Deloitte.



Albert Shed – Manchester

EIA Scoping Report

October 2026

Contents

1 Introduction 2
2 Site Description 4
3 Proposed Development 11
4 Approach to EIA and Proposed Methodology 12
5 Environmental Disciplines to be Scoped Out of the EIA 22
6 Environmental Statement Chapters 27
Appendices 66
Appendix 1 - Site Location Plan 67
Appendix 2 - Committed and Cumulative Schemes, including reasonably foreseeable schemes 68
Appendix 3(a) – Limitations and Assumptions 69
Appendix 3(b) – Scenarios Tested 72
Appendix 4 – Environmental Statement Structure 75
Appendix 5 –Topographical Survey 79
Appendix 6 – Phase 1 Geo-Environmental Report 80
Appendix 7 – Archaeological Desk-based Assessment 81
Appendix 8 – ZTV Study 82
Appendix 9 – Flood Risk Assessment 83

1 Introduction

1.1 This Environmental Impact Assessment (EIA) Scoping Report (the "Report") has been prepared in respect of the redevelopment of Albert Shed for a residential development ("the Proposed Development") in Manchester City Centre.

1.2 Albert Shed ("the Site") is owned by Select Property ("the applicant"). The Site occupies a prominent riverside position at the junction of Water Street and New Quay Street in the St John's neighbourhood in Manchester City Centre.

1.3 This Report is submitted to request that Manchester City Council ("MCC") as Local Planning Authority ("LPA") adopt a Scoping Opinion under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ("the EIA Regulations"). In accordance with Regulation 15, paragraph 2, this Report contains:

- A plan sufficient to identify the land (included at Appendix 1);
- A brief description of the nature and purpose of the Proposed Development;
- An explanation of the likely significant effects of the development on the environment; and
- Other supporting information considered relevant to the LPA in adopting a robust Scoping Opinion.

EIA Requirements

1.4 The EIA process is the mechanism by which development proposals are appraised in terms of environmental criteria, in addition to socio-economic, engineering, and technical considerations. The EIA process defines the context of the Proposed Development and examines the issues considered relevant to the proposals.

1.5 The purpose of the EIA is to establish the nature of the development and the environment in which it is likely to take place; identify likely significant effects on the environment that may arise; and compare the existing situation at the start of the work (baseline) with the situation once the proposals are in place.

1.6 The EIA Regulations require that any Proposed Development falling within the description of a 'Schedule 2 development' within the meaning of the Regulations will be subject to an EIA where such development is likely to have 'significant' effects on the environment by virtue of factors such as its nature, size or location (Regulation 2(2)).

1.7 The Proposed Development falls under the category of "Infrastructure Projects – Urban Development Projects" (Schedule 2, 10, (b)) as described in the Regulations. The applicable thresholds above which EIA is likely to be required are: (i) the development includes more than 1 hectare of urban development which is not dwellinghouse development; or (ii) the development includes more than 150 dwellings; or (iii) the overall area of the development exceeds 5 hectares.

1.8 The indicative thresholds and criteria state that:

> *"In addition to the physical scale of such developments, consideration should be given to the potential increase in traffic, emissions and noise. EIA is unlikely to be required for the redevelopment of land unless the new development is on a significantly greater scale than the previous use, or the types of impact are of a markedly different nature or there is a high level of contamination".* (Annex: Indicative Screening Thresholds (2015), Planning Practice Guidance: Environmental Impact Assessment)

1.9 The Site covers an area of approximately 0.31 ha and over 419 dwellings are proposed. This accounts for an increase in units to include a 10% buffer 'worst case scenario'. We consider that this exceeds the threshold in relation to part (ii) listed in Schedule 2, 10, (b) of the Regulations. An EIA is therefore considered appropriate to test the likely significant effects of the Proposed Development.

Purpose of the EIA Scoping Report

1.10 The process of identifying likely significant effects on the environment which should be addressed by the EIA is termed 'scoping' and the results are presented as a Scoping Report.

1.11 Regulation 15 of the EIA Regulations (2017) sets out the process for obtaining a Scoping Opinion from the relevant planning authority.

1.12 This Scoping Report sets out the approach taken to the topic areas and information that would be contained within the Environmental Statement ('ES'). Statutory consultees are invited to express their views on the proposed scope of the EIA or suggest additional issues which may be considered to be of significance. The views expressed by statutory consultees will then be used by the LPA to inform the formal EIA Scoping Opinion, in accordance with Regulation 15(4).

1.13 The LPA is requested to respond to the formal request for an EIA Scoping Opinion within five weeks of registering receipt.

Structure of this Report

- Chapter 2 and 3 of this Report provide a Site description and outline the nature of the Proposed Development.
- Chapter 4 sets out the proposed approach and methodology that an ES would take and who might need to be consulted.
- Chapter 5 provides details of those environmental disciplines to be scoped out of the EIA.
- Chapter 6 sets out the key issues that would be addressed by the EIA.

2 Site Description

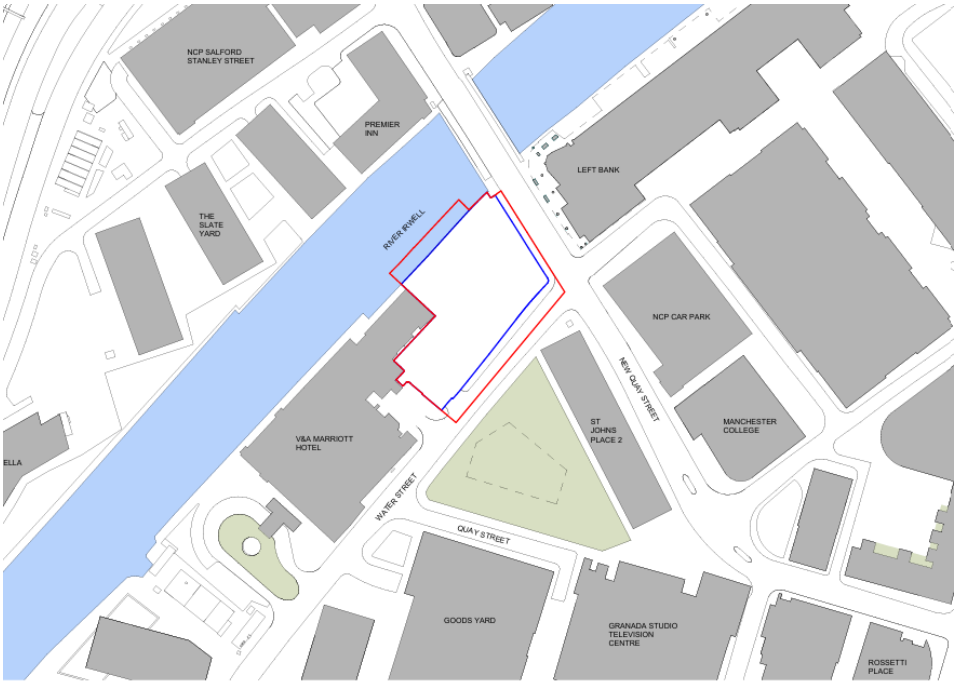
Site Location

2.1 The Site is located in Manchester City Centre, within the St John's neighbourhood. The Site is located on the southern bank of the River Irwell, at the junction of Water Street and New Quay Street and on the boundary between the Manchester City Council and Salford City Council areas.

2.2 The Site is identified on Figure 2.1, below. A Site Location Plan is also included at Appendix 1.

2.3 For the purposes of this Scoping Report, the red line boundary extends to cover an area of approximately 0.31 ha. This extent represents a 'worst case scenario' to ensure robustness, and it is anticipated that the final proposed development will occupy a smaller area within this boundary.

Figure 2.1 – Site Location Plan (source: Simpsonhaugh)



Surrounding Land Uses

2.4 The Site is located within an established mixed-use area comprising residential, commercial, office, hotel, food and beverage, cultural, leisure and health uses. Notable nearby developments and destinations include Left Bank, the Manchester Marriott Victoria & Albert Hotel, Aviva Studios and Spinningfields.

2.5 Immediately north of the Site lies the River Irwell, with apartment buildings and a hotel located on the opposite bank.

2.6 Immediately east, the Site is bounded by New Quay Street, beyond which are the Left Bank residential apartments. To the south, the Site is bounded by Water Street, with offices at St John's Place and the Courts Club Manchester sports and recreation facility beyond.

2.7 Immediately west of the Site are commercial, office, hotel, food and beverage, and health uses.

Site Description

Site Area

2.8 The Site extends to circa 0.31 ha. This extent represents a 'worst case scenario' to ensure robustness.

Existing Buildings, Structures and Spaces

2.9 The Site is currently a vacant industrial shed, which is in a poor state of repair and non-operational.

Trees

2.10 There are no trees located on the Site.

Access and Topography

2.11 The Site is bounded by vehicular streets to the east by New Quay Street and to the south by Water Street. Access to the Site itself is via Water Street.

2.12 As reported within the Topographic Survey produced by Survey Operations, the Site is relatively flat with a sloped entrance on Water Street to the south. The River Irwell is located adjacent on the northeastern boundary. The basement level lies below the surrounding street level, with the Site rising gradually to meet Water Street.

Connectivity

2.13 The Site occupies a highly accessible city centre location with strong rail, Metrolink, bus, walking and cycling connections. Its proximity to key transport infrastructure supports sustainable travel choices and provides convenient access to Manchester City Centre, Salford and the wider Greater Manchester area.

Rail

2.14 The Site is within walking distance of both Deansgate-Castlefield railway station and Salford Central railway station, providing access to local, regional and national rail services. This supports strong connectivity to destinations across Greater Manchester and the wider UK.

Metrolink

2.15 The Site benefits from excellent access to the Metrolink network via Deansgate-Castlefield Metrolink stop, which is located within walking distance of the Site. The Metrolink network provides frequent connections across Greater Manchester, supporting sustainable travel to key employment, leisure and residential destinations as well as to Manchester Airport.

Bus

2.16 Key bus routes run along New Quay Street, with several bus stops located along this road. The Site has a GMAL (a measure of public transport accessibility) of 8, which is the highest possible score.

2.17 Shudehill Interchange also provides a bus station within a 20-minute walk from the Site, offering services to Bury, Eccles, Piccadilly as well as coach services to various destinations including Leeds and London.

2.18 Manchester's Free Bus is a free bus service linking the main destinations across Manchester City Centre. The nearest Free Bus stop is approximately a two- to three-minute walk away, at the Science and Industry Museum. Free Bus services are accessible to users with disabilities and run at a 10-minute daytime frequency. The service covers most of the City Centre and provides convenient access to major activity centres, including all mainline railway stations, principal car parks and retail centres.

Walking and Cycling

2.19 The Site benefits from excellent pedestrian and cycle accessibility, with direct connections to Manchester City Centre and surrounding neighbourhoods. Established walking and cycling routes, including those along the River Irwell, provide convenient links to nearby residential areas, employment destinations, public transport interchanges and green spaces.

Site Specific Environmental Designations

Air Quality

2.20 The Site is located within the Greater Manchester Air Quality Management Area (AQMA), which is an area where air pollution levels are, or are likely to, exceed national air quality objectives. This means that NO2 is monitored and the local authority has a strategy in place to manage and improve air quality in the area.

Ecology

2.21 There are no Sites of Special Scientific Interest or Special Areas of Conservation ('SACs') located on or immediately adjacent to the Site. There are three Sites of Biological Importance (SBIs) within approximately 2 km of the Site boundary, including the River Irwell, Rochdale Canal and Ashton Canal.

2.22 No Priority Habitats are located on the Site or adjacent sites.

2.23 The Site comprises a vacant industrial shed and surrounding hardstanding and has a low ecological value.

Flood Risk and Drainage

2.24 According to the UK Government's Flood Map, the Site is located within Flood Zone 2 and partly within Flood Zone 3, defined as having a medium and high probability of flooding, respectively. This means there is an annual probability of river or sea flooding of between 0.1% and 1%, or greater.

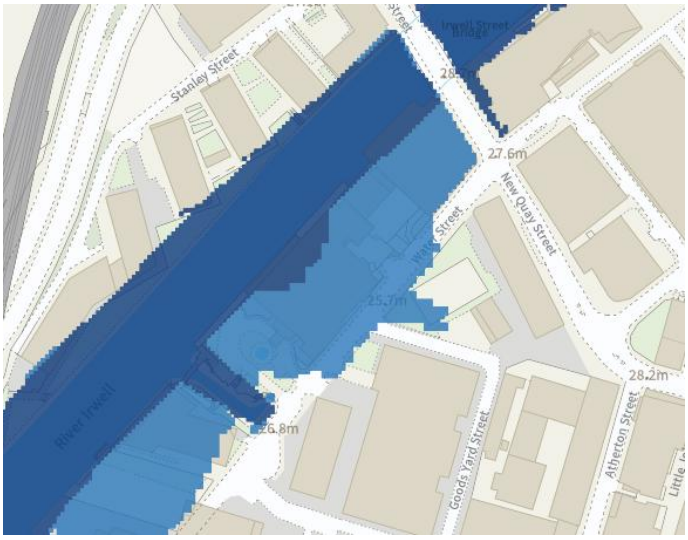


Figure 2.2 Site on the Flood Risk Map (Source: the Environment Agency's Flood Map for Planning).

2.25 According to the UK Government's Flood Map, the Site has the potential to experience surface water flooding. Figure 2.3 below identifies the areas with a 1 in 30 annual chance of flooding.

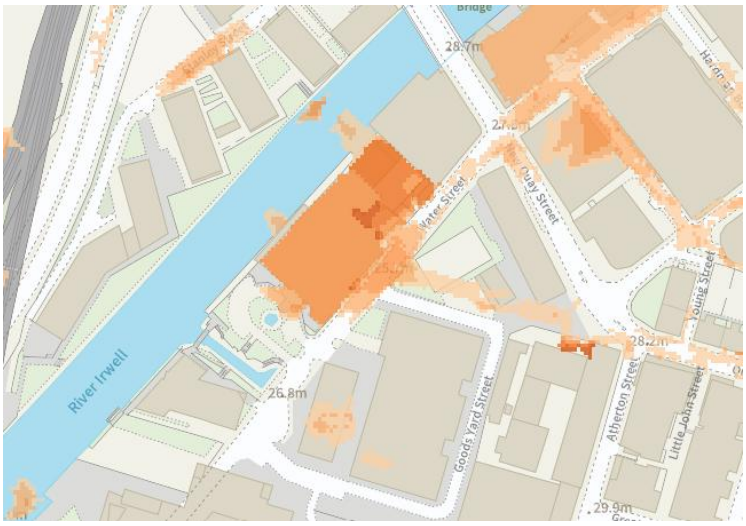


Figure 2.3 Site on the Surface Water Flood Map (Source: UK Government Flood Map).

2.26 As with the majority of the Regional Centre, the Site is located within the Conurbation Core Critical Drainage Area, as defined in the Manchester, Salford, Trafford Strategic Flood Risk Assessment (SFRA).

Heritage

2.27 The Site does not constitute a designated heritage asset and is not considered to possess sufficient significance to qualify as a non-designated heritage asset. However, it is considered to form part of the curtilage of the Grade II listed Albert Warehouse owing to its historic, operational and ownership associations and its existence prior to 1948. The structure also shares a direct physical relationship with the Grade II listed Irwell Street Bridge, being partially built onto and adjoining the bridge, with the potential for works at this interface to affect designated heritage fabric.

2.28 The Site is located within the Castlefield Conservation Area. Three conservation areas are located within an approximately 500 m radius of the Site. The closest are the St John Street Conservation Area and the Deansgate and Peter Street Conservation Area.

2.29 There are 26 Listed Buildings located within 1km of the Site (see Figure 2.4), with the following in the immediate vicinity in order of distance from the Site:

Table 2.1: Surrounding listed buildings.

Map No.	Location	Grade	List Entry Number
1	Irwell Street Bridge	II	1386141
2	Albert Warehouse Quay on West Side	II	1254727
3	Former Grape Street Railway Bonded Warehouse	II	1457402
4	Colonnaded Railway Viaduct at Former Liverpool Road Goods Depot	II	1200805
5	Old Warehouse to North of Former Liverpool Road Railway Station	I	1282991
6	Former Liverpool Road Railway Station Masters House	I	1291477
7	Former Commercial Hotel	II	1219418
8	St Johns College of Further Education	II	1282969
9	Cobden House	II*	1247447
10	14 Byrom Street	II	1283039
11	28 St John Street	II	1254605
12	24A and 26 St John Street	II	1254468
13	24 St John Street	II	1270704
14	22 St John Street	II	1270787
15	18 and 20 St John Street	II	1254598
16	12 to 16 St John Street	II	1254466
17	10 St John Street	II	1270785
18	8 and 8A St John Street	II	1270784
19	25 to 31 and Former Chapel	II	1208243
20	The Opera House	II	1247470
21	Sunlight House	II	1270915
22	Royal London House	II	1200852
23	Masonic Temple	II	1197809
24	John Rylands Library	I	1217800
25	Sawyers Arms Public House	II	1282973
26	31 to 33 King Street West, including 3 Smithy Lane	II	1282988

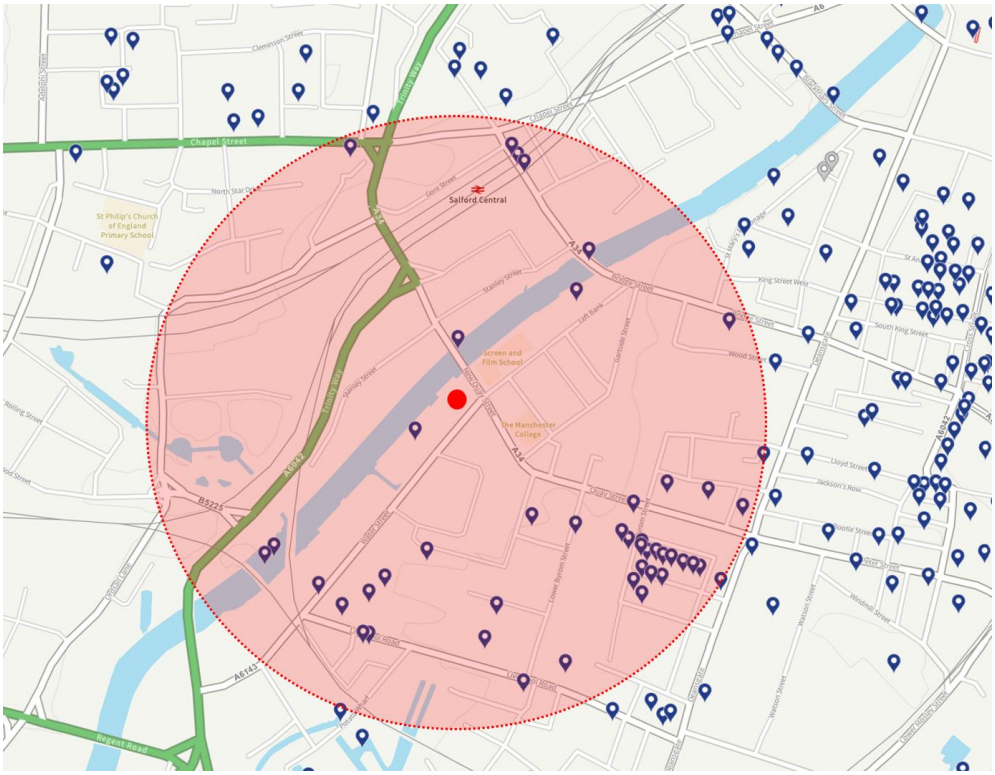


Figure 2.4 – Historic England Listed Asset Map (1km radius).

Planning Policy Allocations and Frameworks

2.30 The Site is located within Manchester City Centre and Greater Manchester Regional Centre, as defined by the 2012 Manchester Core Strategy Proposals Map, as well as Policy JP-Strat2 (City Centre) of Places for Everyone (2024). The City Centre (Core Strategy CC1) is identified as the primary focus for economic development as well as having an increasingly important role in providing high density residential development.

2.31 The Site is located within the St John's neighbourhood, an area with a distinctive character and a key role within the City Centre. This neighbourhood is governed by the St. Johns Strategic Regeneration Framework (SRF) (adopted in 2015 and updated in 2016) which identifies the 'Albert Shed' (now One St Johns) Site as an opportunity to deliver a landmark development, acting as a significant marker at a key route within the City.

2.32 The Site is allocated as a regeneration opportunity by Manchester City Council (MCC), and as set out on the MCC website page, City Centre Regeneration Areas, the Site is an *"unique city centre community of creativity, culture and innovation where people can live, work and visit"* and an *"internationally unique important centre for arts and culture alongside a range of flexible workspace centred on digital, creative and tech sectors and new residential, hotel and retail development".*

2.33 The St Johns Strategic Regeneration Framework (SRF) and masterplan sets out the development principles for the St Johns neighbourhood. It is noted that St Johns will be a *"best in class city centre neighbourhood; a place to live, work and play; a place for enterprise and innovation; for culture, entertainment and leisure; a unique proposition for Manchester that will raise its international profile and set it apart from its peer cities".* Where the Site is located, the SRF notes the potential to introduce taller, elegant residential buildings.

Planning History

2.34 A search of the Site's planning history has been undertaken using MCC's Public Access system.

2.35 Relevant planning history has been summarised below:

Table 2.2: Planning History

Reference	Description of Development	Status
136041/FO/2023	*Refurbishment, change of use and extension to the existing Albert Shed warehouse, including conversion of the existing first floor car park into the food hall, addition of a mezzanine level and provision of an adjacent service yard.*	Approved on 09 June 2023. Permission not implemented and therefore has expired (Expired June 2026).
123957/AOH/2019	*Installation of non-illuminated advertisements on billboard and poster signs with interchangeable artwork.*	Approved on 16 August 2019.
109660/FO/2015/C1	*Demolition of existing buildings and structures, including Albert Shed and Globe and Simpson Building, to enable the construction of four buildings comprising : hotel use (Class C1) and residential use (Class C3) within building 1 (ground floor plus 51 storeys); hotel use (Class C1) within building 2 (ground floor plus 7 storeys); residential use (Class C3) within building 3 (ground floor plus 17 storeys); and, residential use (Class C3) within building 4 (ground floor plus 3 storeys), providing a total of 387 residential units; retail use (Class A1) or Financial and Professional Services use (Class A2) or Restaurant and Cafe use (Class A3) or Drinking Establishment use (Class A4) at the lower floors of all buildings, together with associated external seating areas; creation of new public realm and landscaping, riverside walkway, car and cycle parking, access arrangements and highways works, rooftop plant, and other associated works*	Approved on 21 October 2016. Permission remains extant, having been lawfully implemented in 2019 through the construction of the basement associated with St John's Tower.
030989	*Conversion of warehouse into a car park for use by Granada staff during the week and for use by the public for Granada tours at the weekend*	Approved on 07 April 1988.
023535	*LISTED BUILDING CONSENT Minor modifications to external fabric in connection with change of use to T.V. production space inc. glazed screen, railings, lamp standards adj. River Irwell, metal railings & gates rear of 56 Water St., brick wall & new access*	Approved on 26 June 1985.

3 Proposed Development

3.1 At the time of writing, the Proposed Development is still at concept design stage and so the final design, mix of uses, and quantum of floorspace is not yet fixed. This Scoping Report is therefore prepared on the basis of the anticipated uses, design intent, and maximum parameters of development that are expected to come forward on the Site.

3.2 Whilst the detailed design is still being developed, the Proposed Development will likely comprise:

- The demolition of the existing Albert Shed and construction of a 33-storey building containing 419 residential units.
- The creation of new public realm space and high-quality landscaping finish.

3.3 The existing industrial shed on Site will be demolished, and the Site cleared.

3.4 The proposed maximum parameters for development are set out within Table 3.1, which have been the basis of the analysis as set out in this Report.

Table 3.1 – Development Parameters

Measurement detail	Maximum Parameter
Maximum Height (storeys and AOD meters)	33 storeys, 102.67 m AOD
Maximum Floorspace (sqm)	GEA – 42,243 GIA – 39,523
Maximum no. apartments	**Total units: 419** - 1bed: 140 - 2bed: 272 - 3bed: 7
Number of cycle spaces	244
Number of car parking spaces	2 (private residents' spaces)

3.5 These parameters are defined as a 'worst case' scenario for EIA assessment purposes and include a 'buffer' to the current design quantums which are being developed by the design and project team. Should these parameters be exceeded or otherwise materially change then the EIA scope would be further reviewed as noted in Chapter 4.

4 Approach to EIA and Proposed Methodology

The Project Team

4.1 Regulation 18, Paragraph 5 (a) of the EIA Regulations (2017) requires the ES to be prepared by competent experts. The Applicant has instructed Deloitte to lead and manage the EIA process. Deloitte has significant experience and expertise in managing the EIA process for similar projects to the Proposed Development and holds the ISEP EIA Quality Mark.

4.2 As part of the Scoping Exercise, technical input to this EIA Scoping Report has been provided from the members of the project team, set out in Table 4.1.

4.3 All technical assessments in the EIA will be undertaken by a suitably qualified project team to ensure credibility, and coordinated by Deloitte. Table 4.1 also sets out details of the proposed EIA Team.

4.4 The following disciplines are proposed to be scoped out of the EIA, as detailed in Chapter 5:

- Agricultural Circumstances
- Transport
- Archaeology
- Ecology
- Electronic Interference

4.5 It is proposed that the following disciplines will be scoped into the EIA:

- Heritage
- Townscape and Visual Impact
- Wind
- Daylight, Sunlight and Overshadowing
- Solar Glare
- Climate Change
- Noise and Vibration
- Air Quality
- Socio-Economics

- Human Health
- Ground Conditions
- Water Resources and Flood Risk

Table 4.1 Project and EIA Team

Project Team			
EIA Discipline (Scoped In)	Consultant	Qualifications	Scoped In/Out
EIA Coordinator	Deloitte	MRTPI, MPlan, MSc, BA (Hons) ISEP Quality Mark Registered	N/A
Planning	Deloitte	MRTPI, MPlan, MSc, BA (Hons)	N/A
Architecture and Design	SimpsonHaugh	RIBA Member, ARB, BArch Architecture, BA(Hons) Architecture, DipArch Architecture	N/A
Construction Management and Phasing	Renaker	N/A	N/A
Wind Microclimate	Architectural Aerodynamics	Beng(Hons), Msc, EngD	In
Daylight, Sunlight and Overshadowing	GIA	BEng(Hons), MSc, EngD	In
Transport	Curtins	BA (Hons), MSc, CMILT, FCIHT	Out
Ground Conditions	RSK Geoscience	BSc (hons) CEnv MISEP FGS	In
Archaeology	Civic	MA, BA	Out
Ecology	ERAP	BSc, MSc, MCIEEM	Out
Electronic Interference	Pager Power	BSc, MSc	Out
Water Resources, Flood Risk and Drainage	De Simone	B.Eng C.Eng MICE	In
Heritage	Levrant	IHBC (Full Member)	In

Project Team			
TVIA	Chris Burnett	BSc BLD CMLI	In
Climate Change	Element Sustainability	BSc (Hons),CEnv, MIEnvSc, MIAQM	In
Noise and Vibration	Fisher Acoustics Ltd	Beng (Hons), Chartered Engineer.	In
Air Quality	BWB Consulting Ltd	AMIAQM, AMIEnvSc, Mres, BSc (Hons)	In
Socio Economics	GC Insight	BA (Hons), MSc, Practitioner Member of the Institute of Sustainability and Environmental Professionals (ISEP), Registered Environmental Practitioner, Member of the Institute of Economic Development	In
Solar Glare	GIA	MSc, ARB	In
Human Health	Enfusion	BSc, MSc, CEnv, FISEP	In

Approach to Scoping

4.6 This Report aims to provide the LPA with sufficient information to inform a clear and agreed scope for the EIA and ensures a robust assessment of likely significant environmental effects arising from the Proposed Development.

4.7 The Scoping exercise has taken account of the proposed construction activities, operational characteristics of the Proposed Development, relevant planning policy, knowledge of the Site, and the professional opinion of the project team.

4.8 This EIA Scoping Report seeks to establish the overall framework for the EIA in relation to the environmental topics and associated likely significant effects that will be subject to detailed assessment. However, iterative re-scoping will continue as the design and strategy is refined, plans and principles are developed, and additional technical survey work informs the final design for the Proposed Development. Any deviation between the scope of effects considered within this EIA Scoping Report and the ES will be clearly communicated in the ES.

4.9 This Report considered firstly whether technical disciplines should be "Scoped In" or "Scoped Out" of the EIA. Based on the information available at the time of writing, where the Proposed Development is not considered to give rise to likely significant effects on the environment, it is scoped out and will not be considered within the ES. Where required for disciplines are scoped out, a standalone technical assessment will be submitted with the planning application.

4.10 In summary, each consultant has advised:

- Whether consultation has taken place.

4.11 Rationale for scoping out, if applicable:

- Any background studies which have been completed or baseline information available.
- Provided the baseline of the Site as relevant to each of the technical areas.
- Identification of effects which are not significant at both the Construction 'C' and Operational 'O' stages of development and the mitigation proposed.

4.12 In addition, for those disciplines which are sought to be scoped in, consultants have provided a headline summary of:

- Baseline data.
- Assessment methodology for the likely significant effects.
- Limitations and assumptions (included at Appendix 3(a)).

4.13 For the purpose of the Scoping Report each of the technical consultants have looked at the potential scenarios, namely:

- Scenario 1: Existing Baseline (existing EIA Site, as of 2026) ('do nothing scenario')
- Scenario 2: Existing Baseline + Proposed Development
- Scenario 3: Existing Baseline + Proposed Development + Cumulative

4.14 To be robust, and to assess the most 'reasonable worst-case scenario', consultants have been asked to advise which scenario represents the most 'reasonable worst-case scenario' for their respective disciplines.

4.15 Scenarios to be tested are set out in full in Appendix 3(b) alongside a matrix outlining which scenarios are to be tested for each discipline.

4.16 The following statutory consultees should be consulted through the EIA Scoping process:

- MCC – Contaminated Land, Environmental Health, Flood Risk, Highways, Tree Officer (Technical Officers);
- Transport for Greater Manchester (MCC Highways);
- Environment Agency (EA);
- Greater Manchester Police Secure by Design;
- Historic England;
- Greater Manchester Archaeological Advisory Service;
- Natural England;
- Greater Manchester Ecological Unit; and,
- United Utilities

- Cadent Gas
- Electricity North West.

4.17 Early consultation with statutory consultees is ongoing in order to inform specifics of the design of the Proposed Scheme and to ensure early engagement to ascertain their views on likely significant effects, baseline data collection and appropriate assessment methodologies. The outcomes of those early consultations are reflected in this EIA Scoping Report.

Structure and Scope of the ES

4.18 The ES will comprise two volumes, Volume 1 would set out the findings with respect to each of the environmental disciplines that have been examined as part of the EIA. Volume 2 would include all the supporting documents and technical appendices relating to the chapters. A Non-Technical Summary (NTS) of the ES will also be produced and form a standalone document.

4.19 Overall, the information presented in the ES will be provided in accordance with Schedule 4 of the EIA Regulations (2017) and will include:

- A description of the Proposed Development;
- An outline of the reasonable alternatives studied and reasons for selecting the chosen option;
- A description of the aspects of the environment likely to be significantly affected by the Proposed Development;

4.20 A description of the likely significant effects of the Proposed Development on the environment, including direct and indirect and in-combination impacts;

- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment;
- A non-technical summary; and

4.21 An indication of any difficulties encountered by the applicant in compiling the required information.

4.22 The proposed structure of each ES Chapter (Volume 1) is included at Appendix 4. This is considered to be a robust approach and aligns with the EIA Regulations (2017).

EIA Boundary

4.23 The geographical coverage of the EIA will be determined by a number of factors including:

- The physical extent of work;
- The nature of the baseline environment, including the location of sensitive receptors;
- The distance over which effects will be significant; and
- The presence and type of “pathways” along which impacts may be spread.

EIA Methodology

4.24 The introductory chapters of the ES will provide the following information:

- An introduction to the ES in a legislative and site specific context;
- Description of the Site and Proposed Development;
- Alternatives considered and project design evolution;
- EIA methodology;
- Construction methodology and programme;
- Stakeholder engagement;
- ES structure; and
- Details of the EIA project team.

4.25 The EIA would assess both the construction and operational phases of the Proposed Development.

4.26 Each ES chapter would follow the headings set out below to ensure the final document is transparent, consistent, and accessible. A reference list will also be provided as relevant with each ES chapter. This is considered to be a robust approach and aligns with the EIA Regulations (2017).

Introduction

4.27 This Chapter will introduce the assessment discipline and the purpose for which it is being undertaken.

Legislative and Policy Context

4.28 This Chapter will include a summary of national, regional and local policy and guidance of relevance to the environmental discipline and assessment. Relevant legislation will be summarised where applicable.

4.29 In addition, preparation of each ES chapter will consider relevant local and regional, social and economic policies. This will include (but may not be limited to):

The Adopted Development Plan

- MCC Core Strategy (2012) and 2024 addendum;
- Places for Everyone – Greater Manchester Combined Authority (2024); and
- National Planning Policy Framework (2026).

Relevant Material Considerations

- Emerging Regulation 19 MCC Local Plan;

- Guide to Development in Manchester – Supplementary Planning Document and Planning Guidance (2007);

4.30 MCC consulted on their Regulation 19 Draft Local Plan from 17 August to 28 September 2026. Submission to the Planning Inspector is expected in December 2026. Given the stage of its preparation, the emerging Local Plan provides an indication of the future direction of travel for planning policy in Manchester. The NPPF notes that relevant policies in emerging development plans may be given weight according to their stage of preparation, the extent to which there are unresolved objections to relevant policies and the degree of compliance of the relevant policies in the emerging plan with policies for plan-making within the NPPF. As such, the emerging MCC Local Plan should be afforded limited weight as per the NPPF guidance.

Assessment Methodology and Significance Criteria

4.31 This Chapter will provide an explanation of methods used in undertaking the technical study with reference to published standards, guidelines and best practice. The application of significance criteria will also be discussed.

4.32 It will also outline any difficulties encountered in compiling the required information.

Baseline Conditions

4.33 This will include a description of the environment as it is currently and as it is expected to change if the project were not to proceed (i.e. 'do-nothing' scenario). The method used to obtain this information will be clearly identified. Baseline data will be collected in such a way that the importance of the particular subject area to be affected can be placed in its context and surroundings so that the effects of the proposed changes can be predicted.

Identification and Evaluation of Likely Significant Effects

4.34 This Chapter will identify the likely significant effects on the environment resulting from the Proposed Development.

4.35 The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the effects can be positive or negative. The criteria to be used in carrying out this process are detailed below. Where relevant, individual consultants may use a variation of the criteria and this will be clearly explained within the methodology of each chapter.

4.36 The Proposed Development will come forward in one phase.

4.37 As a rule, and to ensure consistency across disciplines, developments that are already under construction are considered to form part of the Baseline and those subject to planning permissions or otherwise identified within the committed developments as reasonably foreseeable are considered as part of the cumulative analysis. While this is a general rule professional judgement has still been applied on a scheme specific basis.

4.38 The proposed scenarios to be tested are detailed in full within Appendix 3(b).

Prediction of Impact Magnitude

4.39 The methodology for determining the scale or magnitude of change caused by the impact is set out in Table 4.2. The below table represents a standard methodology which all disciplines

shall follow unless stated otherwise within Chapter 6. Where the standard methodology is not followed, a discipline specific methodology is detailed within Chapter 6 of this Report.

Table 4.2: Standard Methodology for Assessing Magnitude of Change

Magnitude of Change	Criteria for assessing magnitude of change caused by an impact
Major	Total loss or major/substantial alteration to key elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.
Moderate	Loss or alteration to one or more key elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Minor	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but not material. The underlying character/composition/attributes of the baseline condition will be similar to the pre-development circumstances/situation.
Negligible	Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation.

Prediction of Receptor Sensitivity

4.40 The sensitivity of a receptor is based on the relative importance of the receptor using the scale set out in Table 4.3. The below table represents a standard methodology which all disciplines shall follow unless stated otherwise. Where the standard methodology is not followed, a discipline specific methodology is detailed within Chapter 6 of this Report.

Table 4.3: Standard Methodology for Determining Sensitivity

Sensitivity	Examples of receptor
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character or is of international or national importance.
Moderate	The receptor/resource has moderate capacity to absorb change without significantly altering its present character or is of high importance.
Low	The receptor/resource is tolerant of change without detriment to its character, is of low or local importance.

Assessment of Effect Significance

4.41 Effect significance will be calculated using the matrix in Table 4.4. This illustrates the interaction between impact magnitude and receptor sensitivity. The duration of the effect will also be considered and whether it is permanent or temporary.

Table 4.4: Effect Significance Matrix

Magnitude	Sensitivity High	Moderate	Low
Major	Major Adverse/Beneficial	Major - Moderate Adverse/Beneficial	Moderate - Minor Adverse/Beneficial
Moderate	Major - Moderate Adverse/Beneficial	Moderate – Minor Adverse/Beneficial	Minor Adverse/Beneficial
Minor	Moderate – Minor Adverse/Beneficial	Minor Adverse/Beneficial	Minor - Negligible
Negligible	Negligible	Negligible	Negligible

Mitigation Measures

4.42 Adverse effects will be considered for mitigation and specific measures will be put forward, where practicable. Mitigation measures considered may include modification of the project, compensation and the provision of alternative solutions as well as pollution control. The extent of the mitigation measures and how these will be effective will be discussed. Where the effectiveness is uncertain or depends upon assumptions about operating procedures, data will be introduced to justify the acceptance of these assumptions.

4.43 It should be noted that a distinction will be made between 'additional' mitigation and 'embedded' mitigation. The significance will be assessed and an initial conclusion reached prior to the consideration of any additional (add-on) mitigation, and identifying of residual harm.

4.44 The approach to mitigation will follow best practice guidance, which suggests a hierarchical approach whereby effects are avoided, and if not, they are minimised and/or compensated.

4.45 Clear details of when and how the mitigation measures were carried out, or will be carried out, are to be given within the ES. When uncertainty of impact magnitude and/or effectiveness of mitigation over time exists, monitoring programmes will be proposed to enable subsequent adjustment of mitigation measures, as necessary.

4.46 The opportunity for enhancement measures will also be considered where appropriate.

Cumulative Effects

4.47 Two types of cumulative effect will be assessed:

- Type 1 Cumulative effects - are the interactions between effects of the construction and development works on a single receptor.

- Type 2 Cumulative effects - are those that arise from incremental changes caused by other past, present or reasonably foreseeable projects together with the development proposals and associated works.

4.48 An assessment of the cumulative effect of the Proposed Development and other committed developments within a defined radius of the Site, including those with recent Planning Permissions and reasonably foreseeable to come forward in the near future, will be undertaken as part of the EIA.

4.49 There is no agreed / standard threshold for how far the assessment should go. Therefore, a professional judgement has been taken regarding which schemes to highlight, taking into consideration the surrounding context of the Site, which may differ between disciplines. This is set out for the relevant disciplines in Chapter 6.

4.50 As a general principle, schemes under construction are treated as forming part of the baseline, while schemes that are approved, subject to a live application reasonably likely to be approved, or otherwise reasonably foreseeable are treated as committed developments for the purposes of the cumulative assessment. Professional judgement is applied where the status of a scheme does not reflect its realistic delivery position. For example, a scheme where construction has commenced but is known to have stalled may be treated as part of the committed development pipeline rather than the baseline. The rationale for the treatment of each scheme, including any assumptions made, is recorded in the committed developments table.

4.51 Full details of the committed developments to be included as part of the cumulative effects assessment are set out at Appendix 2.

Residual Effects

4.52 The residual effects, i.e. the effects of the Proposed Development assuming implementation of proposed mitigation (both embedded and additional), will be determined. The residual effects represent the overall likely significant effect of the Proposed Development on the environment having taken account of practicable/available mitigation measures.

5 Environmental Disciplines to be Scoped Out of the EIA

5.1 Table 5.1 identifies the environmental disciplines to be scoped out of the EIA, including supporting evidence base.

Table 5.1: Environmental Disciplines to be Scoped Out of the EIA

Discipline	Evidence Base
Agricultural Circumstances	The Site is entirely on brownfield land so there would be no likely significant effects with respect to agriculture. This discipline can therefore be scoped out of the EIA.
Transport	*Summary analysis* The Site is primarily occupied by a vacant warehouse and includes a service yard associated with the neighbouring Victoria & Albert Hotel, which will transfer back to the hotel operator. As the warehouse is vacant, the associated baseline traffic is currently zero. The Site is bounded by New Quay Street to the east and Water Street to the south, which form a signalised crossroads adjacent to the Site's eastern corner. Only a single 'slight' collision occurred at this crossroads between 2020 and 2024, with no collisions on the sections of either New Quay Street or Water Street which border the Site. It is therefore considered that there are no existing road safety issues within the immediate vicinity of the Site. Located within an established urban area, the Site benefits from a highly accessible active travel and public transport network. The nearest bus stop is approximately 170m east on New Quay Street, served by Free Bus service #1 every 10 minutes on weekdays. Additional bus services are available from bus stops on Bridge Street approximately 350m northeast of the Site providing connections to destinations further afield including Leigh, Bolton and Warrington. Deansgate-Castlefield Metrolink and Deansgate railway stations are approximately 900m southeast, providing frequent services across Greater Manchester and the North West. The proposed development comprises circa. 419 apartments, including residential amenity facilities. The Site is proposed to be car-free, except the two penthouse apartments, where garages will be provided at ground floor level. A development of 419 apartments is forecast to generate 248 daily two-way vehicular movements, based on TRICS total-person trip rates and a 10% car mode share, aligned with the City Centre Transport Strategy's 2040 target (down from 21% in 2019). While these modal shares relate to trips into central Manchester, they provide a reasonable proxy for residents within the city centre, where travel by taxi and car clubs would be more likely than travel by the private car, particularly given the absence of on-site car parking. Our professional judgement is that actual car use is likely to be lower than 10% due to the availability and attractiveness of sustainable modes of transport.

Discipline	Evidence Base
	Servicing and deliveries, including Amazon and Uber Eats for example, are estimated to generate 190 daily two-way trips, based on trip rates contained in the TRICS report 'Servicing & Deliveries at Residential Apartments in London' (2025). The nature and function of both New Quay Street and Water Street suggest they are not sensitive links. A Department for Transport traffic count on New Quay Street records 8,563 daily two-way movements. The 438 forecast resident, servicing and delivery trips would represent a 5.12% traffic increase, which is well below the 30% threshold for assessment contained within IEMA guidelines 'Environmental Assessment of Traffic and Movement' (2023). In lieu of a formal traffic count on Water Street, our professional judgment is that the road serves primarily as an access to car parking and for servicing, noting it is not a through-route. It also benefits from a wide carriageway and footways, providing adequate space for all road users. On this basis, the effects of the proposed development traffic on Water Street during the operational phase are expected to be minor and not significant. Construction vehicle forecasts have been provided by Renaker. There would be a maximum of 4 daily goods vehicle trips during the steady state construction period, and 15 daily goods vehicle trips, comprising 5 LGVs and 10 HGVs, at the peak of construction. The forecast level of construction vehicles would be significantly below the 30% threshold for assessment on New Quay Street, with the peak of construction representing a 0.18% increase (total vehicles) and a 3.89% increase (HGVs only). Our professional judgement is that the effects of the proposed development traffic on Water Street during the construction phases would be minor and not significant.
	Consultation There has been no consultation with Local Authorities at this stage. It is proposed engagement will be ongoing with MCC Highways throughout the development of proposals.
	Rationale for scoping out • There are no recorded existing road safety issues within the immediate vicinity of the Site. • The Site benefits from a highly accessible active travel and public transport network. • The proposed development is forecast to generate 248 daily two-way vehicular movements by residents, and 190 daily two-way servicing and delivery trips. • The nature and function of both New Quay Street and Water Street suggest they are not sensitive links. • A traffic count on New Quay Street records 8,563 daily two-way movements, and the 438 forecast resident, servicing and delivery trips represent a 5.12 % increase. • There would be 15 daily goods vehicle trips, comprising 5 LGVs and 10 HGVs, during the peak of construction, representing a 0.18% increase (total vehicles) and a 3.89% increase (HGVs only). • The forecast traffic increases on New Quay Street during the operational and construction phases are well below the 30% threshold for assessment contained within IEMA guidelines. • Our professional judgement is that the effects of the proposed development traffic on Water Street during the operational and construction phases would be minor and not significant.

Discipline	Evidence Base
Archaeology	*Summary analysis* Available baseline information: • Historic maps • Previous Desk-based Assessment (OA North, 2016) • Heritage Gateway The Site falls within the Castlefield Conservation Area and adjoins the Grade II Listed Albert Warehouse. A separate Heritage Statement is being produced to assess the impact on built heritage. The Site has potential for buried remains dating to the industrial period, including 18th-century quay buildings and houses, and the 19th-century Albert Warehouse. Development had taken place within the Site by the early 18th century when a quay was constructed along the River Irwell by the Old Quay Company by 1740. The Site was within part of the quay yard. The quay was extended in the mid- to late 18th century with warehouses constructed and a group of houses at Quay Court were built to the east. Buildings associated with a dye house were also established by at least 1831. Albert Warehouse was constructed in the west of the Site in the early to mid-19th century, replacing some of the houses and earlier warehouse, with the dye house and a timber yard in the east of the Quay yard. The warehouse was extended in the late 19th century, occupying the full footprint of the Site, and was remodelled as Albert Shed in the early 20th century. Part of Albert Shed currently remains upstanding within the Site.
	Consultation • Lesley Dunkley – Historic Environment Officer (GMAAS) – via email on 18th March 2026 • Ian Miller – Heritage Management Director (GMAAS) – via email on 18th March 2026 Consultation with Ian Miller confirmed that the Site has the potential to contain archaeological remains associated with the former Old Quay, Quay Court and Albert Warehouse. Given the anticipated low (local) to medium (regional) significance of any surviving remains, it was agreed that archaeology can be appropriately addressed through a standalone archaeological assessment and mitigation strategy secured by planning condition. Whilst development may affect archaeological deposits, any impacts can be adequately investigated, recorded and mitigated, such that significant residual effects are not anticipated.
	Rationale for scoping out • Ground-breaking works have the potential to affect buried archaeological remains that may survive within the Site and are considered of low (local) or potentially medium (regional) significance in line with ICOMOS guidance and criteria.

Discipline	Evidence Base
	• Any effect would be mitigated prior to construction during an archaeological evaluation and preservation by record. Any necessary mitigation would be secured through a condition of planning in line with policies HE5 (paragraph 5) and HE10 (paragraphs 1b and 2) of the National Planning Policy Framework (Aug 2026). • The archaeology scoping assessment has concluded that there will be no likely significant effects in EIA terms arising from the proposed development. • An archaeological desk-based assessment has been prepared to support the proposed scheme.
Ecology	*Summary analysis* ERAP (Consultant Ecologists) Ltd carried out a daytime licensed bat survey and ecological assessment of the site in December 2022. The previous report states: In the presence of the implementation of measures to protect the habitat connectivity function at the River Irwell, the proposals will have no adverse direct or indirect effect on statutory or non-statutory designated sites for nature conservation. Vegetation is limited to occasional young shrubs of self-seeded Butterfly-bush and Silver Birch at the yard to the west of the building. No Priority Habitat, semi-natural habitats or irreplaceable habitat will be affected by the proposals. No invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were detected at the site. No evidence of the current or previous use of the building by roosting bats was detected. The building is assessed to be of 'negligible' suitability for use by roosting bats. Inappropriate use of artificial lighting around the exterior (particularly the riverside / north-western elevation) of the building may have an adverse effect on use of the off-site river corridor site by foraging bats and other wildlife. Mandatory measures to be applied to ensure protection of nesting birds during and prior to the site preparation works are required. • Appropriate and proportionate survey effort and / or assessment, in accordance with standard survey guidelines has been applied to discount adverse effects on other relevant protected species. No further surveys for other protected species were considered to be necessary to inform a planning application. The scope of survey to be completed in 2026 will provide an update to the 2022 survey and will be compliant with current ecological survey guidelines, planning guidance and best practice.
	Consultation The Greater Manchester Local Record Centre (GMLRC) has been contacted to obtain known records of Sites of Biological Importance (SBIs) and protected / notable species within the Site and relevant zone of potential influence of the proposals. There are no known statutory and non-statutory designated sites or other ecological considerations within a zone of potential influence of the proposals that would trigger the need to scope ecology into the EIA. No further consultation has been undertaken.

Discipline	Evidence Base
	Rationale for scoping out There are no significant ecological constraints at the Site / associated with the proposals. No potential significant adverse effects on statutory and non-statutory designated sites, irreplaceable habitats, Priority Habitats, invasive plant species, rare plants and protected species are identified. Based on the anticipated low score of the Site in terms of statutory Biodiversity Net Gain (BNG), if relevant, it is advised that the Site will secure biodiversity net gain in accordance with the Statutory Biodiversity Metric and that compliance with the Biodiversity Net Gain: Good Practice Principles for Development (CIEEM, 2016) can be demonstrated.
Electronic Interference	*Summary Analysis* To identify the existing quality of terrestrial services, a terrestrial television baseline survey will be conducted. This will allow a 'before and after' comparison in the event of a complaint being received post-construction. A desk-based assessment to predict potential effects upon satellite reception will also be carried out. If adverse effects on television services occur as a result of the Development, mitigation measures will be required. The most effective form of mitigation is dependent on the specific impact, however the most common form of mitigation for isolated impacts upon terrestrial reception is the provision of Freesat. Effects upon satellite users are commonly addressed via upgrading the dish or relocating it outside the interference zone. The impacts will only be identified once the Development is operational via reports received or by carrying out a post construction survey. The requirement for the implementation of such measures will be addressed on a case-by-case basis dependent on the report received or the results of the post construction survey. A mitigation strategy can be implemented pursuant to a planning condition.
	Consultation Consultation has not been carried out nor is proposed. Consultation is not carried out with respect to assessing potential interference of TV reception. Methodologies are established and precedented for building developments in urban areas.
	Rationale for scoping out It is generally the case that if adverse impacts to reception are experienced due to a new building, alternative sources of coverage can be provided. The optimal solution needs to be assessed on a case-by-case basis. Common options include improvement or adjustment of the receiving equipment, or provision of services via an alternative technology. The process for investigating and dealing with TV interference is well known and is frequently covered by a planning condition. No significant residual effects are therefore predicted. It is therefore considered appropriate for TV reception to be scoped out.

6 Environmental Statement Chapters

6.1 The proposed scope of the EIA is set out in the below Chapter. Each consultant has followed the Scoping Template as issued by Deloitte, the EIA Co-ordinator.

6.2 The list of proposed technical ES Chapters are set out as follows.

- Daylight, Sunlight and Overshadowing
- Townscape and Visual Impact
- Climate Change
- Air Quality
- Noise and Vibration
- Socio-Economics
- Human Health
- Heritage
- Solar Glare
- Wind
- Ground Conditions
- Water Resources

6.3 The scope of each topic has been determined according to the nature of the likely effects. Some topics assess both construction and operational effects, whilst others focus on operational effects only where this represents the relevant worst-case scenario.

Daylight and Sunlight (GIA)

Consultation & Available Information, & Baseline Conditions

Consultation

6.4 There are no specialists within Manchester City Council or other statutory consultees relevant to the area of daylight and sunlight. As such, no consultation has been undertaken.

6.5 Discussions on daylight and sunlight have formed part of any pre-application process with Manchester City Council.

Completed Background Studies

6.6 Identification of residential/student sensitive receptors surrounding the Site.

6.7 Location of floor plans for the residential/student sensitive receptors.

6.8 Identification of external amenity space sensitive receptors surrounding the Site.

Baseline Conditions

6.9 The scope of the residential buildings (the daylight and sunlight receptors) and the areas of outdoor amenity space (the overshadowing sensitive receptors) that will be assessed has been determined through professional judgement, considering their orientation and proximity to the Site.

6.10 The baseline conditions are the levels of daylight sunlight and overshadowing that are experienced by the sensitive receptors with the Site developed as it is currently (September 2026).

6.11 Baseline daylight, sunlight and overshadowing assessments of the daylight, sunlight and overshadowing sensitive receptors are currently being undertaken. The baseline assessments will review the daylight, sunlight and overshadowing conditions within each of the sensitive receptors based on the Site area's present form (i.e. the current baseline).

6.12 If the Proposed Development did not come forward, the baseline daylight, sunlight and overshadowing levels within the sensitive receptors would remain as per the baseline assessment. Conditions would not change unless other developments were demolished/constructed in the area.

Scope of Assessment

Identification of Effect/s which are Not Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Reduced daylight and sunlight amenity within commercial properties or within distant residential buildings/amenity space	All commercial properties or residential properties and areas of amenity space which are sufficient distance not to be affected by the Proposed Development	Construction and Operation	The scope of works will focus on the nearest sensitive receptors which are the residential properties and public amenity spaces in immediate proximity of the Site. These have been determined in line with the reasonable expectation of daylight and sunlight as per the BRE guidelines. The BRE Guidelines consider that residential properties have the highest requirement for daylight and sunlight. As such, daylight and sunlight effects to commercial buildings surrounding the Site, or residential buildings and areas of amenity space that are sufficient distance from the Site, are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Reduced daylight and sunlight amenity within surrounding residential buildings/amenity space during demolition and construction	All	Construction	Owing to the evolving and changing nature of construction activities, the assessment of potential daylight, sunlight and overshadowing effects during construction of the Proposed Development on surrounding properties and amenity space will not be modelled. Since the potential daylight, sunlight and overshadowing effects relating to construction works will vary throughout the construction programme and gradually increase to the potential effects identified for the completed Proposed Development, the interim construction effects will not be assessed qualitatively as it is considered that the completed Proposed Development represents the worst-case assessment. Therefore, the completed development represents the maximum extent of effect and therefore provides a robust worst-case assessment

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/ Operation*	*Discussion*
Reduction in daylight amenity	Leftbank Apartments Quartz Building – The Slate Yard Graphite Building – The Slate Yard Flint Building – The Slate Yard Union East Tower Union West Tower Ralli Quays (PA/2024/1691)	Operation	Reduction in daylight amenity within the daylight sensitive receptors
Reduction in sunlight amenity	Leftbank Apartments Quartz Building – The Slate Yard Graphite Building – The Slate Yard Flint Building – The Slate Yard Union East Tower Union West Tower Ralli Quays (PA/2024/1691)	Operation	Reduction in sunlight amenity within the sunlight sensitive receptors
Increased overshadowing	The Slate Yard – Amenity Space	Operation	Increase in shadow upon the overshadowing sensitive receptors

Assessment Methodology for Likely Significant Effects

Baseline Data

6.13 The baseline assessments will be carried out in accordance with the BRE Guidelines.

6.14 The analysis will be calculated from a 3D computer model using specialist software based on detailed architectural models, Ordnance Survey (OS) mapping and photogrammetry.

6.15 The baseline daylight amenity to the identified sensitive receptors will be considered by reference to the BRE recommended Vertical Sky Component (VSC) and, where floor plans are publicly available, No Sky Line (NSL) methods of assessment.

6.16 The baseline sunlight amenity to the identified sensitive receptors will be considered by reference to the BRE recommended Annual Probable Sunlight Hours (APSH) method of assessment. Due to the southerly location of the sun in the sky, this assessment will consider those windows which face the Site and are located within 90 degrees of due south.

6.17 The baseline overshadowing levels to the identified sensitive receptors will be considered by reference to the BRE recommended Sun Hours on Ground (SHOG) method of assessment.

Method of Assessment

6.18 In accordance with the BRE guidelines, the same assessments used to establish the baseline levels of daylight, sunlight and overshadowing will be used to assess the daylight, sunlight and overshadowing levels with the Proposed Development in place. The baseline and proposed levels will then be compared in order to determine the magnitude of change and the significance of any daylight, sunlight and overshadowing effects.

6.19 The following table provides a summary of the criteria set out within the BRE guidelines for daylight, sunlight and overshadowing.

Method	BRE Criteria
VSC	A window may be adversely affected if its VSC measured at the centre of the window is less than 27% and less than 0.8 times is former value.
NSL	A room may be adversely affected if the daylight distribution (NSL) is reduced beyond 0.8 times its existing area.
APSH	A window may be adversely affected if a point at the centre of the window received for the whole year, less than 25% of the APSH including at least 5% of the APSH during the winter months (21 September to 21 March) and less than 0.8 times its former sunlight hours during either period, and for existing neighbouring buildings, if there is a reduction in total APSH which is greater than 4%.
SHOG	An amenity area may be adversely affected if less than 50% of its area receives less than 2 hours of direct sunlight on 21 March and less than 0.8 times its former value.

6.20 Best estimates were made in determining building uses (residential or commercial). Generally, these were made from external observations and recourse to the Valuation Office Agency's (VOA) council tax records.

6.21 Where publicly available, room layouts will be included within the modelling of the sensitive receptors. Reasonable assumptions as to the floor levels within these modelled rooms, which dictate the level of the working plane relevant for the NSL assessments, will be based on external observations.

Townscape and Visual Impact (LDA)

Consultation & Available Information, & Baseline Conditions

Consultation

6.22 The principal viewpoints from which verified views will be prepared to inform the visual impact assessment have been agreed via email with the LPA. The viewpoints have also been shared with Historic England, who at the time of preparing the report have not responded.

Completed Background Studies

6.23 An initial desktop review of OS mapping, aerial photography, relevant planning policy and guidance and a preliminary site visit have been carried out. A field visit will be undertaken to confirm selection of viewpoints and townscape character.

Baseline Conditions

6.24 The Site is located in Manchester City Centre and is bound by New Quay Street to the north, the River Irwell to the west and Water Street to the south and to the east. The Site is located within Castlefield Conservation Area, however, contains no buildings considered to yield any heritage interest are on the site itself.

6.25 The site is located in the St Johns character area which has witnessed a great deal of redevelopment in recent years, including several tall buildings and a major new performance venue the Aviva Studios (home of Factory International). The area also contains a number of important listed structures, including the Grade I Liverpool Road Station and 1830s Warehouse together with a number of non-designated heritage assets. Also included are a number of natural assets, including the River Irwell riverside frontage and St. Johns Gardens, a small area of public open space situated in the centre of this area.

Scope of Assessment

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Change to townscape character	Townscape Character	Construction/Operation	The townscape effects of Proposed Development on a series of townscape character areas that surround the Proposed Development site for a distance of up to 1Km will be assessed as part of the TVIA.
Changes to site visuals	Visual Receptors	Construction/Operation	The visual effects of the Proposed Development on a series of selected, and agreed, Representative Viewpoints that surround the Proposed Development site for a distance of up to 1Km will be assessed as part of the TVIA.

Assessment Methodology for Likely Significant Effects

Baseline Data

6.26 A Zone of Theoretical Visibility (ZTV) map will be produced using Lidar data superimposed onto a 10K map to provide an indication of the Proposed Developments' visibility and guide the selection of viewpoints.

6.27 The effects of the Proposed Development on Townscape Character will be based on Manchester City Centre Zones, revised in Manchester Residential Quality Guidance as Neighbourhood Zones.

Method of Assessment

6.28 The Institute of Environmental Management and Assessment (IEMA) / Landscape Institute 'Guidelines for Landscape and Visual Impact Assessment' (3rd Ed., 2013) will be used as the principal source of guidance for the methodology for this assessment. The Historic England Advice Note (no.4) on Tall Buildings, 2015 will also be used as relevant guidance.

6.29 A number of 'Representative Viewpoints' have been selected and agreed with MCC, all within the identified ZTV. They have been confirmed following extensive fieldwork. This will inform the assessment of the effect of the Proposed Development on townscape character, views and visual receptors in more detail and on a comprehensive basis, taking in short, medium and long range views, all from publicly accessible viewpoints. Receptors fall into two categories: Townscape receptors and Visual Receptors. Viewpoints will be selected to ensure that the Proposed Development is assessed from a 360 degree basis and from a range of different viewpoints which include approach roads, key, well used city centre streets, tram stations, urban parks, civic spaces and buildings and sensitive historic environments such as Castlefield.

6.30 The Townscape and Visual Impact Assessment will be supported by Accurate Visual Representation (AVRs) consisting of rendered and wireline images of the Proposed Development superimposed onto baseline photographs which are accurately surveyed from selected viewpoints. Technical Note 06/19 Visual Representation of Development Proposals will be used to inform the methods for production of visualisations but a Type 4 Photomontage / Photowire (Survey/ Scale Verifiable) is deemed an appropriate level of visualization in these circumstances.

6.31 Views will be assessed during the summer months, when vegetation is in full leaf. As a result, foliage may partially screen the Proposed Development in some views, representing a relatively favourable visibility scenario. Where practicable, viewpoints will be selected to minimise the influence of foreground vegetation. This is not considered a significant limitation to the TVIA given the Site's highly urbanised location within Manchester City Centre, where tree and hedge cover in the immediate vicinity is limited.

Climate Change

Consultation & Available Information, & Baseline Conditions

Consultation

6.32 No consultation has been undertaken to date or is proposed to be carried out for the purposes of the assessment, beyond that carried out through EIA scoping.

Completed Background Studies

6.33 No site-specific Climate Change studies have been previously undertaken for the Site.

Baseline Conditions

GHG Emissions Assessment

6.34 The Site comprises a currently unused industrial building, as well as an area of hardstanding currently used as a surface level car park. Consideration to existing GHG emissions from vehicles utilising the car park will be provided within the assessment.

6.35 In the absence of future development, GHG emissions generated by the existing land-uses associated with the Site will remain. In the long-term, it is anticipated that emissions associated with vehicle movements and electricity from the grid will decrease in line with national and regional decarbonisation strategies to achieve net zero by 2050.

Climate Change Resilience Assessment

6.36 Existing climatic conditions are predicted to change regardless of whether the Proposed Development occurs or not. The UK Met Office Hadley Centre has published climate change projections for the UK, referred to as the UK Climate Projections (2018) (UKCP18). This suggests the UK will experience warmer and wetter winters and drier and hotter summers, leading to an increased risk of climate hazards such as heatwaves, droughts, floods, storms and extreme winds.

Scope of Assessment

Identification of Effect/s which are Not Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Climate change hazards/ risks	Construction staff, plant and machinery	Construction	The climate is not anticipated to vary significantly over the construction period. As such, no additional hazards or risks are anticipated beyond those generated by current climatic conditions

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
A1-A3: Product stage embodied carbon	Global atmosphere	Construction	GHG emissions associated with raw material extraction, transport to manufacturer, and manufacturing of building materials and products
A4-A5: Construction process stage	Global atmosphere	Construction	GHG emissions associated with transport of materials to site, construction and installation processes, and construction waste
B1-B5: In-use embodied carbon	Global atmosphere	Operation	GHG emissions associated with use, maintenance, repair, replacement, and refurbishment of building components over the 60-year reference study period
B6: Operational energy use	Global atmosphere	Operation	GHG emissions associated with the operational energy use for the day-to-day running of the building
B7: Operational water consumption	Global atmosphere	Operation	GHG emissions associated with operational water consumption and wastewater treatment
B8: Operational waste emissions	Global atmosphere	Operation	GHG emissions associated with disposal of waste during the operation of the Proposed Development

Operational road vehicle exhaust emissions	Global atmosphere	Operation	GHG emissions associated with operational transport
C1-C4: End of life stage	Global atmosphere	Operation	GHG emissions associated with deconstruction/demolition, transport, waste processing, and disposal of the Proposed Development at the end of its design life
Climate change hazards/ risks	Future building occupants/ Building structure/ Infrastructure and Plant/ Landscaping	Operation	Impact of climate hazards such as heatwaves, drought, water scarcity, flood risk, storms and extreme weather events over the lifetime of the Proposed Development

Assessment Methodology for Likely Significant Effects

Baseline Data

6.37 To establish the existing baseline, consideration will be given to any potential GHG emissions from the existing Site use, as well as establishing the existing GHG emissions at a national and regional level. The following data sources will be utilised:

- GHG emissions from vehicles utilising from the existing car park.
- Annual emissions for the existing site will be derived from the Department of Environment Food and Rural Affairs (DEFRA) latest Emissions Factor Toolkit (EFT).

6.38 The existing national and regional emissions statistics will be obtained from the latest figures published by the Department for Energy Security and Net Zero (DESNZ) at the time of writing. This will allow contextualisation of emissions against relevant baseline levels.

6.39 The existing local climate context will be based on historic climate data obtained from the Met Office for the closest historical meteorological station to the Site and will consider changes to parameters such as average, maximum and minimum temperatures, rainfall and frost days over the 30-year period between 1991 - 2020.

6.40 The future baseline will be defined using the UK Met Office Hadley Centre's published climate change projections for the UK, referred to as UKCP18. A summary of a range of projected changes to climate variables will be provided to generate a view of future climate conditions and assess potential impacts.

6.41 The assessment of potential likely effects of climate change on the Proposed Development will apply a conservative approach recommended as best practice in the Institute of Sustainability and Environmental Professionals (ISEP) 'Environmental Impact Assessment Guidance to: Climate Change Resilience and Adaption' (2020). As such, the assessment will utilise the highest concentration pathway scenario, RCP8.5, to establish the future baseline. This represents likely worst-case changes to climatic conditions during the time periods that correspond to the lifetime of the Proposed Development.

Method of Assessment

6.42 In accordance with the EIA regulations, the Climate Change chapter will address:

- The impact of the project on climate change, in line with IEMA (2022) Assessing Greenhouse Gas Emissions and Evaluating their Significance

- The vulnerability of the project to climate change (climate change resilience) in line with IEMA (2020) EIA Guide to: Climate Change Resilience & Adaptation

GHG Emissions Assessment

6.43 The Proposed Development has the potential to generate GHG emissions across its lifetime. As such, associated effects will be assessed in accordance with the ISEP guidance 'Assessing GHG Emissions and Evaluating their Significance Edition 2.1 with Supplementary Guidance', (2026).

6.44 GHG emissions contribute to climate change, which is a global environmental effect. Therefore, the study area for the assessment is not limited by any specific geographical scope or defined by specific sensitive receptors. Nevertheless, the assessment will focus on emission sources associated with the Proposed Development over which the Applicant has some ability to control or influence. The assessment will consider impacts arising across the lifetime of the Proposed Development, inclusive of the demolition, construction and operational phases.

6.45 Expected GHG emissions arising from the sources scoped into the assessment will be quantified through a Whole Life Carbon Assessment (WCLA) undertaken in accordance with the Royal Institute of Chartered Surveyors (RICS) Whole Life Carbon Assessment for the Built Environment, 2nd Edition (2023). Where emission sources fall outside of the RICS WCLA scope, such as those generated by vehicles travelling to and from the site, they will be quantified using a calculation-based methodology as per the following equation which is aligned with the GHG Protocol.

6.46 The relevant approach to each GHG emission source will be applied and justified within the assessment.

Climate Change Resilience Assessment

6.47 The CCRA will focus on the global impact of an external factor (climate change) on the Proposed Development, rather than the local impact of the Proposed Development on receptors in a confined geographical location. The resilience of the Proposed Development to climate change will be assessed based on the susceptibility and vulnerability of receptors to climate risks, the likelihood of a climate risk occurring and consequence to the receptor.

6.48 A CCRA will be undertaken following the methodology provided within Appendix 1 of the ISEP 'Environmental Impact Assessment Guidance to: Climate Change Resilience and Adaption' (2020) guidance document. This will comprise the following five stages:

- Define the future baseline;

- Identify potential climate risks and affected receptors within the scheme;

- Assess the likelihood and consequence of each climate risk on the identified receptors;

- Determine the significance of impacts; and,

- Where necessary, provide additional mitigation measures to reduce the impacts of the identified risks.

6.49 The study area for the CCRA, unlike other disciplines, will focus on the effect that climate change will have on the Proposed Development, rather than the Proposed Development on the environment. The study area therefore will comprise identified receptors within the Site extents. Consideration will be given to future predicted climate change over the lifetime of the Proposed Development.

6.50 The ISEP guidance recommends using a combination of the likelihood of a climate hazard event occurring and consequence of such an event on the identified receptors to reach a reasoned conclusion on the magnitude of the effect of climate change on the Proposed Development. The ISEP guidance states that magnitude is based on a combination of:

- Likelihood, which takes into account the chance of the effect occurring over the lifespan of the Proposed Development if the risk is not mitigated; and,

- Consequence, which reflects the geographical extent of the effect, or the number of receptors affected (e.g., scale), the complexity of the effect, the sensitivity of receptors, and the duration, frequency, and reversibility of the effect.

6.51 The ISEP 'Assessing GHG Emissions and Evaluating their Significance Edition 2.1 with Supplementary Guidance', (2026) will be utilised to assess the significance of potential GHG emissions effects. The relevant criteria are summarised in the table below.

Major Adverse	The project's GHG impacts are not mitigated or are only compliant with do-minimum standards set through regulation, and do not provide further reductions required by existing local and national policy for projects of this type. A project with major adverse effects is locking in emissions and does not make a meaningful contribution to the UK's trajectory towards net zero.
Moderate Adverse	The project's GHG impacts are partially mitigated and may partially meet the applicable existing and emerging policy requirements but would not fully contribute to decarbonisation in line with local and national policy goals for projects of this type. A project with moderate adverse effects falls short of fully contributing to the UK's trajectory towards net zero.
Minor Adverse	The project's GHG impacts would be fully consistent with applicable existing and emerging policy requirements and good practice design standards for projects of this type. A project with minor adverse effects is fully in line with measures necessary to achieve the UK's trajectory towards net zero.
Negligible	The Proposed Development's GHG impacts would be reduced through measures that go well beyond existing and emerging policy and design standards for projects of this type, such that radical decarbonisation or net zero is achieved well before 2050. A project with negligible effects provides GHG performance that

	is well 'ahead of the curve' for the trajectory towards net zero and has minimal residual emissions.
Beneficial	The project's net GHG impacts are below zero and it causes a reduction in atmospheric GHG concentration, whether directly or indirectly, compared to the without-project baseline. A project with beneficial effects substantially exceeds net zero requirements with a positive climate impact.

6.52 It should be noted that substantial or moderate adverse effects and beneficial effects are considered to be significant. Slight adverse and negligible effects are considered to be not significant.

6.53 All GHG emissions to the atmosphere have a lasting effect, accumulating and remaining in the atmosphere and contributing to global warming. As such, effects from each stage of the development will be considered as long term, permanent, direct and irreversible.

6.54 The estimated net GHG emissions will be contextualised against the UK National Carbon Budgets and the Tyndall Centre recommended carbon budgets for Manchester.

6.55 Climate Resilience: Significance is determined using a risk-based approach (likelihood of hazard × consequence to the development), consistent with IEMA (2020) guidance. The assessment will be reported in the form of a risk assessment rather than using the standard significance matrix.

Climate Change Resilience Assessment

6.56 The likelihood of a risk occurring will be combined with the consequence of effect to determine the significance of impact in line with the significance matrix with ISEP's 'Environmental Impact Assessment Guidance to: Climate Change Resilience and Adaption' (2020) guidance. This is shown in the table below.

Likelihood	Consequence of Effect				
	Negligible	Minor	Moderate	Moderate/Major	Major
Very High	Not Significant	Significant	Significant	Significant	Significant
High	Not Significant	Not Significant	Significant	Significant	Significant
Medium	Not Significant	Not Significant	Not Significant	Significant	Significant
Low	Not Significant	Not Significant	Not Significant	Not Significant	Significant
Very low	Not Significant	Not Significant	Not Significant	Not Significant	Significant

6.57 Where significant effects are determined, further mitigation measures will be required to ensure the scheme is resilient to future climate change.

Air Quality

Consultation & Available Information, & Baseline Conditions

Consultation

6.58 Consultation will be undertaken with the MCC Environmental Protection Officer to agree scope and methodology of the proposed air quality assessment.

6.59 The consultation emails are detailed within Appendix 16 to this scoping report.

Completed Background Studies

6.60 A review of baseline air quality data in the study area available from MCC's 2025 Air Quality Status Report and Defra background maps have established that there is sufficient baseline information. As such, no additional air quality background studies have been completed to date in support of the proposed development application process.

Baseline Conditions

6.61 The proposed development is located within the Manchester Air Quality Management Area (AQMA), declared for exceedances of the annual mean nitrogen dioxide (NO_2) air quality objective. A review of MCC air quality monitoring data within the 2025 Air Quality Status Report indicates potential exceedances of the annual mean NO_2 air quality objective (40µg.m^{-3}) in the vicinity of the Site.

6.62 Annual mean NO_2 concentrations recorded at monitoring locations closest to the Site in 2025, diffusion tube SA39NO and automatic station MAN09, were 31.1µg.m^{-3} and 42.2µg.m^{-3} respectively. Diffusion tube SA39NO is located approximately 350m north of the Site along Chapel Street/Trinity Way roadside, and MAN09 is located approximately 420m northeast of the Site on Bridge Street roadside.

6.63 The monitoring locations are situated in areas expected to experience similar NO_2 exposure and concentrations as New Quay Street roadside (the Site), with monitoring location MAN09 demonstrating potential for exceedances of the air quality objective in this area.

6.64 The MCC 2025 Air Quality Status Report suggests concentrations of NO_2 have typically experienced an overall decrease since the introduction of the Greater Manchester Clean Air Plan measures in 2022. However, the 2025 Air Quality Status Report also indicates concentrations of particulate matter (PM_{10} and $PM_{2.5}$) have remained stable over the reported period (2021-2025) and observed some increases between 2024 to 2025.

6.65 The proposed development may affect air quality in the surrounding area through the following:

- Demolition and construction activities which is likely to generate dust (PM10) emissions;
- Construction-related road traffic, which is likely to generate NO2, PM10 and PM2.5 emissions;
- Vehicle movements associated with the operation of the proposed development which is likely to generate NO2, PM10 and PM2.5 emissions.

- The operation of the proposed standby generator during testing and emergency scenarios which is likely to generate NOx, CO, PM10 and PM2.5 emissions.

Scope of Assessment

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Construction dust	Existing human health and property	Construction	A construction dust risk assessment should be carried out to identify the level of dust risk for the proposed development and recommended mitigation measures.
Vehicle emissions	Existing human health	Construction	Trip generation may exceed the IAQM and EPIC criteria for when an air quality assessment is required, indicating potentially significant effects on existing receptors.
Vehicle emissions	Existing and future human health	Operation	Trip generation is expected to exceed the IAQM and EPIC criteria for when an air quality assessment is required within an AQMA, indicating potentially significant effects on existing receptors and future Site users.
Generator emissions	Existing and future human health	Operation	Testing and operation of proposed standby generator would introduce a combustion process on Site with potentially significant effects on existing receptors and future Site users.

Assessment Methodology for Likely Significant Effects

Baseline Data

6.66 Data that would be utilised to determine baseline air quality conditions include:

- MCC 2025 Air Quality Status Report;
- Defra Background Mapping data for local authorities – 2021; and
- ADMS-Roads modelling of road traffic vehicle emissions to determine baseline concentrations of NO2, PM10 and PM2.5 at existing receptors.

Method of Assessment

6.67 A qualitative construction phase dust assessment would be undertaken in accordance with the IAQM Assessment of dust from demolition and construction (2024 V2.2) guidance to determine the risk of dust emissions associated with demolition, earthworks, construction and trackout activities. Mitigation will be recommended in accordance with the IAQM guidance.

6.68 A qualitative assessment of construction phase road traffic emissions would be undertaken where suitable information is available. Consideration will be given to the likely daily trip generation associated with the construction of the proposed development, and this will be screened using the IAQM and EPIC Guidance on land-use planning and development control: Planning for air quality (2017 v1.2) threshold criteria to determine the significance of effects.

The construction phase trip generation is not expected to exceed the IAQM and EPIC screening criteria.

6.69 Due to the size of the Site, a quantitative assessment of operational phase impacts on NO_2, PM_{10} and $PM_{2.5}$ at existing human receptors will be undertaken using dispersion modelling software (ADMS-Roads) as it is likely that the trip generation for the proposed development will exceed the relevant threshold criteria as detailed within the IAQM and EPIC Guidance on land-use planning and development control: Planning for air quality (2017 v1.2). The assessment methodology would follow IAQM and EPIC guidance, Defra Local Air Quality Management Technical Guidance (TG22), and MCC Air Quality & Planning Technical Guidance.

6.70 A damage cost assessment would be undertaken where required following MCC Air Quality & Planning Technical Guidance and Defra Air Quality Appraisal: Damage Cost Guidance.

6.71 An exposure assessment will be undertaken using ADMS-Roads to predict NO_2, PM_{10} and $PM_{2.5}$ across the Site using ADMS-Roads to determine the suitability of the Site for the proposed sensitive use with regards to the current relevant air quality objectives for England following IAQM and EPIC guidance and Defra Local Air Quality Management Technical Guidance (TG22).

6.72 A qualitative assessment of combustion processes introduced by the standby generator would be assessed following IAQM and EPIC Guidance on land-use planning and development control: Planning for air quality (2017 v1.2).

6.73 A qualitative assessment is proposed to evidence how exposure to $PM_{2.5}$ has been considered when selecting the Site, and what actions and/or mitigation has been considered to reduce $PM_{2.5}$ exposure across the Site and at existing sensitive receptor locations as required by Defra $PM_{2.5}$ Targets: Interim Planning Guidance.

Noise and Vibration

Consultation & Available Information, & Baseline Conditions

Consultation

6.74 Richard Knightley, Team Manager of the Environmental Health section of Manchester City Council was emailed on 20 August 2026 to discuss the scope of the noise and vibration assessments to be undertaken in relation to the proposed development. A response is currently awaited.

Completed Background Studies

6.75 Noise surveys will be carried out to determine the prevailing levels of environmental noise due to the above noise sources and any other environmental noise sources and able to affect the noise-sensitive receptors and the proposed dwellings. The surveys will include the measurement of noise at a location close to New Quay Street over several days and nights to determine the levels of noise from this major source of noise in the area. Noise levels will also be measured adjacent to the River Irwell, at a location that is screened from road traffic on New Quay Street.

6.76 These measurements will allow the determination of background noise levels in the area, representative of the sensitive receptors in the area. The surveys will be conducted in

general accordance with BS 7445-1 2003; 'Description and measurement of environmental noise'.

Baseline Conditions

6.77 The noise climate at and around the proposed development site is principally governed by road traffic on New Quay Street which borders the site to the east, road traffic on Water Street which borders the site to the south and road traffic on Trinity Way which lies approximately 130m to the northwest of the site.

6.78 The levels of noise adjacent to traffic routes and screened from direct traffic noise will be measured to determine ambient and background noise levels

6.79 There are no existing significant sources of groundborne vibration at and around the Site.

6.80 There is expected to be negligible impact on the noise and vibration climate in the area during the operation phase given compliance with the guidance documents discussed below.

Scope of Assessment

Identification of Effect/s which are Not Significant.

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Traffic Noise		Operation	Significant environmental effects are not anticipated with respect to traffic noise as the proposed development will require limited servicing and includes only four car parking spaces. Therefore, traffic flows and hence traffic noise due to the development will be insignificant relative to pre-existing traffic flows. Traffic noise can therefore be scoped out of the EIA.
Noise breakout from nearby entertainment venue Aviva Studios	Apartments within the Proposed Development	Operation	A noise survey has previously been conducted at a noise sensitive receptor (Tower 1 and 2 Union Buildings) that is substantially closer to Aviva Studios than the Proposed Development. No music noise breakout was measurable at the receptor during performances at Aviva Studios. Therefore, no impact would be expected at the Proposed Development due to Aviva Studios.

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Noise nuisance due to construction activities	Residential Properties at Leftbank and The Slate Yard; Manchester Marriott Victoria & Albert Hotel; Premier Inn, Manchester City Centre West	Construction	Noise from construction activities has the potential to result in nuisance and or adverse health effects due to disturbance of day-to-day activities.

Vibration due to construction activities	Residential Properties at Leftbank and The Slate Yard; Manchester Marriott Victoria & Albert Hotel; Premier Inn, Manchester City Centre West	Construction	Vibration due to construction activities has the potential to result in nuisance and or adverse health effects.
Noise nuisance due to fixed building services plant	Residential Properties at Leftbank and The Slate Yard; Manchester Marriott Victoria & Albert Hotel; Premier Inn, Manchester City Centre West	Operation	Noise from plant has the potential to result in nuisance and or adverse health effects due to disturbance of day-to-day activities and in the extreme can result in sleep disruption.
Noise nuisance due to entertainment and activities	Residential Properties at Leftbank and The Slate Yard; Manchester Marriott Victoria & Albert Hotel; Premier Inn, Manchester City Centre West	Operation	Noise from leisure facilities has the potential to result in nuisance and or adverse health effects due to disturbance of day-to-day activities and in the extreme can result in sleep disruption. The proposed leisure facilities at the development are a pool, a gym and an amenity space, each of which is expected to be provided with a background music system.

Assessment Methodology for Likely Significant Effects

Baseline Data

6.81 The proposed development sits within the jurisdiction of Manchester City Council. The main existing noise sources affecting the Proposed Development and surrounding sensitive receptors are:

- Road traffic on New Quay Street, which borders the site to the east.
- Road traffic on Water Street, which borders the site to the south.
- Road traffic on Trinity Way to the lies approximately 130m to the northwest of the site.

6.82 Noise surveys will be carried out to determine the prevailing levels of environmental noise due to the above noise sources and any other environmental noise sources and able to affect the noise-sensitive receptors and the proposed dwellings. The surveys will include the measurement of noise at a location close to New Quay Street over several days and nights to determine the levels of noise from this major source of noise in the area.

6.83 Noise levels will also be measured adjacent to the River Irwell, at a location that is screened from road traffic on New Quay Street. These measurements will allow the determination of background noise levels in the area, representative of the sensitive receptors in the area. The

surveys will be conducted in general accordance with BS 7445-1 2003; 'Description and measurement of environmental noise'.

Method of Assessment

6.84 To assess fixed building services plant noise, reference will be made to BS 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound'.

6.85 To assess noise and Vibration due to construction activities, reference will be made to BS 5228 (2009+A1:2014) 'Code of practice for noise and vibration control on construction and open sites'.

6.86 To establish acceptable levels of music noise breakout, reference will be made to 'Planning & Noise, Technical Guidance', issued in October 2022 by the Environmental Protection, Environmental Health and The Neighbourhoods Service sections of Manchester City Council.

6.87 Appropriate noise levels within the proposed dwellings will be those recommended in BS 8233: 2014 'Guidance on sound insulation and noise reduction for buildings'.

Socio Economics

Consultation

6.88 No consultation has been undertaken to date.

Completed Background Studies

6.89 An initial socio-economic baseline assessment has been undertaken using published datasets to establish existing conditions. Appropriate study areas have been defined for each socio-economic receptor to assess the characteristics of the communities most likely to be affected by the Proposed Development, including population, employment and social and community infrastructure. The assessment areas vary by receptor and are outlined in the baseline section below.

6.90 Datasets accessed include:

- Office for National Statistics (ONS) Annual Population Survey (2025)
- ONS Business Register and Employment Survey (2024)
- ONS Regional gross value added (balanced) by industry (2023)
- NHS General Practice Workforce Survey (2026)
- ONS Census (2021)
- Department for Education (DfE) School Capacity (2025)
- ONS Family Spending Workbook (2025)

6.91 The assessment was completed during August 2026 using the latest available datasets at that time. While all committed developments identified in the area are relevant, due to data

availability and time lags in reporting updates, it is unlikely that publicly available baseline data will reflect them all.

Baseline Conditions

6.92 The site is located within Deansgate ward, on the western boundary of the local authority of Manchester. For the purpose of this assessment, the 'local area' will comprise of this ward, as well as two bordering wards within the neighbouring local authority of Salford. This includes Ordsall ward and Blackfriars & Trinity Wood ward (see appendix 2). The bullet points below provide a high-level summary of the socio-economic baseline position:

- The population of the local area was 49,140 in 2024, with 45.9% residents in the 21-30 age group;
- The majority of households within the local area are privately rented and at local authority level most households are owned;
- Average weekly household expenditure is £540 across the North West, slightly below the national average;
- Local health service provision within 1 mile equates to an estimated 1:2,2034 GP to patient ratio (against a 1:1,800 benchmark); and
- Local education provision indicates an estimated total surplus of 23% in primary schools (within 1 mile) and just a 1% surplus in secondary schools (within 2 miles), compared to 7% DfE guidance.

Scope of Assessment

Identification of Effect/s which are Not Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Socio-economics- Potential for structural economic change and impacts on wider local industries, including traditional industries and foundational economy.	Workforce, economy and businesses	Operation	**Scoped Out:** The Proposed Development consists of residential use. Any potential employment from operation are not of a scale that would lead to any discernible structural economic change in the local, district or regional areas.
Infrastructure- Effects on foundational economy and essential local infrastructure such as water, energy digital, transport.	Community, Businesses, Workforce, Transport, utilities, and energy systems	Construction and Operation	**Scoped Out:** The scale of local infrastructure provision within the Proposed Development is not likely to result in significant effects arising, the effects of any will be assessed within the Transport Statement, and Flood Risk Assessment

People – Effects on health and wellbeing, education, skills and human rights	Community Land and sea users Public Rights of Way, National Landscapes, National Parks, protected landscapes and other public gardens, beaches, marine assets	Construction and Operation	**Scoped Out:** Effects on health and wellbeing will be assessed within the Human Health ES Chapter
People – Distribution of effects between different demographic groups or sensitive groups, indigenous communities			**Scoped Out:** No sensitive groups beyond those typically identified as vulnerable populations are considered.
People – Effect of project on quality, supply, or access to community land, recreational assets, water courses			**Scoped Out:** An assessment of the effects of the Proposed Development on access to open space, play space and community facilities is scoped in under the effects on social infrastructure. The Proposed Development is not expected to have any other effects relating to the quality or supply of community land, recreational assets water courses and offshore environment.
Community – Impacts on community cohesion, networks, ties and organising including risk of severance or islanding	Community and Public Services	Construction and Operation	**Scoped Out:** It is not considered likely that the Proposed Development will result in significant effects in EIA terms in relation to community cohesion, networks, ties and organising. However, the potential for any such effects arising to be beneficial, adverse or neutral will be explored within the Human Health ES Chapter if relevant.
Community – Impacts on community safety including risk of hazards, security, conflict, crime, antisocial behaviour			**Scoped Out:** Whilst an increase in population in the local area may result in an increase in opportunities for hazards or crime, the Proposed Development design standards and implementation of good practice measures will act as embedded mitigation for any effects.
Community – Impacts on procedural justice and trust in political and decision-making systems			**Scoped Out:** The Proposed Development is not expected to have an impact on procedural justice and trust in political decision making.
Culture – Effects on local culture and identity, for example, culture and heritage, language, connection with place, landscape, local traditions, religious activity, events, festival	Community, Visitors, Cultural and heritage assets and Cultural events or activity	Operation	**Scoped Out:** The Proposed Development is not expected to lead to any material changes on local culture or identity.

Culture - Impact on tourism and recreation assets, such as accommodation or attractions. Effects on visitor perceptions, experience and behaviour			**Scoped Out:** The Proposed Development does not include any uses that would result in effects on tourism and recreation assets.
Nature – Impact on natural capital and the social experience of wildlife and habitats and species	Community, Wildlife and ecology	Construction and Operation	**Scoped Out:** The impact of the Proposed Development on demand for open space is included in the assessment of effects on social infrastructure. The Ecological Impact Assessment will assess the effects of the Proposed Development on ecology. No further significant effects are expected.
Living Environment – Impacts on the quality of the living environment including for example air quality, climate change, water quality, noise, vibration, light, flicker, flare, transport, waste, hazards	Community and Living Environment	Construction and Operation	**Scoped Out:** It is proposed this is scoped out of this ES Chapter on the basis that any such relevant effects will be assessed within other technical ES chapters such as air quality, noise, and climate change and the Transport Assessment.

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Socio-economics – Jobs and GVA created, safeguarded or lost (direct and supply chain, indirect and induced)	Workforce, economy and businesses	Construction	**Scoped In**: It is proposed jobs are scoped in for the construction stage, reflecting the anticipated scale of spend.
Housing – Quality, supply and access to accommodation	Community and housing market	Operation	**Scoped In:** The Proposed Development comprises up to 381 (+10% - 419) new homes (apartments) which will likely have a significant effect on the supply of and access to accommodation.
Infrastructure – Effects on local services and social infrastructure (either access, quality and supply either as a direct result of the project or as a result of population change)	Health, education and community facilities	Operation	**Scoped In:** The Proposed Development will lead to changes in residential population and demand for health care, education, open and play space and community facilities.
People – Population and demographic change arising from	Community	Operation	**Scoped In**: Considering population and child yields from development enables an assessment of

the project e.g. influx of new residents, workers, visitors			effects on the labour market and social and community infrastructure requirements.
Community – Fiscal returns to local or national Government from taxes or levies e.g. business rates, council tax, income tax, s106, CIL or other social investments	Community	Operation	**Scoped In:** The Proposed Development, it is likely to generate potentially significant annual household spend, and council tax receipts or other social investments.

6.93 In summary, the likely significant effects to be considered within the ES are:

- Temporary changes in demand for construction workers during the demolition and construction works.
- Permanent changes in the supply of new homes once the Proposed Development is complete and operational.
- Permanent changes in the effect of the population accommodated by the new homes on the demand for social and community infrastructure, specifically GP Surgeries, education, open and play space and community facilities, once the Proposed Development is complete and operational.
- Permanent changes in the effect of spending from the new households and council tax receipts as well as changes to the supply of labour on the local economy.

Assessment Methodology for Likely Significant Effects

Baseline Data

6.94 The effects of the Proposed Development will be considered across the following geographies:

- Local Area – Deansgate, Ordsall and Blackfriars & Trinity Wood wards;
- Local Authority – Manchester City Council; and
- Region – North West.

Construction phase

Receptor	Baseline	Impact Area
Workforce, economy and businesses	72,000 construction workers; £107,500 GVA per FTE for the sector[6]	Sub-regional (Greater Manchester)

Operational phase

Receptor	Baseline	Impact Area
Housing	214,732 households[7]	Local Authority level
Health Facilities	1:2,203 GP to Patient ratio[8]	1 mile Walking Distance
Education Facilities	23% surplus within primary schools and 1% surplus within secondary schools.	1-mile Primary and 2-mile Secondary Walking Distance (adjusted from DfE Home to School Travel Statutory Guidance[9] due to highly urban context)
Community Facilities (inc. open and play space	Host of nearby open and play space, and community facilities nearby.	2-mile Walking Distance
Community – fiscal returns	£540 household spend per week £268m Council Tax income for 2026/27[10]	Local Authority or Regional level

Method of Assessment

6.95 GC Insight will prepare a socio-economic assessment of the Proposed Development, establishing baseline demographic, housing and economic conditions within the local area, the Manchester local authority area and the North West. The assessment will also review existing education, healthcare, open space and play space, and community facilities provision in the vicinity of the site, using appropriate catchment areas and accessibility thresholds. Baseline analysis will draw on a range of published sources, including ONS datasets, employment statistics, school census data and NHS information for example.

6.96 The assessment will identify and evaluate the likely socio-economic effects arising during both construction and operation. Key considerations will include temporary construction employment, contribution towards housing delivery, population growth, school place demand, healthcare capacity, open space and community facility requirements, and household expenditure and council tax revenues.

6.97 Future population and child yield estimates will be calculated using recognised demographic data and used to assess demand for social infrastructure. Education impacts will be assessed against available school capacity, while healthcare impacts will be considered using established GP capacity benchmarks. Employment effects will be quantified using recognised job density and additionality methodologies.

6.98 Where significant adverse effects are identified, appropriate mitigation measures will be proposed. The assessment will also consider residual effects following mitigation and include a cumulative assessment.

Human Health

Consultation & Available Information, & Baseline Conditions

Consultation

6.99 None necessary. The Human Health assessment relies on published information and the findings of other technical studies relevant to Human Health (Manchester Core Strategy (Development Management Policy DM1) - Adopted 2012).

Completed Background Studies

6.100 Google Maps for general geographical features & measurement of approximate distances; Identification of potential sensitive receptors – August 2026.

6.101 Office for Health Improvement & Disparities for health profiles by local authority & compared with subregional (Manchester) & national (England) – August 2026.

6.102 Health data from MCC Intelligence Hub for General health & Index of Multiple Deprivation (IMD) by Ward (Piccadilly) (the IMD is comprised of 7 domains – income, employment, health derivation & disability, Education skills & training, crime, Barriers to Housing & Services, Living environment); reported street crime – August 2026.

6.103 English indices of deprivation 2019 for relative levels of deprivation in small areas/neighbourhoods called Lower-layer Super Output Areas (LSOAs) – August 2026.

Baseline Conditions

6.104 According to OHID local authority profiles for Manchester (2021-23) healthy life expectancy at birth for males is 51.8-61.5 in the worst to 25th percentile for England with a best of 69.7 years. Healthy life expectancy at birth for females is 52.6-61.9 in the 25th to 75th percentile for England with a best of 70.8 years. For Manchester (2022-24), life expectancy at 65 for males is 16.3-18.9, and 19.1-21.4 for females in the worst to 25th percentile for England with a best of 20.9 and 23.9 years respectively for England.

6.105 According to OHID local authority profiles for Manchester (2023-25), life expectancy at 65 for males is 16.6-19.1, and 19.0-21.5 for females in the worst to 25th percentile for England with a best of 21.4 and 24.1years respectively for England. Healthy life expectancy (2022-24) at birth for males is 6.6 to 10.1 and for females 7.6-11.1 in the worst to 25th percentile for England with a best of 13.1 and 14.7 respectively for England.

6.106 The IMD score (2019) for the Deansgate Ward is 24.1 which compares with the range for Wards in Manchester 15.5 – 62.7 where the larger the score, the more deprived the area. The IMD deprivation score for England (2019) was 21.7 and for 2025 was 21.81. According to the Manchester Intelligence Hub (latest data 2018), reported street crime is 14,172 which is comparatively high within a range from 16,552 to the lowest number of crimes at 1,342 for all Wards. Local housing benefit (2024) is 70.0 which is in the lowest of a range that extends from 70.0 to 1,773. Numbers claiming unemployment (August 2024) are 160 – again, the lowest of a range from 160 – 1,815.

6.107 The site is within the city centre and close to a wide range of services and facilities, including sustainable transport – all of which can have a positive effect on human health and wellbeing. Without the Proposed Development, opportunities for healthy living in a sustainable urban location would not be realised.

Scope of Assessment

Identification of Effect/s which are Not Significant

Effect	*Receptor*	*Construction/ Operation*	*Discussion*

Health & wellbeing – heritage; traffic; daylight, sunlight, overshadowing; ground conditions; solar glare, flood risk & water resources; wind	On-site workers; Nearby residents, including any particularly sensitive receptors such care homes, schools; new residents	C, O	Elements of these technical studies relevant to human health are considered to not give rise to likely significant effects and thus scoped out

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/ Operation*	*Discussion*
Health & wellbeing – housing	New residents & wider communities	Operation	Provision of good quality housing is fundamental for health and wellbeing – to reduce stress, improve sleep & support both mental & physical health, including enhanced productivity and social engagement. Design that includes inviting entrances & open communal areas improves social interaction, strengthens communities, and increases feelings of security.
Health & wellbeing - Employment & economy	Local and wider communities	Construction / Operation	Work (and training) are well known to affect health and wellbeing - employment and the local economy will be considered through the socioeconomic impact assessment.
Health & wellbeing - services & facilities	New residents & local communities	Operation	Accessibility to health and social care services and other social infrastructure is vital for mental and physical health – capacity & accessibility to GPs, dentists, educational facilities etc will be considered through the socioeconomic impact assessment. Accessibility to other social infrastructure such as gyms, sports centres, bars, clubs, restaurants, museums, theatres, cinemas etc are important for social inclusion & mental health with further impacts on physical health.
Health & wellbeing – open, green space & nature	New residents & local communities	Operation	Access to open and green spaces is vital for health & wellbeing – encouraging relaxation, physical activity, and social inclusion, with effects for both mental and physical health. A visual connection with nature has been shown to lower cortisol levels.
Health & wellbeing - Air quality, noise and neighbourhood amenity	New residents & local communities	Construction / Operation	Building Design and location are key elements that affect air quality, noise and neighbourhood amenity. The materials used in a building affect indoor air quality, comfort & aesthetics. Well designed spaces enhance movement, usability & adaptability. Ensuring high indoor air quality is essential for better health. Good design integrates natural and mechanical ventilation systems and air filtration to maintain a healthy indoor environment preventing respiratory problems by reducing pollutants & allergens, enhancing concentration & reducing fatigue, improving comfort for overall wellbeing.

			Noise is the second largest environmental risk factor in the UK & associated with health issues including sleep disturbance, chronic annoyance, high blood pressure, and cardiovascular disease. Reducing noise is better for focus, communication, stress levels & sleep. Road traffic is the largest source of noise, but neighbour/community noise is increasing, especially in dense urban environments.
Health & wellbeing - Accessibility and active travel	New residents & local communities	Construction / Operation	Accessibility reduces stress & health issues for commuting & social interactions; active travel affects cardiorespiratory factors & mental health, including social interactions & changes to health related behaviours.
Health & wellbeing – social cohesion & inclusivity	New residents & local communities	Operation	Limited elements of social cohesion and inclusive design may be relevant to the Proposed Development and contribute to health-related behaviours and the social environment.
Health & wellbeing – crime, safety	New & nearby residents & visitors	Construction / Operation	Crime reduction and community safety are important for health and wellbeing. Crime & health inequalities are intrinsically linked with high-crime neighbourhoods often leading to higher rates of chronic illness, injury, and severe mental health issues for both victims and offenders.
Health & wellbeing – townscape & visual impact	New & nearby residents & visitors	Construction / Operation	The visual effects of building design - aesthetics, lighting, spatial layout, environmental quality — have a significant impact on human health, affecting stress levels, cognitive function, and emotional well-being. Poorly designed spaces can cause stress and anxiety, whilst visually appealing design can improve mood and productivity. Environments with poor aesthetic appeal, lack of light, and low visual quality can result in fatigue, headaches, and low mental health. Maximising natural light regulates sleep-wake cycles & improves mood. Visually complex façades are associated with lower stress or anxiety levels. Natural materials & views of greenery into design lowers cortisol levels, reduces blood pressure, and improves mood.
Health & wellbeing – climate change	New & nearby residents & visitors	Operation	Minimising the use of resources and climate change are key factors in considering environmental sustainability, a healthy environment, and reducing risks to health and wellbeing from the predicted effects of climate change. The main hazards posed by the UK's changing climate include heatwaves, flooding and drought. These direct impacts of climate change can lead to further, indirect impacts such as malnutrition, mental health impacts (stress, anxiety) and infectious disease spread.

Assessment Methodology for Likely Significant Effects

6.108 There is no standard methodology for assessing health in EIA. The complexities of investigating health impacts are recognised, for example, by Public Health England (PHE, 2017 & 2020) with their Wider Determinants of Health tool that details the multiple determinants for health and the need for cross-sectoral understanding. The EIA professional body, Institute of Sustainability & Environmental Professionals ISEP, has published guidance on effective scoping and assessment of human health in EIA. This includes five categories for the wider determinants of health – Health related Behaviours; Social Environment; Economic Environment; Biophysical Environment; and Institutional & Built Environment. Themes are also identified by the Healthy Urban Development Unit HIA Tool (2017, 2019), as follows – Healthy Housing/Buildings; Active Travel; Healthy Environment; and Vibrant Neighbourhoods. The HUDU tool recognises eleven topics or broad determinants of health and wellbeing focused on the built environment and issues influenced by planning decisions. The HUDU tool aligns with the wider determinants of health listed in the ISEP guidance and better correlates with proposed developments in a city centre context.

6.109 The overall approach to human health will be to consider the summary findings of each relevant technical topic –socioeconomic; townscape and visual impacts; air quality; noise and vibration; and climate change - and align these with their interconnectedness into the themes for healthy urban planning and taking into account the relevant broad determinants of health. Different study areas will be used for the assessment of individual human health impacts, according to each relevant technical topic. The overall likely significant effects on health will then be determined in a qualitative way using professional judgment. The key impacts for health will be considered, and inter-relationships will be integrated within the themes identified for healthy urban living, such that any significant impacts for human health are clearly presented in a separate chapter.

6.110 It is considered that the method proposed for the Human Health chapter constitutes an established approach to HIA applicable to new development in an urban context – and thus, satisfies the requirements of the GM JDP Policy JP-J6 Health for an HIA.

Heritage

Consultation & Available Information, & Baseline Conditions

Consultation

6.111 Key stakeholders such as the Local Planning Authority (LPA), (Manchester City Council, MCC) and Historic England will be engaged as part of the Planning Application process. The site has been subject to previous discussions with the LPA as part of former applications for the redevelopment of the Albert Shed site.

Completed Background Studies

6.112 On-site surveys of the Site and surrounding area were undertaken in 2022, with subsequent visits taking place in August 2026. This informed both the appraisal of the Site as a component of the historic environment and its contribution to the setting of surrounding heritage assets.

6.113 Levrant (previously known as Stephen Levrant Heritage Architecture) has previously prepared Heritage Statements on the Albert Shed site, which have been approved under planning permissions 109660/FO/2015/C1 and 136041/FO/2023 detailed in the Planning History summary in Section 2 of this report. These have informed the current understanding of the history and development of the Site and have formed the basis of the current, updated assessment.

Baseline Conditions

6.114 The Site is located in Manchester City Centre and is bound by New Quay Street to the north, the River Irwell to the west and Water Street to the south and to the east. The Site currently comprises a currently unused industrial building, as well as an area of hardstanding currently being used as a surface level car park. Baseline conditions of the study area (500m radius) were collected utilising Historic England's Online Mapping tool and Manchester City Council's online data (refer to Figure 1). Google Earth was also utilised as part of the baseline data collection. Additional studies of relevance include: Zone of Visual Influence Study (ZVI) (reproduced in Figure 2).

6.115 The Site (Albert Shed) consists of a roughly rectangular, single-storey, transhipment shed, at the junction of Water Street and Irwell Bridge Street. The building is an early-20th century adaptation of an earlier wing which belonged to Albert Warehouse (now Grade II), which was partially demolished following a substantial fire in 1913.

6.116 Albert Shed is identified on the Historic Environment Record (HER) under ref: 12386. The Site is located within Castlefield Conservation Area.

6.117 The Site forms part of the setting to approximately 26 Listed Buildings (500m radius) and four further Conservation Areas.

6.118 The Site is located within the curtilage of the Grade II Listed Albert Warehouse.

Scope of Assessment

Identification of Effect/s which are Not Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Neutral (no harm)	Listed Buildings beyond approximately 250m radius	None anticipated	Listed Buildings beyond 250m have been scoped out from further assessment based on the data produced by the Zone of Visual Influence Studies (ZTVI), which has indicated the development will not give rise to any meaningful visual impact upon the wider built historic environment.
Neutral (no harm)	St Marys Parsonage Conservation Area	None anticipated	Designated heritage assets beyond 250m have been scoped out from further assessment based on the data produced by the Zone of Visual Influence Studies (ZTVI), which has indicated the development will not give rise to any meaningful visual impact upon the wider built historic environment.

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Likely to be significant (direct and indirect)	Castlefield Conservation Area	Construction / Operation	Direct and Indirect impacts anticipated as the site is located within the designated Conservation Area. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	St Johns Conservation Area	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.

May be significant (indirect only)	Deansgate Conservation Area	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	Albert Square Conservation Area	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
Likely to be significant (direct and indirect)	ALBERT WAREHOUSE (Grade II) List Entry Number: 1254727	Construction / Operation	Direct and Indirect impacts anticipated as the site is within the immediate setting / curtilage of the Listed Building. These will be judged to be positive, neutral (no harm) or harmful.
Likely to be significant (direct and indirect)	IRWELL STREET BRIDGE (Grade II) List Entry Number: 1386141	Construction / Operation	Direct and Indirect impacts anticipated as the site is physically connected to the Listed Building. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	FORMER HYDRAULIC POWER STATION IN GROUNDS OF CITY COLLEGE (Grade II) List Entry Number: 1254724	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	ST JOHNS COLLEGE OF FURTHER EDUCATION (Grade II) List Entry Number: 1282969	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	Former Grape Street railway bonded warehouse (Grade II) List Entry Number: 1457402	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	COLONNADED RAILWAY VIADUCT AT FORMER LIVERPOOL ROAD GOODS DEPOT (Grade II) List Entry Number: 1200805	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	OLD WAREHOUSE TO NORTH OF FORMER LIVERPOOL ROAD RAILWAY STATION (Grade I) List Entry Number: 1282991	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.

May be significant (indirect only)	RAILWAY BRIDGE OVER RIVER IRWELL TO FORMER LIVERPOOL ROAD STATION (Grade I) List Entry Number: 1270603	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	RAILWAY VIADUCT OVER RIVER IRWELL LEADING TO LOWER BYROM STREET WAREHOUSE (Grade II) List Entry Number: 1254829	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	RAILWAY VIADUCT LINKING BRIDGE OVER IRWELL TO LIVERPOOL ROAD STATION (Grade: II). List Entry Number: 1254726	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	FORMER LIVERPOOL ROAD RAILWAY STATION, STATION MASTERS HOUSE (Grade I) List Entry Number: 1291477	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	MANCHESTER MUSEUM OF SCIENCE AND INDUSTRY, FORMER LOWER BYROM STREET WAREHOUSE (Grade: II) List Entry Number: 1283016	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	POWER HALL OF MUSEUM OF SCIENCE AND INDUSTRY (Grade II) List Entry Number: 1291458	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.
May be significant (indirect only)	123, LIVERPOOL ROAD (Grade II)	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.

	List Entry Number: 1200804		
May be significant (indirect only)	COMMERCIAL HOTEL (Grade II) List Entry Number: 1219418	Construction / Operation	Only indirect impact anticipated to the setting of the designated asset. These will be judged to be positive, neutral (no harm) or harmful.

Assessment Methodology for Likely Significant Effects

6.119 A study area of 250m from the Site boundary has been determined by Levrant as being appropriate for the consideration of potential significant effects of the Proposed Development on the setting of heritage assets in the local area. The determination of the study area has been based on an understanding of the existing nature of the Site and its surroundings, heritage sensitivities in the locality of the Site, the form and character of the Proposed Development, a Zone of Theoretical Visibility, and has been further informed by professional judgement and experience in similar assessments.

6.120 There are 68 Listed Buildings within a 500m radius of the Site. However, a number of the Listed Buildings within the wider area are to be scoped out from further assessment, due to the lack of intervisibility of the Site. This scoping exercise is supported by ZTVI studies of the Site.

6.121 The built heritage chapter will identify and evaluate the nature and likelihood of the impacts of the Proposed Development, both permanent and temporary, in both the short term and long term, on built heritage receptors against clearly defined criteria.

6.122 The assessment methodology for the historic environment is a synthesis of established guidance, best practice and professional judgement. The assessment of effects of the Proposed Development has been undertaken in accordance with an adapted form of the methodology set out in the ICOMOS Guidance on 'Heritage Impact Assessments' (January 2011), in which the value of heritage attributes is assessed in relation to statutory designations. The ES Chapter on Built Heritage will be guided by the Planning Policies in Chapter 20 of the NPPF (2026) and the 1990 Planning (Listed Buildings and Conservation Areas) Act.

6.123 The relative 'value' and importance attributed to the identified heritage assets largely coincides with their national status. In line with ICOMOS terminology, Grade I buildings are considered to be of very high significance; Grade II* of high significance; and Grade II of medium heritage significance. The value of Conservation Areas is informed by the quality and significance of the built form within them and may be influenced by the status of listed and locally listed buildings which make up the designated area.

6.124 The receptor (which for the purposes of this assessment are 'heritage assets') which has the potential to be affected by the Proposed Development is ascribed a value and subsequently the impact of the Proposed Development on them is assessed in order to determine the significance of the effect.

- The following Historic England guidance will be utilised:
- Historic England's Conservation Principles, Policies and Guidance (2008);
- Historic England's Good Practice Advice Note 3: The Setting of Heritage Assets (2017);

- Historic England. Advice Note 4: Tall Building Guidance (2022); and
- Historic England (2019). Understanding Place: Conservation Area Designation, Appraisal and Management.

6.125 A Heritage Statement will be prepared to support the Built Heritage Chapter (forming a technical appendix) and accompany the Planning Application. As stated above, the Heritage Statement will provide a detailed and robust baseline assessment of the identified heritage assets surrounding the Site, considering their significance and to what extent their setting contributes to an appreciation of this. This information will be summarised in the ES Chapter.

6.126 In order to assess the potential magnitude and significance of effect of the visual impact of the Proposed Development, the following criteria is considered:

- The sensitivity and proximity of receptors (i.e. heritage assets);
- The nature of the existing views;
- The degree of change to existing views and the visibility of the Proposed Development; and
- The availability and amenity of alternative views.

6.127 The assessment section of the Chapter will:

- Describe the potential impacts to the heritage assets as a result of the Proposed Development; and
- Outline suitable mitigation measures to deal with the potential effects of the Proposed Development on heritage assets.

6.128 Significant effects in EIA terms relate to effects categorised as Moderate, Moderate-Major, or Major. Any effects categorised below this – Minor-Moderate, Minor, Negligible, or None – are considered to be Not Significant. Please refer to detail below for relevant methodology matrix.

Solar Glare

Consultation & Available Information, & Baseline Conditions

6.129 There are no specialists within Manchester City Council or other statutory consultees relevant to the area of solar glare. As such, no consultation has been undertaken. Discussions on solar glare may, however, form part of any pre-application process with Manchester City Council.

Completed Background Studies

6.130 Solar Glare is not a comparative assessment as the it considers the effect of the Proposed Development in absolute terms. No background studies are required and have been undertaken for solar glare.

Baseline Conditions

6.131 The solar glare assessment is undertaken in the worst-case scenario, which is the Proposed Development scenario. The fact it may occur in the baseline does not necessarily justify its occurrence as a result of the Proposed Development.

6.132 However, it should be noted that the Proposed Development will be located on a Site where its existing state is two low-rise brick buildings with punched windows, thus there is limited opportunity for instances of solar glare from the Site to be experienced. Solar glare from surrounding buildings is not assessed.

Scope of Assessment

Identification of Effect/s which are Not Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Solar Glare causing visual discomfort to occupiers of adjoining buildings	Solar Glare impacting occupants of adjoining buildings	Operational	BRE states that reflected sunlight can affect occupants of adjoining buildings. There are two types of glare: disability glare, which is a safety issue; and discomfort glare, which includes solar reflections impacting adjacent buildings. Discomfort glare does not impair the ability to see. Whilst it can be important where work involves continuous viewing of the outdoor space from a fixed vantage point, it can generally be managed where glare is an issue by using blinds of curtains for the periods of time where such glare occurs. It is therefore considered that any impact on residential amenity is not expected to be significant and an assessment of discomfort glare is not considered necessary. Therefore, solar glare effects to occupants of neighbouring buildings is scoped out.

Identification of Effect/s which are Likely to be Significant

Effect	Receptor	Construction/Operation	Discussion
Solar Glare safety issues concerning transit through critical intersections and junctions	Viewpoints within 500m of the Site, where the Proposed Development is visible within the driver's field of view will be assessed. At distances greater than 500m from the Proposed Development, instances of solar glare would be unlikely to occur. A review of the surrounding area has identified the following roads or junctions that are likely to be receptors sensitive to solar glare, this will be	Operational	Solar glare reflections to road drivers may cause disability glare, which would represent a hazard and so this would be technically assessed.

	kept under review as the design evolves: • New Quay St • Peter St • Irwell St • Water St • Trinity Way		
Solar Glare safety issues concerning visibility of train drivers along nearby railway tracks	Solar Glare impacting visibility of train drivers at selected viewpoints within 500m of the Site where the Proposed Development is visible. The following receptors would be considered: • Railway lines in the approach to Salford Central station, eastbound and westbound	Operational	Solar glare reflections to train drivers may cause disability glare, which would represent a hazard and so this would be technically assessed.

Assessment Methodology for Likely Significant Effects

6.133 The assessment will consider potentially sensitive viewpoints for road and train drivers surrounding the site. The viewpoints will generally be located at the minimum stopping distance for road users and at the driver's eye level with the focal point being a relevant traffic element, such as signals or incoming traffic. For train drivers, viewpoints will be assessed where signals are visible or at representative intervals where the Proposed Development would be visible close to the direct line of sight for a substantial stretch of track.

6.134 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined following this through professional judgment.

Wind and Microclimate

Consultation & Available Information, & Baseline Conditions

6.135 No specific wind microclimate consultation has been undertaken to date. The proposed scope and methodology are set out below for consideration through the EIA Scoping process.

Completed Background Studies

6.136 As part of the initial review of the Proposed Development, a desktop appraisal has been completed to identify potential wind microclimate risks and areas where mitigation may

ultimately be required. This was completed in July 2026, and involved a high-level review of the Site location, shelter by the immediate surrounds, and the general massing presented by the Proposed Development that might lead to elevated winds within the public realm.

6.137 This additionally involved analysis of historic weather data for the region from Manchester International Airport, review of significant terrain and topography within the region, and the development of a wind climate model for Manchester and surrounding areas.

Baseline Conditions

6.138 Baseline conditions will be quantified as part of the CFD assessment. Based on the characteristics of the Site and surrounding area, together with Architectural Aerodynamics' experience within the vicinity, existing conditions are anticipated to be suitable for pedestrian access and movement, with no pedestrian safety concerns expected.

Scope of Assessment

Identification of Effect/s which are Likely to be Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Exceedance of the LDDC variant of the Lawson Criteria for pedestrian safety.	Thoroughfares, entrances and waiting areas neighbouring the Site, in the vicinity of the taller elements of the Proposed Development, where acceleration of wind has the potential to be greatest.	Construction	Noting the scale of the Proposed Development, in the latter stages of construction there is some potential for wind conditions to exceed the safety criteria.
Exceedance of the LDDC variant of the Lawson Criteria for comfort.	Thoroughfares, entrances and waiting areas neighbouring the Site, where acceleration of wind has the potential to be greatest, or where pedestrian activities are most sensitive to wind and require the most benign conditions.	Construction	Noting the scale of the Proposed Development, in the latter stages of construction there is some potential for wind conditions to exceed the comfort criteria.
Exceedance of the LDDC variant of the Lawson Criteria for pedestrian safety.	Thoroughfares, entrances and waiting areas neighbouring the Site, in the vicinity of the taller elements of the Proposed Development, where acceleration of wind has the potential to be greatest.	Operation	Noting the scale of the Proposed Development, there is some potential for wind conditions to exceed the safety criteria.
Exceedance of the LDDC variant of the Lawson Criteria for comfort.	Thoroughfares, entrances and waiting areas neighbouring the Site, where acceleration of wind has the potential to be greatest, or where pedestrian activities are most sensitive to wind and require the most benign conditions.	Operation	Noting the scale of the Proposed Development, there is some potential for wind conditions to exceed the comfort criteria.

Assessment Methodology for Likely Significant Effects

6.139 Analysis of historic weather data for the region from Manchester International Airport, review of significant terrain and topography within the region, and the development of a wind climate model for Manchester and surrounding areas.

6.140 Quantitative prediction of non-dimensional wind speeds within and around the existing Site, as a ratio of the approach wind speed at a reference height where the wind climate model applies.

6.141 Combination of wind climate model and wind speed predictions to derive the probability of exceedance of wind speed thresholds pertaining to the LDDC variant of the Lawson Criteria for pedestrian safety and comfort.

6.142 The following methodology for assessment is proposed:

- Analysis of historic weather data for the region from Manchester International Airport, review of significant terrain and topography within the region, and the development of a wind climate model for Manchester and surrounding areas.
- Quantitative prediction of non-dimensional wind speeds within and around the Proposed Development, as a ratio of the approach wind speed at a reference height where the wind climate model applies.
- Combination of wind climate model and wind speed predictions to derive the probability of exceedance of wind speed thresholds pertaining to the LDDC variant of the Lawson Criteria for pedestrian safety and comfort.

6.143 The assessment will take into account the following factors:

- The effect of the geometry, height, massing, exposure and orientation of the Proposed Development; and
- The pedestrian activity to be expected, e.g. thoroughfare, ingress / egress, waiting areas, recreational spaces, outdoor seating spaces (such as cafes), and the Lawson comfort category that corresponds to the activity – long term sitting, short-term sitting / standing, strolling or walking.
- The season(s) in which the activity is anticipated to take place, e.g. thoroughfare, waiting (at bus stops, for example) and entrance use would all take place year-round and be assessed against a worst-case ('worst-seasonal' results) while prolonged outdoor seating (outdoor café spaces, for example) would be assessed during summer.

6.144 Digital models of the Site and surrounding area will be constructed, and simulations will be performed for a minimum of 16 wind directions, to represent all directions. The assessment of operational effects will be determined by computational modelling (computational fluid dynamics, CFD).

6.145 An assessment of operational effects would represent an appropriate approximation of a worst-case scenario during construction and therefore, the assessment of construction effects will be considered qualitatively within the ES Chapter and will be substantially informed by the operational assessment.

6.146 Gust and mean wind speed ratios (e.g. pedestrian level wind speeds as a ratio of a reference wind speed at a known height above ground) will be predicted at key locations within the Site where increased windiness is expected as a result of the buildings' geometry and in areas of wind-sensitive activities, such as public entrances or pedestrian pathways.

6.147 The results of the modelling will be presented, showing the suitability of conditions at all assessment locations against the LDDC variant of the Lawson Criteria, and will be presented within a comprehensive report submitted as a technical appendix to the ES. The ES Chapter will provide the assessment of the environmental effects/receptor locations where significant effects are identified.

6.148 The LDDC variant of the comfort criteria provides wind speed thresholds that should not be exceeded for more than 5% of the time in a season to be acceptable for the stated pedestrian activity. The safety criterion identifies areas where someone could find walking difficult, or even stumble and fall. This criterion provides a wind speed threshold (15 m/s) that should not be exceeded more than once per year (equivalent to 0.022% of the year).

6.149 An increase in windiness relative to the baseline will not be considered to be significant if the wind speed is not expected to exceed the limit for the pedestrian activity being undertaken in that area. In the case of windiness levels in excess of the tolerable limits for intended pedestrian use, mitigation measures will be developed if required.

6.150 Receptors are defined to be pedestrians and cyclists on the thoroughfares within the Proposed Development and surrounding areas. The acceptability of conditions will be determined with reference to pedestrian safety and the suitability of conditions for the intended pedestrian activity.

Ground Conditions

Consultation & Available Information, & Baseline Conditions

6.151 Enquiry letters have been sent to relevant authorities (Environment Agency and Local Authority Environmental Health Officer), requesting detailed information of any historic environment and pollution issues onsite and in the surrounding area. A response is currently awaited from the respective authorities.

6.152 Both the MCC Environmental Health Officer and The Environment Agency were consulted on 27 August 2026.

Completed Background Studies

6.153 The following background studies have been completed:

- RSK Geoscience Phase 1 Desk Study, 12199 R01(00), dated August 2026.
- Environmental Health Officer Contaminated Land Enquiry
- Local Authority Enquiry

Baseline Conditions

6.154 The Site is currently surfaced entirely with hardstanding with no potentially contaminative operations noted at the time of inspection. Similarly, no point sources of contamination (e.g.

above ground fuel or product storage tanks) were noted during the course of the site inspection.

6.155 Historical map records indicate the Site, which occupies a riverside location adjacent the Irwell, was developed for a range of uses including a dye house yard, timber yard (through until the late 19th century) and the Albert Shed warehouse (which has occupied the site in its current configuration since the early 20th century).

6.156 Review of BGS Geological and historical mapping records indicates Made Ground is anticipated across the Site underlying the current development from various phases of development. Superficial deposits of Alluvium (Secondary A Aquifer) are recorded across the majority of the site overlying Chester Formation Sandstone (Principal Aquifer). No superficial deposits are recorded to underlay the northeastern most corner of the site.

6.157 Records indicate the Site not located in any groundwater source protection zones, mineral safe guarding areas or within / in close proximity to any sensitive land uses (e.g. SSSI, SBI etc). Similarly, no current or historical landfill sites are noted within close proximity (<500m).

6.158 At the time of writing no ground investigation information is available for the Site, although this will be completed as part of any subsequent detailed design and planning process. Based on the RSK Phase 1 Desktop Study theoretical risks of active exposure pathways toward receptors are present for Human Health and Controlled Waters, owing to the Site's previous warehousing / industrial operations. However, the magnitude and severity of these risks is likely to be low due to the nature of these current / historic operations.

Scope of Assessment

Identification of Effect/s which are Not Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Ground Conditions	Geology	Construction	Ground conditions associated with geology have been scoped out of the Environmental Impact Assessment (EIA) as the proposed development is not anticipated to give rise to significant environmental effects relating to the underlying geological strata.
Contaminated Land	Human Health	Construction & Operation	Potential effects associated with land contamination have been scoped out as, whilst evidence to indicate the presence of significant sources of contamination within the site that could give rise to likely significant environmental effects on Human Health.

Identification of Effect/s which are Likely to be Signficant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Contaminated Watercourse	Controlled Waters (surface water and	Construction	Potential effects on the water environment arising from the contamination of watercourses during the construction phase have been scoped in due to the potential for

	bedrock aquifer)		construction activities to adversely affect the quality of nearby surface waters and associated aquatic receptors. Construction activities have the potential to generate contaminants that could enter watercourses through surface water runoff, accidental spillages, sediment-laden drainage, or inappropriate storage and handling of materials.

Assessment Methodology for Likely Significant Effects

6.159 A desk-based assessment has been undertaken in order to develop an understanding of the physical environment and setting of the Scheme. Baseline data was obtained from the following sources:

- British Geological Survey (BGS) – geology mapping (superficial and solid), landslip data, and mineral prospecting data;
- An environmental database (Envirocheck) report, that incorporates data from:
  - EA – Groundwater vulnerability maps, groundwater source protection zones, licensed groundwater abstractions, landfills (historic and present), and pollution incidents; and
  - Local authority (NLC and CDC) – pollution incidents, landfills, sensitive land use, location of made ground and potentially contaminative sites; and
- Historic mapping.
- Site walkover.

Water Resources

Consultation & Available Information, & Baseline Conditions

6.160 Initial contact has been made with the Environment Agency, Local Lead Flood Authority and United Utlities. Consultation outcomes will inform the Flood Risk Assessment and Drainage Assessment as well as the Encironmental Impact Assesment chapter relating to Water Resources.

6.161 Flood Risk data for the Site has been obtained from the Environment Agency.

6.162 Below ground drainage plans have been obtained from United Utilities.

Baseline Conditions

6.163 The Red Line plan for the development shows the site falling within Flood Zone 2 and 3. The section of the site shown as Flood Zone 3 is the overhanging structure across the river Irwell, with the boundary between Flood Zone 3 and 2 being the River Wall. The development area of the site falls within Flood Zone 2.

6.164 Based on information available the main risk of flooding is from Fluvial sources from the River Irwell. From existing information, we understand that the flood level for a 0.1% AEP + climate change is around 25.65mAOD. The access and egress points onto the site range from approx 26.8mAOD to 28.64mAOD which provides a freeboard of over 1.15m above the proposed design flood level.

6.165 Areas falling within Flood Zone 3 adjoin the site but these are prevented from entering the site by the existing river wall and do not affect the development

Scope of Assessment

Identification of Effects which are Likely to be Significant

Effect	*Receptor*	*Construction/Operation*	*Discussion*
Flooding from the River Irwell	Proposed Development Site	Construction	Damage and Risk to Site
Flooding from the River Irwell	Proposed Development Site	Operation	Damage and Risk to Site
Flooding from Surface Water Discharge	Wider Catchment Area	Operation	Damage and Risk to wider catchment
Pollution during construction	Local Watercourses	Construction	Damage to water quality and wild life
Pollution during operation	Water supply and Sewer Infrastructure	Operation	Damage to water quality
Pollution during construction and operation	Ground Water Quality	Construction	Damage to Groundwater quality

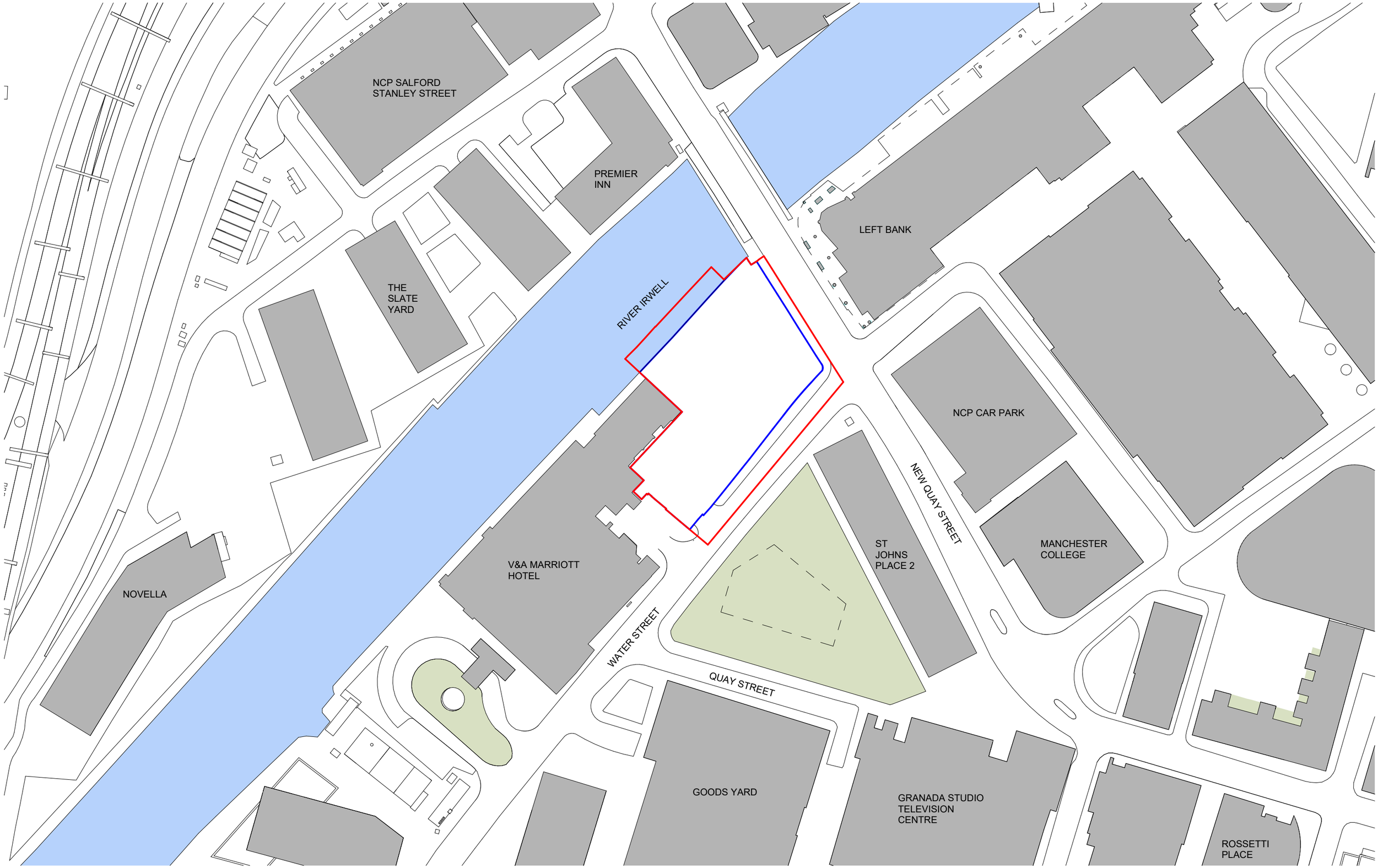
Assessment Methodology for Likely Significant Effects

6.166 The ES chapter will be based on the Flood Risk Assessment and Drainage Strategy. The Flood Risk Assessment scope will be undertaken in accordance with National Planning Policy Framework document (NPPF) 2026 which provides technical guidance on how flood risk should be assessed during the planning and development process. The intention is to ensure that development-planning decisions are made in a manner that delivers sustainable development in terms of current and future flood-risk.

6.167 The scope of the Flood Risk Assessment and mitigation measures will be agreed with the Environment Agency, and the Lead Local Flood Authority. Mitigation measures with suitable construction techniques and environmental best practice will be incorporated.

Appendices

Appendix 1 - Site Location Plan



This drawing is copyright

Do not scale off dimensions.

All dimensions to be checked on site by contractor.

Contractor to report any dimensional discrepancies, errors or omissions prior to commencing on site.

NOTE:

DO NOT SCALE OFF DRAWING REFER TO INDICATED DIMENSIONS ONLY.
DRAWING TO BE READ IN CONJUNCTION WITH SHP SPECIFICATION, INDICATIVE DETAILS TO ILLUSTRATE VISUAL INTENT ONLY. ALL TO CONTRACTORS DESIGN.
ALL DETAILS TO BE COORDINATED WITH ADJACENT TRADES AND SE AND M+E ENGINEER DETAILS.
THE CONTRACTOR IS RESPONSIBLE FOR MEETING THE SPECIFIED PERFORMANCE CRITERIA.

LEGEND KEY:

- Ownership Boundary (0.23 Hectare)
- Application Boundary (0.31 Hectare)

NORTH

Rev	Date	Description
X01	2026-08-24	STAGE 2 - FIRST ISSUE
X02	2026-09-04	STAGE 2 - UPDATE TO SITE BOUNDARIES TO REFLECT TOPO SURVEY
X03	2026-09-15	STAGE 2 - UPDATE TO BOUNDARY LINES

Project Title: One St John's, Manchester

Drawing Title: Existing Site Plan

Project No: 10480

Scale: 1 : 1000 @ A3

Status: FOR INFORMATION

SHP Drawing Code (PROJ - ORIG - ZONE - ROLE - CLAS - TYPE - LOC - SEQ): OSJ-Z1-SHP-G100-PL-XX-1001

Revision: X03

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Appendix 2 - Committed and Cumulative Schemes, including reasonably foreseeable schemes

Albert Shed - Committed Developments

A number of Sites benefit from extant Planning Permission within a 0.5km radius and will therefore be considered in the cumulative assessments.

Site Location	Description of development	Status as of August 2026	Distance from Site	Map No.
Baseline				
Middlewood Locks , Land at Middlewood Street and East of Oldfield Road, Salford, M5 4GU 21/78212/OUTEIA	*Outline planning application, including access to, but not within the site, for mixed use development comprising a maximum of 93,000sqm office floorspace (Use Class E(g)), a maximum of 1,000 dwellings (Use Class C3), a maximum of 23,706sqm of commercial floorspace (Use Classes C1, E (a, b, e and f) and drinking establishments (Sui Generis)), multi-storey car park, infrastructure and other associated works.*	03/09/2024 – Planning application approved. Currently under construction. Early 2030 - Expected completion.	320m	1
Two Parcels Of Land Known As "Trinity Islands" Bounded By The River Irwell, Regent Road, Water Street, Trinity Way And The Railway, Manchester, M3 4JW 132429/FO/2021	*Erection of four towers ranging from 39, 48, 55 and 60 storeys to form a mixed use development comprising 1950 residential apartments (Use Class C3a) and commercial uses (Use Classes E and Sui Generis: Drinking Establishment) (361 sqm) within the podium level together with public realm, car and cycle parking, access arrangements and highway works, and other associated works.*	13/05/2022 – Planning application approved. Vista River Gardens completed in November 2025. Trinity Heights in final fit out stage. Phase 2 currently underway. 2031 – Targeted completion date.	573m	5

Site Location	Description of development	Status as of August 2026	Distance from Site	Map No.
Regent Trading Estate, Salford, M5 4DE PA/2024/1152	*block and townhouses with associated access, parking and public realm.*	08/11/2024 – Planning application approved. Construction began in June 2026. Q2 2028 - Targeted completion date.	574m	6
Plot A1 Salford Central Masterplan, Irwell Street, Salford, M3 5EN PA/2024/1691	*Erection of a 22-storey apartment building comprising 189 no. residential apartments with associated amenity space and landscaping works.*	20/05/2025 – Planning application approved. Construction began in June 2026. Q2 2028 – Targeted completion date.	103m	7
275 - 283 Chapel Street, Salford, M3 5JZ 19/73607/FUL	*Construction of an eight-storey mixed use building comprising 270m2 commercial floorspace and 49 apartments*	21/02/2023 – Planning application approved. Construction currently ongoing. Expected completion date unknown.	502m	8
Former Kendals Building, 98-116 Deansgate And 35-47 King Street, King Street	*Change of use of upper floors and erection of three storey rooftop extension, including plant level, to Kendal Milne building to provide offices*	Consent phased under NMA Ref: 138315/NMC/2023	440m	14

Site Location	Description of development	Status as of August 2026	Distance from Site	Map No.
West, Manchester, M3 2GQ 129251/FO/2021	*on floors 1-9 (Use Class E), together with change of use of ground, lower ground and basement levels of Kendal Milne building to flexible commercial spaces (Use Class E, F2 and /or Sui Generis (Drinking Establishments) and associated elevational alterations and works; Demolition of adjacent Fraser Building and link bridges and erection of 14 storey office building (Use Class E), including plant level, together with associated amenity space and ground and basement floor flexible commercial units (Use Class E, F2 and / or Sui Generis (Drinking Establishments)) and basement areas for cycle storage and plant; Highways landscaping and public realm works, engineering and infrastructure works and other associated works.*	Pre-commencement conditions discharged under Refs: CDN/23/0840, CDN/23/0858, CDN/24/0013 Consent implemented. Works not currently progressing.		
Cumulative Development				
Great Northern Complex Encompassing Great Northern Warehouse, Great Northern Square, 223-255 Deansgate And Goods Yard Entrance Manchester M3 4EN 135565/FO/2022	*Demolition of the central atrium, car park ramps, and other elements, retention of casino (Sui Generis), bowling alley and existing food and drink unit (Use Class E) alongside to allow refurbishment, restoration and re-use of the Great Northern Car Park to provide office accommodation, retail and/or food and drink uses (Use Class E) and ancillary areas; and Refurbishment, restoration, partial demolition and erection of a 3-storey extension to*	14/03/2018 – Original Planning application approved. This permission has now been replaced by applications 135565/FO/2022 and Listed Building Consents	496m	2

Site Location	Description of development	Status as of August 2026	Distance from Site	Map No.
	Deansgate Terrace (northern section) and Goods Yard Entrance to form office, retail and / or food and drink use (Use Class E) and drinking establishments / hot food takeaway (Sui Generis), with associated public realm works comprising the reconfiguration of Great Northern Square and the introduction of additional public realm with associated hard and soft landscaping, highways works, access and servicing facilities, rooftop plant and other associated works; and *Partial demolition of the existing leisure box to erect three residential buildings (ground plus 16, 27 and 34 storeys) to provide 746 residential apartments (Use Class C3), reconfiguration of existing car parking together with the creation of office, retail and / or food and drink use (Use Class E), or Sui Generis (drinking establishments / hot food takeaway) at ground floor and level 3, hard and soft landscaping, together with highways works, access and servicing facilities, rooftop plant and other associated works; and,* *External alterations and restoration of Deansgate Terrace (southern section) to provide office, retail or food and drink use (Use Class E) or Sui Generis (drinking establishments / hot food takeaway / live music venue), along with*	135583/LO/2022 and 135566/LO/2022. The associated S106 Agreement is undergoing signing. Construction is therefore yet to begin. Expected completion date unknown.		

Site Location	Description of development	Status as of August 2026	Distance from Site	Map No.
	delivery of associated public realm, highways works, plant, and associated works			
Regent Retail Park, Ordsall Lane, Salford PA/2024/0962	*Outline Planning Application (with all matters reserved except for Access to, but not within, the Application Site) for a Mixed-Use Development Comprising a maximum of 10,000 sq. m new Commercial and Community Floorspace (Use Classes E and F.2) and up to a maximum of 3,300 new Residential Dwellings (Use Class C3) and a new Public Park andassociated infrastructure and works.*	Decision Notice imminent.	527m	9
138273/FO/2023 Land Bound By New College Street, New Quay Street, NCP Car Park And Gartside Street Manchester M3 3BE	*Demolition of the existing buildings and structures and the erection of a 16-storey office building (Use Class E(g)), with flexible ground floor uses (Use Class E), rooftop amenity space and works to facilitate public realm improvements.*	07/03/2024 - Planning application approved. Construction yet to commence.	86m	10
Albert Bridge House Bridge Street Manchester M3 5AH 143164/FO/2025	*Creation of a mixed use development comprising three separate components: an office building of up to 18 storeys (Use Class E (g)) with ground floor commercial, leisure, food and drink uses (All Use Class E (g)) and/ or drinking establishment (Sui Generis) with rooftop plant and roof top amenity; a residential building up to 37 storeys (Use Class C3a) with roof top plant level, basement car and cycle*	23/10/2025 – Resolution to grant permission received at Planning Committee.	391m	11

Site Location	Description of development	Status as of August 2026	Distance from Site	Map No.
	parking; and a residential building up to 49 storeys (Use Class C3) with ground floor commercial, leisure, food and drink uses (Use Class E) and/ or drinking establishment (Sui Generis), roof top plant level, basement cycle parking, together with landscaping and public realm, drainage, sub-station, servicing and access arrangements, surface car parking for 7 cars, highway alterations and other associated works following demolition of the existing building complex.			
Ralli Quays, 3 Stanley Street, Salford, M60 9HL 21/78277/FUL	*Demolition of existing buildings and the erection of a 12-storey office building (Use Class E(g)) and a 16-storey hotel building (Use Class C1) with associated ancillary facilities, servicing, means of access, landscaping and public realm.*	15/02/2023 – Planning application approved. 08/02/2024 – Request for confirmation of partial compliance of Condition 5 (CEMP Demolition Phase only) was discharged. Construction yet to begin.	133m	12
Land Bound By King Street West, St Marys Parsonage, Garden Lane And Smithy Lane Manchester M3 2JP 135028/FO/2022	*Erection of 14 storey building and the refurbishment of the existing buildings at 3 Smithy Lane and Carriage Works on Garden Lane / St Mary's Parsonage with ground floor extension to form office accommodation (Class E) with front of house and commercial floorspace at ground floor (Class E) with*	08/09/2023 – Planning application approved. 13/07/2026 – Application for the discharge of Conditions 5 (CMP), 9 (Historic Fabric Protection) and 12 (Bat	460m	13

Site Location	Description of development	Status as of August 2026	Distance from Site	Map No.
	associated landscaping and other works following demolition of existing buildings at 27-29 King Street West and 31-33 King Street West and link bridge from Carriage Works on Garden Lane / St Mary's Parsonage to 3 St Mary's Parsonage	License) was submitted – awaiting discharge. Construction yet to commence.		
Moxy Hotel, 8 Atkinson Street, Manchester, M3 3HH 141460/FO/2024	*Erection of a 3 -storey rooftop extension to the existing 9-storey hotel building, external facade alterations, and other associated works*.	20/02/2025 – Planning application approved. Currently under construction. Expected completion date unknown.	410m	4
109660/FO/2015/C1 St Johns Tower	*Demolition of existing buildings and structures, including Albert Shed and Globe and Simpson Building, to enable the construction of four buildings comprising : hotel use (Class C1) and residential use (Class C3) within building 1 (ground floor plus 51 storeys); hotel use (Class C1) within building 2 (ground floor plus 7 storeys); residential use (Class C3) within building 3 (ground floor plus 17 storeys); and, residential use (Class C3) within building 4 (ground floor plus 3 storeys), providing a total of 387 residential units; retail use (Class A1) or Financial and Professional Services use (Class A2) or Restaurant and Cafe use (Class A3) or*	21/10/2016 planning application approved. 18 Storey Residential Tower approved on Albert Shed Site – superseded by Proposed Development. St Johns Tower Implemented through construction of basement 2019. Development stalled with temporary tennis court located on Site.	St Johns Tower – 22m	15

Site Location	Description of development	Status as of August 2026	Distance from Site	Map No.
	Drinking Establishment use (Class A4) at the lower floors of all buildings, together with associated external seating areas; creation of new public realm and landscaping, riverside walkway, car and cycle parking, access arrangements and highways works, rooftop plant, and other associated works			
Alberton House, 30 St Marys Parsonage, Manchester, M3 2WJ 134287/FO/2022	*Demolition of existing building and erection of a 19 storey (ground including mezzanine, plus 18) building above basement level to form a mixed use office development with ancillary office amenity including gym for use by office occupiers, (Use Class E(g(i)) flexible commercial floorspace at ground floor and mezzanine (Use Class E (a), (b), (c) and/ or drinking establishment Sui Generis), flexible office floorspace (Use Class E(g(i)) at Levels 1-16, and two floors of wellness centre (Sui Generis) at Levels 17 and 18 including ancillary food and beverage (Use Class E (a), (b), (g(i)) and/ or drinking establishment Sui Generis), cycle parking, landscaping, highways and other associated works.*	10/11/2022 – Planning application approved. Demolition and site clearance progressed. Works not currently progressing	435	3

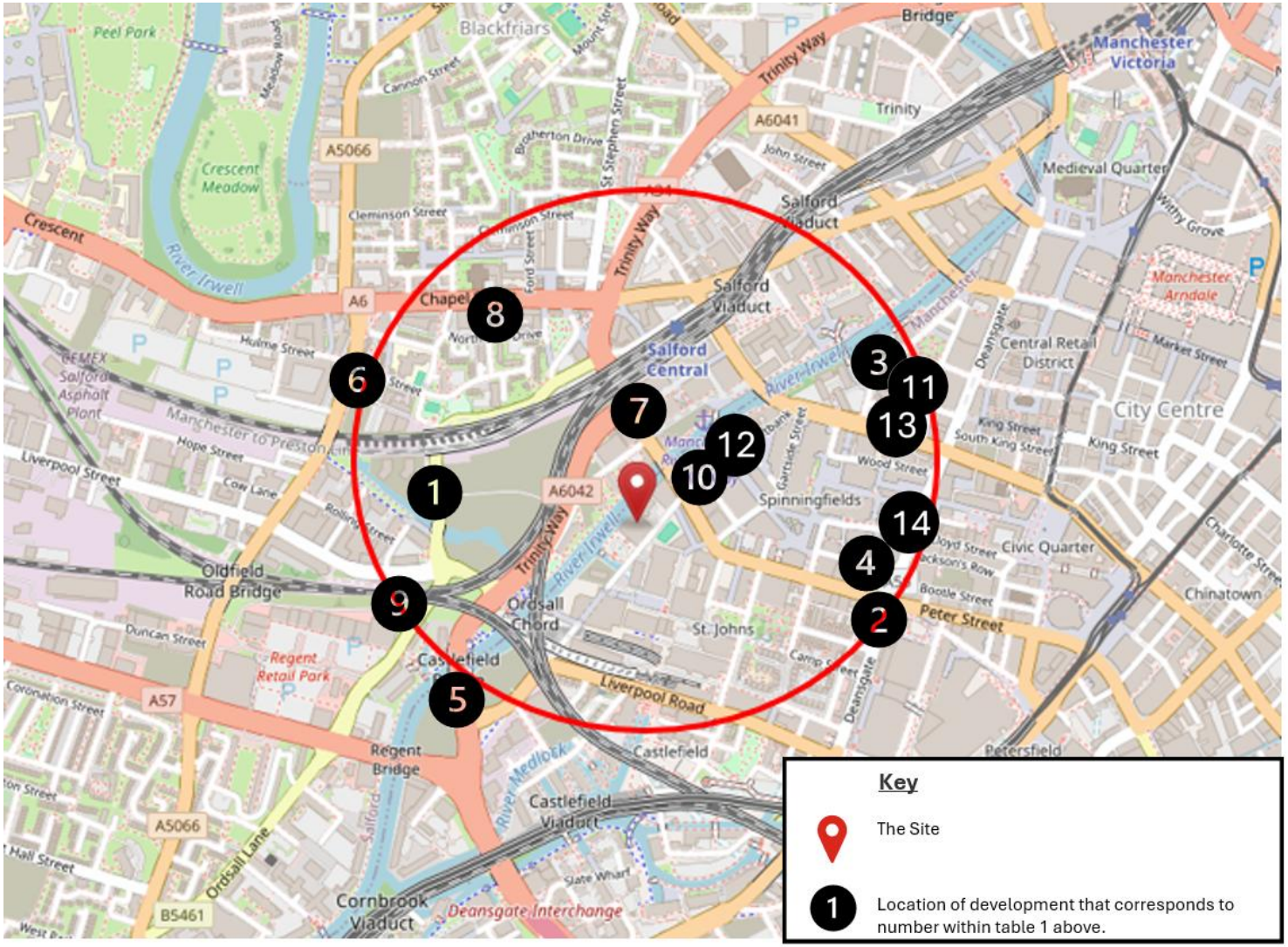


Figure 1- Map of Committed Developments

Appendix 3(a) – Limitations and Assumptions

Discipline	Limitations and Assumptions
Daylight and Sunlight	• Best estimates were made in determining building uses (residential or commercial). Generally, these were made from external observations and recourse to the Valuation Office Agency's (VOA) council tax records. • Where publicly available, room layouts will be included within the modelling of the sensitive receptors. Reasonable assumptions as to the floor levels within these modelled rooms, which dictate the level of the working plane relevant for the NSL assessments, will be based on external observations.
Townscape and Visual Impact	• The TVIA will not include an assessment of the effects on the heritage assets arising from changes to their settings, however, the selection of viewpoints has been undertaken with consultation with heritage consultant. • The TVIA will assess the effects during the day only. It is assumed that a lighting strategy and assessment will be undertaken by appropriately experienced consultants. • The TVIA will consider the overall effect on near-by residential receptors, but it will not consider the visual amenity from individual residential properties.
Climate Change	• The WLCA will be based on design information available at the time of assessment; assumptions will be made regarding material quantities and specifications where detailed design is not yet available, consistent with RICS *Whole Life Carbon Assessment for the Built Environment*, 2nd Edition (2023) guidance. • Operational energy consumption (B6) will be estimated based on available energy modelling data; actual consumption may vary. • A 60-year reference study period (RSP) is assumed in accordance with BS EN 15978:2011. • Climate projections are based on UKCP18 RCP 8.5 (high emissions scenario) to provide a precautionary assessment; actual future climate conditions may differ. • Munich RE climate risk assessment software outputs are based on modelled data and are subject to the inherent uncertainties of climate modelling. • The Circular Economy Study will be based on design information available at the time of assessment and will be updated as the design develops.
Air Quality	• Professional judgement will be used in the completion of the construction phase dust assessment for the Proposed Development. • It is assumed that the information provided by the transport consultant is accurate and robust for input into the assessment.

Discipline	Limitations and Assumptions
	• The ADMS-Urban dispersion models used in the assessment to assess the existing and future baseline concentrations in the vicinity of the Application Site relies on input data, such as traffic data and predicted emissions data, etc., which may have uncertainties associated with them. The models simplify complex environments and does not always accurately reflect local micro-climatic conditions which may ultimately affect the predicted pollutant concentrations. • The assumptions made are considered reasonable and robust.
Noise and Vibration	• In undertaking the demolition and construction noise assessments, there are limitations and constraints that are expected to affect the outputs from this work. The BS 5228 calculation methods allow accurate noise levels to be determined for various demolition and construction activities. However, the value of any such predictions is necessarily limited by the number of assumptions that are made regarding the number and type of plant to be utilised, their location and detailed operating arrangements. • Some of this information would be clarified as the details of the demolition and construction works are specified and later when resources are mobilised on application site for the works, but other information such as exactly where the plant operates and for how long would remain uncertain, even after works have commenced. Available information (e.g. suitable areas for plant equipment and associated acoustic mitigation methods) will be set out in a detailed Demolition and Construction Management Plan, but onsite constraints will always influence operations to some degree. • As a consequence, the anticipated available information will be sufficient to perform a generic demolition and construction phase noise assessment, focussing on key activities operating at potential locations nearest the SRs, with the aim of identifying whether a significant, albeit temporary, noise effect is likely to arise at the nearest SRs.
Socio-Economic	• In preparing the baseline analysis CBRE has obtained and utilised the most up-to-date available secondary data published by official third-party sources. • The data sources have methodological limitations, there are limitations to the spatial area across which data is aggregated and reported, a time-lag in reporting dates, and the data will only report a socio-economic context at a specific point in time. • To mitigate, as far as possible, CBRE has clearly referenced the date of data publication and has utilised spatial datasets that permit analysis to be aggregated or disaggregated as closely as possible to the relevant technical study area.
Human Health	• The Health Chapter will consider the findings relevant to human health of each technical impact assessment scoped into the Environmental Statement and, as such, any key assumptions or limitations associated with each technical impact assessment are addressed within the individual chapters.

Discipline	Limitations and Assumptions
	• The overall approach for collating, assessing, and reporting impacts on human health and wellbeing is considered to be appropriate and proportionate such that there are no limitations. The assessment will be desk-based and with professional judgment using published information.

Appendix 3(b) – Scenarios Tested

For the purpose of the EIA scenarios, 'Proposed Development' is defined as follows:

- Construction – demolition of existing structures on site (multi-storey car park and retail units), and construction/ erection of new build.
- Operational – occupation/ operational running of new build/ scheme

The alternative baseline assumes the demolition has commenced prior to this redevelopment application.

Scenario 1	Existing Baseline (existing EIA Site, as of March 2026)
Scenario 2	Existing Baseline + Proposed Development
Scenario 3	Existing Baseline + Proposed Development + Cumulative

Discipline/ Scenario	1	2	3	Supporting Commentary
Daylight and Sunlight	Y	Y	Y	All scenarios are to be assessed to provide a robust assessment.
Townscape and Visual Impact	Y	Y	Y	All scenarios are to be assessed to provide a robust assessment
Climate Change	Y	Y	N	GHG Emission Assessment An overarching principle of the ISEP guidance is that GHG emissions from all development cumulatively contribute to climate change and a change to the global environment. This, therefore, makes the assessment of GHG emissions a cumulative assessment by its very nature. As such, cumulative effects from the Proposed Development when considered alongside other committed and reasonably foreseeable developments in the vicinity of the Site, will be addressed inherently within the GHG Emissions assessment.

Discipline/ Scenario	1	2	3	Supporting Commentary
				Climate Change Resilience Assessment The approach to the CCRA differs from other topics in that it assesses the potential impacts of the future environment on future receptors within the Proposed Development, rather than impacts of the Proposed Development on the environment. As such, there are no cumulative impacts to consider.
Air Quality	Y	Y	Y	
Noise and Vibration	Y	Y	Y	Scenario 3 represents the worst case and is therefore the only scenario that needs to be tested in relation to potential noise and vibration impact.
Socio Economics	Y	Y	Y	All scenarios are to be assessed to provide a robust assessment.
Human Health	Y	Y	Y	All scenarios are to be assessed to provide a robust assessment.
Solar Glare	N	Y	N	For solar glare, the worst-case scenario is portrayed by the complete and operational Proposed Development, where all reflective facade materials have been installed and any covers, films or hoarding used during the construction period have been removed. As construction works progress, and the facades of the Proposed Development are installed, the potential solar glare effects would be similar to those once the Proposed Development is complete and operational. It is therefore considered that the completed Proposed Development represents the worst-case assessment in terms of likely solar glare effects. The construction scenario will be assessed qualitatively, based on professional judgement. As the worst-case scenario for solar glare is portrayed by the complete and operational development, a quantitative assessment has been undertaken for the operational phase only. As such, solar glare would be tested quantitatively in the: Scenario 2 – Existing Baseline + Proposed Development.
Wind and Microclimate	Y	Y	Y	As part of wind microclimate testing it is important to consider the impacts of the Proposed Development within both existing and cumulative surrounds. This allows the effects of the Proposed Development to be assessed within both the current and likely future built context. Alongside the proposed testing for the above scenarios, the assessment will also consider the conditions both with and without mitigation where mitigation is required, as the CFD assessment progresses.
Heritage	Y	Y	Y	All scenarios to be tested for Built Heritage.

Discipline/ Scenario	1	2	3	Supporting Commentary
Ground Conditions	Y	Y	Y	Applicable to all scenarios above for a robust assessment: .
Water Resources	Y	Y	Y	Applicable to all scenarios for a robust assessment

Appendix 4 – Environmental Statement Structure

Each chapter sub-heading is explained in further detail below.

A reference list will also be provided as relevant with each ES chapter.

This is considered to be a robust approach and aligns with the EIA Regulations (2017).

Introduction

This Chapter will introduce the assessment discipline and the purpose for which it is being undertaken.

Legislative and Policy Context

This Chapter will include a summary of national, regional and local policy and guidance of relevance to the environmental discipline and assessment. Relevant legislation will be summarised where applicable.

In addition, preparation of each ES chapter will consider relevant local and regional, social and economic policies. This will include (but may not be limited to):

- Manchester City Council Core Strategy (2012) and 2024 addendum
- Guide to Development in Manchester – Supplementary Planning Document and Planning Guidance (2007)
- Places for Everyone – Greater Manchester Combined Authority (2024)
- National Planning Policy Framework (2025)
- Assessment Methodology and Significance Criteria

This Chapter will provide an explanation of methods used in undertaking the technical study with reference to published standards, guidelines and best practice. The application of significance criteria will also be discussed.

It will also outline any difficulties encountered in compiling the required information.

Baseline Conditions

This will include a description of the environment as it is currently and as it is expected to change given the project were not to proceed (i.e. 'do-nothing' scenario). The method used to obtain this information will be clearly identified. Baseline data will be collected in such a way that the importance of the particular subject area to be affected can be placed in its context and surroundings so that the effects of the proposed changes can be predicted.

Identification and Evaluation of Likely Significant Effects

This Chapter will identify the likely significant effects on the environment resulting from the Proposed Development.

The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the effects can be positive or negative. The criteria to be used in carrying out this process are detailed below. It should be noted that these tables provide a standardised set of criteria, which may not be applicable to all technical disciplines considered within the EIA. Where relevant, individual consultants may use a variation of the criteria and this will be clearly explained within the methodology of each chapter.

The Proposed Development will likely be delivered in a single phase. If the building were to come forward in phases scenarios would be reconsidered and amended where appropriate.

As a rule, and to ensure consistency across disciplines, developments that are already under construction are considered to form part of the Existing Baseline and those subject to planning permissions or otherwise identified within the committed developments are considered as part of the cumulative analysis.

The proposed scenarios to be tested are detailed in full within Appendix 3(b).

Prediction of Impact Magnitude

The methodology for determining the scale or magnitude of change caused by the impact is set out in Table 3.1. The below table represent a standard methodology which all disciplines shall follow unless stated otherwise.

Table 3.1: Standard Methodology for Assessing Magnitude of Change

Magnitude of Change	Criteria for assessing magnitude of change caused by an impact
Major	Total loss or major/substantial alteration to key elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.
Moderate	Loss or alteration to one or more key elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Minor	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but not material. The underlying character/composition/attributes of the baseline condition will be similar to the pre-development circumstances/situation.
Negligible	Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation.

Prediction of Receptor Sensitivity

The sensitivity of a receptor is based on the relative importance of the receptor using the scale set out in Table 3.2. The below table represent a standard methodology which all disciplines shall follow unless stated otherwise.

Table 3.2: Standard Methodology for Determining Sensitivity

Sensitivity	Examples of receptor
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character or is of international or national importance.

Moderate	The receptor/resource has moderate capacity to absorb change without significantly altering its present character or is of high importance.
Low	The receptor/resource is tolerant of change without detriment to its character, is of low or local importance.

Assessment of Effect Significance

Effect significance will be calculated using the matrix in Table 3.3. This illustrates the interaction between impact magnitude and receptor sensitivity. The duration of the affect will also be considered and whether it is permanent or temporary.

Table 3.3: Effect Significance Matrix

Magnitude	Sensitivity		
	High	Moderate	Low
Major	Major Adverse/Beneficial	Major - Moderate Adverse/Beneficial	Moderate - Minor Adverse/Beneficial
Moderate	Major - Moderate Adverse/Beneficial	Moderate – Minor Adverse/Beneficial	Minor Adverse/Beneficial
Minor	Moderate – Minor Adverse/Beneficial	Minor Adverse/Beneficial	Minor - Negligible
Negligible	Negligible	Negligible	Negligible

Mitigation Measures

Adverse effects will be considered for mitigation and specific measures will be put forward, where practicable. Mitigation measures considered may include modification of the project, compensation and the provision of alternative solutions as well as pollution control. The extent of the mitigation measures and how these will be effective will be discussed. Where the effectiveness is uncertain or depends upon assumptions about operating procedures, data will be introduced to justify the acceptance of these assumptions.

The approach to mitigation will follow best practice guidance, which suggests a hierarchical approach. The UNEP EIA Training Resource Manual (2002) advises that impacts should ideally be:

- Avoided; if not
- Minimised; and/or compensated.

Three 'types' of mitigation are characterised in IEMA's Special Report – The State of Environmental Impact Assessment Practice in the UK (2011):

- EIA influence at design stage;
- Standard construction practices for minimising effects; and

- Follow-up actions for implementation post-consent.

Clear details of when and how the mitigation measures were carried out, or will be carried out, are to be given within the ES. When certainty of impact magnitude and/or effectiveness of mitigation over time exists, monitoring programmes will be proposed to enable subsequent adjustment of mitigation measures, as necessary.

The opportunity for enhancement measures will also be considered where appropriate.

Cumulative Effects

Two types of cumulative effect will be assessed:

- Type 1 Cumulative effects - are the interactions between effects of the construction and development works on a single receptor.

- Type 2 Cumulative effects - are those that arise from incremental changes caused by other past, present or reasonably foreseeable projects together with the development proposals and associated works.

An assessment of the cumulative effect of the Proposed Development and other committed developments within a defined radius of the Site, including those with recent Planning Permissions and reasonably foreseeable to come forward in the near future, will be undertaken as part of the EIA.

There is no agreed / standard threshold for how far the assessment should go. Therefore, a professional judgement has been taken regarding which schemes to highlight, taking into consideration the surrounding context of the Site, which may differ between disciplines.

Where schemes are under construction, they have been considered part of the baseline. If applications are approved, subject to a live application reasonably considered likely to be approved, or otherwise reasonably considered likely to come forward, these are included as a committed development to be considered as part of the cumulative analysis. The list of committed developments includes schemes where the construction phase has stalled.

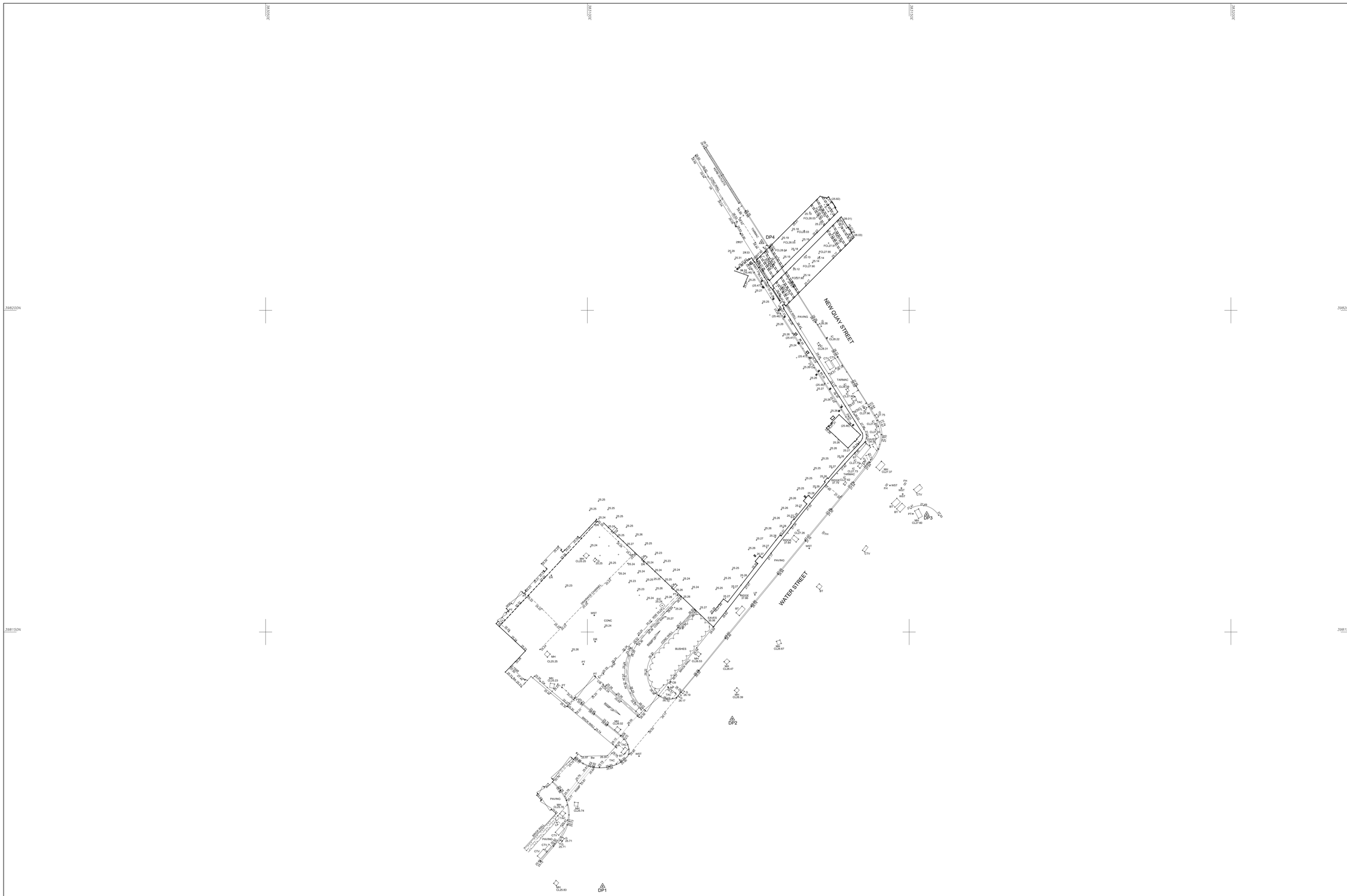
The schedule of committed developments has been issued to the LPA who have confirmed their agreement.

Full details of the committed developments to be included as part of the cumulative effects assessment are set out at Appendix 2.

Residual Effects

The residual effects, i.e. the effects of the Proposed Development assuming implementation of proposed mitigation, will be determined. The residual effects represent the overall likely significant effect of the Proposed Development on the environment having taken account of practicable/available mitigation measures.

Appendix 5 –Topographical Survey



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Note:
The survey is plotted on a plane local Grid. Orientation to National Grid.
All levels relate to Ordnance Datum, achieved using the OS National GPS Network.
Survey Control Markers established for Mapping purposes only and should not be used for Construction without the written approval of Survey Operations Ltd.
Levels in parenthesis indicate top of walls.

SURVEY STATIONS

Name	Easting	Northing	Height
DP1	383102.37	398110.50	25.96
DP2	383122.55	398136.51	26.47
DP3	383152.73	398168.31	27.62
DP4	383127.08	398210.60	28.81

STANDARD REFERENCE & ABBREVIATIONS

(AM).....Assumed Route
AB.....Air Brick
AV.....Air Valve
B/W.....Barbed Wire
BAR.....Barrier
BB.....Belisha Beacon
BH.....Borehole
BL.....Bed Level
BOL.....Bollard
BS.....Bus Stop
BT Box..British Telecom Box
BT.....British Telecom It
BWTW...Brick Retaining Wall
BW.....Brick Wall
C/B.....Close Boarded
C/I.....Corrugated Iron
C/P.....Chestnut Paling
CB.....Control Box
CBW....Concrete Block Wall
CCTV....Closed Circuit TV
CD.....Cable Duct
CEL.....Cellar Light
CHL.....Chain Link
CHY.....Chimney
CL.....Cover Level
CM.....Cable Marker
COL.....Column
CONC....Concrete
CP.....Catch Pit
CRTW....Concrete Retaining Wall
CTV.....Cable Television
CUL.....Culvert
CW.....Concrete Block Wall
DC.....Drainage Channel
DPC.....Damp Proof Course
DR.....Drain
DSW.....Dry Stone Wall
ECP.....Electricity Cable Pit
ECC.....Electricity Inspection Cover
EJ.....Expansion Joint
EJB.....Electricity Junction Box
EP.....Electricity Pole
ER.....Earth Rod
ETL.....Electricity Transmission Line
FB.....Flower Bed
FH.....Fire Hydrant
FL.....Floor Level
FP.....Flagpole
G^.....Girth (of tree)
G.....Gulley
GAB.....Gabion
GIP.....Gas Inlet Pipe
GWM....Gas Worker
GST.....Gas Stop Tap (Domestic)
GSV.....Gas Stop Valve (Mains)
HSE.....Housing
HT.....Height
HV.....High Voltage
I/R.....Iron Railing
IC.....Inspection Cover
IL.....Invert Level
IP.....Inlet Pipe
KO.....Kerb Outlet
LB.....Letter Box
LP.....Lamp Post
MG.....Multi-Girth
MH.....Manhole
MKR....Marker
MP.....Mooring Point
NP.....Street Name Plate
O/H....Overhead
O/P.....Open Paling
OE.....Overhead Electric Wire
OP.....Outfall Pipe
OSBM....Ordnance Survey Bench Mark
OT.....Overhead Telecom Wire
P/C.....Post & Chain
P/R.....Post & Rail
P/W.....Post & Wire
PAV.....Paving
PB.....Pillar Box
PC.....Pedestrian Crossing
PF.....Petrol Pump
PT.....Post or Pillar
RE.....Rodding Eye
RS.....Road Sign
RTW.....Retaining Wall
RWP.....Rain Water Pipe
SAP.....Sapling
SL.....Sump Level
SOL.....Soffit Level
SP.....Sign Post
SPL.....Springing Level
SWTW....Stone Retaining Wall
SV.....Stop Valve (unspecified)
SVP.....Soil Vent Pipe
SW.....Stone Wall
TAC.....Traffic Paving
TB.....Traffic Bollard
TBM.....Temporary Bench Mark
TCB.....Telephone Call Box
TFM.....Taken From Records
TIP.....Anchor Point (Waste/Poles)
TL.....Traffic Light
TLB.....Traffic Light Control Box
TM.....Ticket Machine
TNC.....Tarmac
TP.....Telecommunications Pole
TPIT....Trial Pit
TS.....Trash Screen
U/C.....Under Construction
U/G.....Underground
UTL.....Unable to Lift (BM,IC etc)
UTS.....Unable to Survey
VDP.....Vehicle Detector Pad
VP.....Vent Pipe
W/W.....Wire Work
WL.....Water Level
WM.....Water Meter
WO.....Wash Out
WP.....Waste Pipe
WST.....Water Stop Tap (Domestic)
WSV.....Water Stop Valve (Mains)

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Client
Renaker Build Limited

Drawing Title
Topographical Survey of Land at:
Albert Shed Project
Water Street/New Quay Street Spinning Fields
Manchester

Scale(s)	1:200	Surveyor	ES
Date	AUG 26	Drawn	JG
Job Number	26G239	Checked	SO/MH

Sheet Size & Drg Number & Revision
A0 26G239/001

Appendix 6 – Phase 1 Geo-Environmental Report

Appendix 7 – Archaeological Desk-based Assessment

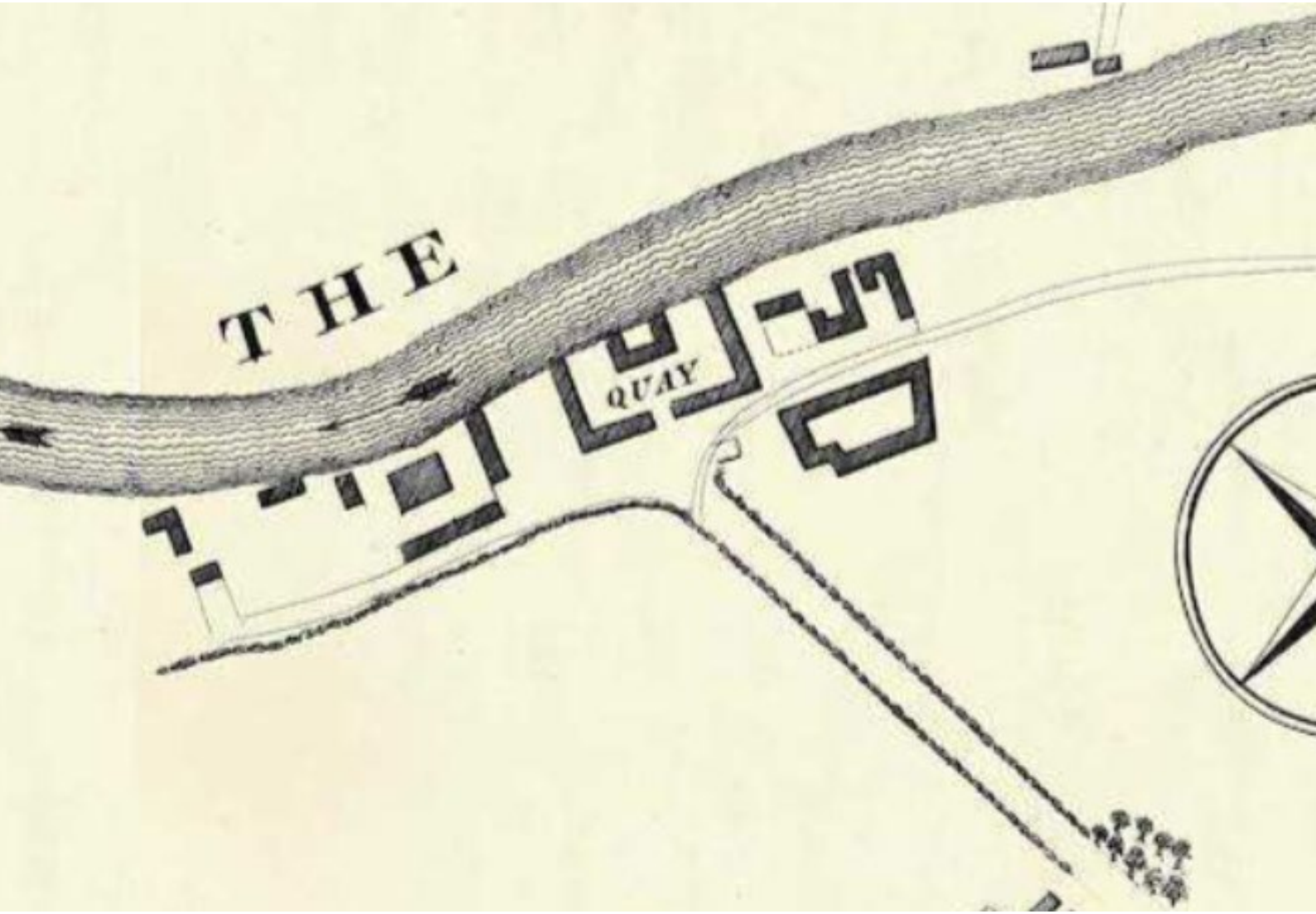
One St Johns, Manchester

Archaeological Desk-based Assessment

October 2026

PREPARED FOR

Select Property Group



Archaeological Desk-based Assessment

Prepared By	Ellie Jeffery
Reviewed By	Natalie Poundall
Report Reference	61219
Location	NGR 383115, 398177
Client	Select Property Group
Issuing Company	Civic Heritage Limited
Issued	06/10/2026 - Rev02

Revisions

Date	Rev	Reason	Name
04/09/2026	01	Initial Issue	Ellie Jeffery
06/10/2026	02	Reissue following comments	Ellie Jeffery

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CONTENTS

Executive Summary 3
1. **Introduction** 4
1.1. Background 4
1.1.1. Purpose 4
1.1.2. Location 4
1.1.3. Topography and Landuse 5
1.1.4. Geology and Soils 5
1.2. Designations 5
2. Methodology 6
2.1. Introduction 6
2.2. Research sources 6
2.3. Site walkover 6
2.1. Archaeological potential 6
2.2. Significance and impact assessment methodology 6
3. Planning Policy 7
3.1. Introduction 7
3.1.1. National Planning Policy Framework 7
3.1.2. Local Development Framework 8
3.1.1. Draft Manchester Local Plan 8
3.1.1. Places for Everyone 9
4. Historical and Archaeological Background 10
4.1. Introduction 10
4.2. Prehistoric (pre-10,000 BC to AD 43) 10
4.2.1. Archaeological potential 10
4.3. Roman (AD 43 – AD 410) 10
4.3.1. Archaeological potential 11
4.4. Medieval (AD 410 – AD 1540) 11
4.4.1. Archaeological potential 11
4.5. Post-medieval (AD 1540 – *c* AD 1750) 11
4.5.1. Archaeological potential 12
4.6. Industrial (c AD 1750 – post-1914) 12
4.6.1. Archaeological potential 13
4.7. Development of the Site 13
4.8. Previous archaeological works 19
4.8.1. Previous archaeological works within the Site 20
4.8.2. Previous archaeological works in the study area 20
5. Site Walkover 21
6. Gazetteer 30
7. Significance 32
7.1. Policy context for heritage assets 32

7.2. Designated heritage assets 32
7.3. Significance of the archaeological resource 32
7.3.1. Historical and archaeological interest 32
7.3.2. Baseline Significance conditions 32
7.4. Summary of significance 34
8. Impact Assessment 35
8.1. Site conditions 35
8.2. Proposed development 35
8.3. Review of impact of the archaeological resource 35
9. Conclusions 36
9.1. Planning policy 36
9.2. Recommendation for further work 36
Bibliography 37
Newspapers 37
Census 37
Cartographic 37
Directories 38
Appendix A 29

Plates

Plate 1: Recent satellite image of the Site, showing the red line development boundary 4
Plate 2: Casson and Berry's 1741 map of Manchester and Salford, showing approximate Site location (map not orientated north) 13
Plate 3: Tinker's 1772 plan of Manchester and Salford, showing approximate Site location 14
Plate 4: Green's 1794 plan of Manchester and Salford with Site boundary 15
Plate 5: Bancks and Co.'s 1831 plan of Manchester and Salford with Site boundary 16
Plate 6: 1851 Ordnance Survey town plan with Site boundary (courtesy of the National Library of Scotland) 17
Plate 7: 1891 Ordnance Survey town plan with Site boundary (courtesy of the National Library of Scotland) 18
Plate 8: 1922 Ordnance Survey plan with Site boundary (courtesy of the National Library of Scotland) 19
Plate 9: View showing Albert Shed, facing north-east 21
Plate 10: View showing Albert Shed, facing north, showing polychromatic brickwork and stone quoins around infilled cart doorway 22
Plate 11: View showing the north-eastern and south-eastern elevations of Albert Shed with Irwell Street Bridge to the right, facing north-west 22
Plate 12: View showing the concrete slab separating the levels of Albert Shed, facing east from the associated yard 23
Plate 13: View showing the former ramp into the car park at Albert Shed, facing north-east 23
Plate 14: View of lowest level to former car park, facing west towards part of concrete ramp 24
Plate 15: View of partially demolished concrete ramp to former car park and access underneath New Quay Street, facing north-east 24
Plate 16: View of lower level to former car park, facing west 25
Plate 17: View of current cement yard/car park, facing south-west from Albert Shed 25
Plate 18: View showing the wooden jetty at the rear of Albert Shed, facing west from Irwell Bridge 26
Plate 19: View of the rear elevation of Albert Shed over the River Irwell, facing south-west from Irwell Bridge 26
Plate 20: View showing the inside of the upper level of Albert's Shed, facing north 27
Plate 21: View showing the interior of Albert Shed, facing north-west 27
Plate 22: View showing the interior to the primary south-eastern elevation of Albert's Shed, on the upper level, facing south 28
Plate 23: View showing the interior trusses and beams of the upper level of Albert Shed, facing north-east 28
Plate 24: View showing the interior of the upper level of Albert Shed, facing east 29
Plate 25: View of collapsed timber trusses and roof on the upper level, facing north towards the River Irwell 29

Executive Summary

Select Property Group are devising proposals for a residential development scheme at One St Johns, Manchester (centred on NGR 383115, 398177). Select Property Group has commissioned Civic to carry out an archaeological desk-based assessment to support the planning application for the proposed development. The desk-based study aimed to identify as far as possible from existing records, the nature, extent and significance of the archaeological resource within the site so that an informed decision may be made regarding the nature and scope of any further scheme of archaeological works that may be required in relation to the proposed development.

The proposed development site is located in the Water Street and New Quay Street area of Manchester city centre. Prior to the later post-medieval period, the area was completely undeveloped, before becoming part of the Old Quay along the River Irwell after the Irwell and Mersey Navigations were successfully completed in 1740. The site saw gradual growth throughout the 18th and 19th centuries, also consisting of part of warehouses or other general buildings associated with the use of the Old Quay, and part of houses likely associated with the Old Quay known as Quay Court. There was also a Dye House and later Dye House Yard within the site, potentially associated with the dwellings at Quay Court.

By the late 19th century, the site became home to the Albert Warehouse, which formed part of the wider navigation network along river and canal travel by storing goods to be shipped, owned by the Manchester Ship Canal Company by 1889. Part of the Albert Warehouse was destroyed by fire in 1913, and the footprint of this part of the complex was taken over by Albert Shed by 1916. Throughout the early to mid-20th century, the Shed remained in use as storage, before being converted into a car park for the nearby Granada Studios in 1988. Albert Shed is currently unused and upstanding within the site and will be demolished as part of the proposed works.

The proposals comprise the demolition of the existing buildings on Site and the construction of a residential tower (Use Class C3) of ground +30 storeys, providing 381 apartments. The development will include residential apartments and residential amenity facilities comprising a gym, swimming pool, sauna, amenity space and management suite, together with cycle parking, refuse and servicing facilities, plant, landscaping, public realm improvements, access arrangements and all other associated works.

The site has moderate potential to contain buried archaeological remains of medium and low significance. Remains may include those associated with Quay Court, associated Gardens, the Old Quay complex, part of Albert Warehouse, and Albert Shed. Without a programme of mitigation, the proposed development could damage or destroy these remains.

Following consultation with GMAAS, an archaeological evaluation will be required at the site to establish the presence or absence of buried archaeological remains, and if present, their significance. The exact scope of any such further investigation will be determined by GMAAS and set out within a Project Design. Should significant archaeological remains be encountered during the archaeological evaluation, further excavation may be required to offset the harm of the development to the buried archaeological resource.

1. Introduction

1.1. Background

1.1.1. Purpose

This desk-based assessment has been prepared in support of a planning application for a residential development at One St Johns, Manchester. In accordance with National, Regional and Local Planning Policies, Select Property Group has commissioned Civic to carry out an archaeological desk-based assessment for the proposed development site. The assessment will support the planning application for the scheme.

The desk-based study aimed to identify as far as possible from existing records, the nature, extent and significance of the archaeological remains within the site so that an informed decision may be made regarding the nature and scope of any further scheme of archaeological works that may be required in relation to the proposed development. The archaeological resource may include below-ground remains, earthworks, standing buildings and other structures. A detailed consideration of the above-ground historic environment is not considered within this assessment, which is focused on below-ground heritage assets.

1.1.2. Location

The proposed development area, known as One St Johns, is located within Manchester city centre (centred on NGR 383115, 398177; herein referred to as the 'Site'). The Site occupies land that is bounded by the River Irwell to the north-west, New Quay Street to the north-east, Water Street to the south-east, and the Grade II Listed Marriott Hotel to the south-west (Plate 1; Figs. 1-2). The Site currently comprises the derelict Albert Shed Warehouse and an associated yard of hard-standing concrete, currently in use as a car park (Plate 1).



Plate 1: Recent satellite image of the Site, showing the red line development boundary

1.1.3. Topography and Landuse

Topographically, the Manchester conurbation as a region lies within an undulating lowland basin, which is bounded by the Pennine uplands to the east and to the north. The region as a whole comprises of the Mersey River valley, whilst the rivers Irwell, Medlock and Irk represent the principal watercourses in Manchester.

The Site adjoins the River Irwell. The Site is lies at a height of approximately 28m above Ordnance Datum (aOD).

1.1.4. Geology and Soils

The underlying solid geology of the development area comprises sandstone of the Chester Formation formed between 250 and 247.1 million years ago during the Triassic period. No superficial deposits are recorded for the Site (BGS Geology Viewer, 2026).

1.2. Designations

The Site does not contain any heritage assets that are afforded statutory protection, such as Listed Buildings, Scheduled Monuments, or any Registered Parks and Gardens. The Site is within the Castlefield Conservation Area.

The Site is located within 250m of eight Listed Buildings, two Locally Listed Buildings, and the St John Street Conservation Area. The proposed development will not have a physical impact on these designated heritage assets, and so they are not considered further in this report; however, it may have an indirect impact on their setting. A detailed consideration of the above-ground historic environment is not considered within this assessment, which is focused on below-ground heritage assets.

DESCRIPTION	DESIGNATION	LIST ENTRY
Castlefield	Conservation Area	DGM1554

Table 1: List of designated assets within the Site

DESCRIPTION	DESIGNATION	LIST ENTRY
St John Street	Conservation Area	DGM1473
Irwell Street Bridge	II	1386141
Albert Bridge	II	1293278
Victoria Warehouse, Albert Warehouse and quay	II	1254727
Former Grape Street railway bonded warehouse	II	1457402
St Johns College of Further Education	II	1282969
Two bollards at west end of St John's Passage	II	1291330
Hydraulic power station (formerly)	II	1254724
Manchester and Salford Junction Canal Tunnel	II	1405199
Mark Addy landing stage and former public house	Locally Listed	HER 16252.1.0
Royal Veteran Hotel (former; now Riverside House)	Locally Listed	HER 12387.1.0

Table 2: List of designated assets within 250m of the Site

2. Methodology

2.1. Introduction

The aim of the desk-based assessment is to consider the potential impact of the proposed development upon any buried archaeological remains within the Site. The production of the assessment followed the Chartered Institute for Archaeologists (CIfA) standard and guidance for undertaking archaeological desk-based assessments (CiFA, 2020).

2.2. Research sources

The desk-based assessment consists of existing written, cartographic, photographic and electronic information, which have been analysed in order to identify known and unknown heritage assets. These include:

- National Library of Scotland;
- The Historic Environment Record supplied by the Greater Manchester Archaeology Advisory Service (GMAAS);
- The National Heritage List for England (NHLE);
- Historic newspapers;
- Historic trade directories;
- Reports of archaeological work carried out in the Study Area; and,
- Historic Landscape Characterisation.

2.3. Site walkover

The aim of the Site walkover was to relate the findings of the desk-based study to the existing land use of the application area, in order to identify any evidence for surviving below-ground remains. The site walkover also aimed to locate and assess the extent and severity of modern ground disturbance, in order to evaluate its potential impact on any buried archaeological remains.

2.1. Archaeological potential

The potential for the Site to contain archaeological remains is rated ‘high’, ‘medium’, ‘low’, or ‘unknown’. This assessment is based on an understanding of the archaeological resource as a whole and takes into account the Site’s geology, topography, relevant research sources and the likelihood of modern ground disturbance.

2.2. Significance and impact assessment methodology

The Secretary of State’s criteria for the scheduling of ancient monuments, outlined in Annex 1 of ‘Scheduled Monuments: identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979’ (DCMS, 2013) provides a methodology for assessing archaeological significance. These criteria have been utilised in Chapter 8.3) of this assessment.

The International Council on Monuments and Sites (ICOMOS) issued ‘*Guidance on Heritage Impact Assessments for Cultural World Heritage Properties’* in January 2011 (ICOMOS, 2011), which outlines an option on assessing heritage value. In line with the ICOMOS guidance, this document states that an archaeological asset’s significance can be assessed as very high, high, medium, low, negligible or unknown (Chapter 8.4).

The impact assessment assesses the potential impact of the proposed development upon the significance of the archaeological resource within the Site. Mitigation strategies may be recommended in order to reduce the level of impact on the significance of the identified assets.

3. Planning Policy

3.1. Introduction

3.1.1. National Planning Policy Framework

This assessment accords with National, Regional and Local Planning Policies which relate to the historic environment. National planning policies relevant to heritage asset management are contained within the National Planning Policy Framework (NPPF 2026).

The NPPF sets out the Government's planning policies and for making decisions on development proposals in England (Ministry of Housing, Communities & Local Government, August 2026, pp. 93-98). Chapter 20 deals specifically with *Conserving and enhancing the historic environment* (HE1-10). The section states that heritage assets are an irreplaceable resource that can range from buildings of local historic value to World Heritage Sites, that *should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.*

Policy *HE1: Planning for the historic environment* states that to 'deliver a positive strategy for the conservation, enhancement and enjoyment of the historic environment, development plans should:

a) Identify the heritage assets within the plan area, including those heritage assets at most risk through neglect, decay or other threats, set out the key issues facing them and identify where these assets can be used to support sustainable development;

b) Be informed by a proportionate heritage assessment

c) Consider the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;

d) Take opportunities, for example through site allocations, design guides, design codes and masterplans, to draw on the contribution which the historic environment can make to the character and quality of development, and its context and

e) Be supported by a local heritage list to identify non-designated heritage assets that are important to the local community'.

Policy *HE5: Assessing effects on heritage assets* states that:

'Development proposals affecting heritage assets should be accompanied by an assessment of the significance of the assets affected (including any contribution made by their setting) and of the potential effect of the proposal on their significance. The level of detail should be proportionate to the assets' importance and no more than is necessary to understand the potential effect of the proposal on their significance. The relevant historic environment record should be referred to in making this assessment, and appropriate expertise employed where necessary*'.*

Policy *HE7: Decisions on non-designated heritage assets* states development proposals that would have a positive effect on a non-designated heritage asset should be supported and harm to the significance of a non-designated heritage asset should be weighed against the benefits of the proposal and a balance judgement made. Development proposals that would cause substantial harm to, or the total loss of, the significance of a non-designated heritage asset would only be supported where the harm or loss is outweighed by the benefits of the proposal.

Policy *HE10: Loss or removal of heritage assets* states that applicants should and advance understanding of heritage assets to be lost in a manner appropriate to their importance and the potential impact upon it. This evidence should be made publicly accessible by depositing in the relevant HER and any archives with a local

museum or public depository. In addition, *'*heritage assets with archaeological interest should be preserved in situ where feasible. Where an asset cannot be preserved or managed on-site, appropriate provision should be made for the investigation, understanding, recording, dissemination and archiving or that asset, which should be undertaken by suitably qualified individuals or organisations'*.*

3.1.2. Local Development Framework

The NPPF states that local planning authorities are required to create local plans and frameworks to implement the NPPF at a local level. Manchester City Council adopted a Core Strategy in 2012, which is scheduled until 2027 (Manchester City Council, 2012). The heritage strategy is outlined in *Objective 6: Environment* of the local plan and summarises the approach the local authority will take in determining planning applications which may affect the historic environment (Manchester City Council, 2012, pp. 172-173).

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 ancient monuments, listed buildings, registered parks and gardens, conservation areas and archaeological remains.

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

3.1.1. Draft Manchester Local Plan

A new Local Plan for Manchester is currently under review. A draft of the plan was published by Manchester City Council in September 2025. Policy D5 of the draft plan concerns Heritage, which states:

'Manchester has a distinctive historic environment with a concentration of heritage assets in the city which contribute to the character, economy, sustainability, culture and quality of life.

Development affecting Heritage assets will positively conserve or enhance their significance as an integral part of sustainable growth, and will:

- *Describe and assess the significance of the heritage asset which will inform proposals for their positive conservation.*
- *Ensure heritage assets and their settings are conserved and enhanced in a manner appropriate to their significance.*
- *Secure the continued beneficial use of heritage assets while allowing them to meet changing needs and adapt to climate change.*
- *Ensure heritage is at the heart of place making and sustainable growth, responding positively to the distinctive character of our heritage assets and delivering high quality buildings and spaces which enhance their settings.*
- *Avoid harm to the significance of heritage assets, but where unavoidable clearly demonstrate the public benefit of the proposals and seek to mitigate the harm in all cases.*

Non-designated Heritage assets (NDHAs)

Non-designated heritage assets including local buildings and structures of merit, archaeology, and open spaces will be conserved. When assessing Proposals affecting NDHAs a balanced judgement will be made

regarding the scale of any harm or loss of the asset and the public benefit of the development' (Manchester City Council, Sept 2025, p. 199).

3.1.1. Places for Everyone

Places for Everyone (PfE) was adopted in March 2024 and forms part of the development plan for nine districts in Greater Manchester, including Manchester city centre. Places for Everyone Plan is a strategic plan, and it does not cover everything that a local plan would, therefore Local Plans set out more detailed policies (both strategic and non-strategic).

In relation to the historic environment, Policy JP-P2: Heritage: *'We will proactively manage and work with partners to positively conserve, sustain and enhance our historic environment and heritage assets and their settings. Opportunities will be pursued to aid the promotion, enjoyment, understanding and interpretation of heritage assets, as a means of maximising wider public benefits and reinforcing Greater Manchester's distinct character, identity and sense of place. Local Plans will set out the key elements which contribute to the district's identity, character and distinctiveness and which should be the priority for conserving and enhancing in the future and demonstrate a clear understanding of the historic environment and the heritage values of sites, buildings or areas and their relationship with their surroundings. This knowledge should be used to inform the positive management and integration of our heritage by:*

1. Setting out a clear vision that recognises and embeds the role of heritage in place-making;

2. Ensuring that the heritage significance of a site or area is considered in accordance with national planning policy in the planning and design process and opportunities for interpretation and local engagement are optimised;

3. Integrating the conservation and enhancement of heritage assets and their settings, with creative contextual architectural responses that contribute to their significance and sense of place;

4. Delivering positive benefits that sustain and enhance the historic environment, as well as contributing to the economic viability, accessibility and environmental quality of a place, and to social wellbeing; and

5. Exploring opportunities to reduce greenhouse gas emissions that restoration of historic buildings offer.

Particular consideration will be given to ensure that the significance of key elements of the historic environment which contribute to Greater Manchester's distinctive identity and sense of place are protected from harm. These include historic town centres, places of worship, historic transport routes including the canal network, industrial buildings and structures including textile mills, farmsteads and other sites, buildings, and areas of identified archaeological, architectural, artistic and/or historic value. Development proposals affecting designated and non-designated heritage assets and/or their settings will be considered having regard to national planning policy. Where heritage assets have been identified as being at risk, Local Plans should identify specific opportunities for them to contribute to regeneration and placemaking, and they should set out strategies for their repair and re-use. Development proposals which will help safeguard the significance of and secure a sustainable future for Greater Manchester's heritage at risk will be supported in principle, provided they are not contrary to national policy or other policies in the development plan. Proposals should be informed, as necessary, by the findings and recommendations of the appropriate heritage assessment(s) in the development plan evidence base and/or any updated heritage assessment submitted as part of the planning application process' (Greater Manchester combined authority, 2024, pp. 192-4).

Manchester City Council is advised on archaeological matters by the Greater Manchester Archaeological Advisory Service (GMAAS).

4. Historical and Archaeological Background

4.1. Introduction

The historical background provides context for the Site. A desk-based assessment was produced by Oxford Archaeology in 2016, which covered a larger area, including the full extent of the Site (Oxford Archaeology North, 2016).

4.2. Prehistoric (pre-10,000 BC to AD 43)

The current understanding of human activity in the Manchester region during the prehistoric period is poor, although it is reasonable to suggest that several areas in the city centre, such as Castlefield, the area that now contains Manchester Cathedral, Chetham's School and Ardwick may have been conducive for late prehistoric settlement on account of the natural topography and the abundance of natural water sources (i.e. rivers) (Gregory, 2007).

Limited prehistoric finds were discovered within Manchester city centre. During the 19th century a flint flake was recorded at Cathedral Yard. Other prehistoric finds in this area include a polished stone axe, discovered at a depth of 20ft from the base of a ditch that was excavated at the junction of Corporation Street and Todd Street in 1870. A Bronze Age dagger and axe fragment were also found during excavations at the northeast corner of Hanging Bridge in 1870.

No prehistoric finds have been discovered within the study area, despite the Site lying in close proximity to the River Irwell.

4.2.1. Archaeological potential

No evidence of prehistoric activity has been identified within the Site or study area, and therefore the potential for remains is considered to be **low**.

4.3. Roman (AD 43 – AD 410)

Archaeological evidence for Romano-British activity in Manchester is focused on the Roman fort of *Mamucium*, located in Castlefield, and established during the governorship of Agricola (AD 77-84). The fort was initially constructed of wood, but underwent several phases of development, rebuilt in stone around AD 200. The fort was located *c.* 570m south-east of the Site.

As this military complex developed, a grid of roads was laid out and a substantial extramural settlement, or *vicus*, developed. Based on archaeological excavations and the distribution of Roman finds, the limits of this civilian settlement appear to have extended south-eastwards along Chester Road, terminating somewhere in the vicinity of Great Jackson Street, northwards from the fort to approximately Quay Street, westwards along Liverpool Road for *c.* 100m from the north-west corner of the fort, and eastwards across Deansgate to the area now occupied by Viadux.

The Site lies within the Castlefield Conservation Area, which also covers the area of the former Roman fort at Manchester, with the vicus located *c.* 185m south-east of the Site. Activity in the vicus is contemporary with the first timber fort. The vicus was abandoned during the Flavian period and covered with timber shops and houses. A road and associated buildings were constructed during the Hadrianic period, including a timber hostelry. After 250 AD the vicus experienced a decline, mirroring the decline of the nearby fort (HER 415.2.0).

A group of Roman coins were discovered *c.* 35m north-east of the Site, close to the bridge over the Irwell, recorded as an antiquarian find (HER 415.4.21). This consisted of one coin of Hadrian, one of Faustina the elder, one of Faustina the younger, and a final coin of Marcus Aurelius. A further six Roman coins were discovered during excavations *c.* 185m south-west of the Site, along Quay Street (HER 415.4.5),

4.3.1. Archaeological potential

There is no known evidence of Roman activity within the Site, and the potential for remains is considered to be **low**, especially given the later intensive development of the Site.

4.4. Medieval (AD 410 – AD 1540)

There is very little archaeological evidence in the region as a whole that represents the period between the end of the Roman occupation and the Norman Conquest of 1066. Edwin took control of Manchester in AD 620, and it is believed that this may have marked the beginning of a settlement near the site of the present-day cathedral (Farrer & Brownbill, 1908). Later, in AD 919, Edward the Elder established a fortified stronghold—known as a burh—in Manchester, which at the time was part of Viking-controlled Northumbria.

After the Norman Conquest, William I granted most of the territory between the Ribble and Mersey rivers to Roger of Poitou, who retained the manor of Salford demesne (Tupling, 1962, p. 116), but divided his other newly acquired land into several fiefdoms (Kidd, 1996, p. 13). The substantial of these was the estate centred on Manchester, created by the grant of extensive lands in the hundreds of Salford, Leyland and West Derby to Albert Grelley (Tupling, 1962, p. 116).

By the 13th century, the Grelley family had established a manor house at the confluence of the rivers Irwell and Irk, where they governed both the manor and the extensive barony (Hartwell, Hyde, & Pevsner, 2004, p. 256). In 1222 Manchester was granted an annual fair, and in 1301 Thomas Grelley was granted the Great Charter of Manchester by Edward I, and thus it became a free borough (*ibid*).

A survey of the medieval layout of the city was undertaken in the 1980s by GMAU, which led to the designation of a zone defined as the Area of Medieval Manchester (Morris, 1983). The survey demonstrated that in addition to the manorial and ecclesiastical heart of the town, streets radiated out from the centre, with Deansgate being one of the main thoroughfares.

Archaeological remains associated with medieval activity nearby include the documentary remains of the Lady Pearle Spring or well, located *c.* 119m north-west of the Site. Mr JG Mandley referred to it as a spring with supposedly miraculous powers, where ‘cripples’ would be carried for healing (HER 1822.1.0). The distance of the Site from the medieval settlement core of Manchester, *c.* 930m north-east, suggests that the area likely remained undeveloped until the post-medieval to industrial period.

4.4.1. Archaeological potential

The Site was within the vicinity of some medieval activity, however, due to the extent of development in the 18th and 19th centuries, the potential for remains is considered to be **low**.

4.5. Post-medieval (AD 1540 – *c* AD 1750)

By 1539, John Leland was able to describe Manchester as the ‘finest and busiest town in the whole of Lancashire, with the best buildings and the greatest population’ (Chandler, 1993, p. 263), at a time when the textile industries in South Lancashire were beginning to flourish. Manchester emerged as a centre for the textile finishing processes, as woollen cloth was brought in from outlying areas for bleaching and dyeing. Most importantly, however, Manchester expanded its role as a market centre for textiles produced in the towns and hamlets of the surrounding district (Frangopulo, 1964, p. 26).

Manchester underwent a rapid expansion during the post-medieval period. The population of Manchester increased from approximately 1800 people in 1563 to just over 3000 people in the year 1642 (Willian, 1980, pp. 38-9). The Hearth Tax Returns of 1664 listed 820 households, which suggests a population of approximately 3690. The population of Manchester roughly doubled between 1563 and 1664, despite an outbreak of plague in 1645 (Phillips & Smith, 1994, p. 7). By the census of 1773, the town’s population had dramatically increased even further, with approximately 24,937 people living in the township of Manchester,

23,032 of which were living in the town itself. During the post-medieval period, Manchester changed from what had been a small market centre into the largest town in Lancashire (Nevell, 2003).

Post-medieval remains were discovered *c.* 225m north-west of the Site, consisting of post-medieval agricultural soil deposits close to the River Irwell, on the site of later industrial buildings and worker's housing (HER 15862.1.0). The Site previously formed part of Manchester's earliest purpose-built waterfront, known as the 'Old Quay' at the junction of Water Street and Quay Street, built by Edward Byrom for £1200 in 1735-6 (Nevell, 2004) (See section 5.7).

4.5.1. Archaeological potential

The potential for any remains from the post-medieval period is considered to be **medium** due to the later intensive development of the Site.

4.6. Industrial (c AD 1750 – post-1914)

By around 1750, pure cotton fabrics were being produced, and cotton had overtaken wool in importance. Textiles were generally manufactured in domestic-based workshops or weavers' cottages as part of the putting-out system, whereby merchants employed textile workers and supplied them with raw materials, later manufactured in purpose-built factories.

The second half of the 18th century was characterised by an accelerated pace of development, and the growth of Manchester was enhanced by the development of waterborne transport. The first key development was the founding of the Mersey & Irwell Navigation Company in 1721, which aimed to provide a navigable route from the Mersey estuary to Salford and Manchester by improving the course of the River Irwell and the River Mersey. The navigation opened in 1734, opening up trade from the growing port of Liverpool to Manchester and Salford (Geroge & Brummond, 2002, p. 22). A quay was established on the Manchester side of the river by Edward Byrom in 1736 to secure trade. A second quay was built on the Salford side of the river in 1755, connected to Chapel Street by Quay Street, located 150m to the north-west of the Site (HER 884.1.0). The Bridgewater Canal, the first true canal in the world, was completed between the Duke of Bridgewater's coal mines at Worsley and Castlefield by 1765. The success of the canal acted as the catalyst for the construction of numerous other canals across the country.

The Site lay within an area of intensive industrial activity, developed from its previous use as part of the Old Quay, and was primarily associated with trade along the navigable River Irwell towards the River Mersey and Liverpool. Therefore, it included several wharfs and large warehouses within and in its immediate vicinity. Most of the Navigation's trade was in bulk cargo, such as cotton and timber, amounting to 93,000 tons in 1816, growing to *c.* 133,000 tons in 1823 (Nevell, 2004). In 1822, the New Quay Company opened on ground at the southern end of Water Street, and after the establishment of this second wharf area, the original became known as the 'Old Quay Company' (*ibid*).

The Old Botany Wharf previously stood *c.* 90m north-east of the Site, occupied by Barnby Faulkner and Co., General Carriers in 1850 (HER 11238.1.0).

A former timber mill previously stood *c.* 25m north-east of the Site, consisting of an L-shaped building, later a warehouse and 'Plumcake Shed' (HER 11235.1.0). The Old Quay Mill also stood *c.* 27m north-east of the Site, a former woollen mill, belonging to Leeming & Co in 1850 (HER 11236.1.0).

The Water Street Hat Manufactory also stood on the opposite side of New Quay Street, potentially belonging to 'Stopford' in 1850, although no manufacturer is listed after this point (HER 11237.1.0). It was vacated or demolished by 1869, before becoming part of a riverside yard. The Irwell Silk Mill stood on the opposite side of the River Irwell, which was owned by William Harter from 1825 onwards, and was equipped with 184 power looms (HER 1772.1.0). It later became a corn mill, and archaeological investigations on the site identified no significant remains associated with either phase of the site.

The Site previously included part of the extent of several brick-built warehouses fronting onto the Irwell with small windows and loading openings onto the riverfront. These include the Albert Warehouse, which previously stood within the Site (See section 5.7); alongside the Victoria, New Botany, and Marshall's Side Warehouses, built after the improvement of the Irwell and Mersey in 1740, directly south-west of the Site (HER 8646.1.0). Victoria Warehouse was built between 1838-40, with the six-bay long Albert Warehouse added sometime in the 1850s after the filling-in of an earlier quay (Nevell, 2004).

4.6.1. Archaeological potential

The Site has **high** potential to contain remains for the industrial period.

4.7. Development of the Site

One of the first maps to depict the area of the Site is Casson and Berry's 1741 map of Manchester and Salford, which showed the 'Kay' adjacent to the River Irwell (Plate 2). By this time, Key Street and Water Street were laid out, with the Site comprising a group of fields to the south-west of the town, crossing slightly into the grounds of the 'Kay'.



Plate 2: Casson and Berry's 1741 map of Manchester and Salford, showing approximate Site location (map not orientated north)

The next map to depict the Site was Tinker's 1772 plan, which showed significant growth in comparison to the 1741 map (Plate 3). By this time, more buildings had been constructed around the Quay, potentially representing some of the warehouses detailed on the HER, with some partially within the boundaries of the Site. The fields surrounding the Site were either removed or not represented on this map, demonstrating the increased growth of the area during the industrial revolution.

According to line drawings dating between 1741 and 1746, the Quay complex comprised a three-storey, L-shaped warehouse, with hoists operated by wooden shafting and gearing, alongside a single-storey range of buildings at right angles to the south, and a purpose-built quay (*ibid*). Salford Old Quay was built directly opposite, to take advantage of this trade.

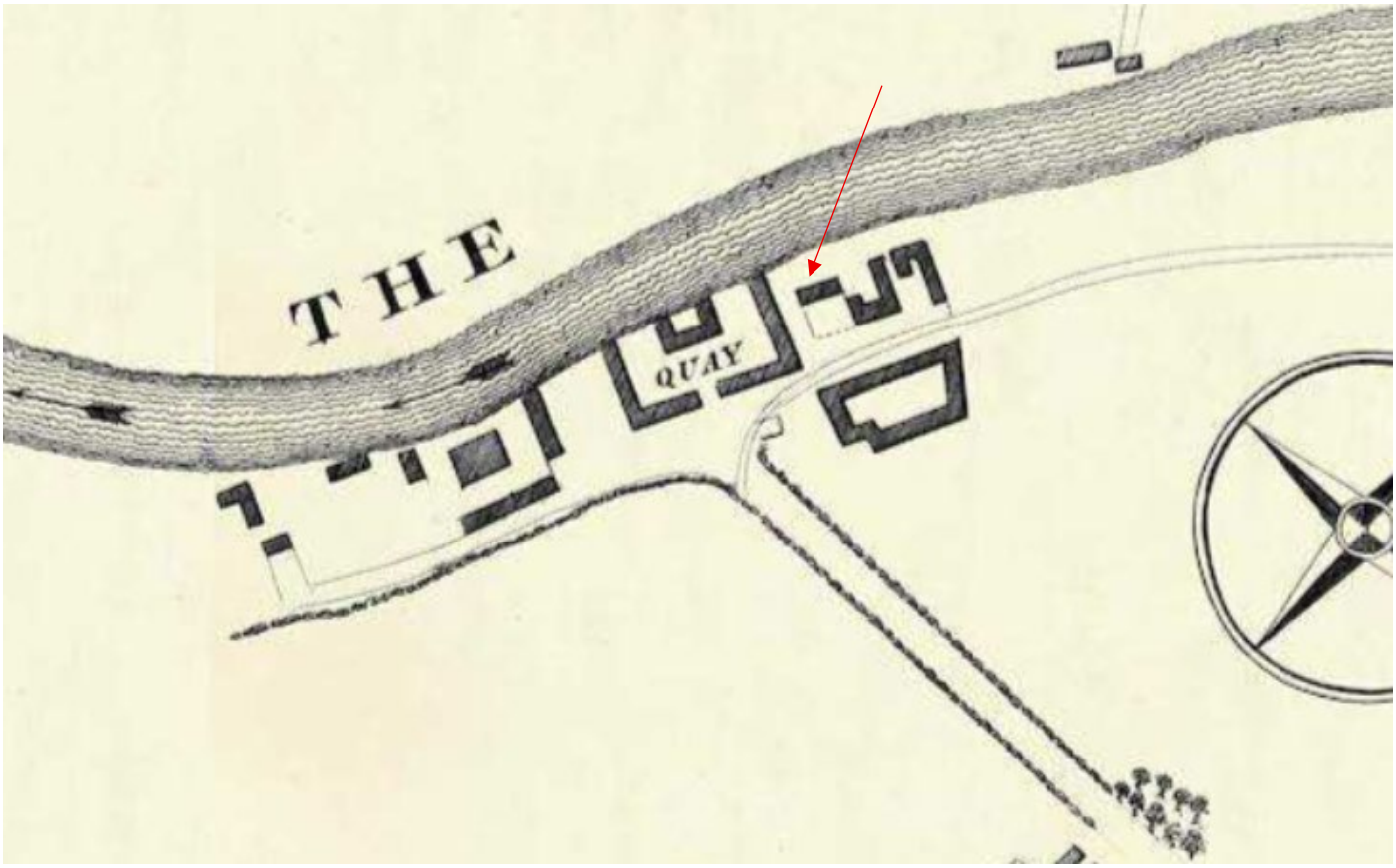


Plate 3: Tinker's 1772 plan of Manchester and Salford, showing approximate Site location

One of the earliest maps to depict Manchester's historic core was Green's 1794 map (Plate 4; Fig. 3). This showed that the Site had been significantly built up since 1741 and is also the first map to depict the Site in detail. The Site encompassed part of the Old Quay, including a large L-shaped building, alongside several smaller buildings and associated gardens, comprising 'Quay Court' on slightly higher ground.

Aside from this, many of the roads within the area were laid out and built up, including Back Quay Street and Pitt Street, which were lined by double-depth worker's housing. Little Edward Street stood *c.* 56m south-west of the Site (not depicted on this map extent), which consisted of two short rows of double-depth worker's housing, separated by a narrow passage (HER 16828.1.0). These houses did not have cellars and were likely similar to those around Back Quay Street and Pitt Street.

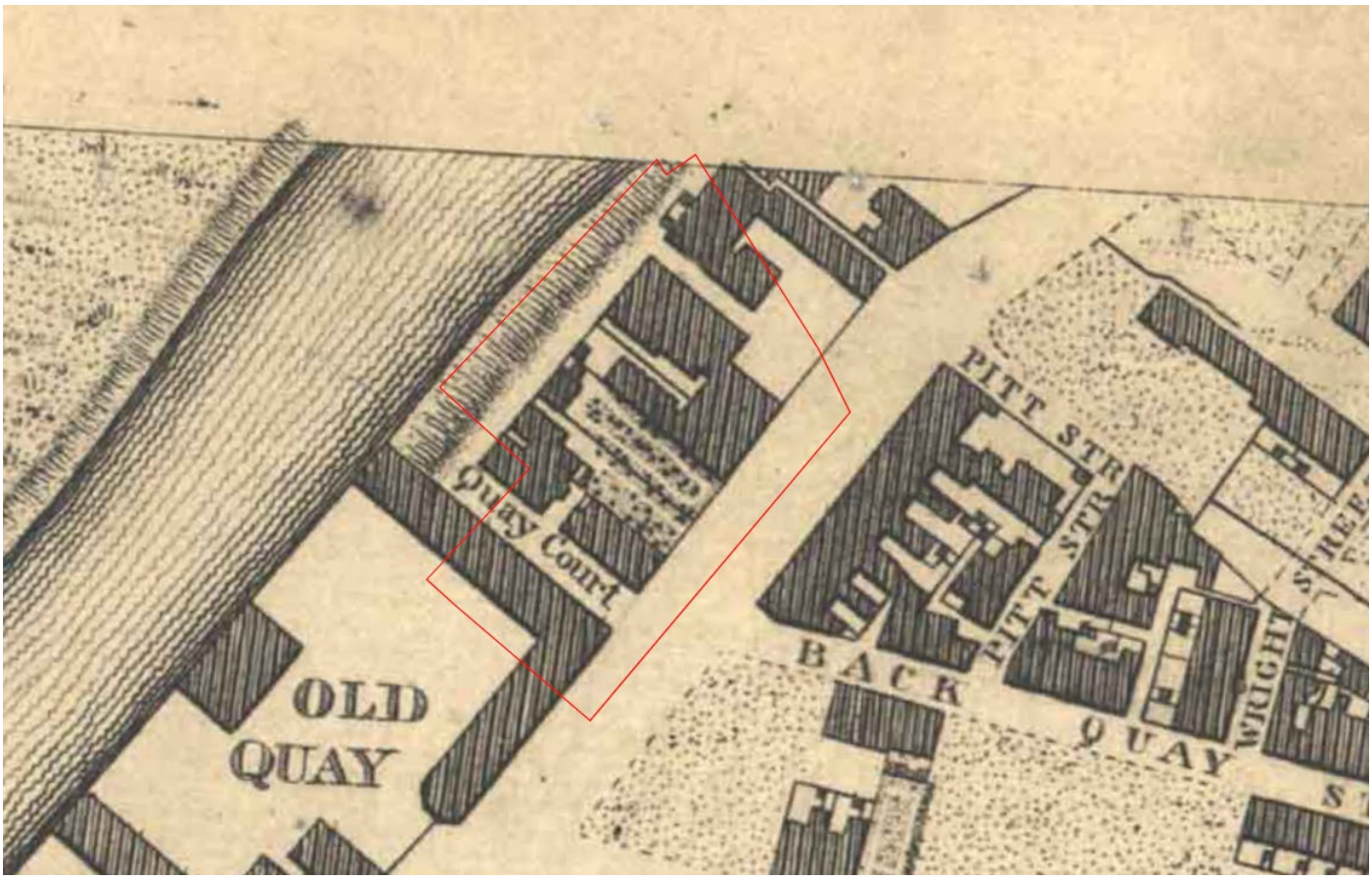


Plate 4: Green's 1794 plan of Manchester and Salford with Site boundary

The next map to depict the Site in detail was Bancks and Co.'s 1831 plan of Manchester and Salford, which covers an area of the Old Quay site, alongside areas of housing to the north-east (Plate 5; Fig. 4). Compared to Green's 1794 plan, these houses appeared to now have gardens fronting onto the Irwell, and the gardens depicted on the earlier mapping evidence may have been converted into yards. In 1841, one of the inhabitants of Quay Court was recorded as the Teers family, with the head of the household William working as a Boiler Maker, and two of his children in employment as a book maker and a 'market woman' (England, Wales & Scotland Census, 1841). Other inhabitants included the Calvert family, who were labourers, the Landsley family, the Daniels family, the Capper family (many of whom worked in silk mills), the Platt family, and the Davies family (*ibid*).

A 'Dye House' was also labelled, likely representing the small outline of a building attached to one of these larger houses, to the very north-east. William Davies worked as a cloth stainer in 1841, suggesting that the 'Dye House' attached to Quay Court on this map was in use by him (England, Wales & Scotland Census, 1841).

Several areas of worker's housing were also apparent in the direct vicinity of the Site, including back-to-backs along Pitt Street, Hardman Street, and Grindle Street. Inhabitants of Grindle Street in the 1841 census consisted of workers related to the cotton industry, including spinners, strippers, and packers; although some other traditional labourer professions were represented including engineers, blacksmiths, joiners, and porters (England, Wales & Scotland Census, 1841).



Plate 5: Bancks and Co.'s 1831 plan of Manchester and Salford with Site boundary

The next map to depict the Site is the 1851 Ordnance Survey town plan, which shows significant changes from the 1831 plan (Plate 6; Fig. 5). The Dye House Yard had been extended with the northern extent of the north-eastern buildings removed. A Timber Yard was also labelled to the south-east of the Dye House Yard. The dwellings/ buildings to the south-west were removed by this 1851. Albert Warehouse was also constructed by this date, labelled as a 'Warehouse' on this map, along Water Street. This Warehouse, along with the adjoining Victoria and Botany Warehouses, were each constructed *c.* 1838 and were five storeys in height and constructed of red brick (HER 8646.1.0). The Victoria Warehouse had three sets of tiered loading doors with gabled hoist hoods in the eaves, and two blocked basket arches with rusticated stone arch rings. The Albert Warehouse had one tier of loading doors with similar rusticated arched heads below its eaves, a stone cornice, and coped gabled ends. A stone-paved quay adjoined this warehouse to the rear (*ibid*).

Outside of the Site boundary, a Timber Yard had been constructed on the opposite side of Water Street, alongside the Three Sugar Loaves Public House on the corner of Quay Street and Water Street (HER 12388.1.0). The owner of the Three Sugar Loaves Tavern was recorded as Daniels Frederick in Slater's Directory of 1850 (Slater, 1850). A Weighing Machine was also depicted, on the corner of the L-shaped part of the Warehouse. A Portable Steam Engine Manufactory was also shown, along Back Quay Street.



Plate 6: 1851 Ordnance Survey town plan with Site boundary (courtesy of the National Library of Scotland)

The next available map of the Site is the 1891 Ordnance Survey town plan, which shows that New Quay Street was laid out by this date (Plate 7; Fig. 6). The south-western part of the warehouse was demolished, with this map the first to label the building as 'Albert Warehouse'. Part of Victoria Warehouse was also visible on this map extent, to the very south-west. The wharf at these warehouses was used for timber, as recorded in Slater's Directory of 1895 (Slater, 1895).

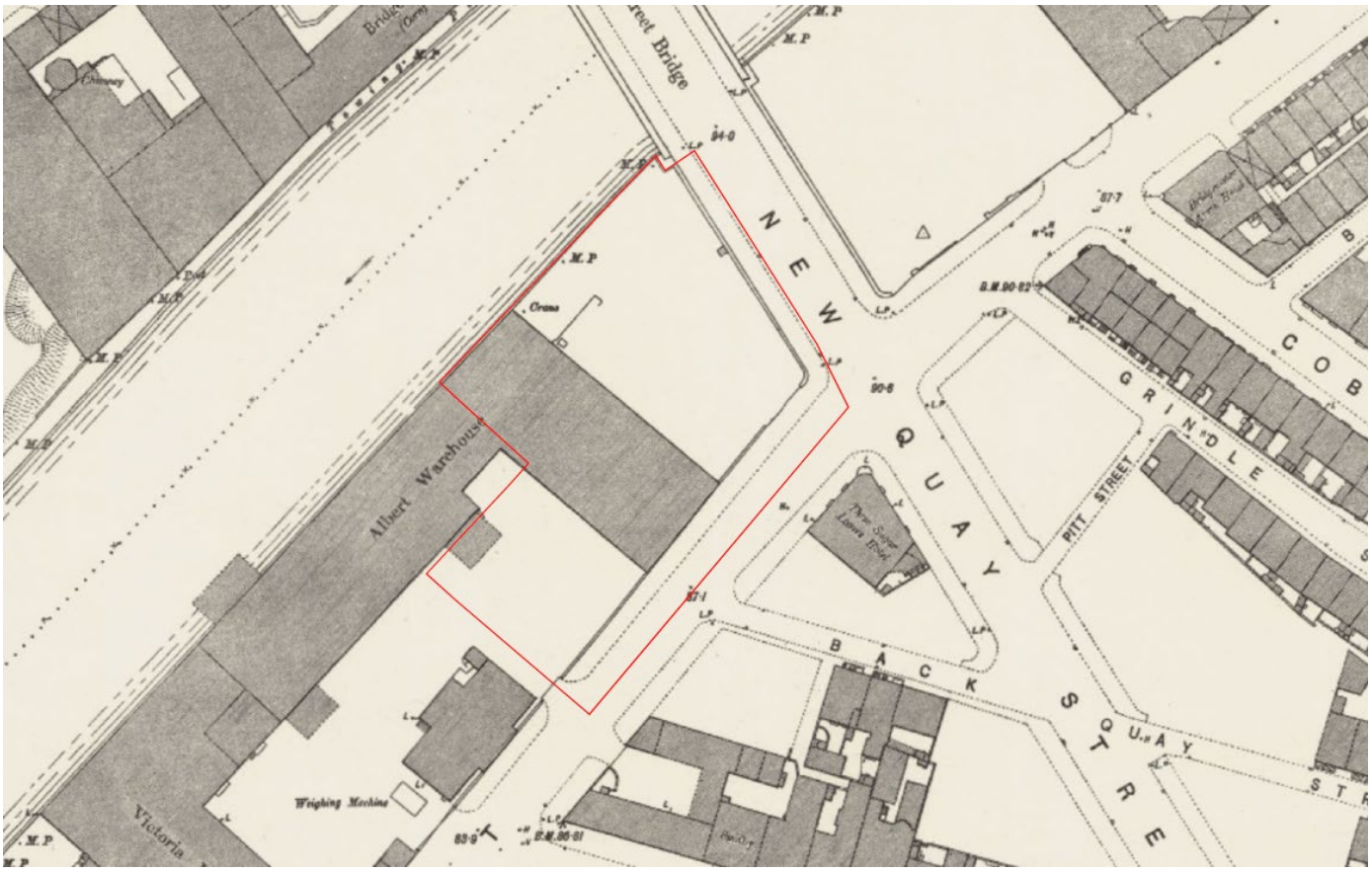


Plate 7: 1891 Ordnance Survey town plan with Site boundary (courtesy of the National Library of Scotland)

The next available map of the Site is the Goad Insurance Plan of 1889 (not included due to copyright restrictions). This depicts the Site in a similar state to the 1891 Ordnance Survey plan (Plate 7) and shows that the Site was then owned by the Manchester Ship Canal Company, alongside the adjoining Victoria Warehouse and Marshall Side Wharf. A cross-section of the Victoria and Albert Warehouses was also included on Goad's plan, showing the use of each level of the building, which was cotton on the upper two levels and 'General & Shipping' on the lower three. Both warehouses had wooden truss roofs, which were slated. The Site additionally included a yard belonging to the Ship Canal Company, to the north-east of the Warehouse.

In the immediate vicinity of the Site, several other industries were seen, including a Flour Mill close to the junction with the Manchester and Salford Junction Canal, which additionally had a yard of 'Scattered Timber' directly north, adjacent to the Irwell Bridge over the Manchester and Salford Junction Canal. There was also a small block of offices, adjacent to Water Street, associated with the Victoria and Albert Warehouses.

The next date of available historic mapping comes from 1922, which labels the building within the Site as 'Albert Shed', with a smaller 'Albert Warehouse' now adjoining to the south-west (Plate 8; Fig. 7). Part of the Albert Warehouse was demolished to accommodate the new building. 'Albert Shed' had a larger footprint than the former Warehouse on the street, having taken over the former 'Ship Canal Co. Yard' visible on the Goad map. Albert Shed was described as a "roughly rectangular, single-storey transhipment shed, 62m x 42m, at junction of Water Street and Irwell Bridge Street. Three bays, with king-post roof trusses supported by steel columns" in 2001 (HER 12386.1.0). It was also described with a wooden pent over the River Irwell, and an overhead crane.

A fire appears to have been the culprit for the demolition of part of the original Albert Warehouse, as the easternmost wing of the building went up in 1913, whilst not impacting the neighbouring Victoria Warehouse (*Manchester Courier*, 5th September 1913). Albert Shed stood in its place from 1916 and currently remains

upstanding (HER 12386.1.0).



Plate 8: 1922 Ordnance Survey plan with Site boundary (courtesy of the National Library of Scotland)

No changes occurred within the Site between 1922 and 1973 (Figs. 7-11), although there were some small changes to the immediate surroundings of the Site. This primarily consisted of the warehouse to the north-east being renamed as the 'Plumcake Shed', before being demolished in the later 20th century, and the removal of the remaining workers' housing within the immediate vicinity. These former houses gradually became industry, such as an Automobile Engineering Works along Back Quay Street.

Albert Shed was converted into a car park in 1988, for the use of Granada staff during the week and for the public during weekend tours, due to the proximity of the former Granada Studios building to the Site (LPA planning ref: 030989). Prior to this, the Shed occasionally formed part of sets for shows produced at Granada Studios, once forming part of the market stall set for the drama serial 'Albion Market' (*Manchester Evening News*, 7th August 1985)

The Historic Landscape Characterisation (HLC) records the Site as a "late 20th century medium scale building, function unclear. Possibly commercial. Site of 19th century warehouses" (HGM11914), partially crossing into a "late 20th century conversion of early to mid-19th century Victoria Warehouse and Albert Warehouse. Site of historically important quay on the River Irwell. Early 19th century dock extent" (HGM11911).

4.8. Previous archaeological works

In total, 44 events have been recorded within 250m of the Site, comprising 19 desk-based assessments, two photographic records, three heritage statements, one heritage impact assessment and one environmental assessment. Intrusive events carried out within 250m of the Site comprised four watching briefs, seven evaluations, and seven excavations.

4.8.1. Previous archaeological works within the Site

A desk-based assessment (DBA) was produced by Oxford Archaeology North in 2016, which covered the Site, alongside a now-developed area directly south (HER EGM4201) (LPA planning ref: 114385/FO/2016). The assessment concluded that the site had the potential for buried archaeological remains, including workers' houses around Quay Court and the former Three Sugar Loaves Hotel, the Public House itself, alongside the extant buildings in the site. Any remains associated with any of these were likely to not be of more than local significance, and the assessment concluded that the development would have the largest impact on the standing remains, rather than any buried archaeology, which was likely removed during the construction of these later warehouses. The assessment recommended a watching brief during all ground slab removal works associated with the demolition of Albert Shed and the Globe & Simpson Building (Oxford Archaeology North, 2016).

4.8.2. Previous archaeological works in the study area

A DBA and site inspection was carried out at a site on the opposite side of New Quay Street in 2000, in advance of proposed development. It was concluded that the site had the potential for remains of regional significance dating from the mid-18th to mid-19th centuries, which would require recording if impacted by any redevelopment (EGM3116).

An intrusive investigation was carried out at The Factory, St John's, in response to the 2016 DBA produced by Oxford Archaeology North. Three evaluation trenches were excavated, two of which containing no remains of significance. Within trench 2, a handmade brick wall was uncovered, with the edge of a line of stone blocks above it visible in the trench edge, likely part of the original canal wall. As this was outside of the development boundary, no further investigation was determined to be required, however it was noted that the survival of this early wall indicates the potential for the good level of survival of any remains within the north-east car park area (EGM4834).

The closest intrusive investigation to the Site was carried out on Quay Street by Salford Archaeology in 2019, opposite the boundary. This consisted of an open-area excavation, targeted on areas of late 18th and early 19th century workers' housing. The earliest remains at the site included relict soils predating the industrial period, with the discovery of some archaeological features cut into the natural ground, including post-holes and linear features. Concrete foundations associated with the former Granada Television buildings truncated remains in Area 1, however in Area 2 structural remains of six back-to-back houses in good condition were observed (EGM5629).

5. Site Walkover

A Site walkover was carried out on 27th August 2026. The Site currently comprises the Albert Shed warehouse and car park, along with an open yard area to the south-west of the Shed. The Site is located on the banks of the River Irwell, and access is granted from Water Street to the south.

Although Albert Shed has been greatly altered since its original construction, some original early 20th-century features survive, particularly on the south elevation fronting Water Street (Plate 9; Plate 10). Here, the external faces of the apertures have polychromatic brickwork, formed by engineering brick segmental arched heads. This is typical of Victorian neo-Gothic design, championed by architects such as John Ruskin from the late 1840s, and continued to be used until the 1920s and '30s. In addition, an earlier cart doorway is visible, flanked by stone quoins on either side. Each of the windows are also likely early 20th-century.

The New Quay street elevation is currently covered by advertising for St Johns, although the Site is bordered by a red brick wall (Plate 11).



Plate 9: View showing Albert Shed, facing north-east



Plate 10: View showing Albert Shed, facing north, showing polychromatic brickwork and stone quoins around infilled cart doorway



Plate 11: View showing the north-eastern and south-eastern elevations of Albert Shed with Irwell Street Bridge to the right, facing north-west

Albert Shed was previously converted into a car park, and some evidence of this remains in the concrete slab separating the different levels of the building, with ramps providing access to the upper level (Plate 12; Plate 13; Plate 14; Plate 15; Plate 16). The southern external ramp provides access to the upper level from Water Street, whilst the internal northern ramp is partially damaged.

Not included in the Site boundary, but attached to the shed, is a wooden jetty overhanging the River Irwell at

the north elevation of Albert Shed (Plate 18).



Plate 12: View showing the concrete slab separating the levels of Albert Shed, facing east from the associated yard



Plate 13: View showing the former ramp into the car park at Albert Shed, facing north-east

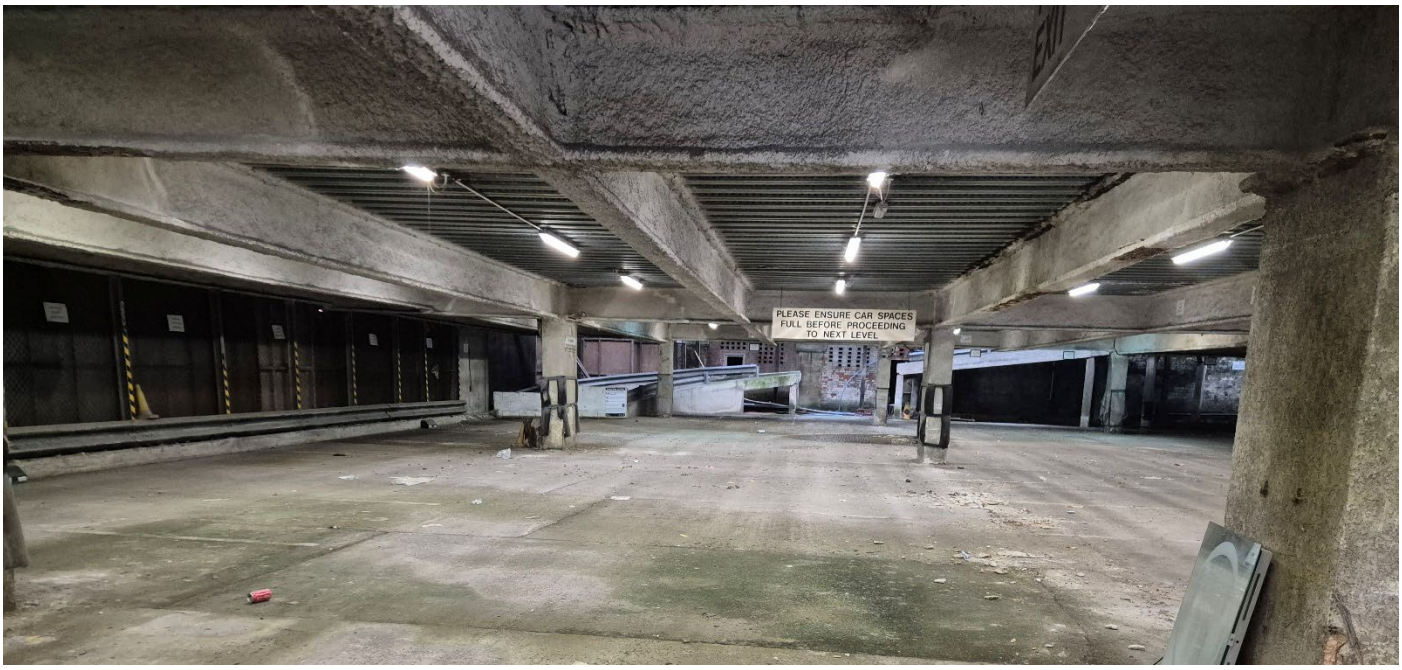


Plate 14: View of lowest level to former car park, facing west towards part of concrete ramp



Plate 15: View of partially demolished concrete ramp to former car park and access underneath New Quay Street, facing north-east

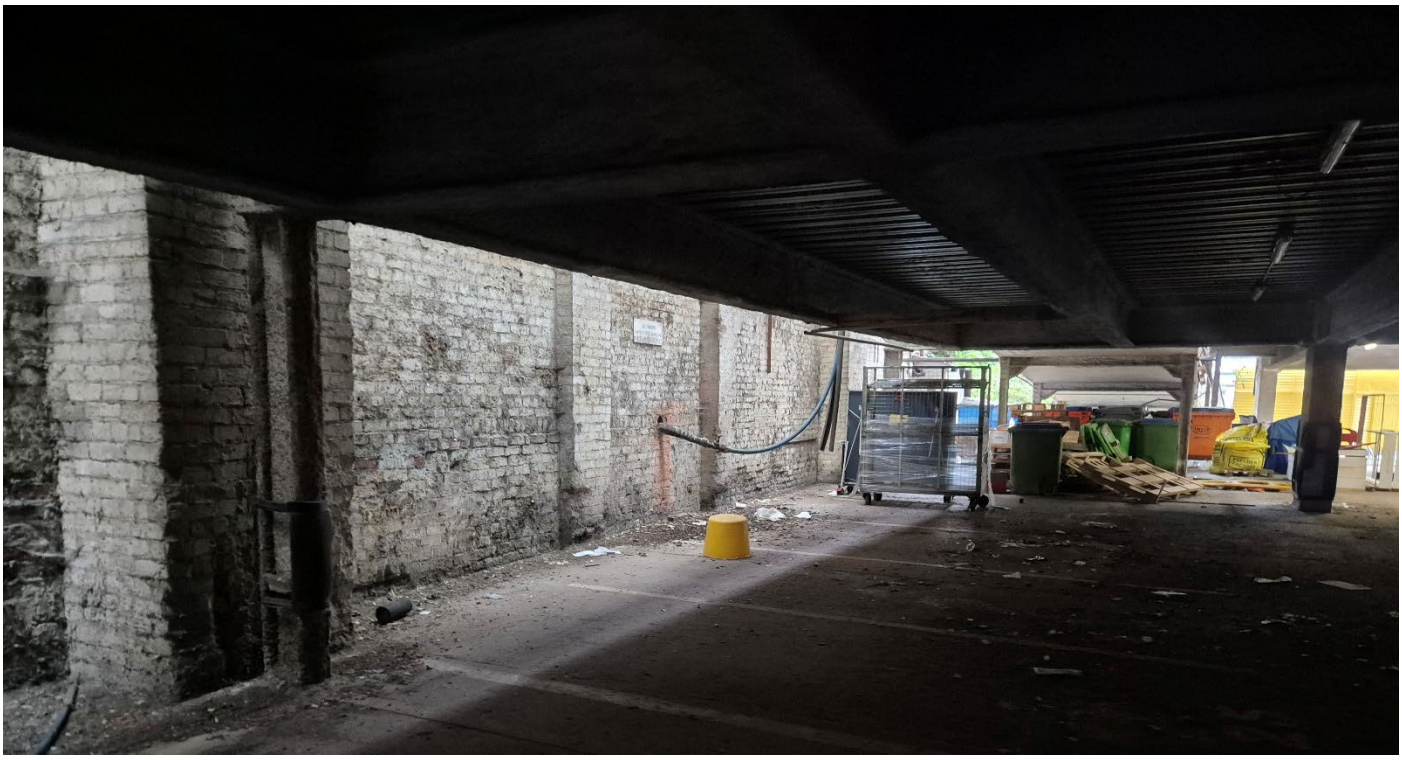


Plate 16: View of lower level to former car park, facing west



Plate 17: View of current cement yard/car park, facing south-west from Albert Shed



Plate 18: View showing the wooden jetty at the rear of Albert Shed, facing west from Irwell Bridge



Plate 19: View of the rear elevation of Albert Shed over the River Irwell, facing south-west from Irwell Bridge

Internally, the roof is an early 20th-century asbestos cement corrugated roof, with modified double Howe timber trusses, the same to each bay, also 20th century (Plate 20; Plate 22; Plate 21; Plate 23). The stanchions

within the Shed are the same throughout, and the ties that support the king post to the tie beam are also the same to each truss and bay (Plate 24).

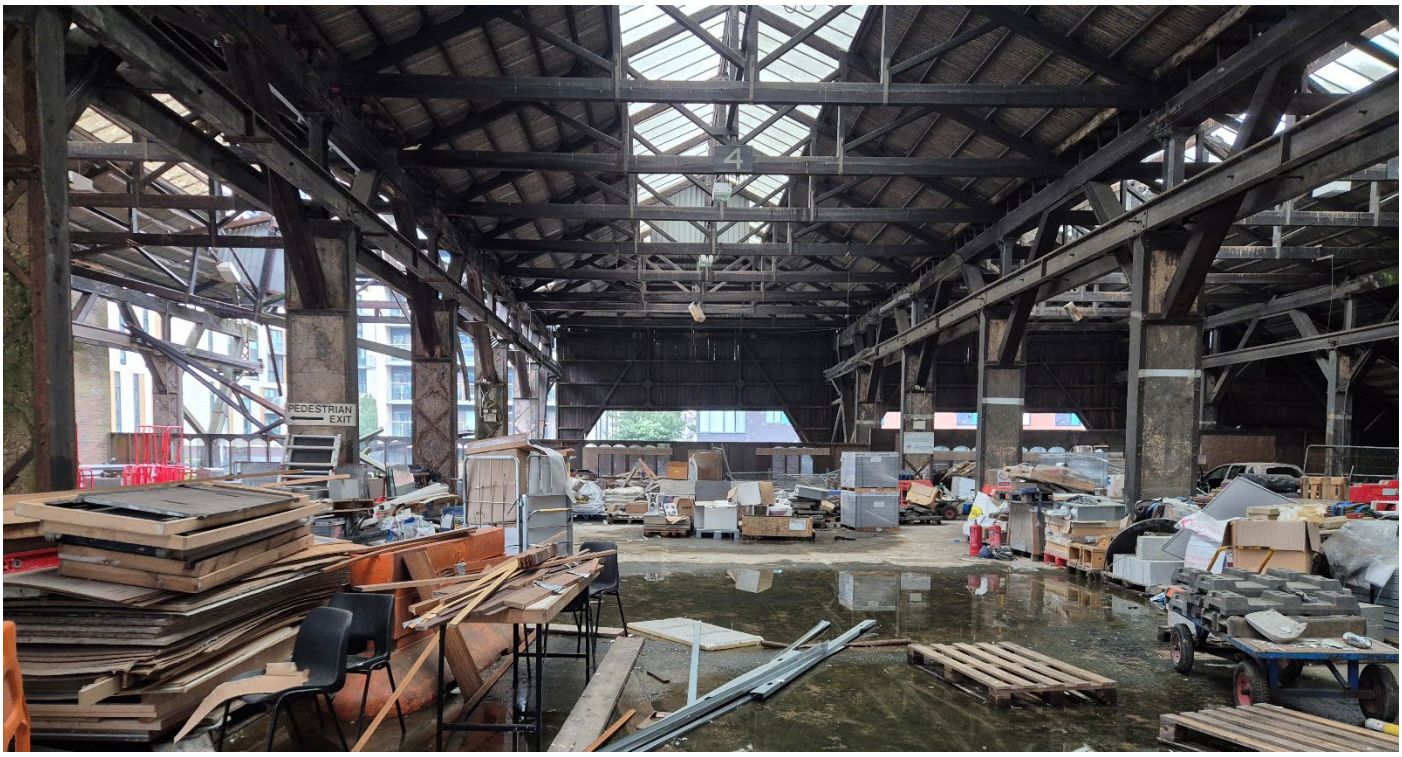


Plate 20: View showing the inside of the upper level of Albert's Shed, facing north



Plate 21: View showing the interior of Albert Shed, facing north-west



Plate 22: View showing the interior to the primary south-eastern elevation of Albert's Shed, on the upper level, facing south



Plate 23: View showing the interior trusses and beams of the upper level of Albert Shed, facing north-east



Plate 24: View showing the interior of the upper level of Albert Shed, facing east



Plate 25: View of collapsed timber trusses and roof on the upper level, facing north towards the River Irwell

6. Gazetteer

The following gazetteer sites (GS) summarise the sites of potential archaeological interest and elements of the historic landscape within the Site and its immediate vicinity. The identification of these heritage assets is drawn primarily from the historic map regression analysis, Historic England, and the HER data, and includes both designated and non-designated heritage assets. The locations of the gazetteer sites are shown on Figures 12 and 13 within Appendix A.

Gazetteer Site (GS)	01
Site Name	Quay Court
Designation	-
HER number	-
Period	18th century
NGR	Various; centred on 383115, 398175
Description	A group of houses visible on Green's map of 1794, to the north-west of warehouses around the 'Old Quay'. A similar layout with some additions is also visible on Bancks and Co.'s map of 1831, with the buildings in the south-western area demolished to make way for the Albert Warehouse by the mid-nineteenth century. These buildings were double-depth dwellings, with some laid-out yards or gardens in their back yards. They could have also had some small-scale industrial purposes alongside being residential. The OS map of 1851 shows pavement lights next to the buildings, suggesting that they later incorporated cellars. Quay Court was demolished by the end of the 19th century.
Assessment	Remains of these dwellings may exist under the current Albert Shed building and may be affected by the proposed development scheme. However, any remains may have been affected by later development at the Site.

Gazetteer Site (GS)	02
Site Name	Gardens
Designation	-
HER number	-
Period	18th-19th century
NGR	Various; centred on 383106, 398175
Description	Two phases of gardens around Quay Court, the first comprising yards or gardens amongst the buildings, and then when the dwellings at Quay Court were elongated into double-depth houses, became gardens fronting the river to the backs of these properties. They were likely removed as their associated dwellings were, as warehouses were built on the site.
Assessment	Remains associated with these gardens may be affected by the proposed development scheme. However, any remains may have been affected by later development at the Site.

Gazetteer Site (GS)	03
Site Name	Old Quay
Designation	-
HER number	8646.1.0
Period	18th century
NGR	383097, 398149
Description	Green's 1794 map shows the Site encompassing part of the north-westerly U-shaped buildings in the Old Quay, the former main Manchester wharf after the improvement of the River Irwell in 1740. This became part of a later warehouse by the mid-19th century, before being demolished and subsumed by the Albert Shed in the early 20th century.

Assessment	Remains associated with the 18th-century quay may survive within the Site and may be affected by the proposed development. However, any remains may have been affected by later development at the Site.

Gazetteer Site (GS)	**04**
Site Name	Dye House
Designation	-
HER number	-
Period	19th century
NGR	383120, 398193
Description	A Dye House shown on Bancks and Co.'s 1831 map, attached to Quay Court. It was later part of a 'Dye House Yard', as annotated on the 1851 OS map, but was removed as the later warehouses and sheds were constructed.
Assessment	Remains associated with the Dye House may survive within the Site and may be affected by the proposed development. However, any remains may have been affected by later development at the Site.

Gazetteer Site (GS)	**05**
Site Name	Albert Warehouse
Designation	-
HER number	8646.1.0
Period	19th century
NGR	383107, 398168
Description	Albert Warehouse was opened in 1839 and stood on a site alongside an adjoining warehouse; Victoria Warehouse, and the Quay. These were brick-built, with small windows, loading openings to the river front and direct loading on and off boats alongside. Albert Warehouse was altered in the later 19th century before being partially demolished to accommodate Albert Shed in the early 20th century.
Assessment	Remains associated with the north-eastern part of this structure may survive within the Site and may be affected by the proposed development. However, any remains may have been affected by later development at the Site.

Gazetteer Site (GS)	**06**
Site Name	Albert Shed
Designation	-
HER number	12386.1.0
Period	20th century
NGR	383115, 398174
Description	Albert Shed is a roughly rectangular, single-storey transhipment shed, measuring 62m x 42m at the junction of Water Street and Irwell Bridge Street. It has three bays with king-post roof trusses, supported by steel columns. There is an additional wooden jetty over the River Irwell. It was built on top of the former Albert Warehouse and first shown on the 1922 OS map. It was converted into a car park at some point in the mid-20th century.
Assessment	This building currently survives at the Site but will be demolished by the proposed development.

7. Significance

7.1. Policy context for heritage assets

Under both national and local planning policy, both designated and non-designated heritage assets are to be considered within the planning process (as previously stated in Chapter 3). The NPPF emphasises assessing the development proposals in line with an up-to-date local plan. Therefore, Policy EN3 of Manchester City Council's Local Plan were consulted as the key Development Plan Document in the Local Development Framework (LDF).

7.2. Designated heritage assets

The Site is situated within 250m of ten designated heritage assets, however, the proposed development will not have a physical impact on these designated heritage assets, and so it is not considered further in this report (see Chapter 2.2).

7.3. Significance of the archaeological resource

The Secretary of State's criteria for the scheduling of ancient monuments, outlined in Annex 1 of 'Scheduled Monuments: identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979' (DCMS, 2013) provides a methodology for assessing archaeological significance. This criterion has been used to assess archaeological significance, below.

7.3.1. Historical and archaeological interest

The Site is located within the Castlefield Conservation Area, named as such for the former Roman camp at Castlefield, the vicus of which was *c.* 185m south-west of the Site. However, no evidence for occupation at the Site exists until the mid-18th century, when the Site became part of the Old Quay complex along the banks of the River Irwell. Historic maps indicate that the Site mostly contained gardens and double-depth dwellings associated with Quay Court up until the later industrial era.

By the mid-19th century, Warehouses began to be constructed on the Site, consisting of the Victoria and Albert Warehouses, which were later demolished and the latter partially incorporated into Albert Shed, which still stands at the Site today.

The Site is considered to be of historical and archaeological interest. The historic and archaeological interest of the Site lies in its development as part of an early quay on the outskirts of rapidly developing Manchester and are associated with the transformation of the transport network during this period. Any remains pre-dating the 19th century in particular would be considered of archaeological interest.

7.3.2. Baseline Significance conditions

Period

No prehistoric, Roman, medieval or post-medieval activity is known to have taken place within the Site, and the potential for such remains is considered to be low due to the intensive development of the Site since the late 18th century.

The most likely remains to be encountered within the Site would date to the industrial period, which could include Quay Court (GS01), the wall of the Old Quay complex (GS03), the Dye House (GS04) or Albert Warehouse (GS05). The early 20th-century Albert Shed is also currently upstanding within the Site (GS06). The industrial period is significant to Manchester's history. Therefore, sites reflecting Manchester's industrial heritage may be considered significant due to period.

Rarity

Any archaeological remains pre-dating the industrial period may be considered significant due to rarity, particularly any remains associated with the Old Quay (GS03). The remains of Albert Shed (GS06) are not considered rare as there are better surviving examples in the area.

Documentation

The historical development of the Site can be traced reasonably well from cartographic and other primary sources. Further documentary research would undoubtedly furnish additional evidence, although this is unlikely to alter the outline and conclusions presented in this assessment.

Group value

Buried remains within the Site may hold group value in that they are contemporary features.

Survival / condition

The survival, extent and condition of any below-ground archaeological remains within the Site is presently unknown. Quay Court (GS01) appears to have contained cellars by the mid-19th century, which increases the chance of survival.

Albert Shed (GS06) still stands within the Site and incorporates part of the former Albert Warehouse (GS05). Archaeological remains associated with Albert Shed still stand but are in poor condition and are not currently in use. They have also been greatly altered by the Shed's use as a car park in the later 20th century. The later construction of Albert Warehouse and later Albert Shed across most of the Site may have damaged any earlier remains. Although, the extent of this is currently unknown.

Fragility / vulnerability

Any buried archaeological remains, should they be present and survive in situ, are vulnerable to damage or destruction during any earth-moving works associated with the development scheme.

Diversity

The heritage assets within the Site may be associated with the development of Manchester during the industrial period but are unlikely to be considered significant due to diversity.

Potential

There are no prehistoric or Roman sites within the Site or its environs, and the potential for remains from these periods is considered to be low. There are some medieval and post-medieval finds within the study area, however the Site itself was not developed upon until the later post-medieval to industrial periods, where the majority of archaeological potential for the Site is found.

Remains relating to Quay Court (GS01), the Old Quay (GS03), Dye House (GS04), Albert Warehouse (GS05), and Albert Shed (GS06) are the most likely to survive within the Site, and may have some potential to address the research agendas outlined in the current *Archaeological Research Framework for North West England* (https://researchframeworks.org/nwrf/sample-page/post-medieval/; https://researchframeworks.org/nwrf/industrial/; Table 3):

Industrial period	
Agenda No	**Agenda Description**
PM42	How can archaeological investigations inform our understanding of the development of transport and infrastructure in the early post medieval period?
PM43	What roles have different transport systems played in the development of industry, commerce, agriculture and settlement?
Ind53	What can archaeology tell us about the production and use of consumer products

	and their typologies from the late 18th to early 20th centuries?
Ind68	What can archaeological studies tell us about commodity storage and exchange buildings?
Ind98	How well understood and recorded are the North-Wests canals, waterways and basins?

Table 3: Post-medieval and industrial period research agendas

7.4. Summary of significance

A summary of the potential and significance of the archaeological remains within the Site is outlined in the table below (Table 4). These conclusions have been informed by the above criteria, professional judgment, the ICOMOS guide to assessing the value of heritage assets, as well as contributions that could be made towards local and regional research agendas.

Identified Asset	Period	Potential	Archaeological significance
Quay Court (GS01)	18th century	Medium	Low
Gardens (GS02)	18th century	Low	Low
Old Quay (GS03)	18th century	Low	Medium
Dye House (GS04)	19th century	Low	Low
Albert Warehouse (GS05)	19th century	Medium	Low
Albert Shed (GS06)	20th century	High	Low

Table 4: Summary of potential archaeological sites and their significance

This assessment concludes that the Site is of moderate archaeological interest and has the potential to contain buried remains of medium and low significance that date to the 18th and 19th centuries.

8. Impact Assessment

8.1. Site conditions

The Site currently comprises the Albert Shed building and an associated car park/yard area adjoining it to the west of hard-standing concrete. The Site is located on the riverbank of the River Irwell.

8.2. Proposed development

The proposals comprise the demolition of the existing buildings on Site and the construction of a residential tower (Use Class C3) of ground +30 storeys, providing 381 apartments. The development will include residential apartments and residential amenity facilities comprising a gym, swimming pool, sauna, amenity space and management suite, together with cycle parking, refuse and servicing facilities, plant, landscaping, public realm improvements, access arrangements and all other associated works.

8.3. Review of impact of the archaeological resource

The development proposals will involve ground-breaking works across the Site, which has the potential to impact on buried archaeological remains.

The Site has the potential to contain archaeological remains of medium and low significance. Without a programme of mitigation, the proposed development could damage or destroy these remains.

9. Conclusions

9.1. Planning policy

The NPPF makes clear that where the loss of the whole or a material part of a non-designated heritage asset's significance is justified by a development, the developer should be required to record that asset and advance understanding of its significance, and to make this evidence publicly accessible.

9.2. Recommendation for further work

Following consultation with GMAAS, an archaeological evaluation will be required at the Site to establish the presence or absence of buried archaeological remains, and if present, their significance. The exact scope of any such further investigation will be determined by GMAAS and set out within a Project Design. Should significant archaeological remains be encountered during the archaeological evaluation, further excavation may be required to offset the harm of the development to the buried archaeological resource.

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Green's Plan of Manchester and Salford, 1794

Bancks & Co's Plan of Manchester and Salford, 1831

Ordnance Survey map, 1851

Ordnance Survey map, 1891

Ordnance Survey map, 1922

Ordnance Survey map, 1934

Ordnance Survey map, 1949

Ordnance Survey map, 1962

Ordnance Survey map, 1973

Directories

Slater's Directory of Manchester and Salford, 1850

Slater's Directory of Manchester and Salford, 1895

Appendix A

Figures

Figure 1: Site location map

Figure 2: Site boundary superimposed on modern mapping

Figure 3: Site boundary superimposed on Green's map of 1794

Figure 4: Site boundary superimposed on Bancks & Co's Plan of 1831

Figure 5: Site boundary superimposed on the Ordnance Town Plan of 1851

Figure 6: Site boundary superimposed on the Ordnance Survey Town Plan of 1891

Figure 7: Site boundary superimposed on the Ordnance Survey 25-inch to 1-mile plan of 1922

Figure 8: Site boundary superimposed on the Ordnance Survey 25-inch to 1-mile plan of 1934

Figure 9: Site boundary superimposed on the Ordnance Survey 1:1250 map of 1949

Figure 10: Site boundary superimposed on the Ordnance Survey 1:1250 map of 1962

Figure 11: Site boundary superimposed on the Ordnance Survey 1:1250 map of 1973

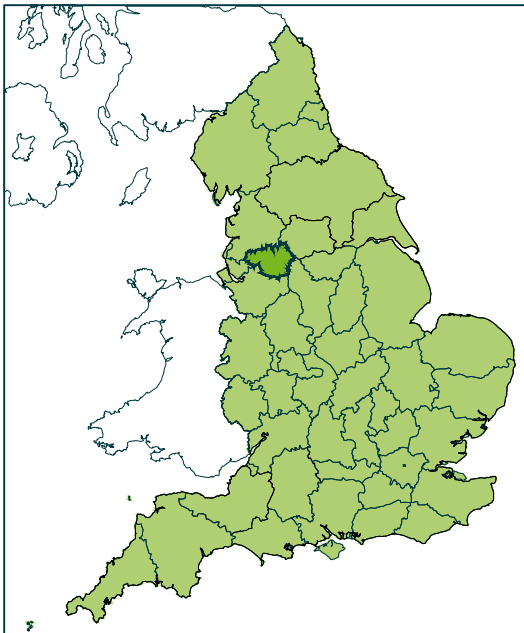
Figure 12: Gazetteer sites 01-04 superimposed on modern mapping

Figure 13: Gazetteer sites 05-06 superimposed on modern mapping

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Albert's Shed, Manchester

Project Code: 61219

Figure 1: Site location

CIVIC

Carver's Warehouse
77 Dale Street, Manchester, M1 2HG



Map data © OpenStreetMap contributors Microsoft, Facebook, Google, Esri Community Map contributors, Map layer by Esri Powered by Esri



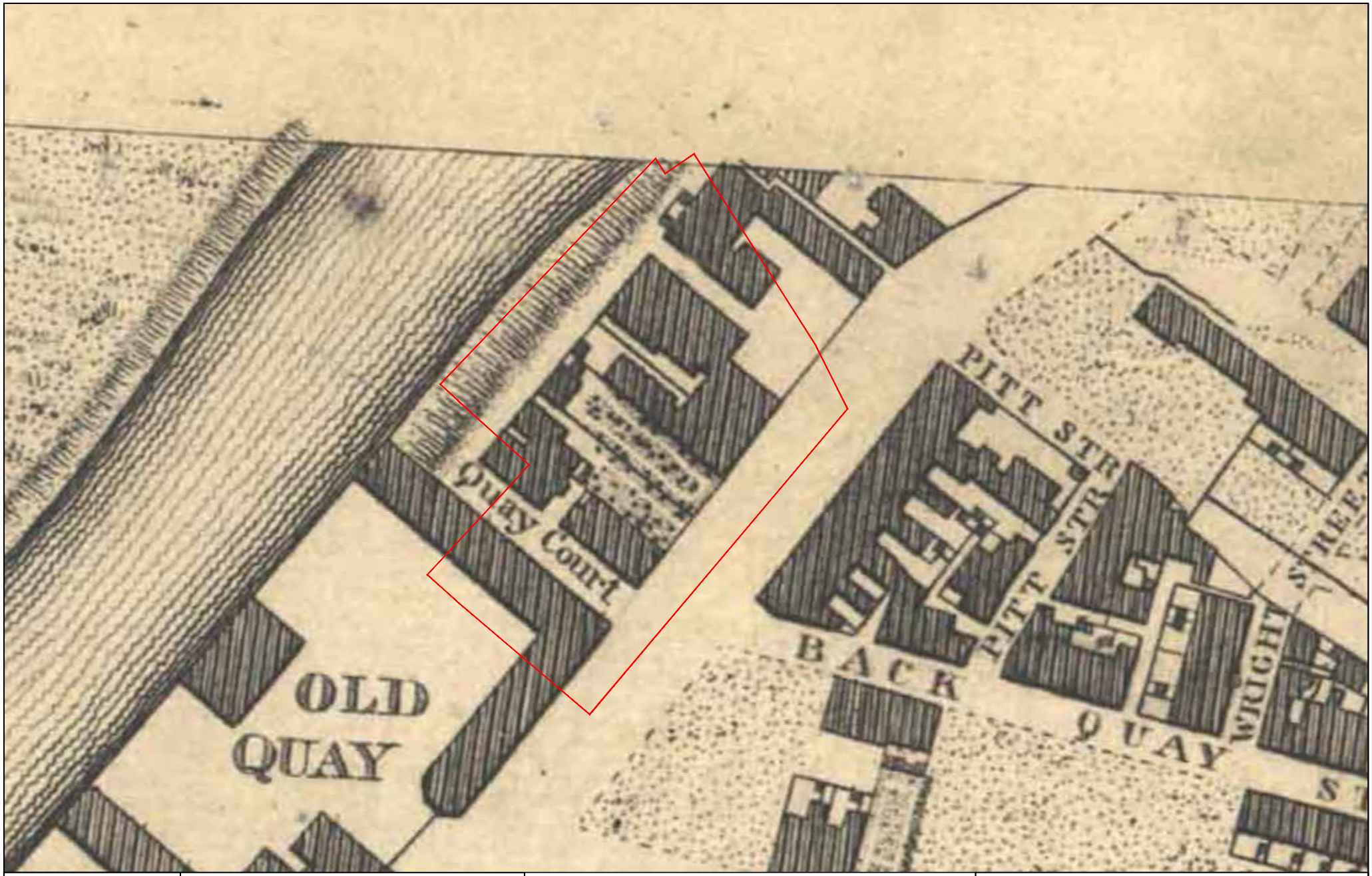
CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

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Scale at A4 1:750

Albert's Shed, Manchester
Project Code: 61219
Figure 2: Site boundary superimposed on modern mapping

N

Key: Site boundary



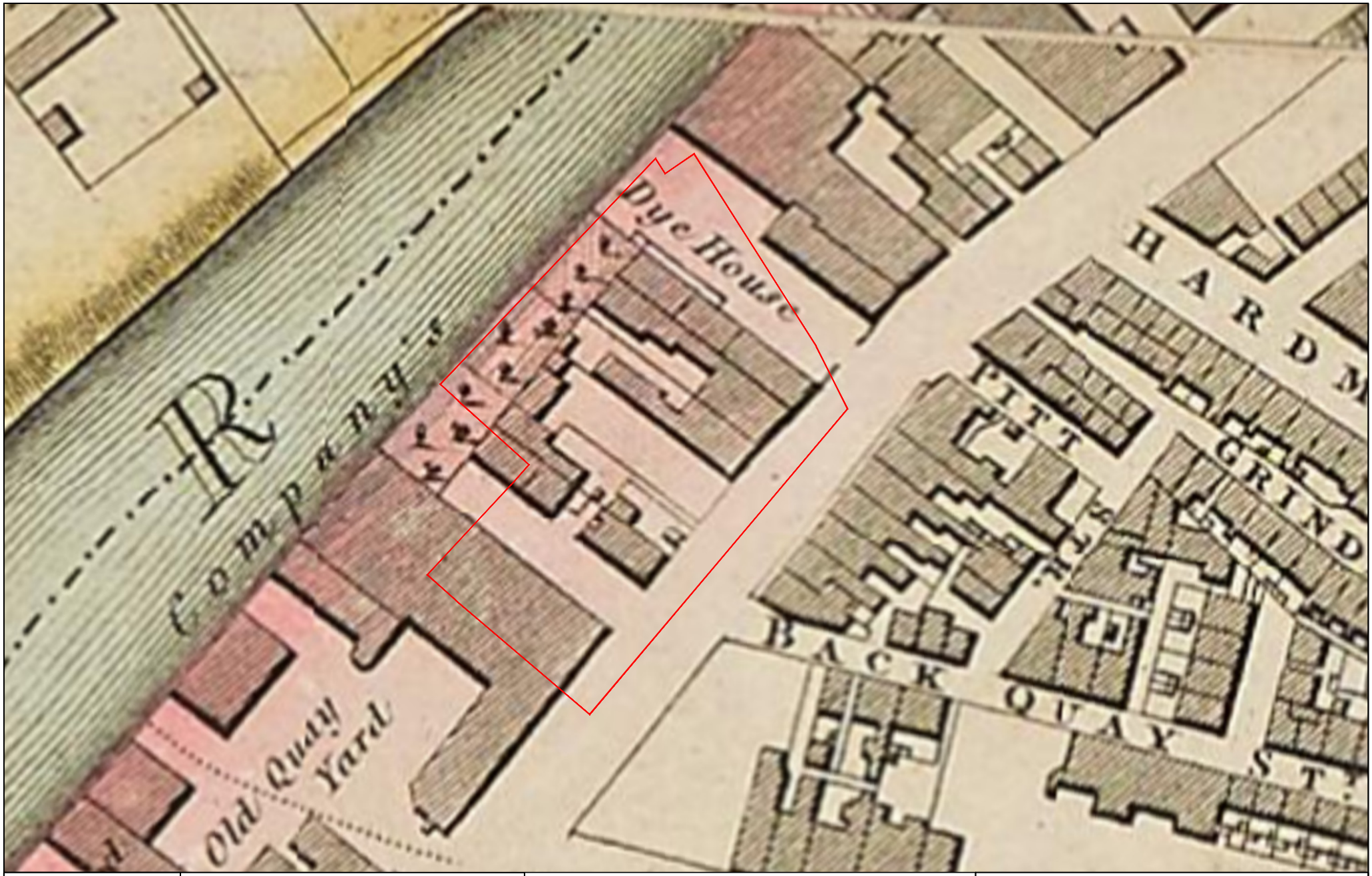
CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

0 50 m
Scale at A4 1:750

Albert's Shed, Manchester
Project Code: 61219
Figure 3: Site boundary superimposed on Green's 1794 Plan of Manchester and Salford

N

Key: Site boundary



CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

0 50 m
Scale at A4 1:750

Albert's Shed, Manchester

Project Code: 61219

Figure 4: Site boundary superimposed on Bancks & Cos 1831 plan of Manchester & Salford

N

Key: Site boundary



CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

0 50 m

Scale at A4 1:750

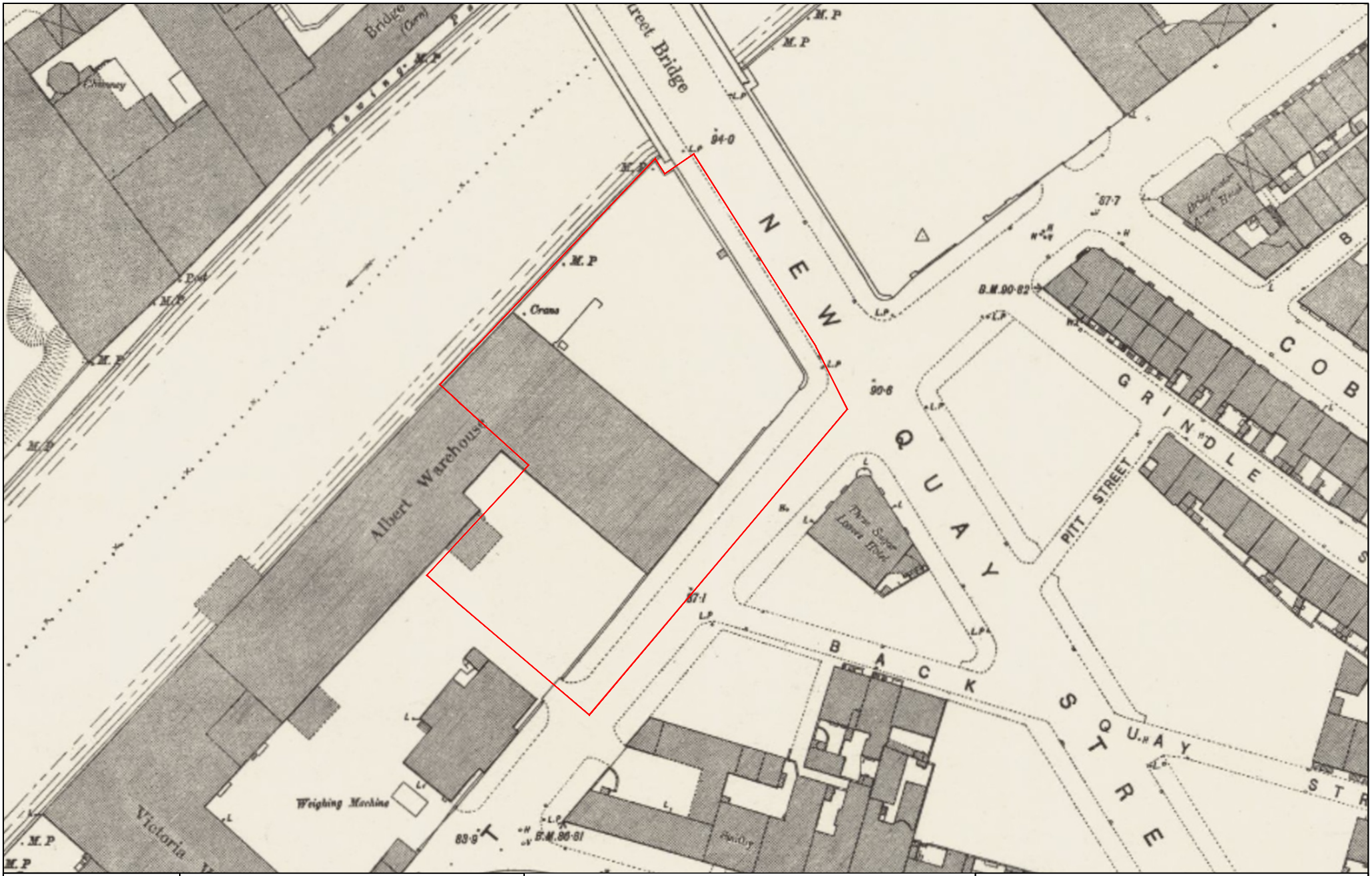
Albert's Shed, Manchester

Project Code: 61219

Figure 5: Site boundary superimposed on the 1851 Ordnance Survey town plan

N

Key: Site boundary



CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

0 50 m

Scale at A4 1:750

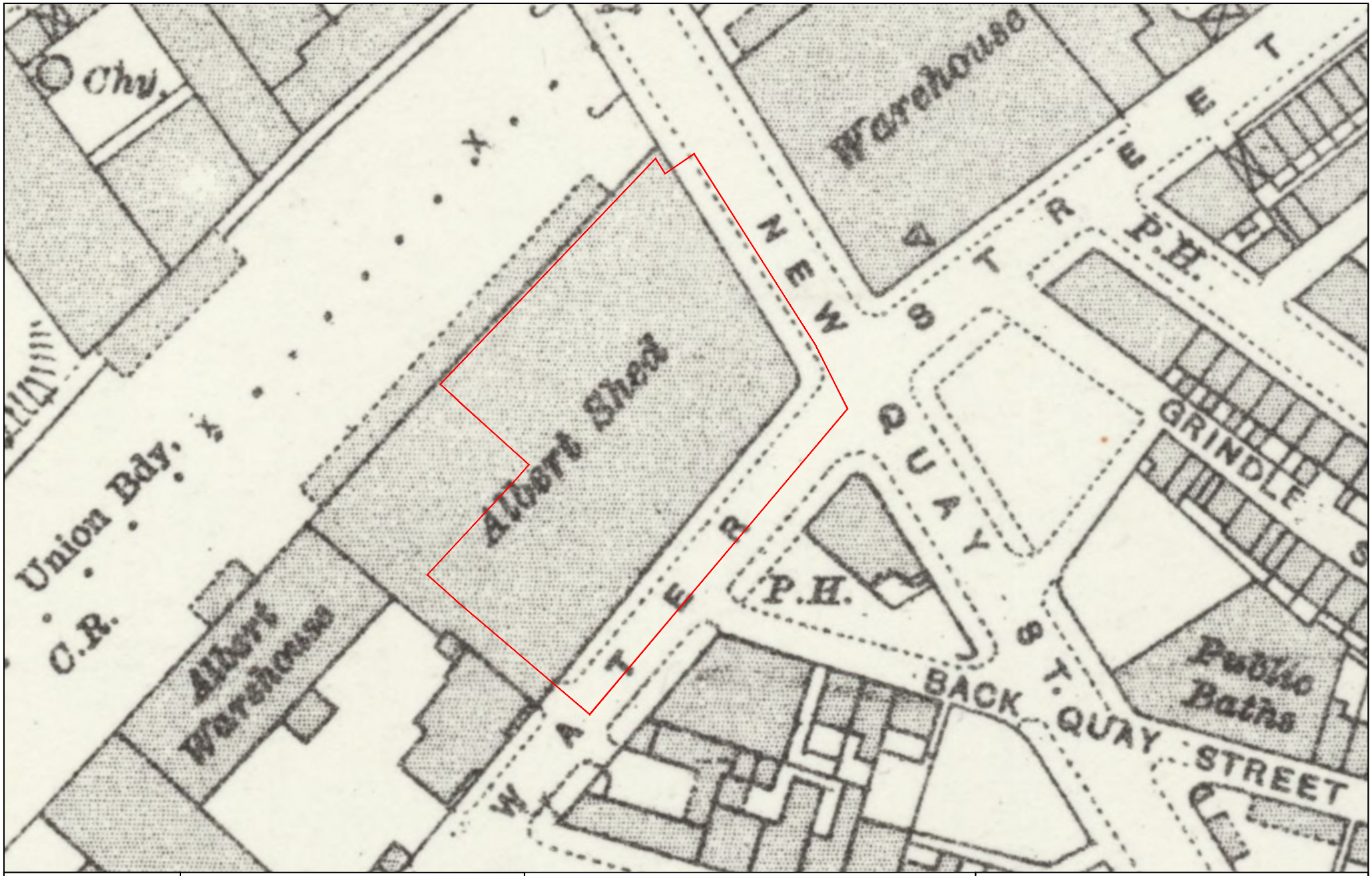
Albert's Shed, Manchester

Project Code: 61219

Figure 6: Site boundary superimposed on the 1891 Ordnance Survey town plan

N

Key: Site boundary



CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

0 50 m
Scale at A4 1:750

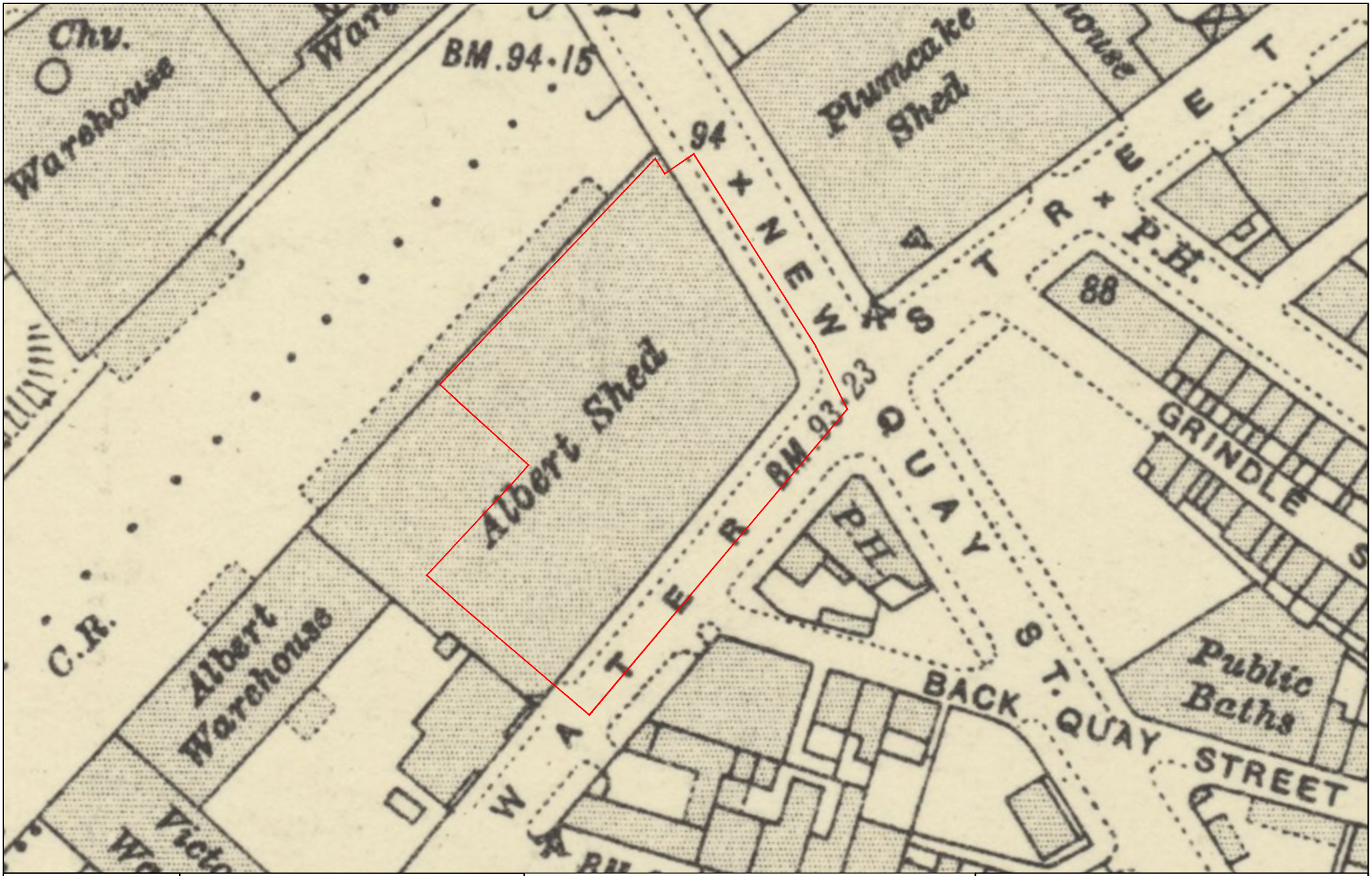
Albert's Shed, Manchester

Project Code: 61219

Figure 7: Site boundary superimposed on the 1922 Ordnance Survey 25-inch to 1-mile plan

N

Key: Site boundary



CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

0 50 m

Scale at A4 1:750

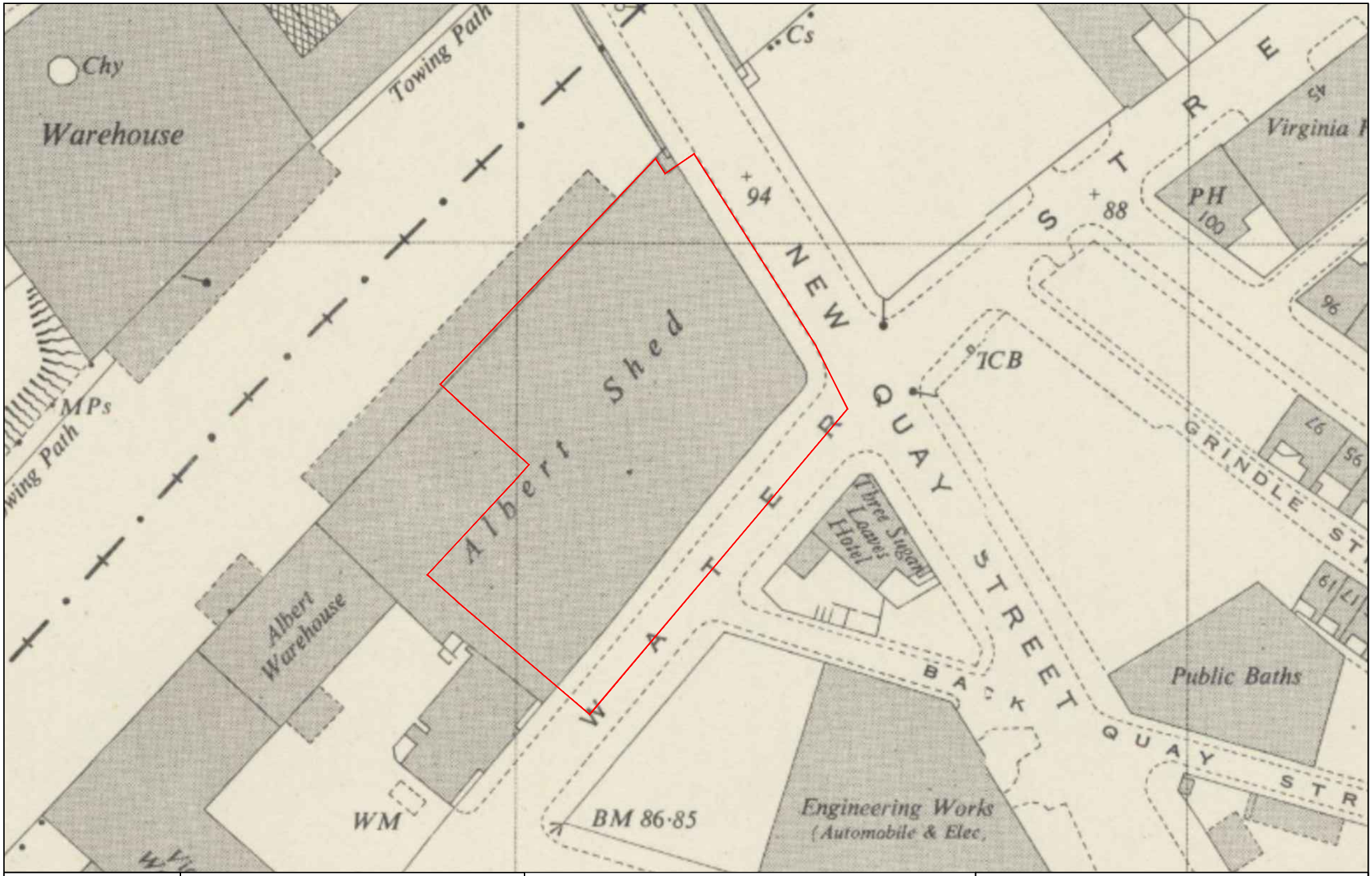
Albert's Shed, Manchester

Project Code: 61219

Figure 8: Site boundary superimposed on the 1934 Ordnance Survey 25-inch to 1-mile plan

N

Key: Site boundary



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77 Dale Street, Manchester, M1 2HG

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Scale at A4 1:750

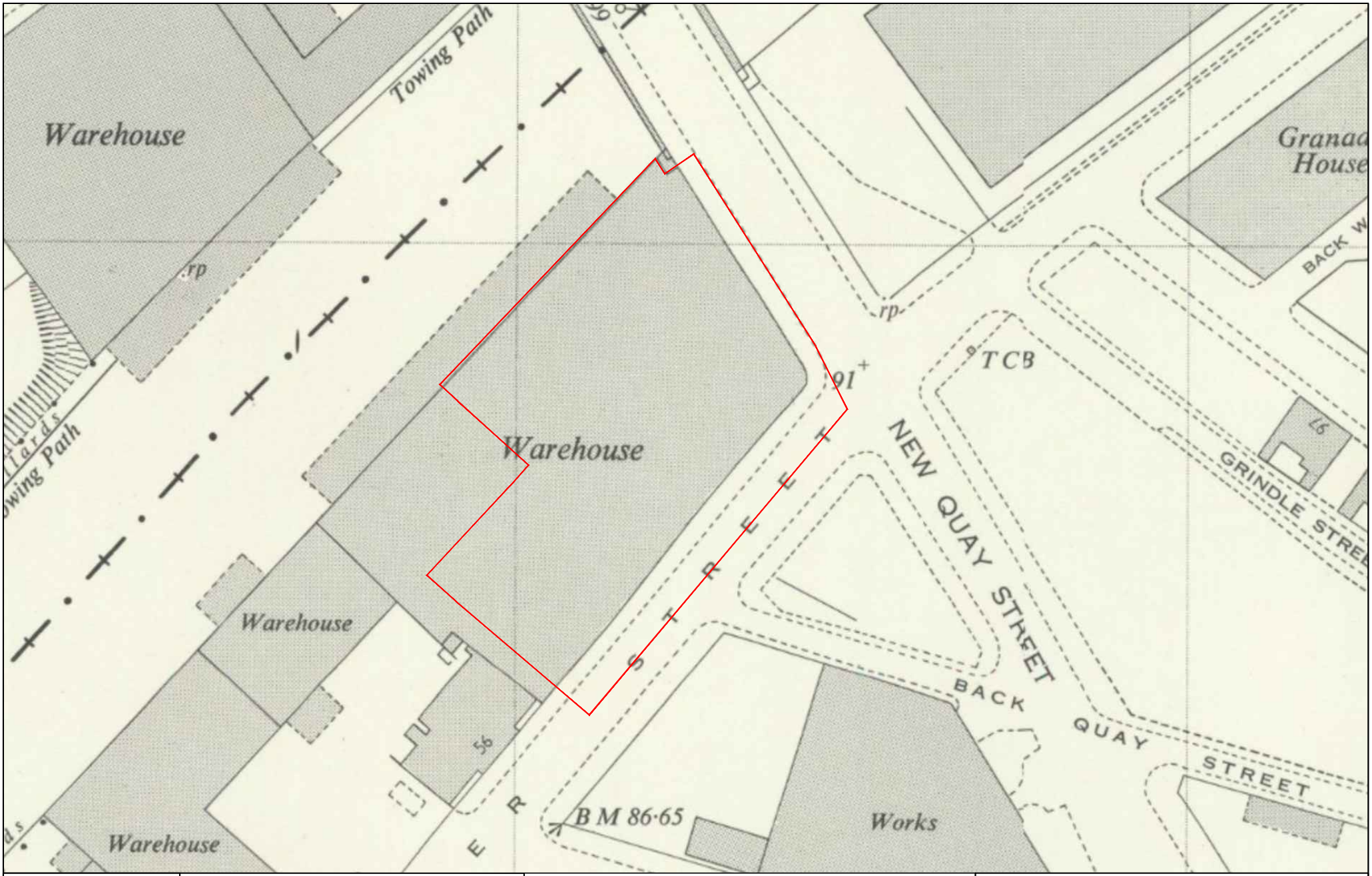
Albert's Shed, Manchester

Project Code: 61219

Figure 9: Site boundary superimposed on the 1949 Ordnance Survey 1:1250 plan

N

Key: Site boundary



CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

0 50 m

Scale at A4 1:750

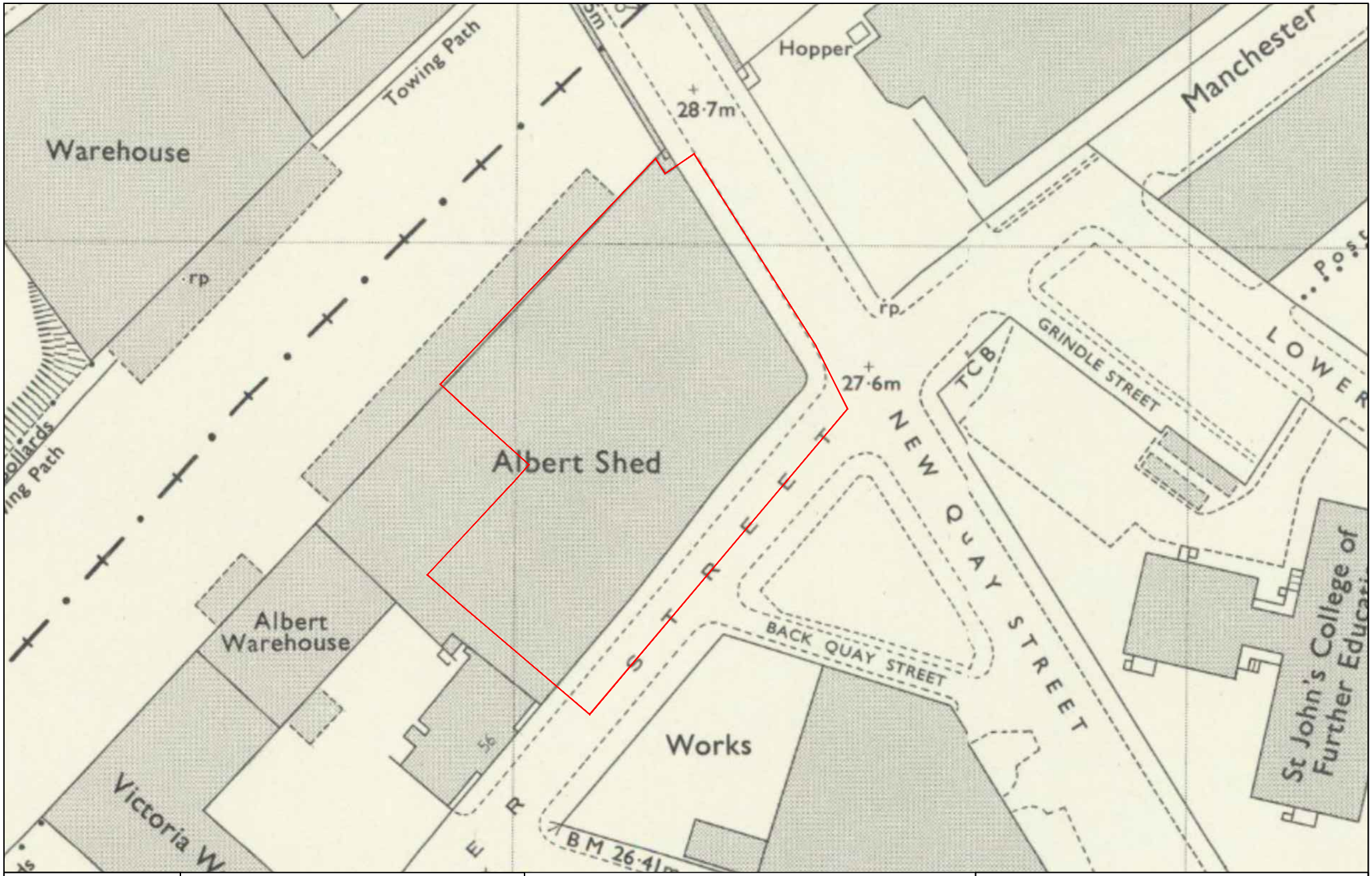
Albert's Shed, Manchester

Project Code: 61219

Figure 10: Site boundary superimposed on the 1962 Ordnance Survey 1:1250 plan

N

Key: Site boundary



CIVIC
Carver's Warehouse
77 Dale Street, Manchester, M1 2HG

0 50 m
Scale at A4 1:750

Albert's Shed, Manchester

Project Code: 61219

Figure 11: Site boundary superimposed on the 1973 Ordnance Survey 1:1250 plan

N

Key: Site boundary



CIVIC
Carver's Warehouse,
77 Dale Street, Manchester, M1 2HG

0 1 m

Albert's Shed, Manchester

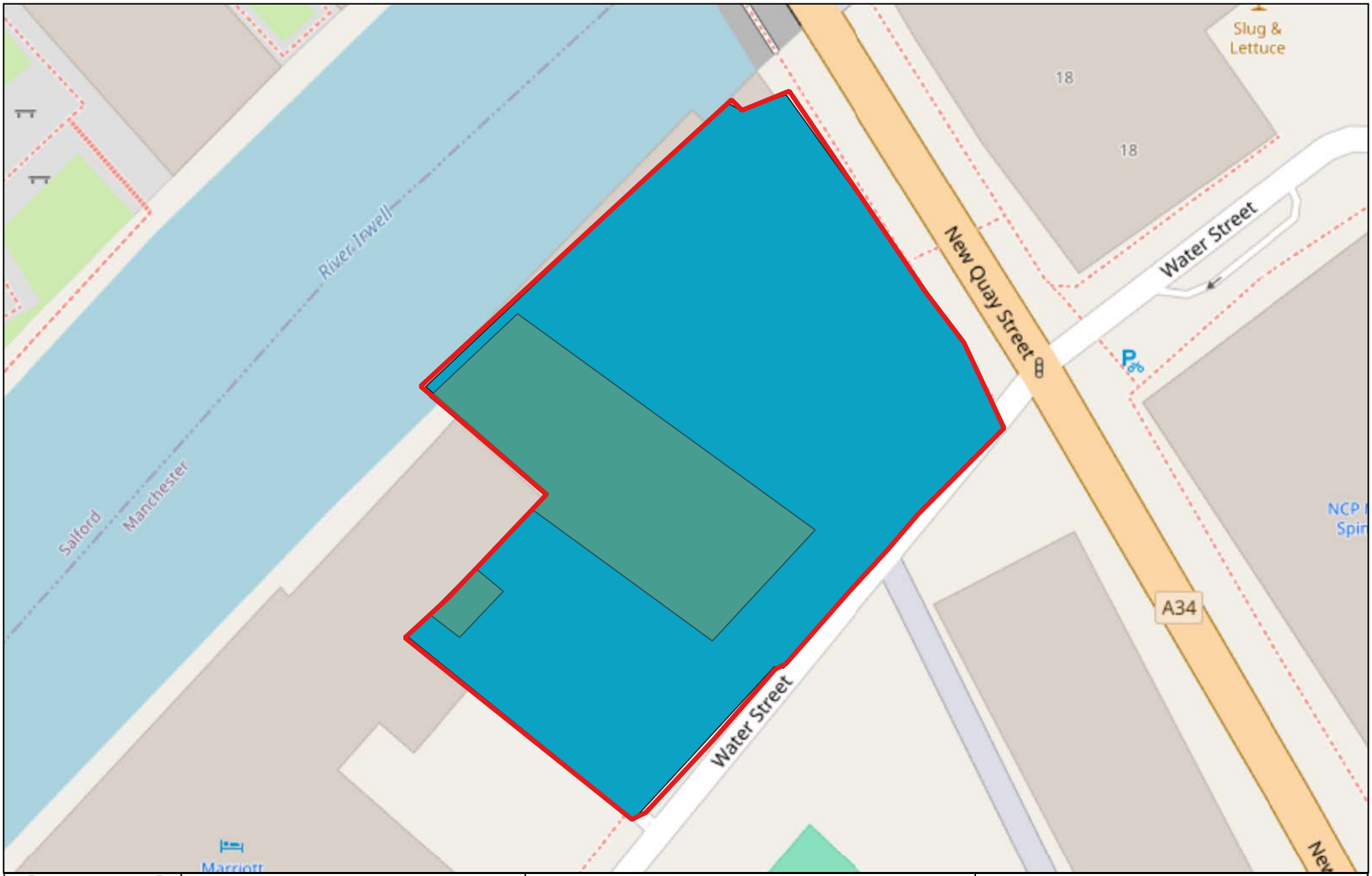
Project Code: 61219

Figure 12: Gazetteer Sites

N

Key:

site boundary
GS01
GS02
GS03
GS04



CIVIC
Carver's Warehouse,
77 Dale Street, Manchester, M1 2HG

0 1 m

Albert's Shed, Manchester

Project Code: 61219

Figure 13: Gazetteer Sites

N

Key:

site boundary GS05 GS06

Appendix 8 – ZTV Study

TVIA Appendix

View No.	Wireline	Rendered	Heritage View (Y/N)
1	N	Y	Y
2	N	Y	Y
3	Y	N	Y
4	Y	N	Y
5	Y	N	Y
6	Y	N	Y
7	Y	N	Y
8	N	Y	Y
9	N	Y	Y
10	N	Y	Y
11	Y	N	Y
12	Y	N	Y
13	Y	N	Y
14	Y	N	Y
15	Y	N	N
16	Y	N	N
17	Y	N	N
18	Y	N	N
19	Y	N	Y
20	Y	N	N

Zone of Visual Influence



THE CURRENT VIEWS ORIGINATES FROM FROM THE PREVIOUS HERITAGE STATEMENT PREPARED FOR THE ST JOHN'S TOWER PROPOSAL AND THE CONSENTED SCHEME. ADDITIONAL VIEWPOINTS HAVE BEEN INCLUDED TO BETTER REFLECT THE VISIBILITY OF THE SCHEME OF ALBERT SHED AND PROVIDE A MORE ACCURATE ASSESSMENT OF ITS VISUAL IMPACT.



▶ Original Camera Position ▶ New Camera Position

Appendix 9 – Flood Risk Assessment

Date:	Prepared by:	Project Number:
Oct 2026	Qaasim Khan	260862

Prepared for:
Select Property Group Ltd

FRA & Outline Drainage Strategy Report

OSJ-Z1-DCE-A180-RP-XX-9006

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Report approved by Darren Paine
BEng CEng MICE



Rev	Date	By	Comment
P01	06 Oct 2026	QK	Stage 2+ issue
P02	07 Oct 2026	QK	Revised Update
P03	12 Oct 2026	DEP/QK	Flood Zone updated

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Contents

1. Executive Summary 5
2. Introduction 7
3. Development Proposal 8
4. Existing Site Conditions 9
5. Planning Policy 10
5.1. National Planning Policy Framework (NPPF) 10
5.2. Flood Risk & Coastal Change Planning Practice Guidance (FRCC-PPG) 10
5.2.1. Flood Risk categorisation 10
5.2.2. Flood Risk Vulnerability and Flood Zone Compatibility 11
5.3. Local Policy and Strategic guidance 13
5.3.1. Manchester Core Strategy – Policy EN14: Flood Risk 13
5.3.2. Greater Manchester Strategic Flood Risk Assessment (SFRA) 13
5.3.3. Manchester Local Flood Risk Management Strategy (LFRMS) 14
5.3.4. United Utilities Surface Water Hierarchy 14
5.4. Climate Change Alowances 14
6. Hydrological Assessment 15
6.1. Flooding History 15
6.2. Fluvial Flood Risk 15
6.3. Tidal Flood Risk 16
6.4. Surface Water Flood Risk 16
6.5. Groundwater Flood Risk 16
6.6. Sewer Flood Risk 16
6.7. Canal Flood Risk 16
6.8. Reservoir Flood Risk 17
6.9. Summary of Flood Risk 17
6.10. Proposed Flood Mitigation and Resilience Measures 17
6.11. Sequential & Exception Testing 18
7. Outline Drainage Strategy 20
7.1. Drainage Design Basis 20
7.2. Existing Drainage Context 20
7.3. Surface-Water Discharge Hierarchy 21
7.4. Proposed Surface-Water Drainage Strategy 21
7.4.1. Outfall B: north-eastern catchment 22
7.4.2. Outfall A: south-western lower catchment 22
7.4.3. Combined design flows and catchment check 23
7.4.4. Sustainable Drainage and Water Quality 23
7.4.5. Pollution hazard and treatment train 24
7.4.6. Hydraulic Performance and Exceedance 24
8. Foul-Water Drainage Strategy 26

9. Consents and Approvals 27
10. Ownership, Management and Maintenance 28
11. Summary & Conclusions 29
12. Appendix A - Drainage GA 30
13. Appendix B – Hydraulic Calculations 31
14. Appendix C – Flood Map for Planning 32
15. Appendix D – United Utilities Sewer Map 33

Figures

Figure 1 - One St Johns, Manchester 9

Tables

Table 1 : Proposal Overview 8
Table 2: Flood zone categorisation 10
Table 3: Flood Risk Vulnerability 11
Table 4: Fluvial flood levels 15
Table 5: Summary of flood risk 17
Table 6: Drainage design parameters 20
Table 7: Discharge hierarchy assessment 21
Table 8: Outfall B design parameters 22
Table 9: Outfall A design parameters 22
Table 10: Outfall assessment overview 23
Table 11: Surface water runoff treatment overview 24
Table 12: Foul drainage design parameters 26
Table 13: Drainage Maintenance Schedule 28

1. Executive Summary

This Flood Risk Assessment and Outline Drainage Strategy has been prepared to support the proposed redevelopment of One St Johns, Manchester, M3 5EN. The approximately 0.17 ha brownfield site will accommodate a 31-storey residential building comprising 381 apartments, with residential amenity facilities at ground floor and plant, cycle storage, water tanks and drainage infrastructure within the basement.

The Red Line plan for the development shows the site falling within Flood Zone 2 and 3. The section of the site shown as Flood Zone 3 is the overhanging existing structure across the river Irwell, with the boundary between Flood Zone 3 and 2 being the River Wall. The development area of the site falls within Flood Zone 2. Residential developments are classified as More Vulnerable and are compatible with Flood Zone 2, subject to application of the Sequential Test and demonstration that the development will remain safe throughout its lifetime without increasing flood risk elsewhere.

Environment Agency model data obtained in March 2025 identified flood levels of 24.55 mAOD for the 1% Annual Exceedance Probability (AEP) event and 25.05 mAOD with a 35% climate-change allowance. It also identified a 1% AEP plus 70% sensitivity level of 26.02 mAOD and a conservative 0.1% AEP level of 26.31 mAOD. These levels should be checked against current Environment Agency data before the report is finalised.

The proposed principal ground-floor finished floor levels are 27.550mAOD and 28.640mAOD. The lower level is approximately 2.50m above the 1% AEP plus 35% climate-change level and 1.24m above the conservative 0.1% AEP level. Occupied ground-floor accommodation and entrances are therefore above the previously modelled design and extreme flood levels.

The basement is proposed at 22.550mAOD and will be below the River Irwell flood levels. No residential or sleeping accommodation is proposed at basement level. The basement will be designed as a water-excluding structure with appropriate waterproofing, hydrostatic and uplift resistance, controlled service penetrations, pumped drainage, duty and standby pumps, emergency storage, alarms and backflow protection. Water-sensitive equipment will be raised or locally protected where practicable, with safe internal access maintained to the ground floor.

Surface water will be discharged directly to the River Irwell through two separate gravity outfalls. Outfall B will serve the roof and higher north-eastern catchment through 375mm diameter carrier drainage. It will have an invert of 26.540mAOD and a maximum discharge of 62.0 l/s at approximately 1.4m/s during the critical 1% AEP rainfall event including 45% climate change. The outfall is above the previously modelled river levels but will still include a non-return valve and appropriate scour protection.

Outfall A will serve the lower south-western catchment. It will have an invert of 24.500mAOD and a maximum discharge of 6.2 l/s at approximately 0.8m/s. As this invert is below the previously reported design River Irwell levels, the outfall will become submerged during elevated river conditions. The detailed hydraulic model must therefore incorporate the relevant river tailwater levels and demonstrate that surcharge cannot affect the basement, lower external areas or building thresholds. A non-return valve or equivalent backflow-prevention arrangement will be provided.

Rain gardens and planters will provide interception and water-quality treatment, with permeable paving also considered through detailed design. Two appropriately sized hydrodynamic vortex separators will be installed upstream of the river outfalls as part of a wider treatment train including catchpits, silt traps and trapped gullies. The treatment proposals will be verified through a CIRIA C753 water-quality assessment.

Foul drainage will connect by gravity to the United Utilities combined sewer within Water Street at or near manhole reference 1102. The assumed peak foul discharge is 32.13 l/s. Basement foul drainage will be pumped to a high-level gravity manhole using duty and standby pumps, emergency storage, alarms and non-return valves. The connection will be subject to confirmation of sewer capacity and Section 106 approval from United Utilities.

Subject to updated flood-data verification, detailed hydraulic modelling, completion of the formal Sequential Test and receipt of the necessary approvals from the Environment Agency, Manchester City Council, United Utilities and the relevant river-wall or riparian interest, the development is considered capable of being delivered safely without increasing flood risk elsewhere.

2. Introduction

This report reviews available Environment Agency hydraulic modelling, previous flood risk and drainage assessments, the current development proposals and the latest architectural levels. It considers fluvial, surface-water, groundwater, sewer, reservoir and artificial-source flood risk, together with finished-floor levels, basement protection, safe access and residual-risk management.

The report also sets out the proposed surface-water and foul-water drainage arrangements. Surface water will discharge to the River Irwell through two separate outfalls incorporating backflow protection and water-quality treatment. Foul flows will discharge to the United Utilities combined sewer within Water Street, subject to confirmation of capacity and approval of the proposed connection.

The assessment has been prepared in accordance with the National Planning Policy Framework, the Flood Risk and Coastal Change Planning Practice Guidance, the National Standards for Sustainable Drainage Systems, Environment Agency climate-change guidance, CIRIA C753 The SuDS Manual, and relevant Manchester City Council and United Utilities requirements. Detailed drainage layouts, hydraulic calculations and final outfall designs will be developed alongside the planning and detailed design process.

The objectives are to:

- establish the current flood-zone and vulnerability context.
- review flood risk from rivers, surface water, groundwater, sewers, reservoirs, canals and other artificial sources.
- assess the suitability of current ground-floor and basement levels.
- identify safe access, resilience and emergency-planning requirements.
- provide technical evidence for the Sequential Test and address whether the Exception Test is required.
- demonstrate that the development can remain safe for its lifetime and will not increase flood risk elsewhere.

Reference Framework:

- National Planning Policy Framework, August 2026, Policies F4 to F9 and Annex F.
- Defra, National Standards for Sustainable Drainage Systems, June 2025, updated July 2025.
- Environment Agency, Flood risk activities: environmental permits.
- Environment Agency, Discharges to surface water and groundwater: environmental permits.
- CIRIA C753, The SuDS Manual.
- BS EN 752, Drain and sewer systems outside buildings.
- Sewers for Adoption / Design and Construction Guidance, where applicable.
- Manchester City Council and Greater Manchester SuDS and flood-risk guidance.
- United Utilities requirements for new connections to the public sewer.

3. Development Proposal

The proposed development comprises demolition/redevelopment of the existing Albert Shed site and construction of a 31-storey residential building, including ground floor, with a maximum height of approximately 93.5 m. The scheme provides 381 apartments with associated amenity facilities and supporting plant and servicing infrastructure.

Table 1 : Proposal Overview

Item	Current proposal
Site name	One St Johns
Address	Water Street / New Quay Street, Manchester, M3 5EN
Site area	Approximately 0.17 ha
Existing condition	Previously developed brownfield site
Proposed height	31 storeys including ground floor; approximately 93.5 m
Residential units	381 apartments
Ground-floor levels	27.550 mAOD and 28.640 mAOD
Basement level	22.550 mAOD
Ground-floor uses	Entrance, pool, changing, steam/sauna, management suite, car park, refuse, generator, and substation
Basement uses	Cycle store, pool plant, LV, communications, storage, water/sprinkler tanks, and an attenuation tank

The current ground-floor plan shows external levels around the site ranging from approximately 26.800 mAOD to 28.810 mAOD. The lowest identified external levels are located toward Water Street and the hotel service-yard side. The higher New Quay Street side provides the strongest opportunity for principal dry access and egress.

4. Existing Site Conditions

The site occupies a constrained urban plot between Water Street, New Quay Street, the River Irwell and the adjoining hotel/service-yard land. The existing site is substantially developed and impermeable. The River Irwell forms the north-western boundary and flows south-west toward the Manchester Ship Canal.

Historical surveys record marked level differences across the site and surrounding streets. The earlier topographical survey identified the former lower parking/service-yard area at around 25.1 mAOD, with New Quay Street generally higher and Water Street falling toward the south-west. The current development substantially revises the building and basement arrangement, and the current proposed levels take precedence over former development layouts.

Previous sewer records and drainage surveys identified combined sewer infrastructure in Water Street and New Quay Street, together with a large overflow/surface-water conduit crossing the southern part of the site toward the River Irwell. These assets and their protection/diversion requirements will be addressed in the separate drainage strategy. Their presence is relevant to residual sewer-flooding and basement-backflow risk.



Figure 1 - One St Johns, Manchester

The site adjoins the canalised lower River Irwell, historically referred to in earlier documents as the Grey Irwell. The river is hydraulically linked to the Manchester Ship Canal approximately 1 km downstream. Water levels are influenced by catchment flows and, in the hydraulic model, by operational assumptions for downstream control structures, including normal operation and Latchford gate-closure scenarios.

5. Planning Policy

5.1. National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) 2026 requires that development should be located in areas with the lowest flood risk practicable, applying a sequential, risk-based approach that accounts for all sources of flood risk and anticipated climate change. Development proposed in Flood Zones 2 or 3 must demonstrate the Sequential Test has been applied; where appropriate, the Exception Test must also be satisfied. This requires justification that the development offers sustainability benefits outweighing flood risk and can remain safe for its lifetime without increasing flood risk elsewhere.

Site-specific Flood Risk Assessments are mandatory in Flood Zones 2 and 3 and should include mitigation measures and demonstrate that flood risk is not exacerbated by development. Submissions should also explore opportunities for reducing flood risk.

The site falls within Flood Zone 2 but is located in a Critical Drainage Area as identified in local studies. Thus, despite being outside higher flood zones, a site-specific FRA is proportionate given the complexity of local drainage and the presence of low-lying land and development constraints.

5.2. Flood Risk & Coastal Change Planning Practice Guidance (FRCC-PPG)

FRCC-PPG provides detailed guidance underpinning the NPPF, defining Flood Zones and vulnerability classifications, and outlining expectations for site-specific FRAs and consideration of climate change.

'More Vulnerable' uses—including residential and commercial with basements—are acceptable in Flood Zone 2 without needing an Exception Test, provided Sequential and site-specific assessments (including groundwater and sewer considerations) are carried out. Basement development is specifically referenced in PPG and must follow resilience and flood resistance best practice (e.g., compliance with BS 8102:2022).

5.2.1. Flood Risk categorisation

The NPPF references the Flood Zones defined on the Environment Agency's Flood Map for Planning (Rivers and Sea) and uses these to guide the appropriateness of development through the sequential approach. The Flood Risk and Coastal Change PPG provide the formal definitions of Flood Zones and their application in planning; these are summarised in Table 2 (extracted from Table 1 of the PPG).

Table 2: Flood zone categorisation

Flood Zone	Definition
Zone 1 Low Probability	Land having a less than 1 in 1,000 (0.1%) annual probability of river or sea flooding. Land shown as 'clear' on the Flood Map for Planning (all land outside Zones 2, 3a and 3b).
Zone 2 Medium Probability	Land having between a 1 in 100 and 1 in 1,000 (1% and 0.1%) annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 (0.5% and 0.1%) annual probability of

	sea flooding. Land shown in light blue on the Flood Map for Planning.
Zone 3A High Probability	Land having a 1 in 100 (1%) or greater annual probability of river flooding; or land having a 1 in 200 (0.5%) or greater annual probability of sea flooding. Land shown in dark blue on the Flood Map for Planning.
Zone 3B Functional Flood Plain	Functional Floodplain | This zone comprises land where water must flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise: - Land having a 1 in 30 (3.3%) or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or - Land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. This Zone is not separately distinguished from Zone 3a on the Flood Map for Planning.

5.2.2. Flood Risk Vulnerability and Flood Zone Compatibility

Annex F, Table 2 of the NPPF defines the type and nature of different development classifications in the context of their flood risk vulnerability. The information in Annex F was extracted and is presented in Table 3.

Table 3: Flood Risk Vulnerability

Classification	Description
Essential Infrastructure	- Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk. - Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including infrastructure for electricity supply including generation, storage, and distribution systems; including electricity generating power stations, grid and primary substations storage; and water treatment works that need to remain operational in times of flood. - Wind turbines. - Solar farms.

Highly Vulnerable	Police and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding. - Emergency dispersal points. - Basement dwellings. - Caravans, mobile homes, and park homes intended for permanent residential use. - Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or waterside locations or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure'.)
More Vulnerable	- Hospitals - Residential institutions such as residential care homes, children's homes, social services homes, prisons, and hostels. - Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs, and hotels. - Non–residential uses for health services, nurseries, and educational establishments. - Landfill and sites used for waste management facilities for hazardous waste. - Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.
Less Vulnerable	- Police, ambulance, and fire stations which are not required to be operational during flooding. - Buildings used for shops; financial, professional, and other services; restaurants, cafes, and hot food takeaways; offices; general industry, storage, and distribution; non-residential institutions not included in the 'more vulnerable' class; and assembly and leisure. - Land and buildings used for agriculture and forestry. - Waste treatment (except landfill and hazardous waste facilities). - Minerals working and processing (except for sand and gravel working). - Water treatment works which do not need to remain operational during times of flood.

	- Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place. - Car parks.
Water Compatible Development	- Flood control infrastructure. - Water transmission infrastructure and pumping stations. - Sewage transmission infrastructure and pumping stations. - Sand and gravel working. - Docks, marinas, and wharves. - Navigation facilities. - Ministry of Defence installations. - Ship building, repairing, and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location. - Water-based recreation (excluding sleeping accommodation). - Lifeguard and coastguard stations. - Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms. - Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.

5.3. Local Policy and Strategic guidance

5.3.1. Manchester Core Strategy – Policy EN14: Flood Risk

Policy EN14 requires new development to manage flood risk sustainably and contribute to reducing surface water discharge. It mandates integrated SuDS, climate resilient design, and protecting existing flood water storage capacity. EN14 remains effectively part of the Development Plan even where superseded by PfE policies and is reflected in the current local plan framework.

5.3.2. Greater Manchester Strategic Flood Risk Assessment (SFRA)

The Greater Manchester Level 1 (2019) and Level 2 (2011/2019) SFRAs are the primary flood risk evidence base. These identify key strategic flood risk areas around Manchester's rivers, canals, and urban drainage systems. Notably:

The Irwell, Medlock, and Manchester Ship Canal form critical flood corridors.

One St John is located in a **Critical Drainage Area**, where surface water and sewer flooding risk is heightened.

Functional Floodplain delineation is provided via the GM Level 2 SFRA.

SFRAs support Sequential and Exception Tests, resource safeguarding, and SuDS prioritisation.

5.3.3. Manchester Local Flood Risk Management Strategy (LFRMS)

As the Lead Local Flood Authority, Manchester City Council's LFRMS guides local flood risk reduction strategies, emphasising the importance of SuDS, partnerships, and risk-based interventions. This includes reducing surface water flooding and preserving natural drainage functions.

5.3.4. United Utilities Surface Water Hierarchy

United Utilities promotes a hierarchy favouring infiltration, then discharge to watercourses, then sewers as a last resort. Where connection to combined sewers is necessary, discharge must be tightly controlled: i.e., connection to the combined sewer is acceptable here provided it is supported by full hydraulic justification and attenuation to greenfield rates.

5.4. Climate Change Allowances

In accordance with Environment Agency flood risk assessment guidance, climate change allowances have been applied to the flood risk and drainage assessment for the proposed development within the River Irwell Management Catchment. The Environment Agency publishes peak rainfall climate change allowances by management catchment for use in flood risk assessments, strategic flood risk assessments, and flood and coastal risk management schemes.

For the River Irwell Management Catchment, the relevant upper-end peak rainfall climate change allowance is 45%. This allowance has therefore been adopted for the assessment of future flood risk and has been incorporated into the drainage strategy.

The proposed development is assumed to have a design life of 100 years. On this basis, the drainage strategy has been designed to accommodate the appropriate future climate change scenario, using the 1% Annual Exceedance Probability flood event plus a 45% climate change allowance.

6. Hydrological Assessment

6.1. Flooding History

The historic Environment Agency information issued in 2025 identified recorded flood outlines in the wider River Irwell corridor, including events in 1866, 1946, 1954, 1991 and 2015. The previous site-specific assessments did not identify a recorded flood outline affecting the site itself. Historic datasets are incomplete and absence of a record does not prove that flooding has never occurred. The evidence nevertheless indicates no known pattern of recurring internal flooding at the application site.

6.2. Fluvial Flood Risk

The Red Line plan for the development shows the site falling within Flood Zone 2 and 3. The section of the site shown as Flood Zone 3 is the overhanging existing structure across the river Irwell, with the boundary between Flood Zone 3 and 2 being the River Wall. The development area of the site falls within Flood Zone 2. The principal fluvial source is the River Irwell immediately adjacent to the site. The March 2025 Environment Agency model information remains the most recent detailed site-specific model output supplied within the project information. The previous assessment selected model node 3, immediately downstream of New Quay Street bridge, as representative of the site.

Table 4: Fluvial flood levels

Model scenario/event	**Reported water level**
Normal operation, 1% AEP	24.55 mAOD
Normal operation, 1% AEP +35% peak flow	25.05 mAOD
Normal operation, 1% AEP +70% peak flow	26.02 mAOD
Normal operation, 0.1% AEP	26.28 mAOD
Latchford three gates closed, 0.1% AEP	26.31 mAOD

The current lower ground-floor FFL of 27.550 mAOD is approximately 2.50 m above the reported 1% AEP plus 35% climate-change level, 1.53 m above the reported 1% AEP plus 70% sensitivity level, and 1.24 m above the conservative 0.1% AEP level. The higher ground-floor FFL of 28.640 mAOD provides still greater freeboard. On the historic model evidence, all occupied ground-floor accommodation is above the design and extreme fluvial levels.

The lowest current external level shown is approximately 26.800 mAOD, which is approximately 0.49 m above the conservative 0.1% AEP level of 26.31 mAOD. Subject to verification against updated flood levels and detailed grading, this supports a dry access route toward Water Street/New Quay Street and means the entrances shown at 27.550 mAOD and 28.640 mAOD are not expected to be inundated by the previously modelled extreme event.

The basement level of 22.550 mAOD is below all reported fluvial model levels. Direct external basement openings, penetrations and below-ground drainage systems therefore represent potential ingress pathways. The basement cannot be described as outside flood risk solely because access is internal. Its acceptability depends on a robust water-excluding structure, controlled penetrations, pumped drainage, backflow prevention, internal escape to ground floor and management of residual risk.

Subject to the mitigation in Section 6 and confirmation of current Environment Agency data, the inherent fluvial risk is assessed as Medium due to the Flood Zone 2 location and riverside setting, reducing to Low for occupied accommodation following mitigation.

6.3. Tidal Flood Risk

Manchester is located inland and is not influenced by tidal processes. There is no credible pathway for tidal flooding to affect the site. Accordingly, tidal flood risk is assessed as negligible.

6.4. Surface Water Flood Risk

Previous Environment Agency surface-water mapping indicated a generally very low risk across the former building footprint, with localised low, medium and high-risk areas toward Water Street, the service yard and former lower parking areas. Such strategic mapping is indicative and may not represent walls, thresholds, detailed grading, drainage capacity or the current development layout.

The current ground-floor accommodation is raised above the lower external areas. Detailed external levels should direct exceedance flows away from entrances, the generator room, substation, basement vents and ramp interfaces. The separate drainage strategy should demonstrate no internal property flooding during the 1% AEP rainfall event plus the applicable peak-rainfall climate-change allowance and should show safe exceedance routes for less frequent events or blockage scenarios. With these measures, surface-water risk is considered Low.

6.5. Groundwater Flood Risk

The riverside setting means groundwater levels may respond to River Irwell levels. Earlier site evidence and nearby investigations described made ground over superficial granular deposits and sandstone, with groundwater influenced by the river. The basement formation level of 22.550 mAOD increases the importance of groundwater control, uplift assessment and waterproofing. The basement should be designed in accordance with BS 8102:2022 by suitably qualified structural and waterproofing specialists, with groundwater monitoring and ground investigation informing the design. With a maintainable combined protection strategy and structural resistance to hydrostatic load, residual groundwater flood risk can be reduced to Low.

6.6. Sewer Flood Risk

Public combined sewers and an overflow/surface-water asset are present within and around the site. Surcharge could occur during extreme rainfall, blockage or elevated receiving-water conditions. The basement is particularly vulnerable to backflow through gravity connections. All below-river-level and below-ground drainage should therefore be assessed for surcharge, with pumped discharge used where gravity drainage cannot remain secure. Non-return devices should be accessible and maintainable, and critical pumps should have duty/standby configuration, alarms and emergency storage. Subject to these measures, sewer flood risk is considered Low.

6.7. Canal Flood Risk

The Manchester Ship Canal begins approximately 1 km downstream and is hydraulically linked to the River Irwell. Its influence is represented within the fluvial hydraulic model and the gate-operation scenarios. No separate canal breach pathway has been identified that would control risk at the site independently of the River Irwell assessment. Risk from canals and other artificial sources is therefore assessed as Low.

6.8. Reservoir Flood Risk

Previous Environment Agency mapping places the wider area within a potential reservoir inundation extent. Reservoir failure is a highly regulated and very low-probability event. Consequences could be significant, but the overall likelihood is extremely low. Raised occupied levels, internal refuge and emergency planning provide additional resilience. Reservoir flood risk is assessed as Low.

6.9. Summary of Flood Risk

The assessment of all flood sources indicates that the site is at low risk of flooding from all mechanisms. The site lies within Flood Zone 2, with no fluvial or tidal flood pathways, and localised surface water risk is effectively managed through design and drainage mitigation.

Table 5: Summary of flood risk

Source	Inherent risk	Residual risk with mitigation
Fluvial	Medium	Low
Surface water	Low to Medium	Low
Groundwater	Medium for basement	Low
Sewer	Medium for basement	Low
Reservoir	Low	Low
Canal/artificial sources	Low	Low
Tidal	Negligible	Negligible

6.10. Proposed Flood Mitigation and Resilience Measures

6.10.1. Finished floor levels

Retain occupied ground-floor finished levels at no lower than 27.550 mAOD unless updated Environment Agency data demonstrates that a higher minimum is necessary. Current levels provide material freeboard above both the previously reported 1% AEP climate-change levels and the 0.1% AEP sensitivity level.

6.10.2. Safe access and egress

The principal pedestrian access and escape strategy should use the higher New Quay Street and Water Street interfaces. Final external-level and threshold drawings should demonstrate a continuous route from the building to land outside the applicable design flood extent with a very low flood-hazard classification. Because the lowest mapped external level is 26.800 mAOD, only 0.49 m above the previous 0.1% AEP level, small level changes or updated model levels could affect this conclusion and must be checked before issue.

6.10.3. Basement protection

- No residential or sleeping accommodation is to be located at basement level.
- The basement should be designed as a water-excluding structure in accordance with BS 8102:2022, informed by ground investigation and groundwater monitoring.
- The structural engineer should assess hydrostatic pressure and flotation/uplift using the agreed design water level and appropriate partial factors.
- All penetrations, joints, ducts, vents and service entries below the design flood level should use proprietary watertight details.
- Critical electrical, LV and communications equipment should be raised above the basement slab on plinths and locally protected. Where practicable, particularly vulnerable equipment should be relocated above the extreme flood level.
- Basement drainage should use duty/standby pumps, high-level alarms, emergency storage and maintainable backflow protection. Resilience to power loss should be addressed with the building services strategy.
- A safe internal stair route from basement to ground floor should remain available at all times and should not rely on a potentially inundated external basement entrance.

6.10.4. Ground-floor plant and service areas

The generator room and substation are at ground-floor level. Their thresholds and ventilation openings should be no lower than the adjacent protected floor level, and the detailed design should prevent surface-water exceedance from entering. The generator room lies closer to the lower service-yard/Water Street side and should receive particular attention. Fuel, oil and other pollutants should be stored or contained so that they cannot be released during a flood incident.

6.10.5. Flood warning and emergency plan

The building owner or management company should register for available Environment Agency flood warnings. A site Flood Emergency Plan should define warning triggers, management responsibilities, closure of basement access, movement of people to upper floors, restrictions on cycle-store access, shutdown or protection of affected plant, and post-event inspection. The plan should be coordinated with the fire strategy and building-management procedures.

6.11. Sequential & Exception Testing

6.11.1. Sequential Test

Policy F5 of the August 2026 NPPF seeks to steer development to areas at the lowest risk of flooding from any source. As the site is within Flood Zone 2 and the proposal introduces More Vulnerable residential development, the normal Flood Zone 1 surface-water-only exemption does not apply. A formal Sequential Test should therefore be prepared or confirmed by the planning consultant and agreed by Manchester City Council unless the site benefits from a relevant allocation that was already sequentially tested or another policy exemption applies.

This FRA provides the following technical evidence to support the Sequential Test and site layout assessment:

- The site is previously developed brownfield land in an established central Manchester regeneration area.

- The current Flood Map for Planning places the site in Flood Zone 2 rather than Flood Zone 3.
- Residential uses are compatible with Flood Zone 2 under Annex F.
- The lower occupied ground-floor level is above the previous 1% AEP plus climate-change and 0.1% AEP model levels.
- No residential or sleeping accommodation is proposed within the basement.
- Safe access appears achievable toward the higher surrounding streets, subject to updated modelling and a detailed route plan.
- The design does not rely on lowering occupied accommodation into the floodplain and can incorporate robust basement protection.

The planning-led Sequential Test should define and justify the geographical search area, identify the development need and required scale, review reasonably available alternative sites, and explain why those sites are not suitable or available. This FRA should not state that the Sequential Test is passed until that exercise has been completed and accepted by the Local Planning Authority.

6.11.2. Exception test

Under Annex F, More Vulnerable development is compatible with Flood Zone 2, and the Exception Test is not required solely because of the site flood-zone classification. Therefor it is not considered applicable unless Manchester City Council identifies a reason for requiring it.

Occupied floors are above the previously modelled climate-change and extreme levels; safe access can be directed toward higher street levels; the basement contains no sleeping accommodation and will be protected as a water-excluding structure; and the drainage strategy will be required to avoid increasing flood risk elsewhere.

7. Outline Drainage Strategy

This section sets out the proposed surface-water and foul-water drainage strategy for the redevelopment of One St Johns. It should be read alongside the separate Flood Risk Assessment, the proposed drainage general arrangement and the supporting hydraulic calculations.

7.1. Drainage Design Basis

The site comprises approximately 0.17 ha of previously developed land. Based on the current landscape and building information, approximately 0.140 ha will be impermeable and approximately 0.033 ha will comprise permeable or soft-landscaped areas. The component areas total approximately 0.173 ha, with the small difference from the stated site area arising from rounding and ongoing design development.

Table 6: Drainage design parameters

Parameter	Design basis
Total site area	Approximately 0.17 ha
Impermeable area	Approximately 0.140 ha
Permeable / landscaped area	Approximately 0.033 ha
Approximate impermeable proportion	81%
Surface-water destination	River Irwell via two separate outfalls
Foul-water destination	United Utilities combined sewer in Water Street
Surface-water design standard	Critical 1% AEP rainfall event plus 45% climate-change allowance
Foul design flow	32.13 l/s assumed peak design discharge

The proposed impermeable proportion is approximately 81%, with around 19% of the site remaining permeable or landscaped. Not all landscaped areas will necessarily infiltrate because the detailed ground conditions, basement extent and structural build-ups may require them to be lined. Their primary drainage functions may therefore be interception, water-quality treatment, temporary storage and controlled conveyance rather than infiltration

7.2. Existing Drainage Context

The earlier site investigations and utility information identified existing public combined sewer infrastructure in Water Street and New Quay Street, together with historic private drainage and a substantial surface-water or overflow conduit crossing the southern part of the site toward the River Irwell. The former arrangement served the existing brownfield development and did not provide a contemporary SuDS treatment train.

Direct discharge to the river remains the proposed strategy for the current scheme. This avoids adding clean surface-water runoff to the public combined sewer network and accords with the principle of discharging to a surface-water body in preference to a combined sewer, subject to the necessary approvals and appropriate pollution control.

Existing drainage assets, outfalls and river-wall penetrations must be verified through surveys before construction. Any redundant connections should be abandoned or sealed in accordance with the requirements of the relevant asset owner. The proposed works must also be coordinated with the basement, river-wall structure, foundations and any retained sewer or overflow assets.

7.3. Surface-Water Discharge Hierarchy

The current National Standards for Sustainable Drainage Systems require runoff destinations to be considered in a defined hierarchy, alongside interception, peak-flow control, water quality, amenity, biodiversity and whole-life maintenance. The hierarchy has been applied as follows:

Table 7: Discharge hierarchy assessment

Destination	Assessment
Rainwater reuse	Potential non-potable reuse should remain under review for irrigation, washdown or other suitable building demands. It is unlikely to accept all runoff and does not remove the need for a secure exceedance destination.
Infiltration to ground	Not proposed as the primary disposal method. The site is constrained by a full or substantial basement, made ground, historic urban use and proximity to the River Irwell. Infiltration may be structurally impracticable and could mobilise contamination.
Discharge to surface water	Preferred. Two direct gravity outfalls are proposed to the River Irwell, providing a positive surface-water destination without using the combined sewer network.
Surface-water sewer	Not required where a technically viable direct river discharge is available.
Combined sewer	Not proposed for surface water. The combined sewer in Water Street is reserved for foul discharge, subject to United Utilities approval.

The direct river outfalls are described as unrestricted because they do not rely on an attenuation flow-control rate. This does not remove the requirement to demonstrate acceptable water quality, stable outlet velocities, no erosion or scour, appropriate tailwater behaviour, and compliance with Environment Agency and riparian or navigation-authority requirements.

7.4. Proposed Surface-Water Drainage Strategy

Two separate surface-water outfalls are required due to the significant level difference across the site. The south-western part of the development is lower than the north-eastern catchment and cannot achieve a practical gravity connection to Outfall B. Combining the whole site into a single connection would therefore require lower-level runoff to be pumped up to the north-eastern outfall. This would introduce unnecessary mechanical equipment, energy use, maintenance requirements and a risk of drainage failure during a pump or power outage. Providing Outfall A for the lower south-western catchment and Outfall B for the higher north-eastern catchment allows both areas to drain by gravity, providing a simpler, more reliable and sustainable drainage arrangement.

The development will use two independent surface-water catchments reflecting the substantial level difference across the site. Roof and higher-level runoff will discharge through Outfall B on the north-eastern boundary adjacent to New Quay Street. The lower south-western catchment will discharge through Outfall A. The network should be designed so that the two systems operate independently up to their points of discharge and do not permit river surcharge to pass between catchments.

7.4.1. Outfall B: north-eastern catchment

Roof drainage and runoff from the higher parts of the site will connect to a proposed 375 mm diameter surface-water carrier system along the north-eastern boundary adjacent to New Quay Street. The carrier system will discharge directly to the River Irwell through Outfall B.

Table 8: Outfall B design parameters

Outfall B parameter	Current design value
Receiving water	River Irwell
Catchment	Roof and higher north-eastern areas
Carrier pipe	375 mm diameter surface-water pipework
Proposed outfall invert	26.540 mAOD
Peak design flow	62.0 l/s
Calculated outlet velocity	1.4 m/s
Design event	Critical 1% AEP rainfall event plus 45% climate change
Backflow protection	Non-return valve

The proposed invert of 26.540 mAOD is above the previously reported 1% AEP river level of 24.55 mAOD, the 1% AEP plus 35% climate-change level of 25.05 mAOD, the 1% AEP plus 70% sensitivity level of 26.02 mAOD and the conservative 0.1% AEP level of 26.31 mAOD. On the historic hydraulic evidence, Outfall B should therefore remain above the river level in the assessed design events. A non-return valve is nevertheless proposed to protect against short-term river surcharge, local wave effects, blockage and changes in downstream operating conditions.

The proposed 1.4 m/s velocity is not excessive for a properly detailed piped outfall, but the headwall and river interface must be designed to prevent local scour, undermining or damage to the river wall. The final detail should include a secure flap or non-return device, accessible inspection chamber, suitable erosion protection and a means of isolating the outfall for maintenance.

7.4.2. Outfall A: south-western lower catchment

The lower-level surface-water catchment along the south-western boundary will discharge separately to the River Irwell through Outfall A. The relevant external area is approximately 25.200 mAOD and the proposed outfall invert is 24.500 mAOD.

Table 9: Outfall A design parameters

Outfall A parameter	**Current design value**
Receiving water	River Irwell
Catchment	Lower south-western areas
Adjacent external level	Approximately 25.200 mAOD
Proposed outfall invert	24.500 mAOD
Peak design flow	6.2 l/s
Calculated outlet velocity	0.8 m/s
Design event	Critical 1% AEP rainfall event plus 45% climate change
Backflow protection	Required, subject to detailed hydraulic design

Outfall A is below the previously reported 1% AEP river level of 24.55 mAOD by approximately 0.05 m, below the 1% AEP plus 35% climate-change level by approximately 0.55 m and below the 0.1% AEP level by approximately 1.78 m. It will therefore operate as a submerged or surcharged outfall during elevated river conditions. The final hydraulic model must apply the relevant River Irwell tailwater levels rather than assuming a free discharge.

A non-return valve or other approved backflow-protection arrangement is required at Outfall A. Because the outfall is expected to surcharge, the model must demonstrate that upstream chambers, low-level gullies, thresholds and the basement remain protected throughout the critical event. If the required performance cannot be achieved by gravity discharge under the adopted tailwater, additional local storage, a higher outfall, an alternative connection arrangement or a pumped system may be required.

At 0.8 m/s, the stated peak velocity is hydraulically reasonable for a positive discharge; however, lower dry-weather or frequent-event velocities, sediment deposition and access for cleansing should be considered. The outlet should be configured to avoid standing water, odour, debris accumulation and river-water ingress.

7.4.3. Combined design flows and catchment check

The two outfalls have a combined stated peak discharge of 68.2 l/s during the critical 1% AEP plus 45% climate-change event. This equates to approximately 401 l/s/ha across the nominal 0.17 ha site, or approximately 487 l/s/ha when related to the 0.140 ha impermeable area. These values are consistent with an unrestricted direct runoff approach rather than an attenuated greenfield-rate strategy.

Table 10: Outfall assessment overview

Outfall	Peak flow	Velocity	Invert	Key design issue
A	6.2 l/s	0.8 m/s	24.500 mAOD	Submerged during elevated River Irwell levels; model with tailwater and provide backflow protection.
B	62.0 l/s	1.4 m/s	26.540 mAOD	Above historic model levels but still provide non-return protection and scour-resistant outfall detail.

7.4.4. Sustainable Drainage and Water Quality

Although the principal strategy is unrestricted discharge to the River Irwell, SuDS remain necessary to manage everyday rainfall, improve water quality, provide amenity and biodiversity benefits, and reduce the speed at which runoff reaches the carrier drainage. The current landscape proposals include rain gardens and raised or at-grade planters. Permeable paving may also be incorporated where compatible with the basement structure, loading, levels and architectural design.

Rain gardens and planters should receive runoff from adjacent roof, podium or pedestrian areas where possible. Where infiltration is unsuitable, the features should be lined and provided with underdrains to the surface-water network. Filter media, vegetation, check dams and overflow details should be coordinated so that the features provide interception and treatment without directing water toward building thresholds or the basement.

Permeable paving, if adopted, should operate as a lined attenuation and treatment system rather than an infiltration system unless future ground investigation demonstrates that infiltration is safe and structurally appropriate. The paving sub-base should include suitable geotextile separation, inspection points, underdrainage and overflow routing.

7.4.5. Pollution hazard and treatment train

Runoff discharging directly to the River Irwell should be treated in proportion to the pollution risk of the contributing surface. Clean roof runoff presents a very low pollution hazard, whereas trafficked, servicing, refuse and parking areas can generate sediment, metals and hydrocarbons.

Two proprietary hydrodynamic vortex separators, described in the current design as downstream defenders, are proposed upstream of the two river outfalls. Each unit must be sized by the manufacturer for the relevant peak treatment flow, sediment load and connected catchment. The separators should not be treated as the sole pollution-control measure where runoff is received from higher-risk servicing or refuse areas. Source control through rain gardens, planters, permeable paving, trapped gullies, silt traps and catchpits should be used to form a treatment train.

Table 11: Surface water runoff treatment overview

Catchment / source	**Indicative treatment approach**
Roofs	Rain gardens or planters where practicable, followed by carrier drainage and the relevant vortex separator.
Pedestrian and amenity areas	Rain gardens, planters or lined permeable paving, with silt capture before the carrier system.
Lightly trafficked areas	Permeable paving or bioretention where practicable, trapped gullies and hydrodynamic separation.
Servicing / refuse areas	Keep separate where practicable; provide trapped gullies, catchpits and enhanced local treatment based on the detailed pollution-risk assessment.
Basement / enclosed areas	Do not connect potentially contaminated washdown or foul flows to the surface-water system without appropriate assessment and approval.

The separators and SuDS features must remain accessible for inspection, sediment removal and replacement. Bypass arrangements, cover levels and chamber sizes should be coordinated with the external works and structural design. Discharge of clean uncontaminated surface-water runoff may not require a separate water-discharge permit, but the operator remains responsible for ensuring that the discharge does not cause pollution.

7.4.6. Hydraulic Performance and Exceedance

The surface-water system will be modelled for summer and winter rainfall durations sufficient to identify the critical event. The model should demonstrate:

- no uncontrolled flooding of buildings during the 1% AEP rainfall event plus 45% climate change.
- appropriate performance during more frequent events, including no unacceptable surcharge or flooding from minor storms.
- Outfall A performance under the full range of relevant River Irwell tailwater levels.
- Outfall B performance with the non-return valve closed or partially restricted during a coincident river event.
- no transfer of river water into the basement, internal drainage or the alternative catchment.

- safe exceedance routing away from entrances, vents, substations, the generator room and basement interfaces.
- adequate access for inspection, jetting and maintenance of all below-ground components.

Coincident rainfall and high river levels require explicit consideration because Outfall A is below the reported design river level. It is not sufficient to model the drainage network with a free outfall. The adopted tailwater scenarios should be agreed with the Environment Agency and should reflect the site-specific fluvial data used in the Flood Risk Assessment.

8. Foul-Water Drainage Strategy

The proposed foul-water system will remain separate from the surface-water network within the development. Foul flows will discharge toward Water Street and connect by gravity to the United Utilities combined sewer at or close to manhole reference 1102. The proposed connection is subject to confirmation of sewer levels and capacity, agreement with United Utilities and completion of the relevant Section 106 sewer-connection approval.

The assumed peak foul discharge is 32.13 l/s. This value should be supported in the final report by the adopted population, occupancy, amenity and commercial/loading assumptions, and reconciled with the current 381-apartment schedule. United Utilities should confirm that the receiving combined sewer can accept the proposed flow and specify any connection or capacity conditions.

Table 12: Foul drainage design parameters

Foul drainage parameter	**Current proposal**
Receiving network	United Utilities combined sewer in Water Street
Connection point	Manhole reference 1102, subject to survey and United Utilities agreement
Assumed peak flow	32.13 l/s
Connection type	Gravity connection from a site gravity manhole
Basement foul drainage	Pumped to a high-level gravity manhole before onward discharge
Approval	Section 106 connection approval and United Utilities acceptance

Foul appliances and drainage pop-ups at basement level cannot rely on gravity discharge to the receiving sewer. They will be collected in a dedicated foul pumping installation and lifted to a gravity manhole at a level that can discharge safely toward Water Street. The system should include duty and standby pumps, high-level alarms, emergency storage, non-return valves, isolation valves and suitable access for maintenance. Alarm signals should report to the building-management system.

Surface water, groundwater, firefighting water and swimming-pool backwash must not be connected to the foul system without specific design consideration and approval. Pool backwash, chemical dosing discharge and plant-room drainage may constitute foul or trade effluent and should be coordinated with the pool specialist and United Utilities.

9. Consents and Approvals

The proposed drainage strategy is subject to the following third-party approvals:

- Environment Agency approval for works in, over, under or near the River Irwell, which is a Main River. Construction or alteration of an outfall or headwall is a regulated flood-risk activity and may require an exemption, standard-rules permit or bespoke Flood Risk Activity Permit depending on pipe diameter, proximity to other structures and the river-wall arrangement.
- Environment Agency confirmation of the acceptable discharge arrangement, tailwater levels, erosion protection and water-quality controls. Clean uncontaminated rainfall may not require a water-discharge permit, but this should be confirmed for the final catchments and treatment train.
- Peel Ports or the relevant riparian/navigation/land interest approval for both discharge rates, river-wall penetrations, access and maintenance rights. The legal interest and precise consenting role should be confirmed by the client's solicitor and project manager.
- Manchester City Council, acting as Lead Local Flood Authority, acceptance of the drainage strategy, SuDS provision, hydraulic performance, exceedance routes and maintenance arrangements.
- United Utilities approval of the foul connection to the Water Street combined sewer and completion of the Section 106 sewer-connection process.
- Any separate approval required for works affecting the river wall, flood defence, third-party structure or retained drainage asset.

10. Ownership, Management and Maintenance

The private surface-water and foul-water systems should be retained and maintained by the building owner or appointed management company unless an adoption agreement states otherwise. A detailed maintenance plan should be issued before occupation and incorporated into the building-management documentation.

Table 13: Drainage Maintenance Schedule

Component	**Principal maintenance requirement**	**Indicative frequency**
Rain gardens / planters	Remove litter and sediment, manage vegetation, inspect inlets, underdrains and overflows.	Monthly during establishment, then quarterly and after major storms.
Permeable paving	Vacuum sweep, inspect for ponding and loss of infiltration through the surface course.	Quarterly and after major storms.
Catchpits / silt traps	Inspect sediment depth and cleanse before capacity is materially reduced.	Six-monthly and after major storms.
Hydrodynamic vortex separators	Inspect, remove accumulated sediment and floating pollutants in accordance with manufacturer requirements.	At least six-monthly initially, adjusted using inspection data.
Non-return valves	Inspect seating, hinges and seals; remove debris and verify free operation.	Six-monthly and after high river levels.
Outfalls and headwalls	Inspect structural condition, scour, blockage, erosion and river-wall interfaces.	Annually and after significant flood events.
Foul pumping station	Functional test pumps, alarms, valves and controls; desludge chamber as required.	In accordance with manufacturer guidance, normally quarterly to six-monthly.
Carrier drains and manholes	CCTV or jetting where reduced performance, sediment or blockage is suspected.	Annual inspection and reactive cleansing.

11. Summary & Conclusions

The approximately 0.17 ha One St Johns site is proposed for a 31-storey residential development containing 381 apartments. The Red Line plan for the development shows the site falling within Flood Zone 2 and 3. The section of the site shown as Flood Zone 3 is the overhanging existing structure across the river Irwell, with the boundary between Flood Zone 3 and 2 being the River Wall. The development area of the site falls within Flood Zone 2. The proposed use is More Vulnerable and is compatible with Flood Zone 2 under the August 2026 NPPF.

The most recent detailed site-specific model information presently available is the Environment Agency data issued in March 2025. It indicates a 1% AEP level of 24.55 mAOD, a 1% AEP plus 35% climate-change level of 25.05 mAOD, a 1% AEP plus 70% sensitivity level of 26.02 mAOD and a conservative 0.1% AEP level of 26.31 mAOD. The current lower ground-floor FFL of 27.550 mAOD is above each of these levels.

The basement level of 22.550 mAOD lies well below the river model levels and must be treated as exposed to residual fluvial and groundwater pressure. Its acceptability relies on robust structural waterproofing, hydrostatic design, controlled penetrations, pumped drainage, standby capacity, emergency storage, backflow prevention and safe internal escape. No residential or sleeping accommodation is proposed below ground.

The proposed drainage strategy separates surface water from foul water and directs surface runoff to the River Irwell through two gravity outfalls. Outfall B will serve the roof and higher north-eastern catchment through 375 mm carrier drainage at an invert of 26.540 mAOD, with a stated peak flow of 62.0 l/s and velocity of 1.4 m/s. Outfall A will serve the lower south-western catchment at an invert of 24.500 mAOD, with a stated peak flow of 6.2 l/s and velocity of 0.8 m/s.

Outfall B is above the previously reported design and extreme river levels. Outfall A is below the reported 1% AEP and climate-change river levels and will surcharge during elevated River Irwell conditions. It must therefore be modelled with an appropriate tailwater level and protected by a non-return valve or equivalent approved arrangement. The detailed design must demonstrate that surcharge cannot flood the lower external areas, basement or building thresholds.

Rain gardens, planters and potentially permeable paving will provide source control, interception and treatment. Two appropriately sized hydrodynamic vortex separators will provide downstream treatment before discharge, supplemented by catchpits, silt traps, trapped gullies and local treatment for higher-risk areas. These measures will be verified using a CIRIA C753 water-quality assessment.

Foul drainage will discharge to the United Utilities combined sewer in Water Street at manhole reference 1102, subject to survey, capacity confirmation and Section 106 approval. Basement foul drainage will be pumped to a gravity manhole before onward discharge. The current assumed peak foul flow is 32.13 l/s.

The strategy is technically viable in principle, subject to detailed hydraulic modelling, confirmation of river tailwater levels, completion of the water-quality assessment, coordination with the river wall and basement, and approval from the Environment Agency, Manchester City Council LLFA, United Utilities and the relevant Peel Ports or riparian interest.

12. Appendix A - Drainage GA

UNRESTRICTED DISCHARGE ASSUMED TO RIVER IRWELL, SUBJECT TO APPROVAL BY THE ENVIRONMENT AGENCY, PEEL HOLDINGS AND THE LLFA.

OUTFALL A
OUTFALL LEVEL: 24.500m

OUTFALL B
OUTFALL LEVEL: 26.540m

SWMH4
DOWNSTREAM DEFENDER
PEAK FLOW RATE 6.2 l/s
AX DISCHARGE VELOCITY: 0.8 m/s
0.600m DIA
CL 25.616
IL 24.531

225mm 1:94

225mm 1:74

SWMH3
0.600m DIA
CL 27.250
IL 25.675

SWMH8
DOWNSTREAM DEFENDER
PEAK FLOW RATE 62 l/s
MAX DISCHARGE VELOCITY: 1.4 m/s
1.500m DIA
CL 30.670
IL 26.585

225mm 1:102

SWMH7
1.200m DIA
CL 30.670
IL 27.670

225mm 1:32

225mm 1:71

WHOLE OF ROOF AREA TO DRAIN TO OUTFALL B

SWMH6
1.200m DIA
CL 28.445
IL 26.760

225mm 1:100

EXTERNAL AREAS TO BUILDING FRONT AND SIDE ARE TO DISCHARGE TO OUTFALL A

SWMH2
0.600m DIA
CL 27.253
IL 25.678

225mm 1:121

NEW QUAY STREET

ERVICE YARD

FOUL POP UPS TO BE COORDINATED WITH FUTURESERVE. IT IS ASSUMED THAT THE SWIMMING POOL OUTLET WILL CONNECT INTO THE FOUL DRAINAGE. CONNECTION TO THE UU COMBINED SEWER NETWORK IS SUBJECT TO APPROVAL FROM UNITED UTILITIES.

SWMH1
0.600m DIA
CL 26.800
IL 25.225

SWMH5
1.050m DIA
CL 27.900
IL 26.908

BIO-RETENTION / GREEN SuDS TO BE UTILISED AND DEVELOPED ACROSS THE SCHEME WITH THE LANDSCAPE ARCHITECT.

FWMH1

FWMH2

225mm 1:150

225mm 1:150

FOUL OUTFALL TO BE INSTALLED ABOVE EXISTING UU COMBINED SEWER, SUBJECT TO CCTV SURVEY OF SEWER

WATER STREET

General Notes:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED. WHERE THERE APPEARS TO BE A CONFLICT BETWEEN DIMENSIONS OR WHERE DIMENSIONS CANNOT BE DETERMINED FROM THE DRAWINGS, CONSULT THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.
3. THE CONTRACTOR SHALL:
   - 3.1. VERIFY EXISTING UTILITIES BEFORE STARTING WORKS.
   - 3.2. VERIFY THE DIMENSIONS SHOWN ON THE DRAWINGS BEFORE FABRICATION, SETTING OUT OR EXCAVATION OF THE WORK, AND SHALL BE HELD RESPONSIBLE FOR ANY ERRORS OR INACCURACIES RESULTING FROM FAILURE TO DO SO.
   - 3.3. CHECK AND VERIFY THE LOCATION AND LEVELS ALL EXISTING DRAINS, SEWERS, INSPECTION CHAMBERS AND MANHOLES AGAINST DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
4. THE SURFACE WATER DRAINAGE HAS BEEN DESIGNED FOR NO FLOODING FOR A 1 IN 100 YEAR PLUS 45% ALLOWANCE FOR CLIMATE CHANGE.
5. THE PROPOSED BUILDING OUTLINES SHOWN ON THIS DRAWING ARE FOR INFORMATION ONLY, REFER TO ARCHITECTS PLANS FOR PRECISE LOCATION SETTING OUT INFORMATION AND DETAILS. EXTERNAL MANHOLE COVER LEVELS TO BE CONFIRMED BY LANDSCAPE ARCHITECT AND ARE SUBJECT TO THE RECEIPT OF A PROPOSED LEVELS STRATEGY.
6. ALL DRAINAGE BELOW SLAB AND ALL DRAINAGE OUTSIDE BUILDING TO BE STRUCTURED WALL PVC-u.
7. ALL DROP POINTS TAKEN BELOW UNDERSIDE OF SLAB WITHIN VOIDED AREA UNLESS OTHERWISE NOTED.
8. ALL DRAINAGE PIPEWORK SHALL BE LAID SOFFIT TO SOFFIT UNLESS OTHERWISE STATED. ALL STACK CONNECTIONS TO BELOW THE SLAB AND RAINWATER PIPES TO HAVE RODDABLE ACCESS ABOVE SLAB. ALL STACK CONNECTIONS TO BELOW THE SLAB AND RAINWATER PIPES TO HAVE RODDABLE ACCESS ABOVE GROUND.
9. ALL UNDERSLAB DRAINAGE SHALL BE CLEAR OF FOUNDATIONS UNLESS SHOWN OTHERWISE. USE OF SHORT/ LONG RADIUS BENDS IS ACCEPTABLE PROVIDED THEY ARE KEPT TO A MINIMUM AND USED WHERE UNAVOIDABLE.
10. CONTRACTOR TO PROVIDE ADEQUATE PROTECTION TO SHALLOW PIPES. PIPE PROTECTION DETAIL TO BE PROVIDED FOR PIPES WITH COVER LESS THAN 0.9m ABOVE THE CROWN OF THE PIPE FOR ROADS AND 0.6m FOR SOFT AND PEDESTRIAN AREAS AND UNDER ALL FOUNDATIONS AND WHERE PIPES LAID WITHIN 1m OF FOUNDATIONS.
11. CONCRETE ENCASEMENT OF THE PIPEWORK SHALL BE REQUIRED WHERE THE VERTICAL CLEARANCE BETWEEN TWO PIPES CROSSING IS LESS THAN 300mm.
12. ROCKER PIPES ARE TO BE PROVIDED AT ALL CONCRETE CASED INTERFACES.
13. ALL PROPRIETARY PRODUCTS / SYSTEMS TO BE VERIFIED BY THE MANUFACTURER AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION / DETAILS.

REV	DATE	ISSUE	DRN	APR
P02	12/10/26	PRE PLANNING ISSUE	QK	DEP
P01	25/09/26	PRE PLANNING ISSUE	QK	EW

STATUS: S2
STATUS DESCRIPTION: For Planning

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CLIENT: **Select Property**

PROJECT: **One St Johns**

DRAWING TITLE: **Drainage General Arrangement**

DCE PROJECT No.: 260862

DRAWN BY:	CHECKED BY:	DRAWING No.:	
QK	EW	0600	
APPROVED BY:	DATE:	SCALE:	REVISION:
DEP	12th OCT 2026	1:100	02

OSJ-DCE-Z1-G580-PL-Grd-0600

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13. Appendix B – Hydraulic Calculations

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Phase	Company Address:		

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)
SWMH5	Manhole	18.182	-14.620	27.900	0.992	26.908	Circular	1.350
SWMH3	Manhole	-18.626	11.569	27.250	2.657	24.593	Circular	0.600
SWMH4	Manhole	-18.543	17.724	25.200	0.669	24.531	Circular	0.600
SWMH8	Manhole	18.245	17.739	27.910	1.325	26.585	Circular	1.800
SWMH7	Manhole	23.498	17.793	27.910	1.197	26.713	Circular	1.200
OUTFALL 2	Manhole	18.149	22.236	27.910	1.370	26.540	Circular	0.300
SWMH6	Manhole	18.211	0.234	27.850	1.090	26.760	Circular	1.350
SWMH1	Manhole	-18.394	-14.026	26.800	1.952	24.848	Circular	0.600
SWMH2	Manhole	-18.475	-5.110	27.253	2.494	24.759	Circular	0.600
OUTFALL 1	Manhole	-18.573	20.795	25.210	0.710	24.500	Circular	0.300

Name	Lock
SWMH5	None
SWMH3	None
SWMH4	None
SWMH8	None
SWMH7	None
OUTFALL 2	None
SWMH6	None
SWMH1	None
SWMH2	None
OUTFALL 1	None

Inlets

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
SWMH5	Inlet	Footpath 3	(None)	No Restriction
	Inlet (1)	Roof 3	(None)	No Restriction
	Inlet (2)	Roof 4	(None)	No Restriction
	Inlet (5)	Catchment Area (5)	(None)	No Restriction
SWMH3	Inlet (1)	S1.001	(None)	No Restriction
	Inlet (3)	Catchment Area (2)	(None)	No Restriction
SWMH4	Inlet	S1.002	(None)	No Restriction
SWMH8	Inlet	S2.001	(None)	No Restriction
	Inlet (1)	S3.0000	(None)	No Restriction
	Inlet (3)	Footpath 5	(None)	No Restriction
	Inlet (4)	Catchment Area (3)	(None)	No Restriction
SWMH7	Inlet (1)	Soft Landscape	(None)	No Restriction
	Inlet (2)	Catchment Area (4)	(None)	No Restriction
OUTFALL 2	Inlet	S2.002	(None)	No Restriction
SWMH6	Inlet	S2.000	(None)	No Restriction
	Inlet (1)	Roof 1	(None)	No Restriction
	Inlet (2)	Roof 2	(None)	No Restriction
SWMH1	Inlet (3)	Catchment Area (1)	(None)	No Restriction
SWMH2	Inlet	S1.000	(None)	No Restriction
OUTFALL 1	Inlet	S1.003	(None)	No Restriction

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Phase	Company Address:		

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
SWMH5	Outlet	S2.000	Free Discharge
SWMH3	Outlet	S1.002	Free Discharge
SWMH4	Outlet	S1.003	Flap Valve
	Diameter (m)	0.225	
	Coefficient of Discharge	0.600	
	Invert Level (m)	24.531	
SWMH8	Outlet	S2.002	Flap Valve
	Diameter (m)	0.375	
	Coefficient of Discharge	0.600	
	Invert Level (m)	26.585	
SWMH7	Outlet	S3.0000	Free Discharge
SWMH6	Outlet	S2.001	Free Discharge
SWMH1	Outlet	S1.000	Free Discharge
SWMH2	Outlet	S1.001	Free Discharge

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Connections Storm Phase: Phase	Company Address:		

Name	Length (m)	Connection Type	Slope (1:X)	Manning's n	Colebrook-White Roughness (mm)	Diameter / Base Width (mm)	Upstream Cover Level (m)	Upstream Invert Level (m)
S3.0000	5.253	Pipe	41.036		0.6	300	27.910	26.713
S1.002	6.155	Pipe	99.282		0.6	225	27.250	24.593
S2.002	4.497	Pipe	99.942		0.6	375	27.910	26.585
S2.000	14.854	Pipe	100.365		0.6	375	27.900	26.908
S2.001	17.505	Pipe	100.029		0.6	375	27.850	26.760
S1.000	8.916	Pipe	100.181		0.6	225	26.800	24.848
S1.001	16.680	Pipe	100.482		0.6	225	27.253	24.759
S1.003	3.071	Pipe	99.063		0.6	225	25.200	24.531

Name	Downstream Cover Level (m)	Downstream Invert Level (m)	Part Family	Lock	Flow Restriction (L/s)	Culvert Type	Culvert Entrance
S3.0000	27.910	26.585		None		(None)	(None)
S1.002	25.200	24.531		None		(None)	(None)
S2.002	27.910	26.540		None	313.06	(None)	(None)
S2.000	27.850	26.760		None		(None)	(None)
S2.001	27.910	26.585		None		(None)	(None)
S1.000	27.253	24.759		None		(None)	(None)
S1.001	27.250	24.593		None		(None)	(None)
S1.003	25.210	24.500		None	78.83	(None)	(None)

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Inflow Summary Storm Phase: Phase	Company Address:		

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area (1)	SWMH1		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (2)	SWMH3		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (3)	SWMH8		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (4)	SWMH7		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (5)	SWMH5		Time of Concentration	0.004	100	0	100	0.004
Footpath 3	SWMH5		Time of Concentration	0.001	100	0	100	0.001
Footpath 5	SWMH8		Time of Concentration	0.007	100	0	100	0.007
Roof 1	SWMH6		Time of Concentration	0.035	100	0	100	0.035
Roof 2	SWMH6		Time of Concentration	0.035	100	0	100	0.035
Roof 3	SWMH5		Time of Concentration	0.022	100	0	100	0.022
Roof 4	SWMH5		Time of Concentration	0.022	100	0	100	0.022
Soft Landscape	SWMH7		Time of Concentration	0.011	0	0	0	0.000
TOTAL		**0.0**		**0.162**				**0.151**

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address:		

Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

FSR

Type: FSR

Return Period (years)	2.0
Region	England And Wales
M5-60 (mm)	18.0
Ratio R	0.358

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Pipe Size Library

Default

Add. Increment (mm)	75
Max. Diameter (mm)	0

Diameter (mm)	Min. Slope (1:X)	Max. Slope (1:X)
100	0.00	0.00
150	0.00	0.00

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address:		

Manhole Options

Apply Offset	☐

Manhole Size Library

Default

Diameter / Width

Connection (mm)	Diameter / Length (m)	Width (m)
0	1.200	0.000
375	1.350	0.000
500	1.500	0.000
750	1.800	0.000

Additional Sizing

Connection (mm)	900
Diameter / Length (m)	0.900
Width (m)	0.000

Depth

Depth (m)	Diameter / Length (m)	Width (m)
0.000	1.050	0.000
1.500	1.200	0.000

Access

Depth (m)	Ladder Protrusion (mm)
0.000	130
3.000	230

Benching Requirements

Landing Width (mm)	500
Benching Width (mm)	225

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Outfall Details Storm Phase: Phase	Company Address:		

Outfalls

Outfall	Outfall Type	Gated	Fixed Surcharged Level (m)	Level Curve
OUTFALL 2	Free Discharge			
OUTFALL 1	Free Discharge			

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	Company Address:		

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address:		

FSR: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m^3)
Roof 1	FSR: 2 years: +0 %: 15 mins: Summer	0.04	5.3	2.299
Roof 2	FSR: 2 years: +0 %: 15 mins: Summer	0.03	5.2	2.260
Roof 3	FSR: 2 years: +0 %: 15 mins: Summer	0.02	3.2	1.407
Roof 4	FSR: 2 years: +0 %: 15 mins: Summer	0.02	3.2	1.407
Footpath 3	FSR: 2 years: +0 %: 15 mins: Summer	0.00	0.2	0.093
Footpath 5	FSR: 2 years: +0 %: 15 mins: Summer	0.01	1.0	0.452
Soft Landscape	FSR: 2 years: +0 %: 15 mins: Summer	0.01	0.0	0.000
Catchment Area (1)	FSR: 2 years: +0 %: 15 mins: Summer	0.01	1.4	0.605
Catchment Area (2)	FSR: 2 years: +0 %: 15 mins: Summer	0.01	0.8	0.335
Catchment Area (3)	FSR: 2 years: +0 %: 15 mins: Summer	0.01	0.9	0.404
Catchment Area (4)	FSR: 2 years: +0 %: 15 mins: Summer	0.00	0.6	0.269
Catchment Area (5)	FSR: 2 years: +0 %: 15 mins: Summer	0.00	0.6	0.248

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address:		

FSR: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m^3)
Roof 1	FSR: 30 years: +0 %: 15 mins: Summer	0.04	10.0	4.348
Roof 2	FSR: 30 years: +0 %: 15 mins: Summer	0.03	9.8	4.270
Roof 3	FSR: 30 years: +0 %: 15 mins: Summer	0.02	6.1	2.668
Roof 4	FSR: 30 years: +0 %: 15 mins: Summer	0.02	6.1	2.662
Footpath 3	FSR: 30 years: +0 %: 15 mins: Summer	0.00	0.4	0.174
Footpath 5	FSR: 30 years: +0 %: 15 mins: Summer	0.01	2.0	0.856
Soft Landscape	FSR: 30 years: +0 %: 15 mins: Summer	0.01	0.0	0.000
Catchment Area (1)	FSR: 30 years: +0 %: 15 mins: Summer	0.01	2.6	1.144
Catchment Area (2)	FSR: 30 years: +0 %: 15 mins: Summer	0.01	1.5	0.641
Catchment Area (3)	FSR: 30 years: +0 %: 15 mins: Summer	0.01	1.7	0.758
Catchment Area (4)	FSR: 30 years: +0 %: 15 mins: Summer	0.00	1.2	0.506
Catchment Area (5)	FSR: 30 years: +0 %: 15 mins: Summer	0.00	1.1	0.470

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address:		

FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m^3)
Roof 1	FSR: 100 years: +45 %: 15 mins: Summer	0.04	18.8	8.144
Roof 2	FSR: 100 years: +45 %: 15 mins: Summer	0.03	18.4	8.004
Roof 3	FSR: 100 years: +45 %: 15 mins: Summer	0.02	11.5	4.990
Roof 4	FSR: 100 years: +45 %: 15 mins: Summer	0.02	11.5	4.984
Footpath 3	FSR: 100 years: +45 %: 15 mins: Summer	0.00	0.8	0.329
Footpath 5	FSR: 100 years: +45 %: 15 mins: Summer	0.01	3.7	1.600
Soft Landscape	FSR: 100 years: +45 %: 15 mins: Summer	0.01	0.0	0.000
Catchment Area (1)	FSR: 100 years: +45 %: 15 mins: Summer	0.01	4.9	2.142
Catchment Area (2)	FSR: 100 years: +45 %: 15 mins: Summer	0.01	2.8	1.204
Catchment Area (3)	FSR: 100 years: +45 %: 15 mins: Summer	0.01	3.3	1.420
Catchment Area (4)	FSR: 100 years: +45 %: 15 mins: Summer	0.00	2.2	0.950
Catchment Area (5)	FSR: 100 years: +45 %: 15 mins: Summer	0.00	2.0	0.878

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		

FSR: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SWMH5	FSR: 2 years: +0 %: 15 mins: Summer	27.900	26.908	26.956	0.048	7.3	0.068	0.000	7.1	3.154	OK
SWMH3	FSR: 2 years: +0 %: 15 mins: Summer	27.250	24.593	24.624	0.031	2.1	0.009	0.000	2.0	0.933	OK
SWMH4	FSR: 2 years: +0 %: 15 mins: Summer	25.200	24.531	24.571	0.040	2.0	0.011	0.000	1.9	0.930	OK
SWMH8	FSR: 2 years: +0 %: 15 mins: Summer	27.910	26.585	26.712	0.127	19.5	0.323	0.000	17.9	8.804	OK
SWMH7	FSR: 2 years: +0 %: 15 mins: Summer	27.910	26.713	26.725	0.012	0.6	0.014	0.000	0.6	0.269	OK
OUTFALL 2	FSR: 2 years: +0 %: 15 mins: Summer	27.910	26.540	26.612	0.072	16.1	0.000	0.000	16.1	8.727	OK
SWMH6	FSR: 2 years: +0 %: 15 mins: Summer	27.850	26.760	26.833	0.073	17.6	0.104	0.000	16.9	7.712	OK
SWMH1	FSR: 2 years: +0 %: 15 mins: Summer	26.800	24.848	24.874	0.026	1.4	0.007	0.000	1.4	0.603	OK
SWMH2	FSR: 2 years: +0 %: 15 mins: Summer	27.253	24.759	24.783	0.024	1.4	0.007	0.000	1.3	0.601	OK
OUTFALL 1	FSR: 2 years: +0 %: 15 mins: Summer	25.210	24.500	24.526	0.026	1.5	0.000	0.000	1.5	0.910	OK

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		

FSR: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SWMH5	FSR: 30 years: +0 %: 15 mins: Summer	27.900	26.908	26.975	0.067	13.8	0.096	0.000	13.4	5.972	OK
SWMH3	FSR: 30 years: +0 %: 15 mins: Summer	27.250	24.593	24.636	0.043	3.9	0.012	0.000	3.8	1.777	OK
SWMH4	FSR: 30 years: +0 %: 15 mins: Summer	25.200	24.531	24.593	0.062	3.8	0.018	0.000	3.7	1.773	OK
SWMH8	FSR: 30 years: +0 %: 15 mins: Summer	27.910	26.585	26.777	0.192	36.4	0.490	0.000	33.9	16.669	OK
SWMH7	FSR: 30 years: +0 %: 15 mins: Summer	27.910	26.713	26.777	0.064	1.2	0.073	0.000	0.4	0.507	OK
OUTFALL 2	FSR: 30 years: +0 %: 15 mins: Summer	27.910	26.540	26.640	0.100	31.3	0.000	0.000	31.3	16.558	OK
SWMH6	FSR: 30 years: +0 %: 15 mins: Summer	27.850	26.760	26.861	0.101	33.2	0.144	0.000	32.3	14.589	OK
SWMH1	FSR: 30 years: +0 %: 15 mins: Summer	26.800	24.848	24.883	0.035	2.6	0.010	0.000	2.6	1.142	OK
SWMH2	FSR: 30 years: +0 %: 15 mins: Summer	27.253	24.759	24.792	0.033	2.6	0.009	0.000	2.5	1.139	OK
OUTFALL 1	FSR: 30 years: +0 %: 15 mins: Summer	25.210	24.500	24.537	0.037	3.1	0.000	0.000	3.1	1.744	OK

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		

FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SWMH5	FSR: 100 years: +45 %: 15 mins: Summer	27.900	26.908	27.001	0.093	25.8	0.133	0.000	25.3	11.180	OK
SWMH3	FSR: 100 years: +45 %: 15 mins: Summer	27.250	24.593	24.654	0.061	7.4	0.017	0.000	7.2	3.337	OK
SWMH4	FSR: 100 years: +45 %: 15 mins: Summer	25.200	24.531	24.626	0.095	7.2	0.027	0.000	7.0	3.333	OK
SWMH8	FSR: 100 years: +45 %: 15 mins: Summer	27.910	26.585	26.875	0.290	68.0	0.738	0.000	64.7	31.261	OK
SWMH7	FSR: 100 years: +45 %: 15 mins: Summer	27.910	26.713	26.875	0.162	2.2	0.183	0.000	1.7	0.970	OK
OUTFALL 2	FSR: 100 years: +45 %: 15 mins: Summer	27.910	26.540	26.682	0.142	61.4	0.000	0.000	61.4	31.113	OK
SWMH6	FSR: 100 years: +45 %: 15 mins: Summer	27.850	26.760	26.913	0.153	62.5	0.219	0.000	59.9	27.325	OK
SWMH1	FSR: 100 years: +45 %: 15 mins: Summer	26.800	24.848	24.897	0.049	4.9	0.014	0.000	4.9	2.140	OK
SWMH2	FSR: 100 years: +45 %: 15 mins: Summer	27.253	24.759	24.805	0.046	4.9	0.013	0.000	4.7	2.136	OK
OUTFALL 1	FSR: 100 years: +45 %: 15 mins: Summer	25.210	24.500	24.552	0.052	6.2	0.000	0.000	6.2	3.291	OK

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address:		

FSR: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m^3)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S3.0000	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	SWMH7	SWMH8	27.910	26.725	0.069	0.269	0.0	0	0.6	OK
S1.002	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	SWMH3	SWMH4	27.250	24.624	0.036	0.933	0.5	0.04	2.0	OK
S2.002	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	SWMH8	OUTFALL 2	27.910	26.712	0.076	8.727	1.0	0.08	16.1	OK
S2.000	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	SWMH5	SWMH6	27.900	26.956	0.060	3.154	0.6	0.04	7.1	OK
S2.001	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	SWMH6	SWMH8	27.850	26.833	0.100	7.712	0.7	0.08	16.9	OK
S1.000	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	SWMH1	SWMH2	26.800	24.874	0.025	0.603	0.6	0.03	1.4	OK
S1.001	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	SWMH2	SWMH3	27.253	24.783	0.028	0.601	0.5	0.02	1.3	OK
S1.003	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	SWMH4	OUTFALL 1	25.200	24.571	0.027	0.910	0.6	0.03	1.5	OK

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address:		

FSR: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m^3)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S3.0000	FSR: 30 years: +0 %: 30 mins: Summer	Pipe	SWMH7	SWMH8	27.910	26.748	0.098	0.677	0.0	0	0.8	OK
S1.002	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	SWMH3	SWMH4	27.250	24.636	0.053	1.777	0.5	0.07	3.8	OK
S2.002	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	SWMH8	OUTFALL 2	27.910	26.777	0.107	16.558	1.2	0.16	31.3	OK
S2.000	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	SWMH5	SWMH6	27.900	26.975	0.084	5.972	0.7	0.07	13.4	OK
S2.001	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	SWMH6	SWMH8	27.850	26.861	0.147	14.589	0.8	0.16	32.3	OK
S1.000	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	SWMH1	SWMH2	26.800	24.883	0.034	1.142	0.7	0.05	2.6	OK
S1.001	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	SWMH2	SWMH3	27.253	24.792	0.038	1.139	0.6	0.05	2.5	OK
S1.003	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	SWMH4	OUTFALL 1	25.200	24.593	0.039	1.744	0.7	0.06	3.1	OK

Project:	Date: 18/09/2026		
	Designed by: Ethan.Worrall	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address:		

FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m^3)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S3.0000	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH7	SWMH8	27.910	26.875	0.226	0.948	0.1	0.01	1.7	OK
S1.002	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH3	SWMH4	27.250	24.654	0.078	3.337	0.6	0.14	7.2	OK
S2.002	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH8	OUTFALL 2	27.910	26.875	0.155	31.113	1.4	0.31	61.4	OK
S2.000	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH5	SWMH6	27.900	27.001	0.123	11.180	0.8	0.13	25.3	OK
S2.001	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH6	SWMH8	27.850	26.913	0.221	27.325	0.9	0.3	59.9	OK
S1.000	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH1	SWMH2	26.800	24.897	0.047	2.140	0.8	0.09	4.9	OK
S1.001	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH2	SWMH3	27.253	24.805	0.054	2.136	0.6	0.09	4.7	OK
S1.003	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH4	OUTFALL 1	25.200	24.626	0.055	3.291	0.8	0.12	6.2	OK

14. Appendix C – Flood Map for Planning

Flood map for planning

Your reference	Location (easting/northing)	Created
Unspecified	**383119/398178**	**22 September 2026 15:42**

Your selected location is in flood zone 2, an area with a medium probability of flooding.

This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see https://www.gov.uk/guidance/flood-risk-assessment-standing-advice)

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2026 AC0000807064. https://flood-map-for-planning.service.gov.uk/os-terms



Environment Agency

Flood map for planning

Your reference
Unspecified

Location (easting/northing)
383119/398178

Scale
1:2,500

Created
22 Sep 2026 15:43

- Flood zone 3
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

0 20 40 60 m

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Flood risk assessment data

Location of site: 383118/398180 (shown as easting and northing coordinates)
Document created on: 3 September 2026
This information was previously known as a product 4.
Customer reference number: TBUKM6APT9ND

Map showing the location that flood risk assessment data has been requested for.



How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

> **We recommend that you work with a flood risk consultant to get your flood risk assessment.**

Included in this document

In this document you'll find:

- how to find information about other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- past floods
- flood defence locations and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- modelled data
- modelled climate change data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Other sources of flooding

To find out about other factors that might affect the flood risk of this location, you should check:

- reservoir flood risk
- groundwater flood risk - you could use the British Geological Survey groundwater flooding data, groundwater: current status and flood risk and the guide on mining and groundwater constraints for development - further information may be available from the lead local flood authority (LLFA)
- your local planning authority's strategic flood risk assessment (SFRA), which includes future flood risk

Your lead local flood authority is Manchester District.

For information about sewer flooding, contact the relevant water company for the area.

About the models used

Model name: Manchester Ship Canal 2018
Scenario(s): Normal Operation, Latchford 1 Gate Closed, Latchford 3 Gate Closed Date: 1 May 2020

These models contain the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occuring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 3.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

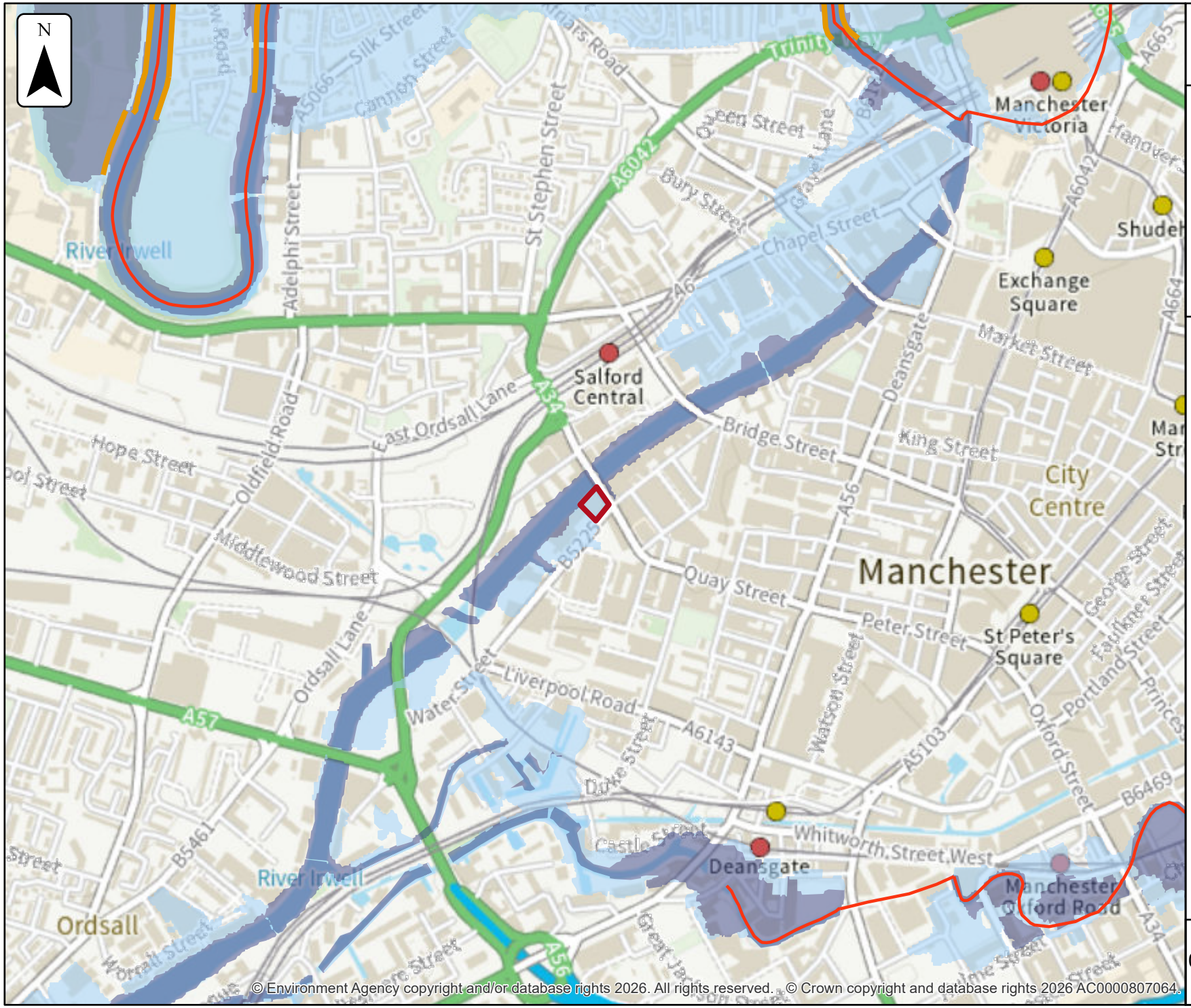
- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change



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Environment Agency

Flood map for planning

Location (easting/northing)
383118/398180

Scale
1:10,000

Created
3 Sep 2026

- Selected area
- Main river
- Flood defence
- Flood Zone 3
- Flood Zone 2

0 100 200 300 400 500
metres

Past floods

Past flood events included in this document

The recorded flood outlines included in this document are for areas of land local to your site location that have been flooded by any of these sources:

- ephemeral water
- main rivers
- ordinary watercourses
- the sea
- unknown

Data limitations

The outlines do not include flooding from:

- drainage where rainfall has led to surface water ponding or overland runoff
- artificial, water-bearing sewer, water supply and wastewater treatment pipelines

Changes to flood defences

The defences (also known as assets) that were in place may also have changed. For example, assets may have been built more recently than the last recorded flood outline.

What the recorded flood outlines dataset is

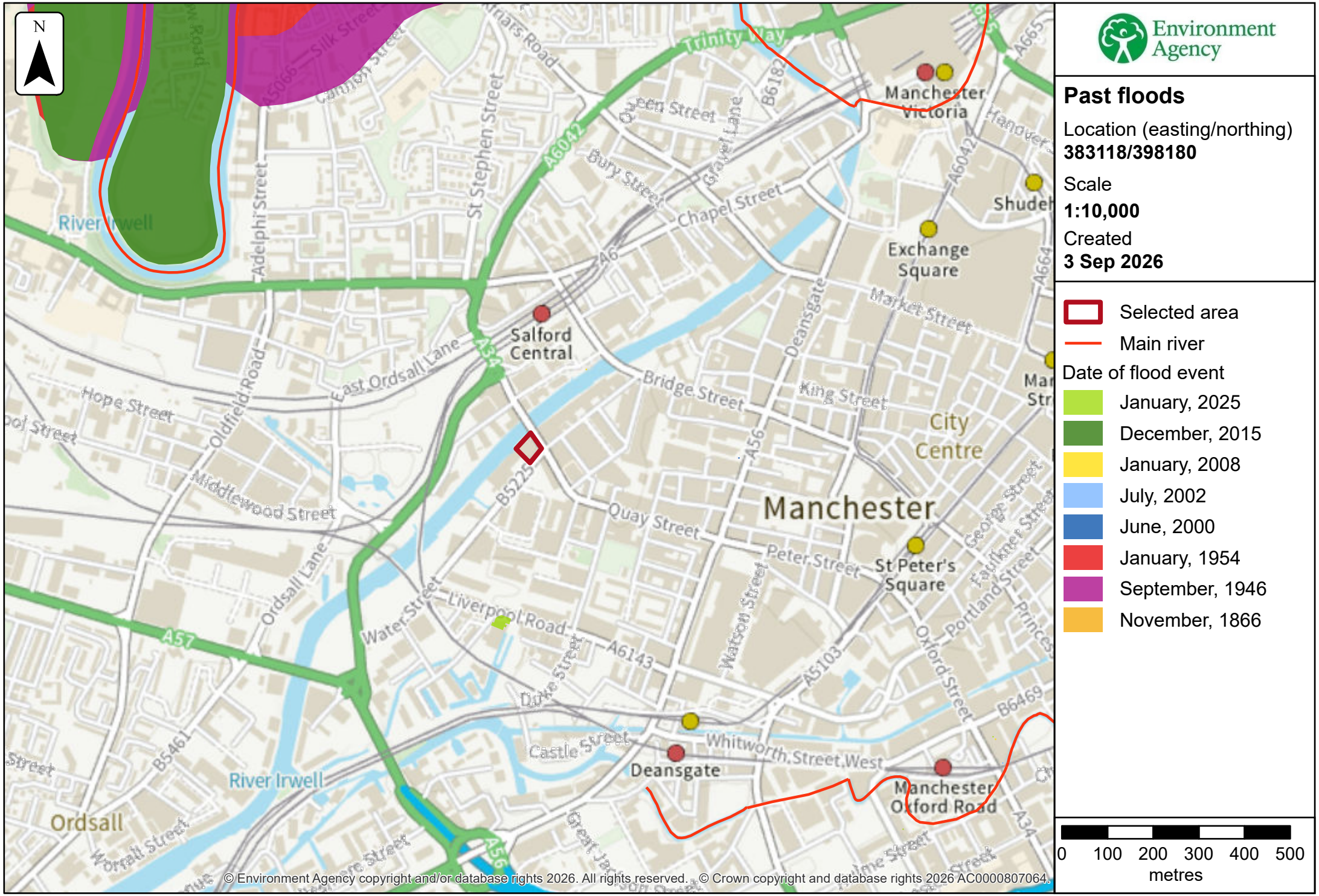
The recorded flood outlines are a geographical information system (GIS) data layer that show our verified records of areas that have flooded in the past from:

- rivers
- the sea
- groundwater
- surface water

Download the complete recorded flood outlines dataset, which includes data quality flags for outlines recorded after April 2020. This indicates the confidence we have in an outline.

Get flood information from other organisations

Contact Manchester District Lead Local Flood Authority (LLFA) and your drainage board to get information about past flooding caused by surface water or drainage systems.



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Data on past flood events

Start date	End date	Source of flood	Cause of flood	Affects location
1 January 2025	1 January 2025	unknown	unknown	No
26 December 2015	26 December 2015	main river	overtopping of defences	No
21 January 2008	22 January 2008	main river	unknown	No
30 July 2002	31 July 2002	ordinary watercourse	unknown	No
1 June 2000	2 June 2000	unknown	channel capacity exceeded (no raised defences)	No
21 January 1954	22 January 1954	main river	channel capacity exceeded (no raised defences)	No
20 September 1946	21 September 1946	main river	channel capacity exceeded (no raised defences)	No
01 November 1866	02 November 1866	main river	channel capacity exceeded (no raised defences)	No

Flood defences and attributes

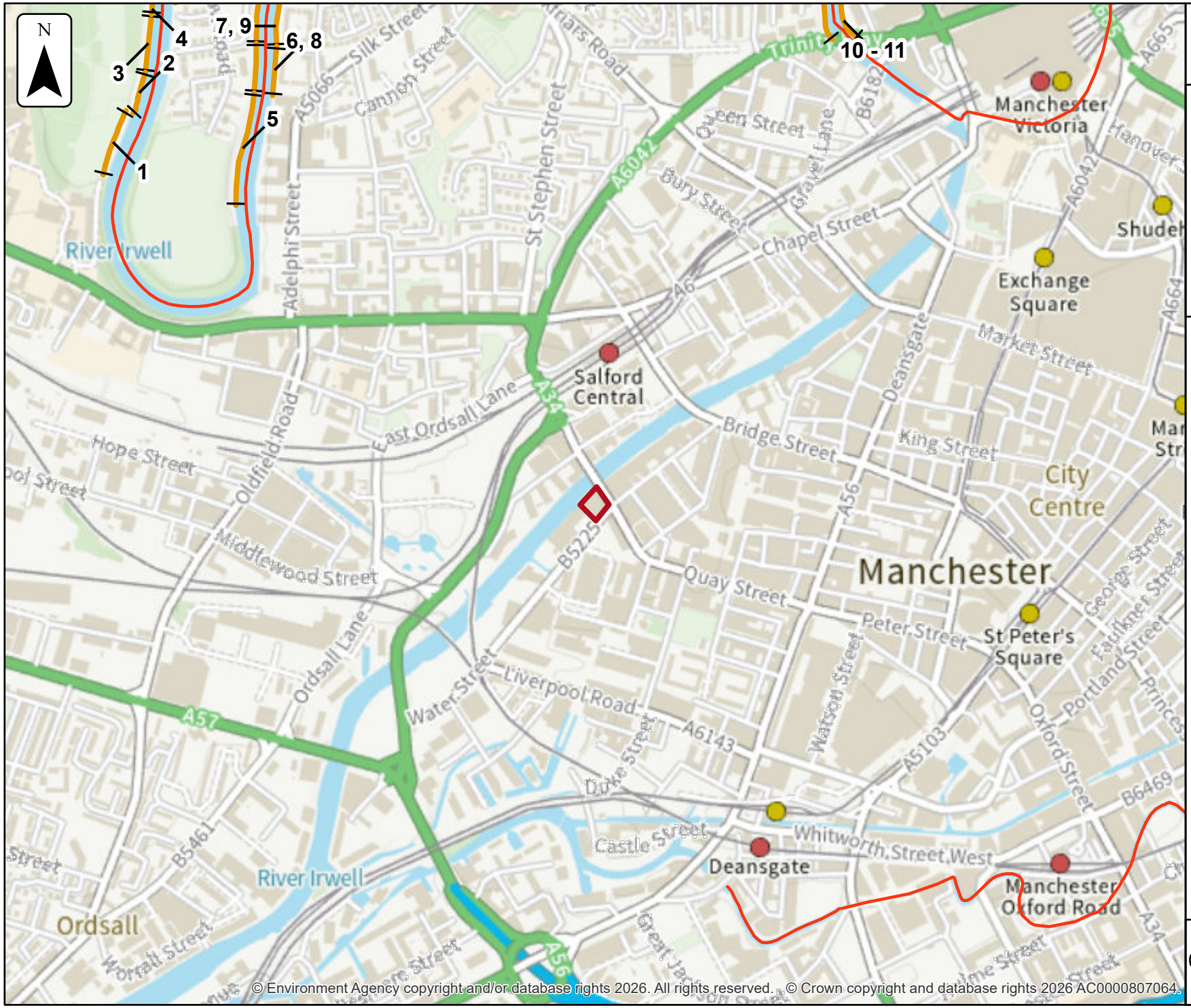
The flood defences map shows the location of the flood defences present.

The flood defences data table shows the type of defences, their condition and the standard of protection. It shows the height above sea level of the top of the flood defence (crest level). The height is In mAOD which is the metres above the mean sea level at Newlyn, Cornwall.

It's important to remember that flood defence data may not be updated on a regular basis. The information here is based on the best available data.

Use this information:

- to help you assess if there is a reduced flood risk for this location because of defences
- with any information in the modelled data section to find out the impact of defences on flood risk



Environment Agency

Flood defences

Location (easting/northing)
383118/398180

Scale
1:10,000

Created
3 Sep 2026

- Selected area
- Main river
- Flood defence

0 100 200 300 400 500
metres

Flood defences data

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
1	71750	Embankment	75	Good	29.52	28.93	
2	89041	Embankment	75	Good	29.04	28.94	
3	89018	Embankment	75	Good	29.01	29.13	
4	89020	Engineered High Ground	75	Good	24.99	24.30	
5	88845	Engineered High Ground	75	Fair	24.56	22.22	
6	88843	Engineered High Ground	75	Good	22.22	27.99	
7	123679	Embankment	75	Good	27.48	27.77	
8	88844	Engineered High Ground	75	Fair	27.10	29.19	
9	88842	Engineered High Ground	75	Fair	29.19	23.06	
10	90728	Engineered High Ground	75	Fair	27.10	25.58	

Any blank cells show where a particular value has not been recorded for an asset.

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
11	88831	Engineered High Ground	75	Fair	27.44	27.66	

Any blank cells show where a particular value has not been recorded for an asset.

Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

Climate change

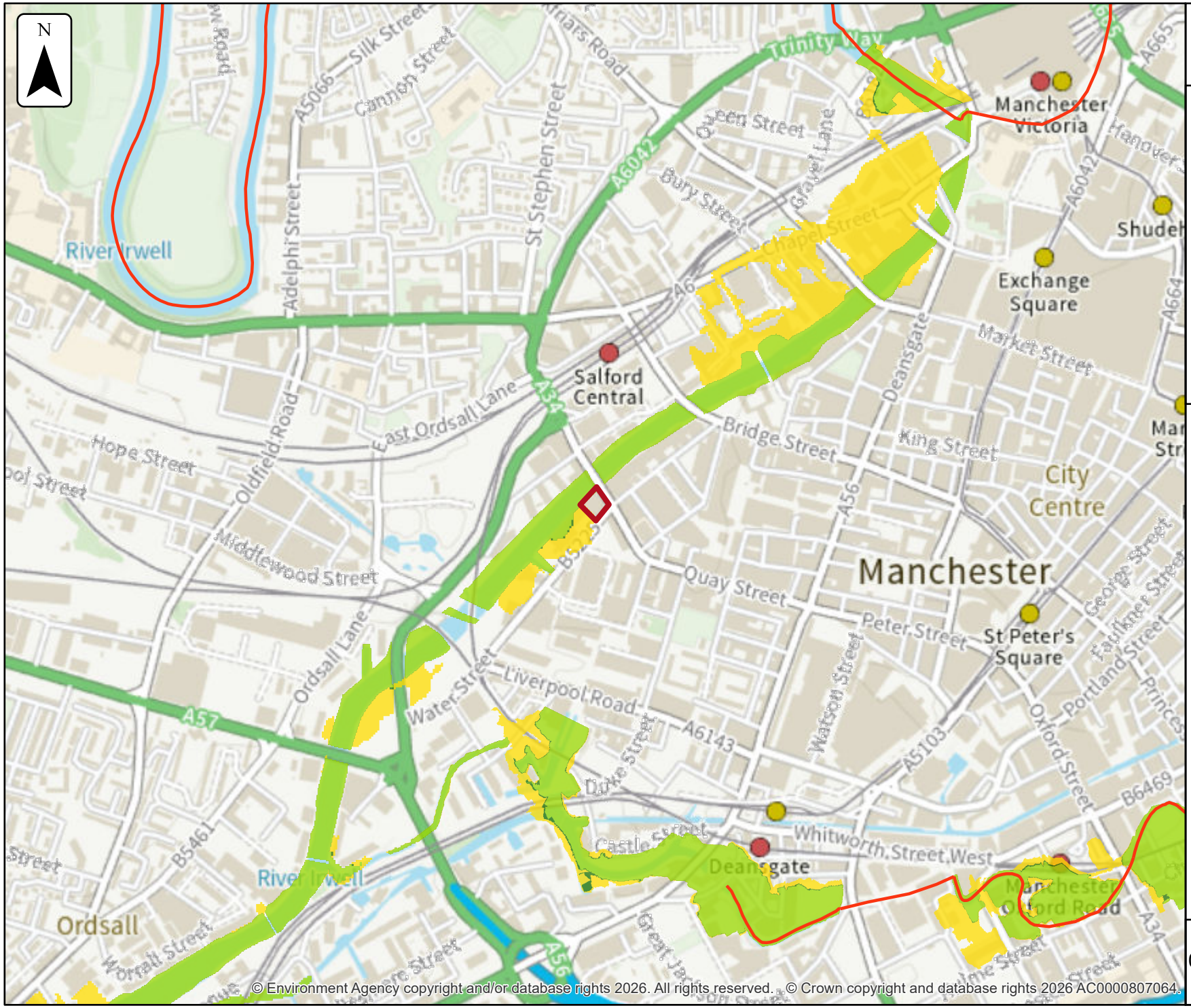
The climate change data included in the models may not include the latest flood risk assessment climate change allowances. Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

- Defences removed modelled fluvial: risk of flooding from rivers where flood defences have been removed
- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- No defences exist climate change modelled fluvial: risk of flooding from rivers where there are no flood defences, including estimated impact of climate change



Environment Agency

Climate change modelled fluvial extent

Location (easting/northing)
383118/398180

Scale
1:10,000

Created
3 Sep 2026

Model name
Manchester Ship 2018

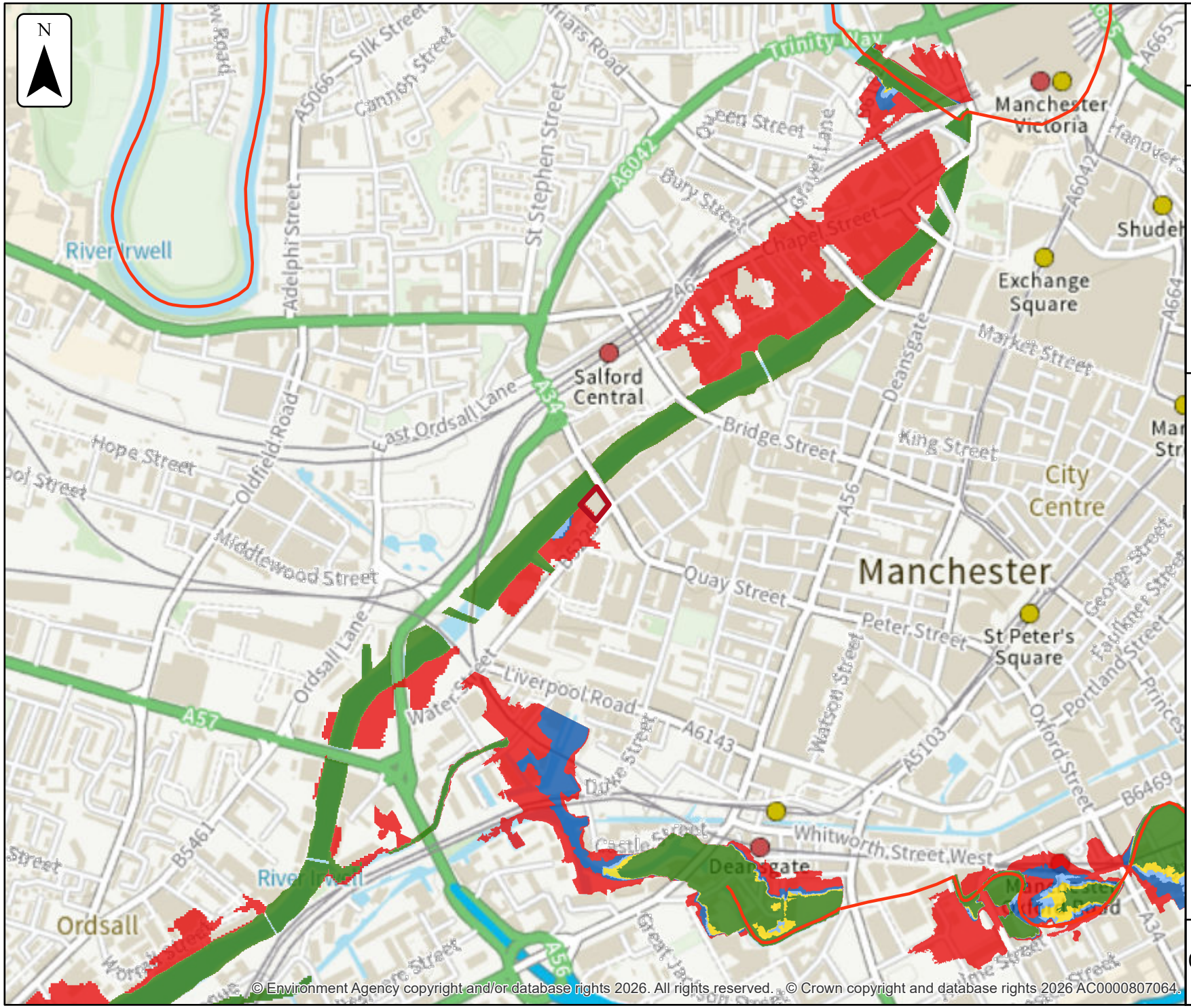
- Selected area
- Main river

Modelled flood extent

- 1% AEP (+30%)
- 1% AEP (+35%)
- 1% AEP (+70%)

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres



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Environment Agency

Modelled fluvial extent

Location (easting/northing)
383118/398180

Scale
1:10,000

Created
3 Sep 2026

Model name
Manchester Ship 2018

Selected area

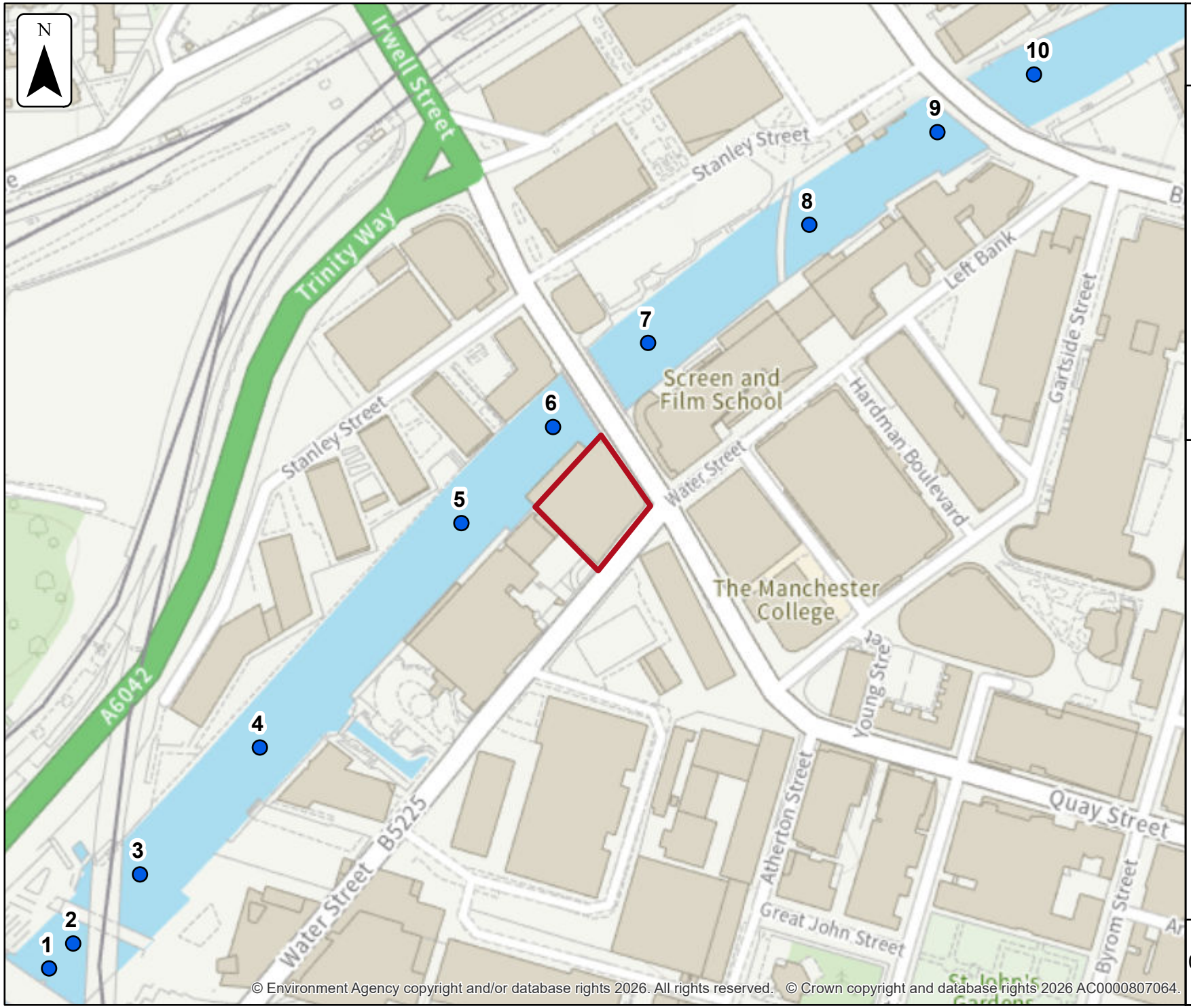
Main river

Modelled flood extent

- 2% AEP
- 1.33% AEP
- 1% AEP
- 0.5% AEP
- 0.1% AEP

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres



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Environment Agency

Modelled fluvial node locations

Location (easting/northing)
383118/398180

Scale
1:2,500

Created
3 Sep 2026

Model name **Manchester Ship 2018**

- Selected area
- Modelled location
- Main river

0 25 50 75 100 125
metres

					Normal Operation											Latchford 1 Gate Closed	Latchford 3 Gate Closed	
Map Reference	Model Node Reference	Easting	Northing	Data	20 % AEP (1 in 5 year)	10 % AEP (1 in 10 year)	4 % AEP (1 in 25 year)	2 % AEP (1 in 50 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	1 % AEP (1 in 100 year) + 30% increase in flow	1 % AEP (1 in 100 year) + 35% increase in flow	1 % AEP (1 in 100 year) + 70% increase in flow	0.5 % AEP (1 in 200 year)	0.1 % AEP (1 in 1000 year)	1 % AEP (1 in 100 year)	1 % AEP (1 in 100 year)	0.1 % AEP (1 in 1000 year)
1	ea013_0251_IRWZ01_0737	382852	397954	Modelled Water Level (m aodN)	23.15	23.41	23.78	23.99	24.12	24.29	24.72	24.81	25.84	24.62	26.13	24.29	24.29	26.16
				Modelled Flow (cumecs)	310.37	351.45	411.44	445.45	466.75	495.88	573.59	589.34	745.05	553.24	773.93	495.88	495.88	770.44
2	ea013_0251_IRWZ01_1361	383331	398389	Modelled Water Level (m aodN)	23.74	24.03	24.45	24.69	24.84	25.03	25.55	25.65	26.81	25.42	27.10	25.03	25.03	27.14
				Modelled Flow (cumecs)	310.19	351.28	411.22	445.16	466.46	495.60	573.24	588.99	744.53	552.84	773.13	495.60	495.60	770.10
3	ea013_0251_IRWZ01_1254	383222	398316	Modelled Water Level (m aodN)	23.51	23.78	24.17	24.39	24.52	24.69	25.13	25.22	26.20	25.03	26.46	24.69	24.69	26.49
				Modelled Flow (cumecs)	310.21	351.31	411.26	445.21	466.51	495.65	573.29	589.05	744.54	552.91	773.25	495.65	495.65	770.19
4	ea013_0251_IRWZ01_0776	382896	398000	Modelled Water Level (m aodN)	23.11	23.36	23.73	23.95	24.07	24.24	24.67	24.76	25.82	24.57	26.12	24.24	24.24	26.16
				Modelled Flow (cumecs)	310.36	351.44	411.42	445.44	466.73	495.87	573.57	589.32	744.99	553.21	773.88	495.87	495.87	770.40
5	ea013_0251_IRWZ01_1113	383097	398218	Modelled Water Level (m aodN)	23.40	23.67	24.04	24.26	24.38	24.55	24.97	25.05	26.02	24.87	26.28	24.55	24.55	26.31
				Modelled Flow (cumecs)	310.25	351.35	411.30	445.27	466.57	495.71	573.36	589.13	744.57	552.99	773.43	495.71	495.71	770.29
6	ea013_0251_IRWZ01_1342	383284	398361	Modelled Water Level (m aodN)	23.68	23.97	24.37	24.59	24.72	24.90	25.35	25.44	26.42	25.24	26.66	24.90	24.90	26.69
				Modelled Flow (cumecs)	310.19	351.28	411.22	445.16	466.46	495.60	573.24	588.99	744.53	552.84	773.13	495.60	495.60	770.10
7	ea013_0251_IRWZ01_1029	383053	398171	Modelled Water Level (m aodN)	23.26	23.52	23.89	24.10	24.23	24.39	24.82	24.91	25.93	24.72	26.21	24.39	24.39	26.25
				Modelled Flow (cumecs)	310.28	351.37	411.34	445.32	466.61	495.75	573.34	589.05	741.05	553.02	767.99	495.75	495.75	764.14
8	ea013_0251_IRWZ01_0882	382954	398062	Modelled Water Level (m aodN)	23.14	23.39	23.75	23.97	24.09	24.26	24.69	24.78	25.84	24.59	26.14	24.26	24.26	26.18
				Modelled Flow (cumecs)	310.32	351.41	411.38	445.39	466.68	495.82	573.50	589.26	739.39	553.14	764.51	495.82	495.82	759.65
9	ea013_0251_IRWZ01_1128	383144	398259	Modelled Water Level (m aodN)	23.40	23.67	24.04	24.26	24.38	24.55	24.97	25.05	26.02	24.87	26.28	24.55	24.55	26.31
				Modelled Flow (cumecs)	310.25	351.35	411.30	445.27	466.57	495.71	573.36	589.13	744.57	552.99	773.43	495.71	495.71	770.29
10	ea013_0251_IRWZ01_0758	382864	397966	Modelled Water Level (m aodN)	23.09	23.34	23.71	23.92	24.05	24.21	24.63	24.72	25.75	24.54	26.04	24.21	24.21	26.08
				Modelled Flow (cumecs)	310.36	351.44	411.42	445.44	466.73	495.87	573.57	589.32	744.99	553.21	773.88	495.87	495.87	770.40

Model data taken from Manchester Ship Canal 2018

AEP - Annual Exceedence Probability

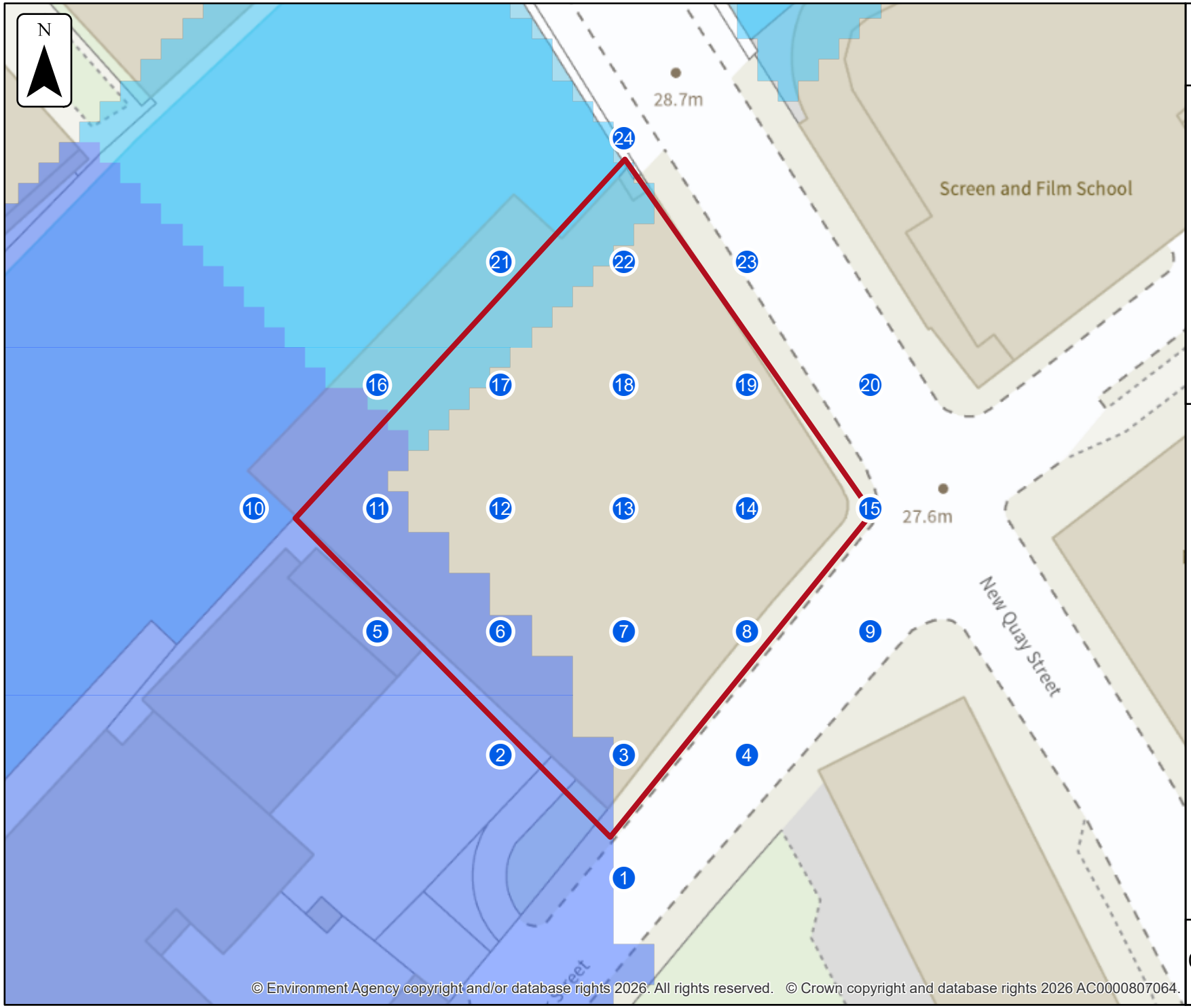
m aodN - metres above ordnance datum Newlyn

cumecs - cubic metres per second

Notes:

*Climate Change Scenario - 30%, 35% and 70% increases in flow calculated for the 2080's (2070 - 2115). Please see https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances for more information regarding the new climate change guidance. The location of the site and the type (vulnerability) of development determine the climate change allowances to consider in any flood risk assessment.

For the Manchester Ship Canal Model, we provide the following three scenarios:
1. Normal Operation: All sluice gates operate automatically to maintain a navigable pounded water level upstream of each set of sluice gates. During times of high flow the gates are opened automatically to allow excess water pass downstream. During extreme conditions the sluice gates can be manually overridden to extend the opening heights.
2. Latchford 1 Gate Closed Scenario: This scenario represents a single operational sluice gate at Latchford Locks fixed closed. Therefore, only operational movements from 2 active sluice gates.The model setup removes the gate from PID controller setup and an IED file is used to define the sluice gate as fixed in the closed position.
3. Latchford 3 Gates Closed Scenario: This scenario has been defined as the removal of operational rules at all three sluice gates at Latchford Locks, thus, all gates are fixed in the closed position resulting in no regulation of upstream water levels. The model setup removes each of the gates from PID controller setup and an IED file is used to define sluice gates fixed in the closed position.



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Environment Agency

Modelled fluvial extent and height

Location (easting/northing)
383118/398180

Scale
1:500

Created
3 Sep 2026

Model name
Manchester Ship 2018

Selected area

Main river

Modelled 2D grid
Height in mAOD

- 26 - 26.125
- 26.125 - 26.25
- 26.25 - 26.375
- 26.375 - 26.5
- 26.5 - 26.625
- 26.625 - 26.75
- 26.75 - 26.875
- 26.875 - 27.0
- 27.0 - 27.125

This map shows the 0.1% AEP height data

0 5 10 15 20 25
metres

Sample point data

No defences exist

Label	Easting	Northing	20% AEP	10% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height
1	383121	398144	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
2	383109	398156	NoData	NoData	NoData	NoData	NoData	NoData	NoData	26.22
3	383121	398156	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	383133	398156	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
5	383097	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	26.22
6	383109	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	26.22
7	383121	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
8	383133	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
9	383145	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
10	383085	398180	23.31	23.57	23.94	24.16	24.28	24.45	24.78	26.24
11	383097	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	26.23
12	383109	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	20% AEP	10% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height
13	383121	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
14	383133	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
15	383145	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	383097	398192	23.34	23.60	23.98	24.19	24.32	24.48	24.81	26.25
17	383109	398192	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
18	383121	398192	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
19	383133	398192	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
20	383145	398192	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	383109	398204	23.37	23.63	24.00	24.22	24.34	24.51	24.84	26.27
22	383121	398204	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
23	383133	398204	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	383121	398216	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	20% AEP	10% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height
Max value in selected area:			23.40	23.67	24.04	24.25	24.38	24.55	24.87	26.28

Data in this table comes from the Manchester Ship Canal 2018 model. Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

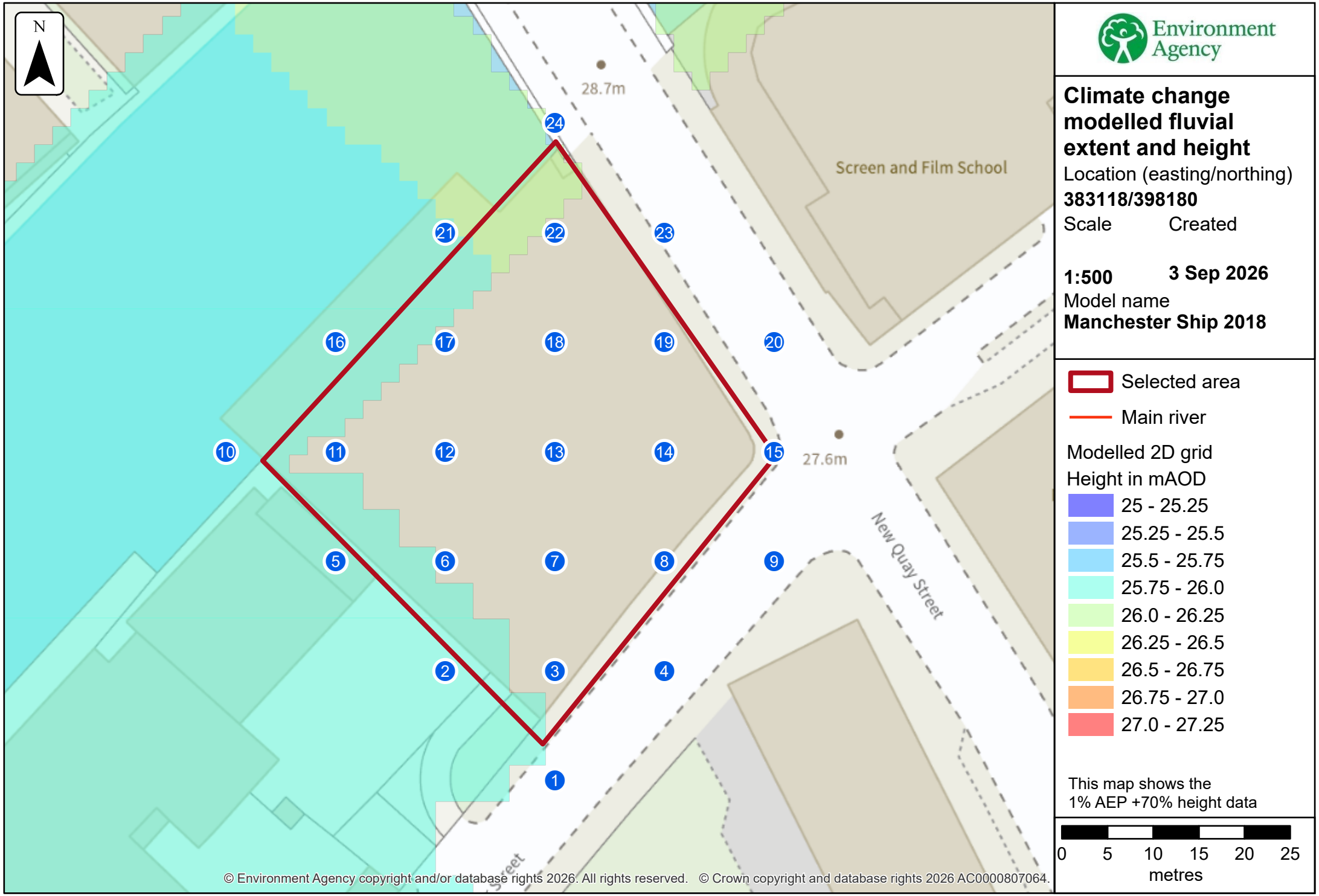
No defences exist

Label	Easting	Northing	20% AEP	10% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
1	383121	398144	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
2	383109	398156	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.01
3	383121	398156	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	383133	398156	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
5	383097	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.85
6	383109	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.16
7	383121	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
8	383133	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
9	383145	398168	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
10	383085	398180	1.78	1.86	1.97	2.04	2.07	2.12	2.22	2.66
11	383097	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.16
12	383109	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	20% AEP	10% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
13	383121	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
14	383133	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
15	383145	398180	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	383097	398192	1.95	2.03	2.15	2.22	2.26	2.31	2.41	2.87
17	383109	398192	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
18	383121	398192	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
19	383133	398192	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
20	383145	398192	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	383109	398204	2.08	2.17	2.30	2.37	2.41	2.47	2.58	3.05
22	383121	398204	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
23	383133	398204	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	383121	398216	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	20% AEP	10% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
Max value in selected area:			1.40	1.46	1.54	1.59	1.61	1.65	1.72	2.04

Data in this table comes from the Manchester Ship Canal 2018 model. Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Environment Agency

Climate change modelled fluvial extent and height

Location (easting/northing)
383118/398180

Scale
1:500

Created
3 Sep 2026

Model name
Manchester Ship 2018

Selected area

Main river

Modelled 2D grid
Height in mAOD

- 25 - 25.25
- 25.25 - 25.5
- 25.5 - 25.75
- 25.75 - 26.0
- 26.0 - 26.25
- 26.25 - 26.5
- 26.5 - 26.75
- 26.75 - 27.0
- 27.0 - 27.25

This map shows the
1% AEP +70% height data

0 5 10 15 20 25
metres

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Sample point data

No defences exist climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)
			Height	Height	Height	Depth	Depth	Depth
1	383121	398144	NoData	NoData	NoData	NoData	NoData	NoData
2	383109	398156	NoData	NoData	25.93	NoData	NoData	0.73
3	383121	398156	NoData	NoData	NoData	NoData	NoData	NoData
4	383133	398156	NoData	NoData	NoData	NoData	NoData	NoData
5	383097	398168	NoData	NoData	25.94	NoData	NoData	0.56
6	383109	398168	NoData	NoData	NoData	NoData	NoData	NoData
7	383121	398168	NoData	NoData	NoData	NoData	NoData	NoData
8	383133	398168	NoData	NoData	NoData	NoData	NoData	NoData
9	383145	398168	NoData	NoData	NoData	NoData	NoData	NoData
10	383085	398180	24.88	24.96	25.96	2.25	2.28	2.58
11	383097	398180	NoData	NoData	NoData	NoData	NoData	NoData
12	383109	398180	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)
			Height	Height	Height	Depth	Depth	Depth
13	383121	398180	NoData	NoData	NoData	NoData	NoData	NoData
14	383133	398180	NoData	NoData	NoData	NoData	NoData	NoData
15	383145	398180	NoData	NoData	NoData	NoData	NoData	NoData
16	383097	398192	24.91	24.99	25.98	2.44	2.47	2.78
17	383109	398192	NoData	NoData	NoData	NoData	NoData	NoData
18	383121	398192	NoData	NoData	NoData	NoData	NoData	NoData
19	383133	398192	NoData	NoData	NoData	NoData	NoData	NoData
20	383145	398192	NoData	NoData	NoData	NoData	NoData	NoData
21	383109	398204	24.93	25.02	26	2.61	2.64	2.96
22	383121	398204	NoData	NoData	NoData	NoData	NoData	NoData
23	383133	398204	NoData	NoData	NoData	NoData	NoData	NoData
24	383121	398216	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)
			Height	Height	Height	Depth	Depth	Depth
Max value in selected area:			24.97	25.05	26.02	1.74	1.76	1.98

Data in this table comes from the Manchester Ship Canal 2018 model. Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as canals, groundwater and reservoirs

Your lead local flood authority is Manchester District.

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

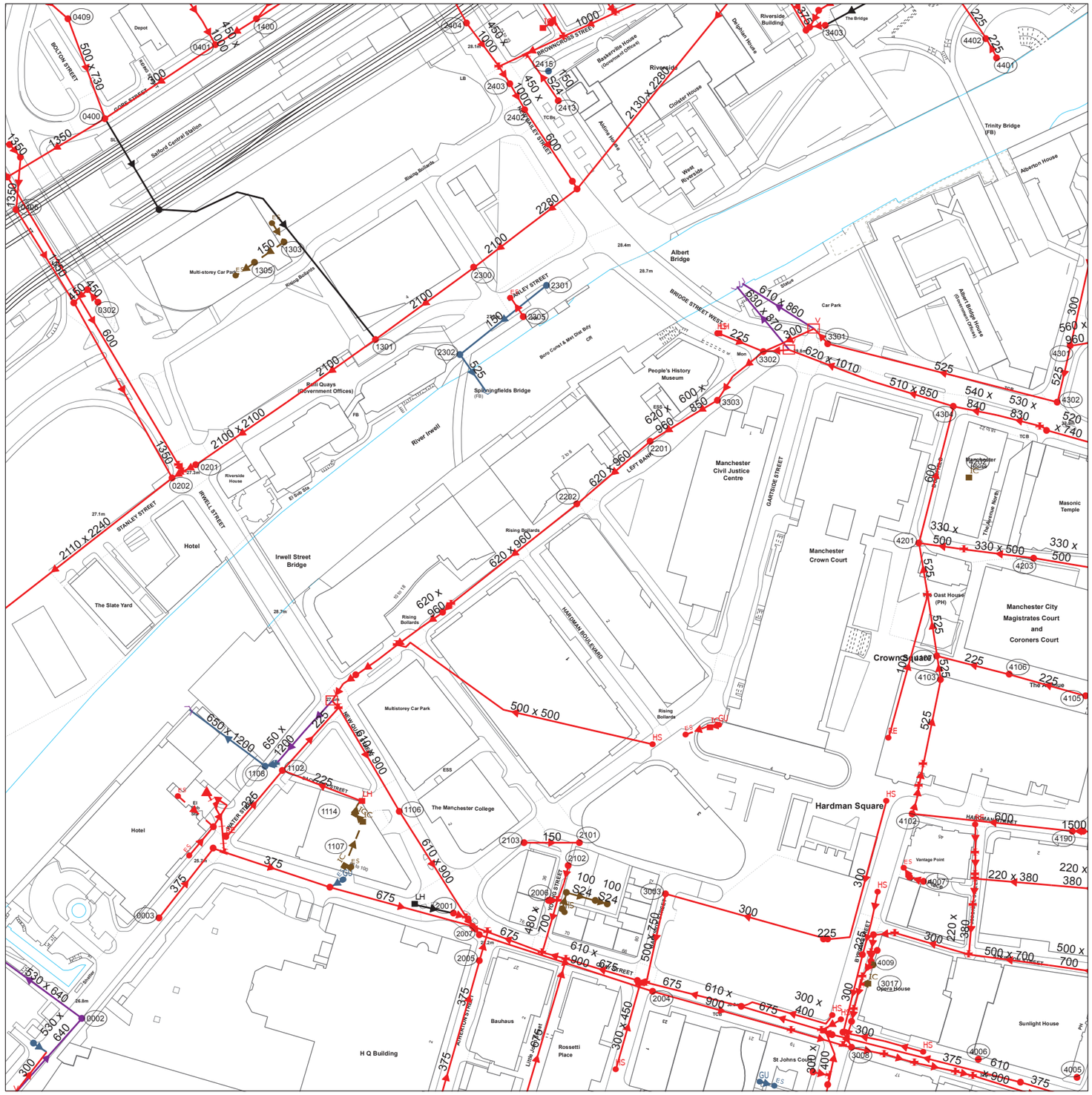
Find out more about flood risk activity permits

Help and advice

Contact the Greater Manchester Merseyside and Cheshire Environment Agency team at inforequests.gmmc@environment-agency.gov.uk for:

- more information about getting a product 5, 6, 7 or 8
- general help and advice about the site you're requesting data for

15. Appendix D – United Utilities Sewer Map



Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
0001	26.17	SW	23.61	300		CI	VC	7.21	
0002	26.65	CV							
0003	25.85	CO	23.9	375		CI	CO	40.61	226
0101	25.65	CO							
0103		CO							
0201	27.49	CO	0	2100		CI	CO	6.71	
0202		CO	0	2110	2240	EG	BR	138.22	
0301	26.21	CO							
0302	26.59	CO	24.24	450		CI	PVC	7.64	16
0303	26.4	CO	23.75	450		CI	PVC	8.65	216
0400	29.16	CO	20.53	1350		CI	CO	52.48	
0401	29.25	CO							
0404		CO							
0406		CO	0	1350		CI	CO	50.59	
0407		CO							
0408		CO							
0409		CO							
1001	26.7	CO	23.4	675		CI	CO	68.41	
1102	26.48	CO							
1104	27.31	CO	23.02	680	810	EG	BR	7.21	
1106	27.68	CO	22.82	610	900	EG	BR	57.98	
1107		FO							
1108		SW							
1110		FO							
1114		FO							
1301	27.47	CO							
1303		CO		150		CI	VC	16.62	
1305		FO							
1400	29.28	CO	25.29	300		CI	VC	22.47	118
2001	27.9	CO	0	900		CI	VC	6.32	
2002	28.04	CO	22.74	610	900	EG	BR	84.12	1402
2003	29.3	CO							
2004	29.38	CO	22.66	610	900	EG	BR	66.48	
2005	28.13	CO							
2006	28.55	CO	26.22	150		CI	VC	4	
2007		CO							
2019		FO							
2020		FO							
2021		FO		100		CI	VC	5.74	
2022		CO							
2101		CO							
2102	28.41	CO	25.48	460	730	EG	BR	8.25	
2103		CO		150		CI	VC	25.45	
2201	27.65	CO							
2202	27.41	CO	23.07	620	960	EG	BR	74.03	
2203	26.62	CO	22.95	620	960	EG	BR	12.21	
2300	27.47	CO	18.62	2100		CI	CO	56.24	
2301		SW	0	150		CI	VC	51.22	
2302		SW							
2305		CO		225		CI	VC	10.52	
2400	28.37	CO							
2401	28.33	CO							
2402	28.08	CO	23.24	600		CI	CO	39.66	97
2403	28.1	CO							
2404	28.16	CO							
2409		CO							
2410		CO							
2413		CO		150		CI	PF	26.13	
2415		SW							
3001		CO							
3003	29	CO	23.4	500	750	UN	VC	41.98	
3004	30.09	CO							
3005	30.09	CO	28.98	225		CI	VC	2	
3006	30.86	CO	27.63	300		CI	VC	37.11	161
3007	30.93	CO	27.38	300		CI	VC	8.06	17
3008	30.99	CO	22.48	610	900	EG	BR	15.3	
3009	30.93	CO	23.25	450		CI	VC	11.7	
3011	30.95	CO							
3012	31.73	CO							
3017		FO							
3091	30.2	CO							
3101		CO							
3301	30.19	CO							
3302	29.15	CO							
3303	28.28	CO	23.33	600	850	EG	BR	17.49	
3401		CO	0	375		CI	VC	41.21	
3402		CO							
3403		CO	0	375		CI	CO	7.26	
3404	22.27	CO							
4003	30.83	CO	26.11	450		CI	VC	8.06	
4005		CO							
4006		CO							
4007		CO		225		CI	VC	6.69	
4008		CO		225		CI	VC	4.94	
4009		FO		150		CI	VC	2.16	
4010		CO							
4013		CO							
4021		CO	0	450		CI	VC	8.06	
4102	30.97	CO							
4103	31.14	CO							
4105		CO							
4106		CO							
4107	0	CO							
4110		CO							
4190	32.98	CO	28.27	600		CI	CO	74.43	90
4201	30.53	CO							
4202		FO							
4203		CO							
4301	33.01	CO							
4302	32.79	CO							
4303	33.01	CO							
4304	31.63	CO							
4401		CO	0	225		CI	VC	10.3	
4402		CO	0	225		CI	VC	58.84	
0004		CO							
0104		CO							
0108		CO		225		CI	CI	15.81	
0410		CO	26.42	450	1000	FT	BR	12.53	
1002		SW							
1111		CO	0	620	960	EG	BR	9.46	
1112		CO	0	640	1260	EG	BR	12.21	
1113		OV	0	650	1200	UN	BR	19.85	
1115		FO							
1116		FO							
1119		CO							
1201		CO	0	620	820	EG	BR	25	
1302		CO	0	2100	2100	SQ	CO	51.04	
2009		CO	0	300	450	UN	VC	40.52	
2012		CO							
2016		CO							
2017		CO	0	480	700	EG	BR	33.54	
2018		CO							
2023		FO		100		CI	VC	1.86	
2104		CO	0	500	500	SQ	BR	130.79	
2304		CO	18.64	2100		CI	CO	29.75	2974
2408		CO							
2411		CO							
2512		CO							
2513		CO							
3010		SW							
3013		CO	0	300	400	UN	CO	42.68	
3016		CO	0	100		CI	CO	10.3	
3022		CO							
3103		CO							
3311		CO							
3312		CO	23.46	620	960	EG	BR	18.87	
4001		CO							
4002		CO							
4004		CO							
4005		CO	0	225		CI	VC	15.52	
4015		CO	0	300		CI	VC	14.32	
4092		CO	0	300		CI	CO	18.68	
4104		CO							
4113		CO	0	300		CI	VC	75.3	
4306		CO							
4307		CO	24.62	620	1010	EG	BR	40.55	61
4308		CO							
0200		CO							
0203		CO	0	600		CI	BR	5.83	
1103		CO							

Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
1109		SW	0	630	1220	EG	BR	5.1	
1118		CO							
1190		CO							
1200		CO							
2008		CO							
2010		CO							
2011		CO							
2013		CO							
2014		CO							
2015		CO							
2090		CO							
2206		CO	0	620	960	EG	BR	5.66	
2405		CO							
2406		CO	0	1000		CI	GRP	26.4	
2407		CO							
2412		CO							
2414		CO							
3002		CO							
3014		CO							
3018		CO	0	450		CI	VC	15.52	
3019		CO	0	610	900	EG	BR	29.12	
3020		CO	0	450		CI	VC	6.08	
3021		CO							
3023		CO							
3024		CO							
3090		CO							
3304		CO							
4014		CO							
4016		CO	0	220	380	EG	BR	23.09	
4017		CO	0	610	900	EG	BR	14.56	
4018		CO	0	610	900	EG	BR	19.42	
4019		CO	0	610	900	EG	BR	8.25	
4020		CO	0	610	900	EG	BR	56.61	
4022		CO	0	450		CI	VC	4	
4023		CO							
4090		CO							
4091		CO	0	220	380	EG	BR	12.04	
4115		CO	0	220	380	EG	BR	10	
4122		CO							
4123		CO							
4206		CO							
4207		CO							
4305		CO							
0403		CO							
1002		CO							
0107		CO		225		CI	CI	13.43	
1105		CO	22.88	610	900	EG	BR	59.99	1500
3305		CO							
3306	29.93	CO	24.27	610	860	RE	BR	39.13	

WASTE WATER SYMBOLOGY

Foul Surface Combined Overflow

- Manhole
- Manhole, Side Entry
- MainSewer, Public
- MainSewer, Private
- MainSewer, S104
- Rising Main, Public
- Rising Main, Private
- Rising Main, S104
- Highway Drain, Private

Foul Surface Combined

- WW Site Termination
- Air Valve
- Cascade
- Non Return Valve
- Extent of Survey
- Flow Meter
- Gulley
- Hatch Box
- Head of System
- Hydrobrake / Vortex
- Inlet
- Inspection Chamber
- Bifurcation
- Catchpit
- Contaminated Surface Water
- WW Pumping Station
- Sludge Pumping Station
- Sewer Overflow
- TJunction/Saddle
- LampHole
- OilInterceptor
- PenStock
- Pump
- RoddingEye
- Soakaway
- Summit
- Valve
- Valve Chamber
- Washout Chamber
- DropShaft
- WW Treatment Works
- Septic Tank
- Vent Column
- Network Storage Tank
- Orifice Plate
- Vortex Chamber
- Penstock Chamber
- Blind Manhole

Foul Surface Combined Overflow

- Screen Chamber
- Discharge Point
- Outfall
- Control Kiosk
- Unspecified

Sludge Main, Public
Sludge Main, Private
Sludge Main, S104

ABANDONED PIPE

- MainSewer
- Rising Main
- Highway Drain
- Sludge Main

LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
CO	Concrete	ST	Steel
CSB	Concrete Segment Bolted	VC	Vitrified Clay
CSU	Concrete Segment Unbolted	PP	Polypropylene
CC	Concrete Box Culverted	PF	Pitch Fibre
PSC	Plastic/Steel Composite	MAC	Masonry, Coursed
GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown. Crown copyright and database rights [2016] Ordnance Survey 100022432.

OS Sheet No: sj8398sw
Scale: 1:1250 199 Nodes
Sheet 1 of 1

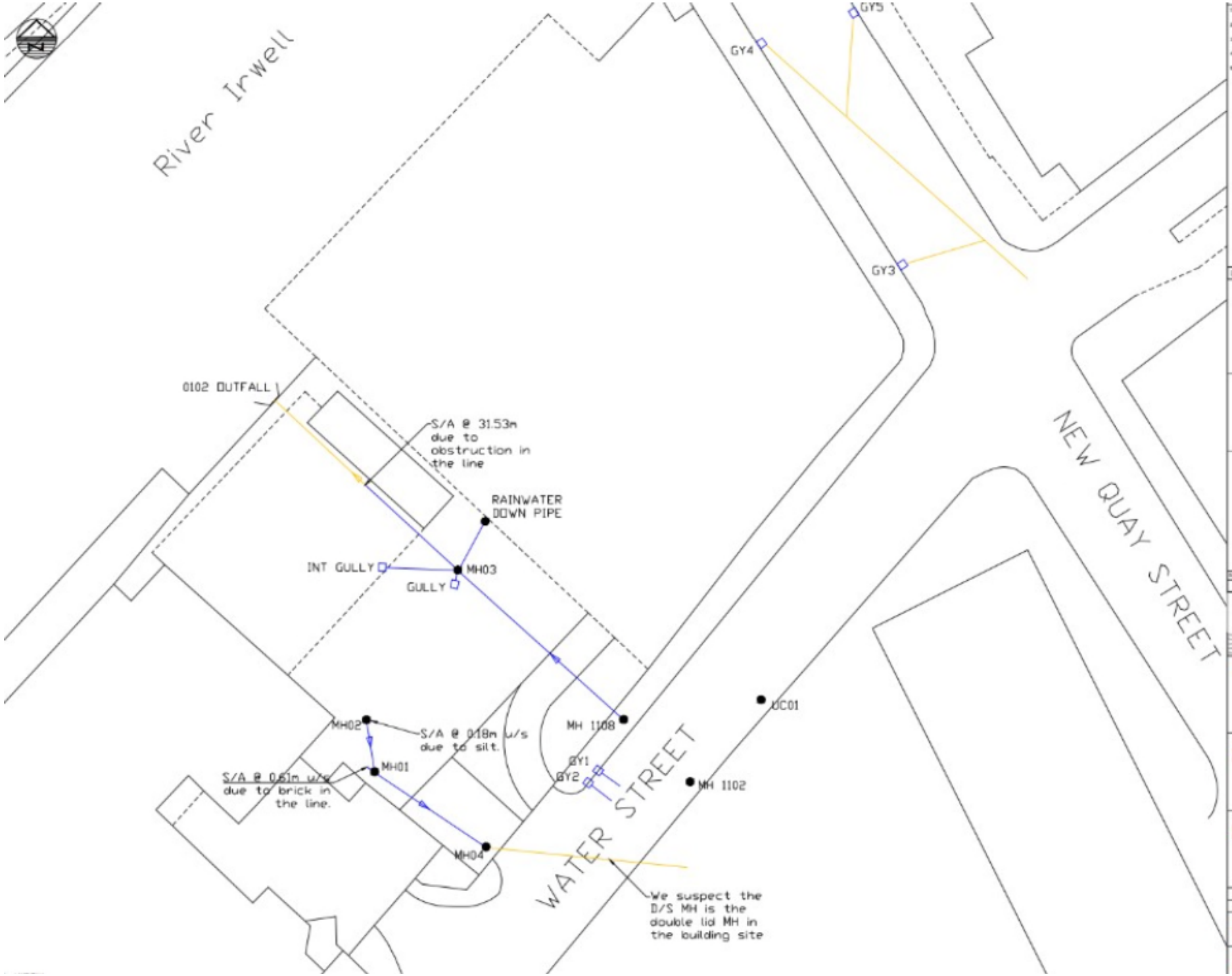
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helping life flow smoothly

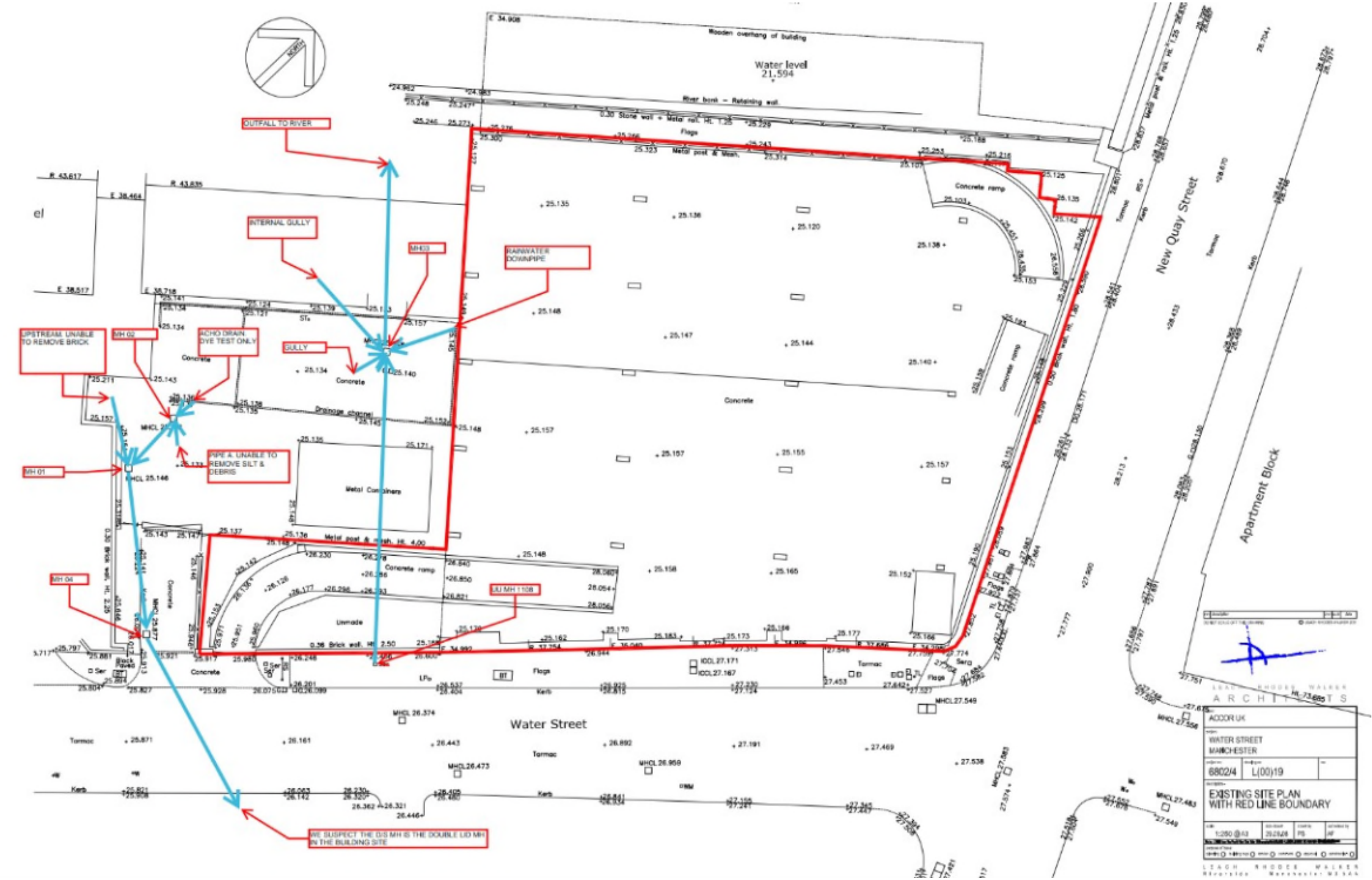
SEWER RECORDS

Printed By: Property Searches

OS Sheet No: sj8398sw

Scale: 1:1250


River Irwell
GY5
GY4
GY3
0102 OUTFALL
S/A @ 31.53m
due to
obstruction in
the line
RAINWATER
DOWN PIPE
INT GULLY
MH03
GULLY
MH02
S/A @ 018m u/s
due to silt.
MH01
S/A @ 0.61m u/s
due to brick in
the line.
MH 1108
GY1
GY2
UC01
MH 1102
MH04
WATER STREET
NEW QUAY STREET
We suspect the
D/S MH is the
double lid MH in
the building site
DRAINAGE/CCTV SURVEY LEGEND
ISSUES & REVISIONS
IWJS
ARP Geotechnical Ltd
Albanis Shed, Water St,
Manchester M3 4JQ
Drainage system
investigation.
NTS
A1
EXISTING
IWJS - 209324
1


OUTFALL TO RIVER
INTERNAL GULLY
MH03
RAINWATER DOWNPIPE
UPSTREAM, UNABLE TO REMOVE BRICK
MH 02
ACHO DRAIN. DYE TEST ONLY
GULLY
PIPE A, UNABLE TO REMOVE SILT & DEBRIS
MH 01
MH 04
LU MH 1108
WE SUSPECT THE D/S MH IS THE DOUBLE LID MH IN THE BUILDING SITE
Water level
21.594
Wooden overhang of building
River bank – Retaining wall
Concrete ramp
Metal Containers
Drainage channel
Concrete
Unmade
Tarmac
Flags
Kerb
Water Street
New Quay Street
Apartment Block
ACCOR UK
WATER STREET
MANCHESTER
6802/4
L(00)19
EXISTING SITE PLAN
WITH RED LINE BOUNDARY
1:250 @A3
26/2/24
PS
LEACH RHODES WALKER
ARCHITECTS



Symbol	Description
SW	STORM WATER SEWERS
FW	FOUL WATER SEWERS
WM	WATER MAIN
GM	GAS MAIN
EL	ELECTRIC CABLES
DUCT	CABLE DUCTING
BT	BT (UNDERGROUND)
CCTV	CABLE TV
CCTV	CLOSED CIRCUIT TV
UI	UNIDENTIFIED FEATURE
UP	UNIDENTIFIED PIPE
UC	UNIDENTIFIED CABLE
UNPR	UNPROVEN FEATURE
SW	END OF TRACE
FW C	LATERAL CONNECTIONS
	EXTENT OF SURVEY BY SURVEY OPERATIONS LTD.
	EXTENT OF SURVEY BY SURVEY OPERATIONS LTD.(DEC 16)
⊗0.0d	BURIED FEATURE FOUND USING RADAR
FW / SW	CONNECTIVITY BETWEEN CHAMBERS FROM CCTV REPORT
	BURIED FEATURE FOUND USING RADAR

UNIDENTIFIED - A buried feature or utility that has been located, but we are unable to state what it is.
UNPROVEN - The assumed location of a reported feature or utility, usually taken from records, but not found during the utility trace (due to various conditions).
CAUTION - Electric pot ended cables, even when they are live, are unable to be detected or traced.

UNDERGROUND UTILITIES SERVICES DISCLAIMER

We have endeavoured to locate existing services using records provided by Statutory Authorities as a guide. Some apparatus were untraceable and details have therefore been taken from Utility Record Drawings, which may be of poor quality. Consequently we cannot guarantee accuracy of information taken from such records.

Where indicated, no allowance has been made for sub-surface entry into manholes, other chambers or confined spaces below ground level. Therefore any details relating to depths, sizes etc, are taken from the surface and as such will be approximate.

We have endeavoured to supply you with the most accurate data possible by using methods and equipment that are at the forefront of our industry. We have taken great care in the detection of pipework and buried features, but as with all methods of detecting underground or buried utilities the information provided is based on results obtained from electromagnetic techniques, and as such may be liable to distortion or errors beyond the reasonable control of the operator or his instruments.

It is the responsibility of the user under Health & Safety (HSG47) Guidelines to satisfy himself of the suspected location of any services prior to excavation of the services shown.

NOTE 1

This utility survey has been undertaken using:
A: Radiodetection RD4000 + RD4000 TIO
B: Mala Geoscience Ground Probing Radar

NOTE 2

Power carrying features shown on this drawing are shown as an individual service line. This does not necessarily represent the number of cables actually present and it is possible that there could be multi numbers of cables including HV, LV and communications transmission cables following the same trace line. These could be at different depths, the trace signal from the deeper cables being masked by signal emitted from the shallower service above. Cable runs could also be present running parallel to the single line shown.

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N

Note:
Orientation to Existing Site Grid.
All levels relate to Existing Site Datum.
Survey Control Markers established for Mapping purposes only and should not be used for Construction without the written approval of Survey Operations Ltd.
Levels in parenthesis indicate top of walls

Revision - Date - Description
A - 22/12/16 - Additional topographical and GPR survey information added.

All drainage information must be verified with local authority records before use.

SURVEY STATIONS

Name	Easting	Northing	Height
CW1	383263.80	397956.37	31.61
CW2	383237.69	397869.12	33.07
CW3	383207.18	397771.97	32.95
CW4	383102.86	397803.53	30.33
CW5	383001.12	397843.51	28.03
CW6	382893.27	397877.75	26.22
CW7	382971.13	397971.46	26.25
CW8	383069.09	398069.93	26.21
CW9	383144.89	398181.38	27.75
CW10	383208.42	398075.02	27.95
SO12	383288.98	398045.86	29.37
SO13	383302.96	398093.10	28.97
CW11	383228.56	398079.33	28.32

STANDARD REFERENCE & ABBREVIATIONS

(AR)........Assumed Route
AB..........Air Brick
AV..........Air Valve
B/W.........Barbed Wire
BAR.........Barrier
BB..........Belisha Beacon
BH..........Borehole
BL..........Bed Level
BOL.........Bollard
BS..........Bus Stop
BT Box......British Telecom Box
BT..........British Telecom IC
BRTW........Brick Retaining Wall
BW..........Brick Wall
C/B.........Close Boarded
C/I.........Corrugated Iron
C/P.........Chestnut Paling
CB..........Control Box
CBW.........Concrete Block Wall
CCTV........Closed Circuit TV
CD..........Cable Duct
CEL.........Cellar Light
CH/L........Chain Link
CHY.........Chimney
CL..........Cover Level
CM..........Cable Marker
COL.........Column
CONC........Concrete
CP..........Catch Pit
CRTW........Concrete Retaining Wall
CTV.........Cable Television
CUL.........Culvert
CW..........Concrete Block Wall
DC..........Drainage Channel
DPC.........Damp Proof Course
DR..........Drain
DSW.........Dry Stone Wall
ECP.........Electricity Cable Pit
EIC.........Electricity Inspection Cover
EJ..........Expansion Joint
EJB.........Electricity Junction Box
EL SUB STN..Electricity Sub Station
EL..........Eaves Level
ELB.........Electricity Box
EP..........Electricity Pole
ER..........Earth Rod
ETL.........Electricity Transmission Line
FB..........Flower Bed
FH..........Fire Hydrant
FL..........Floor Level
FP..........Flagpole
G*.*........Girth (of tree)
G...........Gulley
GAB.........Gabion
GIP.........Gas Inlet Pipe
GMKR........Gas Marker
GST.........Gas Stop Tap (Domestic)
GSV.........Gas Stop Valve (Mains)
HSE.........Housing
Ht..........Height
HV..........High Voltage
I/R.........Iron Railing
IC..........Inspection Cover
IL..........Invert Level
IP..........Inlet Pipe
KO..........Kerb Outlet
LB..........Letter Box
LP..........Lamp Post
MG..........Multi-Girth
MH..........Manhole
MKR.........Marker
MP..........Mooring Point
NP..........Street Name Plate
O/H.........Overhead
O/P.........Open Paling
OE..........Overhead Electric Wire
OP..........Outfall Pipe
OSBM........Ordnance Survey Bench Mark
OT..........Overhead Telecom Wire
P/C.........Post & Chain
P/R.........Post & Rail
P/W.........Post & Wire
PAV.........Paving
PB..........Pillar Box
PC..........Pedestrian Crossing
PP..........Petrol Pump
PT..........Post or Pillar
RE..........Rodding Eye
RS..........Road Sign
RTW.........Retaining Wall
RWP.........Rain Water Pipe
SAP.........Sapling
SL..........Sump Level
SoL.........Soffit Level
SP..........Sign Post
SPL.........Springing Level
SRTW........Stone Retaining Wall
SV..........Stop Valve (unspecified)
SVP.........Soil Vent Pipe
SW..........Stone Wall
TAC.........Tactile Paving
TB..........Traffic Bollard
TBM.........Temporary Bench Mark
TCB.........Telephone Call Box
TFR.........Taken From Records
TIE.........Anchor Point (Masts/Poles)
TL..........Traffic Light
TLB.........Traffic Light Control Box
TM..........Ticket Machine
TMC.........Tarmac
TP..........Telecommunications Pole
TPIT........Trial Pit
TS..........Trash Screen
U/C.........Under Construction
U/G.........Underground
UTL.........Unable to Lift (MH,IC etc)
UTS.........Unable to Survey
VDP.........Vehicle Detector Pad
VP..........Vent Pipe
W/M.........Wire Mesh
WL..........Water Level
WM..........Water Meter
WO..........Wash Out
WP..........Waste Pipe
WST.........Water Stop Tap (domestic)
WSV.........Water Stop Valve (mains)

5	6
7	8

Sheet Layout

SurveY OPERATIONS
Smith Street, Skelmersdale, Lancs. WN8 8LN
Tel: 01695 725662 Fax: 01695 51816
Email: mail@survops.co.uk – www.survops.co.uk

Client
Crookes Walker Consulting

Drawing Title
Utility Survey at:
St Johns Scheme,
Manchester.

Scale(s)	1:200	Surveyor	TW
Date	Jan 17	Drawn	IT/MP/PM
Job Number	16E088	Checked	TP

Sheet Size & Drg Number & Revision
A0 16E088/006 A

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