



WYAS
**Archaeological
Services**

**87 Rochdale Road,
Manchester, Greater
Manchester**

Archaeological Building
Recording

Report no. 3906 (DRAFT)
February 2023

Client: Lanpro Services Ltd



87 Rochdale Road, Manchester,

Greater Manchester

Archaeological Building Recording

Summary

Archaeological Services WYAS carried out an archaeological building recording at 87 Rochdale Road, Manchester, the southern end of the former Rochdale Road Gasworks. The structural remains which survive are in fragmentary condition and are found at two levels. Much of the site is underlaid with cellars, most of which were inaccessible for survey. Much of the upper level contained railway tracks which were used to manage the import of coal to the retort houses north of the site. Part of the site contained a Joiners Workshop, built in the early 20th century. The work was undertaken between the 16th and 27th of January 2023.



Report Information

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Ver	Author(s)	Reviewer	Approver	Date
1.0	MW	JR	JR	Feb 2023

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1 Introduction

Archaeological Services WYAS (ASWYAS) were commissioned by Lanpro Services Ltd to carry out an archaeological building survey at the former Rochdale Road Gasworks, Manchester. The work was undertaken prior to the redevelopment of the site to fulfil part of the archaeological condition of the approved planning application (131708/FO/2021).

The work was undertaken between the 16th and 27th of January 2023, in accordance with the National Planning Policy Framework (NPPF), and a Written Scheme of Investigation (WSI, Appendix 1) written by Lanpro Services Ltd and approved by Greater Manchester Archaeological Advisory Services (GMAAS).

Site location and topography

The development site lies adjacent to the A664, Rochdale Road to the north of Manchester City Centre approximately 1.3km to the north-east of Manchester's city centre (centred at NGR SJ 84699 99133; Fig. 1).

The site extends to an area of 0.5ha and includes a concrete hardstanding car park along with several upstanding buildings of various dates. The site itself is level but the surrounding area slopes to the north, and the northern boundary of the site is approximately 4.5m above the level of the adjacent CCP car park. There are several open and bricked up arches visible from the car park, extending below and into the site. Some of the open arches contain open or blocked doors possibly extending further below the site. It is probable that the area of car park to the north of the site was levelled at the time of the expansion of the gas works and construction of the railway arches, thereby truncating any earlier below ground remains.

The site is bounded by the car park to the north, Gould Street to the west, Clive Street and Back St George's Road to the east and Rochdale Road to the south, including the upstanding buildings and associated car parks of the Marble Arch public house and a convenience store.

Several lengths of brick walls and fragments of former building elevations of varying dates form part of the upstanding boundaries of the site and there are also several upstanding structures of varying dates within the site, the earliest dating to the late 19th century.

The recorded bedrock geology within the proposed development site consists of the Chester Formation – Sandstone overlaid by superficial deposits of Till, Devensian - Diamicton (BGS 2023).

2 Archaeological and Historical Background

The archaeological background below is a precis of information derived from both the desk-based assessment (DBA) and heritage statement (HS) produced by Salford Archaeology (Salford Archaeology 2020, 2021).

Prehistoric, Roman and medieval (c. 9500 BC – c. AD 1540)

There is no known evidence for prehistoric, Roman or medieval activity within the boundaries of the site. The potential for any such remains from these periods to survive is considered to be very low, particularly due to the intensive development of the site since the late 18th century.

Post-medieval and modern (c. 1540 – Present)

The onset of rapid industrialisation in Manchester from the 18th century onwards resulted in rapid and extensive expansion of the town's population. From the late 18th to early 19th century, workers' housing formed the most common site-type within the site boundaries (Salford Archaeology 2020). Laurent's map from 1793 clearly shows the start of development within the site with streets laid out and houses constructed along Ashley Street and Back Ashley Street (Salford Archaeology 2020, plate 9).

By 1824, Rochdale Road Gas Works had begun (originally named the Gould Street Gasworks) and Swire's map of 1824 shows two 'gasometers' and a long range of the Works. The map also shows houses along Back St George's Street and at the junctions between Dewhurst Street and Ashley Street (Salford Archaeology 2020, plate 10). Banck's map of 1831 shows a similar arrangement in greater detail (Salford Archaeology 2020, plate 11).

In 1837, Gould Street School was constructed and is shown on the 1851 Ordnance Survey town plan (Salford Archaeology 2020, plate 12). The map also shows, in great detail, back-to-back housing along Ashley Street, with almost the whole site being occupied by streets and housing. By the time of the 1891 Ordnance Survey, town plan the gas works had expanded into the site, with only a few houses remaining (Salford Archaeology 2020, plate 13). A single large building occupies the site and there are several railway lines and additional structures.

By the 20th century, a joiners shop was added along Gould Street and several photographs dating to the early part of the 20th century (Salford Archaeology 2020, plates 14, 16, 17 and 19) show the arrangement of the buildings. An aerial photograph from 1939 (Salford Archaeology 2020, plate 17) shows the arrangement of buildings at the zenith of the gas works development, including the triple-pile warehouse building.

By the time of the 1951 Ordnance Survey map, the large warehouse building had been partially demolished revealing once internal railway lines (Salford Archaeology 2020, plate 18). The 1970 Ordnance Survey map shows the site to have mostly cleared apart from the very southern end of the west range of the triple-pile warehouse and (now labelled 'Depot') and a further 'Warehouse' structure. A further 'Depot' has been constructed along the south boundary of the site. The 1989 Ordnance Survey map (Salford Archaeology 2020, plate 21), a further 'Depot' has been constructed in the far north-east corner of the site and the 'Warehouse' has gone.

A geophysical survey comprising ground penetrating radar (GPR), electrical resistivity tomography (ERT) and surface ground wave stiffness (SWGS) was carried out in September 2022 (SEP Geophysical 2022). The survey was undertaken to attempt to map the locations of housing identified on historic maps and further information about the nature of the any other below ground structures. The survey concluded that as much of the site is around 4.5m above the surrounding ground level and the depth of mid-low frequency GPR penetration was limited to between 2m and 3m, it was unlikely that any responses relating to earlier terraced housing identified on historic mapping would be revealed. However, the GPR survey did reveal several features that may relate to previous usages at higher levels including walls and rails and later structures as identified on later historic maps.

Evaluation

The building recording was carried out alongside a trial trench evaluation, the results of which are forthcoming (Cobbold forthcoming).

3 Aims and Objectives

The primary aim of the historic building recording was to record surviving evidence for the original use and subsequent historical form, function and development of upstanding historic building remains bounding and within the site through the production of a record consisting of measured plans and a detailed photographic record, in line with Historic England Level 2 historic building survey standards (Historic England 2016). The Level 2 historic building recording has been enhanced with additional archival research, including accessing the National Gas Archives for plans of the site.

The results provided below have been collated with available documentary, cartographic and photographic evidence for the original use, and subsequent historical development, form and function of the buildings, as well as the results of a measured survey. The results of the survey have been analysed and interpreted to gain a clear understanding of the buildings' uses, and phases of alteration and addition to the structures, focusing on evidence allowing for the reconstruction of historical structural and functional arrangements.

Research Framework

The building recording was conducted within the general research parameters and objectives defined by in the regional research agenda, the North West Regional Research Framework for archaeology (NWRF 2021). The previous research agenda The Archaeology of North West England: An Archaeological Research Framework for North West England, Vol 2 Research Agenda and Strategy (Brennand 2007) was also considered. The following research questions are considered most applicable by the project:

- Excavate areas of now undeveloped and cleared former working class areas regarded as slums;

- Take forward our understanding of the impact of industrialisation on the working class and their living conditions;
- Undertake industry specific studies of those industries that have received little archaeological attention;
- Consider what industrial and modern period type sites need further study;
- How were transport infrastructures improved and how was this related to the developing urban and market hierarchy during the industrial period?

4 Methodology

Building recording

A detailed photographic survey of both the internal and external areas of the structural remains of the former gasworks (Fig. 2) was undertaken in the areas to be affected by the proposed works, to the accepted standards and guidance (CIfA 2020, Historic England 2015, 2016). Buildings constructed in the late 20th century were excluded from the detailed survey.

Photographs were taken in RAW format with a high resolution DSLR camera and all photographs included an appropriate scale where possible.

The photographic record was produced to record the building in its setting, with detailed shots taken of specific architectural and structural elements. A full index of the photographic record was made (Appendix 2), with the location and direction of each photograph marked on an annotated plan (see Figs 3-5).

Documentary research

Documentary research was carried out both at Manchester Libraries, Information and Archives and The National Gas Archive. All records relevant to the former gas works were reviewed and relevant information incorporated into the discussion below. The sources consulted are listed in Appendix 3.

5 General Description and Analysis of the Structures

Structural layout

The site incorporates the southern edge of the former gasworks (Fig. 2). The site was originally developed in the later 18th and early 19th century, when rows of terraced houses were constructed. It is thought that at this time the site was characterised by a gentle slope down from Rochdale Road in the south to the north, probably broadly following the present incline of Gould Street. By 1880, the workers' housing had been demolished to allow for a large expansion of the gasworks. This involved the construction of two terraced levels in this area. The lower, northern terrace was probably cut into the natural ground level, whilst the

south terrace was built up to create a flat surface at the same level as Rochdale Road. There is a c. 6m difference in height between the two levels.

Discussion of the structural remains which relate to the former gasworks have been divided into three areas. These are the structural remains associated with the former 'Warehouse', former 'Joiners Workshop' and the 'Northern Wall'. These are terms used in previous reports (Salford Archaeology 2021) and are used here for continuity.

The 'Former Warehouse' and 'Former Joiners Workshop' were accessed from Rochdale Road and are located on the upper terrace. The structural remains on the upper terrace are, in general, poorly preserved and have been subject to widespread alteration and, in places, decay. This area has, from the later 20th century, been used for vehicle parking, storage and repair. The 'Northern Wall' was accessed from the north, through the CCP car park and is located on the lower terrace. It has continued to be used as a retaining wall and is in better condition, albeit subject to significant alteration and addition.

The walls are almost entirely constructed from brick with occasional fine-grained sandstone masonry. The bricks used to construct the gasworks are 9.5" x 3" and are mid-orangery or reddish-brown in colour. The mortar is lime-based and light yellowish-brown in colour. The bricks are generally laid in common bond, with occasional less regularly laid sections.

Upper Terrace

Later 20th-century buildings

Two modern garages occupy the southern edge of the site (Plate 1 and 2) and its north-eastern corner (Plate 3).

Former Warehouse (Fig. 3)

Walls in the south-west corner of the site make up the southern wall and part of the western wall and roof of a former 'Warehouse' building. The Warehouse had been constructed by the time of the 1891 OS map of the area and most was demolished in the later 20th century, with its southern end incorporated into a later 'Depot'. The modern depot consists of earlier Warehouse walls on its southern and western sides with later 20th-century walls inserted on its northern and eastern sides. Part of the western wall of the original Warehouse survives, externally, to the north of the modern depot. The current depot is accessed through a doorway in its north-west corner and a large roller-shutter door in its north-east corner.

On the southern elevation (Plate 4 and 5), the earliest wall is likely to be contemporary with the earlier phase of the Warehouse. Here, the space between the roof and the wall was left open, as it was in other areas of the Warehouse (Appendix 3, Photograph 3). Relative to its western elevation, the southern elevation of the Warehouse lies at a slightly wider angle to that of the iron beams which carry the roof. This wall is constructed in brick with a sandstone cope. A rounded cope stone marked a slight raise in height at its eastern end (Plate 6). Three buttresses on the interior are spaced along the wall. A scar at the western end of the wall suggests it carried a raised floor or loft (Plate 7), which may not be contemporary with the

gasworks. Later the gap between the earlier boundary wall and roof was filled in with brickwork and the gap between the wall and roof two is covered by a wedge-shaped extension to the roof (Plate 8).

The western elevation (Plate 9-11) of the Warehouse is partly internal, where it was incorporated into the later 'depot', and partly external, where it was repurposed as part of an external wall to the site and is in much poorer condition. The elevation contains three broad phases of construction. A boundary wall, visible between and set back slightly from the Warehouse's arches, probably represents the first phase. The style of the wall matches the boundary wall pictured in a photograph to the north in 1901 and it probably represents an early boundary wall of the gasworks (Appendix 3, Photograph 3). As in the southern elevation, the boundary wall is buttressed and is topped with a sandstone cope, with a sudden increase in height at its northern end (Plate 12). Much of this elevation contains the Warehouse building wall which is characterised by large brick arches. Three arches are found internal to the later depot building and a further four are extant, externally, to the north. The columns are characterised by internal pilasters which rise to height of the roof. The arches themselves (Plate 13-15) are rounded in shape and are constructed with two plain courses of brick and no keystone. They are c. 4.5m in height. The southern three arches, within the later depot, are entirely infilled, in at least two sub-phases, probably following the closure of the gasworks in the later 20th century. The four remaining arches are partially blocked by a partially collapsed boundary wall, which may predate the gasworks. The northernmost arch is entirely filled with timber and much later dark grey brickwork (Plate 16). A similar timber construction is seen here on a photograph dated to 1901, suggesting it is an original feature (Appendix 3, Photograph 3).

The roof was probably originally supported largely by a series of iron beams and columns, some of which is extant (Plate 6 and 17). The beams are 'built-up' - constructed of separate, riveted sections and are found along the southern and eastern sides of the building. Beams of this type were commonly constructed from wrought iron in the mid-19th century. The beams are supported by brick walls at the south-western corner and eastern sides of the building. One extant cast iron column, plain in style, is found centrally on the southern side of the building. It is likely that the Warehouse originally contained further iron columns which were removed following the closure of the gasworks.

The roof is of hipped design and supported by iron trusses (Plate 18), with a raised-scissor design. Close inspection was not possible during the survey due to its height. The components are probably with both cast and wrought components and riveted. The roofing material is of corrugated board and is not original.

The eastern and northern elevations do not appear to be contemporary with the gasworks. The northern elevation was clearly inserted as a new external wall as the Warehouse was converted following the demolition of much of the gasworks (Plates 19 and 20). The date of construction of the eastern wall (Plates 21-23) is less clear. A reduction in the size of the

Warehouse, suggested by aerial photography and historic mapping, took place between 1939 and 1951. At this time, this area became the eastern extent of the Warehouse, having previously extended much further to the east, and it is possible a new external wall was built here at this time. However, this wall is built above a railway track, still visible in the floor, which historic mapping suggests was in use in 1951. It is therefore likely the wall was constructed after the closure of the gasworks.

Former Joiners Workshop (Fig. 3)

The Former Joiners Workshop lies along the western edge of the site. It was constructed between 1901 and 1907 and stands on the site of a lightly smaller, earlier building identified on historic photography and mapping. The structure has been significantly reduced, almost to ground floor level. Areas such as windows have been filled in and the remaining elements of it have been repurposed as part of the site's boundary wall. The structure does not appear to incorporate any elements of earlier structures and its footprint appears to overlap with the Former Warehouse described above. Parts of the southern, western and northern walls are extant and are described below.

The southern part of the building was originally lower and has been better preserved, along its southern edge and south-western corner. Externally the brickwork is defined by six brick pilasters separating sections of indented brickwork (Plate 24 and 25). The base of the indents are marked by chamfered sandstone blocks or plinth bricks whilst the upper edge is defined by three stepped courses of standard bricks. Internally (Plate 26), on the southern elevation two narrow horizontal niches were capped with sandstone blocks (Plates 27 and 28). Seven other sandstone blocks were built into the top of the brickwork. The purpose of these features is unclear. At the eastern end of the southern elevation the wall of the Joiners Workshop overlaps that of the Warehouse (Plate 29), demonstrating its later date and overlapping footprint. It is unclear if a wall once separated the Warehouse and workshop.

Little of the remainder of the western side of the workshop survives (Plates 30-35), the walls having been reduced to the base of the original windows observed in historic photographs (Plate 32). The workshop was either cellared or its floor was much lower than the current ground level. This lower level was lit by a series of extant windows. The southern window is circular (Plate 36) whilst the four northern windows, in the main part of the workshop, are taller, arched windows (Plate 37). The arches were defined by at the base by chamfered sandstone masonry and a large, moulded brick keystone. Much of this wall was filled in with brickwork, following demolition, so it could be repurposed as a boundary wall.

The northern elevation (Plate 38) was only visible from the interior of the former workshop. At the far western end of the elevation, inserted brickwork may indicate the location of another door or window. Immediately east of this brickwork, a cast iron bearing box is built into the wall, roughly square and c. 0.50m in size (Plates 39-40). A power cable suggests an electricity supply once was fed through the box but its original purpose was to hold a line shaft to supply a mechanical power to machinery in the building. Part of the bearing housing

survives. Historic plans indicate the building to the north is the 'mechanics workshop' and a line shaft is pictured running in line with this bearing box in a historic photograph (Appendix 3, Photograph 6). Four areas of inserted, later brickwork probably represent the former location of windows (Plates 41 and 43).

Northern Wall (Figs 4-5)

The Northern Wall forms a retaining wall, behind which a number of cellars are found. The historic structures, contemporary with the gasworks, were generally obscured by later brickwork.

Eastern Arches and Cellars (Fig. 5)

The far eastern area of the northern wall contained four arches (Plate 44) through which a series of cellars could be accessed. Originally a wider system of passageways and cellars could be accessed from here which underlie the site. Many of these areas have been bricked up or blocked with rubble and cannot be accessed. The cellars are described by numbering 1-4, from east to west. It was not considered safe to enter the cellars during the survey and they were recorded as completely as possible from the exterior, with some further information provided by photographs taken during separate surveys and historic plans.

The opening of each cellar is defined by a separate brick arch (Plate 45-46). The arch is constructed with a three-centred shape and is supported by sandstone abutments. These consist of rusticated blocks, topped with a moulded impost (Plate 47). The arch is two brick lengths in thickness, consisting of alternate radially and vertically placed courses. Each arch has a sandstone keystone. The wall above contains a course of sandstone, broken by the tops of the arches. The cellars behind the arches are barrel-vaulted and backed with a brick wall that is angled south-westwards, such that the cellars become deeper to the west.

The eastern wall of Cellar 1 (Plate 48) contains a brick arched doorway, and a smaller partially blocked doorway, though which another cellared room could be accessed (Plate 49). The cellar ceiling contained two round openings along the central spine of its roof, c. 0.50m in width (Plate 50). Cellars 1-3 contained two or three identical features. A doorway in the centre of its western side accessed Cellar 2 (Plate 51).

Cellar 2 (Plate 52) contained three openings in its ceiling (Plate 53). A larger central arched doorway is found in the centre of the wall separating Cellar 2 and 3 with a smaller doorway at its southern extent (Plate 54).

Cellar 3 (Plate 46) contained a brick wall had been inserted along the length of the cellar, dividing it into two equal halves (Plate 55). Two openings in its ceiling were partially blocked by this wall (Plate 56 and 57). Between Cellar 3 and 4, two arched doorways had also been blocked (Plate 58).

Cellar 4 (Plate 59) contained the most additional brickwork and lead to a series of cellared rooms to the west and south-west (Plate 60). The western side of the arch was blocked with two brick walls and a third wall marks the back of the cellar (Plate 61). A concrete ramps

leads up to a raised passageway into the cellar behind. It was not possible to safely view this area during the survey.

Remainder of the Northern Wall (Figs 4-5)

Across much of the remainder of the Northern Wall few original features of the gasworks visible (Plates 62 and 63). Original features are likely to be obscured by 20th-century brickwork, added following the demolition of the gasworks, which was constructed in at least three different phases. Earlier phases blocked up the area beneath the iron beams with mid-orangey-brown bricks. Large buttresses and a wider stretch of walling were added in darker greyish-brown and mid-orangey-brown brick, presumably to reinforce the retaining wall. Finally, areas of the wall were capped, again with mid-orangey-brown bricks. Extensive areas of the wall were also obscured by vegetation. The visible features contemporary with the gasworks are described below from east to west.

A square opening in the foot of the modern walling (Plate 64) revealed an earlier brick arched passageway, running southwards (Plate 65). This met another passageway, aligned east-west. As with the cellars described above, it was not safe to access the cellar.

In centre of the Northern Wall, the wall consisted of brickwork largely post-dating the demolition of the gasworks with only a few original features left visible. The earliest features here comprise three horizontal iron beams (Plate 66 and 67), numbered Beam 1-3, in sequence from east to west. The build-up of soil and vegetation at the base of the walls meant accurate measurements of the height of the beams was difficult to obtain, but they were at a height of 3m above the current ground level. Beam 1 and 2 were at the same height, slightly above that of the Beam 3. They had a matching construction that was slightly narrower than Beam 3. All three beams were 'made-up' of separate riveted iron pieces, similar in construction to those in The Warehouse. It is likely that the beams were supported by both brick walls and cast-iron columns, similar to those seen in The Warehouse and on historic photographs in other areas of the gasworks (Appendix 3, Photograph 3 and 4). It is likely that the space beneath was originally open and the beams supported the roof of a cellar. Core drilling through brickwork beneath the beams (SEP 2023) demonstrated a cellar measuring between 3.92m and 7.86m in depth lies behind the beams.

Beneath the Joiners Workshop, at the far western end of the Northern Wall, four tall arches are clearly part of the original construction in this area (Plate 68-70). They are entirely covered in white and red render and measure c. 5.50m in height. It is likely that the arches were originally open and covered a small cellar. Core drilling through the render and brickwork infilling the arches (SEP 2023) demonstrated a cellar measuring between 5m and 10m in depth lies behind the render. The arches are related to the Mechanics Workshop, which extended northwards along the western edge of the gasworks, identified on historic plans of the site.

6 Discussion and Conclusions

Fig.6 shows a plan of the gasworks in the early 20th century onto which the main buildings referred to below are labelled. This information is taken from a range of historic plans held by the National Gas Archives and Manchester Libraries, Information and Archives (Appendix 3).

Upper Terrace

An illustration of an aerial view of the gasworks, dated 1880 (Wilson 1991), is the earliest evidence of the appearance of the site following the expansion of the gasworks. It predates the construction of The Warehouse and shows an arrangement of railway sidings connected by turntables. The area of the later Joiners workshop is much lower and appears to be an open cellar, over which the railway lines are suspended. It is likely that the earliest boundary wall observed in the southern and western elevations of The Warehouse dates to this period.

A photograph dated to 1901 (Appendix 3, Photograph 5) was taken from the western edge of The Warehouse, looking west, prior to the construction of the Joiners Workshop. It is taken from a railway track, at close to the modern ground level, suspended perhaps 4m above ground level on an iron and timber structure above the open cellar. It shows stacks of bricks and timber in the base of the cellar. It is possible the photograph was taken as the construction of the Joiners Workshop was beginning.

The open cellared area may have been filled in during the construction of The Joiners Workshop or the demolition of the gasworks.

The Warehouse

By 1890 The Warehouse had been constructed. Plans, broadly of this period (Appendix 3, Plans 7, 9, 11, 16-18), suggest the same arrangement of turntables and it appears the area continued to be used as railway sidings but it was considered important to cover the area. It is likely that the iron columns, beams and roof of The Warehouse date to this period. It is likely that much of the sides of the structure were left open, either by spanning with iron beams or with brick arches to allow for the interior to be ventilated.

The specific use of The Warehouse is not as clearly understood as other areas of the gasworks as it is generally not labelled on historic plans. Only one plan labels the area 'Railway Sidings' and the form of the arched wall is reminiscent of other Railway Warehouses (Minnis and Hickman 2016). It is possible that it was used for the storage of imported or exported materials, perhaps coal, coke or other by-products of gas production, but there are other more likely areas of the gasworks that these materials would be stored. It is considered more likely that it was used for managing and storing coal trucks, prior to their movement to the retorts.

By 1951 the Warehouse had been reduced in size, along with a rearrangement of the railways lines in the area. This may reflect a reduced need for the storage of railway trucks in this area, perhaps due to the introduction of more efficient mechanical movement of coal to the retorts.

The OS map of 1951 indicates ‘conveyors’ around the retorts which may be part of a process of mechanisation.

Former Joiners Workshop

By 1907 the Joiners Workshop had been constructed (Appendix 3, Photograph 2), replacing earlier building which stood on the site (Appendix 3, Photograph 1). It unclear whether the building was cellared but certainly its floor stood lower than the current ground level. Evidence from the survey shows the building contained machinery which was powered by a mechanical line shaft and electricity may have powered machinery or lighting, but the purpose of the building is unclear. The gasworks is unlikely to have employed a large number of joiners (i.e. those working in timber). The name may refer to joining gas pipework, though those employed in this work were usually referred to as ‘jointers’ (Loverseed 1994). The building itself does not appear to have developed over time and was largely demolished along with much of the gasworks.

Northern Wall

Eastern Arches and Cellars

The Eastern Arches and Cellars face northwards onto an open area labelled ‘coke yard’ on a number of historic plans, between Retort House C and D (Appendix 3, Plan 11). An illustration of 1880 shows much of the yard heaped with coke (Wilson 1991). It is most likely that coal was delivered to the retort houses directly, heaped internally, along the sides of the building so it could be fed the short distance to the retorts which were found along the centre of each retort house (Loverseed 1994). This means it is unlikely the cellars were used to store coal, after being dropped through the ceiling chutes, as previously suggested (Salford Archaeology 2021). It is possible, though, that the cellars were used to store and manage coke stockpiles after removal from the retorts. In this scenario, however, it is unclear what the purpose of the ceiling chutes were. It is unlikely they were used to lift coke to ground level because the railway above left little space to store the coke before removal. It is possible that coke freshly removed from the retorts was moved here to cool or be quenched. The chutes may have been used for ventilation or to provide water to quench the hot coke.

Iron beams

Beams 1 and 2 are found between The Warehouse and Retort House B. They are likely to have supported the roof of the cellar which was found through core drilling the brickwork beneath.

Beam 3, was found along the northern edge of The Warehouse and probably represents part of the raised railway platform which ran along the western side of Retort House B. The line may have been used to deliver coal to the retort house or for the removal of coke. The line here appears also to have extended northwards into the gasworks and may have been used to remove other by-products of the works.

Western Arches

The Western arches probably allowed access from the mechanics shop to the north and cellars to the south which underlie the area covered later by the Joiners Workshop. It is likely that they date to the initial expansion of the gasworks.

Other cellars

Cellar 4 accesses further cellars beneath the site, which are in evidence elsewhere behind the Northern Wall. Historic plans of the site and the recent evaluation present further evidence of a network of cellars beneath the site. At present, there is little evidence to suggest their purpose.

Conclusion

Much of the remains of the gasworks on the site have been demolished, been obscured by later structures or were inaccessible at the time of the survey. It is possible, however, when coupled with cartographic and photographic sources to understand the role and purpose of the extant structural remains on the site.

Much of this part of the gasworks was concerned with the import of coal from the railway. The area was covered with railway sidings and turntables, used to manage the railway trucks for the delivery of coal to the retorts to the north. Much of the site is also underlaid with cellars. Some of the cellars may be related to the management of coke after removal from the retorts. The Joiners Workshop appears to form part of a series of workshops along the western edge of the site.

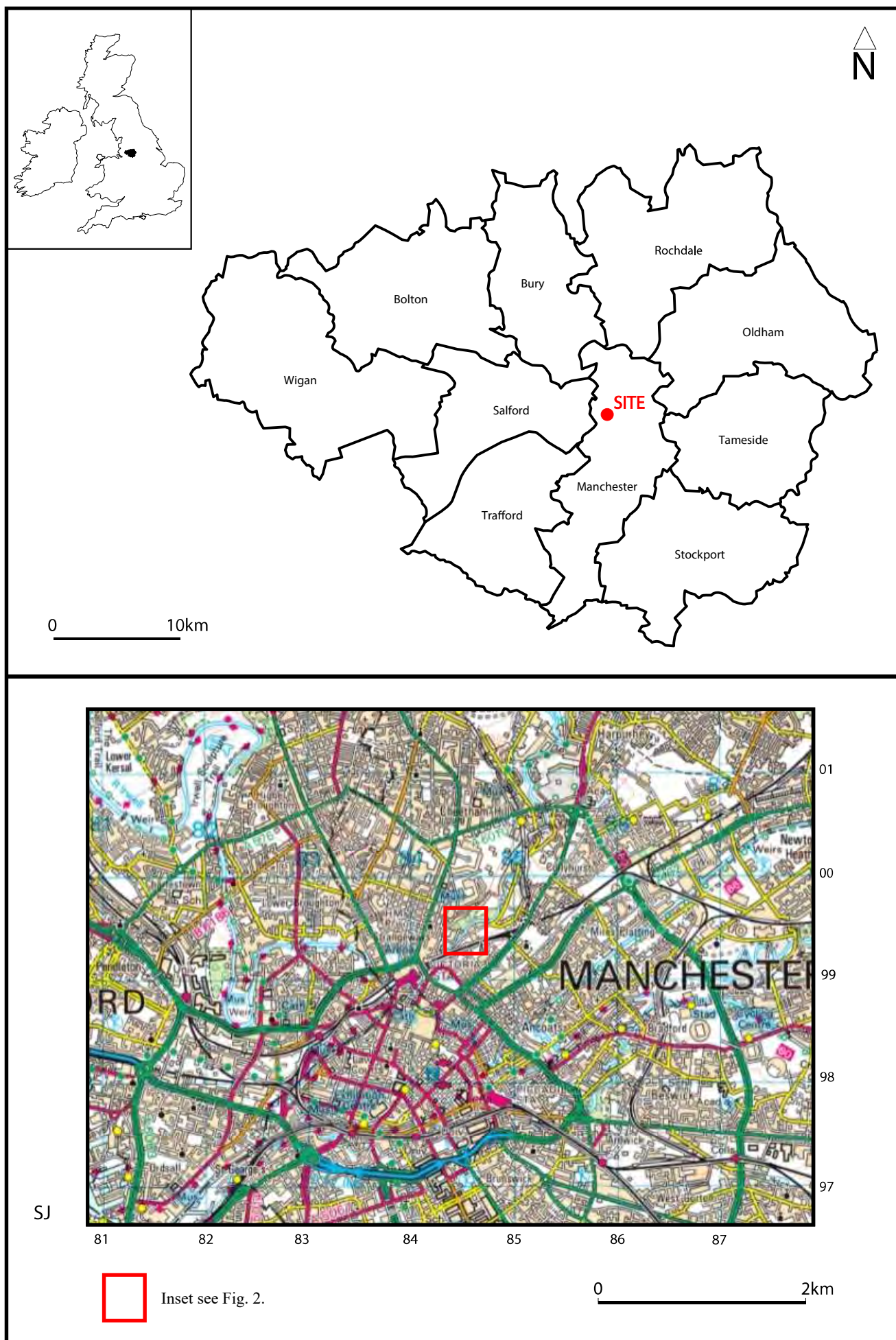
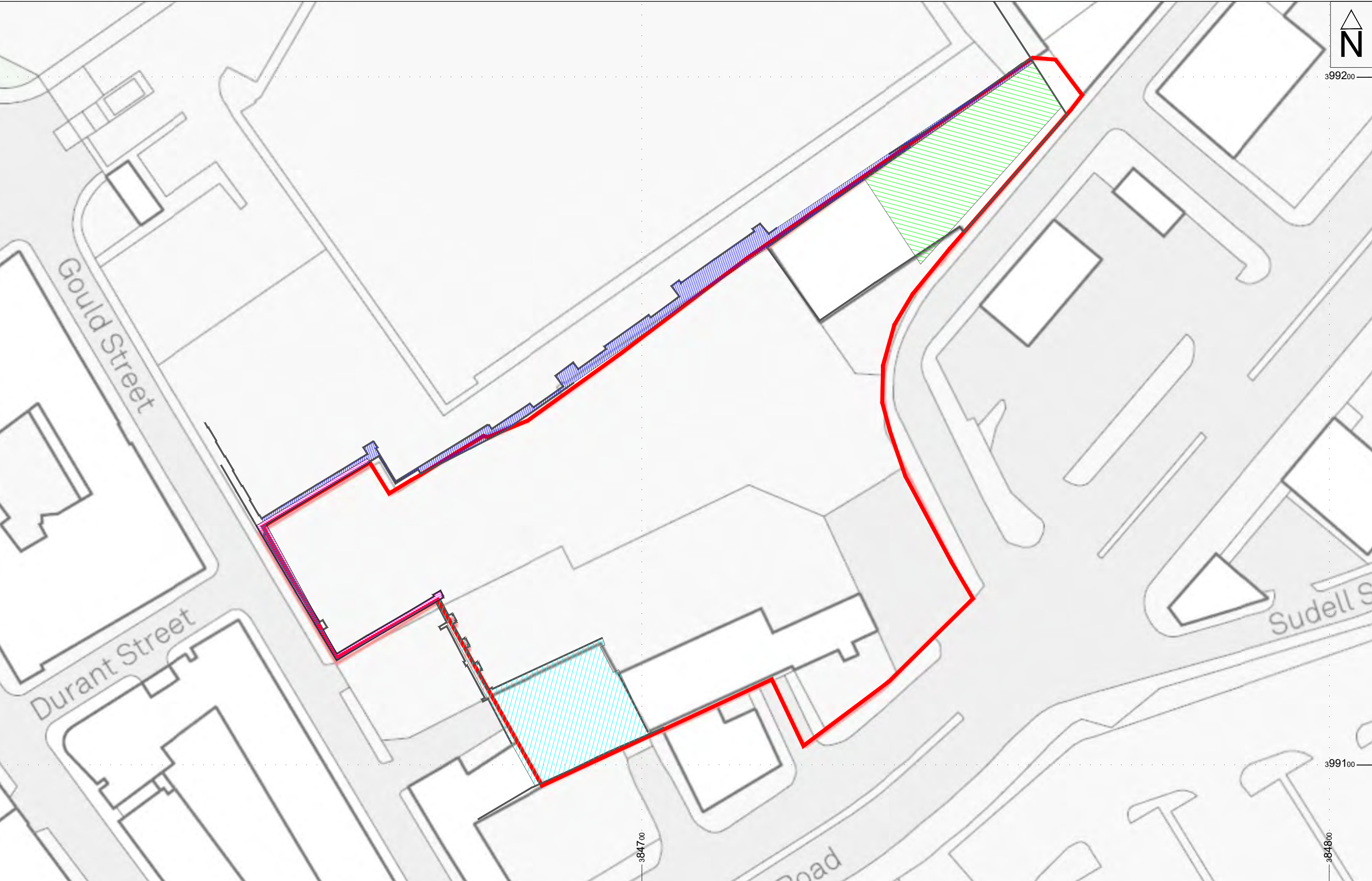
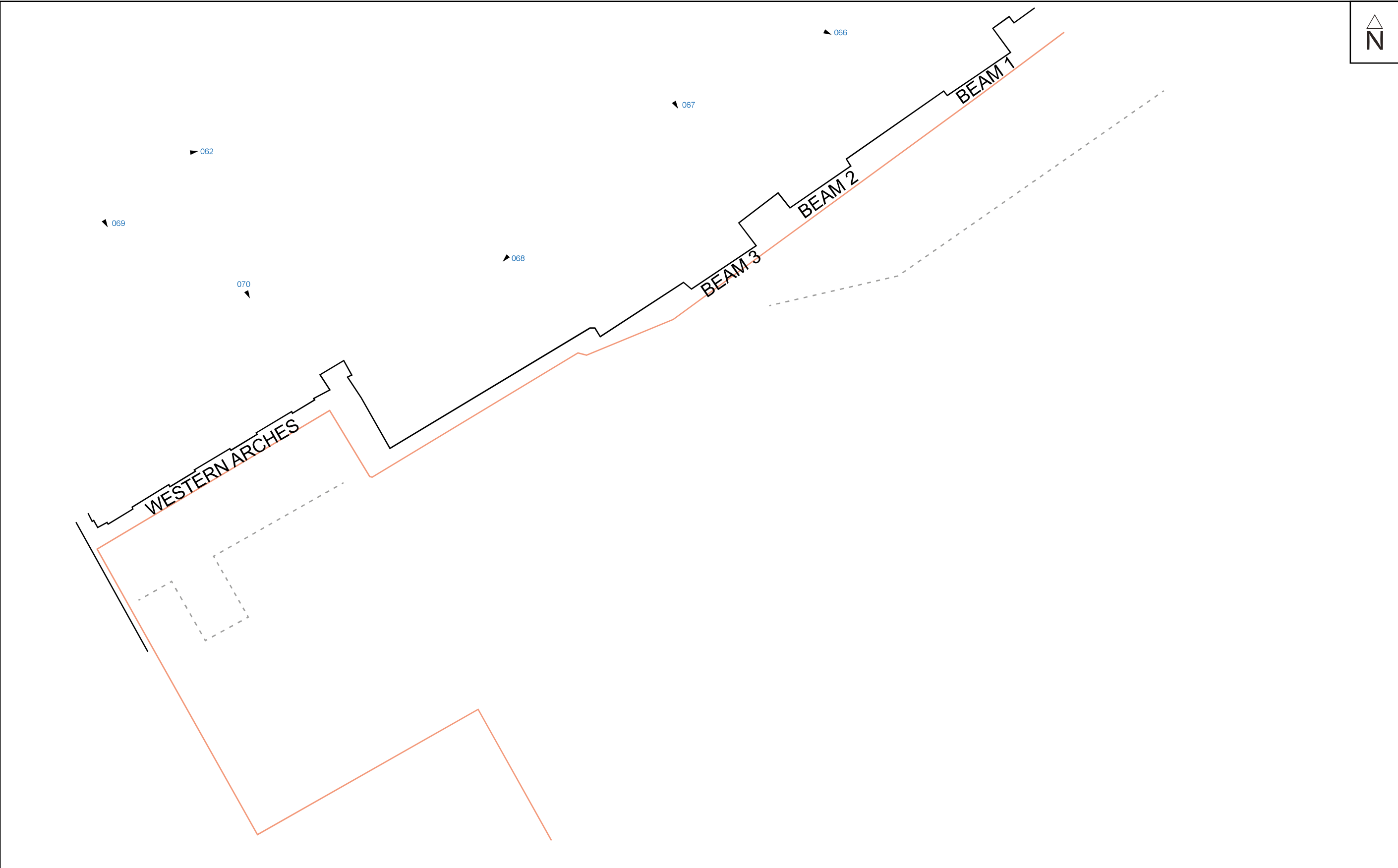


Fig. 1. Site location



	SITE BOUNDARY		NORTHERN WALL		
	FORMER WAREHOUSE		ARCHES AND CELLARS		
	FORMER JOINERS WORKSHOP				





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Project Code: ROC23

Fig. 4

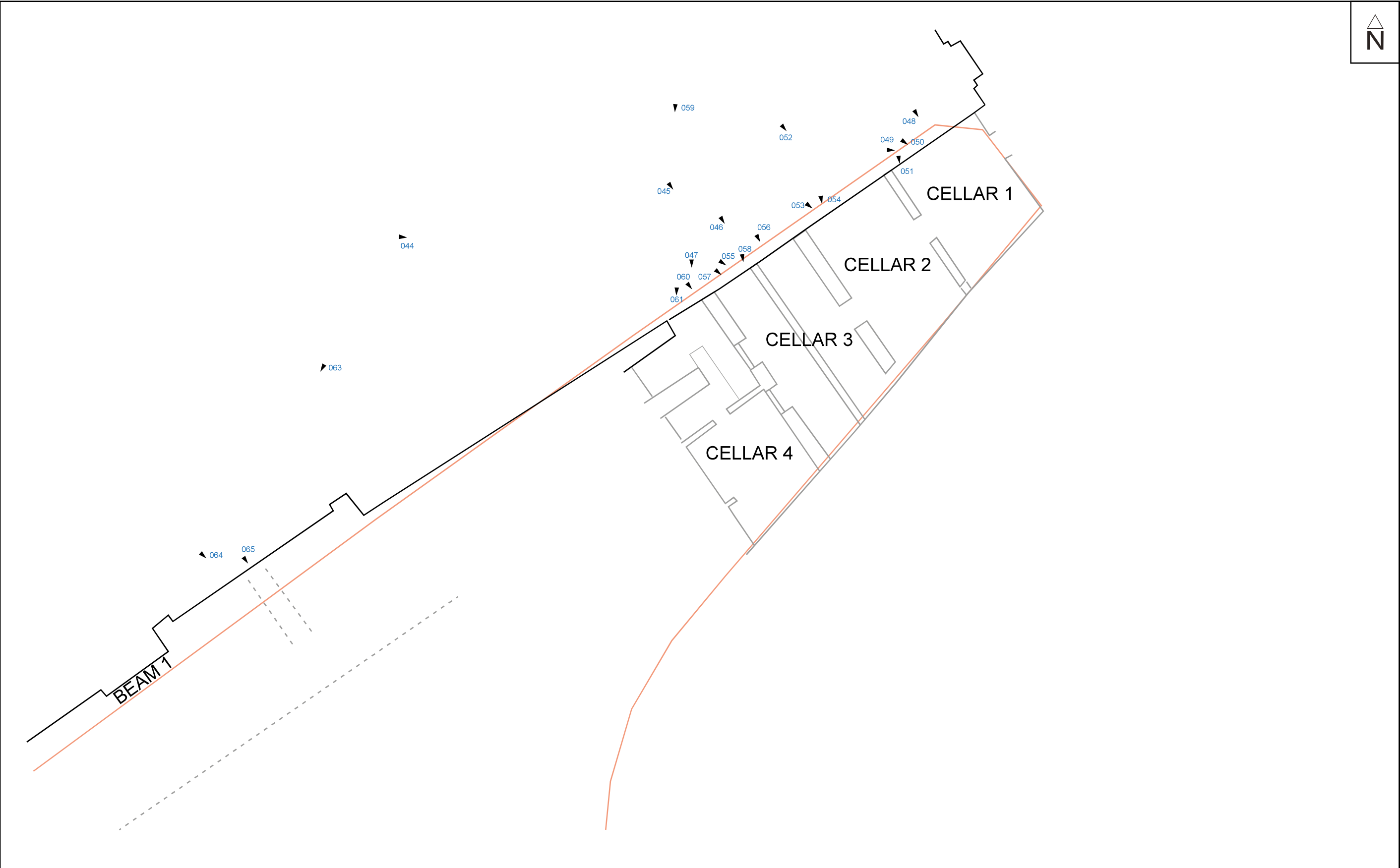
Plan of western end of the Northern Wall

Key

-  SITE BOUNDARY
-  EXTERNAL WALLS
-  CELLAR WALLS

-  PROBABLE REAR CELLAR WALL
-  PLATE LOCATION AND DIRECTION

0 10m



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Fig. 5

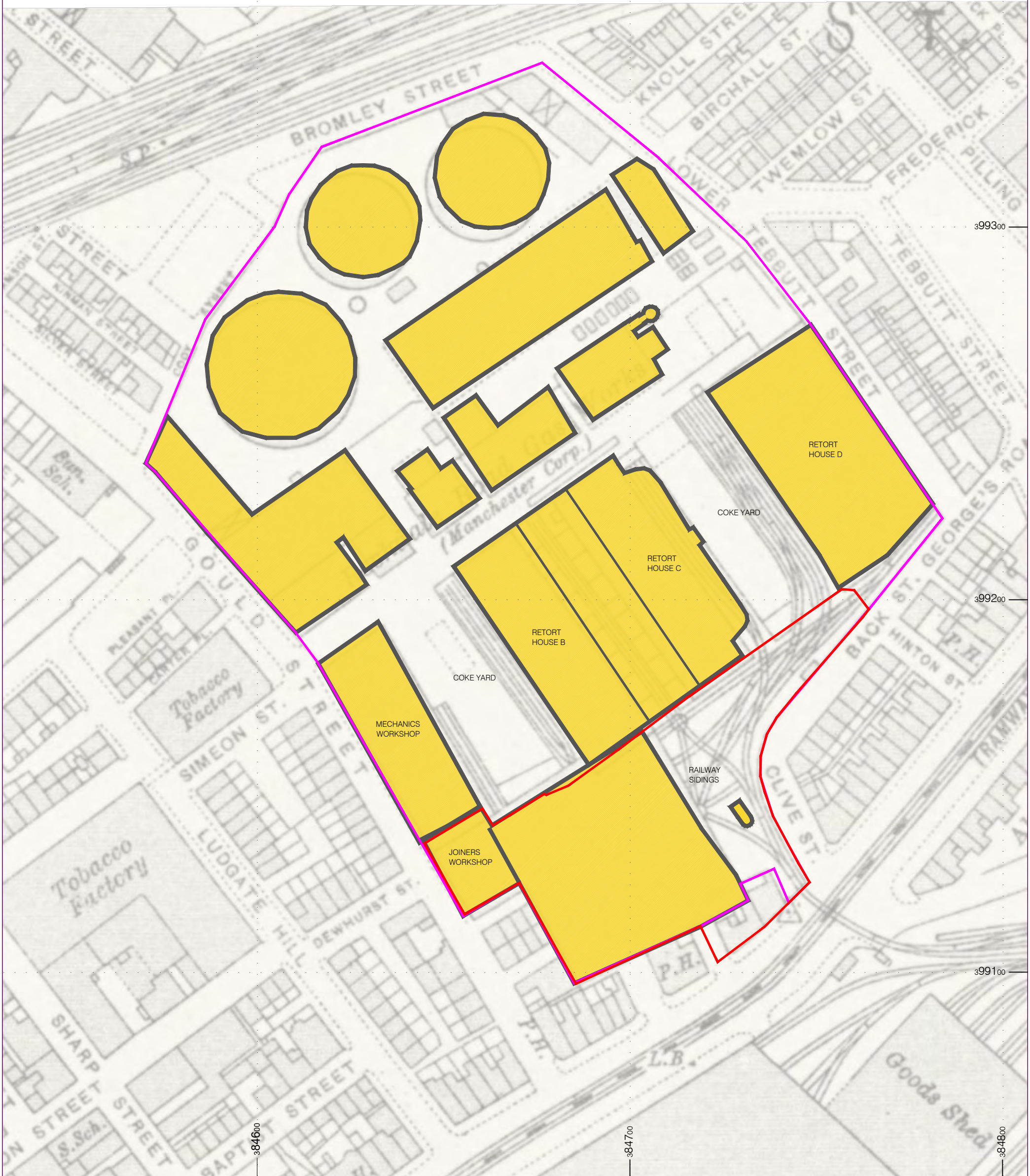
Plan of eastern end of the Northern Wall

Key

- SITE BOUNDARY
- EXTERNAL WALLS
- CELLAR WALLS

- PROBABLE REAR CELLAR WALL
- ▲001 PLATE LOCATION AND DIRECTION

0 10m



 © ASWYAS 2023. Archaeological Services W Y A S, Nepshaw Lane South, Morley, LS27 7JQ Tel: 0113 535 0163 Email: archaeology@wyjs.org.uk www.aswyas.com	Project No. XI10		SITE BOUNDARY	 1:1000 @ A3
	Fig. 6.		BOUNDARY OF FORMER GASWORKS	
	Site plan showing the main gasworks structures mentioned in the text overlying the 1922 25" Ordnance Survey map		FORMER GASWORKS STRUCTURES	



Plate 1. Later 20th-century depot, looking south-west



Plate 2. Later 20th-century office, looking south-west



Plate 3. Later 20th-century depot, looking north-east



Plate 4. Southern internal elevation of The Warehouse, looking south



Plate 5. Southern external elevation of the Warehouse, looking north

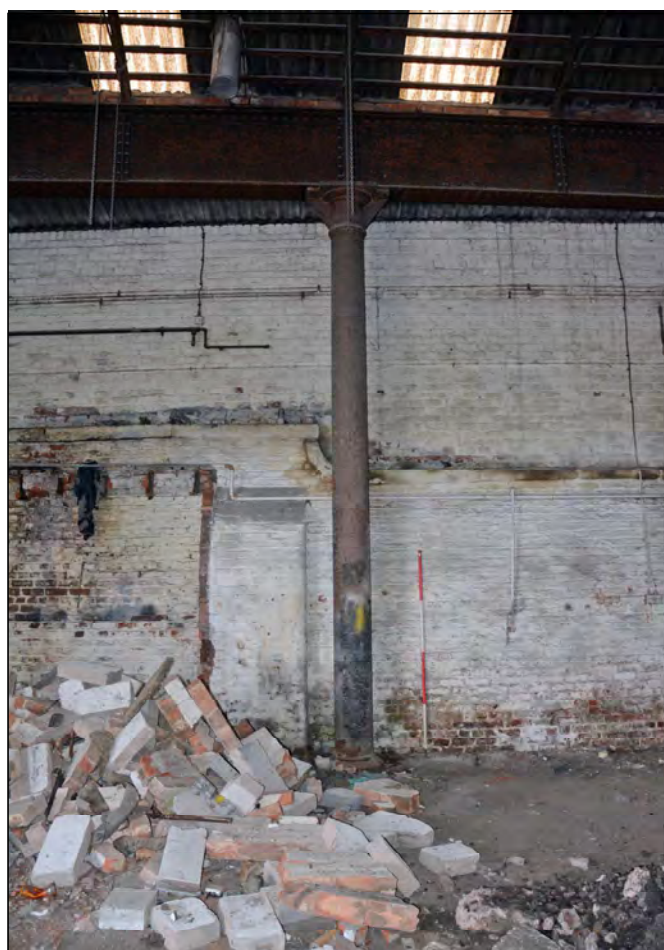


Plate 6. Iron column and beam in The Warehouse, looking south



Plate 7. Wall scars of inserted floor or loft in The Warehouse, looking south



Plate 8. Inserted wall and roof, looking north



Plate 9. Internal western elevation of The Warehouse, looking west



Plate 10. External arched wall of The Warehouse, looking west



Plate 11. External arched wall of The Warehouse, looking east



Plate 12. Detailed view of an arch of The Warehouse with other phases of walling, looking north-west



Plate 13. Detailed view of an arch of The Warehouse with other phases of walling, looking west



Plate 14. Detailed view of an arch of The Warehouse with other phases of walling, looking west



Plate 15. Detailed view of an external arch of The Warehouse, looking west



Plate 16. Detailed view of an arch of The Warehouse with other phases of walling, looking west



Plate 17. South-eastern corner of The Warehouse showing the iron beam and roof extension, looking south-east



Plate 18. General view of The Warehouse roof, looking south-west



Plate 19. Later 20th-century wall inserted into The Warehouse, looking south



Plate 20. Later 20th-century wall inserted into The Warehouse, looking north-west



Plate 21. Eastern external elevation of The Warehouse, looking west



Plate 22. Eastern external elevation of The Warehouse, looking south-west



Plate 23. Eastern internal elevation of The Warehouse, looking east



Plate 24. Southern external elevation of The Joiners Workshop, looking north



Plate 25. South-eastern corner of The Joiners Workshop, looking north



Plate 26. Southern internal elevation of The Joiners Workshop, looking south



Plate 27. South-eastern corner of The Joiners Workshop, looking south



Plate 28. South-western corner of The Joiners Workshop, looking south-west



Plate 29. Overlapping walls of The Joiners Workshop and Warehouse, looking north-west



Plate 30. Western external elevation of The Joiners Workshop, looking north-east



Plate 31. Western external elevation of The Joiners Workshop, looking south-east



Plate 32. North-eastern corner of The Joiners Workshop, looking east



Plate 33. Western internal elevation of The Joiners Workshop, looking west



Plate 34. South-western corner of The Joiners Workshop, looking south-west



Plate 35. North-western corner of The Joiners Workshop, looking north-west



Plate 36. Round blocked window of The Joiners Workshop, looking east



Plate 37. Arched blocked window of The Joiners Workshop, looking west

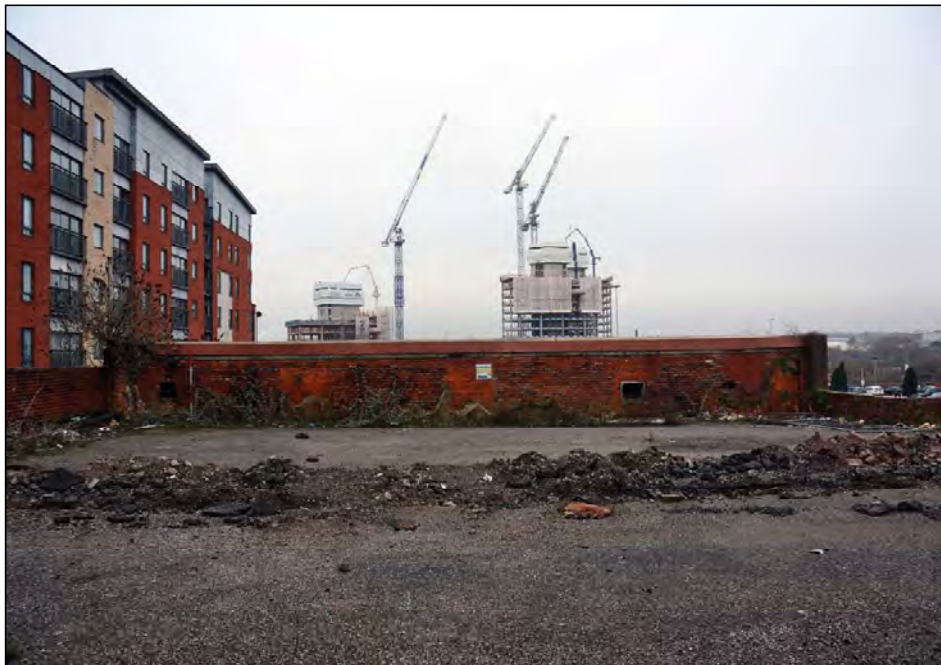


Plate 38. Northern internal elevation of The Joiners Workshop, looking north



Plate 39. Location of line shaft bearing box, looking north



Plate 40. Detail of line shaft bearing box, looking north



Plate 41. Blocked window of The Joiners Workshop, looking north



Plate 42. Blocked window of The Joiners Workshop, looking north



Plate 43. Blocked window of The Joiners Workshop, looking north



Plate 44. General view of eastern arches, looking south-east



Plate 45. Cellar 3 and 4, looking south



Plate 46. Detail of Cellar 3 arch, looking south



Plate 47. Detail of Cellar 4 arch, looking south-west



Plate 48. Cellar 1, looking south



Plate 49. Cellar 1, looking south-east



Plate 50. Cellar 1, looking south



Plate 51. Cellar 1, looking south-west



Plate 52. Cellar 2, looking south



Plate 53. Cellar 2, looking south-east



Plate 54. Cellar 2, looking south-west



Plate 55. Cellar 3 dividing wall, looking south-east



Plate 56. Brick chutes in Cellar 3, looking south



Plate 57. Cellar 3, looking south-east



Plate 58. Cellar 3, looking south-west



Plate 59. Cellar 4, looking south-west



Plate 60. Cellar 4, looking south



Plate 61. Cellar 4, looking south-west



Plate 62. General view of Northern Wall looking south-east



Plate 63. Later 20th-century brick work buttressing the northern wall, looking south-west



Plate 64. Entrance into cellar tunnel, looking south



Plate 65. View of cellar tunnel, looking south



Plate 66. Beam 1, looking south-east



Plate 67. Beam 2 and 3, looking south



Plate 68. General view of the western end of The Northern Wall, looking south-west



Plate 69. Western arches, looking south



Plate 70. Detail of one of the western arches, looking south

Appendix 1: Written Scheme of Investigation

Appendix 2: Building recording photographic plates, directions on plans and registers

Photo No.	Building	Direction	Description
1	-	SW	Later 20th-century depot
2	-	SW	Later 20th-century office
3	-	SE	Later 20th-century depot
4	Warehouse	S	Southern internal elevation of The Warehouse
5	Warehouse	N	Southern external elevation of the Warehouse
6	Warehouse	S	Iron column and beam in The Warehouse
7	Warehouse	S	Wall scars of inserted floor or loft in The Warehouse
8	Warehouse	N	Inserted wall and roof
9	Warehouse	W	Internal western elevation of The Warehouse
10	Warehouse	W	External arched wall of The Warehouse
11	Warehouse	E	External arched wall of The Warehouse
12	Warehouse	NW	Detailed view of an arch of The Warehouse with other phases of walling
13	Warehouse	W	Detailed view of an arch of The Warehouse with other phases of walling
14	Warehouse	W	Detailed view of an arch of The Warehouse with other phases of walling
15	Warehouse	W	Detailed view of an external arch of The Warehouse
16	Warehouse	W	Detailed view of an arch of The Warehouse with other phases of walling
17	Warehouse	SE	South-eastern corner of The Warehouse showing the iron beam and roof extension
18	Warehouse	SW	General view of The Warehouse roof
19	Warehouse	S	Later 20th-century wall inserted into The Warehouse
20	Warehouse	NW	Later 20th-century wall inserted into The Warehouse
21	Warehouse	W	Eastern external elevation of The Warehouse
22	Warehouse	NW	Eastern external elevation of The Warehouse
23	Warehouse	E	Eastern internal elevation of The Warehouse
24	Joiners Workshop	N	Southern external elevation of The Joiners Workshop
25	Joiners Workshop	N	South-eastern corner of The Joiners Workshop
26	Joiners Workshop	S	Southern internal elevation of The Joiners Workshop
27	Joiners Workshop	S	South-eastern corner of The Joiners Workshop
28	Joiners Workshop	SW	South-western corner of The Joiners Workshop
29	Joiners Workshop	NW	Overlapping walls of The Joiners Workshop and Warehouse
30	Joiners Workshop	NE	Western external elevation of The Joiners Workshop
31	Joiners Workshop	SE	Western external elevation of The Joiners Workshop
32	Joiners Workshop	E	North-eastern corner of The Joiners Workshop
33	Joiners Workshop	W	Western internal elevation of The Joiners Workshop
34	Joiners Workshop	SW	South-western corner of The Joiners Workshop
35	Joiners Workshop	NW	North-western corner of The Joiners Workshop
36	Joiners Workshop	NE	Round blocked window of The Joiners Workshop
37	Joiners Workshop	W	Arched blocked window of The Joiners Workshop
38	Joiners Workshop	N	Northern internal elevation of The Joiners Workshop
39	Joiners Workshop	N	Location of line shaft bearing box
40	Joiners Workshop	N	Detail of line shaft bearing box
41	Joiners Workshop	N	Blocked window of The Joiners Workshop
42	Joiners Workshop	N	Blocked window of The Joiners Workshop

43	Joiners Workshop	N	Blocked window of The Joiners Workshop
44	Northern Wall	SE	General view of eastern arches
45	Northern Wall	S	Cellar 3 and 4
46	Northern Wall	S	Detail of Cellar 3 arch
47	Northern Wall	SW	Detail of Cellar 4 arch
48	Northern Wall	S	Cellar 1
49	Northern Wall	SE	Cellar 1
50	Northern Wall	S	Cellar 1
51	Northern Wall	SW	Cellar 1
52	Northern Wall	S	Cellar 2
53	Northern Wall	SE	Cellar 2
54	Northern Wall	SW	Cellar 1
55	Northern Wall	SE	Cellar 3 dividing wall
56	Northern Wall	S	Brick chutes in Cellar 3
57	Northern Wall	SE	Cellar 3
58	Northern Wall	SW	Cellar 3
59	Northern Wall	SW	Cellar 4
60	Northern Wall	S	Cellar 4
61	Northern Wall	SW	Cellar 4
62	Northern Wall	SE	General view of Northern Wall
63	Northern Wall	SW	General view of the western end of The Northern Wall
64	Northern Wall	S	Western arches
65	Northern Wall	S	Detail of one of the western arches
66	Northern Wall	SE	Beam 1
67	Northern Wall	S	Beam 2 and 3
68	Northern Wall	SW	Later 20th-century brick work buttressing the northern wall,
69	Northern Wall	S	Entrance into cellar tunnel
70	Northern Wall	S	View of cellar tunnel

Appendix 3: Catalogue of consulted historic maps, plans and photographs

Ordnance Survey

Description	Date
Town Plan of 1850 (1:1056)	1851
Town Plan of 1891 (1:500)	1891
County Series Map of 1922 (25")	1922
County Series Map of 1951 (25")	1951
National Grid Map of 1970 (1:1250)	1970

National Gas Archive

Plan No.	Title	Description	Ref. No.	Date
1	Manchester - Rochdale Road - Elevation and Plan of Valve House to Mains	Rochdale Road Station Elevation and plan of Valve House to Inlet and Outlet Main of Gasholders. [set 6, no.9]; dated 21 March 1898	NW/MAC/RDR/E/A/1	1898
2	Manchester - Rochdale Road - Plan of Site, Buildings and Gas Mains	Rochdale Road Station, Charlotte Street Plan of site, buildings and gas mains. No.1 of 5, tar tank	NW/MAC/RDR/E/E/1	n.d.
3	Manchester - Rochdale Road - Plan of Tar and Liquor Tank, Gas Mains amd Holders	Rochdale Road Station, Charlotte Street Plan shows, tar and liquor tank and gas mains, holders No.2 of 1.	NW/MAC/RDR/E/E/2	n.d.
4	Manchester - Rochdale Road - Plan of Works	Rochdale Road Station Plan of works, buildings and gas mains, holder No.5, tar tank, tar wells, purifiers, benzole plant, pump house, exhaustor house, mortar mill, retort house, purifiers.	NW/MAC/RDR/E/E/3	n.d.

Plan No.	Title	Description	Ref. No.	Date
5	Manchester - Rochdale Road - Plan of Works	Rochdale Road Works, Lower Tebbutt Street Plan shows, liquor tank, section purifiers, condensers, boiler house, exhaustor house and gas mains.	NW/MAC/RDR/E/E/4	n.d.
6	Manchester - Rochdale Road - Plan of Works	Rochdale Road Works, Lower Tebbutt Street Plan shows, liquor tank, section purifiers, condensers, boiler house, exhaustor house and gas mains.	NW/MAC/RDR/E/E/4B	n.d.
7	Manchester - Rochdale Road - Plan of Site	Rochdale Road Works, Gould Street Plan of site, shows detailed gas mains.	NW/MAC/RDR/E/E/5	n.d.
8	Manchester - Rochdale Road - Plan of Retort House and Mains	Rochdale Road Works, Lower Tebbutt Street, Coburg Street Plan shows C and D retort house, mains.	NW/MAC/RDR/E/E/6	n.d.
9	Manchester - Rochdale Road - Plan of Turntables	Rochdale Road Works, Gould Street Plan shows turntables.	NW/MAC/RDR/E/E/7	n.d.
10	Manchester - Rochdale Road - Plan of Works	Rochdale Road Works, Portland Street, Coburg Street, Water Street Plan of holders no6 & 7, tank, governor house, boiler house, mains.	NW/MAC/RDR/E/E/8	n.d.
11	Manchester - Rochdale Road - Plan of Holder Station	Rochdale Road Station, Portland Street, Lower Tebbutt Street, Gould Street, plan shows holders, previous tar wells, purifiers, scrubbers, exhausters, retort houses, outbuildings, mains.	NW/MAC/RDR/E/E/10 A	n.d.
12	Manchester - Rochdale Road - Plan of Holder Station	Rochdale Road Station, Portland Street, Lower Tebbutt Street, Gould Street, plan shows holders, previous tar wells, purifiers, scrubbers, exhausters, retort houses, outbuildings, mains.	NW/MAC/RDR/E/E/10 B	n.d.
13	Manchester - Rochdale Road - Site Plan of Works and Drains	Rochdale Road Works, Gould Street Detail of part of site plan showing works drains.	NW/MAC/RDR/E/E/11	n.d.
14	Manchester - Rochdale Road - Site Plan of Works Drains	Rochdale Road Works Detail of part of site plan of works drains	NW/MAC/RDR/E/E/12	n.d.

Plan No.	Title	Description	Ref. No.	Date
15	Manchester - Rochdale Road - Plan and Section of Gas Holder Tank Covering	Rochdale Road Station Copy of plan and section of covering over gas holder tank.	NW/MAC/RDR/E/T/1	n.d.

Manchester Libraries, Information and Archives

Plans

Plan No.	Title	Ref. No.	Date
16	Plan of: Gas Works, Rochdale Road	GB127.M900/1/1/2/5/7189	1906
17	Plan of: Rochdale Road, City	GB127.M900/1/1/2/4/6307	n.d.
18	Plan of: Gould Street, Rochdale Road	GB127.M900/1/1/2/6/8402	1909

Photographs

No.	Title	Ref. No.	Date	Link
1	Gas Works, Rochdale Road Gas Works, site for joiners new shop (view looking from Gould Street) near Rochdale Road, Manchester	GB127.m59082	1901	www.gmlives.org.uk/results.html#imu[rid=ecatalogue.23873]
2	Gas Works, Rochdale Road Gas Works, in Gould Street, wall, Manchester	GB127.m59085	1907	www.gmlives.org.uk/results.html#imu[rid=ecatalogue.57666]
3	Gas Works, Rochdale Road Gas Works, site for joiners new shop, (view looking from Gould Street), Manchester	GB127.m59083	1901	www.gmlives.org.uk/results.html#imu[rid=ecatalogue.57667]

4	Rochdale Road Gas Works	GB127.m74745	1901	www.gmlives.org.uk/results.html#imu[rid=ecatalogue.61061]
5	Gas Works, Rochdale Road Gas Works, site for joiners new shop, (view looking from Gould Street), Manchester	GB127.m59084	1901	www.gmlives.org.uk/results.html#imu[rid=ecatalogue.57668]
6	Rochdale Road, Gas Works	GB127.m75304	1901	www.gmlives.org.uk/results.html#imu[rid=ecatalogue.61064]

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