



University of
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MANCHESTER

Archaeological Desk-based Assessment

Monarch's Quay
Phase 1b,
Liverpool,
Merseyside

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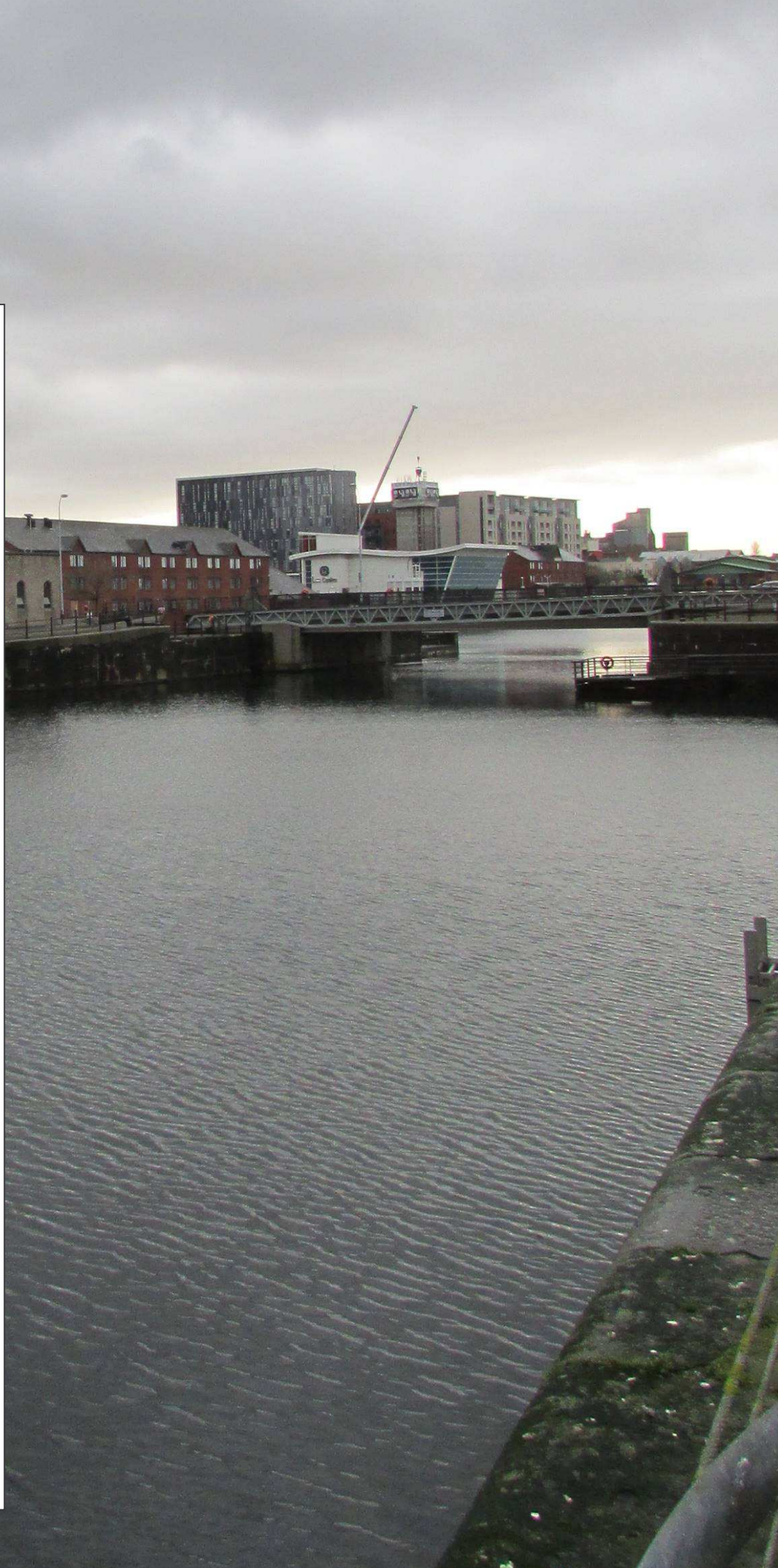
YPG Developments Ltd

Technical Report:

Oliver Cook and Ian
Miller

Report No:

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Site Location: The study area comprises 1.57 hectares situated between Half-Tide Wharf, Queen's Wharf, Queen's Dock and Exhibition Centre Liverpool on Liverpool's waterfront

NGR: 334370 389150

Project: Proposed development of Monarch's Quay Phase 1b, Liverpool, Merseyside

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Summary

In order to inform and support a planning application for a proposed development known as Monarch's Quay, Salford Archaeology was commissioned by YPG Developments Ltd in February 2017 to undertake an archaeological desk-based assessment of land situated between Wapping Dock and Queen's Dock and the River Mersey on Liverpool's waterfront. The global development will be subject to several planning applications, although the present study, referred to as Phase 1b, is focused on the southern part of the site, bounded by Half-Tide Wharf, Queen's Wharf, Queen's Dock and Exhibition Centre Liverpool (centred on NGR 334370 389150).

Development of the study area commenced in the 18th century, with the reclamation of land from the River Mersey and the construction of two basins. Subsequent development included the King's and Queen's Docks, which were completed in 1788 and 1796 respectively. The study area was modified throughout the 19th and early 20th century, continually being updated. The docks and buildings fell out of use in the late 20th century and subsequently decommissioned. The study area is currently a brownfield site and few of the original structures or installations survive above ground level.

The assessment aimed to identify, as far as possible, the nature, extent and significance of the archaeological resource, so as to enable informed recommendations to be made for the future treatment of any surviving remains. There are no designated heritage assets within the boundary of the Phase 1b application area, and the footprint of only ten non-designated heritage assets. There are six listed buildings within a 250m radius, five are nationally designated Grade II and the other is Grade II* listed building, there is also a further 17 non-designated heritage assets. The Phase 1b application area lies outside the southern boundary of the Albert Dock Conservation Area, which coincides with the southern boundary of the Liverpool Maritime Mercantile City World Heritage Site, a designated area of Outstanding Universal Value and international significance. As such, the application area lies within the Buffer Zone of the World Heritage Site. The potential harm of the proposed development on the historic built environment and the setting of designated heritage assets is subject to detailed consideration in the Heritage Assessment that has been prepared in support of the Phase 1b application, and thus only the below-ground archaeological resource is considered in this report.

The assessment has concluded that the proposed development has potential to impact on the below-ground remains of 18th- and 19th-century dock structures and ancillary buildings. Any such remains that do survive *in-situ* are likely to be of at least local or borough interest, and would merit an appropriate strategy to mitigate any impact from development works. In the first instance, however, intrusive site investigation is required to establish whether any such buried structural remains survive *in-situ* and, if so, confirm their condition, extent and significance. This could be achieved most effectively through a programme of evaluation trenching. Should the evaluation reveal significant, intact archaeological remains, further targeted archaeological works in the form of an open-area excavation may be required.

1. Introduction

1.1 Planning Background

In order to inform and support a planning application for a proposed development known as Monarch's Quay, Salford Archaeology was commissioned by YPG Developments Ltd in February 2017 to undertake an archaeological desk-based assessment of land situated between Wapping Dock and Queen's Dock and the River Mersey on Liverpool's waterfront. The global development will be subject to several planning applications, although the present study, referred to as Phase 1b, is focused on the southern part of the site, bounded by Half-Tide Wharf, Queen's Wharf, Queen's Dock and Exhibition Centre Liverpool (centred on NGR 334370 389150). The site currently comprises areas of surface car parking, roadways, and walkways.

1.2 Government and Local Planning Policies

National Planning Policy Framework (NPPF)

The significance of the archaeological resource identified within this report has been assessed as recommended in *National Planning Policy Framework* (Department for Local Communities, March 2012). The NPPF sets out the Government's planning policies and outlines the presumption in favour of sustainable development, which is defined by three principles: economic, social and environmental. Of the 12 core planning principles underpinning decision making, conserving 'heritage assets in a manner appropriate to the quality of life of this and future generations' is one. Section 12 specifically deals with this historic environment (paragraphs 126-41), and local planning authorities should consider:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
- the desirability of new development making a positive contribution to local character and distinctiveness; and
- opportunities to draw on the contribution made by the historic environment to the character of a place.

Paragraph 128 states that local planning authorities, when determining applications, should require the applicant to describe the significance of any affected heritage assets. This should be sufficient so as to understand the potential impact on their significance and this should be done using the appropriate expertise where necessary.

Paragraph 135 indicates that the effect of the proposal on non-designated heritage assets (designated assets are covered in paragraphs 132-34) should be taken into account. Paragraph 141 requires developers to record and advance understanding of heritage assets to be lost, in a manner appropriate to their importance and impact.

1.2.2 Local Development Framework

The NPPF outlines the need for local planning policies to create local plans and frameworks to implement the NPPF at a local level. This requirement is addressed in Liverpool by the new draft Liverpool Local Plan, which was approved for public consultation by the City Council's Cabinet on 19th August 2016.

The draft Liverpool Local Plan sets out both strategic objectives for the development of the City over the next 15-20 years, and more detailed guidance to manage the type, location and scale of this development, including allocation of specific sites. Previously, the City Council had been involved in preparing and consulting upon a Core Strategy, key elements of which have been retained and updated to become the central strategy of the Local Plan. A number of policies in the Draft Local Plan concern archaeology and the historic environment:

Policy STP2 Sustainable Growth Principles and Managing Environmental Impacts states:

'1. New development should seek to avoid negative impacts on the environment through adoption of best practice. Where a negative effect is identified this should be mitigated by appropriate measures. Specifically, to ensure the sustainable growth of the City, new development should:

d) Protect and enhance the City's natural environment (including areas/sites/species of ecological importance) and heritage assets including reflecting and enhancing the area's character and environment;

Policy CC8 Waterfront Design Requirements states:

'Development on the Waterfront should be of a high-quality design that respects its sensitive historic surroundings, whilst making adequate provision for access, parking and servicing and not undermining local amenity and operations of businesses. Development proposals should:

- a. Protect the character, setting, distinctiveness and Outstanding Universal Value of the World Heritage Site by ensuring the siting, scale, form, architectural approach and materials are appropriate and respect the proposal's location;
- b. Respect the form and mass of the dock estate and its industrial heritage and make provision for the repair, conservation, integration and interpretation of heritage assets;

Policy CC 9 Recreational Use of Dock Water Spaces, Quaysides and the Waterfront states:

1. The City Council will support proposals which facilitate greater access and recreational / leisure use of dock water spaces and their quaysides and which contribute towards the creation of an inclusive and usable movement route along Liverpool's Waterfront, specifically:

- a. floating structures for canal boat mooring, boat hire, water taxis and water buses;
- b. installation of stepped dockside structures to gain access at water level;
- c. feature lighting installations that assist in animating dock water spaces and adjacent quaysides;
- d. proposals which enhance the interpretation of the cultural heritage and archaeology of the historic dockland environment.

Policy HD1 refers specifically to designated heritage assets (comprising the World Heritage Site, listed buildings, conservation areas, scheduled monuments and registered historic parks and gardens), and stresses that consent or permission will not be granted for:

- a. applications which are not fully justified and accompanied by full information necessary to assess the impact of the proposals on the heritage asset. Proposals that affect heritage assets should be accompanied by a Statement of Significance which may form part of a Design and Access Statement, and/or a Heritage Impact Assessment to demonstrate that the architectural and historic interest of the structure has been understood and accounted for in any proposals;
- b. development or works which are unsympathetic to the heritage asset and/or its setting in terms of its architectural, historic, cultural or artistic significance. In considering any proposals, the quality of the design and layout and materials will be taken into account.

Policy HD1 also states that ‘proposals for development in the World Heritage Site and its buffer zone will protect its Outstanding Universal Value as set out in the Liverpool Maritime Mercantile City World Heritage Site Supplementary Planning Document.’

Policy HD2 refers to non-designated heritage assets of archaeological remains, and states:

1. ‘All planning applications likely to affect archaeological remains must be accompanied by an appropriate archaeological assessment;

There is a presumption in favour of physical preservation *in-situ* of archaeological remains. Where this is not achievable, mitigation should be undertaken through archaeological fieldwork to investigate and record remains in advance of works. Subsequent analysis, publication and dissemination of the findings should be submitted to the Local Planning Authority and also deposited with the Historic Environment Record.’

2. *Method Statement*

2.1 *Research*

The assessment considers the potential impact of the proposed development upon any buried archaeological remains within the application area, and comprises a desk-based study and site inspection. The production of the assessment followed the Chartered Institute for Archaeologists (CIfA) standard and guidance for undertaking archaeological desk-based assessments (Institute for Archaeologists, *Standard and Guidance for Historic Environment Desk-based Assessment*, 2014).

The desk-based assessment made use of the following sources:

- Published and unpublished cartographic, documentary and photographic sources;
- The Merseyside Historic Environment Record, maintained by the Merseyside Environmental Advisory Service (MEAS);
- Merseyside Maritime Museum, Maritime Archives and Library (MMMMAL);
- The National Heritage List for England.

The aim of the research was to provide the relevant historical and archaeological background relating to the development of the site. The available sequence of historical mapping was the principal source of information, as this provides evidence for the development of the study area since the 18th century.

2.2 *Site Inspection*

The aim of the site inspection was to relate the findings of the desk-based study to the existing land use of the application area, in order to identify any evidence for surviving below-ground remains. The potential harm of the development proposals on the historic built environment has been considered in a separate Heritage Assessment that has been prepared to support the planning application.

2.3 *The Document*

The following presents the historical and archaeological evidence for the study area. A gazetteer (Chapter 5) is presented of heritage assets and sites of potential archaeological interest identified within the study area and this information, along with map regression (*Appendix 1*), is used to assess the significance of the remains (Chapter 6) and impact of the development (Chapter 7). A strategy for further investigation is outlined in Chapter 8, based on the assessment presented in the previous chapters.

3. The Setting

3.1 Location, Topography and Land use

The global Monarch's Quay development site occupies infilled docks between Wapping Dock and Queen's Dock and the River Mersey on Liverpool's waterfront (centred on SJ 34407 89204). The area is bounded to the north by the Liverpool Waterfront Car Park, to the south by Half Tide Wharf, and to the west by the Exhibition Centre Liverpool (Plate 1). The present study, however, referred to as Phase 1b, is focused on the southern part of the site, bounded by Half-Tide Wharf, Queen's Wharf, Queen's Dock and Exhibition Centre Liverpool (centred on NGR 334370 389150; Plate 1). The site currently comprises areas of surface car parking, roadways, and walkways.



Plate 1: Recent aerial view looking west across the Liverpool's waterfront, marking the global Monarch's Quay area (in red) and the Phase 1b application area boundary (in green)

3.2 Geology & Topography

The underlying solid geology of the study area, as mapped by the British Geological Survey at 1:50000, is comprised of Chester Pebble Beds Formation - Sandstone. The site predominantly occupies land reclaimed from the River Mersey; the deposits underlying much of this land are likely to be alluvial silts and sands.

The study area occupies land with a slight incline to the east, the north standing at 6m above Ordnance Datum (aOD), the east 7m aOD and the south-west 3m aOD. It is currently a brownfield site, composed of areas of car parking, roads, and walkways.

3.3 Designations

There are no Scheduled Monuments, Registered Parks and Gardens or Registered Battlefields within the application area boundary, although a single listed building lies a short distance to the east. This comprises the restored Hydraulic Tower at Wapping Dock (List Entry No 1062575), which was built in 1856 to supply power to the adjacent Wapping Warehouse (lying outside the Site boundary). The tower is afforded statutory protection as a Grade II listed building, whilst the adjacent warehouse is Grade II* listed. In addition, there are another five designated and 17 non-designated heritage assets within a 250m radius. The designated heritage assets are listed in Table 1.

The application area lies beyond the southern boundary of the Albert Dock Conservation Area, which coincides with the southern boundary of the Liverpool Maritime Mercantile City World Heritage Site, a designated area of Outstanding Universal Value and international significance. As such, the application site lies within the Buffer Zone of the World Heritage Site, and whilst it does not share the same Outstanding Universal Value, the importance of any archaeological assets within the application area will nevertheless be enhanced by their historical association with those within the World Heritage Site.

HER Number	Site Name	Designation	NGR
MME11189	Hydraulic Tower at Wapping Dock, Queen's Wharf	Grade II	SJ 344522 89282
MME9594	Nos. 1-114 South Quay, Wapping	Grade II*	SJ 34510 89362
MME9597	Duke's Dock, Gower Street	Grade II	SJ 34196 89550
MME12475	Baltic Fleet Public House, Wapping	Grade II	SJ 34488 89540
MME12585	Wapping Basin, Wapping	Grade II	SJ 34365 89565
MME12604	Liverpool Special Post Office Pillar Box, Salthouse Quay	Grade II	SJ 34246 89662
MME13781	Gatekeeper's Lodge at entrance to Wapping Dock, Wapping	Grade II	SJ 34551 89292

Table 1: Designated heritage assets associated with the study area

None of the known buried archaeological remains within the application area are afforded statutory designation, and would thus not necessarily require preservation *in-situ*. Amongst these buried remains, which are considered to be non-designated heritage assets, are elements of the Liverpool's former network of docks and associated infrastructure.

4. Historical Background

This section of the report is based on cartographic and documentary research, and provides a framework to the present study, working chronologically through the periods listed below. Each section details evidence of archaeological remains and the potential for their recovery. Key sites are summarized in the Gazetteer of Sites (Chapter 5).

Period		Date Range
Prehistoric	Palaeolithic	Pre-10000 BC
	Mesolithic	10000 – 3500 BC
	Neolithic	3500 – 2200 BC
	Bronze Age	2300 – 700 BC
	Iron Age	700 BC – AD 43
Romano-British		AD 43 – AD 410
Early Medieval		AD 410 – AD 1066
Late Medieval		AD 1066 – AD 1540
Post-Medieval		AD 1540 – AD 1750
Industrial Period		AD 1750 – 1914
Modern		Post- 1914

Table 2: Summary of British archaeological periods and date ranges

4.1 Prehistoric Period

4.1.1 Archaeological Evidence

The current understanding of prehistoric human activity in north-west England is limited. In Liverpool, this lack of evidence reflects the intense development and urbanisation in the last 200 years, although there has been survival of archaeological remains on the fringe of the city. The earliest evidence of activity in Merseyside dates to the Mesolithic, at which time the area was host to groups of mobile hunter-gatherers. There is evidence to suggest they exploited a range of resources, moving between inland and coastal environments (Cowell 1983). Further north along the coast at Formby, for example, Mesolithic footprints were found preserved in the soft mud of a former salt marsh. Other physical evidence for human activity during this period is limited to flint scatters.

Neolithic and Bronze Age activity close to the study area is slightly better represented, and includes amongst the lithic assemblages numerous stone axes, found throughout the metropolitan borough; these have been interpreted as the beginnings of deforestation and farming. Situated 3.5km to the south-east of the study area are substantial megaliths located in Calderstones Park, Allerton. This area occupies an elevated plateau, and has retained the upright stones of a chambered tomb, the Calderstones, which are heavily decorated with carvings. The site attests to a more permanent occupation during the Neolithic and Bronze Age, and implies the focus of funerary activity on high ground.

4.1.2 Archaeological Potential

Although Merseyside as a whole offers evidence of prehistoric activity, Liverpool city centre and the waterfront have yielded few significant finds, and none are recorded within or near the Monarch's Quay site. The survival of buried archaeological remains is greatly diminished by the intense use of the riverside over the past 200 years. The potential for remains deriving from prehistoric periods is therefore considered to be very low.

4.2 Roman Period

4.2.1 Documentary and Archaeological Evidence

A range of documentary sources shed light on the chronology and political geography of Roman Britain, and compliments the archaeological record of the North West. The conquest of Britain began in AD 43 in the south of England. As the Roman military pushed northwards they encountered a number of different groups inhabiting the Mersey valley. These tribes are mentioned in Ptolemy's Geography from the 2nd century AD. To the south of the River Mersey were the Cornovii and to the north, the Brigantes. The Cornovii, it would seem, were more receptive to Roman rule and experienced a stronger military presence, whilst the Brigantes are traditionally portrayed as 'less sophisticated' pastoralists (Frere 1978, 70-2). Those occupying the territory north of the river may have had less contact with the army but were not in isolation, as attested by residual finds.

By AD 77-79, military consolidation of northern England was complete. This was achieved ultimately by the establishment of a network of forts and roads, which enabled fast lines of communication and deployment of troops. The nearest military fort appears to have been at Chester, established *c* AD 70. The 20th Legion of the Roman Army was stationed in Chester and remained there until *c* AD 400 (MOL 2017). Nevertheless, despite this military presence in the North West, the extent of Romanisation across the region was highly localised. At Irby in the Wirral, the persistence of Iron Age culture alongside imported pottery implies both continuity of lifestyle and some level of acculturation.

Archaeological material for Roman activity in Liverpool as a whole is scarce, and it would seem the intensity of later activity has all but eradicated evidence of Romano-British settlement. Coin hoards and a number of isolated coins from Liverpool strongly suggest settlement during this time. The likelihood, however, is that settlement in Merseyside was dispersed, consisting mainly of farmsteads.

4.2.1 Archaeological Potential

The lack of any archaeological evidence for Romano-British activity in Liverpool suggests the area was sparsely populated during this period, or that all physical remains were destroyed during the intensive development of the city from the 18th century onwards. The Monarch's Quay site, moreover, probably occupied a position within the River Mersey (as the land was reclaimed in the post-medieval period) and as such offers little potential for any physical remains to survive.

4.3 Medieval Period

4.3.1 Documentary and Archaeological Evidence

The reconstruction of pre-Conquest settlement in the Merseyside is speculative and derives mainly from the study of place names (Cowell 1983, 15-8). Although the Domesday Survey of 1086 mentions a number of villages attached to the manor of West Derby (MHCP 2011, 32; Farrer and Brownbill 1911), whether or not Liverpool was established remains unclear. Nevertheless, it is widely believed that it developed as a small fishing port or agricultural centre during the early medieval period (Gregory *et al* 2014; MHCP 2011).

The first references to the town were made in the 12th century (Gregory *et al* 2014, 23; MHCP 2011, 34), but offer little more than its name, *Liuerpol*. This is seen as a reference to the Pool, a muddy tidal inlet, which may have acted as a natural harbour. The elevation of its status from minor port to royal borough by King John in 1207 was largely driven by speculation, an opportunity for trade with Ireland (Gregory *et al* 2014, 23). The king invested in the town, which along with its proclaimed charter attracted new inhabitants (Farrer and Brownbill 1911; Gregory *et al* 2014).

Liverpool witnessed a brief period of economic freedom and relative prosperity following the royal grant of a merchant's guild in 1207, which allowed greater autonomy over the organisation of trade and commerce. This was somewhat eclipsed when the town was granted to the Earl of Chester, after which Liverpool was subject to the control of feudal lords, first the Ferrers, the Earls of Derby, then the Earls of Lancaster (Gregory *et al* 2014).

The use of the harbour (the Pool) during this period is assumed to have been problematic. It was difficult to enter from the River Mersey due to shallow, silt-laden waters (Gregory *et al* 2014, 26). Coupled with the Mersey's adverse tidal range, this meant that ships were forced to beach on its foreshore in order to load and unload cargo (*ibid*). Despite these difficulties, however, the river offered a base for the Royal Fleet and a point for the ferry crossing to Birkenhead, moving both people and goods to and from the town. The town's importance is attested in the following centuries, a product of its natural growth and the attraction of merchant families (*ibid*). Maritime activity provided a source of its trade and influence but was secondary to the role of its market.

Studies of the medieval town have revealed its organisation respected to the course of the Mersey. It first consisted of seven streets, arranged in an H-formation. Castle Street was a later addition to the medieval street plan, added upon its completion in c 1235 by the Ferrers. It housed the constable and a small garrison. The focus of this activity lay to the north of the study area, which probably retained a rural prospect until the late 18th century.

4.3.2 Archaeological Potential

The survival of archaeological evidence pertaining to the medieval town and port has been compromised by later construction activity and is limited to a few discrete locations in the city. No substantial archaeological remains have been uncovered within the city to date. The Monarch's Quay site occupies an area of land that was yet to be reclaimed during this period. The potential for medieval finds or archaeological remains considered to be very low.

4.4 Post-medieval Period

4.4.1 Documentary and Archaeological evidence

Liverpool was principally a market town in the 16th century, depending in part on maritime trade (MHCP 2011, 35), but was well on its trajectory to becoming a port-city of worldwide repute by the early 18th century. The silting of the River Dee and obsolescence of Chester's port created a window of opportunity for West Coast trade in the Irish Sea. Liverpool was well suited to take advantage of this market and progressed commercially and politically. At a time of heightened conflict and political insecurity during the civil wars, Liverpool became England's 'gateway to Ireland' (MHCP 2011, 35) and despite its fluctuation in political allegiance it retained its prominence. During the 17th century the town witnessed increasing prosperity on the back of its maritime trade (Gregory *et al* 2014). The extent of change is embodied not only in the range of materials and wares passing through its port but the composition of its inhabitants. A clear occupational shift towards a mercantile and maritime population has been charted (MHCP 2011, 35).

The late 17th and early 18th century saw several key events which would have important ramifications for Liverpool, and particularly a legal dispute between Liverpool's Corporation and Lord Molyneux, whose family had gained the towns constablenesship during the mid-15th century (Gregory *et al* 2014, 33-4). The outcomes of the dispute were numerous, the most crucial being the transfer of powers and the acquisition of the Pool (*ibid*). This placed upon the Corporation the ability and means to develop Liverpool's waterfront and reclaim land.

Liverpool's maritime trade was expanding in both its intensity and range, well beyond its tradition sphere of influence in the Irish Sea. This was driven in part by its entrepreneurial merchants but was largely influenced by external factors, namely overseas wars and privateering which led to fear and hesitancy among other traders (Farrer and Brownbill 1911). Unsurprisingly, trade with Europe and the Americas was exploited, and new markets for Lancashire's productive industries were forged.

During the early 18th century the world's first commercial wet dock (the Old Dock, as it is now known) was constructed. It was partially opened in 1715 and completed fully around 1731. A depiction of the dock on Chawick's map (Plate 2) shows that it had a one-and-a-half acre octagonal tidal entrance basin, providing short-term berthing and a graving dock off to the north. It was also serviced with single set of lock gates, in particular inward-facing mitre gates, meaning that it was only useable as a half-tide dock (Gregory *et al* 2014).

Other measures were taken to improve the state of the River Mersey around this time, including the buoying and chartering of the river, construction of lighthouses and dredging and deepening of the riverbed (Farrer and Brownbill 1911). Investment in the canalisation of rivers in the north-west and a concerted effort to make the Mersey's tributaries navigable brought Liverpool ever closer to sources of raw materials and finished products, cheapening movement and securing business.

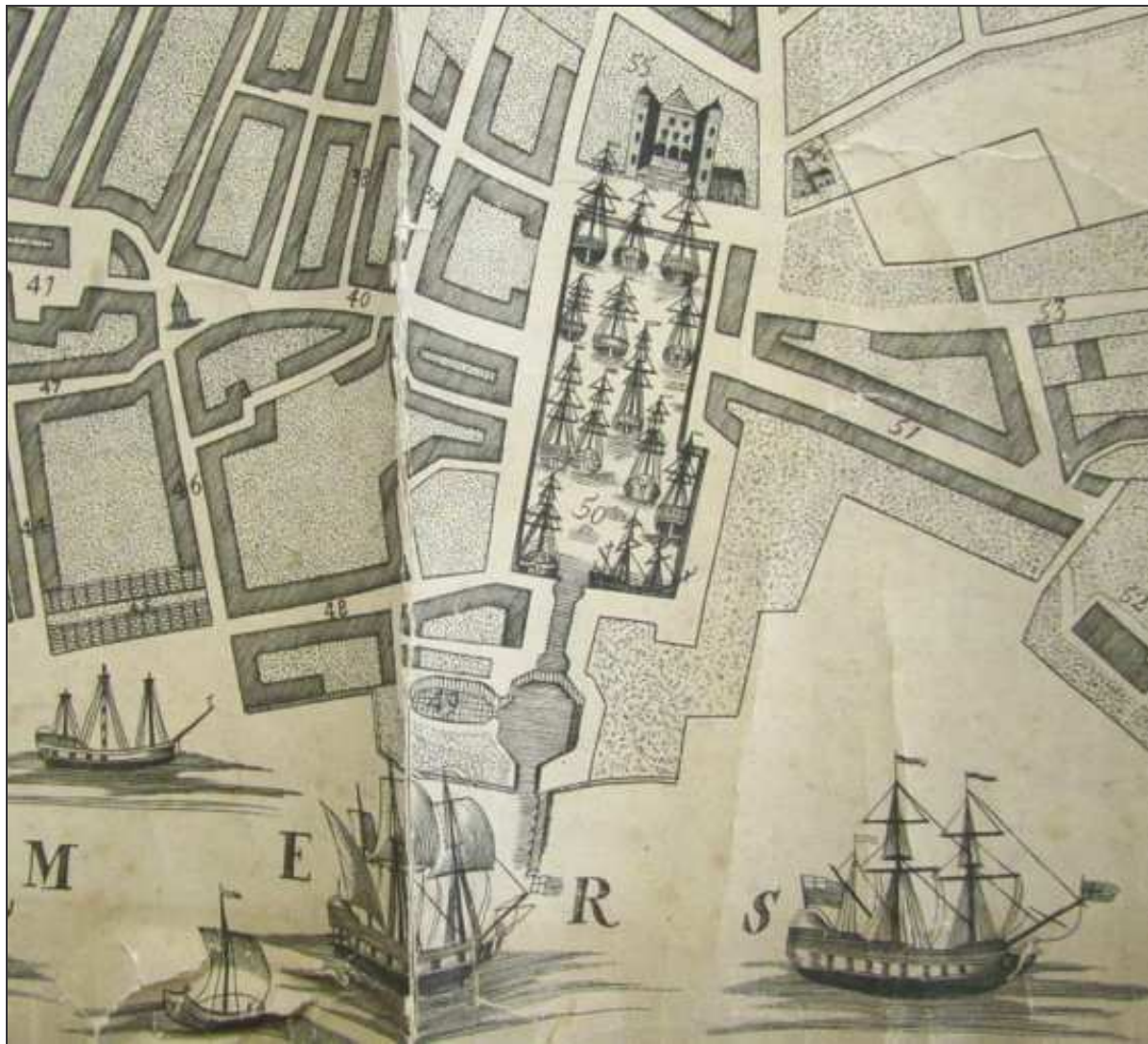


Plate 2: Extract from Chadwick's Map of Liverpool, 1725

4.4.2 Archaeological Potential

Liverpool and its waterfront went through significant development during this period, particularly with the reclamation of land and the opening of an artificial dock. Despite this, there is no indication of development within the Monarch's Quay site during this period. The docks comprising the Monarch's Quay site were developed later, thus precluding any potential for significant post-medieval remains. However, there is perhaps a low potential for the presence of isolated pockets of stratigraphy, made and reclaimed ground dating to this period.

4.5 Industrial and Modern Periods

4.5.1 Documentary and Archaeological Evidence

By the middle of the 18th century, the population of Liverpool was rapidly increasing. This was a result of growth in trade and the expansion of Lancashire's productive industries, which was accelerated by technological advancements. The amount of trade which went through Liverpool can be measured by the tonnage of goods which passed through its docks. This was largely due to the development of several new docks, which were established in the wake of the huge commercial success of the Old Dock. The new docks were intended to take the burden of trade, but as incoming ships increased yet more modifications were made. A prolific period of building occurred in the 1760s and 1770s, with a further phase during the 1780s to 1790s. Of particular relevance to the present study are the King's and Queen's Docks, which were constructed in 1788 and 1796 respectively (Gregory *et al* 2014).

The first decade of the 19th century brought uncertainty to the nation's economy with the abolition of slave trade in the British Empire in 1807. Liverpool reacted well to this, forging links with India and the north-west cotton industry (MHCP 2011, 37). The following decades saw yet more modifications and improvements to the docklands, with a further resurgence in building continuing until c 1900 (Farrer and Brownbill 1911).

By the late 19th and early 20th centuries Liverpool witnessed an unprecedented level of trade and influence, a period regarded as its commercial zenith (MHCP 2011, 37; Gregory *et al* 2014, 151). The docks linked not just the North West but much of Britain to the overseas markets, continuing to provide support for industries through the supply of raw materials, such as cotton, and the export of finished goods including textiles and ceramics. However, heightened levels of connectivity with the rest of Britain were detrimental to Liverpool's own small-scale productive industries, such as potting and metallurgy, and the focus of Liverpool's economy became ever narrower and dependent on maritime trade (Farrer and Brownbill 1911).

Liverpool's economic success masks the more gruelling history of its working classes. The docklands may have brought great wealth to the town but as the population boomed, the rift between the rich elite and the poor became ever more apparent (MHCP 2011, 37). This was manifested geographically in the 'uphill move' of upper classes to Liverpool's greener suburbs, such as Sefton Park, whilst the old town and docklands became the reserve of the poor and destitute, desperately squalid and overcrowded.

The interwar years witnessed economic uncertainty and hiatus in trade between Britain, Europe and America. As the economy began to surge in the 1950s, so too did the trade passing through Liverpool's docks. However, due to the large scale of vessels and increasing use of containers, most of the docks were unable to accommodate the ships and trade began to bypass the city (MHCP 2011, 38). The repercussions of economy (now focused solely on maritime trade) were devastating; maritime trade gradually declined and the docks fell into disuse. Following the 1970s recession, the redundant docklands began to be decommissioned. Much of the obsolete areas of docklands, including the King's and Queen's branch docks, were in-filled in the 1980s and built over subsequently.

4.6 Development of the Site Area

The development of the Monarch's Quay site began in the early 18th century. At this time Liverpool was emerging as a key port in both transatlantic, continental and domestic trade. The first development of the study area began initially with the reclamation of land from the Mersey. The historical evidence suggests that this process took place in piecemeal fashion along the waterfront. Clauses in the contracts of the Dock Corporation tenants meant they were obliged to reclaim land (Richie-Noakes 1984, 37). It was not therefore a uniform or organised effort. The land occupied by the mid-century basins and later by the King's and Queen's and Wapping docks was probably reclaimed in this way, though the scale of these later docks may have required a more concerted reclamation.

The mid-18th century saw the completion of two small basins (Sites 1 and 2), which were established prior to 1765, as shown on John Eyes' map (Plate 3). The basins occupy a small portion of the reclaimed land in the south-west corner of the waterfront, with the southern part of one (Site 2) extending into the present application area. The extent of the land reclamation can be gauged from the position of the shoreline.

Liverpool's mid-18th century waterfront and its environs were relatively slow to develop. Few buildings are depicted on the maps from the 1760s, and much of the surrounding area retained a rural prospect. A strip of land to the east of the study area is laid out in the manner of a market garden or allotment; this is surrounded by arable fields and a windmill. The first buildings are depicted on Perry's map of 1769 and include a long, L-shaped structure (Site 3) immediately east of Site 2; this building probably functioned as a warehouse. Despite the few buildings shown on the Perry's 1769 map and a subsequent Town Plan from 1796 (Plate 4) the rate of urbanisation in the south-west corner of the town was markedly gradual.

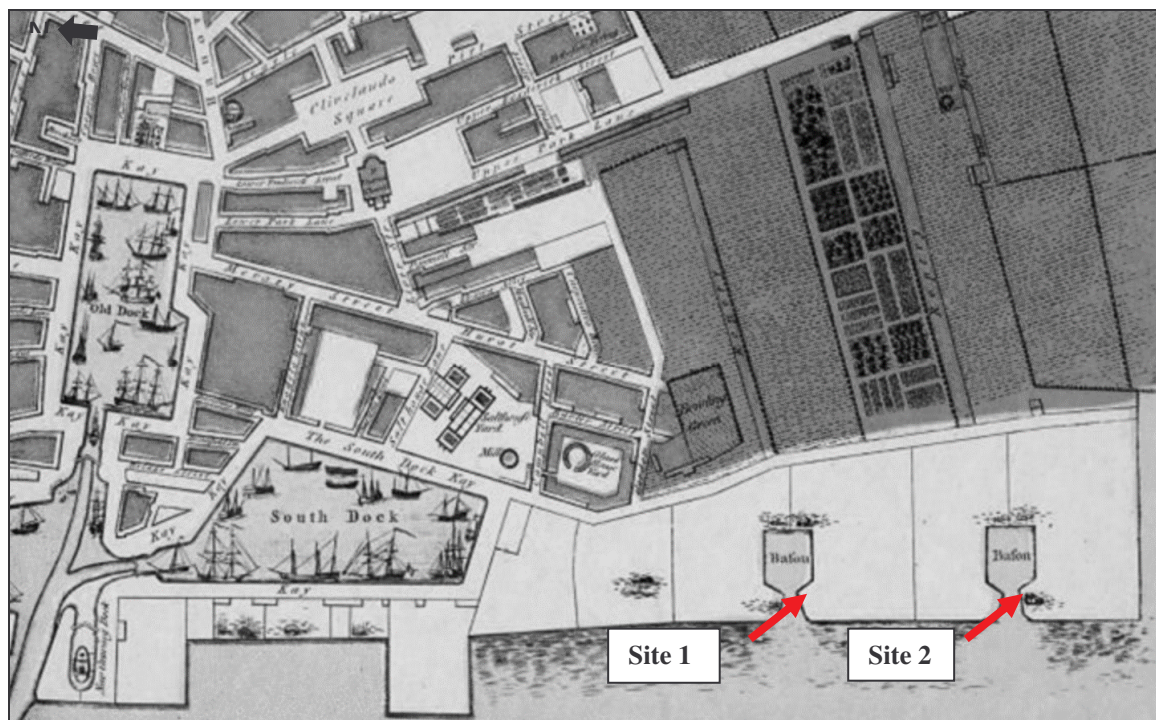


Plate 3: Extract from John Eyes' Map of 1765

The docklands on the other hand were continually being updated, forced to cope with the sheer volume of trade and up-scaling of cargo ships, whilst attempting to overcome the River Mersey's natural limitations: silt, sand, tides and strong currents (Pollard 2004, 93). The initial construction and design choices of King's Dock (Site 4) and Queen's Dock (Site 5) in 1788 and 1796 reflect these pressures, most obviously the need for more mooring posts. With a combined area of 5.6ha, these wet docks represented a major contribution to the docklands capacity for shipping. In addition, two graving docks (Site 7) were placed to the south of the entrance basin (Site 6), and immediately to the south-east of the Site Area, in which ships could be secured safely for repairs and maintenance.

An early depiction of the town and docks in 1796 demonstrates their position in relation to the town (Plate 4). It is apparent that the surrounding area was still to be fully developed. King's and Queen's docks thus occupied a position on the very fringe of the town. To the south-east lay vacant plots of land, divided by proposed streets. A few buildings lined Wapping, a road to the east of the Monarch's Quay site, including a tobacco warehouse. The building shown on the 1769 map is no longer visible. The plan of 1796 also depicts timber yards to the west and south of the docks (Sites 9 and 10), areas devoid of buildings (Figure 4). It is probable these functioned as open-air wharfs. The southernmost timber yard (Site 9), adjacent to the graving docks, was later utilised as a shipwright's yard. Although limited number of buildings are shown on the plan of 1796, Cole's map from 1807 shows a circular fort (Site 11) on the southern side of the entrance basin (Figure 6), and immediately beyond the south-western edge of the Site Area.

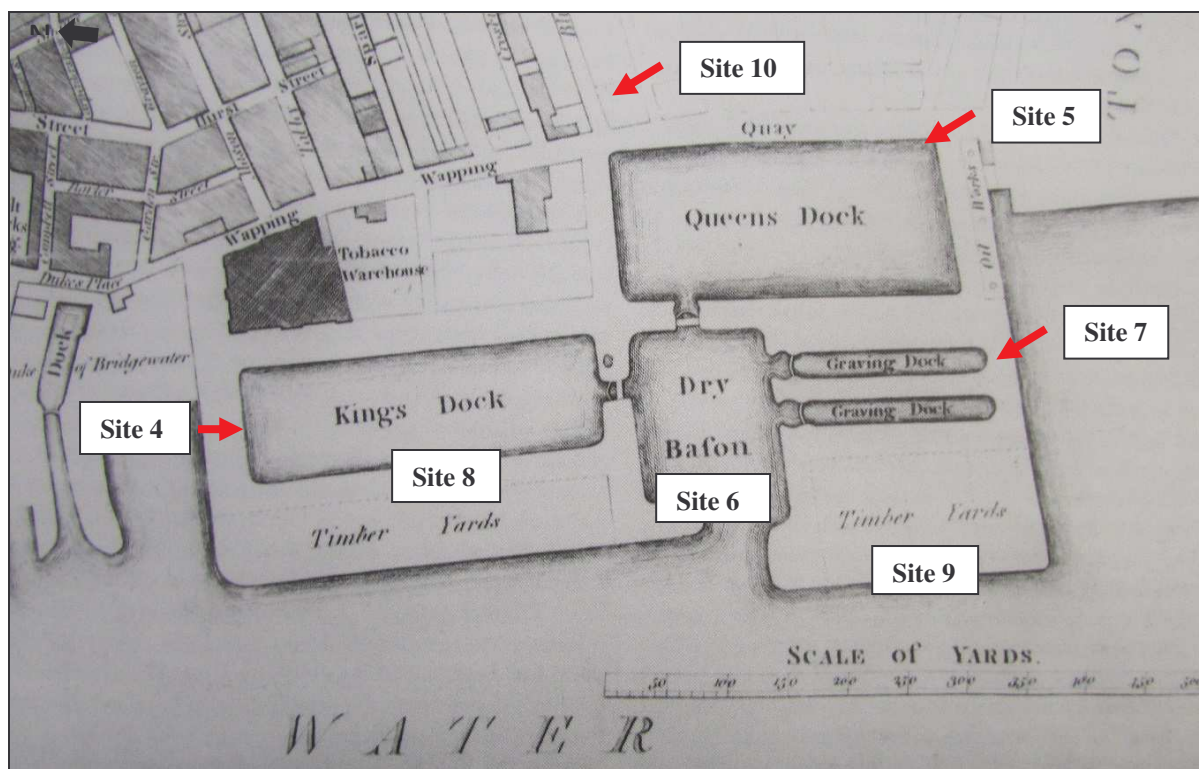


Plate 4: Extract from Town Plan of Liverpool, 1796

In the following decades, the immediate vicinity of the docks underwent a surge in building, a product of Liverpool's economic prosperity and booming population. The pace of this development can be gauged through comparison of the town plan of 1796 and Sheriff's map of 1816 (Figure 7). By 1816, the plots to the east of the docks were occupied and the edge of the town was pushed even further south.

This wave of construction overwhelmed the eastern part of the Monarch's Quay site. Gage's map of 1836 (Plate 5) demonstrates that the north-eastern part of the study area was then occupied by a group of buildings fronting Willacy Place. Along this narrow street were five buildings (Site 12) which did not conform to the regular rows of workers' housing shown nearby; it seems more likely these were industrial or commercial premises. They are absent from the 1864 Ordnance Survey, implying the buildings were cleared prior to the construction of Wapping Dock in the 1850s. The easternmost end of the study area extended across Wapping to incorporate a group of late 18th-century buildings, including an inn, hotel, spirit vault and other cellared properties occupying the site of a former timber yard (Site 10).

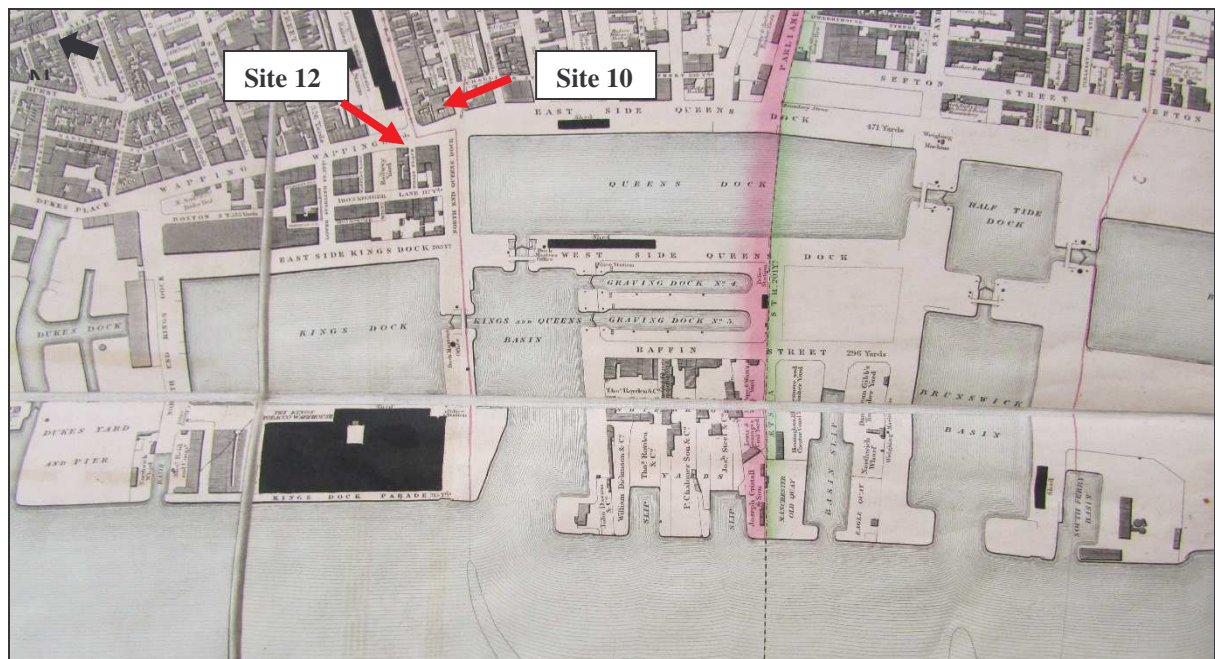


Plate 5: Extract from Gage's Map of 1836

It is possible to chart closely the development of the docks through the 19th century due to the available sequence of historic maps, estate plans and proposals. Between 1803 and 1859, the western edge of the waterfront was gradually pushed westwards, through the reclamation of yet more land; this was required principally to accommodate the tobacco warehouse. Gage's 1836 map also portrays a chamfered form to the northern edge of the basin (Figure 8), which was eventually mirrored on the opposite side. Gage's map also reveals the construction of numerous buildings, clustered around three slips, to the west of the graving docks. The land is divided into strips leased to a range of concerns, namely shipwrights and foundries. The land to the west of the King's Dock included the newly constructed King's Tobacco Warehouse, and a smaller group of buildings adjacent to the Rochdale Basin.

Other dramatic changes to the study area wrought during this period included the southern extension to Queen's Dock in *c* 1816, and the completion of the Wapping Dock in 1855. Both increased the capacity for mooring. Crucially, Wapping Dock connected the neighbouring docks and allowed ships to move with ease between them without having to re-enter the Mersey. The Queen's Basin was also converted to a half-tide dock in 1856, as shown on a plan of 1859 (Plate 6). It retained this form until the late 19th century, when work began on the Queen's branch docks.

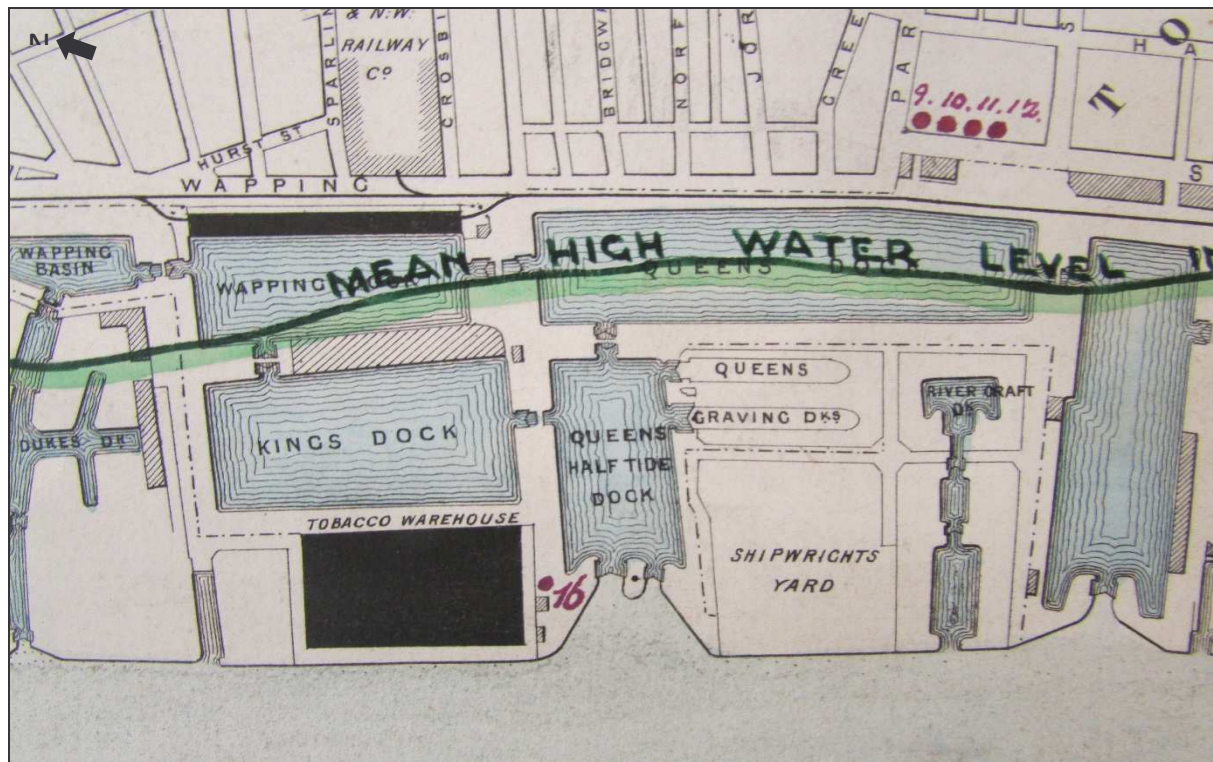


Plate 6: Extract from Plan of the Liverpool Docks, 1859

Plans from this period also show the newly installed hydraulic centre, comprising an engine and boiler house and hydraulic tower (Site **18**). The use of hydraulics became ever more essential with the installation of large gates, locks and swinging bridges and winches for moving ships. A suite of installations are plotted within the Monarch's Quay site on the Ordnance Survey map of 1864 (Figure 11). The area between King's and Queen's docks also became a focus for various offices, including those for the dock master (Site **14a**) and adjacent building (Site **14b**), assistant harbour master (Site **17a**), the district surveyor (Site **14c**) and a substantial custom house depot (Site **14**).

These mid-century changes to the docks were not enough to keep up with the demands of shipping, however, and by 1875 proposals for branch docks, in the place of King's Dock, were in progress. Similar alterations were proposed for Queen's Dock. Construction began in the late 1890s and was completed by 1906. From this point onwards the overall configuration of the King's, Queen's and Wapping docks was retained.

Britain's burgeoning networks of canals and railways connected Liverpool to the productive and resource-rich areas of the country. In turn, these routes also provided a means for the circulation of imported goods. The completion of the London and North West Goods terminus (Liverpool and Manchester station) to the north-east of the study area had significant implications for the development of the area. Between 1836 and 1849, tracks were laid between the main station and a goods shed on Willacy Place. Although the original goods shed was pulled down, the Monarch's Quay site maintained contact to the railway and via the newly completed Docks Railway, which led to Wapping Warehouse and a goods shed adjacent to Queen's Dock. This additional internal line also aided in the movement of goods between docks and warehouses. The modifications of the docks in c 1900 gave greater space and enabled the extension of the line to the edge of the waterfront between newly built warehouses either side of Wapping and Queen's Docks. The line was extended by 1927 and ran further southwards along the edge of the waterfront.

The Ordnance Survey maps from the 1920s onwards illustrate that a small number of buildings were constructed in the eastern part of the study area. Some of the warehouses surrounding the branch docks were reduced in size, but otherwise no further major alterations were carried out to this area of docklands.

A decline in trade during the second half of the 20th century led to the silting up and gradual disrepair of the docks. After much neglect, the branch docks were in-filled in the 1980s, along with the demolition of a number of later buildings.

4.5 *Previous Archaeological Work*

Previous archaeological work along Liverpool's waterfront, particularly those areas offering both 18th- and 19th-century remains, has proved a valuable source of information. A great portion of this archaeological work has been focused on the Old Dock and areas of dockland immediately north of the Site Area.

The completion of a watching brief (EME2407) in the southern part of the study area targeted the entrance lock to the Queen's Dock from the entrance basin (Gregory *et al* 2014, 148-50). The work highlighted the survival of the dock walls and installations, including the housing of the swinging bridge. The housing comprised an arced wall (15m long) with a circular cut for an engine. The base of the housing lay some 1.8m below the top of this wall and consisted of large stone blocks, secured with iron clamps. Two culverts, associated with the management of the water level were also identified. The results of this watching brief established the survival of dock infrastructure, and imply that other lock and swinging bridge installations may survive elsewhere on site.

Elsewhere in the vicinity, reclamation deposits containing dumps of industrial refuse have been unearthed. In total, 1374 pottery sherds were recovered in a dump during a watching brief at King's Parade (MME15717). Considering the close proximity of copper works (MME2959), glass works (MME2962) and pottery workshops, it is probable that similar categories of waste material were utilised during the reclamation of land in the study area.

4.6 *Site Inspection*

A site visit was carried out in early March 2017, and proved useful in relating the findings of the desk-based assessment with the current use and layout of the site, enabling observation of standing structures and assessment of areas deemed archaeologically important.

The visit included an inspection of the extant docks, Wapping and Queen's Dock, which border the site to the east. Their current form reflects adaptations made in the early 20th century. A few remaining elements of dock infrastructure and installations were observed, including the capstan associated with the swinging bridge between the aforementioned docks.

Although the branch docks were in-filled in the 1980s, the blocks of land dividing them can be made out and survive as small promontories jutting out into the Wapping and Queen's docks (Plate 7). From the map regression it is possible to suggest that pockets of reclamation deposits may survive.



Plate 7: View looking north, note the block of land extending into Wapping Dock, showing the Grade II listed former warehouse on the eastern side of Wapping Dock*



Plate 8: View looking south, note the block of land extending into Wapping Dock

An area of archaeological interest in the middle of the site was also examined and no major alterations to ground level were apparent, though this does not preclude that loss or truncation of structural remains in more recent years. Another area of interest is the eastern extent of the Monarch's Quay site, but beyond the boundary of the Phase 1b application area, currently covered by a tarmaced surface. Beneath the road, there may be remnants of the hotels, public houses and dwellings which lined Wapping in the 19th century, especially given the indication of cellars on the Ordnance Survey mapping.



Plate 9: View of the Grade II listed hydraulic centre and tower and policeman's lodge, looking north-east



Plate 10: View of the capstan of the swinging bridge

5. Gazetteer of Sites

The following gazetteer provides a list of the non-designated heritage assets identified within the entire Monarch's Quay development area. This has been compiled from the Merseyside Historic Environment Record (HER) data, coupled with a study of the historical map sequence. A buffer zone was also applied to within the Site Area of 250m, and these entries are listed in *Appendix 2*.

Site Number: 1

Site Name: Basin (North)

NGR: SJ 34372 893696

Site Type: Basin (Site of)

Period: Mid-18th century

Source: Eyes 1765

Description: Eyes' maps from 1765 and 1768 depict two basins constructed within the study area in the mid-18th century. The basins entrances are chamfered, perhaps reflecting early attempts to prevent siltation. The 1769 map by Perry also shows the two basins, in addition to a few buildings to the east. The basins were subsumed by the construction of the King's Dock, and do not appear on the 1796 town plan.

Assessment: The footprint of the north basin lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 2

Site Name: Basin (South)

NGR: SJ 34429 89247

Site Type: Basin (Site of)

Period: Mid-18th century

Source: Eyes 1765

Description: Eyes' map from 1765 depicts two basins constructed within the study area in the mid-18th century. The basins entrances are chamfered, perhaps reflecting early attempts to prevent siltation. The southern basin was in-filled during the construction of the King's Dock in the 1780s and built over subsequently, but unlike the northern basin (Site 1) is not subsumed by the dock itself. The basins do not appear on the 1796 Town plan.

Assessment: The footprint of the south basin occupies a piece of land, which subsequently remained partially unaltered by the later docks. Once in-filled, the northern portion of the basin was subject to few intrusive events and buried structural elements may therefore remain intact. The southern wall of the basin lies within the Phase 1b application area, and development works may impact on any buried remains of the basin that survive *in-situ*.

Site Number: 3

Site Name: Warehouse

NGR: SJ 34519 89255

Site Type: Building (Site of)

Period: Mid-18th century

Source: Eyes 1765

Description: Eyes' map from 1765 depicts two basins constructed within the Site Area in the mid-18th century. Perry's map of 1769 shows an L-shaped building immediately east of the southern basin (Site 2). The building is not shown on later maps.

Assessment: The building footprint extends into the Phase 1b application area, occupying a piece of land that was developed during the construction of the late 18th-century docks and 19th-century additions. The building seems to extend from the edge of the basin (Site 2) along the narrow strip of land, close to the line of Wapping Road. Although partially lost due to the excavation of the Queen's and Wapping Dock's, there is some potential for buried remains to survive *in-situ* either side of the current bridge crossing this area.

Site Number: 4

Site Name: King's Dock

NGR: SJ 34323 89309

Site Type: Dock (Site of)

Period: Late 18th century

Source: A Town Plan of Liverpool, 1796;

Description: The King's Dock, designed by Henry Berry, opened in 1788 as a wet dock, intended to accommodate large sailing ships as well as smaller vessels and was thus designed to allow such ships to be manoeuvred with ease. It originally occupied an area of 2.5ha and was rectangular in plan. A plan of 1796 shows the position of the dock and the adjacent Queen's Dock (opened in 1796). Historic maps and plans of the dock indicate it was linked to its adjacent entrance basin by means of a lock, crossed by a swinging bridge. To the south, the Queen's Dock and two graving docks were added to the entrance basin. No major changes were made to the dock itself until its closure in 1906. At this time, two branches were added to the Wapping Dock, immediately to the east, subsuming the King's Dock. These branch docks retained the name of the former King's Dock. During these modifications, the entrance dock and lock to the King's Dock were in-filled.

Assessment: The southern end of the King's Dock extends into the boundary of the Phase 1b application area, and development may impact upon any buried structural remains that survive *in-situ*.

Site Number: 5
Site Name: Queen's Dock

NGR: SJ 34634 89076

Site Type: Dock (Extant)

Period: Late 18th century

Source: A Town Plan of Liverpool, 1796;

Description: The Queen's Dock was proposed and designed in the 1780s by Thomas Morris and opened in 1796, initially measuring 3.1ha. It lay to the south of King's Dock, at the time the southernmost development within the docklands. It shared an entrance basin with the King's Dock, which consisted of lock gates and swinging bridge. Unlike King's Dock, the Queen's Dock underwent several phases of development between 1816 and 1906, enlarging and deepening the basin to accommodate the ever-increasing size of ships. The sequence of these modifications is in part discernible from the available historic maps.

Assessment: The main dock survives, as do many architectural elements, including the elements of the swinging bridge and lock between the Queen's and Wapping Dock. The original north-western corner of the dock, which was infilled between 1893 and 1908, extends into the Phase 1b application area, and development works may impact on any buried remains of the basin that survive *in-situ*..

Site Number: 6
Site Name: Entrance Basin

NGR: SJ 34380 89109

Site Type: Basin (Site of)

Period: Late 18th century

Source: A Town Plan of Liverpool, 1796;

Description: Built for access to the King's and Queen's docks in the 1780s, the entrance basin started off as a dry basin, enabling access to the docks and graving docks. Designed with a wide entrance, the basin was large enough for ships to manoeuvre under sail. Adjacent to the mouth of the basin on Cole's map of 1807 is polygonal structure, labelled a fort. This is not shown on earlier or later maps suggesting it was lost during the remodelling of the basin. By 1856, the entrance was modified to a half-tide dock, in order to slow down the build-up of silt. Known as the Queen's Half-tide Dock, it remained in use until c 1900, at which time it was converted to Queen's Branch Dock No. 2. The branch dock remained in use until the 1970s. It was in-filled during the 1980s, and a road and car park were constructed over the site.

Assessment: There is potential for elements of the half-tide dock entrance to survive as buried remains within the Phase 1b application area, and development may impact upon any buried remains that survive *in-situ*.

Site Number: 7
Site Name: Graving Docks

NGR: SJ 34482 89008

Site Type: Docks (Site of)

Period: Late 18th century

Source: Town plan 1796; Horwood 1803; Cole 1807; Sheriff 1816; Gage 1836; OS map 1849

Description: Two graving docks, used for the maintenance of ships, are shown on the Town Plan of 1796. These adjoin the entrance basin on its southern side and were accessed by the basin by means of gates or locks. The sequence of maps shows these were in use until the late 19th century, at which time modifications were made to the Queen's Dock, entrance basin and both graving docks. These were superseded by two branch docks and a single graving dock. The loss of a graving dock may in part be due to the decline in shipbuilding along with other industries in Liverpool at this time. The older graving docks were comparatively small, compared to the size of ship now entering the dock; this too may have led to their loss.

Assessment: Given the construction of the Queen's Branch Dock and later graving dock, the extent of any surviving remains of the earlier graving docks is likely to be minimal. The docks' footprint, moreover, lies beyond the boundary of the Phase 1b application area.

Site Number: 8
Site Name: Timber Yards (West of King's Dock)

NGR: SJ 34215 89248

Site Type: Yard and buildings (Site of)

Period: Late 18th century

Source: Town plan 1796; Horwood 1803; Cole 1807; Sheriff 1816; Gage 1836; OS map 1849

Description: The late 18th- and 19th-century maps show the area to the west of the King's Dock was occupied by timber yards, presumably open-air wharfs. The yards are shown on the Town Plan from 1796 and an 1803 map by Horwood. The latter shows three small rectangular buildings to have been built at this time, fronting a road adjacent at the edge of King's Dock. The site was redeveloped c 1916 during the construction of the vast New Tobacco Warehouse, a change which reflects the large volumes of the commodity passing through these docks. The tobacco warehouse was later demolished to make way for the branch docks of Wapping dock c 1898-1908.

Assessment: The footprint of the timber yard lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 9

Site Name: Timber Yards (West of Graving Docks)

NGR: SJ 34369 88917

Site Type: Yard and buildings (Site of)

Period: Late 18th century

Source: Town plan 1796; Horwood 1803; Cole 1807; Sheriff 1816; Gage 1836; OS map 1849

Description: The late 18th- and early 19th-century maps show a timber yard to the south of the entrance basin (Site 3). Horwood's map of 1803 shows the timber yards were owned by Mr Smallshow and Mr Balwin, presumably tenants of the Corporation. The map reveals that a portion of the land was occupied by an oil works. Subsequent mapping reveals the area was given over to a number of shipwright's yards, foundries and warehouses. The yards and associated buildings and infrastructure were cleared ahead of the construction of Queen's branch docks and graving docks. Warehouses were constructed alongside the branch docks in the 20th century.

Assessment: The footprint of the timber yard lies almost entirely beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 10

Site Name: Wapping (South) Buildings

NGR: SJ 34489 89565

Site Type: Buildings (Site of)

Period: Late 18th century

Source: Town plan 1796; Horwood 1803; Cole 1807; Sheriff 1816; Gage 1836

Description: The site of a row of properties at the eastern extent of the study area. The first buildings are depicted on a Town Plan from 1796 and Horwood's map of 1803, and are located on land between Crosbie and Blundell Street. Gage's map of 1836 and the 1849 OS map show that the corners of Crosbie and Blundell Street were occupied by the Universal Hotel and the North and South Shields public house, respectively. Adjacent to the Universal Hotel is a building, labelled Spirit Vault, indicating it was licensed premise. All the buildings depicted on the Ordnance Survey map of 1849 are cellared. The buildings were cleared in the 1850s to make for the Docks Railway running along Wapping, which was retained until the late 20th century. The railway line has since been lifted and this area of the site is now traversed by Wapping Road.

Assessment: The footprint of the buildings lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 11
Site Name: Fort

NGR: SJ 3426 8900

Site Type: Building (Site of)

Period: Early 19th century

Source: Horwood 1803; Cole 1807; Sheriff 1816

Description: To the south of the entrance basin shown on Cole's map of 1807 is a round or polygonal structure, serving as a fort to the King's and Queen's docks. The structure is not shown on maps from before or after this date, and it is possible this was a temporary structure. The structure occupies a position at the south-west corner of the site.

Assessment: The footprint of the building lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 12
Site Name: Willacy Place Buildings

NGR: SJ 34517 89273

Site Type: Buildings (Site of)

Period: Early 19th century

Source: Horwood 1803; Cole 1807; Sheriff 1816; Gage 1836;

Description: The reclaimed land to the north of King's Dock was heavily developed c 1790 – 1836. This development included the construction of warehouses, dwellings, a hotel, potential industrial works and commercial premises. The north-eastern boundary of the Site Area lies immediately to the south, east of the junction of Willacy Place and Ironmonger Lane (shown on Gage's map from 1836 and the Ordnance survey map of 1849) and the corner of a railway building to the north of Willacy Place. The potential railway shed is shown to be connected to the main goods station by means of tracks. The function of the other buildings is hard to discern, though their size and form imply they were not residential. By the time of the 1864 map, these properties appear to have been swept away and replaced by an engine and boiler house and an accumulating tower. The construction of a large goods shed to the east of Wapping Dock c 1851 and another shed to the south of this in the late 19th century may also have impacted on any surviving remains. The area is now partially open and forms an enclosed car-parking space.

Assessment: The footprint of the buildings lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 13
Site Name: East Side King's Dock

NGR: SJ 34460 89247

Site Type: Buildings (Site of)

Period: 19th century

Source: Gage 1836; OS map 1849

Description: The northern boundary of the Site Area lies immediately to the south of a small area of reclaimed land between the east side of King's Dock and Ironmonger Lane, shown on Gage's 1836 map and the Ordnance Survey map edition from 1849. The earlier map depicts two potential buildings, a long narrow structure running parallel to the dock and a rectangular building attached to its eastern side. They appear to have been cleared and replaced by a much larger building by 1849, connected to the nearby goods station. The later map shows a row of regular rectangular buildings, potentially housing fronting Ironmonger Lane; the rear ends of these properties extend into the Site Area. Some of the buildings on Ironmonger Row appear to be cellared. The function of the buildings is hard to determine from the available maps, although those fronting the east side of the docks are clearly commercial, whilst those on Ironmonger Lane may have been domestic. By 1853, the buildings had been cleared and construction of the Wapping Dock had commenced, which will have removed some remains.

Assessment: The footprint of the buildings lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 14
Site Name: Custom House

NGR: SJ 34439 89215

Site Type: Building (Site of)

Period: 19th century

Source: OS map 1849; OS map 1864; Engineer's plan 1873; OS map 1893; 1894 Warehouse Committee Plan.

Description: The 1849 Ordnance Survey map from 1849 depicts a rectangular building close to the south-east corner of King's Dock. The structure, marked as a Customs House, is shown in detail with three separate rooms and nine windows. There is no indication the building was cellared. Immediately to the east of the Customs House was a telegraph station shown on the 1864 OS map edition. An engineer's plan of King's Dock in December 1873 reveals the building received a small extension on its western side. By 1908, the custom house had been demolished, making way for a new line of tracks connecting the dock to the railway and large, narrow warehouses. The area is currently crossed by a tarmaced road.

In addition to the custom house are a number of smaller offices, which include a dock master's office (Site **14a**), unspecified office (Site **14b**), district surveyor's office (Site **14c**) and assistant harbour master's office (Site **17a**). The dock master's office was moved between the 1860s and the 1890s to between the King's Dock and Entrance Basin. The position of these buildings can be determined from the sequence of maps.

Assessment: The major groundwork that the construction of the King's and Queen's branch docks and rail link entailed may have impacted on the below-ground remains of the custom house. However, part of the footprint on the Customs House the dock master's offices extend into the Phase 1b application area, and development may have an impact on any buried remains that survive *in-situ*.

Site Number: 15

Site Name: Wapping Dock

NGR: SJ34477 89413

Site Type: Dock (Extant)

Period: 19th century

Source: 1864 OS map; 1893 OS map; 1908 OS map; 1927 OS map; 1954 OS map; 1971 OS map

Description: Wapping Dock was designed by Jesse Hartley in the 1840s. Located to the east of King's Dock, the site was previously occupied by an 'assortment' of commercial and residential property (LCC 2005, 109). Following a parliamentary act to acquire the land, a further five years was taken up by the clearance and preparation of the site prior to construction. A plan of the Liverpool Docks in 1846 by Hartley shows the proposed location of the dock. In 1853 excavation began and by 1855 Wapping Dock had opened.

A plan of the proposed dock was produced in 1847, showing the position of the dock, locks and adjacent warehouses. A few changes were made subsequent to this design, including the scaling down of the warehouse on the west side of the dock from six storeys to one (LCC 2005, 129). The available plans of the completed dock show its adjacent warehouses were open-fronted. The eastern warehouse (a surviving structure) was built to a height of six storeys.

The dock saw further modification between 1898 and 1906 with the construction of two branch docks, which subsumed the King's Dock. The completed constructed is shown on 1908 OS map.

Assessment: The dock continued to be used when the Queen's Dock became redundant, particularly for through traffic. The proposed development is unlikely to have any direct physical impact on the remains of the dock.

Site Number: 16

Site Name: Wapping Warehouse and Goods Shed (east)/1-114 South Quay

NGR: SJ 34510 89362

Designation: Grade II* listed building

Site Type: Building (extant)

Period: 19th century

Source: Hartley 1847; OS mapping 1864 to present

Description: The proposal plans of the Wapping Dock produced in 1847 depict two warehouses, both designed as six-storey buildings flanking the east and western sides of the new dock. This building opened in 1856 was connected to the Docks Railway and functioned as a goods shed and warehouse. Plans of the Liverpool Dock in 1859 and subsequent OS maps and dock estate plans show this eastern building maintained in use throughout the nineteenth and early twentieth centuries. The building has five storeys above ground and below-ground vaults. It was constructed in brick around an iron frame, formed of 40 bays. On the dock side the structure is open fronted, consisting of a colonnade of iron columns. The building has been converted for residential use, and is afforded statutory protection as a Grade II* listed building.

Assessment: The building lies on the periphery of the Site Area and will not sustain any direct physical impact by the proposed development, although the harm to the setting of this designated heritage asset will need to be considered.

Site Number: 17

Site Name: King's and Wapping Shed (West)

NGR: SJ 34406 89318

Site Type: Building (Site of)

Period: 19th century

Source: OS map 1864; OS map 1893;

Description: The proposal plans of the Wapping Dock produced in 1847 depict two warehouses, both designed as six-storey buildings flanking the east and west sides of the new dock. Unlike the existing building, the western shed was not built to this original plan and remained a single-storey building, open on both sides. The building is depicted on the 1849, 1864 and 1893 Ordnance Survey maps, as well as plans of the dock spanning 1859–75. A small office block for the assistant harbour master was also built c 1864 on the south-east corner of the shed and a dock master's office (Site **17a**) to the south.

Assessment: The footprint of the buildings lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 18
Site Name: Hydraulic Tower

NGR: SJ 34522 89282

Designation: Grade II listed building

Site Type: Building (extant)

Period: 19th century

Source: OS map 1864; OS map 1893; OS mapping 1908

Description: A hydraulic tower or accumulator tower was constructed c 1856, shortly after the completion of Wapping Dock. This formed part of the hydraulic centre built upon the request of Jesse Hartley. The tower was the first accumulator to be installed in Queen's dock in 1852. This became key to the control of the massive gates, locks and bridges installed across the docks, to accommodate larger shipping vessels. The tower comprises a single-storey granite building, topped with a pitched, tiled roof. The existing building corresponds to an engine and boiler house shown on mapping from the mid-19th century onwards, which would have housed much of the machinery and water pumps. The footprint of the tower is square and the lower courses are built in granite. The structure tapers inward and takes on an octagonal shape. The upper part of the tower is of red brick construction, laid in English bond with rusticated sandstone quoins. Its top is crenelated in the form of a parapet, as is a round chimney which protrudes from it. This gothic revival style is reflected elsewhere in the docks, including the nearby policeman's lodge.

The tower and base is first shown on the 1859 plan of the Liverpool Docks and in greater detail on the Ordnance Survey Map of 1864. The 1864 map it is marked as an accumulator tower. The structure appears on subsequent maps to the present day. A plan from 1894 shows the hydraulic machinery installed in Queen's Dock was connected to Toxteth hydraulic centre and

Assessment: The hydraulic tower is Grade II listed and lies beyond the boundary of the Phase 1b application area. The building will not sustain any direct physical impact by the proposed development.

Site Number: 19

Site Name: Gatekeeper/Policeman's Lodge

NGR: SJ 34551 89292

Designation: Grade II listed building

Site Type: Building (Extant)

Period: 19th century

Source: OS map 1864; OS map 1893; OS mapping 1908 - present

Description: A conical policeman's lodge, designed by Hartley and placed close to the hydraulic tower. The structure has a Tudor arched window and door with gate slots on either side. A blind arrow-shaped motif was formed in the masonry of the lodge. Similar structures are shown on a 19th-century representation of Stanley Docks and were evidently erected across the docklands in the 19th century. The lodge survives extant.

Assessment: The listed building lies just beyond the boundary of the Phase 1b application area, and will not sustain any direct physical impact by the proposed development.

Site Number: 20

Site Name: North Shed (West)

NGR: SJ 34324 89150

Site Type: Building (Site of)

Period: Mid- to late 19th century

Source: Plan of 1873; plan of 1875; OS map 1893

Description: The 1893 Ordnance Survey map depicts a long narrow shed running along the northern edge of the Queen's Half Tide Dock. The shed is also shown on a plan from 1793, marked as closed shed. It measured roughly 111 x 9 yards (101.4m x 8.2m). The construction post-dates the 1864 Ordnance Survey map but occurred prior to 1873, as it is shown on a dock plan of that year, together with plans from 1875. Demolished in the 20th century, and its footprint subsumed by a warehouse.

Assessment: The footprint of the building straddles the boundary of the Phase 1b application area, and development may impact on any buried remains that survive.

Site Number: 21
Site Name: North Shed (East)

NGR: SJ 34539 89259

Site Type: Building (Site of)

Period: Mid- to late 19th century

Source: Plan from 1875; OS map editions 1893 and 1908

Description: A shed occupying a position on the northern edge of Queen's Dock, opposite the hydraulic tower (Site 18). The building measured 18 x 32 yards (29.26m x 16.45). The building appears on the 1875 plan and is last shown on 1893 OS map, which indicates that the building was a goods shed connected to the Docks Railway. The building was evidently pulled down and was replaced by nearby Wapping Dock Station, shown on the subsequent map edition of 1908.

Assessment: The footprint of the building within the boundary of the Phase 1b application area, and development may have an impact on any buried remains that survive *in-situ*.

Site Number: 22
Site Name: King's Branch Dock Warehouses (North)

NGR: SJ34295 89313

Site Type: Building (Site of)

Period: 19th and 20th century

Source: OS map editions 1908 – 1980s

Description: Warehouses were built on land dividing the two King's Branch Docks, part of the Wapping Dock. The warehouses were constructed around 1908 and are shown on the OS map of that year, appearing on subsequent editions until 1971. The eastern extent of the warehouses was modified in the mid-20th century.

Assessment: The footprint of the building lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 23
Site Name: King's Branch Dock Warehouse (South)

NGR: SJ 3434 89198

Site Type: Building (Site of)

Period: 19th and 20th century

Source: OS map editions 1908 – 1980s

Description: Situated between the King's Branch Dock (No. 1) and extended railway tracks was a contemporary warehouse. The warehouse was built at the same time as those to the north and an adjacent building flanking the Queen's Branch Dock.

Assessment: The footprint of the building straddles the boundary of the Phase 1 application area, and development may have an impact on buried remains.

Site Number: 24

Site Name: Queen's Branch Dock Warehouse

NGR: SJ 34370 89133

Site Type: Building (Site of)

Period: 19th and 20th century

Source: OS map editions 1908 – 1980s

Description: Warehouse constructed alongside the Queen's Branch Dock, appearing on the 1908 OS map edition and surviving until 1980s.

Assessment: The footprint of the building straddles the boundary of the Phase 1 application area, and development may have an impact on buried remains. However, any such foundations that do survive will be of lesser archaeological interest than earlier examples on the site.

Site Number: 25

Site Name: Wapping Dock Station

NGR: SJ 34579 89269

Site Type: Building (Site of)

Period: 19th and 20th century

Source: OS map editions 1908 – 1980s

Description: Wapping Dock Station first appears on the 1908 OS map and lay immediately south of Wapping Good's station, also known as the Liverpool and Manchester / London and North West goods station. It continued to exist until the 1980s, but is not shown on the 1990's OS edition. It was likely demolished around the same time the branch docks were in-filled.

Assessment: The footprint of the building lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

Site Number: 26

Site Name: Warehouses

NGR: SJ 3453 89277

Site Type: Buildings (Site of)

Period: 1920s onwards

Source: OS map editions 1920s – 1990s

Description: A group of warehouses was constructed in the north-east corner of the Site Area, adjacent to the hydraulic tower and include a rectangular warehouse and subsidiary buildings. The southern extent of the Wapping Warehouse, now a bonded warehouse extends into the Site Area.

Assessment: The footprint of the buildings lies beyond the boundary of the Phase 1b application area, and development will have no impact on the heritage asset.

6. *Significance of the Remains*

6.1 *The Policy Context of Heritage Assets*

The archaeological resource of an area can encompass a range of assets, including below-ground remains, earthworks, and standing buildings and other structures. Some of these remains may have statutory protection, as Scheduled Monuments or Listed Buildings. Others do not but may nevertheless be of archaeological significance. Under both national and local planning policy, as outlined below, both statutory and non-statutory remains are to be considered within the planning process.

The NPPF (National Planning Policy Framework, March 2012) sets out the Secretary of State's policy on planning and includes a section on the conservation of the historic environment (including historic, archaeological, architectural and artistic heritage assets, NPPF paras 126-141), and its wider economic, environmental and social benefits. The NPPF emphasises the significance of an individual heritage asset within the historic environment and the value that it holds for this and future generations in order to minimise or avoid conflict between the heritage asset's conservation and any aspect of the planning proposals. The NPPF draws a distinction between designated heritage assets of national importance and heritage assets that are not designated but which are of heritage interest and are thus of a material planning consideration (paras 134 and 135). In the case of the former, the presumption should be in favour of conservation; in the case of the latter, where this is warranted by its significance, the developer is required to record and understand the significance of the heritage asset before it is lost, in a way that is proportionate to the nature and level of the asset's significance, by the use of survey, photography, excavation or other methods.

The NPPF states that non-designated assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments should be considered in the same manner as designated sites (NPPF para 139). Regarding this policy a lack of formal designation does not itself indicate a lower level of significance; in this instance the lack of designation reflects that the site was previously unknown and therefore never considered for formal designation. Wherever possible, development should be located and designed so as to avoid damage to archaeological remains, ensuring that they are preserved *in-situ*. Where this is not possible, or appropriate, the developer will be required to make suitable provision to ensure that the archaeological information is not lost, and in many cases to secure the preservation of the remains.

6.2 Assessment Methodology and Significance Criteria

The most commonly accepted methodology for assessing archaeological significance is the Secretary of State's criteria for the scheduling of ancient monuments, outlined in Annex 1 of *Scheduled Monuments: identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979* (DCMS March 2010). These criteria have all been utilised in this assessment and are listed below:

- Period
- Rarity
- Documentation
- Group Value
- Survival/Condition
- Fragility/Vulnerability
- Diversity
- Potential

6.3 Baseline Significance Conditions for the land within the Site Area

Period

The Phase 1b application area remained undeveloped as far as can be assessed until the late 18th century, and it is thus likely that any buried archaeological remains and/or finds will date from this period. However, due to its intense use of the river and nearby harbour in the 16th and 17th centuries the possibility that there are stray finds dating to this or indeed earlier periods should not be dismissed entirely, although the chance is slight.

In summary there is potential for buried remains pertaining to three types of activity:

- 18th - 19th-century basins/docks – Sites **2, 4, 5** and **6**
- 18th - 19th-century dock infrastructure/buildings – Sites **3, 14, 20** and **21**
- Modern alterations and additions – Sites **23** and **24**

Rarity

Any structural remains of the 18th- or 19th-century docks and associated buildings will have a rarity value, pending the extent to which buried remains survive *in-situ*. Any buried remains dating to the early 20th century onwards (Sites **23** and **24**) would not have a rarity value.

Documentation

The general development of the Phase 1b application area can be traced reasonably well through cartographic sources from the 18th century onwards. Further detail, including more precise dating of the construction of buildings within the site, might be gained from documentary sources, although this is unlikely to modify the conclusions drawn from this assessment.

Group Value

The group value of the heritage assets within the application area are considered to be moderate to high, given their location in the World Heritage Site Buffer Zone, which encompasses a large portion of the historic dockland.

In addition, the application area offers some potential for a range of 18th- and 19th-century basins and docks, providing a full sequence of the area's development. Taken together, these assets provide opportunity to broaden the understanding of the development of the docks and town during this period.

Survival / Condition

The extent to which any buried remains survive and their condition is presently unknown, although from the evidence discerned from the sequence of historical mapping, suggest some potential for at least fragmentary elements of the 18th-, 19th- and 20th-century docks and associated buildings and to survive as below-ground remains.

The survival of the 18th-century basin (Site **2**), docks (Sites **4**, **5** and **6**) and building (Site **3**) is likely to be partial and the condition variable, at best, due to later truncation of portions of the docks and buildings. The historic map regression has also highlighted areas of reclaimed ground, dating from the 18th century that appear to have been retained up until the present day, which may be of archaeological interest.

Amongst the structures associated with the docks from the 19th century that have been identified within the Phase 1b application area is the edge of the Custom House (Site **14**), the foundations for which may survive *in-situ*.

Diversity

The remains that are likely to be found are typical of the Liverpool docks, however, as the development spans the 18th to 20th century; the site offers some potential for surviving physical remains of a suite of docks, buildings and infrastructure, which cover key periods in the dockland's history and that of Liverpool.

Potential

All of the known archaeological assets within the application area developed from the mid-18th century onwards as a direct result of the development and expansion of Liverpool as a port of international repute. This period offers the greatest potential for the survival of buried archaeological remains, with little or no potential for archaeological remains deriving from any earlier periods.

6.4 Significance

Based on the information gained from the desk-based research, it can be concluded that any buried structural remains of the former docks, associated buildings and infrastructure within the boundary of the application area would be of at least local and, pending their survival and condition, of greater importance. The significance of any surviving archaeological remains is enhanced by the location of the application area within the Buffer Zone of the Liverpool Maritime Mercantile City World Heritage Site.

None of the sites identified are of sufficient importance to merit preservation *in-situ*, although any buried structural remains of the 18th-century south basin (Site **2**) and associated warehouse (Site **3**), the later 18th-century docks and entrance basin (Sites **4**, **5** and **6**), and customs house (Site **14**) would merit the implementation of a strategy to mitigate their damage or loss during the proposed construction works, whilst any remains of the King's and Queen's Branch Dock warehouses (Sites **23** and **24**) would be of lesser significance given their late date.

Whether any buried remains of these sites survive *in-situ* has yet to be determined, although the footprint of the six structures of potential interest lie only partly the application area. This reduces the overall significance of the archaeological resource within the application area.

7. *Impact of Development*

7.1 *Impact of Development on Below-Ground Remains*

The proposal involves the development of a site on Liverpool historic waterfront, comprising elements of the mid- and late 18th-century dock complex, associated infrastructure, and 19th-century additions, which lie within the Buffer Zone of Liverpool Maritime Mercantile City World Heritage Site. The design proposal details the construction of a suite of buildings with deep foundations that will involve substantial earth-moving works. As such, this work would result in the damage or removal of any below-ground remains that do survive *in situ*.

The present assessment has concluded that the application area has some potential to contain buried archaeological remains of at least Local or Moderate Regional Significance, pending the extent of survival of below-ground remains. This awaits confirmation via a programme of intrusive site investigation.

8. *Further Investigation*

8.1 *Heritage Assets*

Where the loss of the whole or a material part of a heritage asset's significance is justified by a development, the developer should be required to record that asset and advance understanding of its significance, and to make this evidence publicly accessible (NPPF para 141). Where appropriate because of their significance, mitigation will need to be undertaken through an archaeological record (NPPF 2012, paras 141).

8.2 *Further Investigation*

Any buried structural remains of the 18th-century south basin (Site **2**) and associated warehouse (Site **3**), the later 18th-century entrance basin (Site **6**), King's Dock (Site **4**) and Queen's Dock (Site **5**), and the customs house (Site **14**) would merit archaeological recording prior to their ultimate loss. In the first instance, however, intrusive site investigation is required to establish whether any such buried structural remains survive *in-situ* and, if so, confirm their condition, extent and significance. This could be achieved most effectively through a programme of evaluation trenching which should focus specifically on the remains of the dock infrastructure. Buildings associated with the docks should also be assessed. Should the evaluation reveal significant, intact archaeological remains, further targeted archaeological works in the form of an open-area excavation may be required.

9. Sources

9.1 Abbreviations

LCC – Liverpool City Council

MHCP – Merseyside Historic Characterisation Project

MMMMAL – Merseyside maritime museum maritime archive and library

MoL – Museum of Liverpool

VCH – Victoria County History

9.2 Maps and plans

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Perry, 1769 Plan of the town and township of Liverpool

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Ordnance Survey 1:2500, Published 1893

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9.4 Web Sources

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Accessed 10.02.2017

10. Acknowledgments

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The report was written and compiled by Oliver Cook and Sarah-Jayne Murphy, and edited by Ian Miller.

Appendix 1: Figures

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- Figure 21: Footprint of 20th-century sites superimposed on modern mapping



Figure 1: Modern map of Liverpool, showing the study area in its surroundings

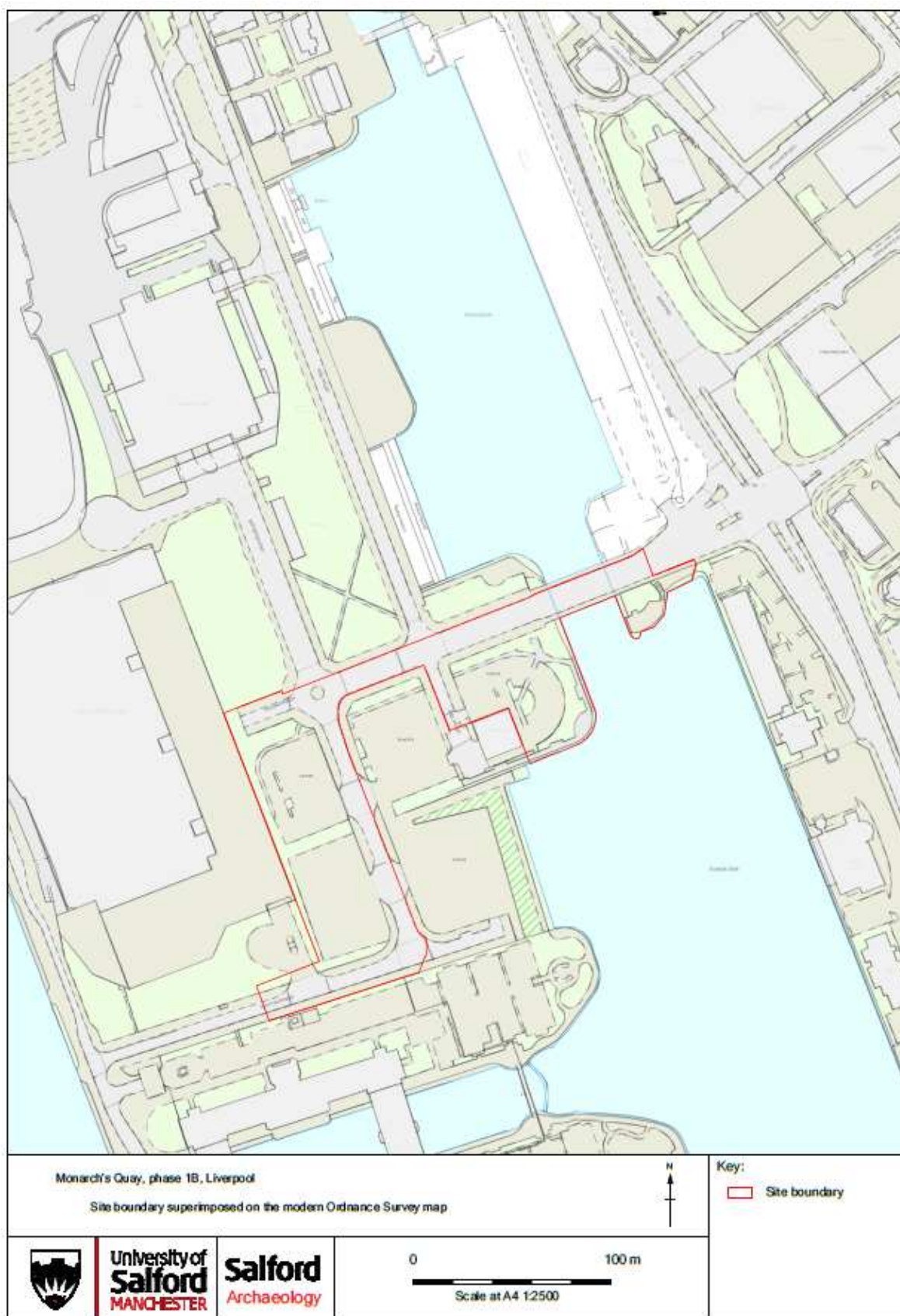


Figure 2: The Site Area boundary superimposed on modern mapping

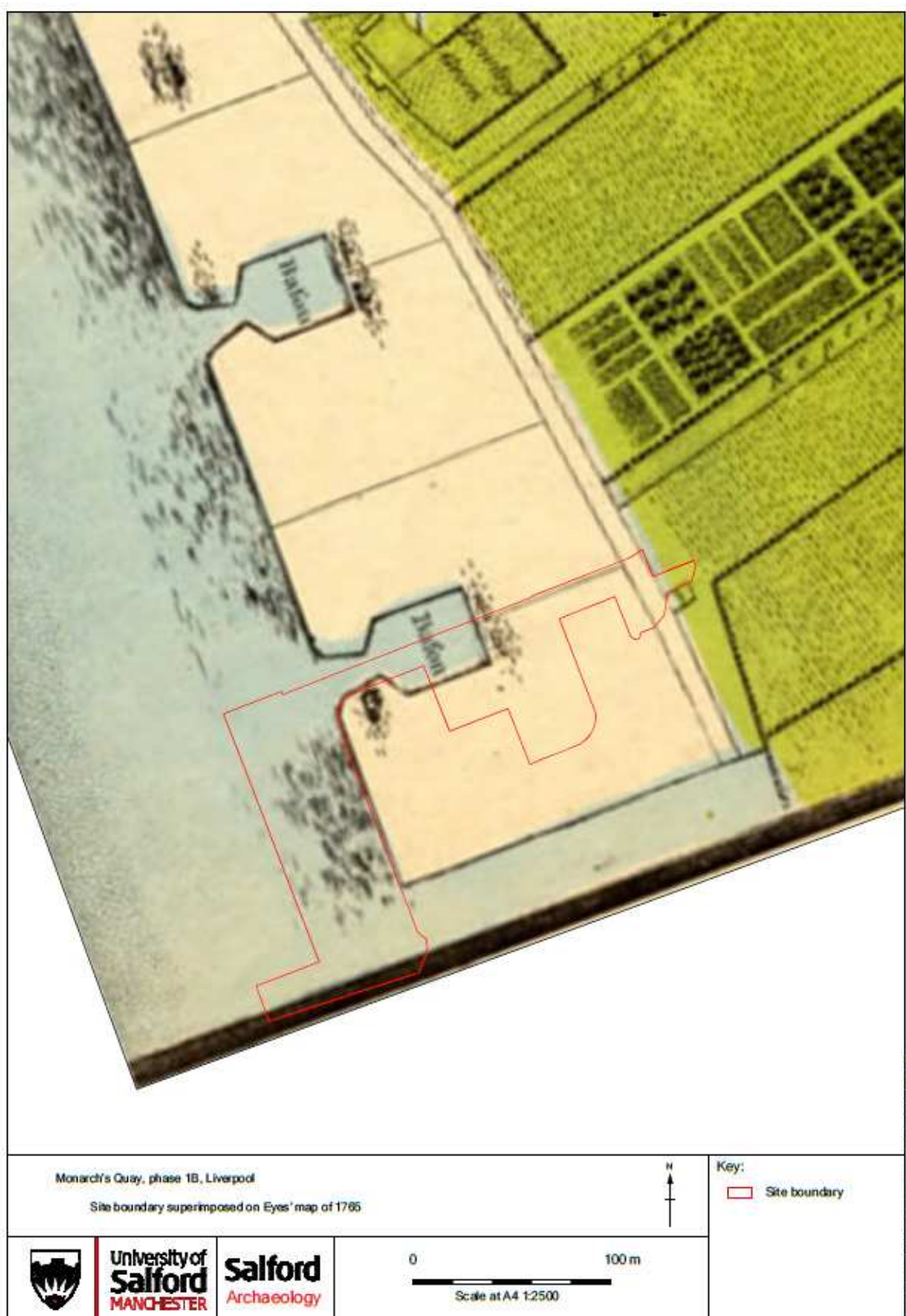


Figure 3: The Site Area boundary superimposed on Eyes' map of 1765

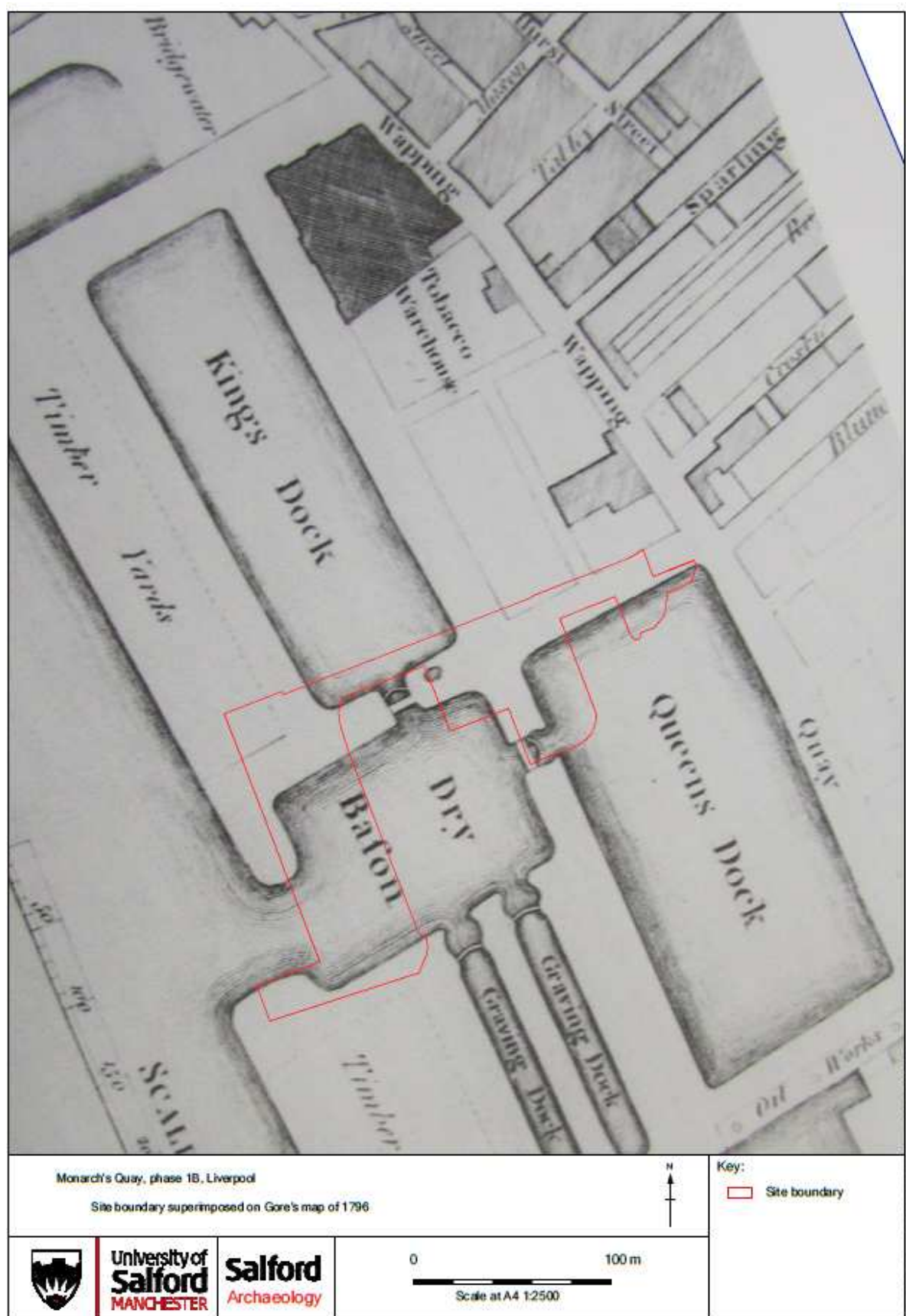


Figure 4: The Site Area boundary superimposed on the Gore's map of 1796

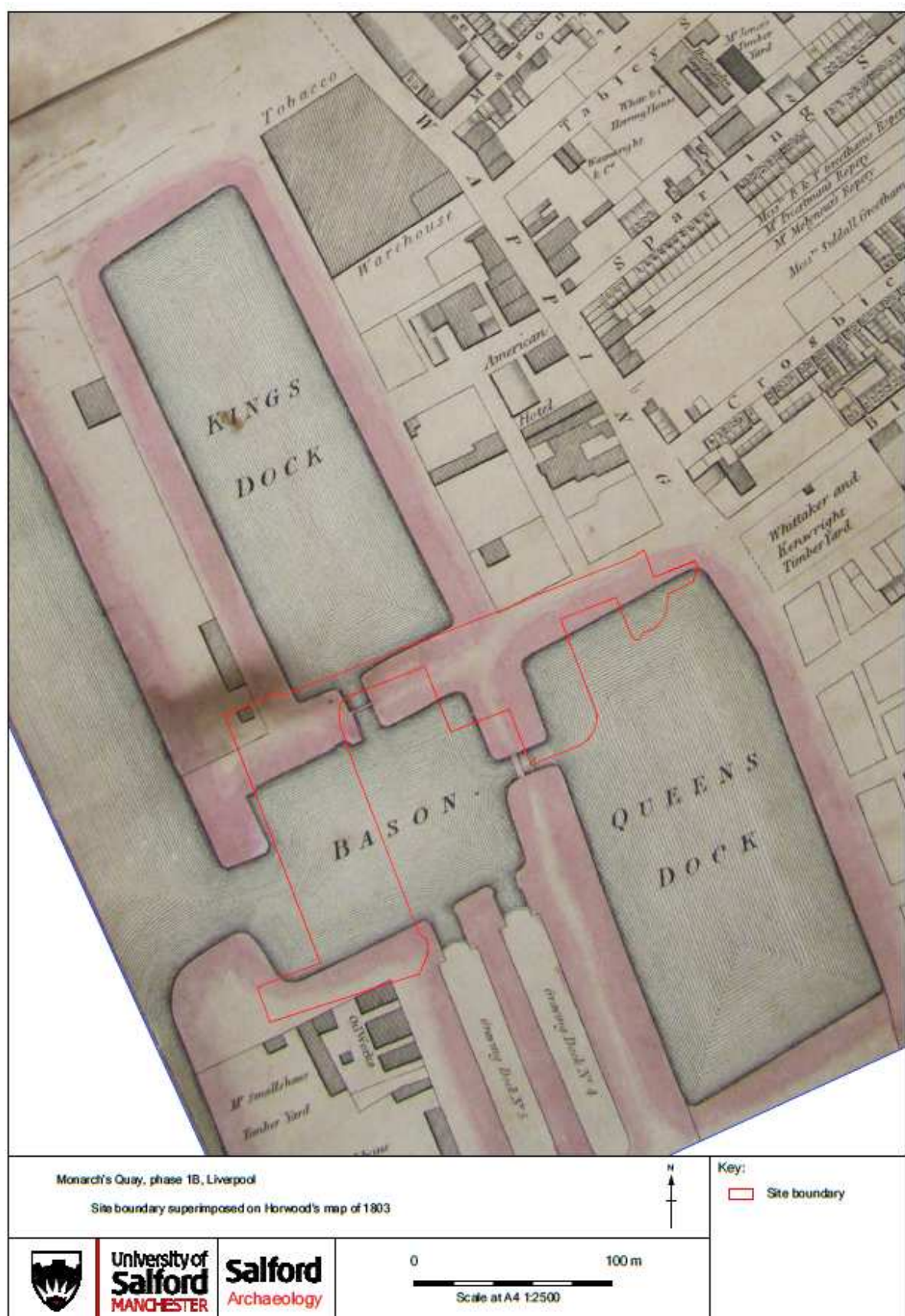


Figure 5: The Site Area boundary superimposed on Horwood's map of 1803

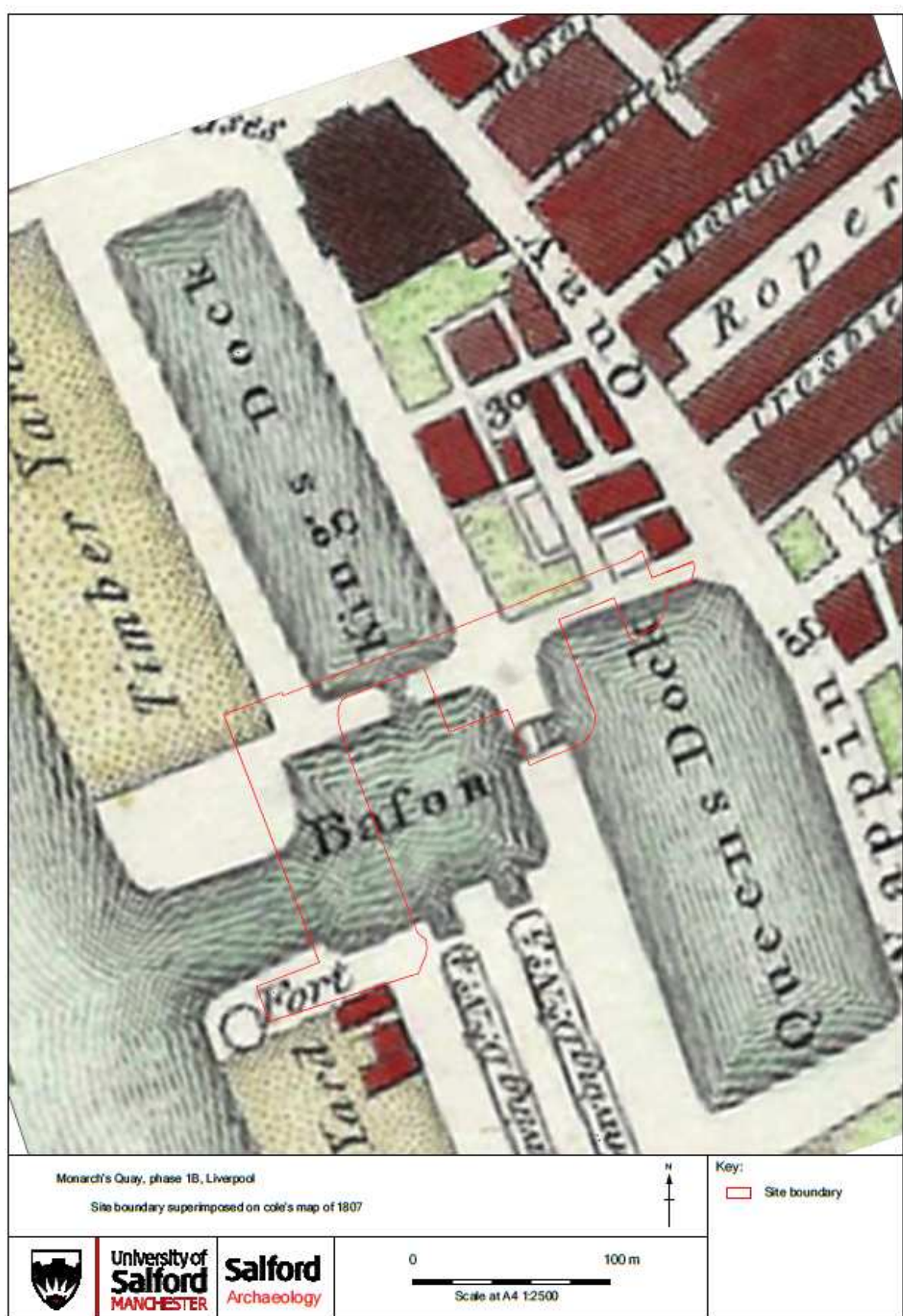


Figure 6: The Site Area boundary superimposed on Cole's map of 1807

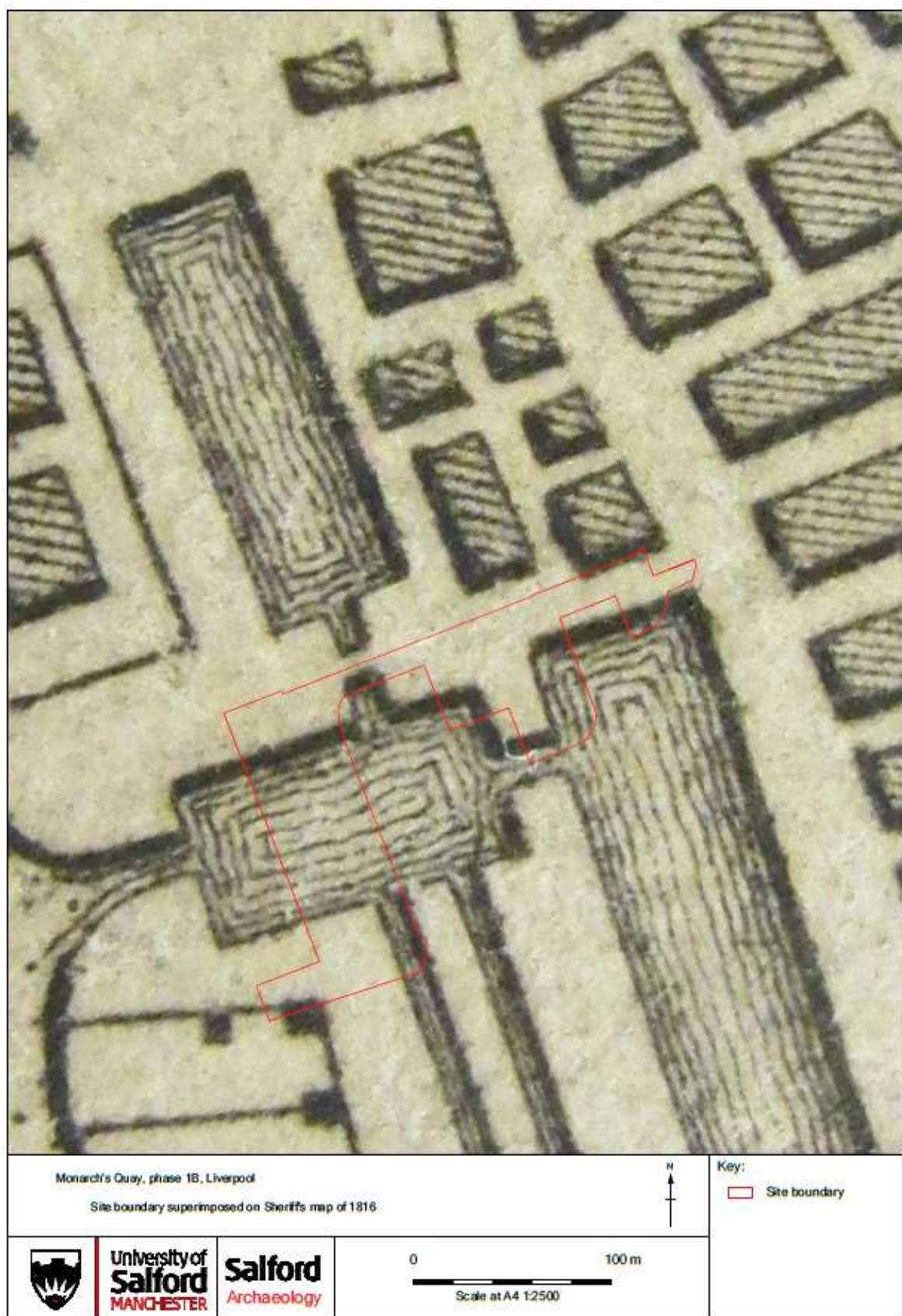


Figure 7: The Site Area boundary superimposed on Sheriff's map of 1816

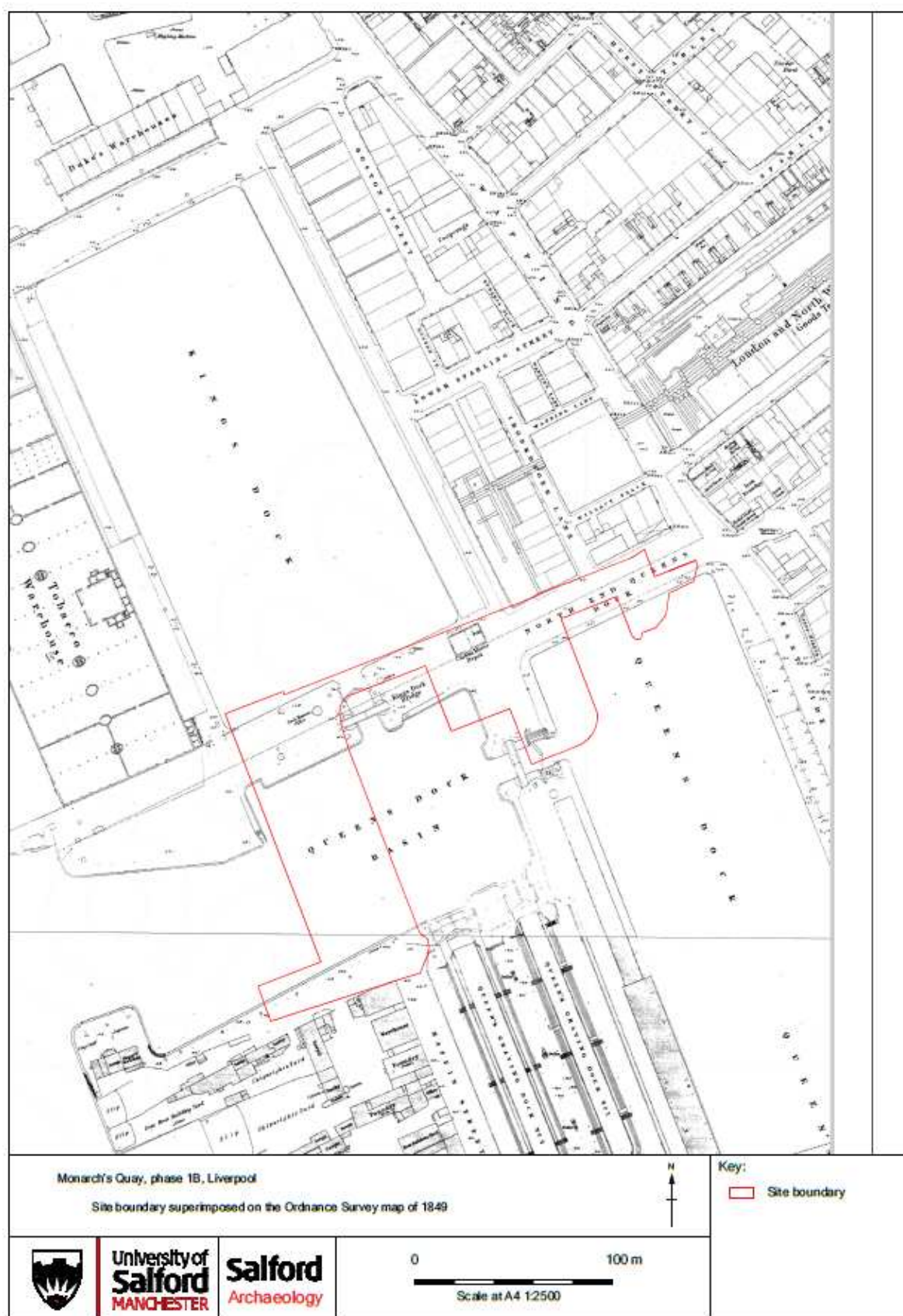


Figure 9: The Site Area boundary superimposed on the Ordnance Survey map of 1849

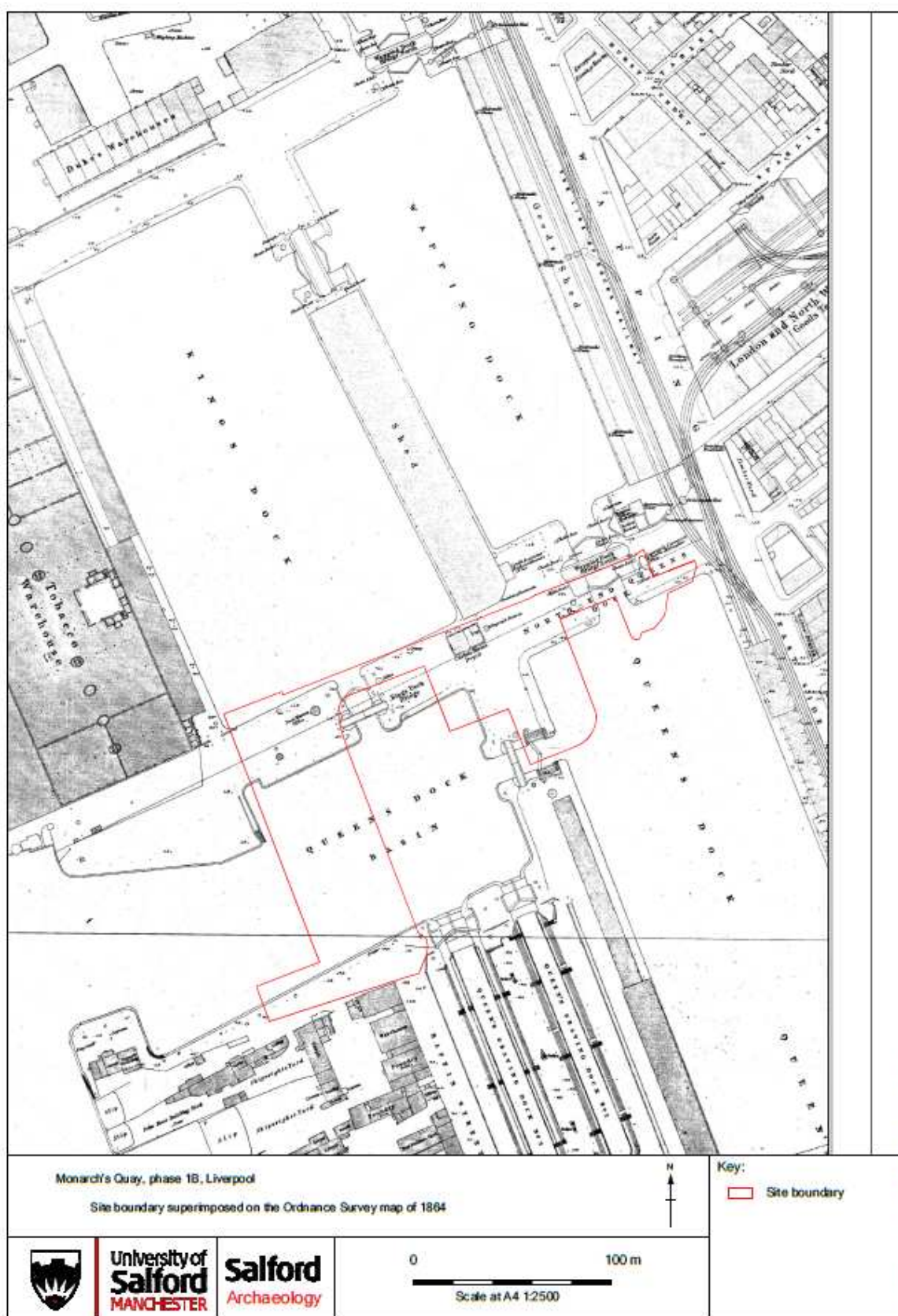


Figure 10: The Site Area boundary superimposed on the Ordnance Survey map of 1864

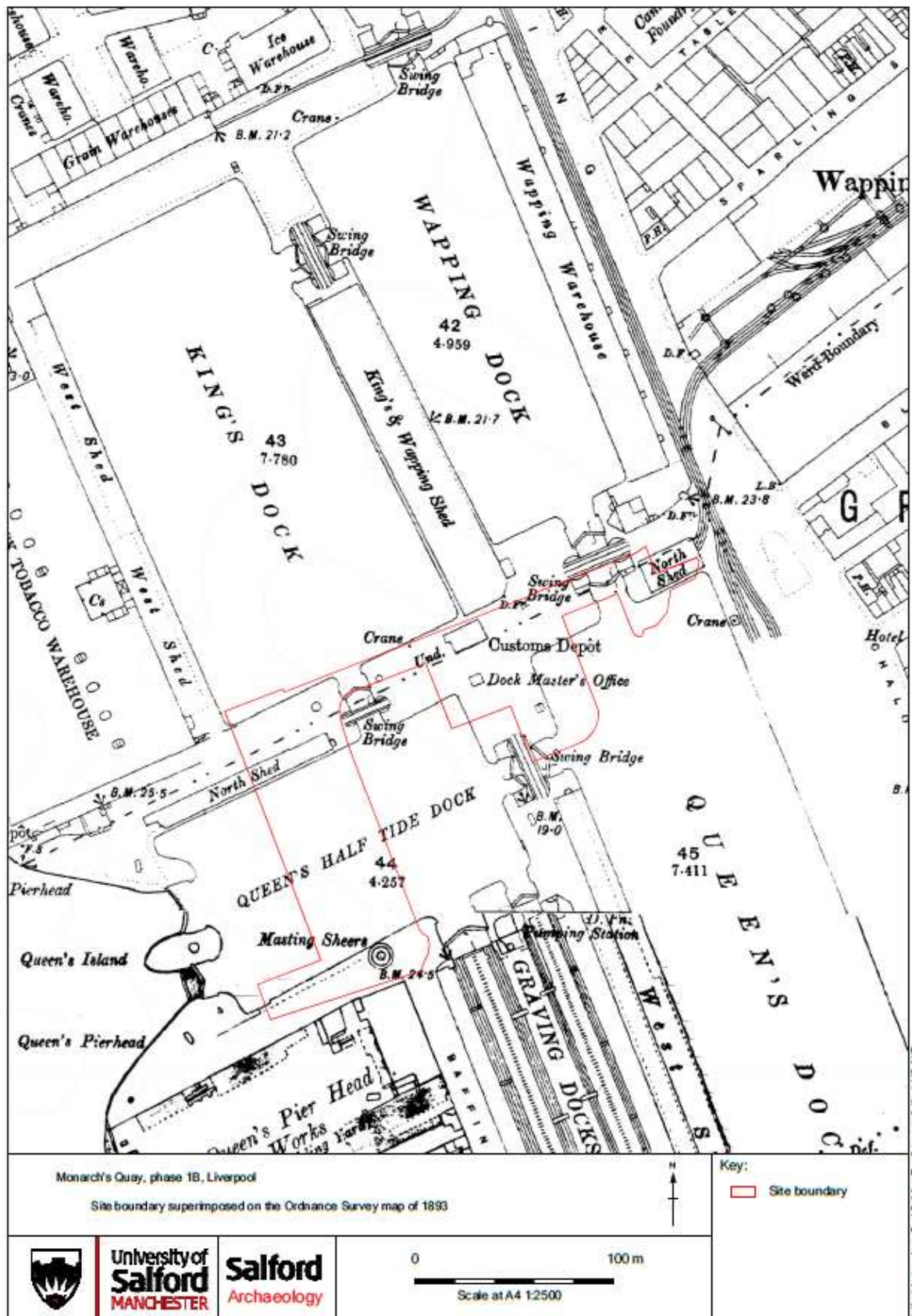


Figure 11: The Site Area boundary superimposed on the Ordnance Survey map of 1893

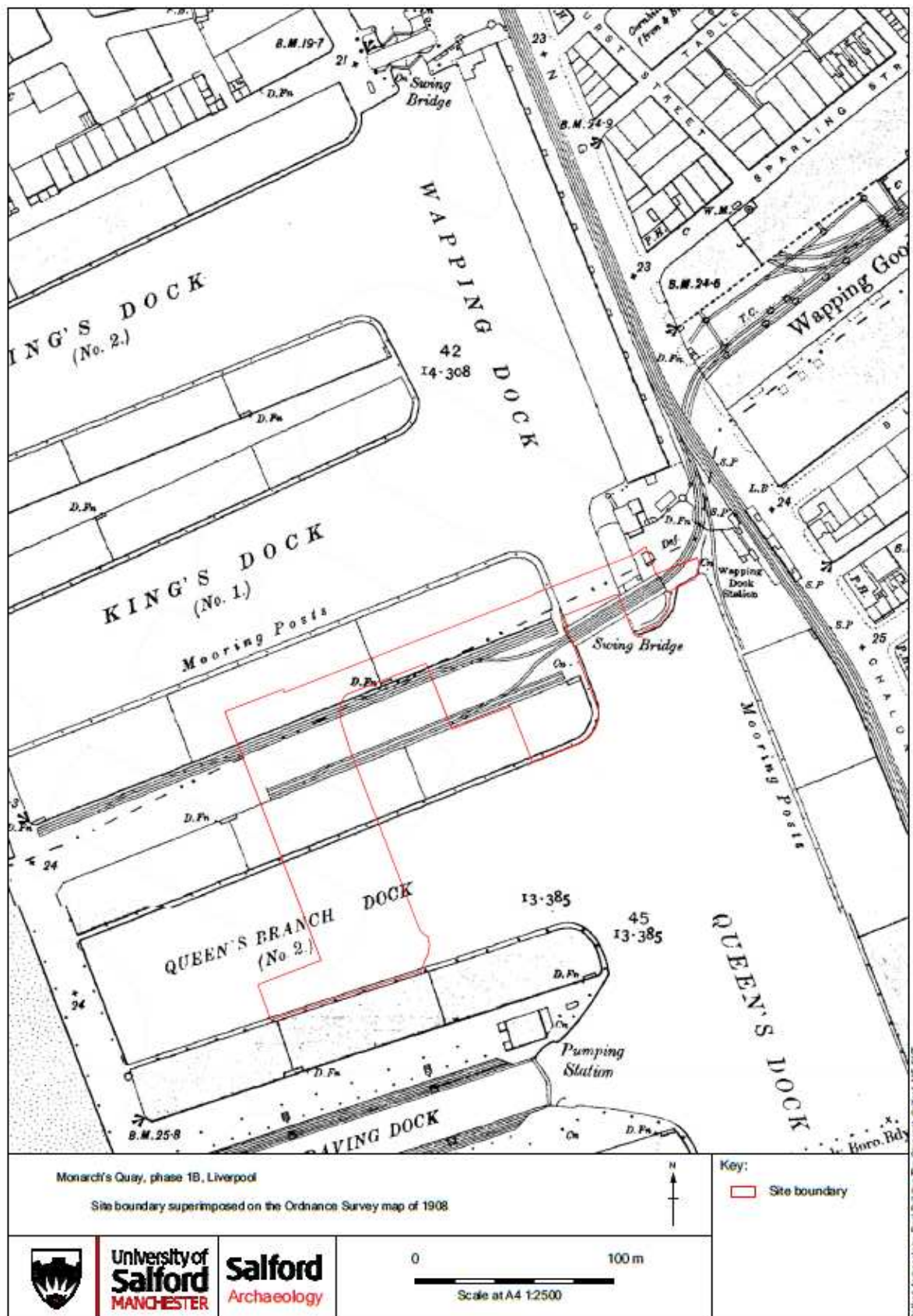


Figure 12: The Site Area boundary superimposed on the Ordnance Survey map of 1908

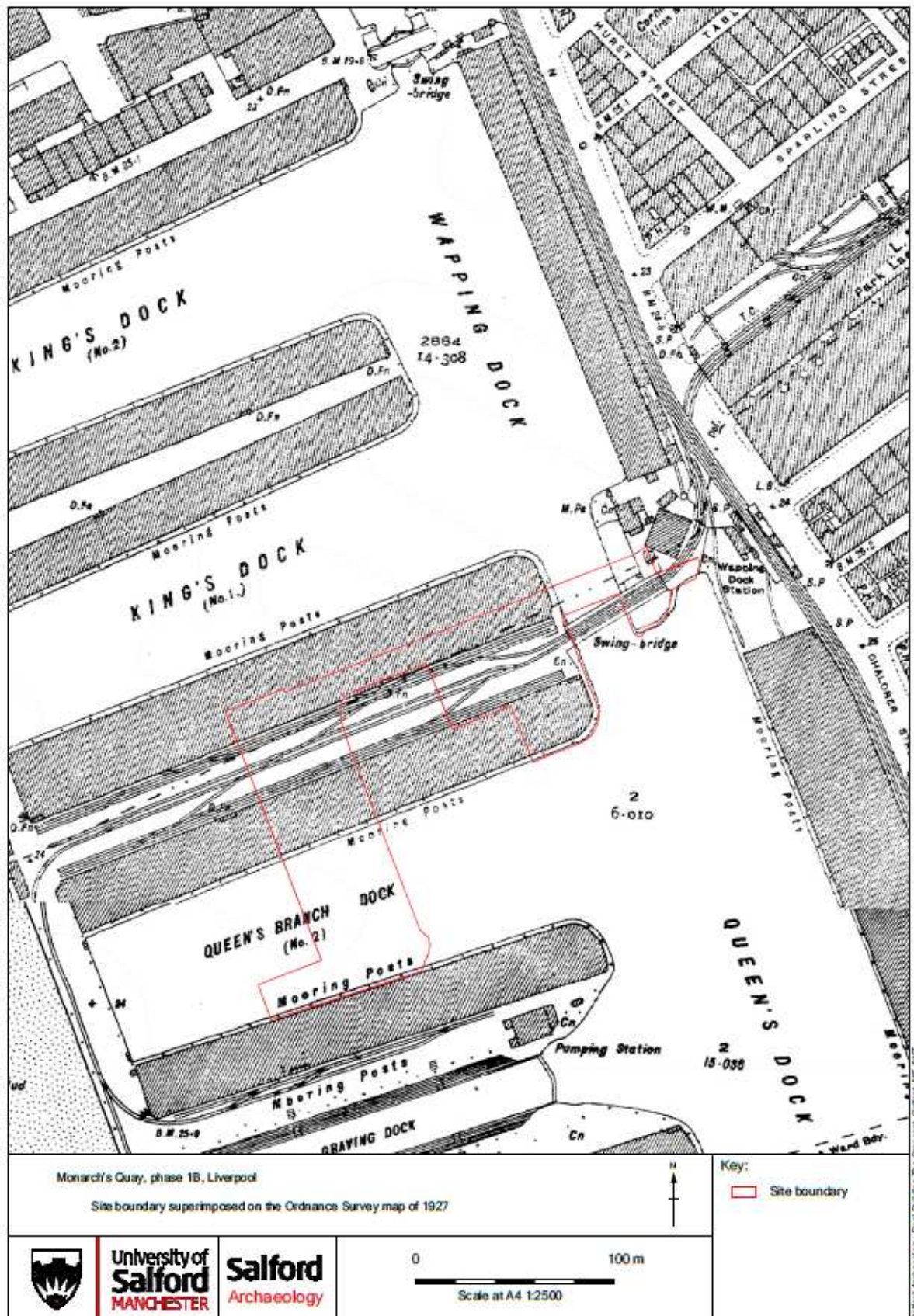


Figure 13: The Site Area boundary superimposed on the Ordnance Survey map of 1927

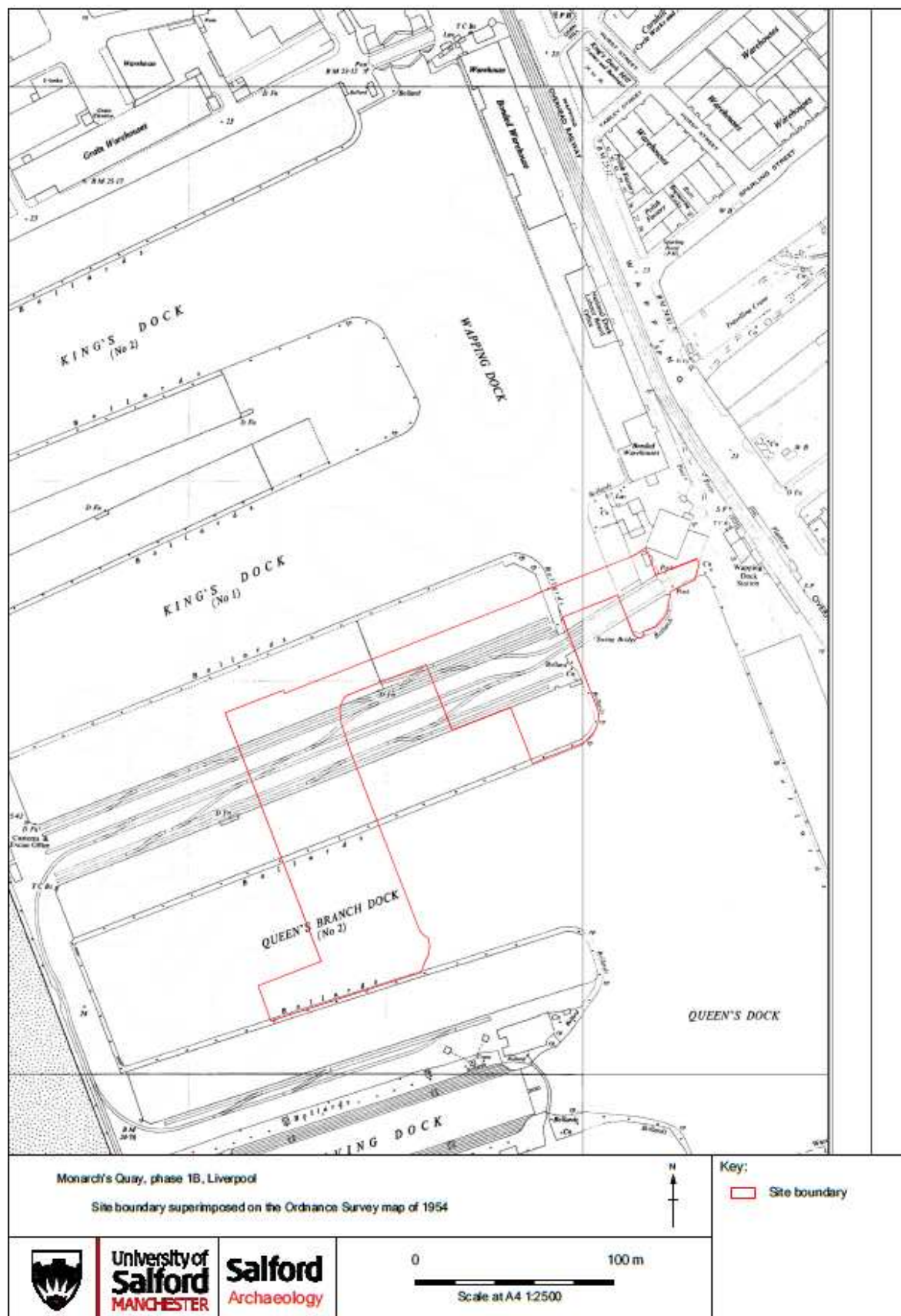


Figure 14: The Site Area boundary superimposed on the Ordnance Survey map of 1954

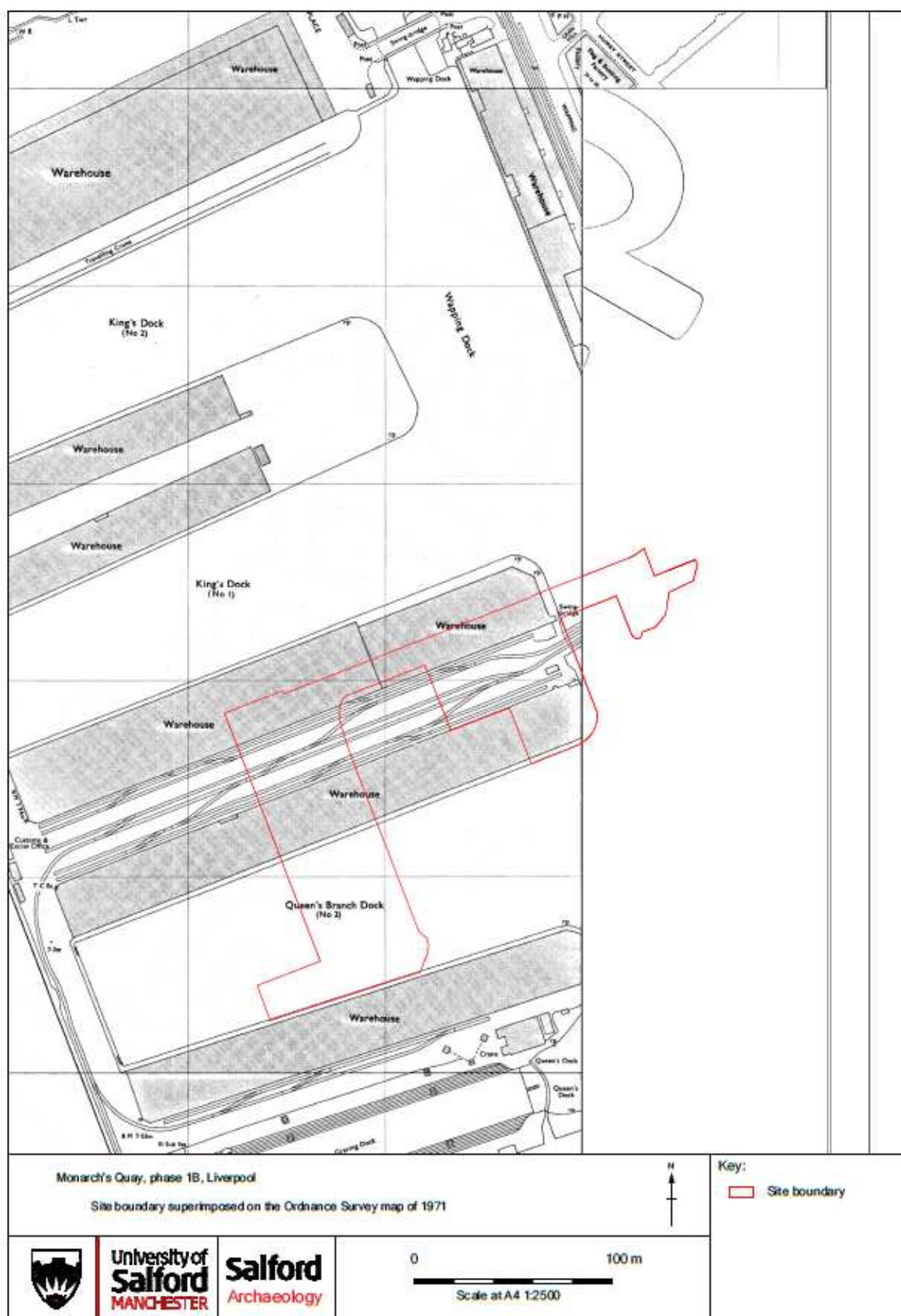


Figure 15: The Site Area boundary superimposed on the Ordnance Survey map of 1971



Figure 16: The Site Area boundary superimposed on modern satellite imaging

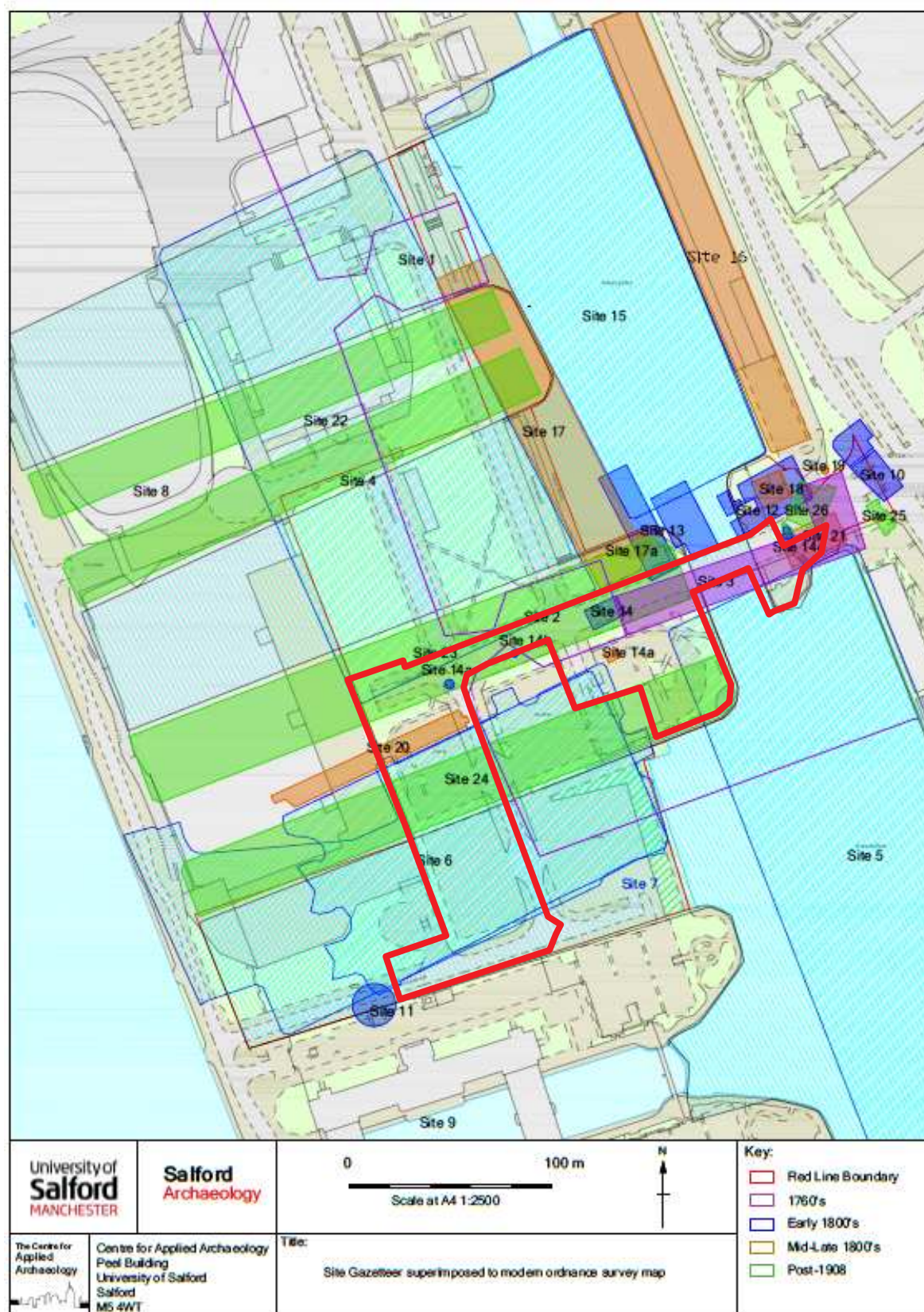


Figure 17: Site Gazetteer superimposed on modern mapping



Figure 18: Footprint of mid-18th-century sites superimposed on modern mapping

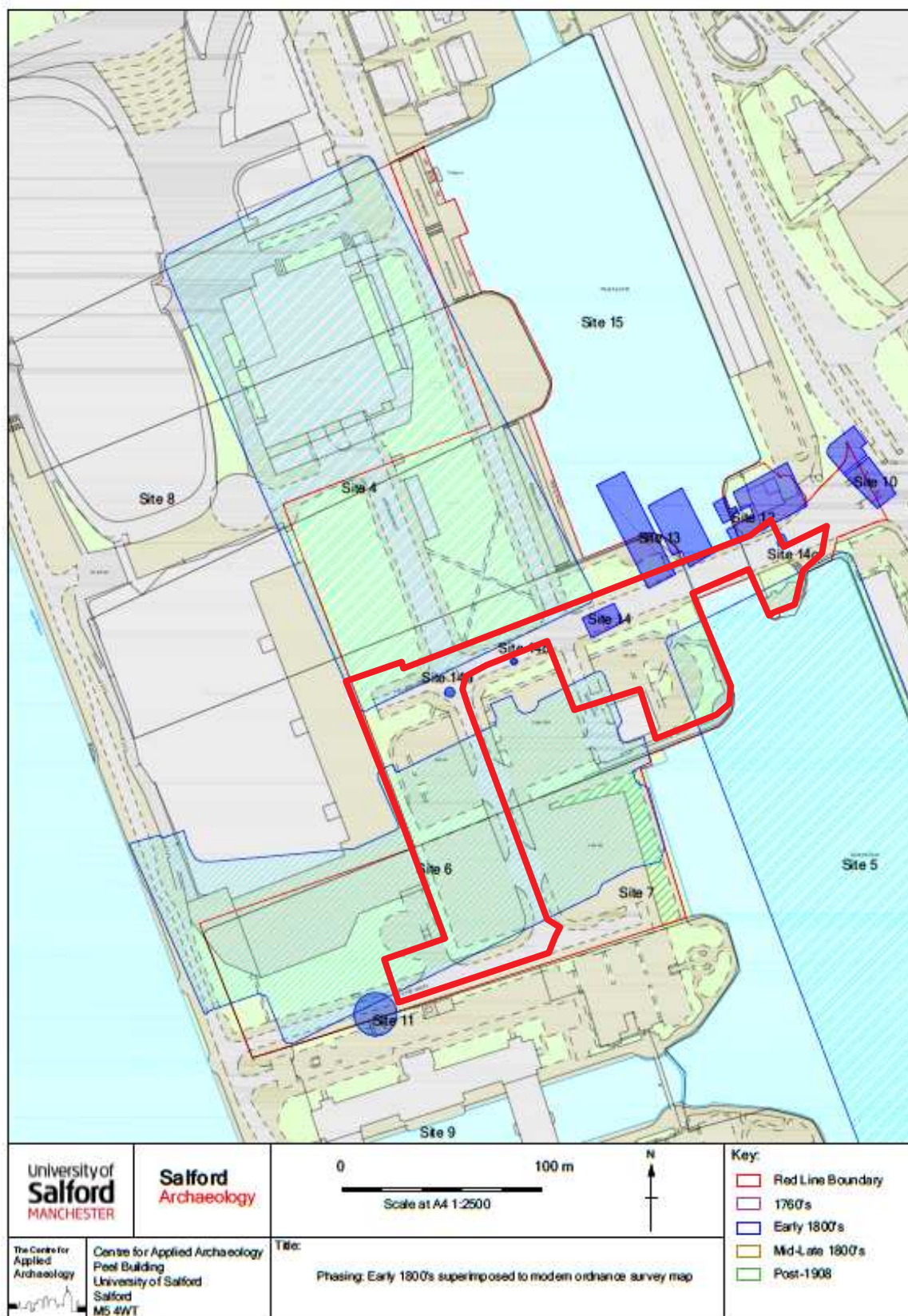


Figure 19: Footprint of early 19th-century sites superimposed on modern mapping

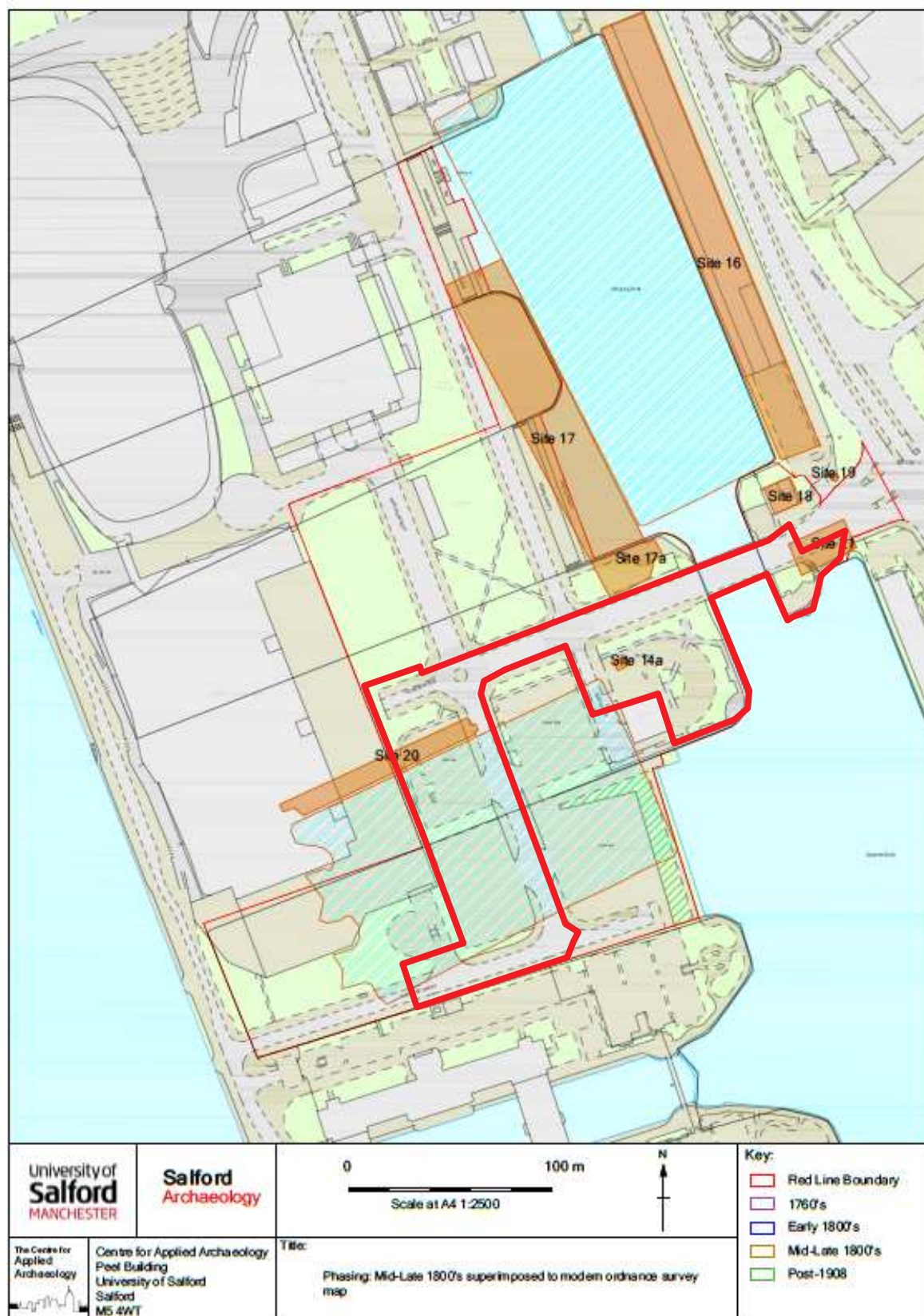


Figure 20: Footprint of mid- to late 19th-century sites superimposed on modern mapping

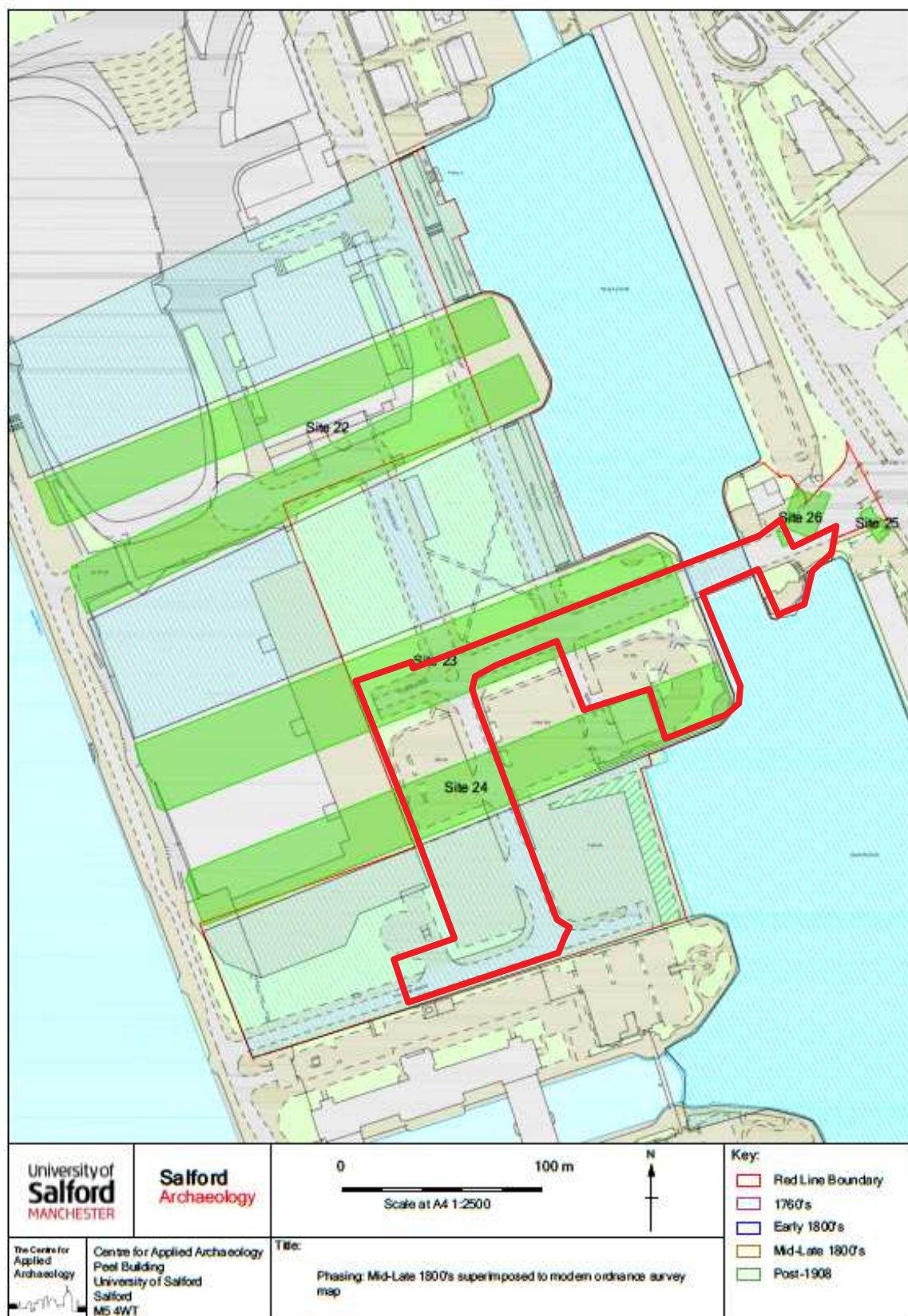


Figure 21: Footprint of 20th-century sites superimposed on modern mapping

Appendix 2: HER Data

HER (PRN) ID	Name	Site Type/ Event	Location	Description
Events				
EME1945	Building survey of Park Lane Goods Station, Wapping Liverpool, 1974	NON-INTRUSIVE – BUILDING SURVEY	SJ 3468 8943	A survey conducted prior to the buildings demolition.
EME2180	Watching brief on Land at Duke's, Liverpool, 2007	INTRUSIVE – WATCHING BRIEF	SJ 33427 8958	A watching brief at Duke's Dock. The remains of a brick warehouse on its south side was recorded, but no features relating to the dock were observed.
EME2185	Watching brief on Land at Duke's and King's Dock, Liverpool, 2007	INTRUSIVE – WATCHING BRIEF	SJ 34278 89478	A watching brief carried out over the excavation of three trenches. 'Trench 1 was subdivided into three areas, A, B, C and excavated sequentially and then filled in for safety reasons to allow room for spoil heaps on the confined site. Due to the unstable nature of the brick and sand fill and the depth of excavation access was restricted and recording was restricted to photographic records and written notes'.
EME2201	Watching brief of geotechnical pits, Strand Street, Liverpool, 2004	INTRUSIVE – WATCHING BRIEF	SJ 34259 89820	Monitoring of 12 Geotechnical pits on the Merseytram route, each was 1.2m deep with hand augering beyond that depth.
EME2324	A desk based assessment of King's Dock Mill, Tabley Street, Liverpool, 2006	NON-INTRUSIVE - DBA	SJ 34541 89538	A desk-based assessment of the site.
EME2404	A desk-based assessment of the former King's Dock, 2004	NON-INTRUSIVE - DBA	SJ 34235 89393	A desk-based assessment of the site.
EME2407	Watching brief at the former King's Dock, 2006	INTRUSIVE – WATCHING BRIEF	SJ 3428 8932	Monitoring of groundworks. Much of the site had been heavily truncated and backfilled before access for the watching brief was granted. Two parts of the arena site, already truncated and a separate area to the southeast, also partly truncated, were investigated.

HER (PRN) ID	Name	Site Type/ Event	Location	Description
Find Spot				
	Pottery	SHERD (LARGE QUANTITY) (GEORGIAN)		19 th century pottery dump was found across an area c. 5 x 5m. The material was crushed and possibly disturbed by recent truncation of the area but material recovered consisted of 1374 sherds dated to c. 1800 – 1820. The high-temperature underglaze painted pieces are thought to have been mainly made for export for America. The area was reclaimed c. 1800, as shown on Horwood 1803 and Cole 1807.
Listed Buildings				
MME11189	Hydraulic Tower	HYDRAULIC ACCUMULATOR TOWER (VICTORIAN to 21 ST CENTURY)	SJ 34522 89282	Standing building. 30/1318 Hydraulic tower at Wapping Dock 14.3.75. G.V. II Hydraulic tower – including base which functioned as the hydraulic centre. Dated 1856, Jesse Hartley. Battered granite rubble base with Tudor-arched opening. Upperpart octagonal; brick with rusticated stone quoins. Date incised at top of east face. Battlemented parapet on granite machicolation. One-storey granite block to rear has Tudor- arched windows and entrance, and later brick gable.
MME13781	Gate Lodge	GATE LODGE (VICTORIAN to 21 ST CENTURY)	SJ 34551 89292	Gatekeeper's Lodge.1856.Jesse Hartley. Granite rubble. Oval , with battered sides, chamfered plinth and corbelled cornice. Short spire, also oval on plan, and top cornice and chimney. Window and entrance, gate slot, and blind arrow slit motif. Originally had flanking gate piers.
MME9594	Nos. 1-114 South Quay	(VICTORIAN to 21 ST CENTURY)	SJ 34510 89362	Warehouse and goods shed to the east of Wapping dock, opened in 1856. Cellar vaults and five floors of brick, similar to Albert and Stanley Docks' warehouses. Converted for residential. (Referred to in text as: Site 16)
MME12475	Baltic Fleet Public House	PUBLIC HOUSE (VICTORIAN to 21 ST CENTURY)	SJ 34488 89540	Standing building, public house. Public House. 1860. Roughcast and stone, slate roof. 2 storeys, 5 bays to Wapping, 3-bay curved corner, 4 bays to Hurst Street and 3 bays to Cornhill. Round-arched windows on ground floor divided by Tuscan pilasters; cornice; rectangular windows on 1st floor in moulded architraves with pediments (3 with carved tympana), and Tuscan pilasters between windows (paired pilasters at ends). Top cornice with brackets. Corner of 3 storeys. 1st floor has architraved windows and cornice. Architraved 2nd floor windows under cornice.
MME9593	Wapping Dock	DOCK (VICTORIAN to 21 ST CENTURY)	SJ 3477 89413	It was opened in 1855, the design of Jesse Hartley (engineer). The western side of the dock was modified when King's Dock No. 1 and King's Dock No. 2 were constructed in the late 19th or early 20th century. Only the eastern half of the dock is original.
MME9597	Dukes Dock	DOCK (GEORGIAN to 21 ST CENTURY)	SJ 3419 8955	The dock is an irregular rectilinear shape with a small extension southwards on the southeast side. Gates are shown at the west end of the dock with a narrow passage leading west to the river which widens along its length. Map regression established the development of the dock through the 19 th century.
MME12604	Pillar Box	PILLAR BOX (VICTORIAN to 21 ST CENTURY)	SJ 34246 89662	Post Box of the type in use in Liverpool 1863. Cast iron. Cylindrical, with plinth, horizontal slot, frieze of 2 rope mouldings and "Post Office" in raised lettering. Octagonal top, moulded, with crown on top.

HER (PRN) ID	Name	Site Type/ Event	Location	Description
Monuments and Buildings				
MME2958	Basin(s)	BASIN (GEORGIAN)	SJ 24258 89449	Former site of a basin (one of two) located on land reclaimed from an area of the Pool. The basin is visible on maps from 1760's but they do not appear on Eye's plan of 1785.
MME2959	Site of Copper Works	COPPER WORKS (GEORGIAN)	SJ 34484 89437	An establishment on the west side of Wapping, near the bottom of Spaling Street for smelting copper ore, erected in 1767. In 1771 the works were removed to the bank of river.
MME2960	Park Mill	WINDMILL (STUART TO GEORGIAN)	SJ 34717 89456	Former site of a windmill, King's Dock Street, Liverpool. It is mentioned in the Rate Assessment book of 1708 and shown on maps in the 1760's. It was demolished by the time of Eyes' map of 1785.
MME2962	Glass Works	GLASS WORKS (GEORGIAN)	SJ 34402 89618	Former site of glassworks on Wapping, Liverpool, established by 1765 and shown on mapping from that period but demolished by the time of Eyes' 1785 map.
MME2966	Windmill	WINDMILL (GEORGIAN)	SJ 34379 89658	Former site of a windmill on Wapping Street, shown on Eyes' map of 1765, Perry's map of 1769 and Eyes' map of 1785, and is last shown on Gore's map of 1796. It was presumably demolished prior to Horwood's map of 1803, on which it is absent.
MME9579	Park Lane goods station	RAILWAY WAREHOUSE (GEORGIAN to 21 ST CENTURY)	SJ 3468 8943	Located on Wapping, Liverpool. Original goods depot of Liverpool and Manchester Railway, connected by tunnel to Edge Hill. Uncertain whether any buildings standing in 1970 were original as siding and building greatly extended by London and North Western Railway. It was demolished in 1970.
MME9593	Wapping Dock	DOCK (VICTORIAN to 21 ST CENTURY)	SJ 3477 89413	It was opened in 1855, the design of Jesse Hartley (engineer). The western side of the dock was modified when King's Dock No. 1 and King's Dock No. 2 were constructed in the late 19th or early 20th century. Only the eastern half of the dock is original.
MME9594	Nos. 1-114 South Quay	(VICTORIAN to 21 ST CENTURY)	SJ 34510 89362	Warehouse and goods shed to the east of Wapping dock, opened in 1856. Cellar vaults and five floors of brick, similar to Albert and Stanley Docks' warehouses. Converted for residential. (Referred to in text as: Site 16)
MME9595	King's Dock	DOCK (GEORGIAN to 21 ST CENTURY)	SJ 34323 89309	Former site of King's Dock, Liverpool. Appears on Eyes' plan of 1785 as intended and shown on subsequent maps from the 1790's. It was authorised by an Act of Parliament in 1785 and work was completed in 1788, built of squared stone. It was later widened and deepened due to silting. The form of the dock is shown on OS maps from 1849 to 1893, after which time the basin was replaced by two branch docks.
MME9596	Queen's Dock	DOCK (GEORGIAN to 21 ST CENTURY)	SJ 34634 89076	Queen's dock was opened in 1796 and enlarged in 1816, rebuilt and deepened in 1856. The dock first appears on Gore's plan of 1796. Cole's map of 1807 shows the original form, whilst the southern extension of the dock is apparent on Sherriff's map of 1816. Mid-century changes and the dock modifications of the late 19 th /early 20 th century are visible on OS mapping.
MME9597	Dukes Dock	DOCK (GEORGIAN to 21 ST CENTURY)	SJ 3419 8955	The dock is an irregular rectilinear shape with a small extension southwards on the southeast side. Gates are shown at the west end of the dock with a narrow passage leading west to the river which widens along its length. Map regression established the development of the dock through the 19 th century.

HER (PRN) ID	Name	Site Type/ Event	Location	Description
MME9683	Warehouses	WAREHOUSE (VICTORIAN to 21 ST CENTURY)	SJ34477 88819	Site of warehouses, south side of Queen's Branch Dock No.1. Two storey warehouse built of common brick, both ends and avenue side. Quayside consists of continuous sliding doors (steel) ground and top floor. Wooden catwalk projecting from top floor, 3 x 12" planks supported by wrought iron brackets. Warehouse divided into 3 sections by two brick firewalls, which project above slate roof. All downspouts and water pipes are of cast iron square section, set flush into brickwork, presumably to avoid damage. Fire hydrants set into wall at intervals both sides. Railway line runs from east to west only half way along avenue. There were four mobile cranes on the quayside roof and 13 fixed hoists on the avenue side of the roof, double pulley gravity type (SWL 5 cwt) Spiral bag chute visible in the west end section from top floor to ground floor. Date: 1901." (2) Queen's Dock - opened 1796 and enlarged 1816. Rebuilt and deepened 1856 with basin turned into a half tide dock. Early 20th C. rebuilding turned half tide docks and adjacent shipyards into two branch docks. (3) Demolished in the 1990s.
MME11189	Hydraulic Tower	HYDRAULIC ACCUMULATOR TOWER (VICTORIAN to 21 ST CENTURY)	SJ 34522 89282	Standing building. 30/1318 Hydraulic tower at Wapping Dock 14.3.75. G.V. II Hydraulic tower – including base which functioned as the hydraulic centre. Dated 1856, Jesse Hartley. Battered granite rubble base with Tudor-arched opening. Upperpart octagonal; brick with rusticated stone quoins. Date incised at top of east face. Battlemented parapet on granite machicolation. One-storey granite block to rear has Tudor- arched windows and entrance, and later brick gable.
MME12475	Baltic Fleet Public House	PUBLIC HOUSE (VICTORIAN to 21 ST CENTURY)	SJ 34488 89540	Standing building, public house. Public House. 1860. Roughcast and stone, slate roof. 2 storeys, 5 bays to Wapping, 3-bay curved corner, 4 bays to Hurst Street and 3 bays to Cornhill. Round-arched windows on ground floor divided by Tuscan pilasters; cornice; rectangular windows on 1st floor in moulded architraves with pediments (3 with carved tympana), and Tuscan pilasters between windows (paired pilasters at ends). Top cornice with brackets. Corner of 3 storeys. 1st floor has architraved windows and cornice. Architraved 2nd floor windows under cornice.
MME12585	Wapping Basin	DOCK (VICTORIAN to 21 ST CENTURY)	SJ 34365 89565	Basin. Dock retaining walls. 1855. J. Hartley. Granite rubble brought to a fair face. Entrances to Salthouse, Duke's and Wapping Docks.
MME12604	Pillar Box	PILLAR BOX (VICTORIAN to 21 ST CENTURY)	SJ 34246 89662	Post Box of the type in use in Liverpool 1863. Cast iron. Cylindrical, with plinth, horizontal slot, frieze of 2 rope mouldings and "Post Office" in raised lettering. Octagonal top, moulded, with crown on top.
MME13781	Gate Lodge	GATE LODGE (VICTORIAN to 21 ST CENTURY)	SJ 34551 89292	Gatekeeper's Lodge. 1856. Jesse Hartley. Granite rubble. Oval, with battered sides, chamfered plinth and corbelled cornice. Short spire, also oval on plan, and top cornice and chimney. Window and entrance, gate slot, and blind arrow slit motif. Originally had flanking gate piers.
MME13930	Tobacco Warehouse	TOBACCO WAREHOUSE (GEORGIAN - 1793 AD to 1824 AD)	SJ 34370 89474	This warehouse is situated on the south end of the town facing the King's Dock, is a good brick building of two hundred and ten feet, by one hundred and eighty, and allowing the diameter of the hogsheads three feet, it will hold upwards of four thousand hogsheads of tobacco on the ground tier. The principal front is to the water, the centre door has a rusticated frontispiece, whereon is a pediment, having the king's arms well executed, the supports are couchant, in the centre is a small turret, which would have been rendered useful by the addition of a clock, the back front to the eastward has also a centre door with a rusticated arch, and small pediments, whereon is place a Liver; the north and south doors are also arched with stone without pediments.

HER (PRN) ID	Name	Site Type/ Event	Location	Description
MME15495	Warehouse,	WAREHOUSE (VICTORIAN)	SJ 3427 8956	Former site of a warehouse, on the south side of Duke's Dock, Liverpool. There is no building shown at this location on Thomas Kaye's map of Liverpool of 1813, which shows Duke's Dock prior to its extension in the 1840s. A warehouse is first shown at this location on the town plan of 1849, but had been redeveloped by the time the town plan of 1891 was produced. A building is last shown at this location on OS mapping dating to 1982, and no building is shown on OS mapping dating to 1991. A watching brief carried out by National Museums Liverpool Field Archaeology Unit in 2007 recorded the presence of a brick wall, believed to be part of that redeveloped warehouse. No finds were recovered and detailed recording was not possible under the circumstances of the groundworks.
MME15506	Duke's Dock Spur and Warehouses	DOCK (GEORGIAN to MID 20TH CENTURY - 1816 AD? to 1960 AD?) WAREHOUSE (GEORGIAN to MID 20TH CENTURY - 1821 AD? to 1960 AD?)	SJ 3426 8949	Site of Duke's Dock spur and warehouses, Keel Wharf, Liverpool. Horwood's plan of 1803 labels Dukes Dock. A spur is shown on the southern side but with no structure to the southern end of it, perhaps indicating work underway or intended. Cole's map of 1807 labels it Bridgewater Dock and does not show the details of Horwood's plan. Sherriff's map of 1816 shows an extension south towards the eastern end of the dock. Sherwood's plan of 1821 shows a long extension extending southwards into a building along the southern border of the plot. It is labelled Duke's Dock and Yard. Bennisons' plan of 1835 shows two spurs off of the southern spur, east and west, and labels the building at the end of the southern spur as a warehouse. The dock is labelled Duke's Dock and the plot is labelled Duke of Bridgewater Yard. Gage's plan of 1835 shows a similar arrangement, though with more detail. A pair of curving lines are shown extending from the southern side of the original dock, in the area a feature was shown on Horwood's plan of 1803. '...maintenance of the dock was largely neglected after the 1820s and Duke's Dock was not incorporated into the Liverpool Dock Estate until 1899. Although it seems to have been regarded as a 'strategic' site, no investment was made there and it remained largely unused except for its warehousing. The river entrance was closed in 1945 and by 1960 virtually all activity on the site had ceased, the buildings were demolished piecemeal between then and 1984.' A watching brief was carried out by National Museums Liverpool Field Archaeology Unit in 2007 and, in different areas, exposed the walls of the spur of Duke's Dock, a warehouse to the northwest of the Grain Warehouse, the Grain Warehouse and sandstone lined basements of it, and two walls of the King's Dock.
MME15711	Fort	FORT (GEORGIAN)	SJ 3426 8900	Former site of a fort, Half-Tide Wharf, Liverpool. No building is shown on this site on Horwood's plan of 1803. Cole's plan of 1807 shows a polygonal feature on the southern side of the passage to the basin serving Queen's and King's Docks. It is labelled Fort. Sherwood's plan of 1821 does not show a building on this site.
MME15712	Queen's Graving Dock	DRY DOCK (GEORGIAN to EDWARDIAN)	SJ 34475 89019	Former site of Queen's Graving Docks, Half-Tide Wharf, Liverpool. The docks are not shown on Eyes' plan of 1785. Gore's plan of 1796 shows two graving docks. They are labelled as graving docks Nos. 4 and 5 on Horwood's plan of 1803 and on Gage's plan of 1835. The OS town plan of 1849 labels them as Queen's Graving Dock Nos. 1 and 2. They are last shown on the OS town plan of 1891; they do not appear on the 2nd edition 25" OS map of 1908.

HER (PRN) ID	Name	Site Type/ Event	Location	Description
MME15713	King's Dock Tobacco warehouse	TOBACCO WAREHOUSE (GEORGIAN to EDWARDIAN)	SJ 34214 89247	Former site of King's Dock Tobacco warehouse, Queen's Wharf, Liverpool. Cole's map of 1807 shows a timber yard on this site, with no buildings within it. Sherriff's map of 1816 shows two buildings within the enclosed space. Sherwood's map of 1821 shows one large structure occupying nearly the entire site and labels it as tobacco warehouse. Gage's plan of 1835 shows the building in more detail and labels it The King's Tobacco Warehouse. The OS town plan of 1849 labels it simply as tobacco Warehouse. The OS town plan of 1891 labels it King's Dock Tobacco warehouse and labels the Queen's Pipe on the roof. It is last shown on the 1st edition 25" OS map of 1893, it does not appear on the 2nd edition 25" OS map of 1908.
MME15715	Site of a swing bridge and lock to Queen's Dock Basin, Keel Wharf, Liverpool	BRIDGE (GEORGIAN to VICTORIAN – EDWARDIAN)	SJ 34468 89156	Former site of a swing bridge and lock to Queen's Dock Basin, Keel Wharf, Liverpool. Eyes' plan of 1785 shows Lock gates, but no bridge, on this site, with the intended docks to either side. Gore's plan of 1796 shows gates and a bridge on this site. The OS town plan of 1849 shows the swing bridge and gates. The OS town plan of 1891 shows a much larger swing bridge on the site. The structures do not appear on the 2nd edition 25" OS map of 1908. In 2006 National Museums Liverpool Field Archaeology Unit carried out a watching brief. The northern side of the lock and site of the swing bridge were found during works. The walls were mostly of red sandstone but some grey granite was evident. There were two culverts within the lock cut into bedrock. A third culvert contained a wrought iron shaft connected to cast-iron gears within a stone lined chamber.
MME15716	Northwich Basin, King's Parade, Liverpool	TIDAL BASIN (GEORGIAN to EDWARDIAN)	SJ 34137 89380	Former site of Northwich Basin, King's Parade, Liverpool. Gore's plan of 1796 shows this area not to have been reclaimed by that time. Horwood's plan of 1803 shows the land to the north to have been reclaimed. The southern extent of this area appears to correspond with the northern boundary of the later basin. Cole's map of 1807 shows the land to the south to have been reclaimed, leaving a narrow rectangular inlet of water between the two areas. It is not labelled. Sherriff's map of 1816 shows the basin, as does Sherwood's plan of 1821. Gage's plan of 1835 labels it as a basin and the north side of it as Northwich Wharf. It is not labelled on the OS town plan of 1849 but the OS town plan of 1891 labels it as Northwich Basin. It is last shown on the 1st edition 25" OS map of 1893; it does not appear on the 2nd edition 25" OS map of 1908. In 2006 National Museums Liverpool Field Archaeology Unit carried out a watching brief. A length of dock wall c.40m long was found, the southern wall of the Northwich Basin. It was built from substantial sandstone blocks measuring 1-2m long, 1m wide and 1m deep. It was left in situ.
MME15730	Wall	WALL (VICTORIAN)	SJ 34496 89445	Wapping Dock wall, Wapping, Liverpool, probably built in 1855/6. There are stanchions of the Overhead Railway along the east elevation of the wall. The southern end has been truncated and the northern end terminates at a former gate pier.

