



Queens Dock, Liverpool, Merseyside

Archaeological Evaluation Report

January 2023

Client: Glenbrook Property

Issue No: V. 1

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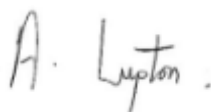
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Queens Dock, Liverpool, Merseyside

Archaeological Evaluation Report

Written by Katie Sanderson

With illustrations by Mark Tidmarsh

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Summary

In October 2022, Oxford Archaeology (OA) North was commissioned by Glenbrook Property to undertake an archaeological trial trench evaluation of a proposed residential development at the site of Queens Dock, Liverpool, Merseyside (NGR: SJ 34472 88996). The work was undertaken as conditions of two Planning Applications (planning refs: 19F/1875 and 20F/2116). The fieldwork took place over three days by a team of two from the 3rd – 5th of October 2022 and comprised the excavation of five trenches that were agreed upon by OA North in discussion with the Planning Archaeologist for the Merseyside Environmental Advisory Service (MEAS). The trenches specifically targeted the remains of two eighteenth century graving docks depicted on historic mapping.

The aim of the archaeological works was to fully record and investigate any remains, in order to inform the planning process prior to the development of this site and mitigate any negative impact this development might have. However, the results of the evaluation were very limited, with no evidence of the graving docks or any other feature of archaeological significance being encountered within the trenches. The deposits remaining at the time of excavation indicated that the site prior to the construction of the current graving dock underwent a significant process of demolition and levelling that removed any evidence of remains down to a depth of at least 2m.

Acknowledgements

Oxford Archaeology (OA) North would like to thank Liam Gordon of Glenbrook Property for commissioning this project. Thanks are also extended to Alison Plummer, Planning Archaeologist for Merseyside Environmental Advisory Service (MEAS), for monitoring the project on behalf of Liverpool City Council.

The project was managed for OA North by Paul Dunn. The fieldwork was directed by Katie Sanderson, who was supported by Ashleigh Neal. Survey and digitising were carried out by Katie Sanderson and Mark Tidmarsh.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) North was commissioned by Glenbrook Properties to undertake a trial trench evaluation at the site of a proposed residential development at NGR: SJ 34472 88996 (Fig 1)

1.1.2 A desk-based assessment (DBA) was produced by OA North (2016) as part of the planning application, which identified potential for remains related to the former Graving Docks, depicted on historic mapping, to survive on the site. As such, two conditions were imposed on the planning applications (planning refs: 19F/1875 and 20F/2116). Condition 17 of Planning Application 19F/1875 stated:

No development shall take place until the applicant has submitted a written scheme of investigation for archaeological work for approval in writing by the local planning authority. The work shall be carried out strictly in accordance with the approved scheme.

REASON: There is a potential for remains of non-designated heritage assets on the site which should be investigated and reported in accordance with the revised NPPF and Policy HD17 of the Liverpool Unitary Development Plan.

1.1.3 Condition 25 of Planning Application 20F/2116 stated:

No development shall take place until the applicant has submitted a Written Scheme of Investigation (WSI) for archaeological work for approval in writing by the local planning authority. For avoidance of doubt the WSI should be produced by an appropriately qualified and experienced archaeologist and should contain appropriate research objectives and a detailed programme of works that include a specification of the methods to be used.

The works shall be carried out strictly in accordance with the approved scheme.

REASON: There is a potential for remains of non-designated heritage assets on the site which should be investigated and reported in accordance with the revised NPPF and Policy HD17 of the Liverpool UDP and Policy H1 of the emerging Liverpool Local Plan.

1.1.4 Discussions with the Planning Archaeologist for Merseyside (MEAS) identified that a scheme of archaeological evaluation would be required to be undertaken on the site. Five trenches were agreed upon, measuring between 25 and 30m long and placed on the former location of the Graving Dock walls on the north and south quays of the existing dock (Fig 2 and 3). OA North were subsequently commissioned by Glenbrook properties to produce a WSI (Appendix A) and undertake the agreed works, which were completed in three days between 3rd and 5th October 2022.

1.2 Location, topography and geology

1.2.1 The site (centred on NGR SJ 34472 88996; Fig 1) is located within Queens Dock, in the south central section of Liverpool docks and comprises the eastern extent of Queens Dock Graving Dock, off Kings Parade, Liverpool. The dock structure is formed of two

parallel quays or wharfs enclosing a (presently) water-filled graving or dry dock. The site takes in both the northern and southern arms of the graving dock, for a distance of approximately 100m west from the dock entrance. To the immediate west of the site is the former site of Liverpool HMRC offices, constructed in 1993 with suspended buildings crossing the graving dock. This site has been developed for residential use, and is now known as 'The Keel'.

- 1.2.2 The topography of the site, within Queens Dock, is situated to the west of the former position of the Mersey foreshore, on made up land reclaimed from the river during the late eighteenth century.
- 1.2.3 The solid geology of the site is mapped as Pebbly (gravelly) Sandstone of the Chester Formation, formed in the Triassic Period (BGS 2022). There is no recorded superficial geology for the site (*ibid*). The soils of the site are mapped as loamy and clayey floodplain soils with naturally high groundwater (Cranfield 2022).

1.3 Archaeological and historical background

- 1.3.1 The archaeological and historical background of the site has been described in detail in the archaeological DBA produced by OA North (2016), and a summary is provided here.
- 1.3.2 In total, 39 heritage assets are recorded within a radius of 500m from the site, four which are listed buildings associated with the surrounding docks. The Merseyside Historic Environment Record (MHER) has records for 21 sites. A total of 14 individual sites/areas of archaeological interest have been identified, by the desk-based assessment, within the site.
- 1.3.3 Cartographic and documentary evidence illustrates that the present Queens Dock Graving Dock was constructed in the first decade of the twentieth century, as part of a major re-organisation of the southern docks. With the exception of the possible survival of evidence for an eighteenth century graving dock within the structure of the present dock, all of the sites identified relate to the twentieth century graving dock and wharfs. These include extant features, including the graving dock structure, the dock gates, dock walls and extant bollards/mooring posts, and potential sub-surface remains, including two warehouses, a pumping station, the remains of a goods railway and a crane.
- 1.3.4 The site, at the easternmost extent of the extant graving dock, was used for car parking and as a recreation area for the former HM Revenue and Customs building, constructed in the 1990s and known now as 'The Keel'. Although the sub-surface impacts of the re-development of the graving dock and wharfs following their closure in 1972 are unclear, it is considered probable that archaeological remains within the Site Area survive beneath the modern car parks and landscaping.

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were as follows:

- i. to adhere to and fulfil the agreed programme of works associated with the archaeological potential of the site;
- ii. to determine or confirm the general nature of any remains present;
- iii. to determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence;
- iv. if archaeological remains are encountered within the trenches, to aim to recover sufficient data to be able to further assess the potential of the site;
- v. to inform a decision as to whether further archaeological works will be required in advance of development ground works; and
- vi. to compile a professional archival record of any archaeological remains within the site.

2.2 Methodology

2.2.1 The full methodology is outlined in the WSI (*Appendix A*) and was adhered to in full, and, as such, was fully compliant with prevailing guidelines and established industry best practice (ClfA 2020a; 2020b; 2022; Historic England 2015). A programme of field observation accurately recorded the character of the deposits within the evaluation.

2.2.2 The five trial trenches were located by a real-time kinematic (RTK) global navigation satellite system (GNSS), accurate to 0.02-0.03m, based upon the proposed trench locations as depicted in the WSI. Following marking the trenches out, they were scanned for underground services by a trained and experienced operator utilising a Cable Avoidance Tool (CAT) and Signal Generator (Genny). No services were identified in the trenches, although only one trench (Trench 1) was excavated in its fully intended location. The other four trenches were required to be shortened or broken due to either existing excavations or upstanding structures or fences, however, all trenches still targeted the structure of the former Graving Docks.

2.2.3 The modern hardstanding and overburden was removed by mechanical excavator, 8-tonne tracked 360° excavator, under direct supervision of a suitably qualified and experienced archaeologist, in stratigraphic order to the first significant archaeological remains or a safe working depth. The excavated material was banded on either side of the trenches, a safe working distance from the trenches edges, approximately 1.5m. The trenches were not entered where they exceeded a safe working depth of 1m. Subsequent cleaning and investigation of all archaeological deposits was undertaken manually, using either hoes, shovel scraping, and/or trowels depending on subsoil conditions. All features of archaeological interest were investigated.

2.2.4 All information identified during the course of the fieldwork was recorded stratigraphically, using a system adapted from that used by the former English Heritage Centre for Archaeology with an accompanying pictorial record (digital photographs). Primary records were available for inspection at all times.

- 2.2.5 Results of all field investigations were recorded on *pro forma* context sheets. The site archive includes a photographic record. The site archive includes both photographic images and accurate large-scale plans and sections at appropriate scales (1:50; 1:20; and 1:10).
- 2.2.6 A full professional archive has been compiled in accordance with the WSI, and in accordance with current ClfA (2020b), Historic England (2015) and National Museums Liverpool (NML 2021) guidelines. Due to the lack of finds recovered during the fieldwork, the archive will be deposited with the Archaeology Data Service (ADS), in due course. An online access to index of archaeological investigation (OASIS) form will also be uploaded, along with a copy of this report.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below and include a stratigraphic description of the trenches excavated. The full details of all trenches with dimensions and depths of all deposits can be found in *Appendix A*.

3.2 General soils and ground conditions

3.2.1 The deposit sequence in the trenches was fairly uniform. The natural geology was not encountered. The trenches mainly consisted of varying layers of made ground, the earliest identified deposit being red brick and sandstone rubble exposed to a depth of 2m, this was then overlain with a grey gravel, between 0.26 and 0.59m thick that had been compacted with a layer of sand, approximately 0.07 – 0.12m thick, as bedding for block paving of the modern car park.



Plate 1: Trench 5 looking north, 1m and 2m scales

3.2.2 The only variation to this sequence occurred at the eastern ends of Trench 1 and 2, which were excavated in a former garden area on the northern quay of the dock. Here the earliest deposits of red brick and sandstone rubble were overlain by a gravelly made ground deposit, approximately 0.29m thick, which was, in turn overlain by topsoil, between 0.42 and 0.72m thick.



Plate 2: Trench 1 looking west, 1m and 2m scales



Plate 3: South-east-facing section of the eastern part of Trench 1, 1m scale

3.2.3 Ground conditions throughout the evaluation were generally good, and the site did not become waterlogged even during periods of heavy rain. Trench 5 was shortened due to prior ground investigative works, whilst Trenches 2, 3 and 4 were required to be shortened or split due to proximity to potential hazards.

3.3 General distribution of archaeological deposits

- 3.3.1 The trenches were mainly composed of remains associated with the construction of the car parks and landscaped areas present, with no evidence encountered for the targeted graving docks at the depths below ground level that were reached. Deep sondages were located over the areas indicated by historic mapping to contain the dock walls; these were excavated to a depth of approximately 2m bgl, with no evidence of the former graving dock walls being encountered.

4 DISCUSSION

4.1 Reliability of field investigation

- 4.1.1 The trenches were targeted upon the walls of the former graving docks, as depicted on historic mapping (Fig 3). Although there was a requirement to shorten or break the trenches, due to constraints on site, the trenches were still targeted on the walls of the former graving docks, of which there was no evidence, even within sondages excavated to a depth of 2m below ground level.
- 4.1.2 The ground conditions did not adversely affect the reliability of these results as the ground was freely draining and the machining was carried out cleanly providing good visibility of the deposits, if archaeological remains had been present, they would have been readily identifiable.

4.2 Evaluation objectives and results

- 4.2.1 The archaeological investigation of the site is considered to largely achieved its general aims (*Section 2.1.1*). The evaluation established and recorded the absence of archaeological remains to a depth of 2m below ground level within all five of the trenches.

4.3 Interpretation

- 4.3.1 There was no evidence of any archaeological remains within the trench, with the earliest deposit encountered in all of the trenches being a substantial made ground deposit consisting of red brick and sandstone rubble. This made ground deposit suggests that the former graving docks were thoroughly demolished and levelled prior to the construction of the modern graving dock.
- 4.3.2 The overlying deposits were consistent throughout the trenches, where the modern usage of the area was for car parking the deposits consisted of further levelling and bedding material for block paving, whilst in the garden area to the east end of the northern quay, further made ground deposits were overlain by a substantial amount of topsoil.

4.4 Significance

- 4.4.1 The evaluation established a lack of archaeological remains to 2m below ground level across both the north and south quays of Queens Dock. Only a substantial thickness of made ground consisting of red brick and sandstone rubble was encountered overlain by modern levelling deposits, suggesting that the former graving docks had been thoroughly demolished. There were no residual finds encountered from within the deposits. As such, the results are of no or limited significance.

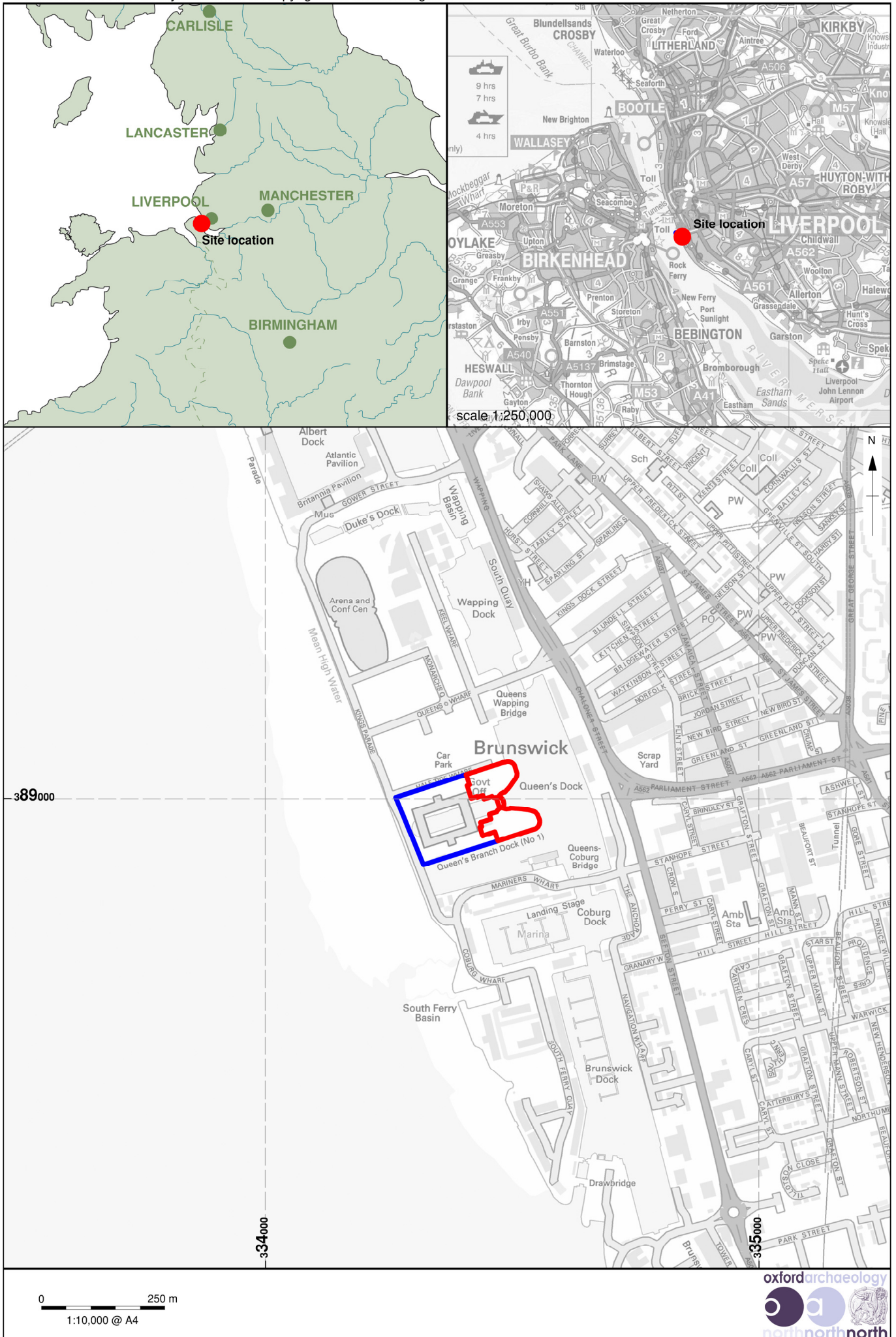


Figure 1: Site location

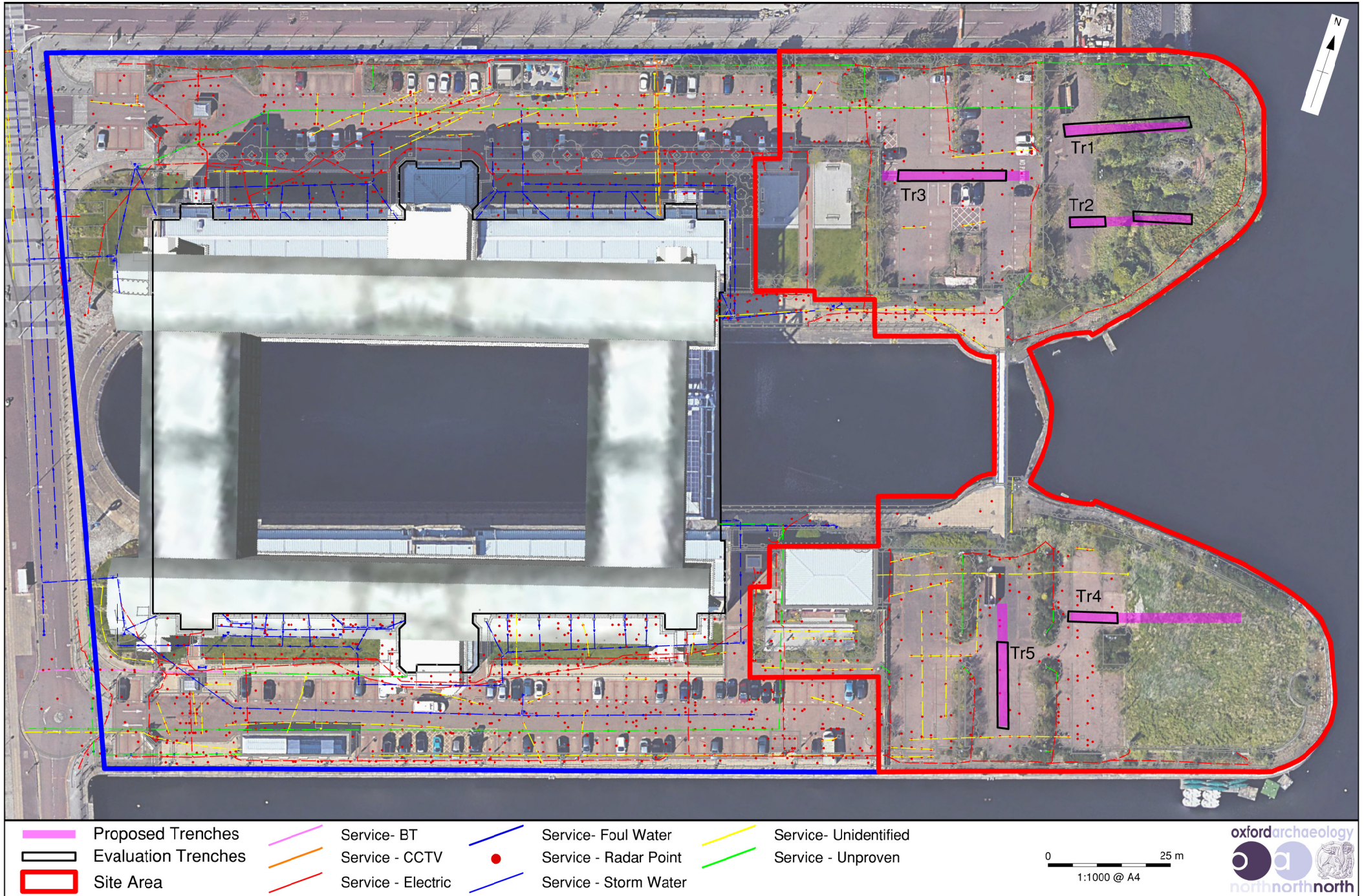


Figure 2: Evaluation trenches superimposed on aerial photography (Google)

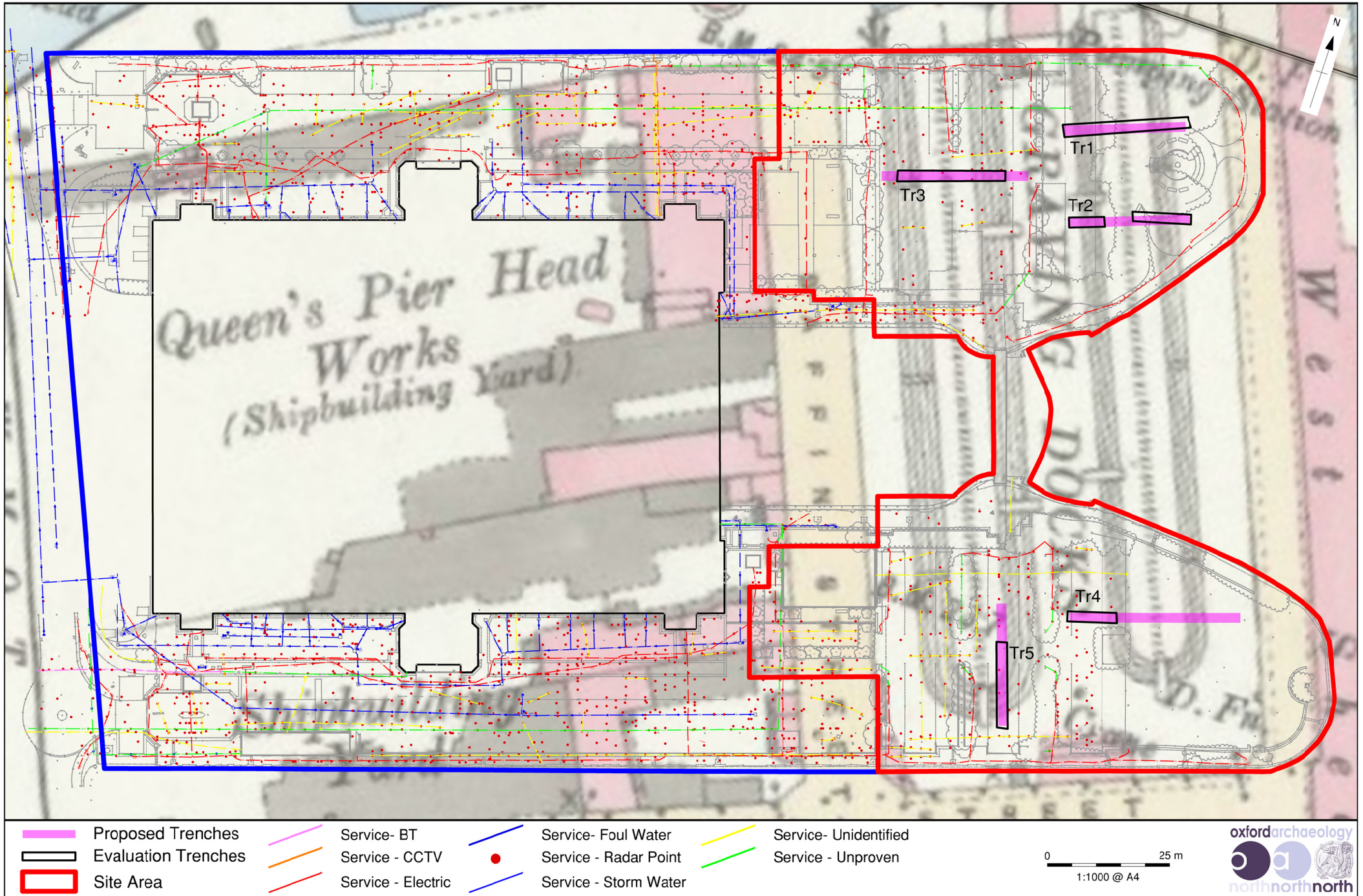


Figure 3: Evaluation trenches superimposed on the Ordnance Survey 25":1 mile map of 1890

APPENDIX A WRITTEN SCHEME OF INVESTIGATION



Queens Dock, Liverpool, Merseyside

Written Scheme of Investigation Archaeological Evaluation

July 2022

Client: Glenbrook Property

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Queens Dock, Liverpool, Merseyside
Written Scheme of Investigation for an Evaluation
Centred on SJ 34472 88996

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1 INTRODUCTION

1.1 Project details

1.1.1 Oxford Archaeology (OA) North has been commissioned by Glenbrook Property to undertake an archaeological evaluation of the site of a proposed residential development at Queens Dock, Liverpool (NGR: SJ 34472 88996; Fig 1).

1.1.2 The work is being undertaken as conditions of two Planning Applications (planning refs: 19F/1875 and 20F/2116). Condition 17 of Planning Application 19F/1875 stated:

No development shall take place until the applicant has submitted a written scheme of investigation for archaeological work for approval in writing by the local planning authority. The work shall be carried out strictly in accordance with the approved scheme.

REASON: There is a potential for remains of non-designated heritage assets on the site which should be investigated and reported in accordance with the revised NPPF and Policy HD17 of the Liverpool Unitary Development Plan.

1.1.3 Condition 25 of Planning Application 20F/2116 stated:

No development shall take place until the applicant has submitted a Written Scheme of Investigation (WSI) for archaeological work for approval in writing by the local planning authority. For the avoidance of doubt the WSI should be produced by an appropriately qualified and experienced archaeologist and should contain appropriate research objectives and a detailed programme of works that include a specification of the methods to be used.

The work shall be carried out strictly in accordance with the approved scheme.

REASON: There is a potential for remains of non-designated heritage assets on the site which should be investigated and reported in accordance with the revised NPPF and Policy HD17 of the Liverpool UDP and Policy H1 of the emerging Liverpool Local Plan.

1.1.4 OA North produced a desk-based assessment (DBA; OA North 2016) submitted with the planning applications, which identified potential for remains related to the former Graving Docks, depicted on historic mapping, to survive on the site. As such, discussions were held with the Planning Archaeologist for Merseyside Environmental Advisory Service (MEAS) to define the scope necessary to discharge the conditions and it was agreed that an archaeological evaluation would be required in the first instance. Five trenches were decided upon measuring between 25 and 30m long and placed on the former location of the Graving Docks on the north and south piers. OA North were subsequently commissioned by Glenbrook Property to produce this written scheme of investigation and undertake the necessary fieldwork; this document outlines how OA will implement those requirements.

1.1.5 All work will be undertaken in accordance with the Chartered Institute for Archaeologists *Code of Conduct* (2021) and relevant *Standards and Guidance* (2020a and 2020b), and local and national planning policies (Research Frameworks 2022 and Historic England 2015).

1.2 Location, topography and geology

- 1.2.1 The site (centred on NGR SJ 34472 88996; Fig 1) is located within Queens Dock, in the south central section of Liverpool docks and comprises the eastern extent of Queens Dock Graving Dock, off Kings Parade, Liverpool. The dock structure is formed of two parallel quays or wharfs enclosing a (presently) water-filled graving or dry dock. The site takes in both the northern and southern arms of the graving dock, for a distance of approximately 100m west from the dock entrance. To the immediate west of the site is the former site of Liverpool HMRC offices, constructed in 1993 with suspended buildings crossing the graving dock. This site has been developed for residential use, and is now known as 'The Keel'.
- 1.2.2 The topography of the site, within Queens Dock, is situated to the west of the former position of the Mersey foreshore, on made up land reclaimed from the river during the late eighteenth century.
- 1.2.3 The solid geology of the site is mapped as Pebbly (gravelly) Sandstone of the Chester Formation, formed in the Triassic Period (BGS 2022). There is no recorded superficial geology for the site (*ibid*). The soils of the site are mapped as loamy and clayey floodplain soils with naturally high groundwater (Cranfield 2022).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND AND POTENTIAL

2.1 Archaeological and historical background

- 2.1.1 The archaeological and historical background of the site has been described in detail in the archaeological DBA produced by OA North (2016), and a summary is provided here.
- 2.1.2 In total, 39 heritage assets are recorded within a radius of 500m from the site, four of which are listed buildings associated with the surrounding docks. The Merseyside Historic Environment Record (MHER) has records for 21 sites. A total of 14 individual sites/areas of archaeological interest have been identified, by the desk-based assessment, within the site.
- 2.1.3 Cartographic and documentary evidence illustrates that the present Queens Dock Graving Dock was constructed in the first decade of the twentieth century, as part of a major re-organisation of the southern docks. With the exception of the possible survival of evidence for an eighteenth century graving dock within the structure of the present dock, all of the sites identified relate to the twentieth century graving dock and wharfs. These include extant features including the graving dock structure, the dock gates, dock walls and extant bollards/mooring posts, and potential sub-surface remains, including two warehouses, a pumping station, the remains of a goods railway and a crane.
- 2.1.4 The site, at the easternmost extent of the extant graving dock, was used for car parking and as a recreation area for the former HMRC building, constructed in the 1990s and known now as 'The Keel'. Although the sub-surface impacts of the re-development of the graving dock and wharfs following their closure in 1972 are unclear, it is considered probable that archaeological remains within the Site Area survive beneath the modern car parks and landscaping.

2.2 Potential

- 2.2.1 The principal potential for the site lies in the possible survival of the eighteenth century graving docks identified on the historic mapping. As detailed in the DBA it is likely that the structure of the forming graving docks will survive beneath the modern car parks and landscaping.

3 PROJECT AIMS

3.1 General

3.1.1 The general project aims and objectives can be summarised as follows:

- i. to adhere to and fulfil the agreed programme of works associated with the archaeological potential of the site;
- ii. to inform a decision as to whether further archaeological works will be required in advance of development ground works; and
- iii. to compile a professional archival record of any archaeological remains within the site.

3.2 Specific aims and objectives

3.2.1 The specific aims and objectives of the archaeological evaluation are:

- i. to determine or confirm the general nature of any remains present;
- ii. to determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence; and
- iii. if archaeological remains are encountered within the trenches, to aim to recover sufficient data to be able to further assess the potential of the site.

4 PROJECT SPECIFIC EXCAVATION AND RECORDING METHODOLOGY

4.1 Scope of works

- 4.1.1 The trial trench evaluation is to consist of the excavation of five trenches within the site, with the principal aim being to identify whether archaeological remains relating to the former graving docks survive within the site (Fig 2). Three of the trenches will be 25m long by 2m wide, with one trench being 30m long by 2m wide and another being 35m long by 2m wide. The trench array has been designed to target the graving docks as depicted on historic mapping (Fig 3) whilst avoiding modern constraints. Prior to the excavation of the trenches photographs will be taken showing the condition of the site and service checks will be undertaken utilising service plans and a cable avoidance tool (CAT and Genny).
- 4.1.2 The trenches will be excavated by mechanical excavator fitted with a toothless ditching bucket, under direct supervision of a suitably experienced and qualified archaeologist at all times. The modern hardstanding and overburden will be excavated in stratigraphic order to natural geology, significant archaeological remains or a safe working depth of 1m, whichever is encountered first. The hardstanding and overburden will be kept separate, being stockpiled on either side of the trenches, they will also be systematically checked and any finds will be retained.
- 4.1.3 Upon completion of the mechanical excavation of the trenches, they will be hand cleaned and any archaeological features will be investigated and recorded. Any finds or environmental material recovered will be returned to OA North's office in Lancaster for processing and assessment. If potentially significant archaeological remains are identified, the archaeologist will inform the client and their representative.
- 4.1.4 Following completion of the recording of the trenches, the client and the local curator will be given the opportunity to view the trenches. Once they are satisfied with the works the trenches will be backfilled by the mechanical excavator. Once the trenches have been backfilled, photographs will be taken to show the condition of the site.

4.2 Programme

- 4.2.1 It is anticipated that the fieldwork will take approximately three days to complete, by a team consisting of a Project Officer/Project Supervisor, directing up to one Project Archaeologists, under the management of Paul Dunn, Senior Project Manager.
- 4.2.2 All fieldwork undertaken by OA North is overseen by the Operations Manager, Alan Lupton MCIfA.

4.3 Site specific methodology

- 4.3.1 A summary of OA's general approach to excavation and recording can be found in *Appendix A*. Standard methodologies for Geomatics and Survey, Environmental evidence, Artefactual evidence and Burials can also be found below (*Appendices B, C, D and E* respectively).
- 4.3.2 Site specific methodologies will be as follows:

- i. the evaluation trenches will be set-out by a real-time kinematic (RTK) global navigation satellite system (GNSS), accurate to 0.02m, based upon the proposed trench plan (Fig 2 and 3). The trench locations will then be scanned using a CAT and Genny, operated by a suitably qualified and experienced person, the position of any potential services will be marked out and demarcated, with the trenches being potentially repositioned depending on the location of the services. Once the location of the trenches are clear, mechanical excavation can commence;
- ii. the modern hardstanding and overburden will be removed by mechanical excavator, under direct supervision of a suitably qualified and experienced archaeologist, in stratigraphic order to the first significant archaeological remains or a safe working depth. The excavated material will be banded on either side of the trenches, a safe working distance from the trenches edges, approximately 1.5m. The trenches will not be entered if they exceed a safe working depth of 1m;
- iii. once the mechanical excavation of the trenches has reached significant archaeology or a safe working depth, the trenches will be cleaned by hand where necessary. The hand excavation and recording methodology can be found in *Appendix A*;
- iv. if features of significance are identified during the evaluation, the client will be informed as soon as possible. A decision as to whether to continue the trenches or stop at that level will then be made;
- v. all information identified during the course of the fieldwork will be recorded stratigraphically, using a system adapted from that used by the former English Heritage Centre for Archaeology with an accompanying pictorial record (plans, sections and digital photographs). Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will also include a photographic record and accurate large-scale plans and sections at appropriate scales (1:50; 1:20; and 1:10);
- vi. once the trenches are fully recorded and the client and Planning Archaeologist has had the opportunity to view the trenches, they will be backfilled by mechanical excavator, in the reverse order they were excavated, i.e. overburden first and then any hardstanding laid on top (although tarmac will need to be left banded to one side). The spoil will be compacted by the weight of the mechanical excavator provided and not by any other type of plant (*Appendix A*); and
- vii. following completion of the fieldwork an archaeological report detailing the results of the evaluation and an interpretation of their significance will be produced (*Section 5*).

5 PROJECT SPECIFIC REPORTING AND ARCHIVE METHODOLOGY

5.1 Programme

- 5.1.1 The level of reporting will depend upon the archaeological significance of the results. If significant remains of regional importance are revealed, then an interim report or statement will be provided to the Planning Archaeologist for MEAS following completion of the fieldwork (*Section 5.2.1*). If only limited or no archaeological remains are discovered, then only an archive report will be produced (*Section 5.2.2*). If excavation is required, an English Heritage MAP2 style of post-excavation assessment report will be compiled following the fieldwork and will define the resource implications of completing the post-excavation programme (*Section 5.2.3*). This will form the basis and methodological approach with which to address a more comprehensive level of analysis and an appropriate level of subsequent publication, should it be required. The decision as to which reporting strategy will be followed will be discussed with the client and the Planning Archaeologist for MEAS upon completion of the fieldwork.
- 5.1.2 A copy of the report in Adobe Acrobat (.pdf) format will be provided to the client, and the Planning Archaeologist for MEAS for review and approval. Once approved, a digital copy of the final report will be provided to the client for their submission to the Local Planning Authority.

5.2 Content

- 5.2.1 The content of this report will be as defined in *Appendix F*.
- 5.2.2 **Interim evaluation report for significant remains:** if significant archaeological remains are identified during the evaluation, an interim report will be produced. This will be an assessment of the quality and preservation of the archaeological remains identified. This will be presented verbally or electronically to the Planning Archaeologist for MEAS to prevent any delay in progressing to the excavation stage. The results will then be combined with the excavation results in a post-excavation assessment (*Section 5.2.3*).
- 5.2.3 **Archival evaluation report for limited archaeological remains:** a draft copy of a written synthetic post-excavation assessment report will be submitted to the client for comment within six weeks of completion of the fieldwork, although the time frame for production of the report can be tailored to the client's requirements upon prior agreement. The report will include a copy of this WSI, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and present an assessment of the history of the site. The report will include the following:
- i. a title page detailing site address, National Grid Reference (NGR), author/originating body, client's name and address;
 - ii. full contents listing;
 - iii. a non-technical summary of the findings of the fieldwork;
 - iv. a description of the archaeological background;

- v. a detailed account of the historical development of the site, as appropriate;
- vi. a description of the topography and geology of the site;
- vii. a description of the methodologies used during the fieldwork;
- viii. a description of the findings of the fieldwork;
- ix. detailed plans of the evaluation trenches, showing the archaeological features exposed. The site location will be plotted with at least four 12-figure national grid references on the site plan at a scale of 1:2,500;
- x. interpretation of the archaeological features exposed and their context within the surrounding landscape;
- xi. specialist analysis reports on the artefactual/ecofactual/industrial remains from the site;
- xii. appropriate photographs of specific archaeological features. Appropriate photographs of specific finds of interest will also be included, if needed;
- xiii. a consideration of the importance of the archaeological remains present on the site in local, regional and national terms;
- xiv. a complete bibliography of sources consulted;
- xv. appendices to include a detailed list of all recorded contexts, all retrieved finds, all samples taken, all drawings produced and all photographs taken;
- xvi. illustrative material will include a location map, site map, site plans and pertinent photographs.

5.2.4 ***Post-excavation assessment for significant remains following mitigation excavation phase:*** if the archaeological results are deemed to be of regional or national importance as a result of discussions with the archaeologist for MEAS, then the results of the evaluation will be combined with the results of the excavation following completion of the fieldwork. An assessment of the archive will then be undertaken, and the resource requirements for analysis and publication will be defined, in accordance with the guidelines of MAP2 (English Heritage 1991). This will involve an assessment of the dataset, followed by a review of the project archive to establish the potential for further analysis. The assessment will take place in close consultation with the client, and the format for the final report will also be agreed at this stage of the work. The Harris Matrix, largely produced during the excavation programme, will be completed and checked as part of the assessment. The assessment will involve the compilation of a brief archive report, outlining the significance of the stratigraphic, artefactual and environmental evidence, and presenting recommendations for further analysis, as appropriate. The report will also include a short summary of the stratigraphic history of the site.

5.2.5 The project assessment will include an updated project specification, which will comprise a full project design for a programme of full analysis and publication, and will be in accordance with MAP2 (English Heritage 1991). This document will be submitted to the client within six months of the completion of the fieldwork.

5.2.6 **Analysis:** an appropriate programme of analysis should then be undertaken to prepare a research archive, as detailed in Appendix 6 of MAP2; the precise scope for this element will be defined within the updated project specification. Following the analysis of the excavation results, a report will be written which will present, summarise, and interpret the results of the programme and will incorporate specialist reports on artefact assemblages and environmental reports. It will include an index of archaeological features identified in the course of the project, with an assessment of the site's development. It will also incorporate illustrations, including copies of the site plans and section drawings all reduced to an appropriate scale. The archive report will be submitted within 12 months of the completion of the assessment report.

5.3 Specialist input

5.3.1 OA has a large pool of internal specialists, as well as a network of external specialists with whom OA have well established working relationships. A general list of these specialists is presented in *Appendix G*; in the event that additional input should be required, an updated list of specialists can be supplied.

5.4 Archive

5.4.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current Historic England guidelines (2015), and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long-Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and materials gathered during the course of the project. This archive will be provided in the English Heritage Centre for Archaeology format.

5.4.2 The site archive, assuming finds are encountered, will be deposited with National Museums Liverpool (NML) following completion of the project. This will follow appropriate industry guidelines (CifA 2020b) and NML's own guidelines (NML 2021). The Archaeology Data Service (ADS) online database project Online Access to Index of Archaeological Investigations (OASIS) will be created once the fieldwork commences and then completed as part of the archiving phase of the project.

5.4.3 A summary of OA's general approach to documentary archiving can be found in *Appendix H*.

6 HEALTH AND SAFETY

6.1 Roles and responsibilities

- 6.1.1 The Senior Project Manager, Paul Dunn, has responsibility for ensuring that safe systems of work are adhered to on site. Elements of this responsibility will be delegated to the Project Officer, who implements these on a day to day basis. Paul Dunn and the Project Officer are supported by OA North's Health and Safety Advisor, Fraser Brown.
- 6.1.2 The Director with responsibility for Health and Safety at OA is Dan Poore Tech IOSH (Chief Business Officer).

6.2 Method statement and risk assessment

- 6.2.1 A summary of OA's general approach to health and safety can be found in *Appendix I*. A risk assessment has also been undertaken and approved and will be kept on site, along with OA's standard Health and Safety file, which will contain all relevant health and safety documentation.
- 6.2.2 The Health and Safety file will be available to view at any time.

6.3 Monitoring of works

- 6.3.1 At least two weeks' notice of the commencement of the works will be given to Alison Plummer, Planning Archaeologist for MEAS.
- 6.3.2 Alison will have free access to the site (subject to Health and Safety considerations) and all records to ensure the works are being carried out in accordance with this WSI and all other relevant standards.

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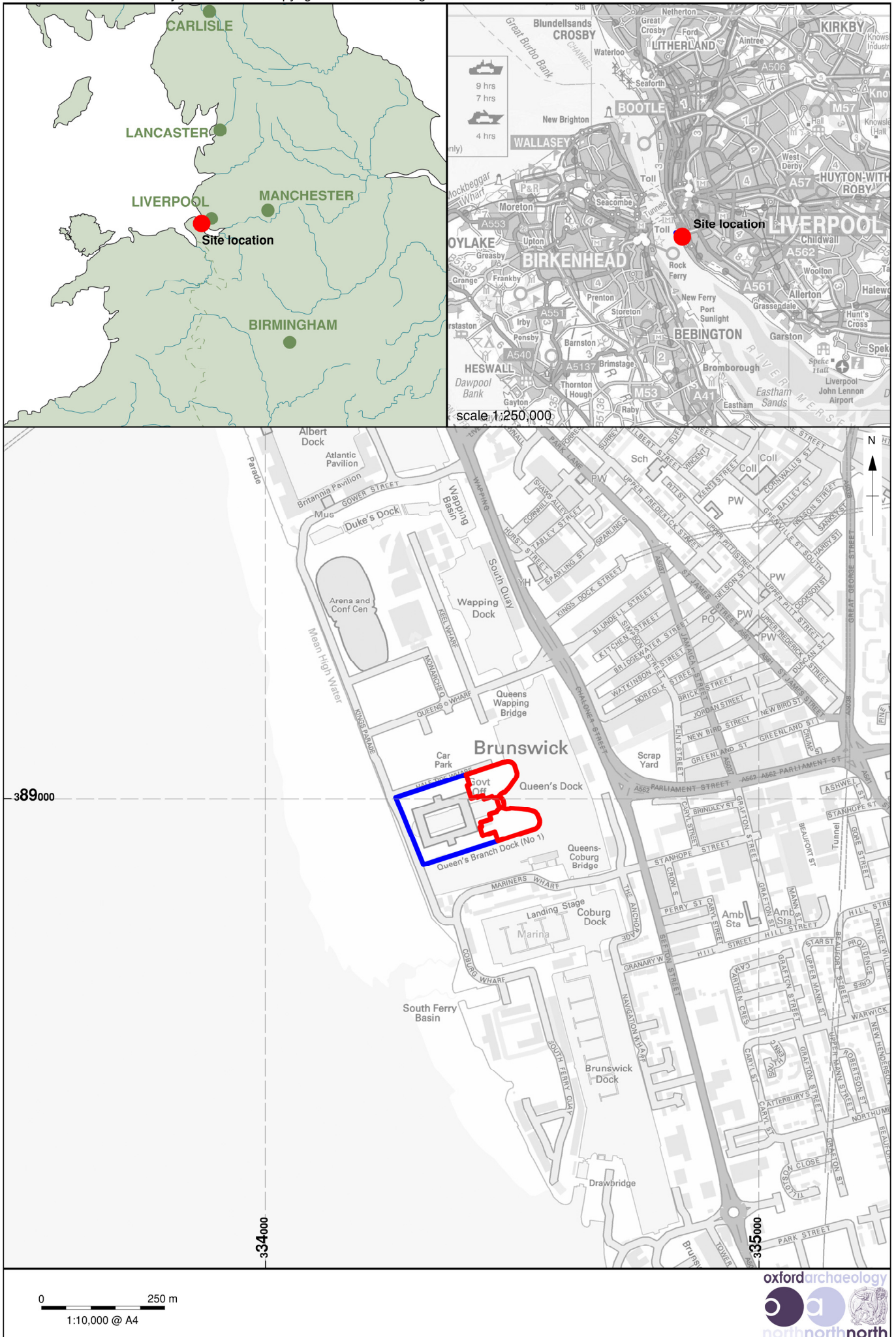


Figure 1: Site location

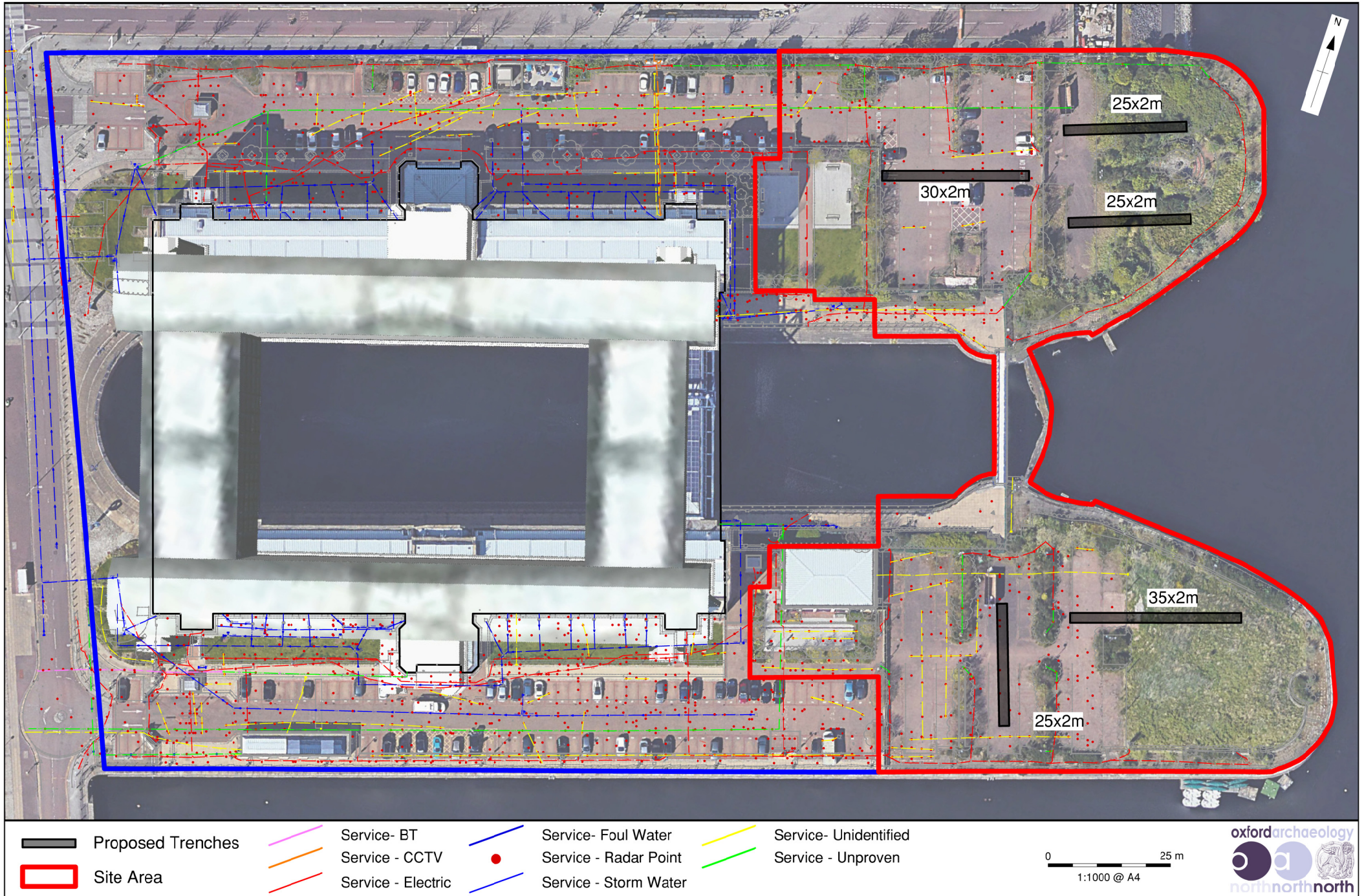


Figure 2: Proposed trenches superimposed on aerial photography (Google)

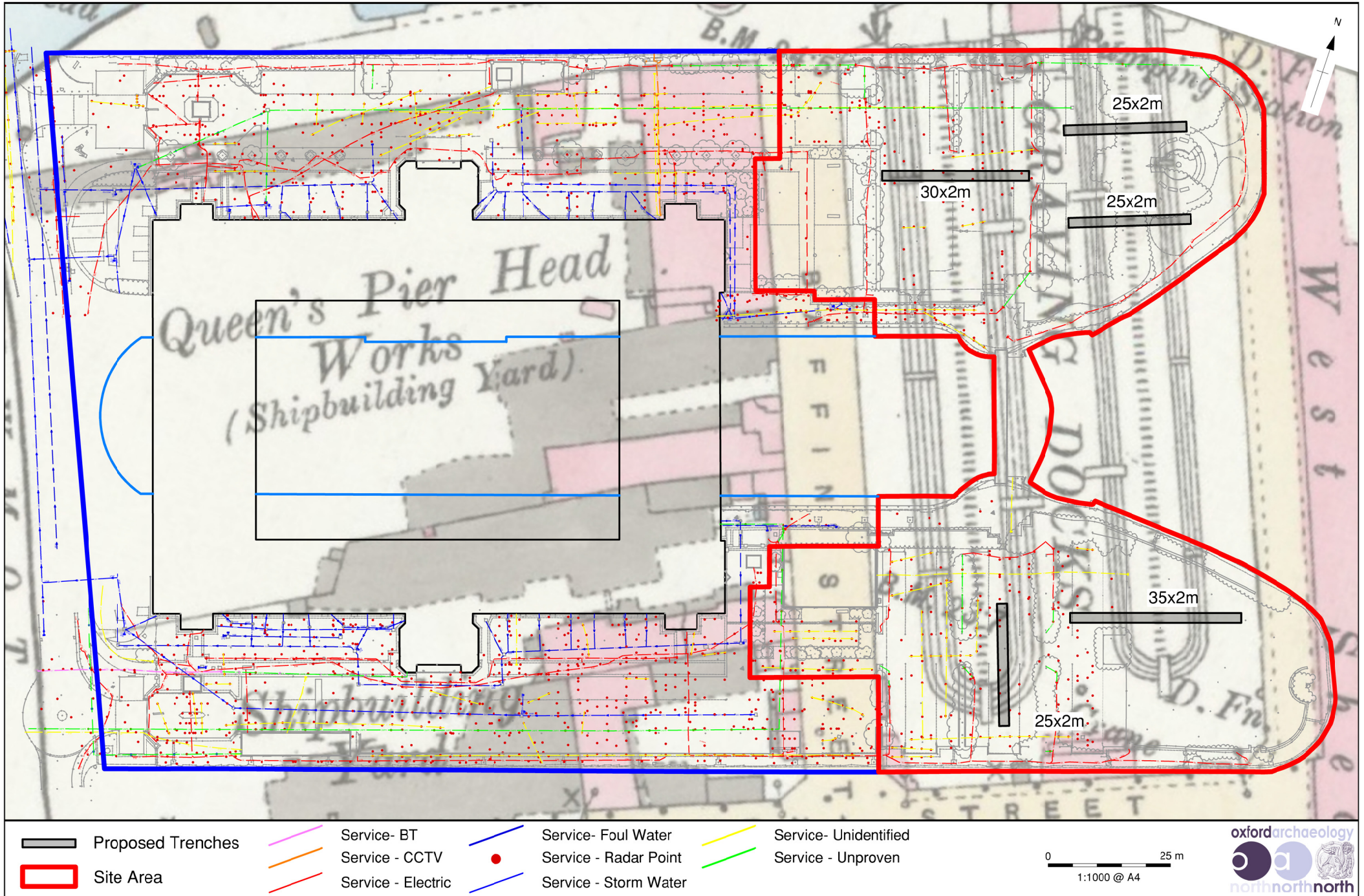


Figure 3: Proposed trenches superimposed on the Ordnance Survey 25":1 mile map of 1890

OA STANDARD FIELDWORK METHODOLOGY APPENDICES

The following methods and terms will apply, where appropriate, to all OA fieldwork unless varied by the accompanying detailed Written Scheme of Investigation.

Copies of all OA internal standards and guidelines referred to below are available on request.

APPENDIX A GENERAL EXCAVATION AND RECORDING METHODOLOGY

A.1 Standard methodology – summary

Mechanical excavation

- A.1.1 An appropriate mechanical excavator will be used for machine excavation. This will normally be a JCB or 360° tracked excavator with a 1.5 m to 2 m wide toothless ditching bucket. For work with restricted access or working room a mini excavator may be used.
- A.1.2 All mechanical excavation will be undertaken under direct archaeological supervision.
- A.1.3 All undifferentiated topsoil or overburden of recent origin will be removed down to the first significant archaeological horizon, in successive, level spits.
- A.1.4 Following mechanical excavation, all areas that require examination or recording will be cleaned using appropriate hand tools.
- A.1.5 Spoil heaps will be monitored in order to recover artefacts to assist in the analysis of the spatial distribution of artefacts. Modern artefacts will be noted but not retained.
- A.1.6 After recording, evaluation trenches and test pits will usually be backfilled with excavated material in reverse order of excavation, and compacted as far as is practicable with the mechanical excavator. Area excavations will not normally be backfilled.

Hand excavation

- A.1.7 All investigation of archaeological levels will usually be by hand, with cleaning, examination and recording both in plan and section.
- A.1.8 Within significant archaeological levels the minimum number and proportion of features required to meet the aims of the excavation will be hand excavated. Pits and postholes will usually be subject to a 50% sample by volume. Linear features will be sectioned as appropriate. More complex features such as those associated with funerary activity will usually be subject to 100% hand excavation.
- A.1.9 In the case of evaluations, it is not necessarily the intention that all trial trenches will be fully excavated to natural stratigraphy, but the depth of archaeological deposits across the site will be assessed. The stratigraphy of a representative sample of the evaluation trenches will be recorded even where no archaeological deposits have been identified. Any excavation, both by machine and by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits, which appear to be worthy of preservation in situ.

Recording

- A.1.10 Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.
- A.1.11 Where stratified deposits are encountered a Harris matrix will be compiled during the course of the excavation.
- A.1.12 Plans will normally be drawn at 1:100, but on urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at scale 1:10 or recorded using geo-referenced digital photography.
- A.1.13 The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.
- A.1.14 A register of plans will be kept.
- A.1.15 Long sections of showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20.
- A.1.16 A register of sections will be kept.
- A.1.17 Generally, all sections will be tied in to Ordnance Datum.
- A.1.18 A full photographic record, illustrating in both detail and general context the principal features and finds discovered will be maintained. The photographic record will also include working shots to illustrate more generally the nature of the archaeological work.
- A.1.19 Photographs will be recorded on OA Photographic Record Sheets.

A.2 Relevant industry standards and guidelines

- A.2.1 The Chartered Institute for Archaeologists (CIfA) Standard and Guidance notes relevant to fieldwork are:
- Standard and guidance for archaeological field evaluation, 2014 (updated 2020)
 - Standard and guidance for archaeological excavation, 2014 (updated 2020)
 - Standard and guidance for an archaeological watching brief, 2014 (update 2020)
- A.2.2 These will be adhered to at all times.

A.3 Relevant OA manual and other supporting documentation

- A.3.1 All fieldwork will be undertaken in accordance with the requirements of the OA Field Manual (ed. D Wilkinson 1992), and the revised OA fieldwork manual (publication forthcoming).
- A.3.2 Further guidance is provided to all excavators in the form of the OA 'Fieldwork Crib Sheets - a companion guide to the Fieldwork Manual'. These have been issued ahead of formal publication of the revised Fieldwork Manual.

APPENDIX B GEOMATICS AND SURVEY

B.1 Standard methodology - summary

- B.1.1** The aim of OA methodology is to provide comprehensive survey cover of all investigation areas. Additionally, it is designed to provide coverage for any areas, beyond the original scope of the project, which arise as a result of further work. It provides digital plans of all required elements of the project and locates them within an overall grid.
- B.1.2** It also maintains all necessary survey data and ensures that the relevant information is copied into the primary record, in order to ensure the integrity of the project archive. Furthermore, it ensures that all core data is securely stored and backed up. It establishes accurate project reference systems utilising a series of control stations and permanent base lines.
- B.1.3** The survey will be conducted using a combination of GPS/GNSS (Global Positioning System/Global Navigation Satellite System), hand-measured elements, Total Station Theodolite (TST) survey utilising Reflectorless Electronic Distance Measurement (REDM), or photogrammetry where appropriate.
- B.1.4** Before the main work commences, a network of control stations will be laid out encompassing the area as necessary. Control stations will be tied in to known points or existing features using rigorous metric observation. The control network will be set in using a TST to complete a traverse or using techniques as appropriate to ensure sufficient accuracy. A GNSS, or other appropriate method, will be used to orientate the control network to National Grid or other recognised coordinate system.
- B.1.5** Control stations will be checked by closed traverse and/or GNSS, as appropriate. The accuracy of these control stations will be accessed on a regular basis and re-established accordingly. Control stations will be recorded on Survey Control Station sheets.
- B.1.6** Each control station will be marked with a PGM (Permanent Ground Marker). Witness diagrams will include the full 3-D co-ordinates generated, a sketch diagram and measurements to at least three fixed details, written description of the mark and a photograph of the control point in its environs.
- B.1.7** Prior to entry into the field all equipment will be checked, and all pre-survey information will be uploaded onto survey equipment as appropriate. Prior to conducting the survey, the site will be reconnoitred for locations for a viable control network and check the line of sight and any possible hindrance to survey. Daily record sheets will be kept recording daily tasks and conditions as appropriate.
- B.1.8** All spatial data will be periodically downloaded uploaded and backed up to our central servers via ftp. It will be cleaned, validated and inspected.
- B.1.9** All survey data will be documented on daily survey record sheets as necessary. Information entered on these sheets includes key set up information (Instrument height etc.) as well as daily variables and errors/comments. All survey data will be digitally recorded in a raw format and translated during the download process this

shall allow for any errors to be cross referenced with the daily survey record and corrected accordingly.

- B.1.10 A summary of survey work will be produced as needed to access development and highlight problems. Technical support for the survey equipment and download software shall be available at all times. In those instances, where sites are remotely operated, all digital data will be backed up regularly via ftp to Oxford on a regular basis.
- B.1.11 A site plan will initially be created by a rapid survey of relevant archaeological features by mapping their extent using a combination of TST and GNSS. This will form the basis for deciding excavation strategy and will be updated as the excavation clarifies the extent of, and relationships between, archaeological features.
- B.1.12 Areas of complex stratigraphy will be hand drawn or recorded by photogrammetry as appropriate. Where hand drawn, at least two Drawing Points (DPs) will be set in as a baseline and measurements taken off this by tape and offset. The hand drawn plans will be referenced to the digitally captured pre-site plan by measuring in the DPs with a TST or GNSS. These hand drawn elements will then be scanned in, geo-referenced using the DPs as reference points and digitised following OA's digitising protocols. For further details on hand planning procedure please refer to the fieldwork guidelines.
- B.1.13 Photogrammetry may also be used to record standing structures or burials. This will be carried out in line with Standard OA procedures for photogrammetry.
- B.1.14 Survey data recorded in the field will be downloaded using appropriate downloading software, and saved as an AutoCAD Map DWG file, or an ESRI Shapefile. These files will be regularly updated and backed up with originals being stored on an OA server in Oxford.
- B.1.15 All drawings will be composed of closed polygons, polylines or points in accordance with the requirements of GIS construction and OA Geomatics protocols. Once created, additional GIS/CAD work will normally be carried out at the local OA central office or at on-site remote locations when appropriate. Support for all GIS/CAD work will be available from OA's Oxford Office during normal office hours. The aim of the GIS/CAD work is to produce workable draft plans, which can be produced as stand-alone products, or can be readily converted to GIS format. Any hand-drawn plans will be scanned and digitised on site in the first instance. Subsequent plans will be added to the main drawing as it develops.
- B.1.16 All plan scans will be numbered according to their plan site number. Digital plans will be given a standard new plan number taken out from the site plan index.
- B.1.17 Information (metadata) on all other digital files will be created and stored as appropriate. At the end of the survey all data recorded will be made available for archiving purposes.

B.2 Relevant industry standards and guidelines

- B.2.1 Historic England, 2017 Understanding the Archaeology of Landscapes A Guide to Good Recording Practice
- B.2.2 Historic England, 2015 Metric Survey Specifications for Cultural Heritage (3rd edn)

B.2.3 Historic England, 2016 Understanding Historic Buildings: A Guide to Good Recording Practice

B.2.4 Historic England, 2017 Photogrammetric Applications for Cultural Heritage: Guidance for Good Practice

B.3 Relevant OA manual and other supporting documentation

B.3.1 OA South Metric Survey, Data Capture and Download Procedures

B.3.2 OA South Digitising Protocols

B.3.3 OA South GIS Protocols

B.3.4 These will be superseded by the OA South Geomatics Manual (in progress).

APPENDIX C ENVIRONMENTAL EVIDENCE

C.1 Standard methodology – summary

- C.1.1 Different environmental and geoarchaeological sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Where possible an environmental specialist(s) will visit the site to advise on sampling strategies. Sampling methods will follow guidelines produced by Historic England and Oxford Archaeology. A register of samples will be kept. Specialists will be consulted where non-standard sampling is required (e.g. TL, OSL or archaeomagnetic dating) and if appropriate will be invited to visit the site and take the samples.
- C.1.2 Geoarchaeological sampling methods are site specific, and methodologies will be designed in consultation with the geoarchaeological manager on a site by site basis.
- C.1.3 Bulk soil samples, where possible of 40 litres or 100% of a deposit if less is available, will be taken from potentially datable features and layers for flotation for charred plant remains and for the recovery of small bones and artefacts. Larger soil samples (up to 100L) may be taken for the complete recovery of animal bones, marine shell and small artefacts from appropriate contexts. Smaller bulk samples (general biological samples) of 10-20 litres will be taken from any waterlogged deposits present for the recovery of macroscopic plant remains and insects. Series of incremental 2L samples may be taken through buried soils and deep feature fills for the recovery of snails and/or waterlogged plant remains, depending on the nature of the stratigraphy and of the soils and sediments. Columns will be taken from buried soils, peats and waterlogged feature fills for pollen and/or phytoliths, diatoms, ostracods and foraminifera if appropriate. Soil samples will be taken for soil investigations (particle size, organic matter, bulk chemistry, soil micromorphology etc.) and possibly for metallurgical analysis in consultation with the appropriate specialists.
- C.1.4 Bulk samples from dry deposits will be processed by standard water flotation using a modified Siraf-style machine and meshes of 0.25mm (flot) and 0.5 or 1mm depending on sediment type and like modes of preservation (residue). Heavy residues will be wet sieved, air dried and sorted. Samples taken exclusively for the recovery of bones, marine shell or artefacts will be wet sieved to 2mm. Waterlogged samples (1L sub-sample) and snail samples (2L) will be processed by hand flotation with flots and residues collected to 0.25mm (waterlogged plants) and 0.5mm (snails) respectively; these flots and residues will be sorted by the specialist. Samples specifically taken for insects, pollen, other microflora and microfauna, metallurgy and soil analysis will be submitted as whole earth to the appropriate specialists or processed following their instructions.

C.2 Relevant industry standards and guidelines

- C.2.1 Historic England, 2010 Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood.
- C.2.2 Historic England, 2018 Waterlogged Organic Artefacts: Guidelines on their Recovery, Analysis and Conservation.

- C.2.3 Historic England, 2011 Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post excavation, (2nd ed)
 - C.2.4 Historic England, 2004 Dendrochronology: Guidelines on Producing and Interpreting Dendrochronological Dates (revision due 2020).
 - C.2.5 University of Bradford, 2019 Archaeomagnetism: Magnetic Moments in the Past <https://www.brad.ac.uk/archaeomagnetism/>
 - C.2.6 Historic England, 2008 Luminescence Dating. Guidelines on Using Luminescence Dating in Archaeology (revision due 2020).
 - C.2.7 Historic England, 2008 Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains (currently being revised).
 - C.2.8 Historic England, 2015 Archaeometallurgy. Guidelines for Best Practice.
 - C.2.9 Historic England, 2015 Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record.
 - C.2.10 Historic England, 2017 Organic Residue Analysis and Archaeology.
 - C.2.11 Baker, P and Worley, F, 2019 Animal Bones and Archaeology: Recovery to archive. Historic England
- C.3 Relevant OA manual and other supporting documentation**
- C.3.1 Oxford Archaeology 2017. Environmental Sampling Guidelines, 4th ed.

APPENDIX D ARTEFACTUAL EVIDENCE

D.1 Standard methodology - summary

- D.1.1 Before a site begins arrangements concerning the finds will be discussed with the Finds Team Leader. Information will be provided by the project manager about the nature of the site, the expected size and make-up of the finds assemblage and any site specific finds retrieval strategies. On-site requirements will be discussed and a conservator appointed who can be called on to make site visits if required. Special requirements regarding particular categories of material will be raised at this early stage for instance the likelihood of recovering assemblages of waterlogged material, large timbers, quantities of structural stone or ceramic building material. Specialists may be required to visit sites to discuss retrieval strategies.
- D.1.2 The project manager will supply the Finds Team Leader with contact details of the landowner of the site so that consent to deposit any finds resulting from the investigation can be sought.
- D.1.3 The on-site retrieval, lifting and short term packaging of bulk and small finds will follow the detailed guidelines set out in the OA Finds Manual (sections 2 and 3), First Aid for Finds and the UKIC conservation guidelines No.2.
- D.1.4 All finds recovered from site will be transported to an OA regional office for processing; local sites will return finds at the end of each day, away based sites at the end of each week. Special arrangements can be discussed for certain sites with the Team Leader before the start of a project. Larger long running sites may in some instances set up on-site processing units to deal with the material from a particular site.
- D.1.5 All finds qualifying as Treasure will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act (1996), and the Treasure (Designation) Order 2002. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.
- D.1.6 Each box of finds will be accompanied by a finds context checklist itemising the finds within each box. The number of bags of finds from each context and individual small find from each context will be recorded. A member of the processing team will check the list when it arrives in the department. There are separate forms for finds recovered from fieldwalking.
- D.1.7 The processing programme is reviewed on a weekly basis and priorities are worked out after discussions with the Fieldwork Team Leader and the Post-excavation Team Leader. Project managers will keep the Finds Team Leader informed of any pressing deadlines that they are aware of. All finds from evaluations are dealt with as a matter of priority.
- D.1.8 All bulk finds are washed (where appropriate), marked, bagged and boxed by the processing team according to the guidelines set out in section 4 and 5 of the OA Finds Manual, First-aid for finds and the UKIC guidelines No.2. They must also take into account the requirements of the receiving museum. Primary data recording count and weight of fragments by material from each context is recorded on the site database.

- D.1.9 Unstable and sensitive objects are recorded onto the database and then packaged and stored in controlled environments according to their individual requirements. The advice of a conservator will be sought for sensitive objects in need of urgent conservation. All metalwork will be x-rayed prior to assessment (and to meet the requirements of most receiving museums).
- D.1.10 Finds recovered from the environmental sample processing will be incorporated into the main assemblage and added to the database.
- D.1.11 On completion of the processing and data entry a finds file for each archaeological investigation will be produced, a summary of which is available for the project manager. The assemblage is allocated an OA number for storage purposes. Bulk finds are stored on a roller racking system, metals in a secure controlled storage and organic finds are refrigerated where possible.
- D.1.12 The movement of finds in and out of the storage areas is strictly monitored and recorded. Carbon copy transit forms exist to record this information. Finds will not be removed from storage without the prior knowledge of the Finds Team Leader.
- D.1.13 Finds information summarised in the finds compendium is used to assess the finds requirements for the post excavation stages of the project. The Team Leader holds a list of all specialists used by OA (see below) both internal and external.
- D.1.14 On completion of the post excavation stage of the project the team prepares the finds assemblage for deposition with the receiving museum. Discussions will be held with the museum, the excavator and the Finds Team Leader to finalise any selection, retention or discard policy. Most museums issue strict guidelines for the preparation of archives for deposition with their individual labelling, packaging and recording requirements.

D.2 Relevant industry standards and guidelines

- D.2.1 ClfA, 2014 (updated 2020) Standard and guidance for the collection, documentation, conservation and research of archaeological materials
- D.2.2 Society of Museum Archaeologists, 1993 Selection, retention and dispersal of Archaeological Collections. Download available via <http://www.socmusarch.org.uk/publica.htm>
- D.2.3 UKIC, 1983 Packaging and Storage of Freshly-Excavated Artefacts from Archaeological Sites. Conservation Guidelines No.2. Archaeology Section, United Kingdom Institute for Conservation.
- D.2.4 UKIC, 1988 Excavated Artefacts and Conservation: UK sites Revised Edition. Conservation Guidelines No.1. Archaeology Section, United Kingdom Institute for Conservation.
- D.2.5 Watkinson, D E & Neal, V, 1998 First Aid for Finds (3rd edition). RESCUE & UKIC

D.3 Relevant OA manual and other supporting documentation

- D.3.1 Allen, L, and Cropper, C (internal publication only) Oxford Archaeology Finds Manual.

APPENDIX E HUMAN REMAINS

E.1 Standard methodology - summary

- E.1.1 Human remains will not be excavated without a relevant licence/faculty and, where applicable (for example, a post medieval cemetery), a risk assessment from the local environmental officer.
- E.1.2 All human remains will be treated with due care and regard to the sensitivities involved, and will be screened from the public throughout the course of the works.
- E.1.3 Excavation will be undertaken in accordance with ClfA (Roberts and McKinley 1993), Historic England (2018), the Advisory Panel on the Archaeology of Burials in England (APABE, 2015, 2017) and British Association of Biological Anthropology and Osteoarchaeology Code of Practice (2019) and Code of Ethics (2019). For crypts and post-medieval burials, the recommendations set out by the ClfA (Cox 2001) and by the Association of Diocesan and Cathedral Archaeologists and APABE (2010) are also relevant.
- E.1.4 In accordance with recommendations set out in the Historic England and Church of England (2005) and updated by the Advisory Panel on the Archaeology of Burials in England (2017), skeletons will not be excavated beyond the limits of the trench, unless they are deemed osteologically or archaeologically important.
- E.1.5 Where any soft tissue survives and/or materials (for example, inner coffins, mattresses and other paddings) soaked in body liquor, no excavation or handling of the remains will take place until an appropriate risk assessment has been undertaken. Relevant protocols (i.e. Cox 2001) for their excavation, recording and removal will be adhered to.
- E.1.6 OA does not excavate or remove modern burials (those less than 100 years old) and does not remove or open sealed lead coffins. Appropriate PPE (e.g. chemical suit, latex gloves) will be worn by all staff when working with lead coffins.
- E.1.7 Graves and their contents will be hand excavated in plan. Each component (for example, skeleton, grave cut, coffin (or remains of), grave fill) will be assigned a unique context number from a running sequence. A group number will also be assigned to all of these, and small finds numbers to features such as coffin nails, hobnails and other grave goods (as appropriate).
- E.1.8 Soil samples will be normally taken during the excavation of inhumations, usually from the region of the skull, chest, right hand, left hand, abdomen and pelvis, right foot and left foot. Infants (circa. less than 5 years) will normally be recovered as bulk samples. Soil samples will also be taken from graves that appear to contain no human bone.
- E.1.9 Burials (including the skeleton, cremation, coffin fittings, coffin, urn, grave goods / other) will be recorded by photographic and written record using specialised pro forma context sheets, although these records may only include schematic representations of the location and position of the skeletons, depending on the nature and circumstances of the burial.

- E.1.10 Where digital imaging is used it will be done in accordance with the British Association of Biological Anthropology and Osteoarchaeology Recommendations on the Ethical Issues Surrounding 2D and 3D Digital Images of Human Remains (2019).
- E.1.11 Where necessary, hand drawn plans (usually at 1:10, sometimes 1:5) will be made, especially of contexts where required details cannot be adequately seen using photography (for example, urned cremations; undisturbed hob nails).
- E.1.12 Levels will be taken. For inhumations this will be on the skull, pelvis and feet as a minimum.
- E.1.13 Human remains that are exhumed will be bagged and labelled according to skeletal region and carefully packed into suitable containers (for example, acid free cardboard boxes) and transported to a suitable storage location. Any associated coffins and coffin fittings will be contained with the human remains wherever possible.
- E.1.14 Urned cremations will not usually be half sectioned, but excavated in spits and/or quadrants (i.e. large deposits or spreads), or recovered as a bulk sample.
- E.1.15 Wherever possible, urned cremations will be carefully bandaged, recovered whole and will be excavated in spits in the laboratory, as per the recommendations of McKinley (2004, 2017).
- E.1.16 Unless deemed osteologically or archaeologically important disarticulated bone / chanel will be collected and reserved for re-burial if immediate re-internment as close to its original position is not practicable. In some instances, a rapid scan of this material may be undertaken by a qualified osteologist, if deemed relevant.
- E.1.17 If undisturbed, pyre sites will normally be excavated in quadrants, at the very least in 0.5 m blocks of 0.5 m spits.
- E.1.18 Pyre debris dumps will be half sectioned or quadrant and will be subject to 100% sampling.
- E.1.19 Wooden and lead coffins and any associated fittings, including fixing nails will be recorded on a pro forma coffin recording sheet. All surviving coffin fittings will be recorded by reference to Reeve and Adams (1993) and the unpublished master catalogue that is being compiled by OA. Where individual types cannot be paralleled, they will be drawn and/ or photographed and assigned a style number. Biographical details obtained from legible departum plate inscriptions will be recorded and further documentary research will be made.
- E.1.20 Funerary structures, such as brick shaft graves and/or vaults will be recorded by photogrammetry or hand-drawn at a scale of 1:10 or 1:20, as appropriate. Location, dimensions and method of construction will be noted, and the structure added to the overall trench plan.
- E.1.21 Memorials, including headstones, revealed within the areas of development will be recorded irrespective of whether they are believed to be in situ.
- E.1.22 Where required, memorials will be accorded an individual context number and will also be included as part of the grave group, if the association with a burial is clear.

E.1.23 Memorials will be recorded on pro-forma context sheets, based on and following the guidelines set out by Mytum (2002), and will include details of:

- Shape
- Dimensions
- Type of stone used
- Condition, completeness and fragmentation of stones, no longer in original positions
- Iconography (an illustration may best describe these features)
- Inscription (verbatim record of inscription; font of the lettering)
- Stylistic type

E.2 Relevant industry standards and guidelines

- E.2.1 Advisory Panel on the Archaeology of Burials in England, 2013 Science and the Dead. A guideline for the destructive sampling of archaeological human remains for scientific analysis. English Heritage Publishing.
- E.2.2 Advisory Panel on the Archaeology of Burials in England, 2017 Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England
- E.2.3 Advisory Panel on the Archaeology of Burials in England, 2015 Large Burial Grounds. Guidance on sampling in archaeological fieldwork projects
- E.2.4 Association of Diocesan and Cathedral Archaeologists and APABE, 2010 Archaeology and Burial Vaults. A guidance note for churches. Guidance Note 2
- E.2.5 British Association of Biological Anthropology and Osteoarchaeology. 2019a Code of Practice (<http://www.babao.org.uk/index/ethics-and-standards>)
- E.2.6 British Association of Biological Anthropology and Osteoarchaeology. 2019b Code of Ethics (<http://www.babao.org.uk/index/ethics-and-standards>)
- E.2.7 British Association of Biological Anthropology and Osteoarchaeology, 2019c Recommendations on the Ethical Issues Surrounding 2D and 3D Digital Images of Human Remains (<http://www.babao.org.uk/index/ethics-and-standards>)
- E.2.8 Cox, M, 2001 Crypt archaeology. An approach. ClfA Paper No. 3
- E.2.9 English Heritage, 2002 Human Bones from Archaeological Sites. Guidelines for producing assessment documents and analytical reports
- E.2.10 Historic England, 2018 The Role of the Human Osteologist in an Archaeological Fieldwork Project. Swindon, Historic England
- E.2.11 McKinley, J, and Roberts, C, 1993 Excavation and post-excavation treatment of cremated and inhumed human remains, ClfA Technical Paper No. 13

- E.2.12 McKinley, J, 2004 Compiling a skeletal inventory: cremated human bone. In Brickley, M, and McKinley, J (eds) Guidelines to the Standards for Recording Human Remains, ClfA Technical Paper No. 7. 9-13
- E.2.13 McKinley, J, 2017 Compiling a skeletal inventory: cremated human bone. In Mitchell P, and Brickley, M (eds) Updated Guidelines to the Standards for Recording Human Remains, ClfA 14-19
- E.2.14 Mitchell P, and Brickley, M (eds) Updated Guidelines to the Standards for Recording Human Remains, ClfA 2017
- E.2.15 Mytum, H, 2000 Recording and Analysing Graveyards. CBA Handbook No. 15
- E.2.16 Reeve, J, and Adams, M, 1993 The Spitalfields Project. Volume I – The Archaeology Across the Styx. CBA Research Report No. 85
- E.2.17 The Human Tissue Act 2004

E.3 Relevant OA manual and other supporting documentation

- E.3.1 Loe, L, 2008 The Treatment of Human Remains in the Care of Oxford Archaeology. Oxford Archaeology internal policy document
- E.3.2 Oxford Archaeology 2018 *Fieldwork Manual Human Remains* unpublished

APPENDIX F REPORTING

F.1 Standard methodology - summary

F.1.1 For Watching Briefs and Evaluations, the style and format of the report will be determined by OA, but will include as a minimum the following:

- A location plan of trenches and/or other fieldwork in relation to the proposed development.
- Plans and sections of features located at an appropriate scale.
- A section drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
- A summary statement of the results.
- A table summarising the features, classes and numbers of artefacts contained within, spot dating of significant finds and an interpretation.
- A reconsideration of the methodology used, and a confidence rating for the results.
- An interpretation of the archaeological findings both within the site and within their wider landscape/townscape setting.

F.1.2 For Excavations, a Post-Excavation Assessment and Project Design will generally be prepared, as prescribed by Historic England Management of Research Projects in the Historic Environment (MoRPHE) 2015, Section 2.3. This will include a Project Description containing:

- A summary description and background of the project.
- A summary of the quantities and assessment of potential for analysis of the information recovered for each category of site, finds, dating and environmental data. Detailed assessment reports will be contained within appendices.
- An explicit statement of the scope of the project design and how the project relates to any other projects or work preceding, concurrent with or following on from it.
- A statement of the research aims of the fieldwork and an illustrated summary of results to date indicating to what extent the aims were fulfilled.
- A list of the project aims as revised in the light of the results of fieldwork and the current post-excavation assessment process.

F.1.3 A section on Resources and Programming will also be produced, containing:

- A list of the personnel involved indicating their qualifications for the tasks undertaken, along with an explanation of how the project team will communicate, both internally and externally.
- A list of the methods which will be used to achieve the revised research aims.

- A list of all the tasks involved in using the stated methods to achieve the aims and produce a report and research archive in the stated format, indicating the personnel and time in days involved in each task. Allowance should be made for general project-related tasks such as monitoring, management and project meetings, editorial and revision time.
- A cascade or Gantt chart indicating tasks in the sequence and relationships required to complete the project. Due allowance will be made for leave and public holidays. Time will also be allowed for the report to be read by a named academic referee as agreed with the County Archaeological Officer, and by the County Archaeological Officer.
- A report synopsis indicating publisher and report format, broken down into chapters, section headings and subheadings, with approximate word lengths and numbers and titles of illustrations per chapter. The structure of the report synopsis should explicitly reflect the research aims of the project.

F.1.4 The Project Design will be submitted to the County Archaeological Officer or equivalent for agreement.

F.1.5 Under certain circumstances (e.g. with very small mitigations), and as agreed with the County Archaeological Officer or equivalent, a formal Assessment and Project Design may not be required and either the project will continue straight to full analysis, or a simple Project Proposal (MoRPHE 2015 Section 2.1) will be produced prior to full analysis. This proposal may include:

- A summary of the background to the project
- Research aims and objectives
- Methods statement outlining how the aims and objectives will be achieved
- An outline of the stages, products and tasks
- Proposed project team
- Estimated overall timetable and budget if appropriate.

F.1.6 Once the post-excavation Project Design or Project Proposal has been accepted, the County Archaeological Officer or their appointed deputy will monitor the progress of the post-excavation project at agreed points. Any significant variation in the project design will be agreed with the County Archaeological Officer.

F.1.7 The results of the project will be published in an appropriate archaeological journal or monograph. The appropriate level of publication will be dependent on the significance of the fieldwork results and will be agreed with the County Archaeological Officer. An OASIS (Online Access to the Index of Archaeological Investigations) form will be completed for each project as per Historic England guidelines.

F.2 Relevant industry standards and guidelines

F.2.1 Oxford Archaeology (OA) adheres to the national standards in post-excavation procedure as outlined in Historic England's Management of Research Projects in the Historic Environment (MoRPHE; HE 2015). Furthermore, all post-excavation projects

take into account the appropriate regional research frameworks as well as national research agendas such as the Framework for Historic Environment Activities & Programmes in Historic England (SHAPE; EH 2008).

APPENDIX G LIST OF SPECIALISTS REGULARLY USED BY OA

G.1.1 Below are two tables, one containing 'in-house' OA specialists, and the other containing a list of external specialists who are regularly used by OA.

Internal archaeological specialists used by OA

Specialist	Specialism	Qualifications
John Cotter	Medieval and Post Medieval pottery, Clay Pipe and CBM	BA (Hons), MCIfA
Dr Alex Davies	Prehistoric Pottery	BA (Hons), MA, PhD, ACIfA
Edward Biddulph	Roman Pottery	BA (Hons), MA, MCIfA
Kate Brady	Roman Pottery	BA, ACIfA
Cynthia Poole	CBM and Fired Clay	BA (Hons), MSc
Leigh Allen	Metalwork and worked bone	BA (Hons), PGDip
Anni Byard	Metalwork, coins and glass	MSx, MCIfA
Dr Ruth Shaffrey	Worked stone artefacts	BA, PhD, MCIfA
Dr Rebecca Nicholson	Fish and Bird Bone	BA (Hons), MA, D.Phil, MCIfA, FSA Scot
Dr Mairead Rutherford	Pollen	BSc, MSc
Ian Smith	Animal Bone	BA (Hons), MSc, PCIfA
Dr Martyn Allen	Animal Bone	BA (Hons), MA, PhD
Adrienne Powell	Animal Bone	BA (Hons), MA
Dr Denise Druce	Charred plant remains, charcoal and pollen	BA (Hons), PhD, MCIfA
Sharon Cook	Charred plant remains	BSc, MSc, ACIfA
Elizabeth Stafford	Geoarchaeology and land snails	BA (Hons), MSc
Carl Champness	Geoarchaeology	BA (Hons), MSc, ACIfA
Nicola Scott	Archaeological archive deposition	BA (Hons Dunelm)
Mike Donnelly	Flint	BSc, MCIfA
Dr Louise Loe	Human Bone	BA PhD, MCIfA, BABAO
Helen Webb	Human Bone	BSc, MSc, MCIfA, BABAO
Mark Gibson	Human Bone	BA, MSc, ACIfA, BABAO
Dr Lauren McIntyre	Human Bone	BSc, MSc, PhD, MCIfA, BABAO
Zoe Ui Choileain	Human Bone	Pg Dip, MA, Msc, BABAO
Natasha Dodwell	Human Bone	BA, MSc, BABAO

External archaeological specialists regularly used by OA

Specialist	Specialism	Qualifications
Lynne Keys	Slag	BA (Hons)
Quita Mould	Leather	BA, MA
Penelope Walton Rogers, The Anglo Saxon Laboratory	Identification of Medieval Textiles	FSA, Dip.Acc
Dana Goodburn-Brown	Conservation	BSc (Hons), BA, MSc
Steve Allen, York Archaeological Trust	Conservation	BA, MA, MAAIS
Dr Richard Macphail	Soils, especially Micromorphology	BA (Hons), MSc, PhD
Dana Challinor	Charcoal	MA, MSc
Dr Nigel Cameron	Diatoms	BSc, MSc, PhD
Dr David Smith	Insects	BA (Hons), MA, PhD
Professor Adrian Parker	Phytoliths and pollen	BSc (Hons), D.Phil
Dr David Starley	Metalworking Slag	BSc (Hons), PhD
Wendy Carruthers	Charred and waterlogged plant remains	BA (Hons)
Dr John Whittaker	Ostracods and Foraminifera	BA (Hons), PhD
Dr John Crowther	Soil Chemistry	MA, PhD
Dr Martin Bates	Geoarchaeology	BSc, PhD
Dr Dan Miles	Dendrochronology	D.Phil, FSA
Dr Jean-Luc Schwenninger	Optically Stimulated Luminescence Dating	PhD
Dr David Higgins	Clay Pipe	BA, PhD, MCIfA
Dr Hugo Anderson- Wymark	Flint	BSc, PhD, FSA Scot, MCIfA
Dr Damian Goodburn- Brown	Ancient Woodwork	BA, PhD
Dr David Dungworth	Archaeometallurgy and Glassworking	BA (Hons), PhD

APPENDIX H DOCUMENTARY ARCHIVING

Standard methodology – summary

- H.1.1 The documentary archive constitutes all the written, drawn, photographic and digital records relating to the set-up, fieldwork and post-excavation phases of the project. This documentary archive, together with the artefactual and environmental ecofact archive collectively forms the record of the site. The report is part of the documentary archive, and the archive must provide the evidence that supports the conclusions of the report, but the archive may also include data which exceeds the limitations of research parameters set down for the report and which could be of significant value to future researchers.
- H.1.2 At the outset of the project OA Archive manager will contact the relevant local receiving museum or archive repository to notify them of the imminent start of a new fieldwork project in their collecting area. Relevant local archiving guidelines will be observed and site codes, which integrate with the receiving repository, will be agreed for labelling of archives and finds.
- H.1.3 Where there is currently no receiving museum for the project archive, although responsibility for the archive ultimately lies with the client, OA will hold the archive on their behalf for a period of up to 3 years after completion of the report, after which time (in the event that a suitable depository has not been secured) provision for further storage of the archive will be made in agreement with Oxford Archaeology, the client and the relevant planning archaeologist.
- H.1.4 During the course of the project the Archive team will assist the Project Manager in the management of the archive including the cataloguing and development technique suitable for photographic archive requirements.
- H.1.5 The hard copy site archive will be security copied by scanning to PdFA and a copy of this will be housed on the OA Archive Server. A full digital copy of the archive, including scanned hard copy and born digital data, will be deposited with and made publicly available on-line through the ADS. A further copy will be maintained on the OA server and if requested a copy on disk will also be sent to the receiving museum with the hard copy. This will act as a safeguard against the accidental loss and the long-term degeneration of paper records and photographs.
- H.1.6 Born digital data will only be printed to hard copy for the receiving museum where practical. Archive elements that need maintaining in digital form will be sent to ADS in accordance with Arches Standard and ADS guidelines. A copy will be sent to the receiving museum by CD and back-up copies will be stored on the OA digital network. In most cases a digital copy of the report will be included in the OASIS project library hosted by ADS.
- H.1.7 Prior to deposition the Archive team will contact the museum regarding the size and content of the archive and discuss any retention and dispersal policies which may be applicable in line with local and SMA Guidelines ' Selection, Retention & Dispersal of Archaeological Collections' 1993.

- H.1.8 The site archive will then be deposited with the relevant receiving museum or repository at the earliest opportunity unless further archaeological work on the site is expected. The documentary archive will include correspondence detailing landowner consent to deposit the artefacts and any copyright licences in accordance with the receiving museum guidelines. Deposition charges will be required from the client as part of the project costs, but the level of the fee is set by the receiving body and may be subject to change during the lifespan of the project. Changes to archiving charges beyond OA's control will be passed across to the client.
- H.1.9 Oxford Archaeology will retain full copyright of any commissioned reports, tender documents, or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide the receiving repository or museum for the archive with a full licence for use to the client in all matters directly relating to the project as described in the Written Scheme of Investigation, and in line with the relevant receiving body guidelines.
- H.1.10 OA will advise the receiving repository or museum for the archive of 3rd party materials supplied in the course of projects which are not OA's copyright.
- H.1.11 OA undertakes to respect all requirements for confidentiality about the client's proposals provided that these are clearly stated. It is expected that such conditions shall not unreasonably impede the satisfactory performance of the services required. Archaeological findings and conclusions can be kept confidential for a limited period but will be made publicly available in line with the above procedure either after a specified time period agreed with the client at the outset of the project, or where no such period is agreed, after a reasonable period of time. It is expected that clients respect OA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

H.2 Relevant industry standards and guidelines

- H.2.1 At the end of the project the site archive will be ordered, catalogued, labelled and conserved and stored according to the following national guidelines:
- H.2.2 EAC, 2014 A Standard and Guide to Best Practice for Archaeological Archiving in Europe (EAC Guidelines 1)
- H.2.3 ClfA, 2014 (Updated 2020) Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives
- H.2.4 Brown, D, 2011 Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation. AAF
- H.2.5 UKIC, 1990 Guidelines for the preparation of excavation archives for long-term storage
- H.2.6 SMA, 2020 Standards and Guidance in the Care of Archaeological Collections
- H.2.7 Local museum guidelines such as Museum of London Guidelines: (<http://www.museumoflondonarchaeology.org.uk/English/ArchiveResearch/DeposRe> source) will be adopted where appropriate to the archive collecting area.
- H.2.8 The site archive will be prepared to at least the minimum acceptable standard defined in Management of Archaeological Projects 2, Historic England 1991.

H.3 Relevant OA manual and other supporting documentation

H.3.1 The OA Archives Policy.

APPENDIX I HEALTH AND SAFETY

I.1 Standard Methodology - summary

- I.1.1 All work will be undertaken in accordance with the current OA Health and Safety Policy, the OA Site Safety Procedures Manual, a site-specific Risk Assessment and, if required, Safety Plan or Method Statement. Copies of the site-specific documents will be submitted to the client or their representative for approvals prior to mobilisation, and all relevant H and S documentation will be available on site at all times. The Health and Safety documentation will be read in conjunction with the project WSI.
- I.1.2 Where a project falls under the Construction (Design and Management) Regulations (2015), all work will be carried out in accordance with the Principal Contractor's Construction Phase Plan (CPP).

I.2 Relevant industry standards and guidelines

- I.2.1 All work will be carried out according to the requirements of all relevant legislation and guidance, including, but not exclusively:
 - I.2.2 The Health and Safety at Work Act (1974).
 - I.2.3 Management of Health and Safety at Work Regulations (1999).
 - I.2.4 Manual Handling Operations Regulations 1992 (as amended).
 - I.2.5 The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (2013).
 - I.2.6 The Construction (Design and Management) Regulations (2015).
 - I.2.7 Relevant OA manual and other supporting documentation
 - I.2.8 The OA Health and Safety Policy.
 - I.2.9 The OA Site Safety Procedures Manual.
 - I.2.10 The OA Risk Assessment templates.
 - I.2.11 The OA Method Statement template.
 - I.2.12 The OA Construction Phase Plan template.



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APPENDIX B TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description					Orientation	NE-SW
Trench devoid of archaeology. 2m deep sondages excavated at either end of the trench. The north-eastern portion of the trench was disturbed by recent modern trenching. The trench contained two layers of rubble, made ground 105 and 101 , overlain by a thick layer of topsoil 100 at the east end. The north end consisted of 105 made ground, overlain by grey construction gravel on top of which was sand 103 and a layer of brick 102 .					Length (m)	25
					Width (m)	2
					Avg depth (m)	1
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
100	Layer	-	0.72	Topsoil	-	-
101	Layer	-	0.29	Made Ground	-	-
102	Layer	-	0.08	Block paving Surface	-	-
103	Layer	-	0.12	Sand bedding	-	-
104	Layer	-	0.26	Grey gravel	-	-
105	Layer	-	-	Made Ground	-	-

Trench 2						
General description					Orientation	NE-SW
Trench devoid of archaeology and broken up into two sections. Two 2m sondages were excavated. At the eastern end of the trench a layer of red brick rubble was overlain by a concrete pad 203 , which was, in turn, overlain by more layers of made ground 202 , 201 followed by a fine layer of topsoil 200 . In the western end made ground 207 was also overlain by grey gravel 206 , sand 205 and block paving surface 204 .					Length (m)	25
					Width (m)	2
					Avg depth (m)	1
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
200	Layer	-	0.42	Topsoil	-	-
201	Layer	-	0.29	Made Ground	-	-
202	Layer	-	-	Made Ground	-	-
203	Layer	-	0.24	Concrete Pad	-	-
204	Layer	-	0.08	Block paving Surface	-	-
205	Layer	-	0.12	Sand bedding	-	-
206	Layer	-	0.26	Grey gravel	-	-
207	Layer	-	-	Made ground	-	-

Trench 3						
General description					Orientation	NE-SW
Trench was devoid of archaeology. Two 2m sondages were excavated. Deposits consisted of layers of made ground 303 and 304 overlain by the same grey gravel 302 , sand 301 and brick floor 300 as other trenches.					Length (m)	22
					Width (m)	2
					Avg depth (m)	1
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
300	Layer	-	0.08	Block paving Surface	-	-
301	Layer	-	0.09	Sand	-	-
302	Layer	-	0.56	Grey gravel	-	-
303	Layer	-	-	Made Ground	-	-

Trench 4						
General description					Orientation	NE-SW
Trench devoid of archaeology. One 2m deep sondage was excavated. Deposits were made up of made ground 403 overlain by gravel 402 , sand 401 and brick surface 400 .					Length (m)	10
					Width (m)	2
					Avg. depth (m)	1
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
400	Layer	-	0.08	Block paving Surface	-	-
401	Layer	-	0.07	Sand	-	-
402	Layer	-	0.29	Grey gravel	-	-
403	Layer	-	-	Made Ground	-	-

Trench 5						
General description					Orientation	NW-SE
Trench was devoid of archaeology. Deposits consisted of two layers of made ground which were overlain by gravel 502 , sand 501 and a brick surface 500 . Substantially more bricks were present in the rubble at the south-eastern end.					Length (m)	18
					Width (m)	2
					Avg depth (m)	1
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
500	Layer	-	0.08	Brick Surface	-	-
501	Layer	-	0.11	Sand	-	-
502	Layer	-	0.29	Grey gravel	-	-
503	Layer	-	0.29	Made Ground	-	-
504	Layer	-	-	Made Ground	-	-

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APPENDIX D SITE SUMMARY DETAILS

Site name:	Queens Dock Liverpool, Merseyside
Site code:	QDL22
Grid Reference	SJ 34472 88996
Type:	Evaluation
Date and duration:	October 3 rd -5 th 2022
Location of archive:	The archive is currently held at OA North, Mill 3, Moor Lane Mills, Moor Lane, Lancaster, LA1 1QD, and will be deposited with ADS digitally in due course.
Summary of Results:	<p>In October 2022, Oxford Archaeology (OA) North was commissioned by Glenbrook Property to undertake an archaeological trial trench evaluation of a proposed residential development at the site of Queens Dock, Liverpool, Merseyside (NGR: SJ 34472 88996). The work was undertaken as conditions of two Planning Applications (planning refs: 19F/1875 and 20F/2116). The fieldwork took place over three days by a team of two from the 3rd – 5th of October 2022 and comprised the excavation of five trenches that were agreed upon by OA North in discussion with the Planning Archaeologist for the Merseyside Environmental Advisory Service (MEAS). The trenches specifically targeted the remains of two eighteenth century graving docks depicted on historic mapping.</p> <p>The aim of the archaeological works was to fully record and investigate any remains, in order to inform the planning process prior to the development of this site and mitigate any negative impact this development might have. However, the results of the evaluation were very limited, with no evidence of the graving docks or any other feature of archaeological significance being encountered within the trenches. The deposits remaining at the time of excavation indicated that the site prior to the construction of the current graving dock underwent a significant process of demolition and levelling that removed any evidence of remains down to a depth of at least 2m.</p>



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