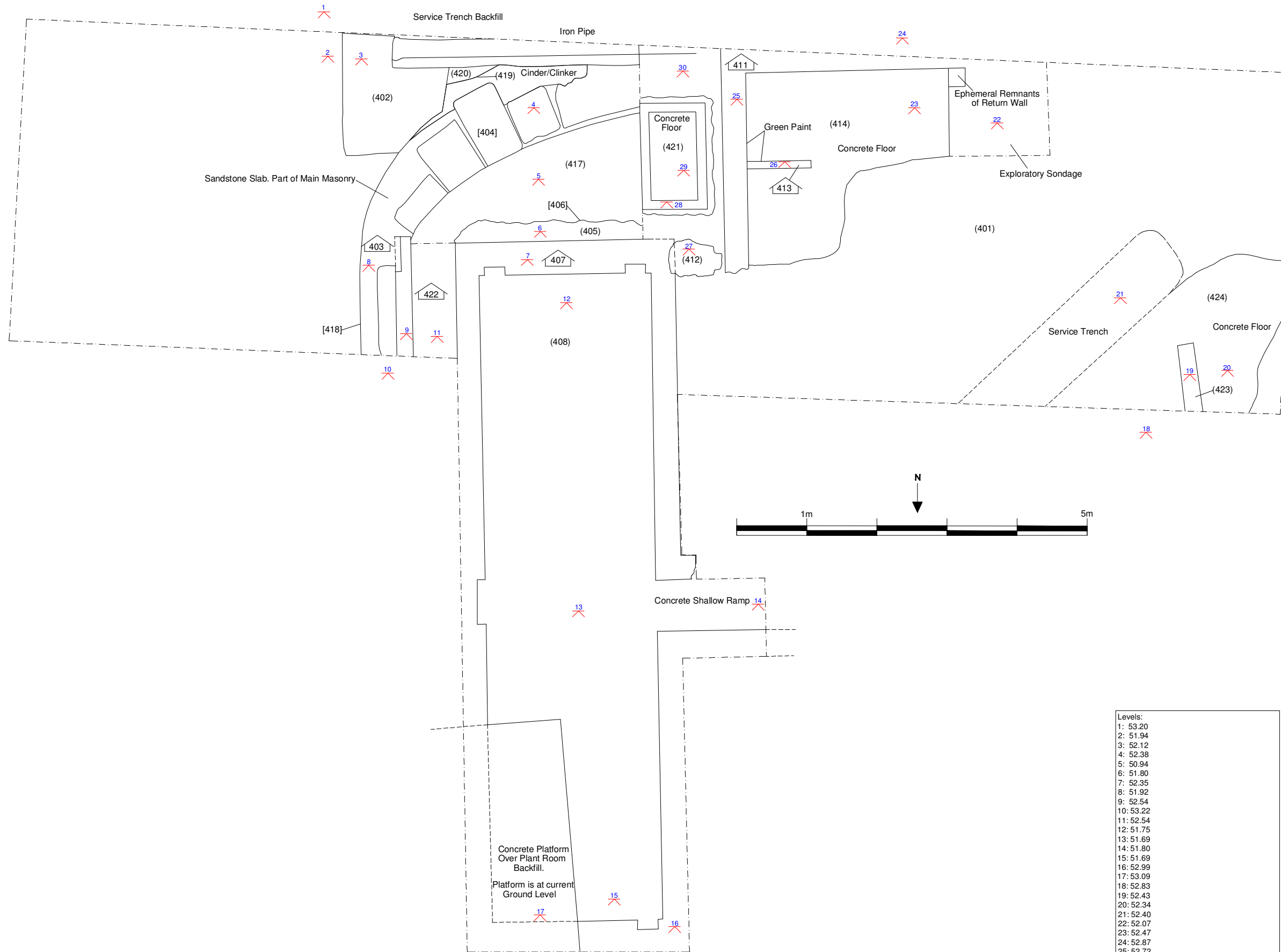


Figure 57. Wharf coping stones (404) and structure (407). Scale = 1m.



Figure 58. Wall (423) and truncated concrete floor (424), Trench 4. Scale = 1m.

Figure 59: Trench 4 Plan



Key:

Levels:	
1:	53.20
2:	51.94
3:	52.12
4:	52.38
5:	50.94
6:	51.80
7:	52.35
8:	51.92
9:	52.54
10:	53.22
11:	52.54
12:	51.75
13:	51.69
14:	51.80
15:	51.69
16:	52.99
17:	53.09
18:	52.83
19:	52.43
20:	52.34
21:	52.40
22:	52.07
23:	52.47
24:	52.87
25:	52.72
26:	52.56
27:	52.59
28:	52.58
29:	52.13
30:	52.58

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Figure 60: Green's Survey of Manchester (1787-94). Red circle indicates approximate location of the proposed development area.

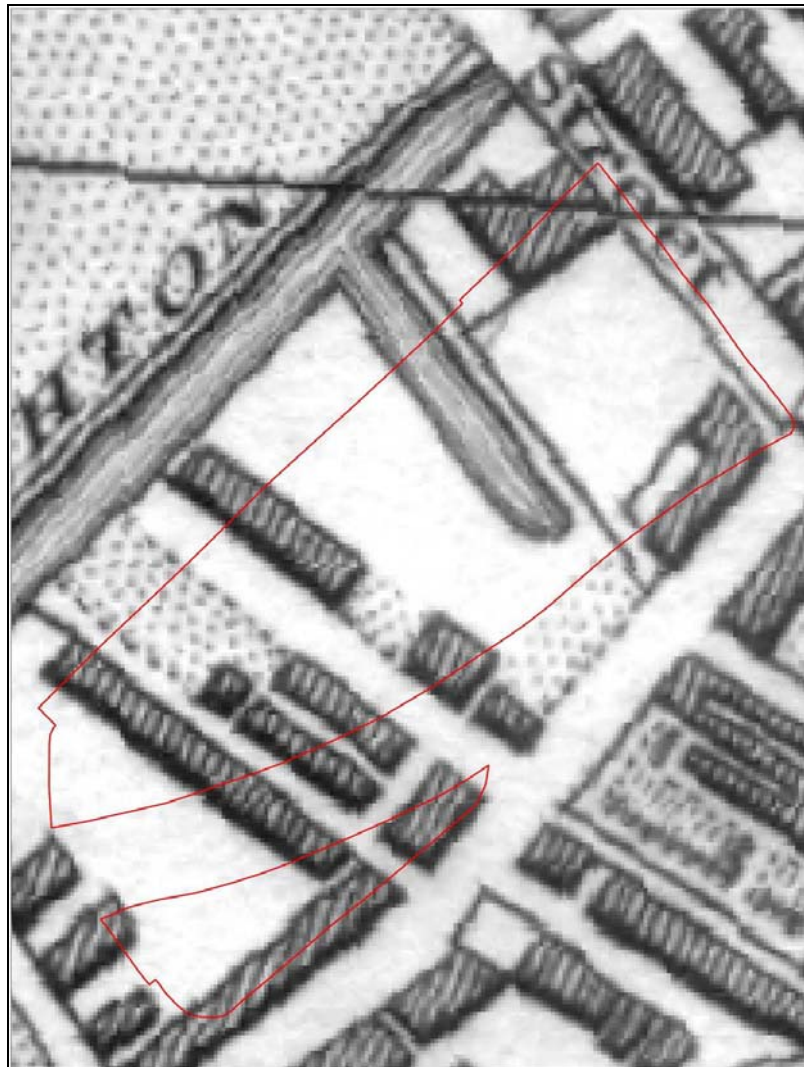


Figure 61: Swire's map of 1824.



Figure 62: Ordnance Survey 1849



Figure 63: Ordnance Survey 1888-1889



Figure 64: Ordnance Survey 1958

Milliner's Wharf, Manchester

Written Scheme of Investigation for Archaeological Evaluation Trenching



1. Introduction

- 1.1. This scheme of works relates to Phase II of development at Milliner's Wharf, Manchester (Figure 1) which includes the construction of two blocks of residential apartments, associated access, car parking and landscaping (Planning Application Number 100991/OO/2012/N2).
- 1.2. A desk-based assessment (DBA) has been produced by University of Manchester Archaeological Unit (2006) for Phase I of the project. The DBA identified potential below-ground remains of regional and high local significance. These included industrial buildings such as two 19th century mills, an iron works and the remains of early to mid 19th century workers' housing (UMUA 2006). An archaeological evaluation and excavation found evidence for early workers' housing and 19th century industrial buildings (UMUA 2007). It was not possible at that time to complete the full development and works were ended following the construction of the current building 'Milliners Wharf'. The proposed development area (hereafter PDA) for Phase II was also included within these previous archaeological investigations.
- 1.3. A further DBA has been produced (ARS Ltd 2014) which identified that the expansion of the building 'Victoria Mill' likely had a direct impact on the preservation of below ground archaeological remains as was demonstrated during evaluation on site (UMUA 2007). As such, archaeological remains of early to mid 19th century workers' housing are likely to survive outside of the extent of the mill's expansion.
- 1.4. As a condition of the planning permission and in consultation with Greater Manchester Archaeological Advisory Service (GMAAS), four evaluation trenches will be excavated (Figure 2).
- 1.5. This document is a written scheme of investigation (WSI) confirming the nature of the archaeological trenching to be undertaken by Archaeological Research Services Ltd (ARS Ltd) at Milliners Wharf, Manchester.

2. Archaeological Background

- 2.1. No prehistoric finds have been recorded within the study area.
- 2.2. One Roman find is within the study area. Approximately 135m north of the PDA a Roman road (MGM 47) running from Manchester to Castleshaw is believed to have run through Ancoats along the route of the road now known as "Old Mill Road". There is a low potential for surviving Roman archaeology to be located due to the intensively developed nature of the study area during the post-medieval period.
- 2.3. Cartographic evidence showed that the PDA lay within agricultural land beyond the built-up area of Manchester. The PDA was shown as fields until Green's map of 1787-94 which

indicates that the earliest archaeological deposits on site will date to the Industrial Period.

- 2.4. The last quarter of the 18th century saw a large increase in the population of Manchester, fuelled by an upsurge in the textile industry in which Manchester was involved as both a manufacturer and commercial centre. The PDA is situated within the region of Ancoats which became the world's first industrial suburb where land was assigned to factories and workers' housing. The Ashton Canal was completed in 1796, and provided the necessary transport links to make the construction of new mills and other works within the region feasible.
- 2.5. Swire's map of 1824 indicates that the land within the PDA had been extensively developed including a cotton spinning mill complex (MGM 2707), a brewery (MGM 18144), an engine house (MGM 18145) and a warehouse (MGM 12441). An arm of the Ashton Canal was also depicted extending southwards from the canal into the PDA which was possibly constructed to service the industrial buildings within the PDA (MGM 18140).
- 2.6. There is evidence for both residential and commercial development within the PDA which attests to growth within the early to mid-19th century.
- 2.7. Swire's map of 1824 depicted a number of workers' housing within the PDA. However, the small scale of this map makes it difficult to determine individual plots or their composition. By the late 1970's/early 1980's all of these buildings had been demolished. As such, the cartographic evidence for the buildings provides much of the record of these buildings.
- 2.8. Trenches excavated within the PDA of Phase II include Trenches 7, 8, 9, 10 and 12 (UMUA 2007). Trench 7 found the remains of cellar walls associated with back to back workers' housing and Trench 8 found remains of a back to back house of a probable 1818 – 1824 construction date. Trench 9 located remains pertaining to the Halton Street Brewery and Trench 12 found other industrial remains from an engine house or boiler room. Trench 10 had been positioned to locate the remains of double depth workers' housing but the extension of Victoria Mills had removed any traces of the houses once located there.
- 2.9. There is considered to be a high potential for archaeology which dates from the early to mid 19th century within the PDA which is supported by the largely well preserved remains found during previous excavation (UMUA 2007). However, this is possibly not the case in areas which the Victoria Mill expanded into as was the case with Trench 10. The final extent of the mill is depicted on Figure 6.

3. Aims and Objectives

3.1. *Aims*

- Excavate and record archaeological deposits and features within the development area.
- Produce relative and absolute dating and phasing for deposits and features recorded on the site.
- Establish the character and delimit the extent of deposits in order to define functional areas on the site such as burial, industrial, domestic *etc.*
- Produce information on the economy and local environment.

3.2. *Objectives*

- Determine the nature and date of the various archaeological features (e.g. boundary features, industrial and domestic structures *etc.*) and understand their spatial organisation

- Recover any information relating to the industrial and domestic activity which is known to have existed in the area in the early 19th century.

3.3. Trench-specific objectives (see Figure 2):

- Trench 1: Uncover any remains of workers' housing which may have been constructed between 1836 and 1848.
- Trench 2: Uncover any remains of workers' housing which may have been constructed by 1821.
- Trench 3: Uncover any remains of worker's housing which may have been constructed between 1821 and 1824.
- Trench 4: Uncover any remains of workers' housing and an arm of a canal which first appears in 1821 and recover any information relating to the industrial activity which is known to have existed in the area in the early 19th century. The workers' housing may have been constructed between 1836 and 1848.

3.4. The evaluation work is designed to identify and record the location, nature, extent, significance and date of 18th-20th centuries industrial structures and workers' housing, along with any earlier archaeological deposits that may exist on the proposed development site.

3.5. If significant archaeological remains are identified during the evaluation that require further examination, a site meeting will be arranged with the client, ARS Ltd and GMAAS in order to agree the requirement and timetable for extending the trench(es) into an open-area excavation.

3.6. Any changes to the agreed WSI will be discussed with, and agreed with GMAAS.

4. Method Statement

4.1. In consultation with GMAAS the following has been agreed upon (see Figure 2):

4.2. Topsoil and unstratified modern material will be removed mechanically by a machine using a wide toothless ditching bucket, under continuous archaeological supervision. The topsoil or recent overburden will be removed down to the first significant archaeological horizon in successive level spits. No machinery will track over areas that have previously been stripped until the area has been signed off by ARS Ltd.

4.3. The areas will be appropriately cleaned using hand tools in order to expose the full nature and extent of archaeological features and deposits.

4.4. All spoil removed during groundworks will be scanned visually to recover small finds. Any finds so recovered will be recorded and their location noted on a site plan at a relevant scale. The finds will be retained and recorded.

4.5. All archaeological features will be planned and sectioned as a minimum objective.

- 4.6. Isolated, discrete features such as pits and postholes not belonging to structures or industrial activities will be 50% sampled, although if they produce artefacts then provision is made for full excavation.
- 4.7. Sampling of linear features such as ditches and gullies will be sufficient to determine their character, stratigraphy and relationship to other features and attempts made to obtain dating evidence.
- 4.8. Any deposits relating to funerary/ritual activities, such as burials and cremation deposits, will be 100% excavated. Domestic/industrial activity (such as walls, postholes, floors, hearths) will be sufficiently excavated to understand their form and function and to recover potential dating evidence and artefact and ecofact assemblages.
- 4.9. Area deposits such as buried soils, or middens, will be hand excavated at a minimum 10%. Subsequent excavation by machine will be considered. Large intrusions, such as reservoirs, will be sufficiently excavated by machine, within safe limits, to provide information on their character.
- 4.10. Limited representative samples of bricks from brick-built structures, and selective products of the brick working process will be retained for specialist analysis where appropriate.
- 4.11. Discovery of any human remains will be reported to the coroner and excavated following receipt of the appropriate Ministry of Justice Guidelines.
- 4.12. Finds of "treasure" will be reported to the Coroner in accordance with the Treasure Act procedures.
- 4.13. For deposits that have potential for providing environmental or dating evidence, a minimum of 10 litres of sample will be taken, or 100% of the sample if smaller. This material will be floated and passed through graduated sieves, the smallest being a 500 μ mesh. Should other types of environmental deposits be encountered appropriate specialist advice will be sought and an appropriate sampling strategy devised. Samples will be assessed by a suitable specialist with provision for further analysis as required. Advice from the English Heritage Scientific Adviser will be taken as appropriate.
- 4.14. All site operations will be carried out in a safe manner in accordance with ARS Ltd's health and safety policy. Deep sections such as those across ditches or pits will be shored as necessary. A risk assessment will be prepared before commencement on site.
- 4.15. Following the excavation, recording and monitoring of each trench they will be backfilled using excavated material.

5. Recording

- 5.1. The site will be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area. The site will be recorded using a single context planning system in accordance with the ARS Ltd field recording manual.
- 5.2. A full and proper record (written, graphic and photographic as appropriate) will be made for all work, using pro-forma record sheets and text descriptions appropriate to the work. Accurate scale plans and section drawings will be drawn where required at 1:50, 1:20 and

- 1:10 scales, as appropriate. In addition to relevant illustrations, provision for rectified photographic recording shall be made, if deemed necessary.
- 5.3. The stratigraphy of the site will be recorded even where no archaeological deposits have been identified.
- 5.4. All archaeological deposits and features will be recorded with above ordnance datum (AOD) levels.
- 5.5. A photographic record of all contexts will be taken using a digital camera, and will include a clearly visible, graduated metric scale. A register of all photographs will be kept. A selection of working shots will be taken to demonstrate how the site was investigated and what the prevailing conditions were like during excavation.
- 5.6. Where stratified deposits are encountered, a 'Harris' matrix will be compiled.
- 5.7. For brick structures, the record should include details of brick dimensions and type (handmade/machine-made, plain/frogged), mortar (colour, composition, hardness) and the extent of structures (number of courses, thickness in skins).
- 5.8. All archaeological fieldwork, recording of archaeological features and deposits and post-excavation analysis will be carried out to acceptable standards as set out in the Institute for Archaeologists' Code of Conduct (2012) and Standard and Guidance for Archaeological Field Evaluation (2009).
- 5.9. Provision will be made for additional specialist advice, e.g. for finds analysis and conservation.

6. Monitoring Arrangements

- 6.1. Should complex archaeological features be discovered, requiring detailed recording, a contingency will be required. The allocation of this contingency will be agreed with the client and GMAAS. Consultation between the client, ARS Ltd and Norman Redhead will be required at the end of the archaeological trenching to ensure that all the below ground archaeology has been adequately recorded.
- 6.2. ARS Ltd will liaise with Norman Redhead at regular intervals throughout the course of the work:

Norman Redhead
Heritage Management Director
Greater Manchester Archaeological Advisory Service
School of the Built Environment
Joule House
University of Salford
1 Acton Square
Salford
M5 4NW

Tel: 01612 955522
Email: n.redhead@salford.ac.uk

7. Report

7.1. Following completion of the evaluation ARS Ltd will produce a report which will include:

- Non-technical summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- A location plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections.
- An objective summary statement of results
- Conclusions
- Supporting data – tabulated or in appendices
- Index to archive and details of archive location
- References
- Statement of intent regarding publication
- Confirmation of archive transfer arrangements
- A copy of the approved WSI
- A copy of the OASIS form

7.2. Within the report:

- All plans will be clearly related to the national grid.
- All levels will be quoted relative to ordnance datum.

7.3. If significant archaeological remains are identified the report will include

- Detailed description and plans (at 1:50 scale) of any areas which provided significant archaeological information, all feature plans and sections (at 1:10 or 1:20 scale), select artefact illustrations, photographs and an overall site plan showing all recorded archaeological features.
- Finds quantification and assessment.
- A summary of the extent, depth and state of preservation of archaeological deposits across the site.

7.4. Copies of the final report will be deposited with the Greater Manchester HER, and will be submitted to GMAAS within six weeks of the completion of fieldwork.

8. Archive Deposition

8.1. A digital, paper and artefactual archive, which will consist of all primary written documents, plans, sections, photographs and electronic data will be submitted to the a suitable repository museum.

8.2. All artefacts and associated material will be cleaned, recorded, properly stored and deposited in the archive (see above).

- 8.3. If they are forthcoming as a result of the work, a full set of annotated, illustrative pictures of the site, excavation, features, layers and selected artefacts will be supplied to the HER and deposited with the archive as digital images on a CD ROM.
- 8.4. The Greater Manchester HER will be notified on completion of fieldwork, with a timetable for reporting and archive deposition.
- 8.5. Written confirmation of the archive transfer arrangements, including a date (confirmed or projected) for the transfer, will be included as part of the final report.
- 8.6. An OASIS online record <http://ads.ahds.ac.uk/project/oasis/> has been initiated and the watching brief data will be added to this record. Key fields will be completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included within the archive).
- 8.7. The Greater Manchester HER will be notified of the final deposition of the archive.

9. Changes to Methodology or Work Programme

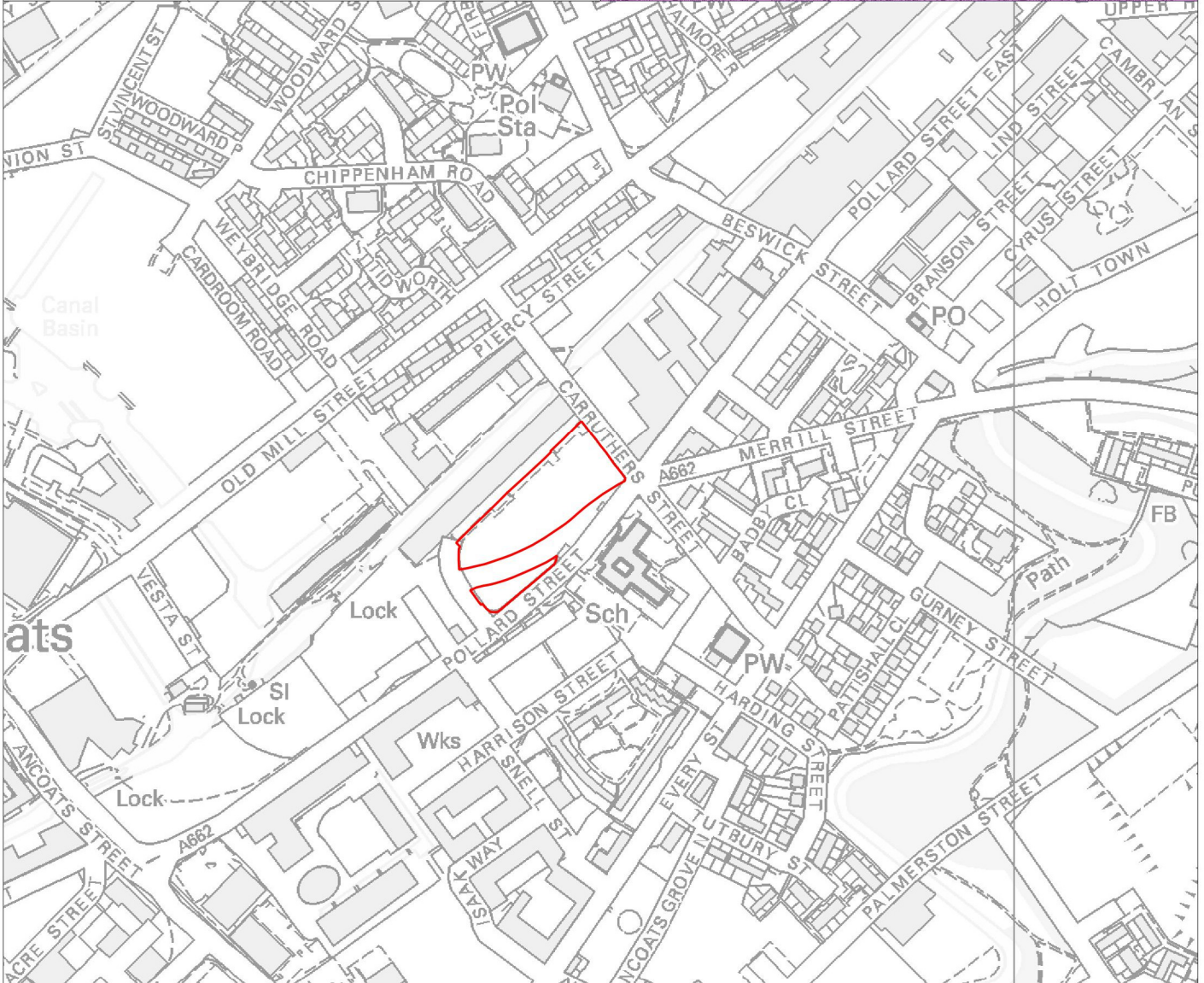
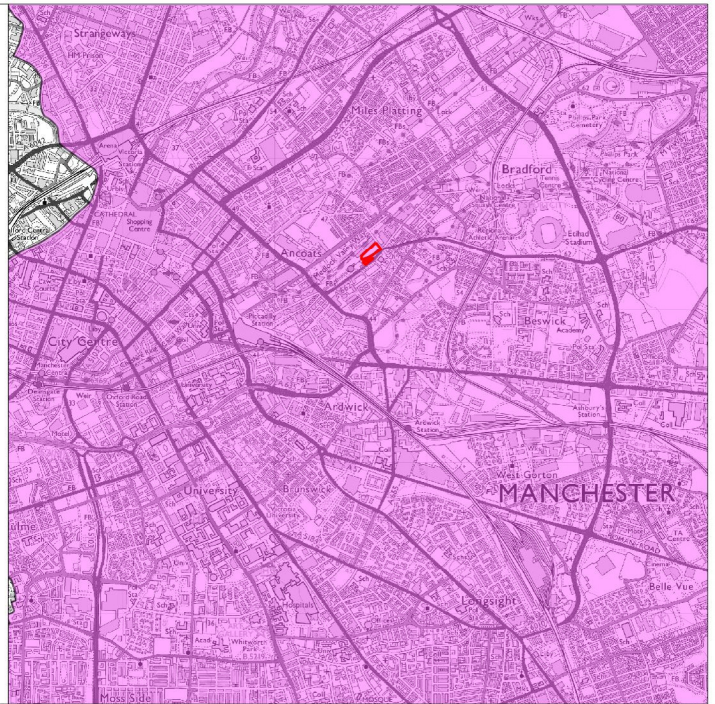
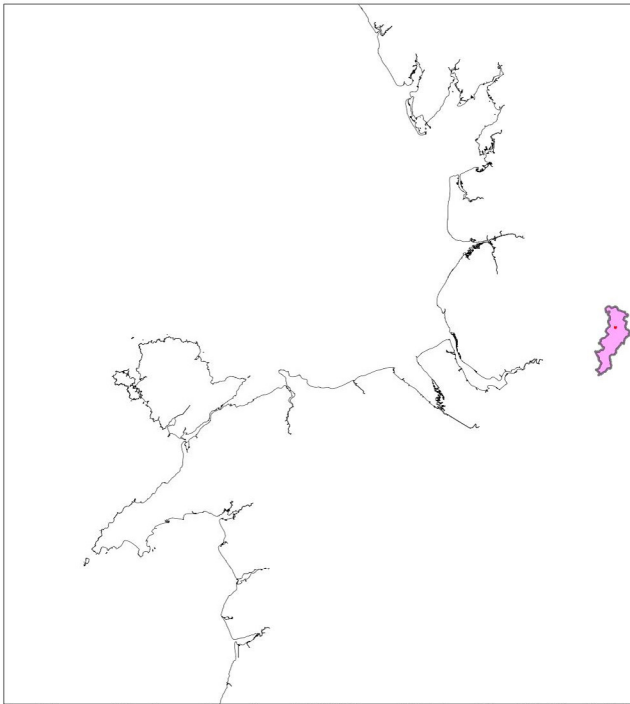
- 9.1. Changes to the approved methodology or programme of works will only be made with the prior written approval of GMAAS.

10. Publication

- 10.1. In the event of significant remains being encountered and excavated, there will be the need for a more formal publication than in the summary form. In this instance a suitable programme and timetable for publication and dissemination will be discussed and agreed upon by all stakeholders.

11. References

- ARS Ltd. 2014. *An Historic Desk-Based Assessment of Land at Munday Street, Manchester (Milliners Wharf Phase II)*. Unpublished Report
- Department for Communities and Local Government. 2012. *Planning Policy Statement 5: Planning for the Historic Environment*.
- English Heritage, 1995. *A strategy for the care and investigation of finds*. Swindon: English Heritage.
- Institute of Field Archaeologists. 2009. *Standard and Guidance for Archaeological Field Evaluation*. Reading: Institute for Archaeologists.
- Institute of Field Archaeologists. 2012. *Code of Conduct*. Reading: Institute for Archaeologists.
- Museum of London Archaeological Services (MoLAS). 2002. *Site Manual*. Reading: Museum of London
- UKIC (United Kingdom Institute for Conservation). 1990. *Guidelines for the Preparation of Archives for Long-Term Storage*.
- University of Manchester Archaeology Unit. 2006. *Victoria Works, Ancoats, Manchester: An Archaeological Building Survey and Desk Based Assessment*. Unpublished Report
- University of Manchester Archaeology Unit. 2007. *Victoria Works, Pollard Street, Ancoats: An Archaeological Evaluation and Excavation*. Unpublished Report



Site name: Milliners Wharf (Phase II)
 Date: February 2014
 Drawn by: JT
 Scale: Varies

Key
 Red Line Boundary Manchester District



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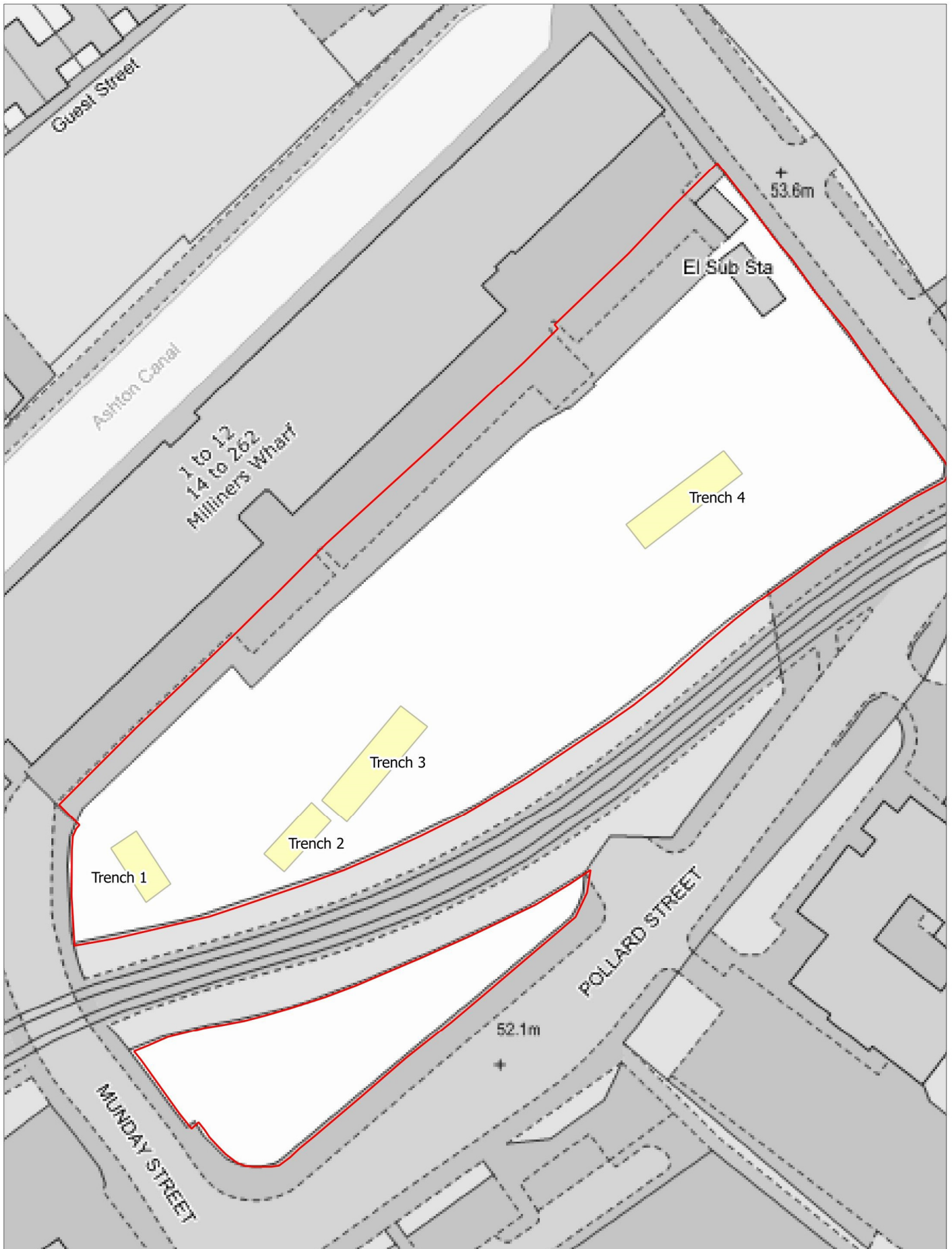


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Figure 1:
Site location



Site name: Milliners Wharf (Phase II)
 Date: February 2014
 Drawn by: JT
 Scale: 1:750 @ A4

Key

Red Line Boundary Proposed Trench Locations 0 5 10 15 20 25 m



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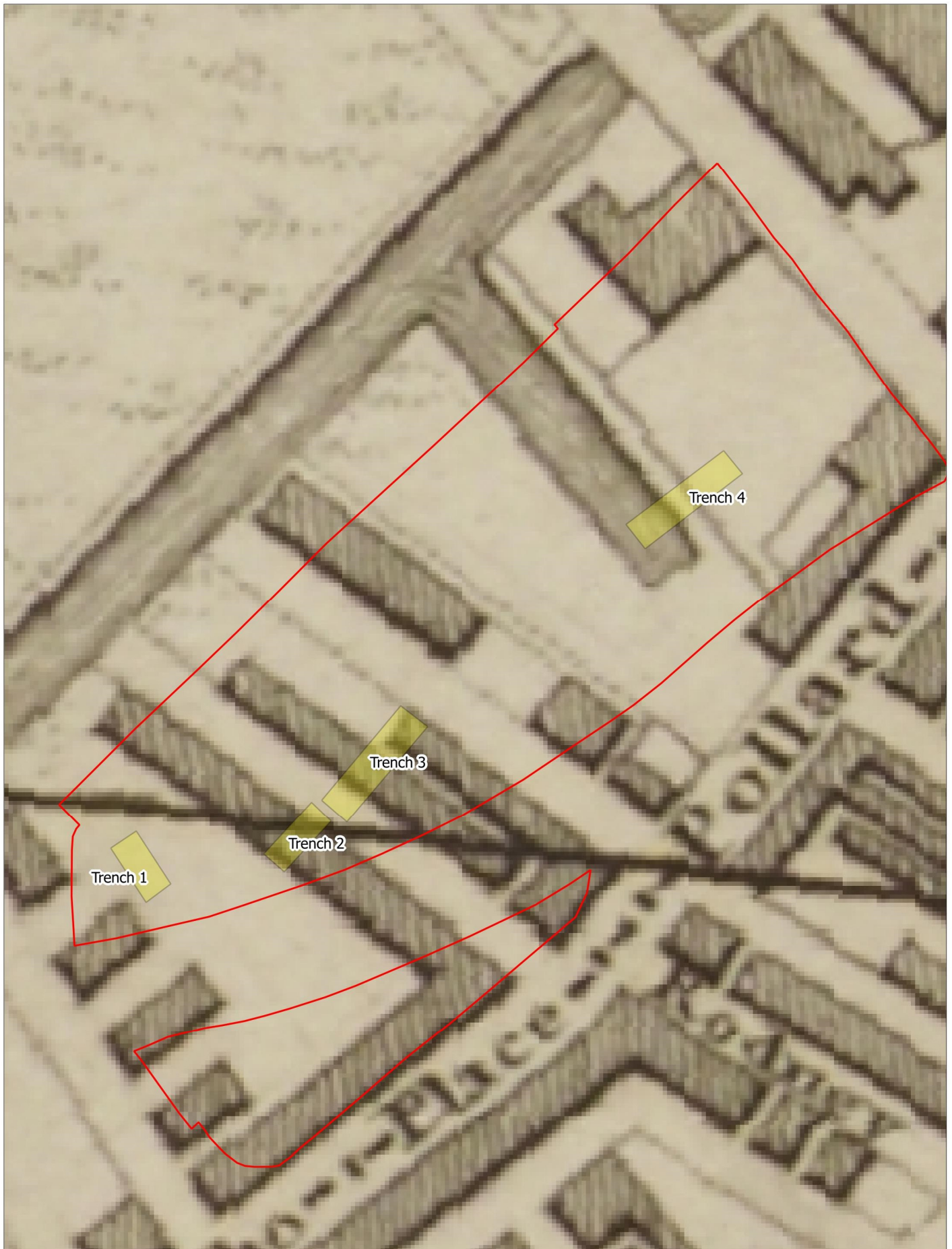
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**Figure 2:
 Trench Location**



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 Drawn by: JT
 Scale: 1:750 @ A4

Key

Red Line Boundary Proposed Trench Locations 0 5 10 15 20 25 m



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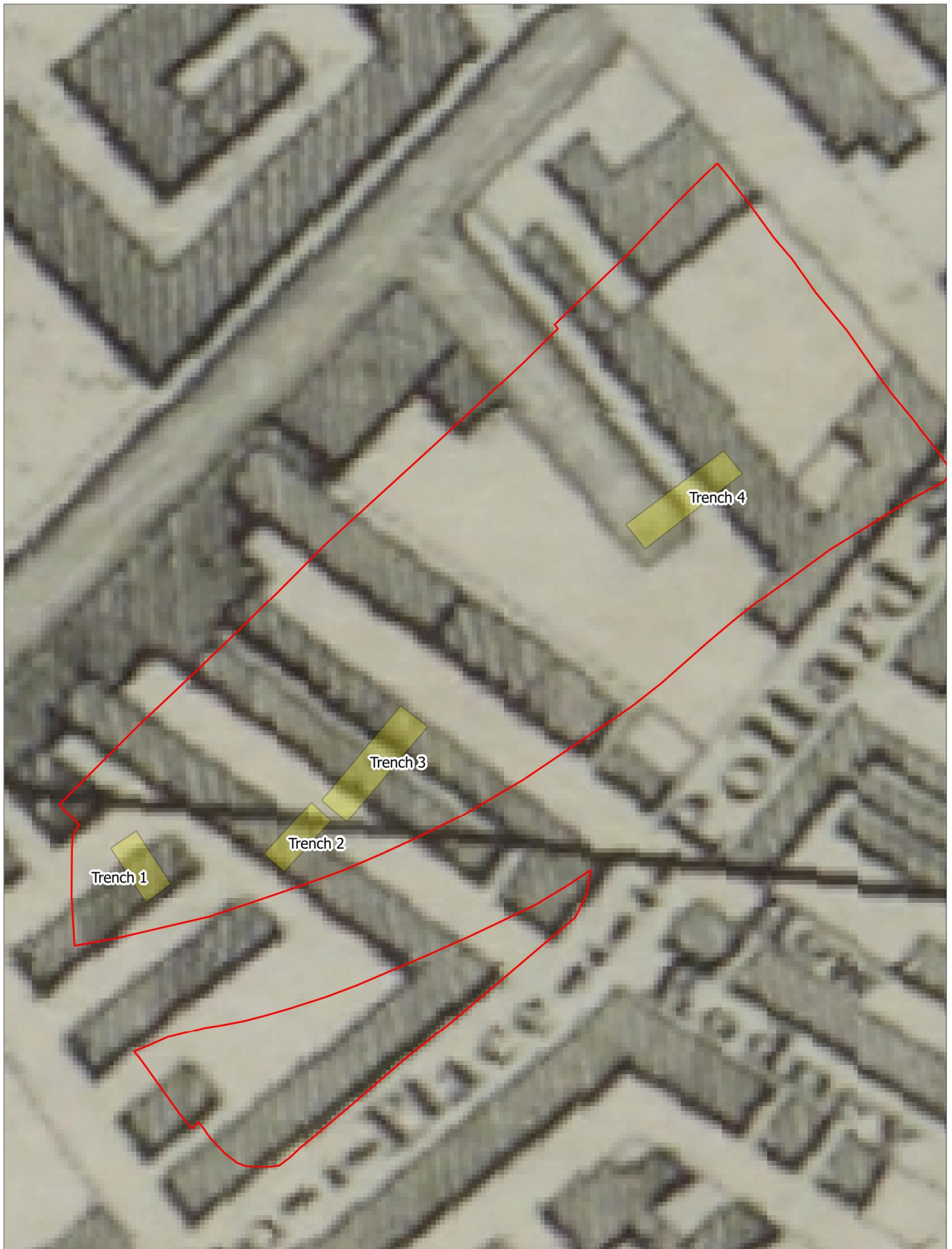
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**Figure 3:
 Trench Location over Pigot's map of 1836**



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 Date: February 2014
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 Scale: 1:750 @ A4

Key

Red Line Boundary Proposed Trench Locations 0 5 10 15 20 25 m



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Figure 4:
Trench Location over Slater's map of 1848



Site name: Milliners Wharf (Phase II)
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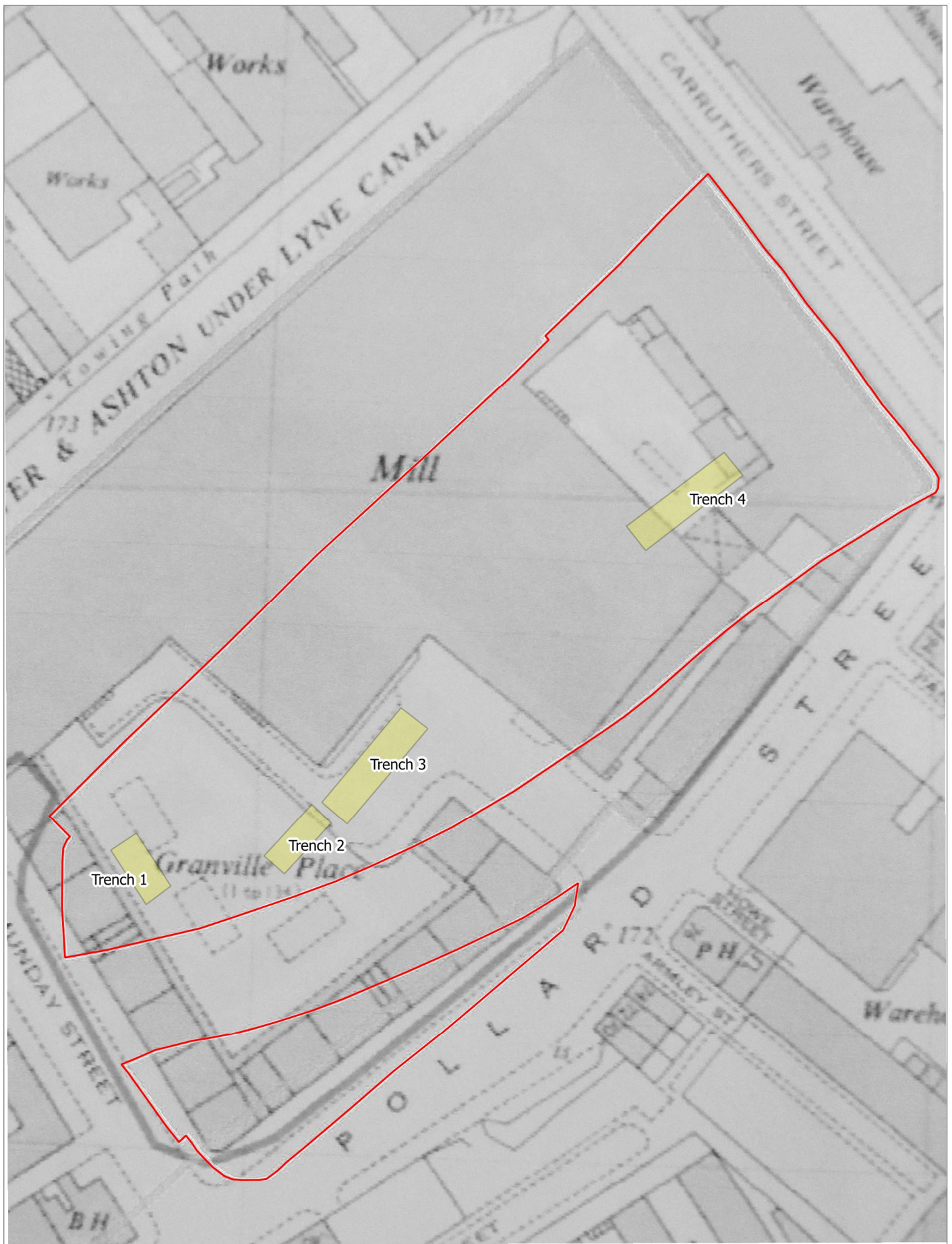
**Figure 5:
 Trench Location over OS map of 1848**

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Figure 6:
Trench Location over OS map of 1958

OASIS DATA COLLECTION FORM: England

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OASIS ID: archaeol5-179935

Project details

Project name	Milliners Wharf, Ancoats, Manchester: Archaeological Excavations
Short description of the project	The archaeological evaluation was carried out to build on the results of the previous DBAs and 2007 evaluation trenches (UMAU 2007). In total, four trenches were excavated during the excavation, which revealed evidence of back-to-back workers' housing with associated utilitarian wares. Evidence for a canal wharf and later mill complex was also recovered.
Project dates	Start: 14-04-2014 End: 25-04-2014
Previous/future work	Yes / No
Type of project	Field evaluation
Site status	None
Current Land use	Other 13 - Waste ground
Monument type	WORKERS HOUSE Post Medieval
Monument type	CANAL WHARF Post Medieval
Significant Finds	NONE None
Methods & techniques	"Targeted Trenches"
Development type	Housing estate
Prompt	Planning condition
Position in the planning process	Pre-application

Project location

Country	England
Site location	GREATER MANCHESTER MANCHESTER MANCHESTER Milliners Wharf, Ancoats
Postcode	M4 7BB
Study area	0.69 Hectares
Site coordinates	SJ 385635 398371 52.9520757689 -2.91454114161 52 57 07 N 002 54 52 W Point
Lat/Long Datum	Unknown

Project creators

Name of Organisation	Archaeological Research Services Ltd
Project brief originator	GMI Construction Group
Project design originator	Archaeological Research Services Ltd
Project director/manager	Robin Holgate
Project supervisor	Laura Strafford

Project archives

Physical Archive recipient	n/a
Physical Contents	"Animal Bones","Ceramics","Glass","Leather","Metal"
Digital Archive recipient	Archaeological Research Services Ltd
Digital Contents	"Stratigraphic","Survey"
Digital Media available	"Images raster / digital photography","Survey","Text"
Paper Archive recipient	n/a
Paper Contents	"Stratigraphic","Survey"
Paper Media available	"Context sheet","Drawing","Matrices","Photograph","Plan","Report","Section","Survey","Unpublished Text"
Entered by	Joseph Tong (joseph@archaeologicalresearchservices.com)
Entered on	28 May 2014

OASIS:

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