Archaeological Works at Manchester Museum, Oxford Road, Manchester

Written Scheme of Investigation

September 2018

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Suite 1, First Floor, Dunham House, Cross Street, Sale, M33 7HH

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Prepared on behalf of:	Purcell
Compiled by:	Ben Dyson
Planning Reference:	118410/FO/2017
Listed Building Consent Refs.:	118412-LO-2017,
	118413-LO-2017,
	118414-LO-2017
Local Authority:	Manchester City Council
Site central NGR:	SJ 84500 96640

1 INTRODUCTION

1.1 Project Background

1.1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Research Services Ltd (ARS Ltd) for Purcell (the client). It details a scheme of works relating to the proposed development at Manchester Museum, Oxford Road, Manchester, M13 9PL. The development comprises a two storey extension to Manchester Museum (Use D1 - Museum) to create two new galleries including a Special Exhibition Gallery (temporary exhibitions) and South Asia Gallery (house permanent collection) and associated ancillary space, escape stair and bridge link.

1.1.2 Planning permission (118410/FO/2017) and Listed Building Consents (118412-LO-2017, 118413-LO-2017 and 118414-LO-2017) have been granted for the proposed development by Manchester City Council. Condition 9 of the planning permission and Condition 6 of the Listed Building Consents (all with the same wording) require that:

> *"Before the works within the courtyard (including demolition works) to construct the main extension hereby approved commence, the applicant or their agents or their successors in title shall secure the implementation of a programme of archaeological works to be undertaken in accordance with a Written Scheme of Investigation (WSI), prepared by the appointed archaeological contractor. The WSI should be submitted to and approved in writing by the local planning authority. The development shall not be occupied until the site investigation has been completed in accordance with the approved WSI. The WSI shall cover the following:*
>
> *(a) A phased programme and methodology of site investigation and recording to include:*
> *- Targeted field evaluation trenching*
> *- (Depending upon the above) more detailed targeted open area excavation and recording*
>
> *(b) A programme for post investigation assessment to include:*
> *- Production of a final report on the significance of the below ground archaeological and historical interest represented.*
>
> *(c) Deposition of the final reports on the site investigation with the Greater Manchester Historic Environment Record.*
>
> *(d) Provision for archive deposition of the report, finds and records of the site investigation.*
>
> *(e) Nomination of a competent person or persons/organisation to undertake the works set out within the approved WSI."*

1.1.3 This document has been prepared by ARS Ltd in accordance with the guidance provided by the Greater Manchester Archaeological Advisory Service (GMAAS)'s Senior Planning Archaeologist (Roberts 2018). It describes the objectives

and methods to be employed and has been approved, in final issue form, by GMAAS's Senior Planning Archaeologist.

1.1.4 The archaeological works will be carried out in accordance with *National Planning Policy Framework (NPPF)* paragraph 199 (Ministry of Housing, Communities and Local Government 2018, 56) to record and enhance understanding of the significance of any heritage assets to be lost during the proposed development in a manner proportionate to their importance, and to make this evidence (and any archive generated) publically accessible.

2 BACKGROUND

2.1 Site Location and Geology

2.1.1 Manchester Museum is located to the south of Manchester City Centre in Chorlton-on-Medlock. The museum site is bound to the north-east by Oxford Road, to the north-west by Bridgeford Street, to the south-east by Burlington Street and to the south-west by Manchester University buildings.

2.1.2 The proposed development area (hereafter PDA) is currently an open courtyard adjacent to Manchester Museum, bound on its south-eastern side by Coupland Street. The original 1885 museum building is located further to the south. To the north-east is the 1911 Haworth building and its 1913 extension, and to the northwest is the 1927 building and new museum entrance. It is enclosed on the south-west side by the Rutherford building. The site is centred at NGR SJ 84500 96640 (Figure 1).

2.1.3 The underlying solid geology comprises the Chester Formation – Sandstone. Sedimentary bedrock formed approximately 247 to 250 million years ago in the Triassic Period when the local environment was dominated by rivers. This is overlain by superficial deposits of Devensian Till – Diamicton, formed up to 2 million years ago in the Quaternary Period when the local environment was dominated by ice age conditions (BGS 2018).

2.2 Archaeological and Historical Background

2.2.1 A detailed archaeological and historical background is provided in a Desk Based Assessment provided by the client (Kerr 2017, 19-29). A brief overview, including date ranges quoted in the DBA, is given below with particular focus on the PDA

2.2.2 The potential for prehistoric (up to AD 43), Roman (AD 43-410) and Early Medieval (AD 410-1066) remains to survive within the PDA is considered very low due to the likelihood that later developments would have removed the majority of traces of earlier activity and given the fact that early settlement activity was concentrated in other parts of the city.

2.2.3 There are no records within the Greater Manchester Historic Environment Record (GMHER) for the medieval period (AD 1066-1499) that relate to the PDA, though it is in this period that 'Cherelton' is first mentioned, developing into the settlement of Chorlton Row by the 16th century, centred on Chorlton Hall. Maps

from the post-medieval period (AD 1500-1799) show that the main settlement area was concentrated to the east of Chorlton rather than within the study area of the DBA whilst the PDA was within agricultural land. Hearth Tax Return records for Chorlton from 1666 show that the township of Chorlton-upon-Medlock had a limited size of 49 hearths.

2.2.4 Oxford Road (originally Oxford Street) was laid out in 1790 and the PDA is depicted within agricultural fields adjacent to the road on Charles Laurent's map of Manchester and Salford, 1793 (Kerr 2017, 21). As the population trebled in the first 40 years of the 19th century the new middle-classes began to populate the area of Chorlton-upon-Medlock, moving out of the industrial centre of the city to the suburbs. James Piggot's Map of Manchester and Salford, 1836 (Kerr 2017, 22), depicts the site occupied by a building with front and rear gardens, whilst OS maps dating between 1848 and 1893 (Kerr 2017, 23-25) show a terrace of 5 properties set back from Oxford Road by individual front gardens. The 1851 OS map provides a further level of detail, naming the buildings as Exmouth Terrace on the north side of Exmouth Street (later renamed Coupland Street). A photograph from 1885 shows that Exmouth Terrace existed as five 3-bayed townhouses with front steps that might suggest that they had basements.

2.2.5 On the south side of Exmouth (Coupland) Street, buildings labelled as Exmouth Place on the 1851 OS map are no longer present on maps from 1893 due to the establishment of Owen's College in 1873 and an extension to the college in 1882-3 with the construction of the first of the Manchester Museum's galleries. Further development of the area into the early 20th century saw the piecemeal replacement of Exmouth Terrace by the construction of the Museum's Haworth building and its subsequent extensions that framed the north and north-eastern sides of the courtyard of the PDA by 1927.

2.3 Regional Research Aims and Objectives

2.3.1 Research topics identified in the *Research and Archaeology of North West England. An Archaeological Research Framework for North West England* (Brennand 2007) for the industrial and modern period urban landscape include the need to excavate urban cellars to examine life 'below stairs' in the middle class house and cellar dwellings and workshops in working class houses (Newman and McNeil 2007, 146-147).

2.4 Evaluation Trenching Aims and Objectives

2.4.1 The aim of the archaeological evaluation is to identify and record the presence/absence, location, nature, extent, survival, quality, significance and date of post-medieval archaeological deposits that might exist within the PDA.

2.4.2 The objective of the archaeological evaluation is to gather sufficient evidence to establish, supplement, improve and make available information about the archaeological resource existing within the PDA, and to provide an appropriate post-excavation assessment, analysis, reporting, archiving and dissemination.

3 EVALUATION TRENCHING METHODOLOGY

3.1 Coverage

3.1.1 Within the PDA, two trenches (Trench 1 measuring 10m by 2m; Trench 2 measuring 6m x 4m) will be excavated. Figure 2 shows the trenches located in relation to a modern plan of the site whilst Figure 3 shows the trenches overlain onto historic mapping. Trench 1 is located over the area of the rear gardens of Exmouth Terrace which are depicted on the 1851 OS map as having curving pathways within them. Trench 2 is located across the central of the three properties covered by the courtyard, located so as to identify any surviving wall lines and surfaces within the main body of the house and the rear extension as well as structures or deposits associated with a small area of yard. Depending on the results of the trenching, targeted open area excavation may also be requested by the GMAAS Senior Planning Archaeologist, which would be the subject of an Addendum to this WSI. The proposed methodology of this scheme of works is as follows.

3.2 Staffing and timetabling

3.2.1 The Project Manager for the watching brief will be Tony Brennan, Operations Manager at ARS Ltd. The Fieldwork Project Officer will be Ben Dyson ACIfA, Senior Project Officer at ARS Ltd, or Rebecca Trow ACIfA, Project Officer at ARS Ltd.

3.2.2 Specialist analyses will be carried out by appropriately qualified specialists as detailed subject to availability.

- Flint and prehistoric pottery: Dr Robin Holgate MCIfA
- Romano-British pottery: Dr Phil Mills MCIfA
- Samian Ware: Dr Gwladys Monteil
- Romano-British small finds: Alex Croom
- Medieval and post-medieval pottery: Dr Chris Cumberpatch or Dr Robin Holgate MCIfA
- Medieval and post-medieval clay pipes, glass and metalwork: Mike Wood MCIfA
- Plant macrofossils and charcoals: Luke Parker
- Human and animal bone: Milena Grzybowska
- Radiocarbon dating: Prof Gordon Cook (SUERC)
- Finds conservation: Vicky Garlick (Durham University)

3.2.3 The proposed timetable for the work is as follows:

Task	**Proposed commencement date**
Evaluation trenching	Mid October 2018
Reporting	November 2018

3.3 Methodology

3.3.1 The evaluation trenching will be carried out in accordance to the guidance laid out in CIfA's *Code of Conduct* (2014a) and *Standards and Guidance for Archaeological Field Evaluation* (2014b). The site will be recorded in accordance with ARS Ltd's field recording manual and single context recording system, and will include as a minimum context record sheets, an accurate site plan and record photography where no archaeological features are present.

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

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

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

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

3.3.6 Isolated, discrete features such as pits and postholes not belonging to structures or industrial activities will be 50% sampled, although if they produce artefacts then provision is made for full excavation.

3.3.7 Sampling of linear features such as ditches or gullies will be sufficient to determine the character, stratigraphy and relationship to other features and attempts made to obtain dating evidence.

3.3.8 Any deposits relating to funerary/ritual activities, such as burials and cremation deposits will be 100% excavated. Domestic/industrial activity (such as walls, postholes, floors, hearths) will be sufficiently excavated to understand their form and function and to recover potential dating evidence and artefact and ecofact assemblages.

3.3.9 Area deposits, such as buried soils, or middens, will be hand excavated at a minimum 10%. Subsequent excavation by machine will be considered. Large intrusions, such as reservoirs, will be sufficiently excavated by machine, within safe limits, to provide information on their character.

3.3.10 Limited representative samples of bricks from brick-built structures, and selective products of the brick working process will be retained for specialist analysis where appropriate.

3.3.11 Any human remains discovered will initially be left *in-situ* and, if removal is deemed necessary, this will be undertaken in accordance with the relevant Ministry of Justice regulations and in discussion with GMAAS.

3.3.12 Finds of "treasure" will be reported to the Coroner in accordance with the Treasure Act procedures.

3.3.13 For deposits that have potential for providing environmental or dating evidence, a minimum of 40 litres of sample will be taken, or 100% if the sample is smaller. This material will be floated and passed through graduated sieves, the smallest being a 500µ mesh. Should other types of environmental deposits be encountered, appropriate specialist advice will be sought and an appropriate sampling strategy devised. Samples will be assessed by a suitable specialist with provision for further analysis as required and in accordance with *Environmental Archaeology: A Guide to the Theory and Practice Methods, from sampling and recovery to post excavation* (Campbell *et al*. 2011). Advice from the Historic England Regional Science Adviser will be taken as appropriate.

3.3.14 All staff employed on the project will be suitably qualified and experienced for their respective project roles and have practical experience of archaeological excavation and recording. All staff will be made aware of the archaeological importance of the area surrounding the site and will be fully briefed on the work required by this specification. Each member of staff will be fully conversant with the aims and methodologies of the evaluation and will be given a copy of this WSI to read.

3.3.15 All site operations will be carried out in a safe manner in accordance with ARS Ltd's health and safety policy. Deep sections, such as those across ditches or pits, will be shored as necessary. A risk assessment will be prepared before commencement on site.

3.4 Recording

3.4.1 The site will be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area. The site will be recorded in accordance with the ARS Ltd's field recording manual and single context recording system, and will include as a minimum context record sheets, an accurate site plan and record photography where no archaeological features are present.

3.4.2 A full and proper record (written, graphic and photographic as appropriate) will be made for all work, using pro-forma record sheets and text descriptions appropriate to the work. Accurate scale plans and section drawings will be drawn where required at 1:50, 1:20 and 1:10 scales, as appropriate. In addition to relevant illustrations, provision for rectified photographic recording shall be made, if deemed necessary.

3.4.3 The stratigraphy of the site will be recorded even where no archaeological deposits have been identified.

3.4.4 All archaeological deposits and features will be recorded with above ordnance datum (AOD) levels.

3.4.5 A photographic record of all contexts will be taken using a digital camera, and will include a clearly visible, graduated metric scale. A register of all photographs will

be kept. A selection of working shots will be taken to demonstrate how the site was investigated and what the prevailing conditions were like during excavation.

3.5 Finds Processing and Storage

3.5.1 All finds processing, conservation work and storage of finds will be carried out in accordance with the CIfA (2014c) *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* and the UKIC (1990) *Guidelines for the Preparation of Archives for Long-Term Storage.*

3.5.2 Artefact collection and discard policies will be appropriate for the defined purpose.

3.5.3 Bulk finds which are not discarded will be washed and, with the exception of animal bone, marked. Marking and labelling will be indelible and irremovable by abrasion. Bulk finds will be appropriately bagged, boxed and recorded. This process will be carried out no later than two months after the end of the excavation.

3.5.4 All small finds will be recorded as individual items and appropriately packaged (e.g. lithics in self-sealing plastic bags and ceramic in acid-free tissue paper). Vulnerable objects will be specially packaged and textile, painted glass and coins stored in appropriate specialist systems. This process will be carried out within two days of the small find being excavated.

3.5.5 During and after the excavation all objects will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information (including controlled storage, correct packaging, and regular monitoring, immediate selection for conservation of vulnerable material). All storage will have appropriate security provision.

3.5.6 The deposition and disposal of artefacts will be agreed with the legal owner and the recipient museum prior to the work taking place. All finds except treasure trove are the property of the landowner.

3.5.7 All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of the recipient museum, in this case the Museum of Science and Industry, Manchester.

3.6 Report

3.6.1 A report shall be produced to include background information, a summary of the works carried out and a description and interpretation of the findings. The report will also include the following.

- A non-technical summary
- Introduction
- Geological and topographical setting
- Methodology
- Discussion of archaeological and historical background
- Discussion on the results of the evaluation

- Specialist descriptions of artefacts or ecofacts
- An indication of potential archaeological deposits not disturbed by the present development
- Conclusions and recommendations
- Sources
- Copy of brief
- A location plan showing all excavated areas with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections.

3.6.2 One bound copy of the final report with a digital copy of the report in PDF/A format on disk will be deposited with the Greater Manchester Historic Environment Record (HER). A copy of the report will be uploaded as part of the OASIS record (see below) for online access via the Archaeological Data Service.

4 Monitoring Arrangements

4.1 At least two weeks prior notice of the commencement of the archaeological works will be given to GMAAS:

Dr Andrew Myers
Senior Planning Archaeologist
Greater Manchester Archaeological Advisory Service
School of Environment & Life Sciences
Room LG20
University of Salford
The Crescent
Salford, M5 4WX
Tel: 0161 295 6917

4.2 The client will afford reasonable access to GMAAS's Senior Planning Archaeologist, or their representative, for the purpose of monitoring the archaeological works. ARS Ltd will liaise with GMAAS at regular intervals throughout the course of the work.

5 Archive Deposition

5.1 Deposition Guidelines

5.1.1 The archive will, if possible, be prepared and deposited with a suitable repository museum, i.e. the Museum of Science and Industry, Manchester. The archive will be deposited in line with the CIfA (2014d) *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives* and Society of Museum Archaeologists (SMA) (1993) *Selection, Retention, and Dispersal of Archaeological collections: Guidelines for use in England, Wales and Northern Ireland.*

5.1.2 A digital and paper archive will be prepared by ARS Ltd, consisting of all primary written documents, plans, sections, photographs and electronic data. The archive will be deposited within two months of the completion of the report. GMAAS will be notified and the Museum Curator will be notified in writing on completion of the fieldwork with projected dates for the completion of the report and deposition of the archive. The date of the deposition of the archive will be confirmed in the report and GMAAS informed in writing on final deposition of the archive.

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

5.1.4 A full set of annotated, illustrative pictures of the site will be supplied to the Greater Manchester HER and deposited with the archive as digital images on a CD ROM.

5.2 OASIS

5.2.1 At the start of work an OASIS online record http://ads.ahds.ac.uk/project/oasis/ will be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the Greater Manchester HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included in the archive).

6 GENERAL ITEMS

6.1 Health and Safety

6.1.1 All work will be carried out in accordance with The Health and Safety at Work Act 1974. Specific health and safety policies exist for all our workplaces and all staff employed will be made aware of the policy and any relevant issues. The particular risks involved with this project will be assessed, recorded and relevant mitigation measures put in place as part of a full risk assessment, which will be compiled in advance of fieldwork and will be read and signed by all on-site operatives. ARS Ltd retains Citation as its expert health and safety consultants and the appointed Health and Safety Officer for the company is Tony Brennan.

6.2 Insurance Cover

6.2.1 ARS Ltd has full insurance cover for employee liability (£10 million) public liability (£5 million), professional indemnity (£5 million) and all-risks cover.

6.3 Community Engagement and Outreach

6.3.1 Any opportunities will be sought for engaging the local community in any archaeological findings, for example a guided site tour and/or dissemination of information via ARS Ltd's website and local media.

6.4 Publication

6.4.1 If significant architectural, historical and/or archaeological findings are made during the course of the building recording exercise, a summary of the project with, if appropriate, selected drawings, illustrations and photographs will be prepared for

publication. The requirement for, and the final form of, any publication arising from the project will be agreed with the GMAAS Senior Planning Archaeologist and the client dependent on the results of the fieldwork.

6.5 Changes to the Written Scheme of Investigation

6.5.1 Changes to the approved Written Scheme of Investigation or programme of works will only be made with prior written approval of GMAAS.

7 REFERENCES

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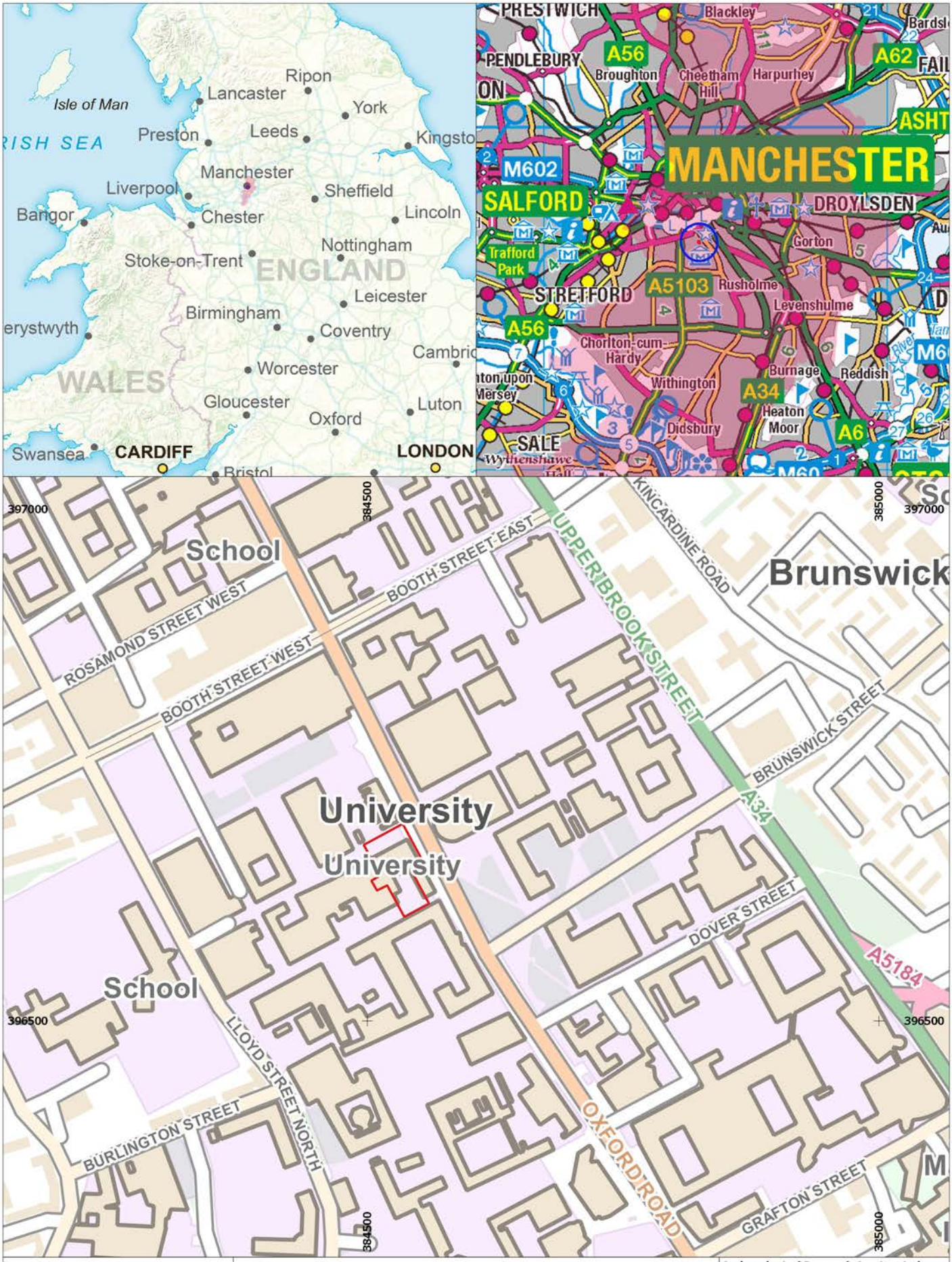
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United Kingdom Institute for Conservation (UKIC). 1990. *Guidelines for the Preparation of Archives for Long-Term Storage.*

FIGURES



Site name: Manchester Museum Date: September 2018 Drawn by: BD Scale: Varies	**Figure 1:** **Site location**	**Archaeological Research Services Ltd** Suite 1 First Floor Dunham House Cross Street Sale M33 7HH Tel: 01619 762544 www.archaeologicalresearchservices.com
This drawing: © ARS Ltd Contains Ordnance Survey data. © Crown copyright and database right 2015	Site Boundary Manchester City Council	

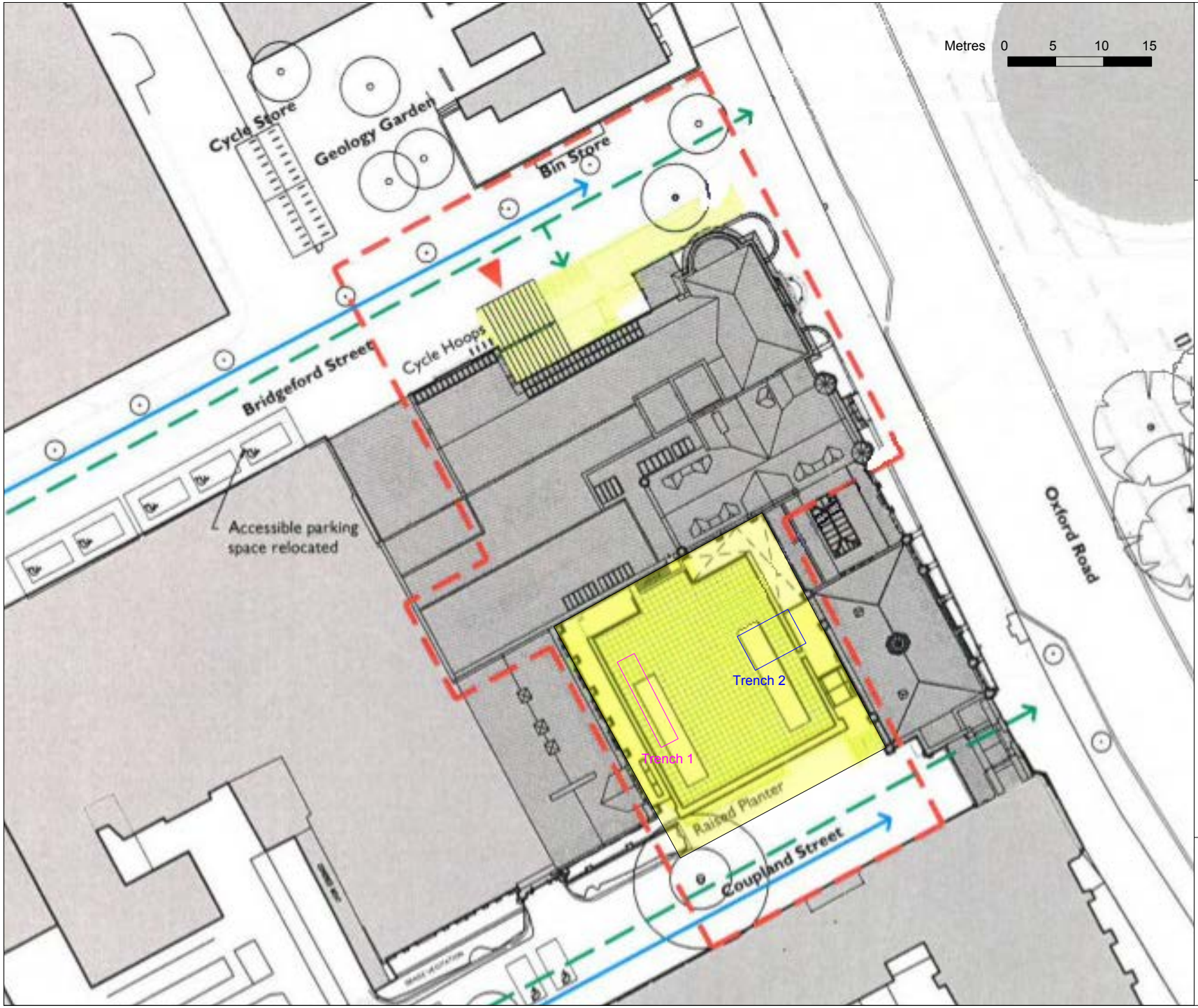


Figure 2.

Courtyard trench locations overlain onto modern location plan.

Scale: As shown.

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Figure 3

Trench location plan overlain onto the 1851 OS map.

Scale: As shown

Site boundary with position of courtyard indicated in yellow

Trench 1: 10m x 2m

Trench 2: 6m x 4m

N

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