

Site C, Trinity Islands
Water Street,
Manchester

**Written Scheme of Investigation for an Archaeological Evaluation of
Site C, Trinity Islands, Manchester**





Project Name:	Site C, Trinity Islands, Water Street, Manchester
Project Code:	TBC
Site Location:	The site is bounded by Water Street, Trinity Way and the River Irwell in Manchester city centre
NGR:	SJ 82815 97850
Document Title:	Written Scheme of Investigation for an Archaeological Evaluation of Site C, Trinity Islands, Water Street, Manchester
Document Type:	Written Scheme of Investigation
Version:	Version 1.0
Prepared for:	Trinity Developments (Manchester) Ltd

Contact:	Ian Miller, Salford Archaeology, Centre for Applied Archaeology, University of Salford, Peel Building, Salford, Greater Manchester, M5 4DW
	0161 295 4467 / 07533 252 442
	i.f.miller@salford.ac.uk

Author:	Ian Miller	
Position:	Assistant Director	
Date:	30 th November 2020	

Copyright for this document remains with the Centre for Applied Archaeology, University of Salford.

This document has been prepared by Salford Archaeology, part of the Centre for Applied Archaeology at the University of Salford, for the titled project or named part thereof and should not be used or relied upon for any other project without an independent check being undertaken to assess its suitability and the prior written consent and authority obtained from the Salford Archaeology. The University of Salford accepts no responsibility or liability for the consequences of this document being used for a purpose other than those for which it was commissioned. Other persons/parties using or relying on this document for other such purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify the University of Salford for all loss or damage resulting therefrom. The University of Salford accepts no liability or responsibility for this document to any other party/persons than by whom it was commissioned.

1. Introduction

1.1 Circumstances of the Project

- 1.1.1 Trinity Developments (Manchester) Ltd has prepared a planning application for a residential development at the southernmost extent of the St John's Strategic Masterplan area on Water Street in Manchester city centre (centred on NGR SJ 82815 97850). The proposed development, referred to as Trinity Islands (Site C), involves the erection of new residential blocks with basement parking and associated infrastructure, the delivery of which will necessitate considerable earth-moving works that will damage or remove any archaeological remains that exist across the site.
- 1.1.2 The archaeological interest in the proposed development area was highlighted in a desk-based assessment prepared by Salford Archaeology in November 2020. This showed that the scheme area has potential to contain below-ground remains of potential archaeological interest, specifically a late 18th-century dye works, an early 19th-century warehouse, a mid-19th-century smithy and a late 19th-century pig market. In addition, the possibility of the site to contain archaeological remains deriving from Roman activity cannot be discounted.
- 1.1.3 In the light of the potential archaeological interest in the site, and following consultation with the Greater Manchester Archaeological Advisory Service (GMAAS), it is anticipated that Manchester City Council will attach a condition to planning consent that requires further archaeological investigation to be carried out in advance of development. In order to fulfil this planning obligation, Trinity Developments (Manchester) Ltd commissioned Salford Archaeology within the University of Salford to devise an appropriate programme of archaeological investigation. This has been formulated to meet the requirements of the Greater Manchester Archaeology Advisory Service (GMAAS), which provides planning advice on archaeological issues to Manchester City Council, and in the first instance allows for a programme of evaluation trenching.
- 1.1.4 The trenches have been targeted on the footprint of former buildings of potential archaeological interest, and are intended to establish the presence or absence of buried remains of archaeological interest. In the event of significant buried remains being discovered during the evaluation trenching, further archaeological investigation is likely to be required. Any such additional works will be carried out in accordance with an Updated Written Scheme of Investigation, which will be formulated in consultation with the Client and GMAAS.
- 1.1.5 This Written Scheme of Investigation (WSI) for an appropriate programme of archaeological evaluation has been prepared on behalf of Trinity Developments (Manchester) Ltd by Ian Miller of Salford Archaeology, in consultation with GMAAS in their capacity as archaeological advisors to Manchester City Council.

1.2 Purpose of the Document

- 1.2.1 An Archaeological Written Scheme of Investigation (WSI) is a comprehensive document detailing the requirements and methodological approaches of a programme of archaeological works. It is defined by Historic England as:

‘Where development will lead to the loss of a material part of the significance of a heritage asset, policy HE12.3 [of PPS5, now paragraph 199 of the NPPF] requires local planning authorities to ensure that developers take advantage of the opportunity to advance our understanding of the past before the asset or the relevant part is irretrievably lost. As this is the only opportunity to do this it is important that:

- 1: Any investigation is carried out to professional standards and to an appropriate level of detail proportionate to the assets likely significance, by an organisation or individual with appropriate expertise;
2. The resultant records, artefacts and samples are analysed and, where necessary, conserved;
- 3: The understanding gained is made publically available;
- 4: An archive is created, and deposited for future research.’

1.3 National and Local Planning Policies

- 1.3.1 The National Planning Policy Framework (NPPF; Department for Communities and Local Government, February 2019) sets out the Government’s planning policies and outlines the presumption in favour of sustainable development, which is defined by three dimensions: economic, social and environmental. Of the 12 core planning principles underpinning plan and decision making, conserving ‘heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations’ is one.
- 1.3.2 Section 16 specifically deals with the historic environment (paragraphs 184-202) and paragraph 189 states that local planning authorities, when determining applications, should require the applicant to describe the significance of any affected heritage assets. This should be sufficient so as to understand the potential impact on their significance and this should be done using the appropriate expertise where necessary. Paragraph 135 indicates that the effect of the proposal on non-designated assets (designated assets are covered in paragraphs 193-96) should be taken into account. Paragraph 199 requires developers to record and advance understanding of heritage assets to be lost, in a manner proportionate to their importance and impact.



- 1.3.3 The NPPF outlines the need for local planning policies to create local plans and frameworks to implement the NPPF at a local level. Manchester adopted a Core Strategy in 2012, which is scheduled until 2027. The heritage strategy is outline in *Objective 6: Environment* and summarises the approach the local authority will take in determining planning applications that may affect the historic environment.

Policy EN3 states:

‘Throughout the City, the Council will encourage development that complements and takes advantage of the distinct historic and heritage features of its districts and neighbourhoods, including those of the City Centre.

New developments must be designed so as to support the Council in preserving or, where possible, enhancing the historic environment, the character, setting and accessibility of areas and buildings of acknowledged importance, including scheduled monuments, listed buildings, registered parks and gardens, conservation areas and archaeological remains.

Proposals which enable the re-use of heritage assets will be encourage where they are considered consistent with the significance of the heritage asset.’

2. Aims and Objectives

2.1 Academic Aims

- 2.1.1 In the first instance, the main aim of the evaluation trenching will be to establish the presence or absence of any buried remains of archaeological interest within the proposed development area and, if present, characterise the level of preservation and significance, and provide a good understanding of their potential. This will be achieved via the excavation of nine targeted trial trenches, placed across the footprint of former buildings of potential archaeological interest that were identified in the desk-based assessment (Salford Archaeology 2020).
- 2.1.2 It is anticipated that the results obtained from the evaluation will enable a decision to be reached as to whether any further archaeological investigation is merited in advance of development. This approach to devising proposals to mitigate the impact of development on the archaeological resource of the development area is in accordance with national guidelines set out in the National Planning Policy Framework: Section 16 – *Conserving and enhancing the historic environment*.

2.2 Objectives

- 2.2.1 The principal objectives of the archaeological investigation are:
- to record, as far as is reasonably possible, the location, extent, condition, significance and quality of any surviving archaeological remains observed;
 - to establish whether there is any evidence of pre-industrial activity on site, and especially any Roman activity associated with water-borne transport on the River Irwell,
 - to establish the presence or absence of any buried remains of the late 18th-century dye works;
 - to establish whether there is any remains associated with the use of the site by the New Quay Company that operated vessels on the Mersey & Irwell Navigation. Any such remains include an early 19th-century warehouse, a mid-19th-century smithy and a basin that allows boats to dock against the quay;
 - to establish whether there is any below-ground remains of the late 19th-century pig market,
 - to provide sufficient information to enable an informed decision to be made about the need for any additional archaeological mitigation; and
 - to make available the results of the work.

3. Method Statement

3.1 Evaluation Trenches

3.1.1 The development site will be investigated via the excavation of nine targeted evaluation trenches of various lengths, providing a combined total of 290m of trenching across the site. An additional 10m of trenching will also be opened at the site director's discretion, pending the results obtained from the initial nine trenches. The additional trenching will be intended to resolve any specific questions that remain unanswered from the initial nine trenches.

- *Trench 1*: this trench will measure 30m x 2m, and will be aligned approximately north-east/south-west across elements of a late 18th-century dye works;
- *Trench 2*: this trench will measure 50m x 2m, and will be aligned approximately east/west across the footprint of the late 18th-century dye works;
- *Trench 3*: this trench will measure 55m x 2m, and will be placed across the area of the early 19th-century quayside structures that were partially excavated in 1990-91;
- *Trench 4*: this trench will measure 25m x 2m, and will be placed across the south-western part of the pig market that was partially excavated in 2016;
- *Trench 5*: this trench will measure 25m x 2m, and will be placed across an area that has not been developed previously to establish the potential for pre-industrial remains to survive *in-situ*;
- *Trench 6*: this trench will measure 25m x 2m, and will be placed across the footprint of a U-shaped range of buildings shown on the Ordnance Survey map of 1891, together with an area that has not been developed previously;
- *Trench 7*: this trench will measure 30m x 2m, and will be placed across an area that has not been developed previously to establish the potential for pre-industrial remains to survive *in-situ*;
- *Trench 8*: this trench will measure 20m x 2m, and will be placed across the footprint of buildings associated with the New Quay Company.
- *Trench 9*: this trench will measure 30m x 2m, and will be placed across the footprint of a smithy and a boiler shown on 19th-century mapping.

3.1.2 In the event of significant archaeological remains being discovered in the trenches, it is likely that further archaeological investigation will be required. Any such additional works will be carried out in accordance with an Updated Written Scheme of Investigation, which will be devised in consultation with the Client and GMAAS.

3.1.3 **General Methodology:** all archaeological work shall be conducted following the CIfA Standards and Guidance for archaeological field evaluation. Prior to the commencement of any excavation works, the trench locations will be laid out accurately with respect to the Ordnance Survey national grid, and scanned for any live services using a cable avoidance tool. The excavations will be scanned regularly as work progresses.

- 3.1.4 Excavation of the modern ground surface will be undertaken by a machine of appropriate power using a toothed bucket and, where necessary, a breaker. The uppermost levels of overburden/demolition material will then be removed using the same machine, but fitted with a toothless ditching bucket, to the top of the first significant archaeological level. Machine excavation will then be used to define carefully the extent of any surviving foundations, floors, and other remains.
- 3.1.5 All machine work will be supervised closely by a suitably experienced archaeologist. Thereafter, structural remains will be cleaned manually to define their extent, nature, form and, where possible, date. If the excavation is to proceed below a depth of 1.2m, then the trenches will be widened to allow the sides to be stepped in.
- 3.1.6 All information identified in the course of the site works will be recorded stratigraphically. Results of the evaluation will be recorded on *pro-forma* context sheets, and will be accompanied with sufficient pictorial record (plans, sections and high-resolution digital photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 3.1.7 *Context Recording*: all contexts will be recorded using *pro-forma* sheets, and details will be incorporated into a Harris matrix. All written recording of survey data, contexts, photographs, artefacts and ecofacts will be cross-referenced from record sheets using sequential numbering.
- 3.1.8 *Photography*: a full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the overall site at all stages of the excavation will be generated. Photography will be undertaken using high-resolution digital cameras. All frames will include a visible, graduated metric scale. Photographs records will be maintained on photographic *pro-forma* sheets.
- 3.1.9 *Planning*: the precise location of all archaeological structures encountered will be surveyed by EDM tacheometry using a total station linked to a pen computer data logger. This process will generate scaled plans within AutoCAD, which will then be subject to manual survey enhancement. The drawings will be generated at an accuracy appropriate for 1:20 scale, but can be output at any scale required. All information will be tied in to Ordnance Datum.
- 3.1.10 *Human remains*: human remains are not expected to be present, but if they are found they will, if possible, be left *in-situ* covered and protected. The removal of human remains will only take place in compliance with environmental health regulations and following discussions with, and with the approval of, the Ministry of Justice. If human remains are identified, the Ministry of Justice and curator will be informed immediately.
- 3.1.11 *Finds policy*: finds recovery and sampling programmes will be in accordance with best practice (following current Chartered Institute for Archaeologists' guidelines) and subject to expert advice in order to minimise deterioration. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC).

4 Health and Safety

4.1 Health and Safety

4.1.1 Full regard will be given to all constraints during the course of the project, and all relevant Health and Safety legislation, CDM, COSHH regulations and codes of practice will be respected. The University of Salford provides a Health and Safety Statement for all projects and maintains a Safety Policy. Salford Archaeology is advised on its Health and Safety matters by the University of Salford, who provide ongoing advice on health and safety matters to all departments in the organisation. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Federation of Archaeological Employers and Managers (FAME), and in accordance with current legislation, including:

- The Health and Safety at Work Act (1974);
- Management of Health and Safety at Work Regulations (1999);
- The Construction (Design and Management) Regulations (2015);
- The Control of Asbestos Regulations (2006);
- Construction (Health, Safety and Welfare) Regulations (1996);
- The Health and Safety (Miscellaneous Amendments) Regulations (2002);
- The Control of Substances Hazardous to Health Regulations (2002);
- The Health and Safety (First-Aid) Regulations (1981);
- The Regulatory Reform (Fire Safety) Order (2005);
- The Provision and Use of Work Equipment Regulations (1998);
- Lifting Operations and Lifting Equipment Regulations (1998).

4.1.2 A risk assessment and will be produced by the archaeological contractor and submitted to the Client prior to the commencement of any onsite archaeological works. Once approved by GMAAS, this WSI will be used for the purposes of a method statement. All Salford Archaeology staff associated with the excavation will be given a copy of the method statement and the risk assessment prior to the beginning of the works and will be required to read both documents.

4.1.3 Salford Archaeology undertakes to safeguard, so far as is reasonably practicable, the health, safety and welfare of its staff and of others who may be affected by our work. This applies in particular to providing and maintaining suitable premises, and providing all reasonable safeguards and precautions against accidents.

4.1.4 At present the profession of Archaeologist is largely covered by the CSCS, Construction Related Organisation CRO White Card for Archaeological Technician (Code 5363); other cards are available for site visitors etc. For this all Salford Archaeology staff likely to undertake fieldwork must pass a CITB Health and Safety Test at least to operative level. Where a member of staff has not yet received their card they will produce a certificate to prove that they have passed the test.

- 4.1.5 **Personal Protective Equipment (PPE):** all staff will wear PPE at appropriate times dictated as by the Senior Archaeologist on site. All Salford Archaeology staff are supplied with the following PPE:
- Safety Helmets (EN397);
 - Ear Defenders (EN 352-3);
 - Safety spectacles (EN166);
 - Goggles (Chemical BSEN 166 Type 3);
 - Dust masks plain and valved (EN149 2001);
 - Hi-visibility vests (EN471);
 - Gloves Nitrile and latex disposable, PVC, EN374;
 - Safety footwear - steel toecap and mid-sole boots and Wellingtons EN345-47.
- 4.1.6 Any other PPE required by the client and/or Principal Contractor must be provided or funded by them.
- 4.1.7 **Services (Gas, Electricity, Water, Sewers, Telecoms):** it is the duty of the Client to provide all information reasonably obtainable relating to any contamination or live services present on site prior to the commencement of the programme of archaeological works.
- 4.1.8 Service plans have been provided by the client and will be inspected closely prior to the commencement of any works. The excavation area will be scanned using a cable avoidance tool before any excavation commences, and will be scanned regularly throughout the mechanical excavation process.
- 4.1.9 No member of Salford Archaeology staff will touch or otherwise interfere with a live service even if declared 'safe'. In the event of the accidental disruption of a live service by archaeologists, the Salford Archaeology Senior Archaeologist will inform both their project manager and, when appropriate, call the relevant emergency number. Any underground service not previously identified which is encountered during excavation will be assumed to be live and will need to be made safe by the Client before further excavation. Any visible overhead cables, pipes, ducts, etc will be assumed to be live if there is no written substantiation that they are dead, and will immediately need to be made safe and/or isolated from further excavation. Where for whatever reason making safe of under- or over-ground services does not happen, Salford Archaeology may need to remove its staff from the site or an area.
- 4.1.10 **Access:** reasonable access to the site will be granted to representatives of the relevant archaeological curatorial body (GMAAS), who may wish to be satisfied, through regular site inspections, that the scope and practice of the archaeological works are being conducted according to professional standards and in accordance with any agreements made.

5 Other Matters

- 5.1.1 **Project Monitoring:** the aims of monitoring are to ensure that the archaeological works are undertaken within the limits set by the Written Scheme of Investigation, and to the satisfaction of the Heritage Management Director (Archaeology) for GMAAS, in the capacity of Archaeological Advisor to the Greater Manchester Planning Authorities.
- 5.1.2 As a minimum requirement, GMAAS will be given a minimum of one week's notice of work commencing on site, and will be afforded the opportunity to visit the site during and prior to completion of the on-site works so that the general phasing of the site and results of the fieldwork can be assessed and to discuss the requirement of reporting or any further phases of archaeological work.
- 5.1.3 Salford Archaeology will notify GMAAS of any discoveries of archaeological significance so that site visits can be made, as necessary. Any changes to this agreed WSI will only be made in consultation with the Client and GMAAS.
- 5.1.4 **Working Hours:** normal working hours are variable between 7.30 am and 6.00 pm, Monday to Friday. It is not normal practice for the University of Salford staff to be asked to work weekends or bank holidays, and should the Client require such time to be worked during the course of a project a contract variation to cover additional costs will be necessary.
- 5.1.5 **Insurance:** the University of Salford has professional indemnity to a value of £50,000,000, employer's liability cover to a value of £50,000,000 and public liability to a value of £50,000,000. Written details of insurance cover can be provided if required.

6 Report and Archive

6.1.1 **Report:** a draft copy of an evaluation report will be submitted for comment to GMAAS within six working weeks of the completion of the fieldwork. This will present the results obtained from the evaluation trenching, and will include:

- a title page detailing site address, NGR, author/originating body, client's name and address;
- full content's listing;
- a non-technical summary of the findings of the fieldwork;
- a description of the archaeological background;
- an account of the historical development of the site;
- a description of the methodologies used during the fieldwork;
- a description of the findings of the fieldwork;
- detailed plans of the excavated trenches, showing the archaeological features exposed;
- appropriate photographs of specific archaeological features;
- interpretation of the archaeological features exposed and their context within the surrounding landscape;
- a consideration of the importance of the archaeological remains present on the site in local, regional and national terms;
- recommendations as to whether any further archaeological investigation will be required in advance of construction works.

6.1.2 **Archive:** the results of the archaeological investigation will form the basis of a full archive to professional standards, in accordance with current Historic England guidelines, and current ClfA standards and guidance for the creation, compilation, transportation and deposition of archaeological archive (published October 2009). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the ClfA in that organisation's code of conduct. As part of the archiving process, the on-line OASIS (On-line Access to Index of Archaeological Investigations) form will be completed.

6.1.3 The site archive will be so organised as to be compatible with the other archaeological archives produced in the Greater Manchester area. All drawn records will be transferred to and stored in digital format, in systems which are easily accessible. The integrity of the site archive will be maintained upon completion of the archaeological works with the archive ultimately being offered for deposited with the Manchester Museum of Science and Industry (subject to their approval).

6.1.4 The archaeological archive will consist of the following:

- All original records created throughout the course of the project;
- All original drawings, whether created during fieldwork or post-investigation;
- Indexes to the drawings;
- Indexes to the photographic archive;
- All born digital material;
- Digital material created from written, drawn or photographed original records;
- The final project report;
- A list of contents of the archive.

6.1.5 It is likely that a large element of the project archive will be in digital format. It would thus be appropriate to deposit a copy of the archive generated from the archaeological investigation with the Archaeological Data Service (ADS), through ADS-Easy. Any records that are created in hard copy during the course of the project will be scanned and added to this digital archive.

6.1.6 **Dissemination:** as a minimum, the information will be finally disseminated through the deposition of a final report at the Greater Manchester Historic Environment Record. In the event of significant remains being encountered, however, a higher level of dissemination will be required.

7. Timetable

- 7.1 It is anticipated that the excavation of the nine evaluation trenches will be completed within a two-week period.
- 7.2 A draft report will be submitted to GMAAS and the Client for comment within six weeks of completion of the fieldwork. The project archive will be deposited with the receiving museum (where applicable) within six months of completion of the fieldwork.

8. Staffing Proposals

- 8.1 The project will be under the overall charge of **Ian Miller BA FSA** (Assistant Director, Salford Archaeology) to whom all correspondence should be addressed. Ian has over 30 years' experience of commercial archaeology, and has a particular interest in the archaeology of the Industrial Period. Ian is a member of the CBA North West Industrial Archaeology Panel, the Cumberland and Westmorland Archaeological Society Industrial Archaeology Panel, and a Co-opted Member of Council for the Association of Industrial Archaeology.
- 8.2 His role will be to ensure that the Written Scheme of Investigation is implemented within the framework of the Project Objectives. He will be responsible for all aspects of staff and resource logistics, ensuring the smooth running of the project programme. Ian holds a current SMSTS certificate.
- 8.3 The fieldwork is likely to be managed by **Graham Mottershead** (Project Manager, Salford Archaeology). Graham is an experienced field archaeologist with over 30 years' experience in field archaeology who has undertaken many excavations within Greater Manchester and has particular experience in the excavation of industrial remains. Graham is a qualified first aider and holds current valid certificates in SSSTS, Excavator Banksman, Cable Avoidance and Asbestos Awareness.
- 8.4 It is not possible to provide details of specific technicians that will be involved with the fieldwork at this stage, but all shall be suitably qualified archaeologists with proven relevant experience. It is anticipated that up to three technicians will be required for the programme of evaluation trenching.

Appendix 1: Proposed Trench Location Plans

Figure 1: Trench locations superimposed on William Green's survey of 1887-94

Figure 2: Trench locations superimposed on the Ordnance Survey Town Plan of 1851

Figure 3: Trench locations superimposed on modern mapping

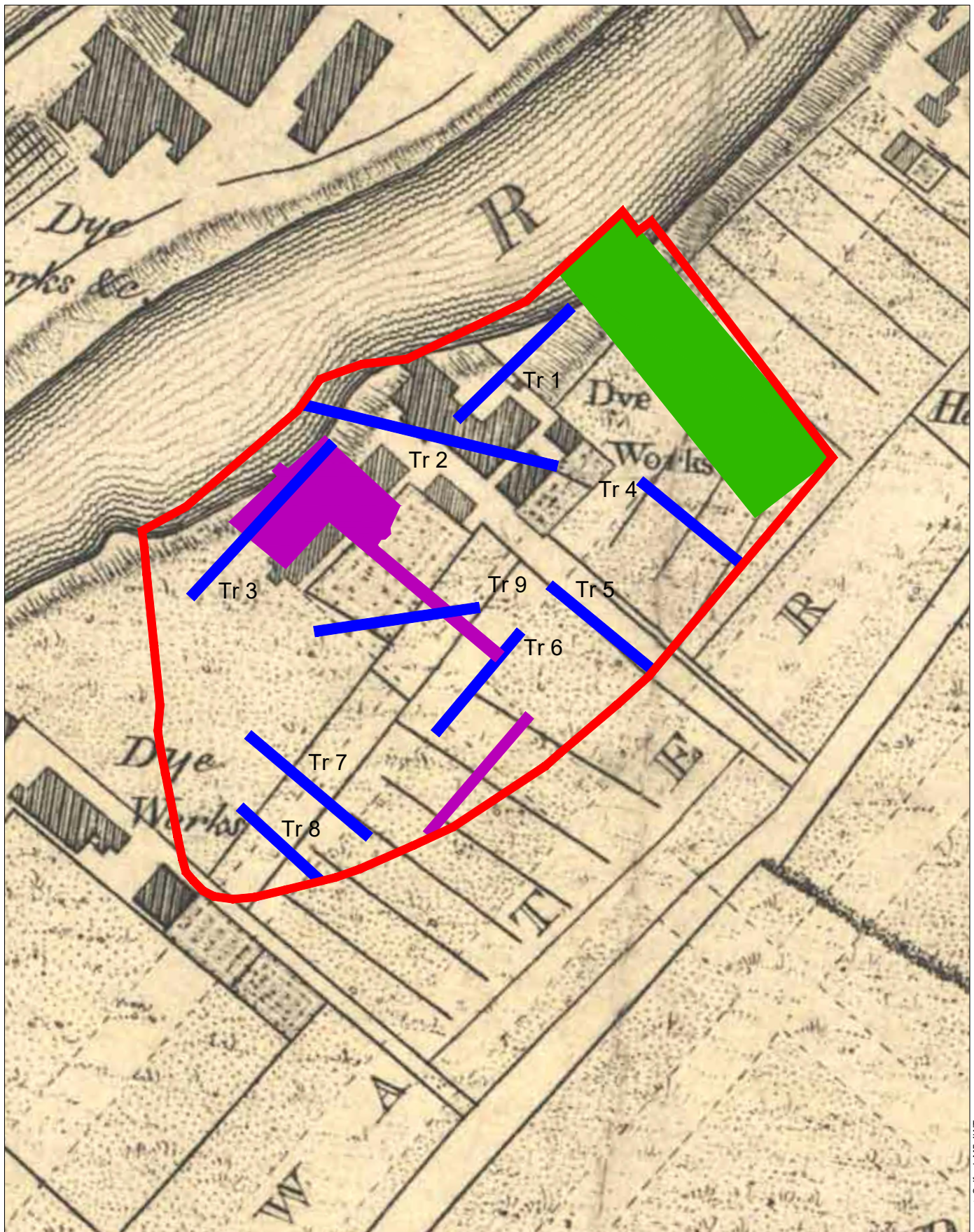


Figure ???:

Plot C Trench Locations Superimposed onto Green's Map of Manchester & Salford 1787-94



Key:

- Site Boundary
- Proposed Trenches
- 1990-91 Trenches
- 2016 Trench



**SALFORD
ARCHAEOLOGY**

0

50 m



Scale at A4 1:1000

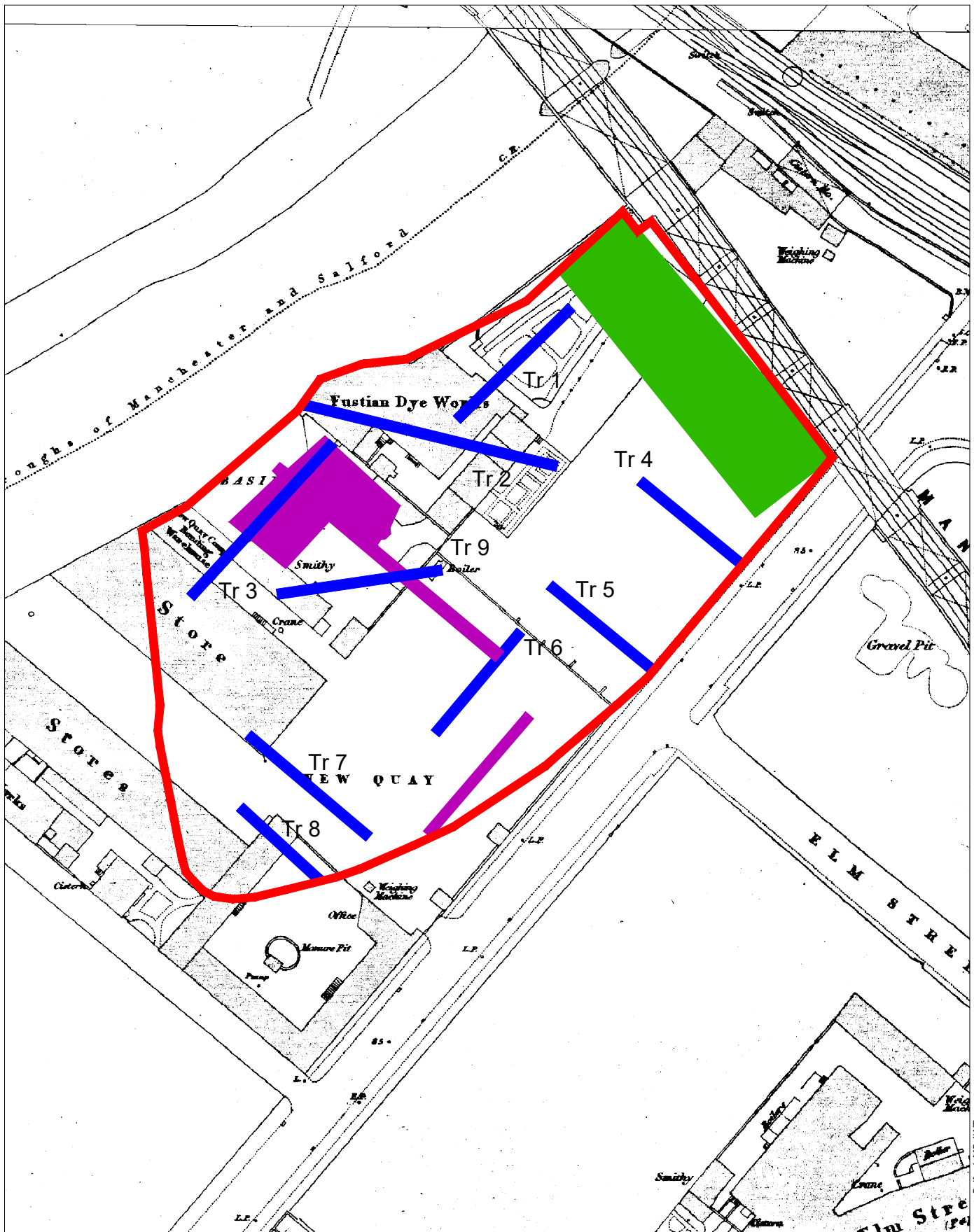
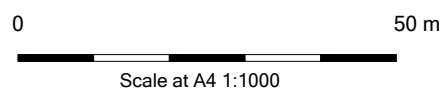


Figure ???:

Plot C Trench Locations Superimposed onto the 1:1056 Town Plan of 1851

Contains Ordnance Survey data © Crown copyright and database right 2020



Key:

- Site Boundary
- Proposed Trenches
- 1990-91 Trenches
- 2016 Trench

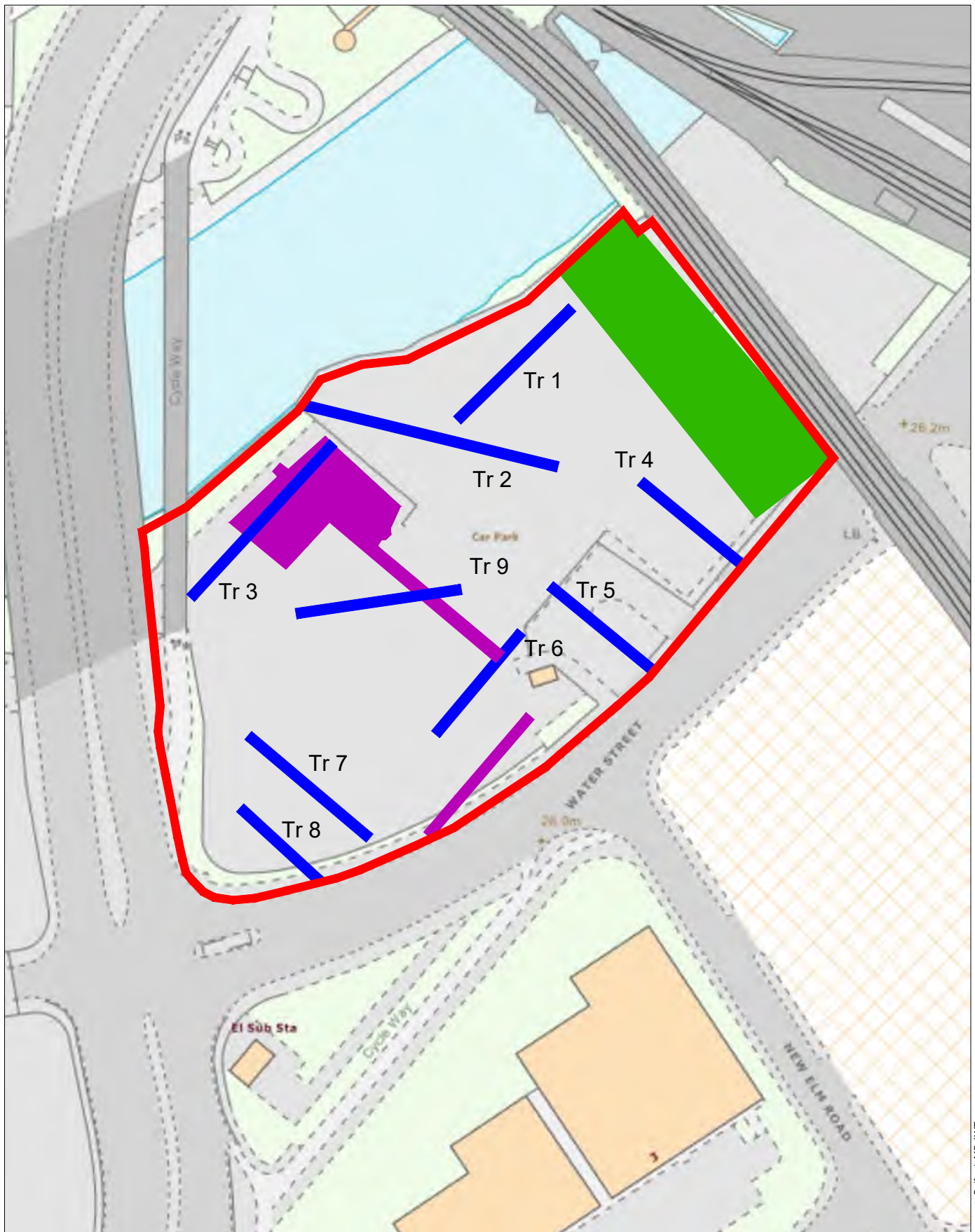


Figure ???:

Plot C Trench Locations Superimposed onto Modern Mapping

Contains Ordnance Survey data © Crown copyright and database right 2020

Key:

- Site Boundary
- Proposed Trenches
- 1990-91 Trenches
- 2016 Trench

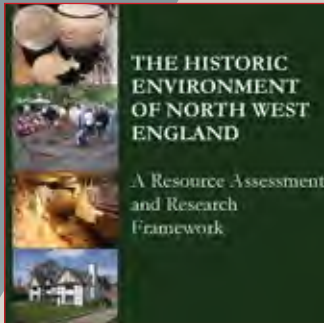


**SALFORD
ARCHAEOLOGY**

0 50 m
Scale at A4 1:1000



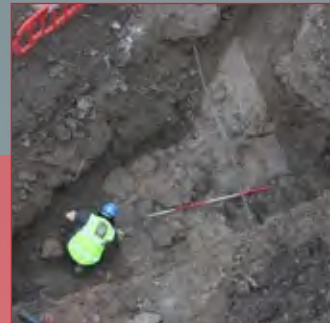
CONSULTANCY



DESK-BASED ASSESSMENTS



WATCHING BRIEF & EVALUATION



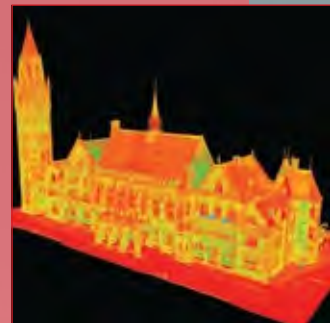
EXCAVATION



BUILDING SURVEY



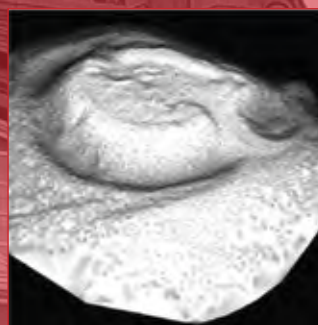
3D LASER SCANNING



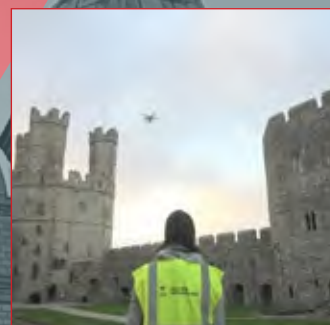
COMMUNITY INVOLVEMENT



LANDSCAPE SURVEYS



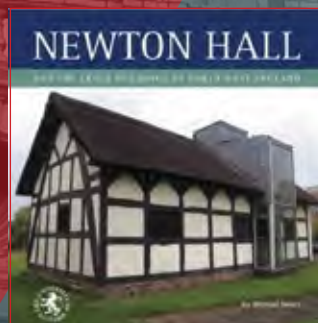
DRONE SURVEYS



WORKSHOPS & VOCATIONAL TRAINING



RESEARCH PUBLICATIONS



SEMINARS, DAYSCHOOLS CPD EVENTS

