Deloitte.



Trinity Islands

Environmental Impact Assessment (EIA)

Screening and Scoping Report

August 2021

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1. Introduction

1.1 This Environmental Impact Assessment (EIA) Screening and Scoping Report has been prepared in respect of the proposals for the development of Trinity Islands ('The Site') as identified within the St John's Masterplan and the Water Street Strategic Regeneration Framework (SRF). The Site is bounded by the River Irwell to the north and west, Liverpool Road to the east and Water Street and Regent Road to the south in Manchester City Centre.

1.2 Renaker Build Limited ('The Applicant') will be submitting an application for Full Planning Permission to deliver a residential-led development with ground floor commercial uses, underground car parking and public realm. The term "Proposed Development" used within this Report refers to all stages of construction and operation of the development.

1.3 This Screening and Scoping Report is submitted to Manchester City Council as a request for a Scoping Opinion under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

1.4 In accordance with Regulation 15, paragraph 2(a), this report contains:

- A plan sufficient to identify the land enclosed at Appendix 1.
- A brief description of the nature and purpose of the Proposed Development and of its possible effects on the environment.
- An explanation of the likely significant effects of the development on the environment.

EIA Requirements

1.5 The EIA process is the mechanism by which development proposals are appraised in relation to the environmental criteria as well as socio-economic, engineering, and technical considerations. The EIA process defines the context of the Proposed Development and examines the issues considered pertinent.

1.6 The purpose of the EIA is to establish both the nature of the Proposed Development and the environment within which it is likely to take place in order to identify likely significant effects on the environment that may arise. This is also undertaken by comparing the existing situation at the start of the work (baseline) with the situation once the Proposed Development is in place.

1.7 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 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 such factors as its nature, size or location (Regulation 4(2)).

1.8 The Proposed Development falls under the category of "Infrastructure Projects – Urban Development Projects" (Schedule 2, 10, (b)) as described in the Regulations. The applicable threshold above which EIA is likely to be required for if the development includes more than 150 dwellings. 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."

1.9 The Proposed Development comprises up to 2,000 residential units (Use Class C3), approximately 900 sq. m of commercial and leisure uses (Use Class E and Sui Generis), underground parking and approximately 1.3 ha of open

space, landscaping, access, and other associated works. Therefore, it is considered the proposals exceed the applicable Schedule 2 thresholds as outlined above, indicating that an EIA is more likely to be required.

1.10 Given the nature of the Proposed Development, an EIA is considered appropriate to test the likely significant effects of the Proposed Development. The Applicant therefore proposes to submit an Environmental Statement (in relation to certain topic areas where there is likely to be a significant effect of the environment) in support of the planning application.

Purpose of the Scoping Report

1.11 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.

1.12 This Scoping Report sets out the framework within which the Environmental Statement ('ES') will be produced and the topic areas and information that will be contained within the document. It is issued to Manchester City Council ('MCC') as the Local Planning Authority ('LPA') for circulation to Statutory Consultees and other organisations who 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 Scoping Opinion.

1.13 The LPA is required to respond to a formal request for a Scoping Opinion within five weeks of registering receipt.

1.14 Should the proposed scope of the EIA be accepted by the LPA, the intention would be that any future application relating to the Proposed Development would be accompanied by an EIA which would be produced by the team as set out in Table 1 and coordinated by Deloitte Real Estate (IEMA EIA Quality Mark registered). The consultants have provided technical input to this initial EIA Scoping Report.

Note: although Deloitte Real Estate has read the input of Renaker Build Limited, SimpsonHaugh, EnSafe, WSP, Chris Burnett Associates, Stephen Levrant Heritage Architecture, Curtins Consulting, GIA and Vectos (together "the Consultant Inputs") for consistency and provide observations based on our knowledge and experience, we accept no liability or responsibility for the Consultant's Inputs and will not be responsible for the technical content.

Table 1.1: EIA Project Team

Topic	Assessment carried out by	Qualifications
The Applicant	Renaker Build Limited	N/A
Town Planning, EIA Coordination	Deloitte LLP	RTPI, RICS, IEMA EIA Quality Mark
Architect	Simpson Haugh	RIBA
Air Quality	Ensafe	BSc (Hons), AMIEnvSc
Climate Change	WSP	BSc, BArcch, MSC, Qualified BREEAM Assessor, CIBSE Affiliate Member, BREEAM AP, CEnv.
Daylight, Sunlight and Overshadowing	GIA	BSc, MSc, CIHT, CILT
Heritage	Stephen Levrant Heritage Architecture	BA(Hons), MA, MSc, IHBC
Noise and Vibration	Matt Fisher	BEng(Hons) CEng MIOA

Topic	Assessment carried out by	Qualifications
Socio-Economic Issues	Ekosgen	MSc
Solar Glare	GIA	MSc
Townscape and Visual Impact	Chris Burnett Associates	BSc BLD CMLI
Traffic and Transport	Vectos	BSc (Hons), MSc, CMILT, MCIHT
Water Resources	Curtins Consulting	BEng(Hons) Civil Engineering, CEng, MICE BSC (Hons) Civil Engineer
Wind Microclimate	WSP	MEng, CEng, FICE

1.15 Section 2 of this report provides a site description and outlines the nature of the Proposed Development. Section 3 sets out the proposed scope and structure of that an ES would take and who might need to be consulted. Section 4 provides details of the proposed EIA methodology, which would be used in assessing the Proposed Development. Section 5 sets out the key issues that would be addressed by the EIA.

2. Site Description and Proposed Development

Site Description

2.1 The Proposed Development Site (referred to hereafter as 'the Site') is in Manchester City Centre located within the St John's and Water Street Strategic Regeneration Framework Areas and is bounded by the River Irwell to the north and west, Liverpool Road to the east and Water Street and Regent Road to the south.

2.2 The Site comprises approximately 1.78 hectares of brownfield land in the form of a car park and is split into two parcels known as Site C and Site D, as per the red line boundary plan.

2.3 Site C comprises approximately 0.89 hectares of brownfield land is bounded by the River Irwell to the north, Trinity Way to the west, Water Street to the south and a railway viaduct to the east. The Site can be accessed by vehicle or foot via Water Street on the southern boundary. The Site slopes downwards to the north towards the River Irwell and there is a limited amount of vegetation running along this boundary.

2.4 Site D comprises approximately 0.89 hectares of brownfield land is bounded by the River Irwell to the north and west, Regent Road to the south and Trinity Way to the east. The Site can be accessed by vehicle or foot via Trinity Way on the eastern boundary. The Site slopes downwards to the north and west towards the River Irwell and there is a limited amount of vegetation running along this boundary.

2.5 A Site plan is provided at **Appendix 1**.

Site Specific Environmental Designations

Air Quality

2.6 The Site is situated in the Greater Manchester Combined Authority Air Quality Management Area (AQMA).

Ecology

2.7 There are no ecological designations within the Site. The closest Special Area of Conservation (SAC) and Sites of Special Scientific Interest (SSSI) is the Rochdale Canal SSSI and SAC. This designation refers to the part of the canal located 6.9 km north east of the Site.

Flood Risk and Drainage

2.8 According to the Environment Agency Flood Map, parts of the Site which are furthest away from the River Irwell to the east are located within Flood Zone 1, defined as land having a less than 1 in 1,000 annual probability of river or sea flooding. Parts of the Site that are closest to the River Irwell are located within Flood Zone 3 which is defined as land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.

2.9 The Site also falls within the Conurbation Core Critical Drainage Area in the Salford and Trafford Critical Drainage Area (CDA), designated in 2011.

Heritage

2.10 The Site is located within the Castlefield Conservation Area. While there are no Listed Buildings on Site there are a number of Listed Buildings within a 250m radius. These are:

- Railway Bridge Over River Irwell To Former Liverpool Road Station Grade I (List Entry Number: 1270603)
- Railway Bridge Over River Irwell To Former Liverpool Road Station Grade I (List Entry Number: 1270603)
- The Giants Basin Grade II (List Entry Number: 1247068)
- Railway Bridge Over River Irwell To Former Liverpool Road Station Grade I (List Entry Number: 1270603)
- Colonnaded Railway Viaduct at Former Liverpool Road Goods Depot Grade II (List Entry Number: 1200805)
- Former Grape Street railway bonded warehouse Grade II (List Entry Number: 1457402)
- Bridgewater Canal Basin at Potato Wharf Grade II (List Entry Number: 1246959)
- Old Warehouse to North of Former Liverpool Road Railway Station Grade I (List Entry Number: 1282991)
- Former Commercial Hotel Grade II (List Entry Number: 1219418)
- Railway Viaduct Linking Bridge Over Irwell To Liverpool Road Station Grade II (List Entry Number: 1254726)
- 123, Liverpool Road Grade II (List Entry Number: 1200804)
- Former Liverpool Road Railway Station Station Masters House Grade I (List Entry Number: 1291477)

2.11 Therefore, there are a number of key heritage considerations for the redevelopment of the Site. The Conservation Area Appraisal prepared by MCC suggest that development in the conservation area should:

- *Incorporate a mixture of uses.*
- *The height and scale, the colour, form, massing and materials of new buildings should relate to the existing high-quality structures and complement them. This policy still leaves scope for innovation, provided that new proposals enhance the area.*
- *The extreme diversity of form and style in Castlefield's existing structures makes it permissible for designers to use their imaginations freely.*

Site Context

2.12 The Site is adjacent to the River Irwell on the northern and western boundaries. Across the River Irwell to the north is Wilburn Basin (located within Salford), a high-rise residential development comprised of four residential buildings, which are supported by a public realm that sits along the riverside and the Trinity Bridge Way immediately to the east.

2.13 There are a mixture of uses located south of the Site. Immediately across Water Street on the southern boundary is a large Big Yellow self-storage facility as well as a number of light industrial warehouses. Further south lies the medium-rise residential development Potato Wharf as well as a mixture of additional small-scale residential, retail and leisure uses surrounding the Bridgewater Canal.

2.14 To the south east of the Site and along the River Irwell is a mixture of residential and commercial uses. The residential uses comprise One Regent and the Vie Building. A large format retail store, Porcelenosa, is immediately adjacent to One Regent as well as 183 Water Street residences.

2.15 The Site falls within both the Water Street Strategic Regeneration Framework (the 'SRF') and the St John's SRF.

Water Street Strategic Regeneration Framework (2016)

2.16 The Water Street Strategic Regeneration Framework (SRF) was originally endorsed by Manchester City Council in 2010 to guide the regeneration and revitalisation of the Water Street area. A refreshed SRF was later endorsed by Manchester City Council in 2016 to reflect changes in Manchester's economic priorities and market conditions as well as the areas strategic planning and regeneration context. The 2016 SRF set out a key vision for the area as well as a number of key development considerations:

- Parking: Car parking contained within the podium or basement levels will help to meet requirements without detracting from place-making.
- Massing, scale, and form: High-density development will maximise on the sites highly strategic and sustainable location within Manchester City Centre, whilst taller developments provide the opportunity to create a new 'gateway' into the city from key transport routes.
- Connectivity: Increase connectivity by creating interconnected and highly accessible spaces across the site that place pedestrian experience at the forefront as well as promoting the use of sustainable modes of transport such as walking and cycling.
- Public Realm: Deliver a generous amount of high-quality, well-connected valuable public spaces with a particular focus on the experience along the River Irwell.
- Uses: Construct a sustainable quarter that comprises a range of commercial, residential, and retail uses to create a distinctive and vibrant place and to support economic growth as well as social cohesion.

2.17 Since the implementation of the SRF, a number of key developments have taken place such as the Big Yellow self-storage facility that was completed in 2019 and Phase 2 Potato Wharf (residential development) completed in 2015, both south of the Site. The final phases of Potato Wharf are currently on site and are largely progressed.

St John's Strategic Regeneration Framework (2016)

2.18 The St John's Strategic Regeneration Framework was originally endorsed in 2014 and later updated in 2016. The SRF has established a vision and set of development principles for the Site focused on the following key areas:

- To deliver 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.
- Development that is fully integrated both functionally and physically with the city centre and adjoining city centre neighbourhoods.
- To re-establish Manchester's tight-knit urban grain and create a meandering network of public spaces and complementary range of uses.

- A form of development that retains and reutilises the Site's key heritage assets and integrates those features into the new urban form.

- A series of existing and new public landscaped spaces will be created that support a new network of routes and linkages which connect the different parts of the Site to its neighbours and the River Irwell, as well as anchoring the major buildings.

- A scale of building form that in height and plan extends the scale of the St. John's Street district across the Site. To the west of the Site, adjacent to the River Irwell, there is the potential to introduce taller, elegant residential buildings.

2.19 In line with ambitions set out within the Water Street SRF, the Site has also been designated within the St John's Masterplan as a proposed development for residential, retail and leisure use and will promote active frontages, including those which face onto the River Irwell.

2.20 The masterplan is in the process of being delivered, with a number of plots under construction, including the Factory, a large-scale venue that will be home to the Manchester International Festival and is due to open in 2023. A number of developments are also under construction in the St John's area, including Old Granada Studios, Manchester Goods Yard and the Globe and Simpson Building. In addition, the two Union Co-Living schemes were minded to approve at Manchester City Council's Planning and Highways Committee on 30 July 2020 and 27 August 2020, subject to the signing of a S106 Agreement and planning conditions. Union T1 was formally granted permission and issued with a decision notice on 15 July 2021. The initial works have commenced under the old extant planning permission for the original T1 and T2 proposals, and it is therefore reasonable to assume that both the Union developments will also progress.

2.21 'Enterprise City' is the key vision behind the regeneration taking place within St. John's, and will underpin all that happens on the estate. The neighbourhood will revolve around three core thematic pillars: 'living', 'culture' and 'enterprise'. The intention is to create a 'sustainable eco-system', comprising a vibrant mix of digital, technology and creative industries, rather than just a 'place of work'. Each building will be unique, whether it is a 'start-up' or a multinational corporation, and every business will find a space that is crafted and curated to fit its specific industry requirements.

2.22 It will comprise a unique offering of multi-studios for TV, film and music recording/production, entertainment, places to start a retail brand, a restaurant, or a café, all anchored on 21st Century workspace infrastructure.

Regional Strategic Context

2.23 Manchester's ambition and vision for the City for the next decade is to be in the topflight of world-class cities by 2025. It is one of the fastest growing cities in Europe and by 2024 the population of the city is expected to reach over 570,000. This growth in population will be supported by employment growth, which is expected to see 15,000 more workers within the City Centre alone over the next ten years.

2.24 Residential development in the City Centre therefore has a key role to play in the city achieving this aspiration. The City Centre performs a number of key functions for both the city and the Greater Manchester City Region and is a driver of economic growth through an increasingly popular residential centre and its associated access to work, leisure facilities and high-quality public transport connections. A number of key documents that reflect this are as follows:

- Design for Access 2 (2003)

- Guide to Development in Manchester SPD (2007) and Technical Guidance (2015)

- Providing for Housing Choice SPD and Guidance (2008)

- Manchester Core Strategy (2012 – 2027)

- Manchester's Green and Blue Infrastructure Strategy (2015)
- The Greater Manchester Strategy (2016)
- Manchester City Centre Strategic Plan (2016)
- Manchester Residential Quality Design Guidance SPD (2017)
- Climate Change Emergency and Playing Our Full Part on Climate Change (2018)
- Draft Places for Everyone (2021)
- Manchester Climate Change Framework: 2020-2025 (2020)
- City Centre Transport Strategy to 2040 (2021)
- Our Manchester Strategy – Forward to 2025 (2021)

2.25 In addition to the above documents that offer an overall strategic objective for both the city and the wider region, the St. John's Strategic Regeneration Framework (2016) supports the redevelopment of the Site for residential development.

Planning History

2.26 The approved planning permissions of most relevance on Site and permitted in nearby within the St John's and Water Street areas are set out in the table below.

Table 2.1: Planning History

Name and PP Reference	Description	Status
Trinity Islands (Allied London) 115107/FO/2017 (Note: This is on the same application site)	Construction of a mixed-use development comprising two podiums of three storeys and five residential (Class C3) towers of 26, 26, 37, 41 and 67 storeys (including podium heights) connected by a new pedestrian bridge. Retail, commercial, leisure (gym and boat club) and community uses (community gallery and events space)(Use Classes A1, A2, A3, A4 or D2), workspace facilities (Class B1) and an educational facility (Class D1) within the lower floors and podium level together with new riverside walkway, public realm and landscaping (including podium level parks). Two levels of parking for 581 cars and 2,532 bicycles and 200 cycle spaces within the public realm areas.	Resolution to grant planning permission (27 July 2017).
Big Yellow Self-storage 116810/FO/2017 (Distance from site: 15m)	Construction of a six storey self-storage warehouse (Use Class B8). Access, parking and public realm works.	Approved September 2017. Constructed.
Union T1, St John's MCC PP. Ref.: 125655/FO/2019	Full Planning Permission for the erection of 32 storey plus two basement level mixed use building (sui generis), comprising co-living units, amenity space, gym and flexible commercial space, landscaping, access and other associated works	Approved July 2021

Name and PP Reference	Description	Status
Union T2, St John's MCC PP. Ref.: 126648/FO/2020 (Distance from site: 0.13km)	Full Planning Permission for the erection of 36 storey plus basement level mixed use building comprising co-living units, amenity space and flexible commercial space (Sui Generis), co-work (Use Class B1), landscaping, access and other associated works.	Minded to approved at Planning Committee on 30 July 2020. Awaiting agreement on S.106 prior to a decision notice being issued.
Old Granada Studios 127612/FO/2020 (Distance from site: 0.28km)	Part redevelopment and part refurbishment including the conversion of the existing Granada House building into a 175 bed hotel (Use Class C1) with associated private members club (Sui Generis); and erection of new single storey rooftop bar and restaurant (Use Classes A3 and A4); external terrace and rooftop pool in addition to the erection of a new ten storey building for office (Use Class B1) and ground floor retail or workspaces (Use Class A1/A3 and/or B1); retention of Studios for current use as filming studios (Use Class B1) and erection of modular workspaces (Use Class B1) with associated access and servicing arrangements; public realm and other associated works	Approved November 2020. Under construction.
The Factory 119890/VO/2018 Plans submitted for amended by 130034/JO/2021, not yet approved) (Distance from site: 0.098km)	City Council Development of a new flexible arts and events space comprising a range of activities including theatre, music, dance, art, other performance and non-performance related events, exhibitions and conferences (Sui Generis) with ancillary facilities including retail exhibitions and conferences (Sui Generis) with ancillary facilities including retail and bar uses (Use Classes A1 and A3), offices, administrative and back of house functions (Use Class B1), training and educational facilities (Use Class D1), servicing and access arrangements, highways works, creation of new public realm, removal of 4 trees, cycle parking and provision of new plant and associated works. Demolition of the Starlight Theatre, existing workshop and other structures and perimeter wall and alterations to the Grade II listed Colonnaded Railway Viaduct. (Amendment of application ref no 114294/VO/2016 approved in January 2017)	Approved July 2018. Under construction.
Globe and Simpson (St John's Place) 121721/FO/2018 (Plans amended by 125222/JO/2019)	Erection of a 9 storey building (including ground) comprising workspace (Use Class B1) and flexible commercial floorspace at ground level (Use Class A1, A3 and / or B1), referred to as Building 2, above basement level for car and cycle parking, together with new public realm, landscaping, provision of external seating areas, access and other associated works.	Approved January 2019. Under construction.
Potato Wharf Phase II 109335/FO/2015/C1	Erection of two residential buildings (Use Class C3) comprising 191no apartments, car parking, bicycle parking, public realm and landscape works, access and servicing arrangements, and associated works, following demolition of the existing buildings and plant.	Approved November 2015. Under construction.

2.27 A full list of all baseline and cumulative developments both within and beyond the boundary of the Site are set out in Appendix 2 of this EIA Scoping Report for agreement with the Local Planning Authority.

The Proposed Development

2.28 The Proposed Development would involve the construction of four new residential towers of between circa 35 and 60 storeys to provide up to 2,000 apartments with retail, commercial and leisure uses on the lower levels and underground parking spaces. It should be noted that the proposed figures are not fixed and are part of an evolving design.

2.29 In summary, the Proposed Development comprises:

Table 2.2: Development Parameters

Measurement	Proposed
Proposed Site Area	C: 0.89 hectares D: 0.89 hectares Total: 1.78 hectares
Residential Use	Up to 2,000 residential units
Commercial Use	Approximately 9,000 sq. ft of retail, commercial and leisure uses (Use Classes E [a,b,d] and Sui Generis).
Open Space	Approximately 1.3 ha of open space including new public realm space at ground and riverside level.
Development Height	Indicative heights of between: C1: 35 storeys to 39 storeys C2: 44 storeys to 48 storeys D1: 56 storeys to 60 storeys D2: 51 storeys to 55 storeys
Car and Cycle Parking Spaces	Underground parking comprised of the following: Car Parking Spaces: Between 550 and 750 (of which c.10% will be EVC from the outset) Cycle Parking Spaces: 1 cycle parking space per apartment

3. Scope, Structure and Consultation

Scope

3.1 A scoping exercise has been carried out in order to determine the likely significant effects on the environment that may arise as a result of the Proposed Development. This process has enabled the team to determine which technical disciplines are pertinent to the Proposed Development and the scope of assessment required in order for any likely significant effects on the environment to be addressed as part of a future EIA process.

3.2 This process has taken account of the proposed construction activities, relevant planning policy, knowledge of the Site, and the professional opinion of the project team.

3.3 The information presented in the ES will be provided in accordance with Schedule 4 of the EIA Regulations and will include:

- A description of the Proposed Development;
- An outline of the main alternatives studied;
- A description of the aspects of the environment likely to be significantly affected by the Proposed Development;
- A description of the likely significant effects of the Proposed Development on the environment;
- 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
- An indication of any difficulties encountered by the applicant in compiling the required information.

3.4 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.

3.5 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.

Environmental Disciplines to be Scoped Out of the EIA

3.6 It is considered that the following disciplines will not give rise to likely significant effects on the environment and would therefore not require inclusion in the ES. An explanation for each discipline is given below.

Agricultural Circumstances

3.7 The Site is entirely on brownfield land so there would be no effects in respect to agriculture. This discipline can therefore be scoped out of the EIA and will not be assessed as part of the planning application.

Archaeology

3.8 The archaeological potential of the Site has been reviewed by the University of Salford Centre for Applied Archaeology (Salford Archaeology) in relation to the Proposed Development.

3.9 The Site lies within the Castlefield Conservation area, but does not contain any Scheduled Monuments, Registered Parks and Gardens or other designated heritage assets.

3.10 There is no known physical evidence to demonstrate human activity in the immediate vicinity of Site C and Site D during the prehistoric, Roman and medieval periods, and the potential for buried archaeological remains deriving from these periods is considered to be low, although the possibility of isolated artefacts should not be dismissed entirely.

3.11 The area is likely to have been developed initially during the early 18th century with the completion of the Mersey & Irwell Navigation, although the original quay was situated at the bottom of Quay Street and a short distance to the north-east. Site C was occupied from the late 18th century by a dye works, which formed part of an important group of early textile-finishing works along the River Irwell corridor. Physical evidence for some of these former industrial buildings are likely to survive in-situ as below-ground remains.

3.12 The area was further developed during the course of the 19th century, providing facilities for water-borne transport by the New Quay Company. Previous archaeological investigation of Site C in the early 1990s revealed well-preserved elements of the 19th-century timber waterfront that was set back some 12m from the modern river embankment.

3.13 Sites of potential archaeological interest identified within Site C include an 18th-century dye works, an early 19th-century warehouse, a mid-19th-century smithy and river basin and a late 19th-century pig market, all of which are of local significance. Site D similarly has potential to contain remains of a late 18th-century dye works, an early 19th-century warehouse, and a mid-19th-century chemical works and workers' housing, all of which are again of local significance. None of the sites identified are afforded statutory designation and are not of sufficient importance to require preservation in-situ.

3.14 It is thus evident from a review of the baseline conditions, and following discussion with the Greater Manchester Archaeological Advisory Service, that the impact of the Proposed Development of Site C and Site D will not have a significant effect on archaeological remains, and this discipline does not merit consideration in an EIA. However, a comprehensive archaeological desk-based assessment will be prepared with a future planning application to assess

the potential impact of development on the sub-surface archaeological resource. This approach is in line with the National Planning Policy Framework (NPPF) and local planning policies.

Aviation

3.15 At up to 60 storeys the Proposed Development exceeds the 90 AOD aviation safeguarding threshold. Manchester Airport Group (MAG), Barton Aerodrome and NATS will need to be contacted for consultation advice. It is considered from professional experience of similar scale developments within this area of MCC that the Proposed Development will not give rise to aviation conflicts which cannot be resolved via appropriate mitigation to avoid any residual impacts arising.

3.16 Therefore, it is considered that the aviation discipline will not give rise to likely significant effects on the environment and would therefore not require inclusion in the Environmental Statement. This discipline is therefore scoped out of the EIA.

Ecology

3.17 ERAP Limited (ecologist consultant) has carried out a desktop study and relevant ecological surveys (Phase 1 Habitat Survey, invasive plant species survey and daylight licensed bat survey and assessment) to inform the preparation of an Ecological Survey and Assessment. The report will be submitted alongside the planning application and will detail the results of the surveys undertaken at the Site and recommendations in relation to the Proposed Development.

3.18 The Site comprises hard-standing and colonising vegetation with boundary vegetation. The Site has no statutory or non-statutory designation for nature conservation. Likely significant effects of the Proposed Development on the Sites of Special Scientific Interest (SSSI), located 1.2 to 1.5 kilometres from the Site are avoided.

3.19 The Site contains only common and widespread plant species. None of the habitats present are representative of semi-natural habitat or Priority Habitat.

3.20 Giant Hogweed and Indian Balsam, both invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were detected at the Site boundary.

3.21 The boundary vegetation provides habitat suitable for use by nesting for birds, otherwise the presence of protected species at the Site is reasonably discounted.

3.22 The assessment concludes that there are no significant ecological constraints on the Proposed Development and any adverse effects on designated sites, protected species and ecologically valuable habitats are avoided.

3.23 The Proposed Development provides an opportunity to secure ecological enhancement for wildlife typical of the urban context of the Site.

Ground Conditions

3.24 A Phase 1 Desk Study (Appendix 5) has been completed at the site and a Phase II intrusive investigation is currently at the design stage. The desk study findings are summarised below, and the Desk Study report is submitted as an appendix to this EIA Scoping Report;

- Historical Ordnance Survey (OS) mapping indicates a number of buildings/ site uses present onsite from 1851 which are indicated to have included a dye works, chemical works, a (now-infilled) dock basin, a Corporation Yard/ refuse destructor with chimney, a smithy, a pig market, a garage and several unspecified buildings.

- Published geological mapping suggests a sequence of Made Ground directly overlying bedrock of the Chester Formation Sandstone.

- The bedrock of the Chester Formation is classified as a Principal Aquifer.
- The River Irwell is immediately adjacent to the northern and western boundaries. The Bridgewater Canal and the River Medlock are approximately 300m to the south of the site.
- Several sources of contamination have been identified associated with the Site's previous uses. Ground conditions will be confirmed during the intrusive investigation.

3.25 Assuming a two-level basement with a founding levels of approximately 12m below the current surface level any foundations will likely be within the intact bedrock.

3.26 The proposed design will include the removal of the majority of Made Ground to enable the construction of the two-level basement.

3.27 In respect of contaminated land, a Phase 1 Desk Study has been completed and a Phase 2 Ground Investigation is at the design stage. The Phase 2 works will include an assessment of potential risks associated with contamination of the ground and, where appropriate, provide recommendations for remediation.

3.28 It is considered that any identified effects are anticipated to be 'Not Significant', will be mitigated through the submission of documents relating to the planning application or addressed through tertiary/best practice measures.

3.29 A summary of the anticipated effects and how the planning process will address those effects are presented as Table 3.1.

Table 3.1: Planning Process Effects Mitigation

Effect	Mitigation	Scoped In	Scoped Out
During Construction			
Exposure of Future Site Residents	The design of the site involves the excavation of a two-storey basement and will include the removal of the majority of Made Ground. Any residual risks that will remain on the site will be addressed under LCRM (Land Contamination Risk Management 2020) using risk assessment. A Phase 2 contaminated land investigation is currently at the design stage and a Phase I desk study report is included as an Appendix to this document. The Phase 2 investigation will confirm the potential risks associated with ground contamination and if required suggest any remedial works, however as mentioned above the majority of any likely source, the Made Ground, will be removed during construction. If necessary, a remediation strategy would be produced which would detail how these works would be verified and validation. The Phase I, Phase II and any remediation strategies and validation reports would be submitted to the local authority as part of the planning process. The information from the Phase 2/remediation strategy would be used to inform the design process to allow mitigation measures (i.e. clean cover layer/ ground gas mitigation) to be incorporated during the constriction and prevent the exposure of future site users. Verification works and a validation report would be prepared confirming that any remedial measures, addressing potential residual risks, had been implemented.		✓
Exposure of construction workers and adjacent site users to contaminated materials within soils			✓

Effect	Mitigation	Scoped In	Scoped Out
	The information from all the reports will be used to inform a Construction Environmental Management Plan (CEMP) (which will be submitted with the planning application) and a Construction Phase Health and Safety Plan (CPP) (which sits outside the planning process) which will set out the mitigation measures required to prevent exposure of construction workers and adjacent site users to any potentially contaminated soils during construction. These mitigation measures are standard construction practices and include dust suppression, good hygiene practices and appropriate standard personal protective equipment. In addition, the completion of gas testing prior to entry into confined spaces would be completed at all construction sites as it best practice.		
Exposure of construction workers to hazardous ground gas in confined spaces			✓
Contamination of the ground and local water receptors with construction activities	The Framework CEMP will be submitted with the planning application, and a more detailed CEMP will be agreed with the Council prior to the construction of the proposed development. These would identify measures to prevent the contamination of the ground and local groundwater. These standard measures generally include bunded fuel areas, the provision of spill kits, designated re-fuelling areas and the installation of temporary drainage (if required). Emphasis will be given to the protection of the water quality within the adjacent River Irwell.		✓
During Operation			
Exposure of residential receptors to contaminated soils	The building will comprise basement parking, ground floor commercial premises with residential units above. The majority of ground surfacing will be hard cover with minimal landscaping. Based on the proposed design and use there will be very limited opportunity for site users to be exposed to any residual contamination given the hard surfacing. The risks will be further reduced by the implementation of any additional remediation measures.		✓
Exposure of residential receptors to contaminated water	Similarly, removal of the majority of the Made Ground will remove the majority of any source of contamination to controlled waters. The high degree of hard surfacing will retain existing low infiltration rates minimising the potential for mobilisation of any existing contamination. The risks to both site users and controlled waters will be further reduced by the implementation of any additional remediation measures during the construction phase. The risk at operational phase to site users and controlled waters is considered negligible.		✓
Exposure of residential receptors to ground gas			✓

Human Health

3.30 The proposal is located in a city centre urban environment. Currently the Site is a surface level car park and the immediate environs are characterised by light industrial buildings and large format retail uses. There are residential dwellings to the north-west and south of the Site in the form on One Regent Road and Potato Wharf. In addition, residential dwellings are proposed as part of surrounding consented schemes and throughout the St John's Strategic Regeneration Framework Area.

3.31 The EIA Regulations (May 2017) amendments included making explicit the requirement to consider population – and human health. There is no prescribed EIA definition for human health but the identification, description, and assessment of effects on human health is well established in the UK for Strategic Environmental Assessment (SEA). Consideration of human health and wellbeing within EIA is distinct from Health Impact Assessment (HIA). The EIA professional body Institute of Environmental Assessment & Management (IEMA) has prepared outline guidance for practitioners – Health in EIA, a Primer for a Proportionate Approach (2017)[1] - it is important that health in EIA is proportionate, balanced, and relevant.

3.32 There are multiple determinants of health and wellbeing, with a need for cross-sectoral understanding and collaboration[2]. There are linkages between the global ecosystem, the natural and built environments, the local economy with communities, people, and their lifestyles, and likely interactions between different sectors. It is considered that most of the factors scoped into the EIA can have impacts to some extent on health and quality of life/wellbeing – both positive and negative. The implications for human health will be considered in each relevant technical topic chapter – in accordance with the standards and methods of environmental assessment applied to that topic – and in a proportionate and balanced way that is appropriate to the proposals and their location.

3.33 Health is closely linked to the conditions in which people are born, grow, live, work and age and inequities in power, money, and resources – the social determinants of health –as reconfirmed with the Marmot Report 10 years on (February 2020)[3]. The importance *of creating and developing healthy and sustainable places and communities* is further identified in the Covid 19 update Build Back Fairer (December 2020)[4]. This recent report also highlights issues for the North-West, including overcrowding in Greater Manchester and exacerbation of certain health inequalities.

3.34 The provision of good quality housing and space for employment will have major positive effects for human health and wellbeing. The site is located within the St Johns and Water Street SRF areas with major mixed-use commercial-led schemes to the north-east of the site, offering strong synergies and linkages with other sites as part of overall regeneration. Opportunities for enhancing health benefits and the opportunity for people to consider healthy lifestyles will be considered throughout the design development of the proposals in line with Manchester City Council's Residential Quality Guidance (2017). This will be detailed in the description of the proposals and the implications for housing, economy and employment will be addressed in the socio-economic ES chapter. The design process will also consider designing for security to reduce the risk of adverse effects on health and wellbeing through crime, or fear of crime, and this will be detailed in the socio-economic ES chapter.

3.35 Provision of and access to green infrastructure, open space, and community/cultural facilities and services has clear implications for human health and wellbeing with positive effects. The development proposals include 1.13 ha of open space, landscaping, access, and other associated works. These matters will be addressed through the design development process with details provided in the Design and Access Statement and the Townscape and Visual Impact Assessment ES chapter. The Socio-Economic ES chapter will consider the capacities of local health facilities, availability of open space, and community/cultural facilities and services. Cultural matters are important for human wellbeing and the implications for heritage factors will be addressed through the heritage ES chapter. The change from the existing surface carpark to a residential-led neighbourhood that is integrated through design with the wider regeneration of the St Johns and Water Street SRF areas is likely to have positive effects for human health and wellbeing that may be synergistic and cumulative in the longer-term.

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[1] https://www.iema.net/assets/newbuild/documents/IEMA%20Primer%20on%20Health%20in%20UK%20EIA%20Doc%20V11.pdf
[2] Barton H, Grant M & Guise R (2nd edition 2010) *Shaping Neighbourhoods: for local health and global sustainability* Taylor & Francis Ltd, England
[3] https://www.health.org.uk/publications/reports/the-marmot-review-10-years-on
[4] https://www.health.org.uk/publications/build-back-fairer-the-covid-19-marmot-review

3.36 During the construction phase, there is the potential for temporary impacts to human health/wellbeing with the potential for accidental spillages, dust, noise and vibration, and disturbance/emissions to air from traffic movements. These will be considered and assessed according to the relevant standards and methods for each technical topic – air quality, noise and vibration, TVIA. The Site is brownfield land and the potential for risks to human health through contaminated land/soil has been addressed within this Scoping Report. Mitigation will be proposed as part of a Construction Environmental Management Plan submitted with the Planning Application and this will reduce potential risks to human health to insignificant effects/acceptable levels.

3.37 During the operational phase, the proposal could potentially have adverse impacts on health, as a result of traffic movements and associated air quality or road safety impact, noise, flood risk/water resources, and daylight / sunlight, wind microclimate impacts. These will be fully considered and assessed according to the relevant standards and methods for each technical topic – Air Quality, Noise and Vibration, Traffic and Transport, Daylight, Sunlight and Overshadowing, Water Resources, and Wind Microclimate. Mitigation will be proposed, and residual impacts reported for any human health implications that are identified as part of each ES chapter.

3.38 The Traffic and Transport chapter will address road safety and the implications for drivers, pedestrians, and cyclists. The Site is well placed for excellent connectivity to sustainable transport – locally and beyond. The implications for air quality through vehicle emissions will be addressed through the Air Quality ES chapter. The implications from building nuisance noise and traffic noise will be addressed by the Noise ES chapter. The risk of direct or indirect flooding will be detailed in the Water Resources ES chapter. The risks from climate change associated with wind, solar glare, and daylight effects will be considered through these chapters and mitigation embedded through the design process such that any adverse residual effects will be minimised.

3.39 Thus, where relevant, the implications for human health will be considered in the individual technical chapters, in a proportionate way and including cumulative effects where applicable. As such, residual adverse impacts on Human Health are not expected to be significant and a standalone ES Chapter is proposed to be scoped out. Overall, it is predicted that the proposals will have major beneficial effects for human health associated with good quality housing and a substantial increase in the quantum of high-quality, safe, accessible, and biodiverse public realm.

Television, FM Radio and DAB Radio Reception

3.40 The Proposed Development has the potential to affect TV transmissions in the surrounding area, particular the area behind the Proposed Development with respect to the transmitter (the shadow zone). The television transmitter serving the area surrounding the Proposed Development is expected to be Winter Hill. This is a UK main transmitter, broadcasting local and national television channels.

3.41 A TV baseline reception survey will be completed within the shadow zone, using an advanced TV signal analyser, connected to an aerial located at 10 metres above ground level. This process will confirm the transmitter serving the surrounding area, as well as the baseline signal strength and quality. The results will allow for a 'before and after' comparison should interference be reported once construction on the Proposed Development has begun.

3.42 Any reported TV interference once construction of the Proposed Development has begun will be investigated. It is not standard practice to apply mitigation in advance because specific instances of interference cannot be easily predicted. It is also not standard practice to alter plans of a Proposed Development solely for TV interference. Any TV interference confirmed to be caused by the Proposed Development will be mitigated by the developer.

3.43 Whilst the Proposed Development may have the potential to impact TV Reception it is not anticipated that there will be significant EIA impacts on telecommunications in the area as a result of the Proposed Development; therefore, Telecommunications is proposed be scoped out of the ES. A TV reception Survey will be prepared and submitted as part of the planning application.

3.44 Therefore, there is no recommendation for an ES Chapter on television interference. The TV baseline survey, which is to be undertaken, will serve as a basis for validating any interference reports once the Proposed Development has begun construction.

Scoping Summary

3.45 Table 3.2 provides a summary of the scoping exercise undertaken and what disciplines will be considered within the EIA and which are proposed to be scoped out of the EIA (and subject to a standalone technical report).

Table 3.2: EIA Scoping Summary

Discipline	ES Chapter	Non-EIA Assessment	Consultant
Agricultural Circumstances	×	×	n/a
Air Quality	✓	×	Ensafe
Archaeology	×	✓	Salford Archaeology
Aviation	×	×	n/a
Heritage	✓	×	SLHA
Climate Change	✓	×	WSP
Daylight, Sunlight and Overshadowing	✓	×	GIA
Ecology	×	✓	ERAP
Television, FM Radio and DAB Radio Reception	×	✓	Pager Power
Human Health	×	✓	Enfusion
Flood Risk and Drainage	✓	×	Curtins
Ground Conditions	×	✓	WSP
Noise and Vibration	✓	×	Matt Fisher
Socio-Economic Issues	✓	×	Ekosgen
Solar Glare	✓	×	GIA
Townscape and Visual Impact	✓	×	Chris Burnett
Traffic and Transport	✓	×	Vectos

Discipline	ES Chapter	Non-EIA Assessment	Consultant
Wind Microclimate	✓	✖	WSP

Cumulative Effects Assessment

3.46 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.

3.47 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.

3.48 Where the construction of schemes has commenced then these will be treated as part of the baseline and not as committed developments.

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

3.50 The Applicant seeks the agreement from the LPA to the scope of committed developments and invites guidance on any additional schemes not listed.

Consultation

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

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

3.52 We would grateful for confirmation of which stakeholders have been consulted as part of the Scoping Opinion

4. Proposed EIA Methodology

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

4.2 The ES would comprise two volumes, the first of 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) would be produced and form a standalone document.

4.3 Each ES chapter would follow the headings set out below to ensure the final document is transparent, consistent, and accessible.

- Introduction;
- Legislative and Policy Context;
- Assessment Methodology and Significance Criteria;
- Baseline Conditions;
- Identification and Evaluation of Key Effects;
- Mitigation Measures;
- Cumulative Effects;
- Residual Effects; and
- Summary.

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

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

Introduction

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

Legislative and Policy Context

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

Assessment Methodology and Significance Criteria

4.8 This section 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.

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

Baseline Conditions

4.10 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

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

4.12 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.

Prediction of Impact Magnitude

4.13 The methodology for determining the scale or magnitude of change caused by the impact is set out in Table 4.1.

Table 4.1: 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

4.14 The sensitivity of a receptor is based on the relative importance of the receptor using the scale set out in Table 4.2.

Table 4.2: 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

4.15 Effect significance will be calculated using the matrix in Table 4.3. This illustrates the interaction between impact magnitude and receptor sensitivity.

Table 4.3: 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

4.16 Adverse effects will be considered for mitigation and specific mitigation measures 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.

4.17 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.

4.18 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.

4.19 Clear details of when and how the mitigation measures were carried out, or will be carried out, are to be given within the Environmental Statement. 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.

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

Cumulative Effects

4.21 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 actions together with the construction and development works.

4.22 The cumulative effects of the Proposed Development and the identified committed developments will be assessed. A list of known committed developments is set out at Appendix 2. The Council are requested to review and comment on this list in their Scoping Opinion.

Residual Effects

4.23 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.

Phasing and Delivery

4.24 Given the scale of the Proposed Development it is envisioned that it will be delivered in a phased manner.

4.25 For the purposes of this Site, we have defined the phasing strategy as:

- Phase C1 – Building C1, whole basement for Site C, operational C1 car parking and any required temporary landscaping works
- Phase C2 – Building C2, operational C2 car parking and final landscaping works

- Phase D1 – Building D1, whole basement for Site D, operational D1 car parking, and any required temporary landscaping works

- Phase D2 – Building D2, operational D2 car parking and final landscaping works.

4.26 As a result of the proposed phasing it will be necessary to test a number of scenarios within the Environmental Impact Assessment. This is to ensure robustness that all impacts that may arise as a result of partial delivery of the proposals (due to phasing) are assessed.

4.27 Our identified EIA scenarios are:

- Scenario 1: Existing Baseline

- Scenario 2: C1 (baseline and cumulative)

- Scenario 3: Phase C1 complete, Phase C2 under construction (baseline and cumulative)

- Scenario 4: Phases C1 and C2 complete, and Phase D1 under construction (baseline and cumulative)

- Scenario 5: Phases C1, C2 and D1 complete, and Phase D2 under construction (baseline and cumulative)

- Scenario 6: Completed Development (baseline and cumulative)

5. Environmental Statement Chapters

5.1 Under each section topic, a summary of the content of the section, the methodology and scope of assessment is given. Where relevant, the assumptions of the assessment are described. Current relevant legislation or recognised guidance for individual assessments will be adhered to, where necessary.

Air Quality

Introduction

5.2 This Chapter of the ES will be prepared by Ensafe Consultants and assesses the likely Air Quality impacts of the proposals upon the Site and surrounding area.

Legislative and Policy Context

5.3 The following legislation, guidance and policy documents will be considered and adhered to during the preparation of the Air Quality Chapter:

Legislation

- European Union (EU) Directive 2008/50/EC - which came into force on 11th June 2008. This Directive consolidated previous legislation which was designed to deal with specific pollutants in a consistent manner and provided new air quality objectives for particulate matter with an aerodynamic diameter of less than 2.5µm ($PM_{2.5}$).

- The Air Quality Standards (Amendment) Regulations 2016 - these Regulations amend the Air Quality Standards Regulations 2010 and transpose the EU Directive 2008/50/EC into UK law. Air Quality Limit Values (AQLVs) were published in these regulations for 7 pollutants, as well as Target Values for an additional 6 pollutants.

- Part IV of The Environment Act 1995 - requires UK government to produce a national Air Quality Strategy (AQS) which contains standards, objectives, and measures for improving ambient air quality. The most recent AQS was produced by the Department for Environment, Food and Rural Affairs (DEFRA) and published in July 2007. The AQS sets out Air Quality Objectives (AQOs) that are maximum ambient pollutant concentrations that are not to be exceeded either without exception or with a permitted number of exceedances over a specified timescale.

- Air Quality Strategy (AQS) 2007 - Sets out a framework for reducing hazards to health from air pollution and ensuring that international commitments are met in the UK. It also sets standards and objectives for ten main air pollutants to protect health, vegetation, and ecosystems

4.28 The Air Quality Objectives (AQOs) considered further during the preparation of the Air Quality chapter are detailed below in Table 5.1.

Table 5.1 Air Quality Objectives

Pollutant	Air Quality Objective	
	Concentration (µg/m³)	Averaging Period
NO_2	40	Annual mean
	200	1-hour mean; not to be exceeded more than 18 times a year
PM_{10}	40	Annual mean
	50	24-hour mean; not to be exceeded more than 35 times a year
$PM_{2.5}$	25	Annual mean

5.4 The following table summarises the advice provided in Department for Environment, Food and Rural Affairs (DEFRA) guidance LAQM TG(16) on where the above AQOs apply.

Table 5.2 Where the Air Quality Objective Apply

Averaging Period	Objectives Should Apply At	Objectives Should Not Apply At
Annual mean	All locations where members of the public might be regularly exposed Building façades of residential properties, schools, hospitals, care homes etc	Building façades of offices or other places of work where members of the public do not have regular access Hotels, unless people live there as their permanent residence Gardens of residential properties Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term
24-hour mean	All locations where the annual mean objective would apply, together with hotels. Gardens of residential properties	Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term
1-hour mean	All locations where the annual mean and 24-hour mean objectives apply. Kerbside sites (for example, pavements of busy shopping streets) Those parts of car parks, bus stations and	Kerbside sites where the public would not be expected to have regular access

Averaging Period	Objectives Should Apply At	Objectives Should Not Apply At
	railway stations etc which are not fully enclosed, where members of the public might reasonably be expected to spend one hour or more Any outdoor locations where members of the public might reasonably be expected to spend one hour or longer	

5.5 Following the advice provided above both annual and 1-hour mean objectives will be applicable to the Air Quality chapter. This will allow for a suitable assessment of potential exposure and impacts at both residential and commercial uses.

National Planning Policy

5.6 The National Planning Policy Framework (NPPF)(2021) sets out the Government's core policies and principles with respect to land use planning, including air quality. The document includes the following considerations which are relevant to this assessment:

"The planning system should contribute to and enhance the natural and local environment by: Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality."

Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development".

"Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan."

5.7 The implications of the NPPF have been considered throughout this assessment.

National Planning Guidance

5.8 The National Planning Practice Guidance (NPPG) - launched by the Department for Communities and Local Government to support the NPPF. The air quality chapters were produced on 6th March 2014 (updated on November 1st 2019) and the relevant sections pertinent to Air Quality are highlighted below:

Paragraph 001 states that: "Defra carries out an annual national assessment of air quality using modelling and monitoring to determine compliance with EU Limit Values" and "It is important that the potential impact of new development on air quality is taken into account, where the national assessment indicates that relevant limits have been exceeded or are near the limit". The role of Local Authorities under LAQM are stated and that Air Quality Action Plans should "identify measures that will be introduced in pursuit of the objectives."

5.9 Paragraph 002 Plans may need to consider ways in which the development could be made appropriate in locations where air quality is or is likely to be a concern, and not give rise to unacceptable risks from pollution. This could, for example entail identifying measures for offsetting the impact on air quality arising from new development including supporting measures in an air quality action plan or low emissions strategy where applicable"

Paragraph 005 states that "Whether or not air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to generate air quality impact in an area where air quality is known to be poor. They could also arise where the development is likely to adversely impact upon the implementation of air quality strategies and action plans and/or, in particular, lead to a breach of EU legislation."

Paragraph 007 states that "Assessments should be proportional to the nature and scale of development proposed and the level of concern about air quality". In terms of mitigation, it states that "Mitigation options where necessary will be location specific, will depend on the proposed development and should be proportionate to the likely impact."

Paragraph 009 shows a flow chart highlighting how the assessment of air quality impacts should fit into the development management process. It makes it clear that air quality impact risks, AQLVs and AQOs should be considered in the decision-making process.

5.10 The Chapter will also be undertaken in accordance with a number of guidance documents, to inform the assessment methodology. These are detailed below:

- Department for Environment Food and Rural Affairs (DEFRA) (2016): Local Air Quality Management Technical Guidance LAQM TG(16);
- Institute of Air Quality Management (IAQM) (2014): Guidance on the Assessment of Dust from Demolition and Construction; and
- IAQM & Environmental Protection UK (EPUK) (2017): Land-use Planning & Development Control: Planning for Air Quality.

Local Planning Policy

5.11 The Manchester Local Development Framework (LDF) Core Strategy was formally adopted in 2012 and provides a framework for development within the city. The LDF comprises a number of documents which set out MCC's spatial policy framework A review of the Core Strategy indicated the following policy in relation to air quality that is relevant to this Chapter:

- Manchester City Council Local Development Framework (LDF) Core Strategy - Policies EN16 Air Quality, CC5 Transport and DM1 Design Management.

Baseline Conditions

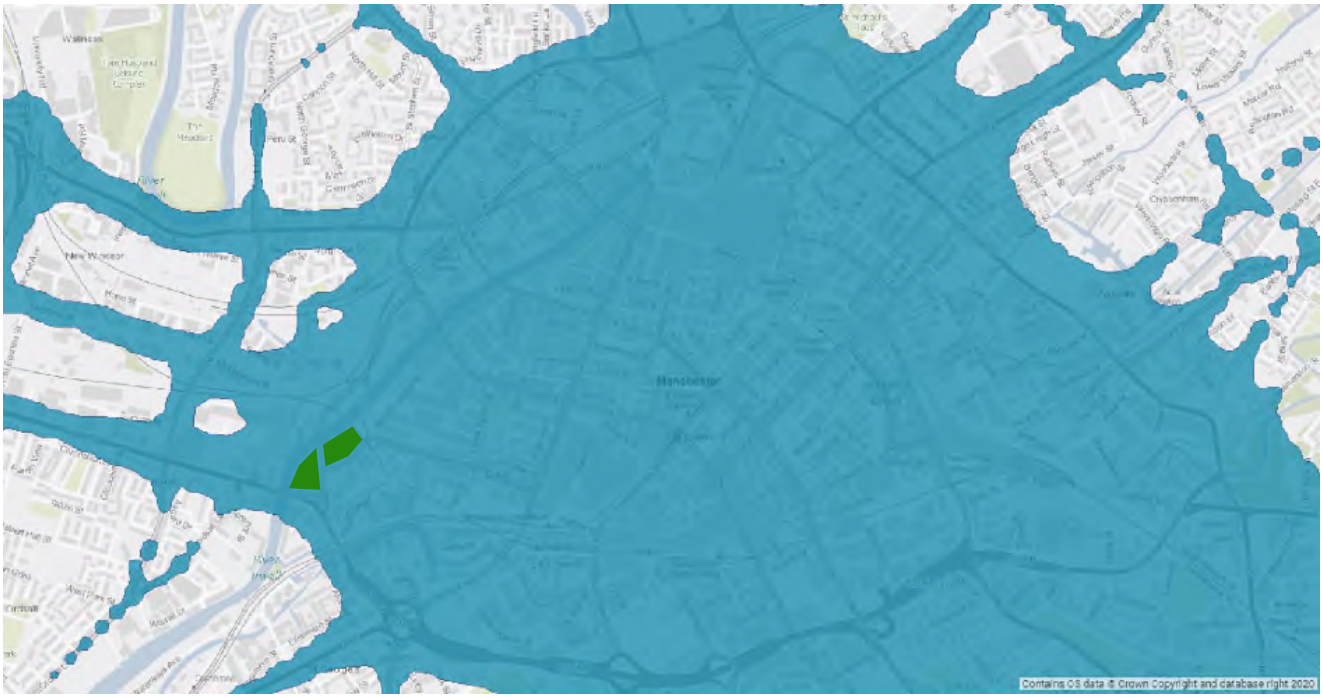
5.12 Existing air quality conditions in the vicinity of the Site have been reviewed and detailed below. As required by the Environment Act (1995), the Greater Manchester Combined Authority (GMCA), on behalf of Manchester City Council (MCC), has undertaken review and assessment of air quality within the city. This process has indicated that annual mean Nitrogen Dioxide (NO_2) concentrations exceed the relevant Air Quality Objectives (AQO) at specific areas throughout the city. As such, an Air Quality Management Area (AQMA) has been declared and is described as:

"Greater Manchester Combined Authority AQMA - This is the part of the Greater Manchester Combined Authority AQMA located within the Manchester City Council area.

5.13 The Site is located within the GMCA AQMA (See Figure 5.1). As a result, there is the potential for future residents to be exposed to elevated pollutant concentrations as a result of the local road network, as well as to cause impacts within the AQMA and surrounding area as a result of road vehicle exhaust emissions generated by the Proposed

Development. MCC has concluded that concentrations of all other pollutants considered within the AQS are currently below the relevant AQOs and as such no further AQMAs have been designated.

Figure 5.1 Greater Manchester Air Quality Management Area (identified in blue) and the Site (in green)



Air Quality Monitoring

5.14 Monitoring of pollutant concentrations is undertaken by MCC using continuous and periodic methods throughout the city. A review of the most recent data indicated that there are currently three continuous monitors operated by MCC, with the closest sited adjacent to Oxford Road. Table 5.3 presents the most recent published monitoring results for this location. Exceedances of the annual mean AQO for Nitrogen Dioxide (NO_2), PM_{10} and $PM_{2.5}$ are highlighted in **bold.**

Table 5.3 Automatic Monitoring Results

ID	Site Name	Site Type	Distance to site	Pollutant	Annual Mean Concentration (µg/m3)		
					2017	2018	2019
MAN3	Oxford Road	Urban Centre	1,584	NO_2	36	35	36
				PM_{10}	20	21	20
				$PM_{2.5}$	8	11	12

5.15 As shown in Table 5.3, the annual mean AQO for NO_2 PM_{10} and $PM_{2.5}$ were not exceeded in recent years at the Piccadilly automatic monitoring site.

5.16 It should be noted this monitoring location is classified as an Urban Centre site and as such, will only be considered further in context of the baseline assessment given the location does not provide a true representation of the Site location or surrounding context.

5.17 MCC also utilises passive diffusion tubes to monitor NO_2 concentrations throughout the city. A review of the latest diffusion tube monitoring location with 1km of the Site indicated two locations. Monitoring results from these locations are summarised in Table 5.4. Exceedances of the annual AQO for NO_2 are shown in **bold**.

Table 5.4 MCC Diffusion Tube Monitoring Results

ID	Site Name	Site Type	Distance to site	Annual Mean Concentration (µg/m3)		
				2017	2018	2019
MAN77	Hewitt Street	Urban Traffic	916	38.81	40.99	**43.66**
MAN97	Chester Road	Urban Traffic	598	-	-	32.29

5.18 The neighbouring Salford City Council (SCC) also undertake Air Quality monitoring within 1km of the Site. A review of the latest data indicated six representative diffusion tube monitoring locations deemed suitable to inform likely onsite conditions. Recent results from these locations are shown in Table 5, with exceedances of the relevant AQO are highlighted in **bold**.

Table 5.5 Salford City Council Diffusion Tube Monitoring Results

ID	Site Name	Site Type	Distance to site	Annual Mean Concentration (µg/m3)		
				2017	2018	2019
SA27	Trinity Way	Urban Traffic	1,005	36.80	34.10	37.20
SA39	Trinity Way/Chapel Street	Urban Traffic	825	**41.60**	39.10	**41.70**
SA59	West Crown Ave	Urban Traffic	923	36.67	33.31	32.45
SA60	Regent Road	Urban Traffic	303	**40.70**	**40.23**	36.66
SA79	Chapel Street	Urban Traffic	737	-	-	**41.10**
SA81	Regent Road	Urban Traffic	185	-	-	**46.41**

5.19 As shown in Table 5.4 and Table 5 there were exceedances of the annual mean AQO for NO_2 at a number of MCC and SCC monitoring locations in recent years. Exceedances are likely due to their kerbside and roadside locations within the GMCA AQMA.

5.20 The closest passive diffusion tube monitor is located at Regent Road (SA81), approximately 185m west of the Site. This location is classified as a roadside site and situated in similar distance to arterial roads as the Site. Subsequently, this location will provide the most suitable representation for baseline concentration across the proposed Site. The remaining locations will provide a suitable representation of site concentrations and will inform the basis of the impact assessment.

5.21 Monitoring of particulate matter with an aerodynamic diameter of less than 10µm (PM_{10}) and 2.5µm ($PM_{2.5}$) is not currently undertaken by MCC or SCC in the vicinity of the Site.

5.22 A review of recent monitoring results within the vicinity of the Site indicated that annual mean NO_2 concentrations adjacent to the Site are likely to be above or marginal to the annual mean AQO. Detailed modelling will therefore be required in order to quantify the potential risk of on-site exposure to elevated pollutant concentrations including PM_{10} and $PM_{2.5}$.

Background Pollutant Concentrations

5.23 Predictions of background pollutant concentrations on a 1km by 1km grid basis have been produced by DEFRA for the entire of the UK to assist Local Authorities (LAs) in their Review and Assessment of air quality. The Site is located in grid square NGR: 382500, 397500. Data for this location was downloaded from the DEFRA website for the purpose of this assessment and is summarised in Table 5.6; for the most recent baseline year (2019) to accord with most recent and available monitoring data.

Table 5.6 Predicted Background Pollutant Concentrations

Pollutant	2019 Predicted Background Concentration (µg/m3)
NO_2	33.65
NO_x	22.79
PM_{10}	13.16
$PM_{2.5}$	8.54

5.24 As shown above, 2019 background concentrations do not exceed the relevant AQOs. Comparison with the monitoring results provided in Table 5.4 and Table 5 indicate the influence of road vehicle exhaust emissions have upon roadside pollutant concentrations.

5.25 To provide a conversative approach, the 2019 background concentrations will be used to inform future year background scenarios.

Potential Significant Effects

On Site Exposure Impacts

5.26 The Site is located adjacent to the A57 and A6042 which are notable sources of road vehicle exhaust emissions. Further to this the Site is located within the GMCA AQMA and subsequently there is potential to introduce new

receptors into an area of elevated pollutant concentrations. This may significantly affect the health and amenity of future occupiers.

4.29 Further assessment is therefore required to quantify pollutant concentrations across the site, to ensure the Proposed Development complies to the AQOs detailed in
5.27 Table 5.1.

Off-Site Impacts

5.28 With regards to offsite construction phase impacts, it is assumed that relevant fugitive dust control measures outlined by the IAQM will be sufficient to reduce construction phase dust impacts. However, a qualitative assessment will be undertaken to determine the level of site-specific control measures.

5.29 Impact relating to construction phase road vehicle exhaust emissions generated by Heavy Duty Vehicles (HDVs) may result in significant temporary impacts and a robust scoping assessment will be undertaken once detailed traffic flow data is available.

5.30 The Proposed Development also has potential to cause impacts upon existing pollution levels at nearby sensitive receptors (identified below in Table 5.8) as a result of additional road vehicle exhaust emissions (NO_2 and PM) generated during the operational phases. Impacts will be defined by predicting pollutant concentrations at sensitive locations with and without the Proposed Development in place using ADMS dispersion modelling.

5.31 The proposed assessment methodologies are detailed in the following sections.

Assessment Methodology

Construction Assessment

5.32 During the construction phase of the Proposed Development there is the potential for air quality effects as a result of fugitive dust emissions associated with demolition, earthworks and construction, and track-out activities on the Site. It is proposed to assess these qualitatively in accordance with the IAQM Guidance on the Assessment of Dust from Demolition and Construction, June 2016. The methodology provided within this guidance document is widely regarded as an example of best practice and results are accepted throughout the UK.

5.33 Road exhaust emissions from construction phase vehicles will also be considered to assess potential human health impacts due to increased NO_x, PM_{10} and $PM_{2.5}$ concentrations during construction phase vehicle movements. The assessment threshold specified in the EPUK and IAQM guidance, as provided below, will be used to determine the requirement for a full assessment:

"A change of HDV flows of more than 25 AADT within or adjacent to an AQMA"

5.34 Should the above criteria not be met, the EPUK and IAQM document considers road vehicle exhaust impacts associated with the construction phase of the Proposed Development will be not significant and no further assessment is required. Conversely, should the criterion be exceeded it may be deemed necessary that further assessment is required. This will be undertaken using ADMS Roads dispersion modelling software. Pollutant concentrations will be predicted at sensitive discrete receptors along the roads likely to be used by construction traffic. Impacts will then be determined in accordance with the EPUK and IAQM significance criteria as well as professional judgement. All phase of the development (C1, C2, D1, and D2) will be considered in isolation and cumulatively.

Operational Assessment

5.35 The operational phase of the Proposed Development is likely to introduce new residents to poor air quality following a review of the baseline conditions. Additionally, traffic generated by the Proposed Development may cause increases in pollutant concentrations as a result of additional road vehicle exhaust emissions. Potential air quality effects across the Proposed Development and at sensitive receptors within close proximity to the Site will

therefore be assessed on a quantitative basis. This will be undertaken by calculating NO_2, PM_{10} and $PM_{2.5}$ levels across the Proposed Development and at sensitive locations with and without the development using the ADMS-Roads dispersion modelling software. It should be noted that the ADMS modelling software is widely accepted within the UK by the Local Authorities, the Environment Agency and DEFRA.

5.36 The significance of potential effects will be determined based on the predicted magnitude of change in pollutant concentrations and the criteria provided within the EPUK and IAQM guidance document "Land-Use Planning & Development Control: Planning for Air Quality (2017).

5.37 The impact significance of each receptor will be defined in accordance with the criteria shown in 8. These are based upon the guidance provided within the EPUK and IAQM Guidance.

Table 5.7 Operational Traffic Exhaust Emissions – Assessment of Impact

Long Term Average Concentration	% Change in Concentration Relative to the AQO			
	1	2-5	6-10	>10
75% or less of AQO	Negligible Adverse/Beneficial	Negligible Adverse/Beneficial	Minor Adverse/Beneficial	Moderate Adverse/Beneficial
76% - 94% of AQO	Negligible	Minor Adverse/Beneficial	Moderate Adverse/Beneficial	Moderate Adverse/Beneficial
95 - 102% of AQO	Minor Adverse/Beneficial	Moderate Adverse/Beneficial	Moderate Adverse/Beneficial	Major Adverse/Beneficial
103 - 109% of AQO	Moderate Adverse/Beneficial	Moderate Adverse/Beneficial	Major Adverse/Beneficial	Major Adverse/Beneficial
110% or more of AQO	Moderate Adverse/Beneficial	Major Adverse/Beneficial	Major Adverse/Beneficial	Major Adverse/Beneficial

5.38 Following the prediction of impacts at discrete receptor locations utilising the criteria in Table 5.5, the EPUK and IAQM document states that this framework is to be used as a starting point to make a judgement on the significance of impacts.

5.39 The following factors will provide assistance in determining the overall significance of the Proposed Development:

- Number of properties affected by significant air quality impacts and a judgement on the overall balance;
- Where new exposure is introduced into an existing area of poor air quality, then the number of people exposed to levels above the objective will be relevant;
- The percentage change in concentration relative to the objective and the descriptions of the impacts at the receptors;
- Whether or not an exceedance of an objective is predicted to arise or be removed in the study area due to a substantial increase or decrease; and
- The extent to which an objective is exceeded e.g. an annual mean NO_2 concentration of 41µg/m^3 should attract less significance than an annual mean of 51µg/m^3.

5.40 These factors will be considered and an overall significance determined for the impact of operational phase road traffic emissions. It should be noted that the determination of significance relies on professional judgement and reasoning should be provided as far as practicable.

5.41 Predictions of 1-hour NO_2 concentrations will not be produced as part of the dispersion modelling assessment unless it is clear that annual mean NO_2 concentrations at onsite or offsite receptor locations are likely to exceed 60µg/m^3. LAQM.(TG16) states if annual mean NO_2 concentrations are below 60µg/m^3 then it is unlikely that the 1-hour AQO will be exceeded. As such, the requirement for 1-hour mean assessment will be judged on a case-by-case basis.

Scenarios to be Assessed

5.42 The Air Quality Chapter will provide a worse case approach, assessing the complete operational development. This will consider the following development scenarios:

- Scenario 1: Existing baseline, for verification purposes against latest 2019 MCC and SCC ratified Air Quality Monitoring data;
- Scenario 2: Anticipated Opening Year baseline and relevant cumulative flows;
- Scenario 6: Anticipated Opening Year baseline and relevant cumulative flows, plus predicted operational flows associated with Phases C1, C2, D1 and D2, including multi storey basement car park (for both Phases C and D), highways and public realm.

5.43 With regards to associated Air Quality impacts, the worst-case scenario presented above provides an assessment of maximum anticipated development traffic generation and thus a worse-case scenario will be assessed.

5.44 The Proposed Development includes the provision of basement level car parking, which is to be served by ventilation units in order to provide suitable extraction of road vehicle pollutants. Emissions ventilation points may have the potential to increase pollutant concentration in the vicinity of proposed and existing receptors. The impacts associated with the ventilation systems, will be considered further throughout the preparation of the chapter. Similar to construction phase road traffic impact the EPUK and IAQM guidance will be employed in accordance with the following assessment criteria:

"The ventilation extract for the car park will be within 20 m of a relevant receptor"

5.45 Should the above criteria not be met, the EPUK and IAQM document considers road vehicle exhaust impacts associated with the multi storey basement car parking will be not significant and no further assessment is required. Conversely, should the criterion be exceeded it may be deemed necessary that further assessment is required. This will again be undertaken using ADMS Roads dispersion modelling software.

Summary of Assessment Scope

5.46 Table 5.8 provides a summary of potential effects which would be assessed within the Air Quality Chapter.

5.47 Pollutants that are listed in the Air Quality Standards Regulations 2010 (amended in 2016) other than NO_2, PM_{10} and $PM_{2.5}$ have been scoped out of the Air Quality chapter.

Table 5.8 Summary of Assessment Scope

Receptor	Impact	Potential Effect	Scoped In / Out
Existing Residential (*Within 350m of the Site boundary)*	Construction Phase Fugitive Dust Emissions	Reduced levels of amenity, annoyance due to dust soiling and human health impacts.	Scoped In

Receptor	Impact	Potential Effect	Scoped In / Out
Existing Residential (*Receptors adjacent to A6042, A57, A5014, A56, A57(M)).*	Construction Phase Road Vehicle Traffic Exhaust Emissions	Human health impacts on existing sensitive locations within the AQMA and surrounding area	Scoped In
Existing Residential (*Receptors adjacent to A6042, A57, A5014, A56, A57(M)).*	Operational Phase Road Vehicle Traffic Exhaust Emissions	Human health impacts on existing sensitive locations within the AQMA and surrounding area	Scoped In
Proposed Residential/Commercial *(Buildings C1, C2, D2 and D2)*	Road Vehicle Traffic Exhaust Emissions	Introduction of new residents into an AQMA, exposure to elevated NO_2, PM_{10} and $PM_{2.5}$ and associated health impacts	Scoped In
Proposed and Existing Residential *(Buildings C1, C2, D2 and D2)*	Road Vehicle Traffic Exhaust Emissions associated with multi-storey basement car park	Annual Mean exposure to elevated NO_2, PM_{10} and $PM_{2.5}$.	Scoped In

For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Built Heritage

Introduction

5.48 This Chapter of the ES will be prepared by Heritage Architecture Ltd and assesses the likely built heritage impacts of the proposals upon the Site and surrounding area.

Legislative and Policy Context

Legislation

5.49 **The Planning (Listed Buildings and Conservation Areas) Act 1990** is of relevance to the proposals as it provides specific protection for buildings and areas of special architectural or historic interest, over and above that provided by development management.

5.50 The Site is situated within the setting of a number of listed buildings, **Section 66** of the Act is of relevance, as it requires the LPA to "*have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses*," when considering whether to grant planning permission.

5.51 **Section 72** of the Act must also be recognised in line with the proposals, as it embodies the '*general duty as respects conservation areas in exercise of planning functions*.' As the Site is situated within the setting of the Castlefield Conservation Area and the Ancoats Conservation Area, it will be clear any proposed development of considerable height on the Site will have some potential to impact external views within the designated areas.

National Planning Policy

5.52 **Section 16** of the National Planning Policy Framework (2021) sets out the Government's planning policies on the conservation of the historic environment.

5.53 The policies in the NPPF constitute the Government's view of what sustainable development in England means in practice. In these terms, development proposals which fail to give due weight to the conservation of heritage assets are deemed not to be sustainable development and consequently should not be supported. This is because one of the key dimensions of sustainability is protecting and enhancing our historic environment.

5.54 In accordance with the legislation, the NPPF's core principles, which underpin decision-taking, require that Planning decisions should contribute to conserving designated heritage assets in a manner proportionate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations (paragraph 189).

5.55 The NPPF stresses that "great weight" should be given to the conservation of designated heritage assets (NPPF paragraph 199), emphasising the need to avoid substantial harm, in terms of demolition, alteration or the compromise of its setting. It will be clear that the redevelopment of a site adjacent to heritage assets could affect the setting of them, and that could be either beneficial or harmful. The fundamental objective is to ensure that the balance of the impact on the heritage assets is demonstrably beneficial, minimising any negative impact on their significance.

5.56 The NPPF establishes a clear hierarchy of significance for heritage assets, which is reflected in the adopted local policy (see below) and Historic England's guidance on measuring impact. Consequently, it is important that the relevant hierarchy of heritage assets surrounding the Site is understood, in order to apply proportionate consideration to the Proposals.

5.57 The 'designated heritage asset' status of the identified Listed Buildings and Conservation Areas requires that any potential 'harm' must be weighted and balanced against the potential advantages of the particular development. It is thus necessary to establish whether the effects of the proposals outweigh any perceived harm, in the context of the statutory duties set out above.

Local Planning Policy and Guidance

5.58 The relevant, local heritage Planning Policies maintains the same focus as the NPPF. The City Council's heritage policies focus on the fundamental importance of *"preserving or, where possible, enhancing the historic environment".* The following policies from Manchester's Core Strategy (2012) are of importance to the heritage assets considered within this statement.

5.59 ***Policy CC9 (Design and Heritage)*** states that development in Manchester City Centre should preserve or enhance the heritage assets that have been identified, including listed buildings, conservation areas and scheduled ancient monuments. The policy also establishes that new development must support the range of uses the Council expects in the City Centre and contribute to a coherent and integrated physical environment.

5.60 ***Policy EN3 (Heritage)*** states that throughout the City, MCC will encourage development that complements and takes advantage of the distinct historic and heritage features of its districts and neighbourhoods. New developments must be designed to support MCC in preserving or, where possible, enhancing the historic environment, the character, setting and accessibility of areas and buildings of acknowledged importance.

5.61 The Council's key regeneration objective is tempered by the need to ensure that: *"historic sites and areas of particular heritage value should be both safeguarded for the future and, where possible, enhanced for their own heritage merits and as part of wider heritage regeneration proposals"* (paragraph 12.21, Policy EN3*).* The policy thus evidently requires development proposals to be sensitive to the inherent values of the designated heritage asset, with any impact justified by clear, documentary evidence. This report aims to demonstrate how this requirement is addressed by the current proposal.

5.62 Assessment of the Built Heritage resource accords with the requirements of the NPPF, and the guidance set out in Historic England's Advice Note 12, *'Statements of Heritage Significance: Analysing Significance in heritage Assets'* (October 2019). The recent guidance calls for a staged approach, which provides relevant and proportionate information sufficient to inform decision-making.

5.63 In 2015 Historic England released three Good Practice Advice notes supporting the implementation of national policy and the related guidance in the PPG. The advice notes do not constitute a statement of Government policy itself, nor do they seek to prescribe a single methodology or particular data sources. **Good Practice Advice Note 2 (Managing Significance in Decision-Taking in the Historic Environment – March 2015)** and **Good Practice Advice Note 3 (The Setting of Heritage Assets – as amended December 2017)** were both utilised as part of this assessment in order to gain a full understanding of the relevant issues, alongside the NPPF and PPG.

5.64 In particular, the present assessment takes account of the advice contained within the revised version of Advice Note 3 on understanding what constitutes the setting of a Listed Building, Conservation Area or other heritage asset, and the selection of assets the settings of which may be considered to be affected by development in a particular location, as well as the approach to the selection of indicative key views of a proposed development in context with existing heritage assets.

5.65 The ICOMOS Guidance on 'Heritage Impact Assessments '(January 2011) and Planning Practice Guidance (July 2019) has also been utilised as part of this assessment.

Baseline Conditions

5.66 Within a 500m study area of the Site there are the following designated heritage assets:

- 27 Listed Buildings
- 1 Conservation Area (Castlefield Conservation Area)

5.67 Please refer to Figure 5.2 and Table 5.10 below for a full list of the designated heritage assets scoped in as part of the assessment.

Figure 5.2: Designated Heritage Assets within a 500m study area of the Site



Table 5.10: Designated Heritage Assets within a 500m study area of the Site

Number, Figure 1	Name	Designation and Grade
1	Railway Bridge Over River Irwell To Former Liverpool Road Station	Listed Building, Grade II
2	Former Canal Flour Mills	Listed Building, Grade II
3	Colonnaded Railway Viaduct at Former Liverpool Road Goods Depot	Listed Building, Grade II
4	Railway Viaduct Over River Irwell Leading to Lower Byrom Street Warehouse	Listed Building, Grade II
5	Former Commercial Hotel	Listed Building, Grade II
6	Two Bollards at West End of St Johns Passage	Listed Building, Grade II
7	Railway Viaduct Linking Bridge Over Irwell To Liverpool Road Station	Listed Building, Grade II
8	Former Liverpool Road Railway Station Station Masters House	Listed Building, Grade II
9	Church of St George	Listed Building, Grade II*
10	Churchyard Walls, Gate Piers and Gates at Church of St George	Listed Building, Grade II
11	Power Hall of Museum of Science and Industry	Listed Building, Grade II
12	Former Grape Street Railway Bonded Warehouse	Listed Building, Grade II
13	Former St Matthews Sunday School	Listed Building, Grade II
14	The Giants Basin	Listed Building, Grade II
15	Castlefield Railway Viaduct From G-Mex To Dawson Street	Listed Building, Grade II
16	St Johns College of Further Education	Listed Building, Grade II
17	Pair of Culvert Arches Over River Medlock And Associated Overflow Channel	Listed Building, Grade II
18	Rochdale Canal Lock Number 92 And Castle Street Bridge	Listed Building, Grade II

Number, Figure 1	Name	Designation and Grade
19	Hulme Lock Branch Canal	Listed Building, Grade II
20	Old Warehouse to North of Former Liverpool Road Railway Station	Listed Building, Grade II
21	123, Liverpool Road	Listed Building, Grade II
22	Albert Warehouse Quay on West Side Fronting River Irwell Victoria Warehouse	Listed Building, Grade II
23	Merchants Warehouse	Listed Building, Grade II
24	Museum of Science and Industry, Air and Space Museum	Listed Building, Grade II
25	Bridgewater Canal Basin at Potato Wharf	Listed Building, Grade II
26	Manchester Museum of Science and Industry, Former Lower Byrom Street Warehouse	Listed Building, Grade II
27	Irwell Street Bridge (That Part in Salford Civil Parish)	Listed Building, Grade II
Orange	Castlefield	Conservation Area

Potential Significant Effects

5.68 Designated heritage assets adjacent to the Site could be affected directly or indirectly by the construction phase. Impacts could be related to construction traffic, noise, dust, site hoarding/ scaffolding etc. The potential effects of the construction phase could result in temporary, adverse effects on the ability to understand and appreciate the settings of the heritage assets identified.

5.69 Designated heritage assets in visual conjunction with the Site could be affected indirectly, through permanent changes to their settings from the presence of the Proposed Development. The potential effects of the operational phase could result in the ability to understand and appreciate the setting of the heritage assets identified.

5.70 Identified designated heritage assets which are not visible from the development and from which the development cannot be seen are not considered to be affected by the Proposed Development and will be scoped out.

5.71 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Assessment Methodology

Technical Scope

5.72 This ES chapter will outline potential built heritage impacts and effects (both direct and indirect) of the Proposed Development.

5.73 A cumulative effects assessment will assess potential combined effects of the Proposed Development and the other key reasonably foreseeable developments (under application or with extant planning permission) as set out in Appendix 3 of this Report.

Baseline Assessment

5.74 The baseline assessment will be undertaken using a combination of desk-based review of plans, maps, records, and other documents followed by on-site surveys in order to identify and assess the heritage interest of the designated heritage assets. It also establishes the way in which the settings and the Site contribute to the heritage interest of these assets.

5.75 Consideration will also be given to the historical development, building types and materials, key views to the notable historic buildings which contribute to the identification of the built form, and understanding of the special interest of the area.

5.76 The above receptors are valued and the potential impact of the Proposed Development on this value assessed giving a significance of effect. Individual viewpoints from which to undertake a visual assessment will be determined by on-site surveys and subsequent correspondence with the LPA.

5.77 The chapter will include a visual impact assessment. Previously, 7 viewpoints were agreed with Historic England to assess the potential visual impact of 5 towers on the Site. All 7 viewpoints will be reassessed as part of the current assessment. These are identified as 3, 4, 6, 9, 12, 15 and 21 on Appendix 6.

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

- The sensitivity and proximity of receptors;
- The nature of the existing views;
- The degree of change to existing views and visibility of the Proposed Development; and
- The availability and amenity of alternative views.

5.79 The relative 'value' and importance attributed to the identified heritage assets largely coincides with their national or local status. In line with ICOMOS terminology, Grade I buildings are considered to be of very high significance; Grade II* of high significance; Grade II of medium and Locally Listed buildings are, comparatively, of low heritage significance.

5.80 As stated within Planning Practice Guidance (July 2019), all heritage assets have a setting, regardless of their identified status. The contribution of setting to the significance of a heritage asset is a key consideration when determining the overall 'value'. This provides a baseline from which to understand the capacity for change. A detailed significance appraisal will therefore be undertaken in order to understand the Site's capacity for change and provide a baseline from which the relative impact on the built historic environment can be deduced.

5.81 The assessment methodology for the Historic Environment is a synthesis of established guidance, best practice and professional judgement. In accordance with an adapted form of the methodology set out in the ICOMOS Guidance on 'Heritage Impact Assessments' (Jan.2011), in which the value of heritage attributes is assessed in relation to statutory designations, and priorities or recommendations set out in national research agendas, and ascribed values.

5.82 The baseline which might be affected by the Proposed Development are valued and the impact on them is assessed in order to give a significance of effect.

Construction Assessment

5.83 The assessment methodology and approach to the relative impact on heritage assets during the construction phase is based on evidence-based assumptions in relation to common issues such as demolition, dust, noise, site hoarding and scaffolding.

Operational Assessment

5.84 The assessment methodology and approach to the relative impact on heritage assets during the operational phase will be assessed utilising the suite of application plans and drawings and verified CGIs of the Proposed Development and professional judgement.

Scenarios to be Assessed

5.85 Scenarios 1 (baseline) and 6 (completed development) will be assessed.

Summary of Assessment Scope

5.86 The table below summarises the Historic Built Environment receptors and potential effects that have been scoped in to be assessed in the Environmental Statement.

Table 5.11 – Summary of Assessment Scope

Receptor	Impact	Potential Effect	Scoped In / Out
Listed Buildings identified in Figure 1	Indirect	Minor-to-moderate beneficial and adverse impacts expected on ability to appreciate heritage interest of listed building	In
Castlefield Conservation Area	Indirect	Minor- to – moderate beneficial and adverse impacts expected on ability to appreciate character and appearance of the conservation area.	In

5.87 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Climate Change

Introduction

5.88 This Chapter of the ES will be prepared by WSP and assesses the Proposed Development in terms of its contribution to climate change in respect of Greenhouse Gas (GHG) emissions. The requirement to consider a project's impact on and vulnerability to climate change results from the 2014 amendment to the EIA Directive (2014/52). The Directive has been fully transposed into UK law in the EIA Regulations. The Directive requires: *"A description of the likely significant effects of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change."*

5.89 An assessment of the vulnerability of the Proposed Development to climate change will not been included within because the Proposed Development's resilience and adaptation to climate change will be robustly considered within the other relevant ES Chapters and Technical Reports, including the ES Chapter on Flood Risk and Drainage; and the Environmental Standards Statement.

Legislative and Policy Context

Legislation

5.90 The applicable legislative context for the GHG assessment of the Proposed Development comprises:

- *Climate Change Act 2008 (2050 Target Amendment) Order 2019*[5]*;*
- *Planning and Energy Act 2008*[6]*;*
- *Carbon Budgets, 2016*[7]*; and*
- *UK Climate Change Risk Assessment (2017)*[8]*.*

5.91 In addition, the Building Regulations (2016)[9] and The Carbon Plan (2011)[10] are also applicable to the GHG assessment for the Proposed Development.

National Planning Policy

5.92 The National Planning Policy Framework (NPPF) (2021) sets out the Government's core policies and principles with respect to land use planning, including climate change. Chapter 14 meeting the challenge of climate change, flooding and coastal change establishes that Local Planning Authorities "*should take a proactive approach to mitigating and adapting to climate change*"[11] has been considered in defining the scope and focus of the assessment.

5.93 The main relevant paragraphs which all support the reduction of greenhouse gas emissions are:

- *Paragraph 8: Achieving Sustainable development means that the planning system has three overarching objectives; a) economic objective b) social objective and c) environmental objective focused on mitigating and adapting to climate change, including moving to a low carbon economy*
- *Paragraph 20: Strategic policies should set out an overall strategy for the pattern, scale and design quality of places, and make sufficient provision for conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.*
- *Paragraph 152: The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.*
- *Paragraph 154: New development should be planned for in ways that avoid increased vulnerability to the impacts arising from climate change and can help to reduce greenhouse carbon emissions.*
- *Paragraph 158: When determining planning applications for renewable and low carbon development, local planning authorities should recognize that even small- scale projects provide a valuable contribution*

5 HM Government, Climate Change Act 2008. Available at: https://www.legislation.gov.uk/ukpga/2008/27/introduction (Accessed: 04/05/2021).

6 HM Government, Planning and Energy Act 2008. Available at: https://www.legislation.gov.uk/ukpga/2008/21/introduction (Accessed: 04/05/2021).

7 HM Government, 2016. The Carbon Budgets Order 2016

8 HM Government (2017). UK Climate Change Risk Assessment 2017. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/584281/uk-climate-change-risk-assess-2017.pdf (Accessed: 04/05/2021).

9 HM Government (2016). The Building Regulations 2010, Approved Document L1A: conservation of fuel and power in new dwellings, 2013 edition with 2016 amendments. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/540326/BR_PDF_AD__L1A__2013_with_2016_amendments.pdf (Accessed: 04/05/2021)

10 DECC (2011). The Carbon Plan: Delivering our Low Carbon Future. Available at: https://www.ukgbc.org/sites/default/files/3702-the-carbon-plan-delivering-our-low-carbon-future.pdf (Accessed: 04/05/2021).

11 Ministry of Housing, Communities & Local Government (2019). National Planning Policy Framework

to cutting greenhouse gas emissions and approve the application if its impacts are or can be made acceptable.

Local Planning Policy

5.94 Manchester Core Strategy Development Plan 2012[12] is the key document in the Manchester Local Plan. It describes Manchester today and outlines the Council's vision for Manchester in 2027.

5.95 Policies EN 4 – EN 7 provide information on reducing carbon emissions by enabling:

- low and zero carbon development
- low and zero carbon decentralised energy infrastructure
- low or zero carbon energy supplies
- energy infrastructure opportunities

5.96 The Manchester Strategy 2015[13] is a result of the city-wide consultations in 2015 where the residents, volunteers, non-resident public and business and civic leaders express their opinion on the future vision of Manchester in 2025.

5.97 In summary, the following themes of the strategy were identified:

- Our vision
- A progressive and equitable city
- A thriving and sustainable city
- A liveable and low carbon city
- A highly skilled city
- A connected city

5.98 Draft Manchester Zero Carbon Framework 2019[14] was issued to set out how the city will meet its carbon reduction targets. The aim is to make Manchester a zero-carbon city by 2038 or before – at least 12 years earlier than the national 2050 target. To achieve this target, emissions will need to reduce by 13% every year until 2038.

5.99 In July 2019 Manchester City Council[15] declared a climate emergency acknowledging that the council needs to act on the causes and impacts of climate change.

Baseline Conditions

5.100 In the baseline scenario, GHG emissions occur constantly and widely as a result of human and natural activity including energy consumption (fuel, power), industrial processes, land use and land use change. The GHG assessment will only consider instances in which the Proposed Development results in additional or avoided

[12] Manchester City Council (2012). Manchester's Local Development Framework. Core Strategy Development Plan Document

[13] Manchester City Council (2020) The Manchester Strategy 2016-25

[14] Draft Manchester Zero Carbon Framework, 2019

[15] Manchester City Council (2019), Manchester City Council Report for Resolution – Climate Emergency Motion to Council

emissions in comparison to the baseline scenario and its assumed evolution. The baseline scenario is assumed to be the same for all EIA scenarios.

5.101 There has been no previous assessment undertaken to date in relation to GHG emissions and the Proposed Development to inform the baseline conditions.

Existing Baseline

5.102 The current land use of the Site is a surface-level car park. The operation and management of the Site will likely require some components and bulk materials for minor maintenance works and repairs to the surface level car parking. These materials will have embodied emissions associated with them, and the transport emission to and on the Site. These GHG emissions associated with the baseline scenario will considered as part of the assessment.

Future Baseline

5.103 The future baseline scenario for traffic emissions will be determined by identifying the growth in baseline traffic. Regarding operational emissions for embodied carbon and building emissions, the amount of coal in the UK electricity mix has substantially decreased in recent years and low and zero carbon technologies (including photovoltaic, wind and nuclear energy) have been increasingly used to generate a larger portion of the UK's electricity. This has resulted in a reduction of carbon emissions generated from grid-supplied electricity. As the grid decarbonises, the lower amounts of emissions created through using on-site electricity will result in a lower carbon impact.

5.104 Also, as the UK has committed to becoming net-zero carbon by 2050, that means GHG emissions would be dramatically reduced and any remaining emissions offset, neutralising environmental impact from GHG emissions and slowing climate change. In addition, in January 2021 the Government announced the Future Homes standard that proposes no new gas boilers should be installed in new homes by 2025, meaning that new homes will be heated solely by electric systems (such as heat pumps) or other alternatives, which will be low in GHG emissions following grid decarbonisation.

5.105 As it is currently unknown how and in what scale the operational emission will reduce it is not possible to calculate this future baseline.

Potential Significant Effects

5.106 The GHG emissions from the Proposed Development are anticipated to be significant in EIA terms. However, the impact will be contextualised through comparing to national carbon budgets to provide a sense of scale.

Assessment Methodology

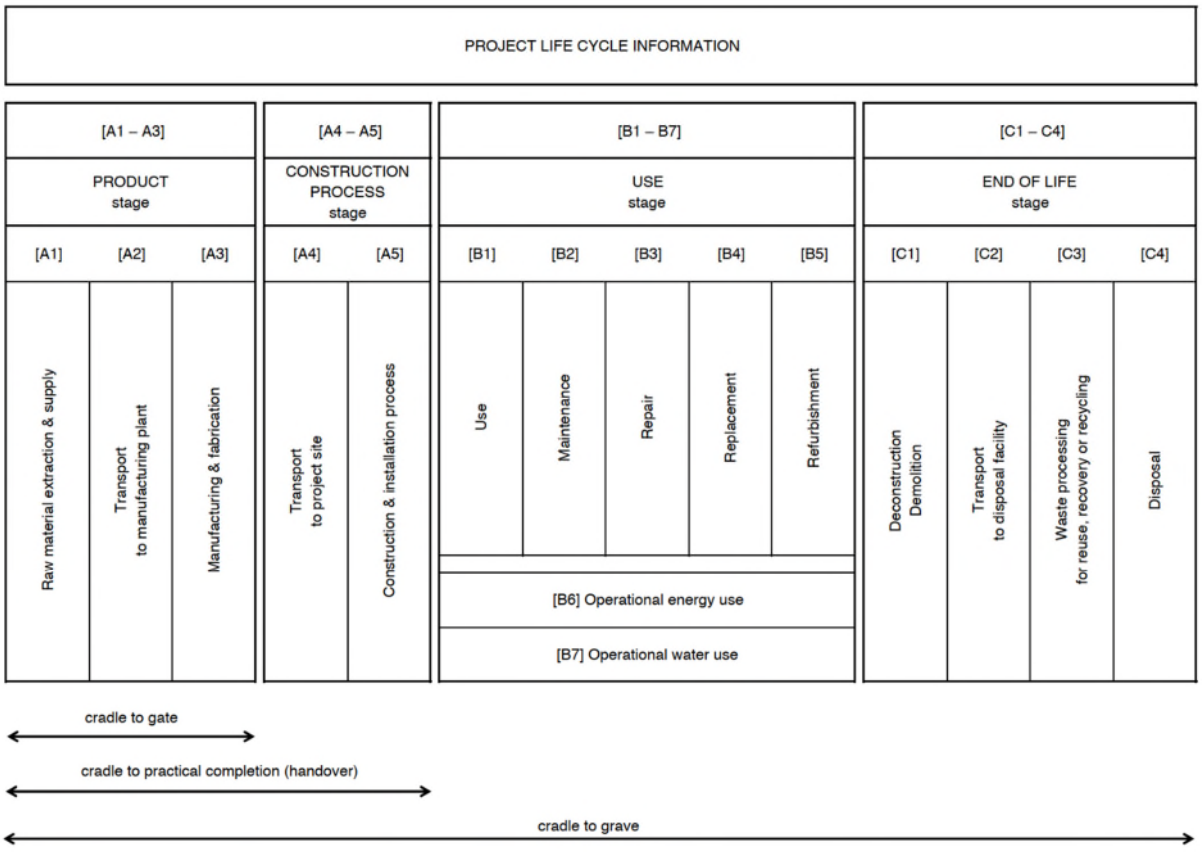
Technical Scope

5.107 GHG are not spatially contained and therefore the GHG assessment will not be restricted by geographical area but instead will include any increase or decrease in emissions as a result of the Proposed Development, wherever this may be. The approach will consider emissions throughout the life cycle of the Proposed Development including:

- Construction stage – embodied carbon emissions associated with manufacturing, transport, replacement and disposal of the existing elements (i.e. construction wate) and proposed buildings;
- Operational stage – embodied carbon emissions associated with replacement/refurbishment of building parts, building emissions associated with buildings' energy use, as well as transport emissions such a vehicle numbers and distances by building users; and
- End of life stage – embodied carbon emissions associated with decommissioning, stripping out, disassembly, deconstruction and demolition operations as well as from transport, processing and disposal of materials.

5.108 The lifecycle stages for the Proposed Development have been identified with reference to the Royal Institution of Chartered Surveyors (RICS) guidance[16], provided in Figure 5.3 below.

Figure 5.3: RIBA Project Lifecycle



5.109 For all lifecycle stages of the Proposed Development, the assessment will include the following:

- Collection of available data/information on the scale of GHG emitting activities (e.g. number of vehicle trips, kWh electricity, construction emissions) for future baseline. In each case this will cover the Proposed Development's lifespan (60 years); and
- Calculation of the GHG emissions by applying a suitable emissions factor (tCO_{2e} per unit of emissions generating activity).

Assessment

5.110 The baseline data for the GHG assessment will be sourced from the following locations:

- One Click Software - Embodied Carbon Calculation;

16 RICS (2017). Whole life carbon assessment for the built environment. Available at: https://www.rics.org/globalassets/rics-website/media/news/whole-life-carbon-assessment-for-the--built-environment-november-2017.pdf (Accessed: 13/05/2021)

- Energy Statement to be submitted as a supporting planning document;
- Transport Assessment to be submitted as a supporting planning document;
- Department for Business, Energy & Industrial Strategy, 2020 Government GHG Conversion Factors for Company Reporting;
- Department for Business, Energy & Industrial Strategy, 2005 to 2018 UK local and regional CO2 emissions – data tables, 2018; and
- Royal Institute of British Architects (RIBA) 2030 Climate Challenge.

5.111 The assessment would follow the emerging best practice and the Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significant (IEMA)[17]. This guidance advocates a 'good practice' approach where GHG emissions are always considered and reported but at varying degrees of detail depending on the EIA and the project in question.

5.112 In line with the guidance, this section sets out the methodological approach that would be taken to address GHG emissions associated with the Proposed Development. Existing sources of GHG emissions prior to construction and operation of the Proposed Development (i.e. without development) are identified to assess the current baseline. Sources of GHG emissions following the construction and during operation of the Proposed Development are then assessed, from which the significance, mitigation measures and residual effects are determined.

5.113 As set out in Chapter 4: Proposed EIA Methodology the general approach adopted in the EIA, will be to attribute an effect significance level based on the sensitivity/value of the affected receptor(s) and the magnitude of change arising from the Proposed Development. As there is only one receptor, the climate, it has a consistent sensitivity no matter the location of the emissions source. There is no accepted technical guidance for determining a level of significance (i.e. high or medium) on the sensitivity of the climate. Therefore, the sensitivity of the receptor will not be used to assess significance.

5.114 There are currently no agreed thresholds for what level of GHG emissions is considered significant in the context of the EIA Regulations. With regards to assigning significance, the IEMA guidance provides guidance on how to assess GHG emissions in EIA:

> *"When evaluating significance, all new GHG emissions contribute to a significant negative environmental effect; however, some projects will replace existing development that have higher GHG profiles. The significance of a project's emissions should therefore be based on its net impact, which may be positive or negative……*
>
> *…. Whilst there is no single preferred method to evaluate significance, extensive research is being undertaken to explore significance, thresholds for GHG emission assessments, and science-based targets. "*

5.115 In the absence of being able to assign a significance level, IEMA further provides some guidance on contextualising a project's GHG emissions:

> *"Under the principle that all GHG emissions might be considered significant, and the ongoing research of how to actually measure significance, it is down to the practitioner's professional judgement on how best to contextualise a project's GHG impact.*
>
> *Generating a project's carbon contribution, will enable the impact of your project, to be contextualised against sectoral, local or national carbon budgets. This will provide the practitioner and the Local Planning Authority with a sense of scale."*

5.116 Therefore, to contextualise the carbon emissions of the Proposed Development, these will compare to:

17 Institute of Environmental Management and Assessment (2017). Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance.

- UK Carbon Budgets (Table 5.12); and
- RIBA 2030 Climate Change targets (Table 5.13).

Table 5.12: National carbon budgets set by the Government (2016)

Carbon budget period	UK carbon budget
Third: 2018-2022	2,544 MtCO2e
Fourth: 2023-2027	1,950 MtCO2e
Fifth: 2028-2032	1,725 MtCO2e
Sixth: 2033-2037	965 MtCO2e

Table 5.13: RIBA 2030 Climate Challenge target metrics for buildings

RIBA sustainable outcome metrics	Current benchmarks	2025 Targets	2030 Targets
Domestic			
Embodied Carbon (kgCO2e/m2) (Lifecycle stages A-C)	1000	< 450	< 300
Operational Energy (kWh/m2 /y)	146	< 70	< 0-35
Operational Carbon (kgCO2e/m2/y)	55	< 16	< 5
Non-domestic			
Embodied Carbon (kgCO2e/m2) (Lifecycle stages A-C)	1100	< 800	< 650
Operational Energy (kWh/m2 /y)	225	< 170	< 110
Operational Carbon (kgCO2e/m2/year)	83	<49	<24

5.117 The overall carbon emissions of the Proposed Development will then be contextualised by comparing these to the UK Carbon Budgets and RIBA Guidance.

5.118 Based on this contextualisation and professional judgement the overall significance of effect of the Proposed Development will be defined as follows:

- Major effect: where the Proposed Development could be expected to have a considerable effect (either positive or negative) on the achievement of national, regional or local carbon budgets; and where the Proposed Development exceeds the "Current Benchmarks" for embodied carbon and operational energy performance as defined by the RIBA Climate Challenge document;

- **Moderate effect:** where the Proposed Development could be expected to have a noticeable effect (either positive or negative) on the achievement of national, regional or local carbon budgets; and where the Proposed Development meets the "2020 Targets" for embodied carbon and operational energy performance as defined by the RIBA Climate Change document;

- **Minor effect:** where the Proposed Development could be expected to result in a very slight noticeable effect (either positive or negative) on the achievement of national, regional or local carbon budgets; and where the Proposed Development meets the "2025 Targets" for the embodied carbon and operational energy targets defined by the RIBA Climate Change document;

- **Negligible:** where the Proposed Development could be expected to have no discernible effect on the achievement of national, regional or local carbon budgets; and where the Proposed Development meets the "2030 Targets" for embodied carbon and operational energy targets defined by the RIBA Climate Change document.

5.119 As per IEMA guidance, all new GHG emissions contribute to a significant negative environmental effect, so regardless of the level of significance, any negative GHG effect will be treated as **significant**. Therefore, any major, moderate, minor or negligible effect will be considered as significant in EIA terms.

Construction Assessment

Embodied Carbon Emissions

5.120 To inform the assessment during the Proposed Development lifecycle stages, an assessment of embodied carbon emissions will be undertaken. Carbon Designer, which is a calculation tool on One Click Life-Cycle Assessment software, will be used to calculate the embodied carbon emissions for the Proposed Development. This procedure is suitable for early stage projects where building shape and areas are available.

5.121 Inputs used to inform the software will be based on the floor area, number of floors, basements, building use and material assumptions coordinated with the design of the Proposed Development. The result will include data related to manufacturing, transport, replacement and disposal of the existing and proposed building elements.

Operational Assessment

Embodied Carbon Emissions

5.122 The same procedure will be followed as described above. The results will refer to the replacement/refurbishment of building parts during use stage.

Building Emissions

5.123 For the regulated carbon emissions from the new buildings during the operational stage, accredited Stroma FSAP 2012 software will be used to model the annual energy consumption. The building energy will be assumed to be compliant with Part L (Conservation of Fuel and Power) of the Building Regulations 2010 (2013 edition with 2016 amendments). Also, the effect of energy efficiency improvements and the low carbon technologies will be considered.

5.124 An average predicted decarbonisation factor for the grid electricity will be taken into account. As electricity generation becomes less carbon intensive, GHG emissions from electricity use will reduce while GHG emissions from gas would remain on-the-whole stagnant.

Transport Emissions

5.125 In order to calculate the operational traffic associated with the Proposed Development, the vehicle numbers and distances will be multiplied by emissions factors for each key vehicle type. The vehicle trips will align with the

Transport Assessment. The 2019 DEFRA emissions factor will be selected for each vehicle type and a summary for the average trip length, data from the Department of Transport statistical data set will be used.

5.126 No further analysis is proposed to be undertaken due to the uncertainty relating to the long term increases in vehicle efficiency, switching to electric vehicles and possible increase in autonomous vehicle use, although, these would likely reduce the total GHG emissions associated with the Proposed Development.

End of Life Assessment

Embodied Carbon Emissions

5.127 The same procedure will be followed as described above. The results of the assessment will refer to the end of life of materials.

Summary of Assessment Scope

5.128 The receptor of the assessment will be the climate.

5.129 The emissions sources which have the potential to impact on the receptor, described as elements with their associated lifecycle stage during the Proposed Development lifespan, have been identified using guidance from IEMA. Professional judgement has been used to consider which elements have the potential to give rise to likely significant effects during construction, operation and end of life of the Proposed Development. The proposed scope of the assessment is consistent with the framework for the quantification of GHG emissions presented in British Standard (BS) EN 15978:2011 'Sustainability of construction works - Assessment of environmental performance of buildings - Calculation method.

5.130 The following elements in Table 5.14 are proposed to be scoped in or out of further consideration in the EIA.

Table 5.14: Summary of Assessment Scope

Element	Impact	Potential Effect	Scoped In / Out
Product stage (manufacture and transport of raw materials to suppliers) A1-3	GHG emissions during the construction phase of the Proposed Development.	Raw materials required for the Proposed Development will result in embodied emissions and have the potential to be large.	Scoped In
Transport of materials to site A4	GHG emissions during the construction phase of the Proposed Development.	Construction stage emissions from fuel / energy consumption due to the delivery of material to site have the potential to be large.	Scoped In
Plant and equipment used during construction A5	GHG emissions during the construction phase of the Proposed Development.	Fuel / energy consumption of plant and equipment used during construction would generate GHG emissions.	Scoped In
Land use, land use change and forestry A5	GHG emissions during the construction phase of the Proposed Development.	Emissions from the disposal of biomass are not expected to be large.	Scoped Out
Disposal of waste A5	GHG emissions during the construction phase of the Proposed Development.	Emissions from the disposal of waste are unlikely to be large, due to a large proportion of construction waste being inert.	Scoped In

Element	Impact	Potential Effect	Scoped In / Out
Replacement and refurbishment B2-5	GHG emissions during the operation phase of the Proposed Development.	The replacement and refurbishment of the Proposed Development would release a potentially large magnitude of emissions.	Scoped In
Operational Energy Use B6	GHG emissions during the operation phase of the Proposed Development.	In-use electricity emissions will be released on an annual basis due to the building use.	Scoped In
End-user emissions (regional traffic flows) – traffic B9/D	GHG emissions during the operation phase of the Proposed Development.	Changes to regional traffic flows are expected and this has the potential to result in a large change in GHG emissions.	Scoped In
In-use Emissions B1	GHG emissions during the operation phase of the Proposed Development.	This is not considered to be a large emission source.	Scoped Out
Maintenance B2-5	GHG emissions during the operation phase of the Proposed Development.	Maintenance associated with the Proposed Development is not considered to be a large emissions source as only a small amount will be additional to the maintenance that already takes place within the region.	Scoped Out
Repair B2-5	GHG emissions during the operation phase of the Proposed Development.	The Proposed Development is designed to be maintained rather than repaired, therefore subsequent repair emissions sources are not considered to be large.	Scoped Out
Land use, land use change and forestry B8	GHG emissions during the operation phase of the Proposed Development.	The reduction in carbon sequestration due to the Proposed Development is not considered to be large.	Scoped Out
Decommissioning process C1-C4	GHG emissions during the end of life phase of the Proposed Development.	Any emissions arising from decommissioning, stripping out, disassembly, deconstruction and demolition operations as well as from transport, processing and disposal of materials at the end of life of the project.	Scoped In

4.30 The assessment will not consider any specific Committed Developments relevant to the Proposed Development because GHG are not spatially contained. Therefore, the assessment will consider the cumulative effect of all GHG that cause climate change (i.e. the worst case scenario) and the assessment of the GHG due to the Proposed Development contextualises GHG comparing these to the UK Carbon Budgets and RIBA 2030 Climate Change targets. For this reason, the ES Chapter will not consider a standalone cumulative scenario.

Daylight and Sunlight

Introduction

5.131 This Chapter of the ES will be prepared by GIA and assesses the likely daylight, sunlight and overshadowing impacts

of the proposals upon the Site and surrounding area.

Legislative and Policy Context

5.132 There is no relevant national policy on daylight and sunlight.

National Planning Policy

Revised National Planning Policy Framework 2021

5.133 The National Planning Policy Framework stipulates that *"…Planning policies and decisions should ensure that developments… create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users."*

5.134 The National Planning Policy Framework (NPPF) adopted on the 27th March 2012 and updated on 20 July 2021 *stipulates* that *"…planning policies and decisions should always seek to secure a good standard of amenity for existing and future occupants of land and buildings."*

5.135 Paragraph 125 further states:

"Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities and ensure that developments make optimal use of the potential of each site. In these circumstances:

[…]

c) In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)."

National Planning Practice Guidance (NPPG) 2019

5.136 The National Planning Practice Guidance (NPPG) – Making Efficient Use of Land, published on 22 July 2019, Paragraph: 006 Reference ID: 66-006-20190722 states that:

"Where a planning application is submitted, local planning authorities will need to consider whether the proposed development would have an unreasonable impact on the daylight and sunlight levels enjoyed by neighbouring occupiers, as well as assessing whether daylight and sunlight within the development itself will provide satisfactory living conditions for future occupants."

5.137 Paragraph 007 Reference ID: 66-007-20190722 also states:

"All developments should maintain acceptable living standards. What this means in practice, in relation to assessing appropriate levels of sunlight and daylight, will depend to some extent on the context for the development as well as its detailed design. For example, in areas of high-density historic buildings, or city centre locations where tall modern".

Local Planning Policy and Guidance

Manchester Core Strategy (2012 – 2027)

5.138 Policy DM1 – Development Management – States that all developments should have regard to the effects on amenity including privacy, light, noise, vibration, air quality and odours.

5.139 Policy EN2 – Tall Buildings – States that, by their very size, tall buildings can have a significant impact on the local environment and its micro-climate. It is therefore expected that this impact be modelled and that submissions for tall buildings also include appropriate measures to create an attractive, pedestrian friendly local environment.

Guide to Development in Manchester Supplementary Planning Document and Planning Guidance (Adopted April 2007)

5.140 The SPD sets out a series of design principles which should be considered and implemented where necessary, those measures relevant to this assessment are:

- Minimise reliance on energy-using equipment for heating, cooling, lighting and natural ventilation.
- Site layout and building design principles should maximise the capture and use of daylight and passive solar energy, whilst avoiding excessive solar gain in the summer.
- Consider the impacts of overshadowing.

Building Research Establishment (BRE) 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice', Second Edition, 2011

5.141 The Building Research Establishment (BRE) Guidelines 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011, 2nd edition' (released October 2011) provides advice on site layout planning to achieve good sunlighting and daylighting within buildings, and in the open spaces between them. It is intended for use by building designers, developers, consultants and Local Planning Authorities (LPAs). The advice it gives is not mandatory and should not be used as an instrument of planning policy, it states:

"This guide is a comprehensive revision of the 1991 edition of Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice. It is purely advisory and the numerical target values within it may be varied to meet the needs of the development and its location."

5.142 It also states:

"The advice is given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. In special circumstances the developer or planning authority may wish to use different target values… in an area with modern high rise buildings, a higher degree of obstruction maybe unavoidable if new developments are to match the height and proportions of existing building" (para.1.6).

5.143 In addition, the BRE Guidelines state (para. 1.3) that, *"it is intended to be read in conjunction with the interior daylighting recommendations in the British Standard 8206-2 Code of practice for daylighting, and in the CIBSE publication Lighting guide: daylighting and window design".*

British Standard (BS) 8206-2:2008: 'Lighting for Buildings – Part 2: Code of Practice for Daylighting'

5.144 The British Standard 8206 part 2 provides recommendations regarding the design for daylight in buildings and sets out various methods for assessing daylight. The document states:

"Daylighting gives to a building a unique variety and interest. An interior which looks gloomy, or which does not have a view to the outside when this could reasonably be expected, will be considered unsatisfactory by its users."

EN17037:2019 Daylight in Buildings (December 2018)

5.145 The new European Standard for Daylighting, or EN17037 was published in December 2018. Most local authorities continue to refer to the BRE guidelines. The BRE hope to secure funding and re-write the BRE guidelines in the financial year beginning April 2019, with the view of a revised publication in 2020. These timescales leave a fair degree of ambiguity as to when the new European Standard will become part of planning policy and what the transition between standards will be. In the meantime, The BRE guidelines and BS8206 remain the relevant tests.

Daylighting and window design: Lighting Guide LG10 (CIBSE) (1999)

5.146 This guide replaces the CIBSE Applications Manual Window Design (1987) and provides a daylight design guide. It states:

"when daylighting decisions are made, however, they will have implications for other, interrelated aspects of window performance such as solar heat gain, winter heat loss, provision of view, acoustic performance, privacy, security and protection from fire."

Baseline Conditions

5.147 Baseline studies are currently being undertaken by GIA. The baseline assessment will review the daylight and sunlight conditions within each of the surrounding residential properties in the Proposed Development area's present form.

Potential Significant Effects

5.148 In order to predict the significance of any potential impacts, it will be necessary to understand the context of the area, and sensitivity of the existing surrounding buildings, and how this should affect the application of the guidance set out in the BRE Guide.

5.149 The BRE Guide does not provide explicit targets on what constitutes minor, moderate of major adverse impacts. For daylight and sunlight, the BRE Guidelines outline the approach within the accompanying Appendix I, in terms of assigning criteria to assess the effects (para I3-I8):

"Adverse impacts occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required…The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied."

"Where the loss of skylight or sunlight fully meets the guidelines, the impact is assessed as negligible or minor adverse. Where the loss of light is well within the guidelines, or only a small number of windows or limited area of open space lose light (within the guidelines), a classification of negligible impact is more appropriate. Where the loss of light is only just within the guidelines and a larger number of windows or open space are affected, a minor adverse impact would be more appropriate, especially if there is a particularly strong requirement for daylight and sunlight in the affected building or open space."

"Where the loss of skylight or sunlight does not meet the guidelines in this book, the impact is assessed as minor, moderate or major adverse. Factors tending towards a minor adverse impact include:

- *Only a small number of windows are affected;*
- *The loss of light is only marginally outside the guidelines;*
- *An affected room has other sources of skylight or sunlight; and*
- *The affected building only has a low level of requirement for skylight or sunlight."*

5.150 The classification of major adverse is documented within Paragraph 7 of the BRE Guidelines:

- *"Factors tending towards a major adverse impact include:*
  - *a large number of windows are affected;*
  - *the loss of light is substantially outside the guidelines;*
  - *all the windows in a particular property are affected; and*
  - *the affected indoor spaces have a particular strong requirement for skylight or sunlight, e.g. a living room in a dwelling".*

5.151 Beneficial impacts occur when there is a significant increase in the amount of skylight and sunlight reaching an existing building. Beneficial impacts should be worked out on the same principals as adverse impacts."

5.152 There is no guidance on what constitutes a moderate adverse impact.

5.153 Therefore, best practice guidance and professional judgment will be used to determine any impacts based on the guidance set out in Appendix I of the BRE Guidelines, the NPPF and the NPPG. Potential effects will be identified as beneficial, adverse or negligible, and their magnitude of effects will be set out as Minor, Moderate and Major.

Assessment Methodology

Technical Scope

5.154 The BRE Guidelines suggest that residential properties have the highest requirement for daylight and sunlight and states that:

"the guidelines are intended for use for rooms in adjoining dwellings where light is required, including living rooms, kitchens and bedrooms."

5.155 The technical analyses carried out to inform the daylight, sunlight, and overshadowing, assessment will be undertaken by creating a digital three-dimensional (3D) model of the existing Site and Proposed Development.

5.156 The 3D model uses Waldram Diagrams to establish the VSC and 3D geometric calculations for daylight distribution. This model (which is orientated to north by the use of Ordnance Survey (OS) information) enables the path of the sun to be tracked throughout the year to establish the shadow cast by the existing and proposed buildings and thus calculate the sun hours on ground in each scenario.

5.157 Only those surrounding residential properties which have windows facing towards the Site were included in the assessment. If a nearby residential property has no windows facing the Site, these properties would not be affected by the Proposed Development in terms of light.

Baseline Assessment

5.158 The baseline assessment will review the daylight and sunlight conditions within each of the surrounding residential properties in the Proposed Development area's present form.

Construction Assessment

5.159 Owing to the evolving and changing nature of demolition and construction activities, the assessment of potential effects during demolition and construction of the Proposed Development on daylight and sunlight to surrounding properties will not be modelled. Instead, a qualitative assessment will be undertaken using professional judgement and experience.

5.160 Since the potential daylight and sunlight effects relating to demolition and 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 are not assessed quantitatively as it is considered that the completed Proposed Development represents the worst-case assessment in terms of likely daylight, sunlight and overshadowing.

Operational Assessment

5.161 The following approaches are undertaken to assess the effect on the sensitive receptors of surrounding properties when the Proposed Development is completed and operational:

Daylight:

- Vertical Sky Component (VSC); and

- No Sky Line (NSL) Method.

Sunlight:

- Annual Probable Sunlight Hours (APSH).

Overshadowing:

- Sun Hours on Ground (SHOG).

Scenarios to be Assessed

5.162 The properties set out below will be considered due to their proximity to the Site, and their use.

5.163 The assessment has considered other adjacent residential properties and due to the distance and orientation from the proposed development, they are unlikely to be affected, so they will not be assessed in detail.

5.164 The following scenarios will be assessed and considered, and are reported within this Chapter of the ES:

- Scenario 1: Baseline configuration (pre-development); and
- Scenario 6: Full scheme (Plot C1, C2, & D1, D2).

5.165 Schemes under construction and with planning consent but not under construction have been included in the baseline scenario, in line with the BRE Guide, and so no separate technical assessment of the cumulative impact is required.

5.166 An overshadowing assessment will be undertaken on the amenity areas within the surrounding area.

Summary of Assessment Scope

Table 5.15: Summary of Assessment Scope

Receptor	Impact	Potential Effect	Scoped In / Out
Wilburn Basin	Daylight/sunlight	Negligible to moderate adverse	In
One Regent Road	Daylight/sunlight	Negligible to moderate adverse	In
183 Water Street	Daylight/sunlight	Negligible to moderate adverse	In
Irwell Building	Daylight/sunlight	Negligible to moderate adverse	In
The Riley Building	Daylight/sunlight	Negligible to moderate adverse	In
The Riverside	Daylight/sunlight	Negligible to moderate adverse	In

Receptor	Impact	Potential Effect	Scoped In / Out
133 Liverpool Road	Daylight/sunlight	Negligible to moderate adverse	In
125 Liverpool Road	Daylight/sunlight	Negligible to moderate adverse	In
1-25 Woollam Place	Daylight/sunlight	Negligible to moderate adverse	In

5.167 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Flood Risk and Drainage

Introduction

5.168 This Chapter of the ES will be prepared by Curtins Consulting Ltd and assesses the likely Flood Risk and Drainage impacts of the proposals upon the Site and surrounding area.

Legislative and Policy Context

5.169 The following legislation and policies are relevant to Flood Risk and Drainage Strategy for the development.

Legislation

- Water Resources Act, 1991. Sets out the regulatory controls and restrictions that provide protection to the water environment through controls on abstraction, impounding and discharges as well as identifying water quality and drought provisions.
- Land Drainage Act, 1991. Places responsibility for maintaining flows in watercourses on landowners.
- Environmental Act, 1995. Establishes basic terms of reference for the Environment Agency.
- Water Act, 2003. Formalises the Government's commitment to the sustainable management and use of water resources.
- The Water Environment (Water Framework Directive (2000/60/EC) WFD) (England & Wales) Regulations, 2003. These Regulations establish a framework for protecting the water environment, with the aim of achieving chemical and ecological water quality targets.
- Floods Directive (2007/60/EC), 2007. Its aim is to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity.
- Building Regulations Part H (Drainage and Waste Disposal), 2010. Statutory guidance for building drainage and sewerage.
- Flood and Water Management Act 2010

National Planning Policy

- National Planning Policy Framework, 2021 sets out the national framework for delivering sustainable development, Chapter 14 "Meeting the challenge of climate change, flooding and coastal change" para 152 to 169.

- National Planning Policy Framework Technical Guidance to the National Planning Policy Framework (2019), provides additional guidance to ensure the effective implementation of the planning policy for development in areas at risk of flooding. This includes the Flood Risk Management Hierarchy and defines spatial flood risk zones based on the annual exceedance probability.

- Flood Risk and Coastal Change Planning Practice Guidance (PPG), 2014 provides guidance on how the suitability of incorporating SuDS into a new development should be assessed within a planning application's site-specific Flood Risk Assessment. Para 051, 079 & 080.

- Non-Statutory Sustainable Drainage Technical Standards (2015) provides a set of technical standards for which all future SuDS are recommended to be designed to in order to achieve the aims (in relation to surface water management and flood risk) of current National planning policy.

- House of Commons: Written Statement (HCWS161) – Sustainable Drainage (2014), strengthens existing planning policy relating to the use of SuDS within 'major' planning applications. From the 6th April 2015, all 'major' planning applications (as defined by Town and Country Planning (Development Management Procedure) (England) Order 2010) will be required to consider using SuDS as part of the development's management of surface water run-off, unless it can be demonstrated to be inappropriate.

Local Planning Policy

Manchester Core Strategy (2012)

5.170 Policy EN8 states that:

All new development will be expected to be adaptable to climate change in terms of design, layout, siting and function of buildings and external spaces.

5.171 Policy EN14 Flood Risk states that:

In line with the risk-based sequential approach contained within PPS25, development should be directed away from sites at the greatest risk of flooding, and towards sites with little or no risk of flooding; this should take account of all sources of flooding identified in the Manchester-Salford Trafford Strategic Flood Risk Assessment (SFRA).

In addition to the requirements for site-specific Flood Risk Assessments (FRAs) set out in PPS25, an appropriate FRA will also be required for all development proposals, including changes of use, on sites greater than 0.5ha within Critical Drainage Areas (CDAs) and Canal Hazard Zones identified in the SFRA.

All new development should minimise surface water run-off, including through Sustainable Drainage Systems (SUDS) and the appropriate use of Green Infrastructure. Developers should have regard to the surface water run-off rates in the SFRA User Guide. In CDAs, evidence to justify the surface water run-off approach / rates will be required.

5.172 Policy EN17 Water Quality states that:

With reference to the Manchester-Salford-Trafford SFRA and other relevant documents:

- *Development should avoid any adverse impact on water quality, including during the construction phase, and wherever possible should seek to enhance water quality, both chemical and ecological;*

- *Development should minimise surface water run-off from development and associated roads, and maximise the use of appropriate sustainable drainage systems, to minimise groundwater contamination, and to avoid pollutants reaching watercourses;*

- *Development close to a watercourse should also ensure that waste or litter cannot enter the watercourse from the site;*
- *Development should, where feasible and appropriate, seek to open up any culverted or hidden watercourse beneath the site to improve the ecological status of that watercourse.*

5.173 Policy DM1 Development Management states that:

All development should have regard to the specific issues including: effects on amenity such as noise, light, air quality, road safety and traffic generation; accessibility; community safety and crime prevention; vehicular access; and, green infrastructure.

Manchester City, Salford City and Trafford Councils Level 2 Hybrid (SFRA)

5.174 Local Planning Authorities are required to produce Local Development Frameworks, which are a portfolio of Local Development documents that collectively deliver the spatial planning strategy.

5.175 The Manchester City, Salford City and Trafford Councils Level 2 Hybrid SFRA is one of these documents and it assesses the risks associated with all types of flooding and is used to identify the amount and types of suitable developments permitted in an area.

5.176 The Manchester City, Salford City and Trafford Councils Level 2 Hybrid SFRA is a combined Level 1 and Level 2 SFRA providing both comments on the wider flooding issues and detailed review of specific development plots.

5.177 Within the SFRA the proposed site is not designated for redevelopment and is therefore not considered specifically within the SFRA Level 2 analysis.

Baseline Conditions

5.178 The Site is approximately 1.78 hectares in size and the majority of the Site has been identified as within Flood Zone 2 from Environment Agency mapping, indicating that the risk of flooding from rivers and sea is medium. The remaining parts of the Site towards the southern boundary are Flood Zone 1, indicating there is a low risk of flooding.

5.179 The flood zone extents are derived from modelled flood level data taken from the 2018 Irwell Study provided by the Environment Agency and compared with the site topography, this confirms that the Site is located within Flood Zone 2, as shown on the mapping.

5.180 The Site is bound by the River Irwell along the northern boundary.

5.181 The Site is within Flood Zone 2, in excess of 0.5 hectares and within the Conurbation Core Critical Drainage Area, therefore a Flood Risk Assessment will be required to be undertaken. The Flood Risk Assessment will assess all potential sources of flooding including tidal, fluvial, surface water, groundwater, sewers and infrastructure failure. The Flood Risk Assessment will also include the predicted impact of climate change on flood risk.

5.182 As the Site is considered to be 'major' development by the Town and Country Planning Order 2015, a Drainage Strategy will also be required as part of the Planning Application for the development. The Drainage Strategy will assess the predicted impact of climate change on rainfall depth and volumes.

5.183 The United Utilities sewer records show that there are public combined sewers running within Water Street, these sewers then turn, heading east down Liverpool Road. These sewers vary in size from 800*520mm increasing to 920*610mm as you move downstream. One Combined Sewer Overflow (CSO) is also detailed on the plans connecting to the identified 920*610mm sewer. This CSO crosses the Proposed Development, running parallel with the existing viaduct. The onsite private sewer network is not currently known other than what has been determined from various site walkover inspections. It is assumed that the sewer network served the industrial building which previously occupied the Site but has subsequently been demolished.

Potential Significant Effects

5.184 This Chapter will identify the flood risk and drainage characteristics of the existing Site and any potential issues and risks associated with the former use of the Site.

5.185 At this stage, all sources of flood risk will be considered until the Flood Risk Assessment has been completed.

Assessment Methodology

Technical Scope

5.186 The ES chapter will be based on the Flood Risk Assessment and Drainage Strategy.

5.187 The Flood Risk Assessment scope will be undertaken in accordance with National Planning Policy Framework document (NPPF) 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.

5.188 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.

Baseline Assessment

5.189 The Flood Risk Assessment and Drainage Strategy will incorporate a thorough review of baseline information collected from a range of sources including Environment Agency data, Strategic Flood Risk Assessment, Phase 1 Detailed Desk Study report and Site-Specific Ground Investigations.

Construction Assessment

5.190 As a result of the Proposed Development the following effects have been identified and will be assessed in the ES:

- Flood Risk to construction workers during construction.
- Direct and indirect contamination of local watercourses/surface water due to mobilisation of soils, existing contamination and spillage of oils from construction plant.

Operational Assessment

5.191 As a result of the Proposed Development, the following potential effects have been identified and will be assessed in the ES:

- Direct flooding of the Proposed Development and end users due to inadequate flooding resilience and management of residual flood risk.
- Direct and indirect flooding of surrounding watercourses, the wider catchment area, adjacent land and property due to increases in surface water runoff from positively drained hard areas.
- Direct and indirect pollution of local watercourses, surface water with discharge of untreated run-off.

- Direct and indirect pollution of groundwater with discharge of untreated run-off.

5.192 All potential impacts can be reduced by suitable mitigation and management and will be considered within the assessment and presented within the Flood Risk and Drainage ES Chapter. An allowance for climate change will be included as part of this assessment.

Summary of Assessment Scope

5.192.1 The following table summarises the Flood Risk and Drainage impacts and whether they have been scoped in to be assessed in the ES.

Table 5.16

Receptor	Impact	Potential Effect	Scoped In / Out
Proposed development site and site end user	Flooding from the River Irwell.	Damage and risk to site and end user	✓
Wider Catchment area	Flooding from the surface water discharge from the development	Damage and risk to wider catchment area and occupants	✓
Local Watercourses	Pollution during construction and operation	Damage to water quality and wildlife	✓
Water Supply and Sewer Infrastructure	Pollution during construction and operation	Damage to Water Quality	✓
Groundwater Quality	Pollution during construction and operation	Damage to Groundwater Quality	✓

5.193 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Noise and Vibration

Introduction

5.194 This assessment will consider the potential impact of noise and vibration from the Proposed Development on the surrounding noise sensitive receptors during the construction and operational phases. Any significant impacts to existing and proposed sensitive receptors will be identified and subsequent mitigation measures will be proposed. Where mitigation measures are proposed, the anticipated residual impacts will also be identified.

5.195 The ES Chapter will be prepared by Fisher Acoustics.

Baseline Conditions

5.196 Under normal circumstances, noise level surveys would be carried out around the Site in order to determine the prevailing noise climate at the Proposed Development and at existing noise-sensitive receptors. However, given the Coronavirus restrictions that are in place, it is expected that the prevailing external noise levels around the Site may not the same as would be the case under normal circumstances, particularly in relation to night time noise levels. Therefore, any noise survey carried out in the foreseeable future is not expected to be fully representative of the long-term noise climate at and around the Site. For the purposes of the noise and vibration assessment, it is

therefore proposed that reference be made to noise surveys carried out in the area over the last few years (e.g. Trinity Islands, Wilburn Basin and Water Street) and to online resources (e.g. http://www.extrium.co.uk/noiseviewer.html). Further information can be found at https://www.ioa.org.uk/sites/default/files/joint_guidance_on_the_impact_of_covid.ioa_anc_v6.pdf

5.197 The noise climate at nearby existing residential accommodation, including Wilburn Basin and Water Street, can be determined without recourse to a specific noise survey.

5.198 Specific noise and vibration surveys will be carried out to determine the potential noise and vibration impact of train movements on the nearby train viaduct and the Ordsall Chord.

Method of Assessment

5.199 Potential noise and vibration effects during the construction works and the completed development to be addressed in the ES will include:

- Temporary noise and vibration nuisance due to enabling and construction works – associated with daytime and (if required) night time works;
- Noise nuisance to existing surrounding sensitive receptors due to road vehicle movements generated during the demolition, enabling and construction works - associated with daytime and (if required) night time works;
- Noise generated from permanent fixed building services plant;
- Noise egress from commercial uses such as amplified sound; and
- The cumulative operational impacts associated with this and other proposed schemes within the locality will be established and assessed. This will principally be in relation to building services noise and the control of commercial noise egress with the assessments undertaken in line with the methods outlined in the following chapter.

5.200 The noise and vibration impact assessment will be undertaken with reference to the following standards and guidance documents:

- The requirements of Manchester City Council
- World Health Organisation 'Guidelines for Community Noise' (1999)
- National Planning Policy Framework (NPPF) (2019)
- Noise Policy Statement for England (NPSE)
- BS 5228 – Noise and vibration control on construction and open sites
- BS 7385 – Evaluation and measurement for vibration in buildings
- BS 6472 – Guide to evaluation of human exposure to vibration in buildings: Part 1 – Vibration sources other than blasting
- BS 4142 – Methods for rating and assessing industrial and commercial sound
- BS 8233 – Guidance on sound insulation and noise reduction for buildings
- BS 7445 – Description and measurement of environmental noise

- Calculation of Road Traffic Noise, Department of Transport (1988)
- ANC Guidelines: Measurement and Assessment of Ground borne Noise and Vibration (2001)
- IEMA 'Guidelines for Noise Impact Assessment' (2014)
- Environmental Protection Act (EPA) [Sections 79 and 80]
- Control of Pollution Act (CoPA) [Sections 60 and 61].
- Acoustic Ventilation and Overheating Residential Design Guide (2020)

5.201 The existing baseline conditions at the Site will be determined by reference to the results of noise survey work carried out previously at and around the Site. A new noise and vibration survey will be carried out to determine the potential noise and vibration impact of train movements on the nearby train viaduct and the Ordsall Chord. The potential effects of the Proposed Development on the surrounding area, and on nearby noise sensitive premises, will be assessed by calculation with respect to the relevant criteria.

5.202 The construction noise and vibration assessment will be based on the guidance given in BS 5228:2009 Noise and Vibration Control on Construction and Open Sites and BS 7385 'Evaluation and Measurement for Vibration in Buildings, Part 2: Guide to Damage Levels from Ground-borne Vibration'.

5.203 Identification of potentially sensitive noise and vibration receptors on and surrounding the Site and categorisation of the 'sensitivity' in accordance with EIA terminology, as illustrated in Table 5.17.

Table 5.17: Receptor sensitivity

Sensitivity of receptor	Description
High	Residential properties, hotels and hostels
Moderate	Commercial, health care and educational buildings
Low	Residential amenity and retail buildings

5.204 The magnitude of impact shall be defined in accordance with recognised noise and vibration guidance and corresponding EIA terminology (Major, Moderate, Minor, Negligible).

5.205 In terms of nature and scale of effects, effects will be defined as either adverse, beneficial or neutral in nature.

5.206 The scale of effects will refer to guidance within the Noise Policy Statement for England (NPSE), the decision making includes identifying whether the overall effect of the noise exposure generated by a development is, or would be, above or below the significant observed adverse effect level and the lowest observed adverse effect level. The definitions for the different effect levels are outlined below:

5.207 Significant Observed Adverse Effect Level (SOAEL): The level of noise exposure above which significant adverse effects on health and quality of life occur.

5.208 Lowest Observed Adverse Effect Level (LOAEL): The level of noise exposure above which adverse effects on health and quality of life can be detected.

5.209 No Observed Effect Level (NOEL): The level of noise exposure below which no effect at all on health or quality of life can be detected.

5.210 Typically, effects (either before or after mitigation) that are major or moderate in scale shall be considered as 'significant effects' i.e., exceeds the LOAEL. The exception to this will be temporary non-permanent sources where a moderate effect would be considered acceptable as it does not exceed the SOAEL.

Construction Phase

5.211 Significance criteria for assessing the effect of construction plant noise and vibration are based broadly on the guidance set out in BS 5228-1&2: 2009+A1:1014 'Code of practice for noise and vibration control on construction and open Sites', and are presented in Table 5.18.

Table 5.18: Significance criteria for assessing construction noise and vibration

Effect category	Daytime Noise Levels	Vibration Levels
Negligible	Lower than existing ambient L_{Aeq}, or greater than the existing ambient L_{Aeq} but less than the threshold noise level (dependent on existing ambient noise levels).	Peak particle velocity (PPV) less than 0.14 mm/s.
Minor Adverse	Greater than existing ambient L_{Aeq} and between the threshold noise level and threshold noise level +5 dB (dependent on existing ambient noise levels).	PPV regularly exceeding 0.14 mm/s, but less than 0.2 mm/s.
Moderate Adverse	Greater than the threshold noise level +5 dB (dependent on existing ambient noise levels) but for no more than 10 days in any month.	PPV regularly exceeding 0.2 mm/s, but less than 1.0 mm/s.
Major Adverse	Greater than the threshold noise level +5 dB (dependent on existing ambient noise levels) for more than 10 days in any month.	PPV regularly exceeding 1.0 mm/s.

Operational Phase

5.212 The operational noise affects will be assessed with respect to the baseline measurements and where appropriate the baseline for the development year.

5.213 The Design Manual for Roads and Bridges (DMRB) (Vol 11 Environmental Assessment Part 7 Noise and Vibration (2011 –Revision 1)) advises that the threshold criteria used for traffic noise assessment during the day is a permanent change in magnitude of 1 dB LA10,18h in the short term (i.e. on opening) or a 3 dB LA10,18h change in the long term (typically 15 years after project opening).

5.214 Furthermore, the DMRB also states that a change in noise level of 1 dB LA10,18h is equivalent to a 25% increase or a 20% decrease in traffic flow, assuming other factors remain unchanged and a change in noise level of 3 dB LA10,18h is equivalent to a 100% increase or a 50% decrease in traffic flow.

5.215 Given that the expected increase in road traffic on local roads due to the operation of the proposed development is less than 25%, the threshold criteria are not expected to be reached. Therefore, a specific assessment of operational phase traffic noise is not proposed and has been scoped out of the assessment.

5.216 For the assessment of building services noise, reference will be made to BS 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound'.

5.217 Criteria for the assessment are set in accordance with BS 4142 and the Institute of Acoustics (IOA) / Institute of Environmental Management and Assessment (IEMA) 'Guidelines for Noise Impact Assessment' as described in Table 5.19.

Table 5.19: Significance criteria for assessing noise impact

Effect Category	Increase in noise level (dB)	Description
Negligible	<1	Noise increase is unlikely to be discernible
Minor Adverse	1.0 to 2.9	A slight increase in noise levels may be perceived in affected buildings and outdoor recreational areas
Moderate Adverse	3 to 4.9	Increase in noise levels is likely to be noticeable in affected buildings and outdoor recreational areas
Major Adverse	>5	Increase in noise level is likely to be clearly perceivable and could have a significant impact on the continued use of a building

Summary of Assessment Scope

5.218 The key considerations associated with the noise and vibration impact of the development are summarised in Table 5.20.

5.219 The impact of these on each of the nearby noise sensitive premises discussed above will be considered in the noise and vibration chapter of the ES.

Table 5.20: Summary of Noise and Vibration Assessment Scope

Receptor	Impact	Potential Effect	Scoped In / Out
Dwellings within the proposed development	Noise impact of environmental noise levels due to, for instance, road traffic and train movements.	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated via the facade design of dwellings within the development.	In
Dwellings within the proposed development	Vibration impact of train movements on adjacent viaduct.	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Potential effects are	In

Receptor	Impact	Potential Effect	Scoped In / Out
		expected to be mitigated via the mass on the building.	
	Noise impact of new external fixed plant items associated with the development	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated via the facade design of dwellings within the development and the design of new external fixed plant items associated with the development.	In
	Noise impact of any amplified music associated with the development	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated via the facade design of dwellings within the development and any premises with amplified music associated with the development.	In
	Cumulative noise impact in conjunction with other developments in the area.	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated via the facade design of dwellings within the development.	In
Existing and proposed nearby dwellings	Noise and vibration impact of temporary construction activities	Temporary effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated or controlled via the construction noise and vibration assessment.	In
	Noise impact of temporary construction traffic	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated or controlled via the construction noise and vibration assessment.	In
	Noise impact of new external fixed plant items associated with the development	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects	In

Receptor	Impact	Potential Effect	Scoped In / Out
		will be mitigated via the design of new external fixed plant items associated with the development.	
	Noise impact of any amplified music associated with the development	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated via the facade design of any premises with amplified music associated with the development.	In
	Cumulative noise impact in conjunction with other developments	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance).	In

5.220 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Socio-Economics

5.221 This section of the Scoping Report has been prepared by Ekosgen. The proposed ES chapter will be prepared by Ekosgen and would assess the likely significant effects of the Proposed Development with respect to the socio-economic environment. The study area for assessment will be defined on two levels:

- Likely effects on the Site and immediate surrounds, representing the 'Site' scale;
- Likely effects on the area within a 7-mile radius of the Site, representing the 'local sub-regional' scale.

5.222 A 7-mile radius study area is considered suitable for a densely populated urban area and is based on advice set out by English Partnerships, now known as Homes England. As more information emerges, the study area for assessment may be redefined to better suit the characteristics of the local environment.

5.223 Socio-economic effects of the Proposed Development are anticipated to include the following topics:

- Population;
- Employment and GVA;
- Housing;
- Local Authority Income Effects;
- Local expenditure;
- Education and training;
- Healthcare;

- Crime; and
- Open space, recreation and amenity.

5.224 The assessment will consider direct and indirect construction phase (temporary) and operational phase (permanent) effects on the local and regional environment.

5.225 Baseline data will be gathered to ascertain the socio-economic characteristics of the study area. These will be gathered from a range of recognised sources, such as the Office for National Statistics, Annual Population Survey, Business Register and Employment Survey, 2011 Census, Labour Force Survey, and Experian Micromarketer. Data relating to schools within the catchment area and their capacity will be sourced from the Department for Education requested from the relevant departments of MCC.

5.226 The most up-to-date data will be used where available; the Local Authority is invited to comment on any relevant sources of information to inform the assessment. Data for both the county and for the city region will be considered.

5.227 The assessment will utilise both quantitative and qualitative methods to consider baseline characteristics and likely impacts. Regard will be given to policy guidance and strategies within the wider area where relevant.

5.228 There are no specific technical criteria to classify the significance of socio-economic effects. Therefore, professional judgement will be applied to consider effects in terms of their overall impact on the study area at various scales.

5.229 All Committed Developments identified within Appendix 2 are relevant to this Chapter.

5.230 This Chapter will test Scenario 6, and with the identified committed developments also being tested separately.

5.231 Table 5.21 below summarises the potential socio-economic impacts which have been scoped in to be assessed within the ES. An initial judgement has been made to assess what the potential effects although the final assessment will be based on the review of baseline conditions and a detailed assessment of proposition and impacts and therefore may differ.

Table 5.21: Summary of Scope

Topic	Impact	Potential Effect	Scoped-in
Population	Changes to temporary and permanent population within the area. Changes in employment opportunities available to local population.	Potential effects on local population.	In
Housing	Increased supply of houses onto local market during operation.	Potential effects for housing supply in the area.	In
Local Expenditure	Changes in local expenditure during construction and operational phase.	Potential effects on local expenditure.	In
Local Authority Income Effects	The introduction of new residential properties will	Uplift in Council Tax Income.	In

Topic	Impact	Potential Effect	Scoped-in
	generate additional Council Tax income for the local authority.		
Employment and GVA	Increases in direct and indirect employment opportunities and economic output during construction and operation.	Temporary creation of employment and uplift in economic output during construction	In
	Changes in employment opportunities available to local population.	Short and long term increases in operational employment.	In
Education and Training	Increases in direct and indirect training opportunities during construction. Changes to availability of school places due to increased population.	Temporary creation of training during construction. Additional demand on Impact upon local school provision.	In
Healthcare	Changes in the availability of healthcare services and facilities due to increased population.	Additional demand on healthcare services.	In
Crime	Impact upon vibrancy, natural surveillance and safety.	Reduce incidences of crime.	In
Open Space, Recreation and Amenity	Increased population within local area during construction and operation requiring access to open space and amenity facilities.	Increased use of open space, leisure and amenity facilities.	In

Solar Glare

Introduction

5.232 This Chapter of the ES will be prepared by GIA and assesses the likely Solar Glare impacts of the proposals upon the Site and surrounding area.

Legislative and Policy Context

5.233 There is no relevant legislation, national, sub-regional or local planning policy in relation to solar glare.

Baseline Conditions

5.234 The solar glare assessment is undertaken on the worst-case scenario. Solar Glare is not a comparative assessment; the fact it may occur in the baseline does not necessarily justify its occurrence as a result of the Proposed Development. Therefore, the assessment considers the effect of the Proposed Development in absolute terms.

Potential Significant Effects

5.235 The BRE guidelines provide that '*glare or solar dazzle can occur when sunlight is reflected from a glazed façade or area of metal cladding*'. This is considered a potential issue in relation to road users and train drivers whereby sun reflections can obscure the view of signals, consequently reducing the driver's visibility and responsiveness.

5.236 The façade treatment for the Proposed Development is understood to include large areas of glazing, as such, a solar glare assessment will be considered necessary. Road junctions are particularly sensitive in relation to solar glare as instances of reflection may obscure the view of traffic signals or temporarily blind drivers and thus result in accidents. Rail tracks are also sensitive in relation to solar glare that could impact signal visibility.

5.237 In relation to the Proposed Development, due to the close proximity of the Site to main roads and rail tracks, several viewpoints are considered likely to be sensitive and therefore will be assessed.

Assessment Methodology

5.238 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.

Operational Assessment

5.239 The assessment of solar glare identifies the time of the day and year that solar reflections will be visible from the assessed viewpoints, as well as their relationship to a driver's line of sight. The assessment does not however, measure the intensity of the reflection but merely the occurrence and duration.

5.240 The effect significance will be determined using professional judgement taking into consideration the duration of solar reflections, location of these in relation to a driver's line of sight, type of junction control and the probability of reflections occurring. The effect significance is given on a per junction basis considering all viewpoints assessed for that junction as well as any viewpoints that would not be affected by the Proposed Development.

Scenarios to be Assessed

5.241 Due to the phased nature of the Proposed Development, it is likely that interim, short-term solar glare effects could arise where one or more of the phases are complete and operational, but others are not. As the phases progress, the implementation of subsequent phases may shade or obscure earlier phases from view and therefore alter the solar glare effects. Therefore, the scenarios below are proposed in order to assess the worst-case scenario for each phase of the Proposed Development:

- Scenario 3 – Phase C1 complete
- Scenario 4 – Phases C1 and C2 complete
- Scenario 5 – Phases C1, C2 and D1 complete
- Scenario 6 - Completed Development

5.242 Based on a common practice approach to portray the worst-case scenario, the cumulative effect will not be considered as neighbouring Cumulative Developments can block sunlight reaching the facades of the Proposed Development and/or obscure the Proposed Development from the viewpoints to be assessed.

Summary of Assessment Scope

5.243 The assessment will consider potentially sensitive viewpoints for road and rail 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 rail 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.

5.244 Viewpoints within 500 metres 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. The receptors sensitive to solar glare include, but are not limited to, those indicated in Figure 5.3 below:



Figure 5.3 – Solar Glare sensitive viewpoints

- Junction 1 – Liverpool Street
- Junction 2 – E Orsdall Lane
- Junction 3 – Trinity Way
- Junction 4 – Water Street
- Junction 5 – New Elm Road
- Junction 6 – Water Street and Trinity Way/Ring Road
- Junction 7 – Water Street, Regent Road, Egerton Street and Trinity Way/Ring Road
- Junction 8 – Regent Road
- Junction 10 – Regent Road
- Junction 11 – Egerton Street/Ring Road
- Junction 12 – Deansgate Interchange
- Track 1 – Northern line, Northbound from Deansgate to Salford Central or Eccles Stations
- Track 2 – Northern line, Southbound from Salford Central to Deansgate
- Track 3 – Northern line, Southbound from Eccles Station to Deansgate
- Track 4 – Tram lines eastbound towards Deansgate-Castlefield

Receptor	Impact	Potential Effect	Scoped In / Out
Solar Glare impacting visibility of road users at major road junctions where the Proposed Development is visible within 500m of the Site.	Safety issues concerning transit through critical intersections and junctions	Visibility of traffic lights, intersections and pedestrian crossings could be obscured by instances of glare, potentially resulting in traffic accidents	Scoped In
Solar Glare impacting signal visibility of train drivers at major road junctions where the Proposed Development is visible within 500m of the Site.	Safety issues concerning visibility of train drivers along nearby railway tracks	Visibility of signals along the tracks could be obscured by instances of glare, potentially resulting in accidents	Scoped In

5.245 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Townscape and Visual Impact Assessment

Introduction

5.246 This Chapter of the ES will be prepared by Chris Burnett BSc BLD CMLI principal partner of Chris Burnett Associates and will assess the likely townscape and visual impacts of the proposals upon the Site and surrounding area.

Legislative and Policy Context

5.247 Both the European Landscape Convention and the National Planning Policy Framework will provide legislative and policy context for this study.

Legislation

5.248 The European Landscape Convention (ELC, 2000) provides a foundation for closer co-operation on landscape issues across Europe and was ratified in the UK on the 21 November 2006 and became binding on 1 March 2007. The convention identifies the need to recognise landscape in law, to develop and promote landscape policies dedicated to the protection, management and creation of landscapes, and to establish procedures for the participation of the general public and other stakeholders in the evolution and implementation of landscape policies. It also encourages the integration of landscape into all relevant areas of policy, including cultural, economic and social policies.

5.249 The ELC defines landscape under Article 1 as ‘an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors’. It recognises that landscape has important cultural, ecological, environmental and social dimensions and is a key element of achieving sustainable development. Article 3 states that the aims of the Convention are to promote landscape protection, management and planning and to organize European co-operation on landscape issues.

National Planning Policy

5.250 Relevant parts of the National Planning Policy Framework will be used to provide National Planning Policy Context. The latest version of the NPPF will be used which was updated in 2021. It sets out the Government’s requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.

5.251 Key aspects of the NPPF which apply to the Townscape and Visual Impact Assessment are the paragraphs 126 and 130 below:

5.252 Paragraph 126 –

The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. Being clear about design expectations, and how these will be tested, is essential for achieving this. So too is effective engagement between applicants, communities, local planning authorities and other interests throughout the process.

5.253 Paragraph 130 - Planning policies and decisions should ensure that developments:

a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);

d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users46; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

Local Planning Policy

5.254 Relevant policies from Manchester City Council's Core Strategy will be used to provide Local Plan context. The relevant policies are set out below:

Policy EN 1 - Design Principles and Strategic Character Areas

"All development in Manchester will be expected to follow the seven principles of urban design, as identified in national planning guidance and listed above and have regard to the strategic character area in which the development is located. Opportunities for good design to enhance the overall image of the City should be fully realised, particularly on major radial and orbital road and rail routes. Design and Access Statements submitted with proposals for new development must clearly detail how the Proposed Development addresses the design principles, reinforces and enhances the local character of that part of the City and supports the achievement of the Core Strategy Strategic Objectives."

Policy CC6 High Density Development

"City Centre High Density Development City Centre development will generally be high-density. It is a location where land should be used to maximise its efficiency. The appropriate scale, massing and height of development in the City Centre will significantly exceed what is appropriate elsewhere in the City. Development will need to have regard to the Council's approach to tall buildings (policy EN2), but any proposals which do not reflect the importance of maximising the development opportunities in the City Centre will only be supported where this accords with wider Core Strategy objectives".

Policy CC 9 Design and Heritage

"Design of new buildings will need to be of the highest standard in terms of appearance and function. The standards and guidance explained in other LDF policies should be the basis for the approach to design, with particular attention

to be given to the City Centre context and character. Development in Manchester City Centre should preserve or enhance the heritage assets that have been identified, including listed buildings, conservation areas and scheduled ancient monuments. The Council will support high density and mixed use development in the City Centre, but developers must recognise the specific design challenges that must be overcome to ensure complementarity of function and form. New development must support the range of uses the Council expects in the City Centre and contribute to a coherent and integrated physical environment."

5.255 The City Centre Character Area is of relevance to the Proposed Development. This area has been broken down into distinct townscape character zones by Manchester City Council and the extent and nature of the impact of the Proposed Development on these zones is described in more detail later in this chapter. The Core Strategy also refers to tall buildings:

Policy EN2 - Tall Buildings

Tall buildings are defined as buildings which are substantially taller than their neighbourhoods and/or which significantly change the skyline.

Proposals for tall buildings will be supported where it can be demonstrated that they

- *Are of excellent design quality,*
- *Are appropriately located,*
- *Contribute positively to sustainability,*
- *Contribute positively to place making, for example as a landmark, by terminating a view, or by signposting a facility of significance, and*
- *Will bring significant regeneration benefits.*

A fundamental design objective will be to ensure that tall buildings complement the City's key existing building assets and make a positive contribution to the evolution of a unique, attractive and distinctive Manchester, including to its skyline and approach views.

Suitable locations will include sites within and immediately adjacent to the City Centre with particular encouragement given to non-conservation areas and sites which can easily be served by public transport nodes.

Elsewhere within Manchester tall building development will only be supported where, in addition to the requirements listed above, it can be shown to play a positive role in a coordinated place-making approach to a wider area. Suitable locations are likely to relate to existing district centres. The height of tall buildings in such locations should relate more to the local, rather than the City Centre, urban context.

By their very size tall buildings can have a significant impact on the local environment and its micro-climate. It is therefore expected that this impact be modelled and that submissions for tall buildings also include appropriate measures to create an attractive, pedestrian friendly local environment.

It will be necessary for the applicant/developer to demonstrate that proposals for tall buildings are viable and deliverable"

5.256 Significantly, the Core Strategy offers further guidance in relation to the development of tall buildings as follows:-

Tall Buildings can provide a sense of place and distinctiveness, however as high development can have a substantial impact on an area careful consideration should be given to each proposal.

The NPPF requires local authorities to have regard to best practice in design, such as "By Design - Urban Design in the Planning System: Towards better practice" and "By Design – Better places to live". Policies are not to be overly

prescriptive but, amongst other things, should concentrate on guiding height in relation to neighbouring buildings and the local area in general. Innovation should not be stifled but local distinctiveness should be reinforced. PPS4 directs planning authorities to set flexible policies for their centres which can respond to changing economic circumstances and encourage where appropriate high density development accessible by public transport, walking and cycling.

In the context of ensuring sustainable development, the City Centre is clearly a location that requires the prudent use of scarce land resources. It is generally well served by public transport and one where a high density of development is consistent with its distinctive character. The City Centre is, in general, considered an appropriate area for tall buildings. The growth of the City Centre is still evolving, particularly in relation to the development of fringe sites, and proposals need to be considered having regard to the character of the places in which they are proposed. Therefore, whilst some parts of the City Centre are more or less likely to be suitable for tall buildings, the Council does not consider a site specific policy that identifies detailed locations for a tall building to be appropriate. The Council is aware that over the 15 year plan period there is a need to be flexible and to be able to respond to changing economic conditions. The above criteria based policy is therefore set out, which will together with other design policies, form the policy context against which all proposals for tall buildings will be considered.

Elsewhere across the City, District Centres may be appropriate locations for "tall" buildings. Being generally accessible to the local population and well served by public transport, they are natural foci for developments that attract a larger number of people. The definition of tall as being in relation to neighbouring buildings should be noted, however, as the scale of development acceptable within a District Centre is unlikely ever to match that within the City Centre.

Tall buildings by their very nature can dominate the street scene and be highly visible over long distances. They can also have an impact on the local micro-climatic conditions, for example, by creating wind tunnels. It is for these reasons that it is considered particularly important that they are designed to the highest quality, both in terms of appearance and their impact on the functioning of surrounding space.

Baseline Conditions

5.257 The Site comprises approximately 1.78 hectares of brownfield land in the form of a car park and is split into two parcels known as Site C and Site D, as per the red line boundary plan.

5.258 The Site falls within the St Johns and Water Street Strategic Regeneration Framework Areas as well as the Castlefield Conservation Area.

5.259 Site C comprises approximately 0.89 hectares of brownfield land and is bounded by the River Irwell to the north, Trinity Way to the west, Water Street to the south and a railway viaduct to the east. The Site can be accessed by vehicle or foot via Water Street on the southern boundary. The Site slopes downwards to the north towards the River Irwell and there is a limited amount of vegetation running along this boundary.

5.260 Site D comprises approximately 0.89 hectares of brownfield land and is bounded by the River Irwell to the north and west, Regent Road to the south and Trinity Way to the east. The Site can be accessed by vehicle or foot via Trinity Way on the eastern boundary. The Site slopes downwards to the north and west towards the River Irwell and there is a limited amount of vegetation running along this boundary.

5.261 The Site is located within a highly urbanised part of the City Centre that is currently undergoing a long process of regeneration. This area is comprised of a predominantly high-density built form and contains a mixture of low-rise buildings as well as taller structures coming forward towards the north within St Johns as well as other existing buildings of height along the River Irwell to the north and south. The Site is visible from a number of key viewpoints along Liverpool Road, Egerton and Regent Road.

Potential Significant Effects

5.262 The objective of the Townscape and Visual Impact Assessment process is to identify and evaluate the likely significant effects arising from the Proposed Development. Significance indicates the importance or gravity of the effect and involves a degree of professional judgement to determine the significance of effects. Effects are broadly be determined by the interaction of the sensitivity of the receptor and the magnitude of change and those

significance of effect values of moderate and above will be used to establish whether any effect is Significant in EIA Regulation terms.

5.263 In terms of cumulative effects, a number of developments have been identified that may affect the development within Appendix 3.

Assessment Methodology

5.264 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, which supersedes the 2007 guidance, will also be used as relevant guidance. 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 Development's visibility and guide the selection of viewpoints.

5.265 A number of 'Representative Viewpoints' will then be selected (as included within this Scoping) and agreed with MCC, all within the identified ZTV. These have been selected 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.

5.266 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 visualisation in these circumstances.

5.267 The guidance states that a 50mm lens should be used 'unless there are exceptional circumstances' we believe that the assessment of a tall building in a townscape setting is an exceptional circumstance where a wide-angle tilt shift lens is justified. This is because:

- The height of the building will inevitably mean that the top of the building is often cut off if a standard 50mm lens is used as the ridgeline is often more than 18˚from the horizontal
- Often close up views are necessary to assess the effect of the Proposed Development on the immediate streetscape, often in areas of tight urban grain
- Skylines and clusters of tall buildings are an important part of a TVIA where the insertion of a new tall building into an existing cluster or, as a new feature on the skyline or horizon, is an essential part of understanding its contextual fit.

5.268 For these reasons we are proposing to use a Cannon 5DMkII FFS with a Canon 24 TS-E 24mm Lens. This is not without precedent as most TVIAs produced as part of EIAs for Tall Buildings in Manchester to date have used this equipment effectively to demonstrate accurately and verifiably the visual and townscape effects of a tall building on the townscape and views.

5.269 An equally important feature of the new guidance is how the images are presented and how they are viewed. Again, the guidance offers some useful advice which we propose to follow in this instance.

5.270 Research by the LI Working Group in the preparation of this guidance, carried out across several cities, suggests that, in mid- to smaller-scale landscapes / townscapes, an enlargement around halfway between 100% and 150% results in a binocular relationship between the presented image and reality…… notwithstanding the above, SNH considers that consistent use of 150% enlargement is beneficial

5.271 So in these circumstances we propose to present each image, consisting of baseline, proposed and cumulative for each viewpoint is presented as an A3 PDF which then be viewed digitally or printed , if necessary, at A2 to obtain a 141% enlargement to achieved the recommended enlargement ratio. Each image when printed should be viewed, again as stated in the guidance at a comfortable arms length.

5.272 Please refer to Appendix 6 for more information on the chosen Visualisation Methodology.

Townscape: Sensitivity of Receptor and magnitude of change

5.273 The sensitivity of a townscape receptor is an expression of its ability to accommodate the Proposed Development. Sensitivity is a judgement based on a combination of the susceptibility of the type of change or development proposed and the value attached to the townscape. Susceptibility indicates the ability of a defined townscape receptor to accommodate the proposed development "without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies." (GLVIA, 3rd version, para 5.40). Susceptibility is evaluated for each receptor type. The overall sensitivity of each townscape receptor would be rated within the range of High-Medium-Low and would be informed by combining the susceptibility and townscape value.

5.274 The magnitude of a townscape effect is assessed in terms of its size or scale, the geographical extent of the area influenced by that effect, and its duration and degree of reversibility and would be rated within the range of Major-Moderate-Minor-Negligible-No Change

Visual: Sensitivity of receptor and magnitude of change

5.275 In terms of assessing the baseline visual sensitivity, key factors to consider are the type of view and the likely numbers and types of viewers (the visual receptors). The type of view and the number of viewers are described in the following terms:

- Glimpsed (i.e. in passing)/ Filtered/Oblique / Framed /Open Views; and
- Few/Moderate / Many Viewers
- The value attached to views has regard to a number of factors, including:
- Recognition through planning designations or heritage assets; and
- The popularity of the viewpoint, its appearance in guidebooks, literature or art, on tourist maps and the facilities provided for its enjoyment.

5.276 The GLVIA identifies that the susceptibility of visual receptors to changes in views and visual amenity is a function of:

- The occupation or activity of people experiencing the view at a particular location; and
- The extent to which their attention or interest may therefore be focused on the views and visual amenity they experience at particular locations.

5.277 The assessment of receptor sensitivity is rated on the scale High-Medium-Low and combines judgements on the susceptibility of the receptor to the specific type of development proposed and the value attributed to that receptor. The magnitude of a visual effect is assessed in terms of its size or scale, the geographical extent of the area influenced and its duration and degree of reversibility and will be rated within the range of Major-Moderate-Minor-Negligible-No Change.

Baseline Assessment

5.278 The baseline conditions will be assessed through a combination of desk top evaluation, ZTV studies and field work which combines photography with a description of the current baseline. Townscape and visual impacts can arise from the addition of, or changes to, physical features in the townscape and views, which affect its character. The visual impact assessment addresses the impacts of the Proposed Development on the current baseline, in terms of views within the study area of Manchester City Centre as defined by the selection of the Representative Viewpoints.

5.279 The assessment of townscape impacts will be structured around the identification of distinct blocks of townscape, or character areas, defined through homogeneity of scale, materials, land use, heritage, street pattern, open space, amongst other factors as they exist in 2021.

Construction Assessment

5.280 The construction assessment will follow the same methodology as the Operational Assessment.

Operational Assessment

5.281 The townscape and visual effects of the Proposed Development will be assessed in accordance with the Methodology above leading to the determination of the Significance of Effect for Townscape and Visual receptors.

Scenarios to be Assessed

5.282 Scenario 6: Completed Development (baseline and cumulative) will be assessed as this represents the worst case scenario in terms of impact on views and townscape.

Summary of Assessment Scope

5.283 Table 5.22 below summarises the townscape and visual receptors identified for inclusion in the assessment in the ES.

Table 5.22

Receptor	Impact	Potential Effect	Scoped In / Out
Townscape character	Townscape impacts	Addition of new elements or features that will influence the character and distinctiveness of the townscape	In
Visual receptors	Townscape and visual impacts on people	Effects on receptors who are most sensitive and least sensitive to changes in the view dependent on category of receptor	In

5.284 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Traffic & Transport

Introduction

5.285 This Chapter of the ES will be prepared by Vectos (Transport Planning Specialists) and will assess the likely traffic & transport impacts of the proposals upon the Site and surrounding area. A Transport Assessment (TA) and Travel Plan (TP) will be prepared to accompany the planning application. These reports will form appendices to the ES.

Legislative and Policy Context

Legislation

5.286 There is currently no specific legislation relating to the assessment of traffic and transport in an ES.

National Planning Policy

5.287 The revised NPPF was published in July 2021 by the Ministry of Housing, Communities and Local Government, and sets out the government's planning policies for England and how these are expected to be applied. At the heart of the Framework is a presumption in favour of sustainable development.

5.288 As part of promoting sustainable transport, paragraph 110 of the revised NPPF states that in assessing applications for development, it should be ensured that:

- *appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location.*
- *safe and suitable access to the site can be achieved for all users;*
- *the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
- *any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*

5.289 Paragraph 111 goes on to state that,

- *Development should only be prevented or refused on highways grounds if there would be an unacceptable* impact *on highway safety, or the residual cumulative impacts on the road network would be severe.*

5.290 Finally, the NPPF notes that travel plans can form an important part of development, and a Framework Travel Plan has been prepared in support of this application, to form the basis of a long-term management strategy for the site delivering sustainable transport objectives and promoting opportunities.

- Planning Practice Guidance: Travel Plans, Transport Assessments and Statements in Decision-Taking (PPG)

Local Planning Policy and Guidance

5.291 Relevant transport planning policy and guidance at the local level is contained within the Manchester Core Strategy document, the Guide to Development in Manchester SPD and Planning Guidance and the Greater Manchester Transport Strategy and the Manchester Residential Quality Guidance (2017). The specific planning guidance for this Site is presented in the St Johns and Water Street Strategic Regeneration Framework Areas.

5.292 The Core Strategy forms the key document in Manchester's Local Development Framework and was adopted in 2012. It sets out a number of strategic policies that will guide the development of the city. Policy SP1 sets out the spatial principles that will guide development to 2027. One of these principles is as follows:

- *New development will maximise the potential of the City's transport infrastructure, in particular promoting walking, cycling and the use of public transport.*

5.293 In addition, the policy goes on to state that developments in all parts of the city should 'improve access to jobs, services and education and open space by being located to reduce the need to travel and provide good access to sustainable transport provision'.

5.294 This is reinforced through Policy DM 1 of the Core Strategy, which concerns development management. This states that all developments should have regard to specific issues including the access to new development by sustainable transport modes and vehicular access and car parking.

5.295 Policy T1 of the Core Strategy concerns sustainable transport. It states that the Council will support proposals that:

- *Improve choice by developing alternatives to the private car.*

- *Take account of the needs of road users according to a broad hierarchy consisting of, in order of priority:*

    1. *Pedestrians and disabled people,*
    2. *Cyclists, public transport,*
    3. *Commercial access,*
    4. *General off peak traffic,*
    5. *General peak time traffic.*

5.296 The development proposals are in line with these policy objectives, ensuring that the Site will be accessible to all users by a range of different transport modes.

5.297 Policy T2 states that the Council will actively manage the pattern of development to ensure that new development:

- *Is located to ensure good access to the City's main economic drivers, including the Regional Centre, the Oxford Road Universities and Hospitals and the Airport and to ensure good national and international connections*

- *Is easily accessible by walking, cycling and public transport; connecting residents to jobs, centres, health, leisure, open space and educational opportunities.*

5.298 With regards to parking standards, the Core Strategy states that the 'maximum standards for car parking do not apply to the City Centre as each development in the City Centre will be considered on a case by case basis.'

Guide to Development in Manchester SPD & Planning Guidance

5.299 This document brings together the development principles that will apply to new developments in Manchester. Paragraph 2.22 of the document states that:

- *In order to reduce reliance on the car, residents and workers should be within easy walking distance of facilities such as clinics, corner shops, newsagents and public transport.*

5.300 The Proposed Development is well aligned with this goal, being located close to a range of different facilities. The guidance goes on to describe the need for Travel Plans in new developments, stating:

- *A Travel Plan is a package of measures and actions aimed at reducing the need to travel by car by providing alternative choices and encouraging walking, cycling, and public transport use. At the planning*

stage consideration should be given to the proximity of the development to existing travel facilities and services, site layout, suitable density, cycling, pedestrian facilities and potential for parking restraint.

Greater Manchester Transport Strategy 2040 (2021)

5.301 In February 2017 Transport for Greater Manchester (TfGM) has developed a 2040 Transport Strategy that sets out ambitions for a radical new approach to planning Manchester's transport system in support of long-term needs and aspirations. This was later refreshed in January 2021.

5.302 The vision is for Greater Manchester to have 'World class connections that support long-term, sustainable economic growth and access to opportunity for all. The Transport Vision aims are as follows:

- Supporting Sustainable Economic Growth
- Protecting Our Environment
- Improving Quality of Life for All
- Developing an Innovative City Region

5.303 The 2040 Vision is supported by policies and proposals for improving the transport network in the medium term up to 2025 structured around spatial themes.

5.304 The Delivery Plan of Transport measures to 2025 is wide ranging package, includes reformation of the bus market, further expansion of the Metrolink network and its capacity, Rail Capacity improvements including improving the capacity on the Castlefield Corridor, Princess Parkway/Mancunian Way roundabout improvements, Cycle Improvements on the Chorlton-Manchester Corridor among a wider package of cycle and pedestrian improvements as part of the Mayors Challenge Fund.

5.305 The development proposals aspire to conform to the vision and goals as set out within the 2040 Vision Document by ensuring that the Site is accessible by a variety of sustainable transport modes in order to deliver a quality development that enhances the environment.

City Centre Transport Strategy (2021)

5.306 The City Centre Transport Strategy was endorsed by Manchester City Council's Executive on 17 March 2021 and Salford City Council's Regeneration Committee on 22 March 2021, before being fully ratified by the Greater Manchester Combined Authority on 26 March 2021.

5.307 The strategy presents an overarching vision for a well-connected, zero-carbon city centre at the heart of the North, offering our residents, employees and visitors a great place to work, live in and visit. In order to achieve this, seven ambitions are set out:

- Ambition 1: Walking is the main way of getting around the city centre
- Ambition 2: The city centre is cleaner and less congested
- Ambition 3: more people choose to cycle to destinations within the city centre
- Ambition 4: The city centre benefits from better public transport connections
- Ambition 5: Parking in the city centre is smarter and integrated with other modes
- Ambition 6: Goods are moved and delivered sustainably and efficiently into and within the city centre
- Ambition 7: Innovation is embraced where it benefits the city centre and its users.

Manchester Residential Quality Guidance

5.308 The Manchester Residential Quality Guidance was adopted in March 2017 and is a material consideration in the determination of planning applications. This document outlines the considerations, qualities, and opportunities that will help to deliver high quality residential development as part of successful and sustainable neighbourhoods across Manchester. It contains guidance for developers in relation to design standards, and new proposals are expected to comply with the guidance.

5.309 The guidance states that 'residential development within Manchester should aim to offer true modal choice, prioritising walking and cycling in the first instance as a key component in developing sustainable neighbourhoods and healthy communities.'

5.310 It goes on to state that the sustainable development of Manchester depends on reducing dependence on the car, suggesting that residential development should consider the manner in which they encourage access to the wider public transport network.

5.311 In relation to parking, the guidance states that 'there is no one size fits all approach to car parking and it should be considered on a site by site basis.' It goes on to state that developments within the city centre will be 'required to provide where possible an appropriate level of car parking within the constraints of site-specific circumstances and other requirements'. The guidance respects that apartment schemes within the city centre will be affected by a number of variables that will affect parking demand such as tenure and price point of the development. Owner occupied schemes will demand a higher level of provision than those aimed at a younger demographic. However, it also goes on to note that car parking demand will be influenced by the availability of public transport.

St Johns and Water Street Strategic Regeneration Framework Areas

5.312 The St Johns Strategic Regeneration Framework (SRF) was adopted by MCC in February 2015 and further updated in November 2016. The SRF sets out key goals and principles within the St John's area which encompasses the Proposed Development.

5.313 The SRF recognises the comprehensive public transport network available locally and aims to ensure that the framework area remains permeable for both pedestrians and cyclists. It recommends that car parking should be contained within basement or podium areas in a manner that does not detract from the place-making and wider urban design of the development proposals.

Baseline Conditions

Field Surveys

5.314 Existing baseline traffic flows have been collected through traffic surveys at the adjacent key junctions of Trinity Way/Water Street and Trinity Way/Regent Road junction. The survey periods include the AM (07:00-09:00) and PM (16:00-19:00) weekday peak periods. The surveys were undertaken on Tuesday 15 June 2021. Information provided by TfGM has confirmed that traffic flows on the local highway network have returned to pre-Covid 19 Pandemic levels and that these traffic surveys are robust.

Desk Based Surveys

5.315 Traffic data held by the highway authorities and DfT will be considered to understand past and future traffic trends. If appropriate the surveyed traffic flows will be growthed using NTM adjusted TEMPro forecasts.

Accident Record

5.316 The Baseline Assessment will also consider the personal injury traffic accident statistics over the last representative 60-month period as obtained from recorded 'STATS 19' data recorded by the police attended accidents and provided by TfGM.

Potential Significant Effects

5.317 An environmental impact can arise through the extra vehicle trips that might be generated by at a site and from new transport infrastructure. The potential implications that may arise from additional traffic have been described in the Institute of Environmental Assessment (IEMA) '*Guidelines for the Environmental Assessment of Road Traffic'* (1993) and include:

- Driver Delay;
- Public Transport Users Delay;
- Pedestrian Delay;
- Pedestrian Amenity;
- Fear and Intimidation;
- Severance; and
- Accidents and Road Safety.

5.318 The assessment will consider the above factors during the construction and operational phases of development.

5.319 The IEMA guidelines state that in scoping out the extent of the assessment for the operational and construction phases, it suggests that *"two broad rules of thumb could be used as a screening process to delimit the scale and extent of the assessment*". Those Rules are:

- Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%)
- Rule 2: Include any other specifically sensitive areas where traffic flows have increased by 10% or more.

5.320 The IEMA Guidelines go on to state that any increases in traffic flows of less than 10% are generally accepted as having negligible impact as daily variance in traffic flows can be of equal magnitude. The 30% threshold relates to the level at which humans may perceive change and there may therefore be an effect. Impacts above this level therefore do not suggest that there is a significant impact, only that further consideration is required to assess the significance.

5.321 The supporting Transport Assessment for the Proposed Development will determine whether the traffic flows exceed the 10% or 30% threshold will be exceeded.

5.322 More specific assessment criteria for the specific environmental effects are considered later.

Assessment Methodology

5.323 The assessment methodology will follow the methodology provided by IEMA for the environmental assessment of road traffic and by Department for Transport on preparing Transport Assessments and Travel Plans. This will also comply with the guidance given by MCC and confirmed in the scoping of the Transport Assessment.

5.324 The assessment methodology has been discussed and agreed with MCC and Transport for Greater Manchester in an email dated 23rd June 2021.

5.325 It is anticipated that the overall approach to the assessment of likely significant effects to traffic and transportation will be as follows:

- Establish existing traffic flows and conditions from survey data and from desk-based analysis;

- Assess the levels of traffic generated by committed developments and add these to the existing traffic flows to establish the future year base traffic flows;
- Assess future baseline traffic conditions through desk-based analysis;
- Calculate the traffic flows generated by the Proposed Development and distribute/ assign these to the study area highway network;
- Assess the effects of the traffic generated by the Proposed Development, compared to the future baseline and compare this against the IEMA thresholds.
- For the areas of the network where there is greater change in traffic flow and highway infrastructure such as the site accesses more detailed traffic modelling and road safety assessments will be conducted.

5.326 The above will be reported in a Technical Chapter of the ES with the TA which will form an appendix to the ES.

Significance Criteria

5.327 The IEMA's aforementioned guidance sets out the broad principles of how to assess the magnitude of the effect for each category. This is summarised below:

- Severance – The guidance states that "*severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery"*. Further *"changes in traffic flow of 30%, 60% and 90% are regarded as producing 'slight', 'moderate' and 'substantial' changes in severance respectively"*. However, the guidance acknowledges that the measurement and prediction of severance is extremely difficult. The assessment of severance pays full regards to specific locations, in particular the location of pedestrian routes to key local facilities and whether or not crossing facilities are provided.
- Driver Delay – such delays "*… are only likely to be significant when the traffic on the network surrounding the development is already at, or close to, the capacity of the system"*.
- Pedestrian delay – *"Changes in the volume, composition or speed of the traffic may affect the ability of people to cross the roads"*. The guidance suggests that assessors *"… use their judgement to determine whether pedestrian delay is a significant impact".*
- Pedestrian amenity – broadly defined as the relative pleasantness of a journey, it is affected by traffic flow, traffic composition and pavement width/ separation from traffic. The guidance suggests a tentative threshold for judging the significance of changes in pedestrian amenity of where traffic flow (or its lorry component) is halved or doubled.
- Fear and intimidation – the impact of this is dependent upon the volume of traffic, its HGV composition, its proximity to people or the lack of protection caused by such factors a narrow pavement width. The guidance states that there are no commonly agreed thresholds for estimating this from known traffic and physical conditions, but it does nevertheless suggest some threshold which could be used, based on previous research, and are shown in Table 5.23.
- Accidents and safety – the guidance suggests that "Professional judgement will be needed to assess the implications of local circumstances, or factors, which may elevate or lessen risks of accidents, e.g. junction conflicts".

Table 5.23: Fear and Intimidation Thresholds

Degree of Hazard	Average Traffic Flow Over 18 Hour Day – (Vehs/ Hour Two-Way	Moderate	Minor

Extreme	+1,800	+3,000	+20
Great	1,200-1,800	2,000-,3,000	15-20
Moderate	600-1,200	1,000-2,000	10-15
Small	<600	<1,000	<10

Please note: although no category is given in the guidance for flows less than the "Moderate" category, for the purposes of this assessment any flows below this threshold will be categorised as 'small'

5.328 The guidance makes it clear that *"a critical feature of environmental assessment in determining whether a given impact is significant"*. Further, *"for many effects there are no simple rules or formulae which define thresholds of significance and there is, therefore, a need for interpretation and judgement on the part of the assessor backed up by data or quantified information whenever possible. Such judgements will include the assessment of the number of people experiencing a change in environmental impact…"*.

Magnitude of Impact

5.329 The magnitude of potential impact (both beneficial and adverse) on environmental baseline conditions will be identified through the detailed consideration of the Proposed Development, taking into account the following:

- Relevant legislation, policy or guidelines (i.e. IEMA Guidelines for the Environmental Assessment of Road Traffic (1993);
- The degree to which the environment is potentially affected for example, whether the quality is enhanced or impaired;
- The scale or degree of change from baseline conditions as a result of the Proposed Development;
- The duration of the effect for example, whether it is temporary or permanent; and
- The reversibility of the effect.

5.330 The magnitude of impacts will be assessed and reported for the construction and operational phases using the criteria presented within **Table 5.24**. These have been established with reference to the various guidance quoted in this Scoping Document, and/or through professional experience and judgement.

Table 5.24: Magnitudes of Impact

Magnitude of Effect	Effect On	Definition of Magnitude
Major	Driver delay	Over 4 minute increase, averaged over all arms at a junction.
	Public transport users	Over 90% increase in traffic flow on relevant links
	Pedestrian delay	Over 150% increase in traffic flows on relevant links
	Pedestrian/ cycle amenity	Over 150% increase in traffic flows on relevant links

Magnitude of Effect	Effect On	Definition of Magnitude
	Fear and intimidation	Change in degree of hazard from moderate to extreme.
	Severance	Over 90% increase in traffic flows on relevant links
	Accidents and road safety	Factor of observed accident rates and national averages (100 is equal to the national average) above 160. Predicted increase in accidents resulting from the development on a link above 0.9 per annum
Moderate	Driver delay	Between 3 – 4 minute increase in delay, averaged over all arms at a junction.
	Public transport users	60% - 90% increase in traffic flow on relevant links
	Pedestrian delay	100% - 150% increase in traffic flows on relevant links
	Pedestrian/ cycle amenity	100% - 150% increase in traffic flows on relevant links
	Fear and intimidation	Change in degree of hazard from great to extreme.
	Severance	Between 60%-90% increase in traffic flows on relevant links.
	Accidents and road safety	Factor of observed accident rates and national averages (100 is equal to the national average) between 130-160 Predicted increase in accidents resulting from the development on a link between 0.6-0.9 per annum
Minor	Driver delay	Between 2 - 3 minute increase in delay, averaged over all arms at junction.
	Public transport users	30% - 60% increase in traffic flow on relevant links
	Pedestrian delay	50% - 100% increase in traffic flows on relevant links
	Pedestrian/ cycle amenity	50% - 100% increase in traffic flows on relevant links
	Fear and intimidation	Change in degree of hazard from moderate to great.
	Severance	Between 30%-60% increase in traffic flows on relevant links.
	Accidents and road safety	Factor of observed accident rates and national averages (100 is equal to the national average) between 100-130 Predicted increase in accidents resulting from the development on a link between 0.3-0.6 per annum

Magnitude of Effect	Effect On	Definition of Magnitude
Negligible	Driver delay	Less than 2 minute increase in delay, averaged over all arms at a junction.
	Public transport users	Less than 30% increase in traffic flow on relevant links
	Pedestrian delay	Less than 50% increase in traffic flows on relevant links
	Pedestrian/ cycle amenity	Less than 50% increase in traffic flows on relevant links
	Fear and intimidation	No change in degree of hazard.
	Severance	Less than 30% increase in traffic flows on relevant links.
	Accidents and road safety	Factor of observed accident rates and national averages (100 is equal to the national average) below 100 Predicted increase in accidents resulting from the development on a link below 0.3 accidents per annum.

Sensitivity of Receptors

5.331 Given the study area is the urban area of Manchester, the potential environmental receptors affected by the Proposed Development are human, and these receptors include residents living in close proximity to the highway network, vulnerable road users of pedestrians and cyclists and drivers on the network. These parties will tend to be affected by the different environmental impacts to different degrees. For example, pedestrians are more impacted upon due to accidents than car drivers.

5.332 Overall, the receptors of the environmental impacts are considered to be Low or Local as the site is within an urban area that is already characterised by traffic movement. The importance of each receptor is considered in Table 5.25:

Table 5.25: Designation of Potentially Sensitive Receptors

Designation	Receptors
Very High (e.g. International)	None
High (e.g. National)	None
Medium (e.g. Regional / County)	None
Low (e.g. Local)	Residential Properties on Liverpool Street between junction with Water Street and Lower Byrom Street
	Drivers using Study Network
	Vulnerable Road Users
Negligible	None

Very High (e.g. International)	None

Significance of Effect

5.333 The magnitude of impact and the sensitivity of the affected receptors are combined to reach an assessment of the overall significance of effect utilising the matrix presented in **Table 5.26**.

Table 5.26: Significance of Effect Matrix

Magnitude of Effect	Sensitivity of Receptor				
	Very High	High	Moderate	Low	Negligible
Major	Major	Major	Moderate	Moderate	Minor
Moderate	Major	Moderate	Moderate	Minor	Negligible
Minor	Moderate	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Minor	Negligible	Negligible	Negligible

5.334 Major effects on driver and bus user delay will be considered to be significant in EIA terms based on Paragraph 32 of the NPPF.

5.335 A minor effect or above on road safety will be considered significant in EIA terms.

5.336 Effects on pedestrian/cycle delay and amenity, fear and intimidation and severance that are moderate or above will be considered to be significant in EIA terms.

Technical Scope

5.337 The study area of the ES will include the following junctions:

- A57 Regent Road/ Trinity Way
- Trinity Way/ Water Street

5.338 The above junctions will be subject to detailed capacity assessments using the appropriate proprietary modelling software. The scenarios that will be test are detailed later in this scoping document.

Baseline Assessment

5.339 The Baseline Assessment will reflect the future year scenario that will adopted in the traffic impact assessment presented in the TA for the Proposed Development.

5.340 The Committed Development schemes summarised at the rear of this document will be considered and included in the Baseline Assessment if they are judged to have an impact on the identified study network.

Construction Assessment

5.341 The impacts arising from traffic movements during construction of the Proposed Development will be described in the ES.

5.342 Construction is typified by regular movements of HGVs delivering construction materials at regular intervals over the course of a working day and the arrival of contractor vans and construction workers on site tends to avoid the

traditional peak periods. In addition, the impact arising vehicle movements and potential road closures/diversions will be temporary.

5.343 The movement of construction vehicles can be controlled to avoid peak periods and HGVs will be routed via less sensitive routes.

5.344 The volume of construction vehicles will need to be considered for the specifics of the Proposed Development, and its programme, but based on experience of similar projects we expect that construction traffic is likely to be below the 10% threshold as described in the IEMA Guidelines. The only location where the implications may have significance is on the immediate roads surrounding the Site.

5.345 The Construction Phase Assessment will consider the aforementioned IEMA criteria. Other applicable criteria include Hazardous Loads and Dust and Dirt. Dust and Dirt will be considered as part of the Air Quality ES Chapter and does not fall under the scope of Traffic & Transport. However, reference will be made to the management of this impact through a Construction Environmental Management Plan (CEMP) for the Proposed Development. The CEMP will accord with best practice and include measures such as wheel-washing to mitigate the impact on construction traffic.

5.346 Hazardous Loads are not scoped into the assessment as it is considered that this will be managed through the CEMP.

Operational Assessment

5.347 The Assessment of traffic changes in the Operational Phase of the Proposed Development will be considered according to the methodology described in this Chapter and apply at the future Year of Opening of the full development (2026). The testing of the impacts will be subject to the outcome of the assessment undertaken as part of the full ES and TA.

Scenarios to be Assessed

5.348 The scenarios assessed in the transport section of the ES will be consistent with those adopted in the TA:

- 2021 Base Year
- 2026 Base Year (Application Registration Year + 5 years) Without Proposed Development
- 2026 Base Year (Application Registration Year + 5 years) With Proposed Development

5.349 Committed Developments will be included in the 2026 Base Year scenarios. In considering the traffic implications of committed development we will review the TAs for those development and if they explicitly forecast traffic in the study area then these will be included. If they are not forecast, then they are assumed to be accounted for in the background traffic growth that will be applied to the baseline traffic.

5.350 The 'With Proposed Development' scenario (Scenario 6) will assume a full build out of the Proposed Development.

Summary of Assessment Scope

5.351 This Chapter sets out the Traffic and Transport methodology to be used in the ES which includes a methodology to identify the severity of the environmental impacts and a methodology for identifying the significance of the inputs.

5.352 The Tables below confirm the matters to be Scoped In or Scoped Out of the assessment in respect of Traffic and Transport. The likely receptors are also identified.

5.353 The matters for assessment have been derived from the Institute of Environmental Management and Assessment Guidance which also provides thresholds for increases in traffic below which items can be scoped out. The matters relating to Noise/Vibration, Visual Impact, Air Quality, Ecology and Heritage impacts are considered elsewhere in this ES Scoping Report. The potential implications of the movement of Hazardous Loads could arise during the

construction phase but there is no data on that available at this stage of the project. It will however be considered as part of a Construction Environmental Management Plan (CEMP) developed by the contractor.

5.354 The matters Scoped In and identified by IEMA as potential environmental implications arising from an increase in road traffic during both the Construction and Operational phases. The implications are location specific so the impact will only be tested where the impact is above the IEMA thresholds.

5.355 The environmental issues identified by IEMA that will be scoped out of the assessment are Hazardous Loads and the effect of Dust and Dirt in the Operational Phase.

5.356 At this stage there is no information whether hazardous vehicle loads are expected during construction. This will be determined by the contractor and any mitigation strategy for that would be assessed as part of the CEMP that will be conditioned to the planning approval.

5.357 Table 5.27 summarises the matters Scoped In or Out for the Construction Phase assessment at this stage.

Table 5.27: Construction Phase Scoped In/ Out

Receptor	Impact	Potential Effect	Scoped In / Out (Construction Phase)
Residential Properties on Liverpool Street between junction with Water Street and Lower Byrom Street	Public Transport Users Delay	Negligible	In
	Pedestrian Delay	Minor Negative	In
	Pedestrian/ Cyclist Amenity	Minor Negative	In
	Fear and Intimidation	Negligible	In
	Severance	Negligible	In
	Dust & Dirt (Air Quality)	Negligible	In
	Hazardous Loads	Negligible	Out
Drivers using Study Network	Driver Delay	Minor Negative	In
	Accidents and Road Safety	Negligible	In
Vulnerable Road Users	Public Transport Users Delay	Negligible	In
	Pedestrian Delay	Minor Negative	In
	Pedestrian. Cyclist Amenity	Minor Negative	In
	Fear and Intimidation	Negligible	In
	Severance	Negligible	In
	Dust & Dirt (Air Quality)	Negligible	In
	Hazardous Loads	Negligible	Out

5.358 Table 5.28 summarises the matters Scoped In or Out of the Operational Phase assessment at this stage.

Table 5.28: Operational Phase Scoped In/ Out

Receptor	Impact	Potential Effect	Scoped In / Out (Operational Phase)
Residential Properties on Liverpool Street between junction with Water Street and Lower Byrom Street	Public Transport Users Delay	Negligible	In
	Pedestrian Delay	Minor Negative	In
	Pedestrian Amenity	Minor Negative	In
	Fear and Intimidation	Negligible	In
	Severance	Negligible	In
	Dust & Dirt	Negligible	Out
	Hazardous Loads	Negligible	Out
Drivers using Study Network	Driver Delay	Minor Negative	In
	Accidents and Road Safety	Negligible	In
Vulnerable Road Users	Public Transport Users Delay	Negligible	In
	Pedestrian Delay	Minor Negative	In
	Pedestrian Amenity	Minor Negative	In
	Fear and Intimidation	Negligible	In
	Severance	Negligible	In
	Dust & Dirt	Negligible	Out
	Hazardous Loads	Negligible	Out

5.359 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

Wind

Introduction

5.360 The objective of the proposed wind microclimate study will be to determine the impact of the Proposed Development on the pedestrian level wind environment across the site and its surroundings. The wind assessment will consider the effect of the surrounding context and will pay particular attention to wind effects in open amenity spaces, building entrances and pedestrian routes to determine the level of compliance against the recommended standards.

Legislative and Policy Context

Legislation

5.361 There is no specific national legislation or planning policy guidance dealing with wind microclimate in terms of pedestrian comfort. However, the LDDC version of the Lawson criteria are typically used to benchmark the performance of new developments in the context of pedestrian level winds.

National Planning Policy

5.362 The National Planning Policy Framework was revised in July 2021 by the Ministry of Housing, Communities and Local Government. The relevant paragraphs are as follows:

5.363 Paragraph 130 of the National Planning Policy Framework states that:

"Planning policies and decisions should ensure that developments:

a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);

d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience."

Local Planning Policy

5.364 Manchester's Local Development Framework – Core Strategy Development Plan was adopted by Manchester City Council on 11th July 2012. It is the key document in Manchester's Local Development Framework and covers a period of 15 years from 2012 to 2027. It describes Manchester today and outlines the Council's vision for Manchester in 2027 along with the planning policies which will be used to deliver that vision.

5.365 Policy EN 2 on Tall Buildings states that:

"By their very size tall buildings can have a significant impact on the local environment and its micro-climate. It is therefore expected that this impact be modelled and that submissions for tall buildings also include appropriate measures to create an attractive, pedestrian friendly local environment."

5.366 Paragraph 12.14 of the Policy EN 2 on Tall Buildings states that:

"Tall buildings by their very nature can dominate the street scene and be highly visible over long distances. They can also have an impact on the local micro-climatic conditions, for example, by creating wind tunnels. It is for these reasons that it is considered particularly important that they are designed to the highest quality, both in terms of appearance and their impact on the functioning of surrounding space."

Baseline Conditions

5.367 The urban density of the area surrounding the Site of the Proposed Development will affect the wind conditions within and in the vicinity of the Proposed Development itself. The surrounding context and the nature of the terrain upstream of the Site do in fact influence the strength, the level of turbulence as well as the local directionality of the winds that are approaching the site of the Proposed Development. For this reason, modelling and studying these conditions is an important step of the wind microclimate assessment.

5.368 The baseline assessment will be carried out as a representation of the existing site conditions, i.e. the existing building(s) on the Site (if any) in the context of the existing surroundings. Any buildings under construction within 500m from the Site will be considered as completed as part of the baseline assessment, unless instructed otherwise by the planning/EIA team. The baseline assessment will then be used as a reference point from which the magnitude of change will be measured once the Proposed Development is assessed under equal conditions.

Potential Significant Effects

5.369 The impact of the Proposed Development on the wind microclimate conditions, both in terms of comfort and safety, will be considered for both on-site and off-site receptors.

5.370 To determine the significance of the effect of the Proposed Development on the wind environment, a comparison can be made with the baseline conditions. However, because the pedestrian use of the Proposed Development will change from that of the existing site, the assessment will also be based on the suitability of the different areas of the Proposed Development for the desired pedestrian use. The likely significance of effects will be based on the following factors:

- The magnitude of change of the wind environment.
- Compliance with the Lawson criteria.
- The sensitivity of the receptor.

5.371 The following sensitive receptor locations have been identified and will be considered within the EIA:

- High Sensitivity: areas intended for sitting and standing (e.g. benches, restaurants and bars, building entrances).
- Medium Sensitivity: areas intended for leisure walking (i.e. commercial or residential streets).
- Low or Negligible Sensitivity: areas intended for business walking (e.g. streets leading to back-of-the-house or maintenance entrances, areas intended for car parks and high-speed roads) and roof-tops only accessible for maintenance.

Assessment Methodology

Technical Scope

5.372 A quantitative assessment of the existing wind environment at the Site will be used to establish the 'Baseline' scenario. This will be followed by a quantitative assessment of the Proposed Development modelled within the existing surroundings. A further quantitative assessment of the Proposed Development will include the consented developments to determine the cumulative effects.

5.373 The methodology to be adopted for the study incorporates Computational Fluid Dynamics (CFD) modelling to predict the wind field within and in the vicinity of the Proposed Development.

5.374 CFD as a tool for pedestrian wind modelling is well validated against wind tunnel tests and real-world data and is often considered advantageous due to its advanced visualization and domain wide measurement capabilities. Also, CFD is performed at full scale with wind speeds calculated at tens of millions of discrete points, allowing for large amount of data to be used for the assessment of the wind microclimate conditions. Like any other tool, it has its own limitations - however - good quality CFD is increasingly becoming an accepted tool in modern standards and guidance documents (e.g. the "Wind Microclimate Guidelines" published by the City of London in 2019).

5.375 The CFD simulations will be used to quantify the local wind speeds within and in the vicinity of the site of the Proposed Development at street level and, if required, at elevated levels (e.g. balconies and terraces) for a comprehensive range of wind directions.

5.376 Long-term wind records from Manchester Airport will be used to develop a site-specific wind climate model. In order to account for the differences in terrain surrounding the weather station at Manchester Airport and the project site, adjustments to the wind records will be made using the wind model proposed by ESDU, an engineering advisory organisation based in the UK.

5.377 The local wind speeds obtained from the CFD simulations will then be combined with the site-specific wind climate model to determine the probability of exceedance of pre-defined wind speed thresholds.

5.378 In order to assess the suitability of wind conditions within and in the vicinity of the site of the Proposed Development, the LDDC version of the Lawson criteria - which associates the probability of exceedance of wind speed thresholds to a range of pedestrian activities - will be used.

5.379 As the Lawson criteria was specifically derived for pedestrian activities, this assessment will only concentrate on assessing areas accessible to pedestrians.

5.380 A detailed review and assessment of the risk associated with wind-induced overturning moments of high-sided vehicles will not be covered by this assessment. Whilst the various mechanisms around wind-induced overturning moments of high-sided vehicles are well-understood in the context of large road bridges, at present there are no guidelines in the UK specifying how an assessment of such risk should be derived in the context of an urban setting.

Baseline Assessment

5.381 To understand and quantify the baseline conditions at the site, a series of CFD simulations will be performed to allow the wind microclimate conditions to be quantified.

5.382 The results from the CFD simulations will be combined with the long-term meteorological climate data for the Manchester area, to understand the baseline conditions specific to the site.

Construction Assessment

5.383 As construction works progress, the conditions on and around the Site would be expected to gradually transition between those of the baseline and the final completed Proposed Development. Therefore, any effects on pedestrians arising from changes in the local wind environment as a result of progressive changes to the massing of the built form on during the construction site works are expected to be temporary.

5.384 Generally, for wind microclimate assessments undertaken for schemes in Manchester, the potential effects during construction are assessed based on the professional judgement of an experienced wind engineer, taking into account an assessment of the background wind microclimate at the site and an understanding of the effects of wind in the built environment. A qualitative approach will be taken to the assessment of the construction works.

Operational Assessment

5.385 Once the Proposed Development is complete and operational, potential for undesirable wind speeds at the following locations will be considered:

- Within the Site, specifically:
  - Ground level pedestrian thoroughfares and entrances; and
  - Accessible elevated levels i.e. podium terraces and balconies (if any).
- External to the site, specifically:
  - Ground level pedestrian thoroughfares and entrances;

- Public realm / amenity spaces; and
- Bus stops and potential pick-up / drop-off points.

Scenarios to be Assessed

5.386 The assessment of the wind microclimate impacts comprises the following scenarios:

- Scenario 1: assessment of the wind conditions across the site in its present conditions in the context of the existing surroundings, i.e. Baseline.
- Scenario 2a: as per 'Scenario 1' but with the addition of Phase C1.
- Scenario 2b: as per 'Scenario 2a' but with the addition of future developments with planning consent in the surrounding area which may influence the local wind conditions across the site.
- Scenario 3a: as per 'Scenario 2a ' but with the addition of Phase C2.
- Scenario 3b: as per 'Scenario 3a' but with the addition of future developments with planning consent in the surrounding area which may influence the local wind conditions across the site.
- Scenario 4a: as per 'Scenario 3' but with the addition of Phase D1.
- Scenario 4b: as per 'Scenario 4a' but with the addition of future developments with planning consent in the surrounding area which may influence the local wind conditions across the site.
- Scenario 6a: as per 'Scenario 4a' but with the addition of Phase D2.
- Scenario 6b: as per 'Scenario 7' but with the addition of future developments with planning consent in the surrounding area which may influence the local wind conditions across the site.

Summary of Assessment Scope

5.387 Both buildings and terrain upstream of the site of the Proposed Development can affect the local speed and direction of the wind flow. In the absence of non-synoptic wind events (e.g. thunderstorms), the strength of wind speed typically increases with height. In an urban context wind speeds at pedestrian level are therefore generally low compared to that of upper-level winds. However, taller buildings can alter this: downdrafts from tall buildings are in fact well known for increasing the level of windiness at street level.

5.388 The likely significant effects relating to wind microclimate to be assessed as part of the EIA are:

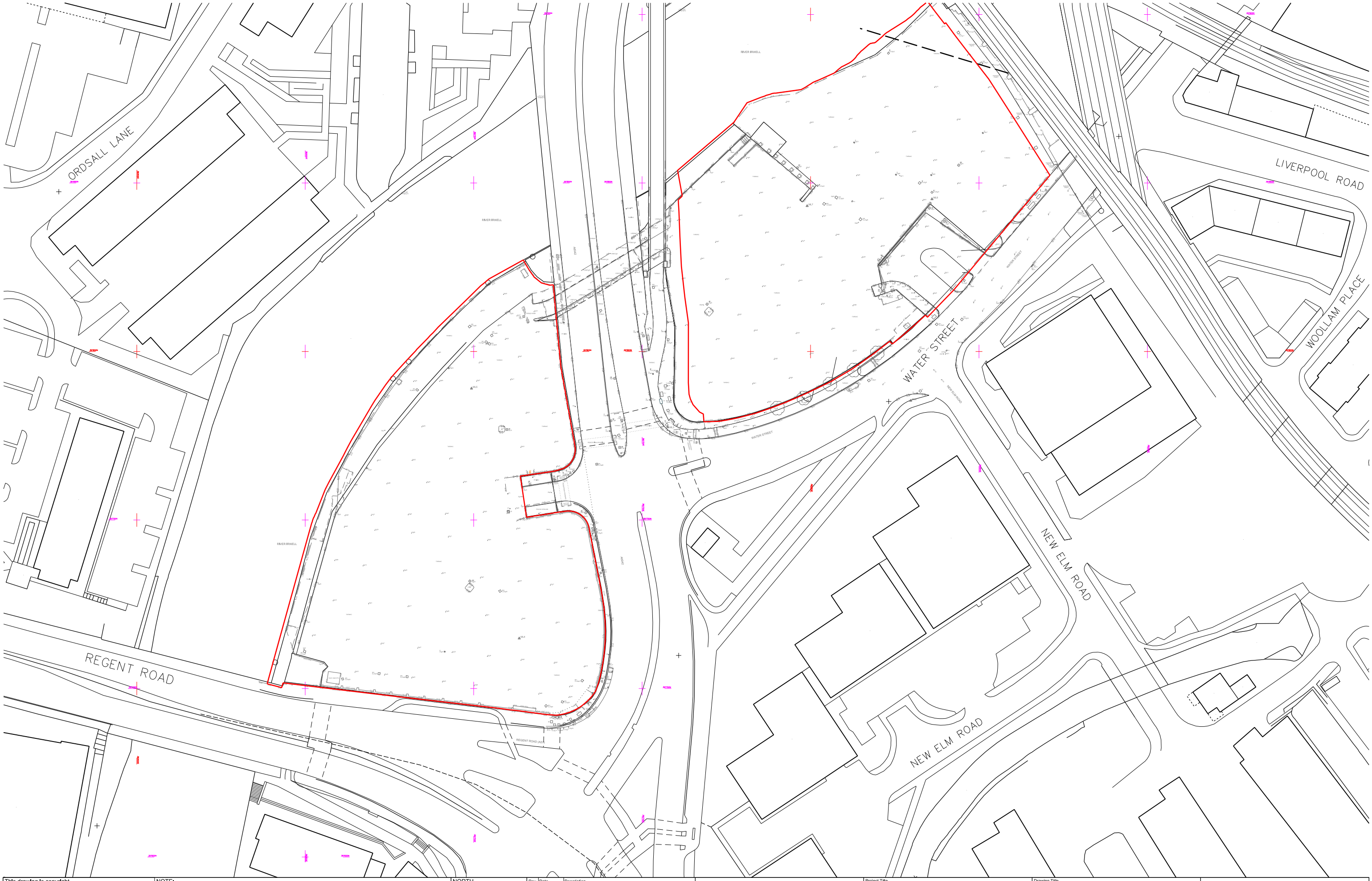
Table 5.29 Significant Effects relating to wind and too be assessed as part of the EIA

Receptor	Impact	Potential Effect	Scoped In / Out
Pedestrians around the site, specifically along Regent Road, Trinity Way and Water Street	Significant	Temporary effects on pedestrians due to temporary changes in the local wind environment during the phased construction of the development	Scoped In
Pedestrians and users of external spaces within the site and the surrounding area	Significant	Long-terms effects on the relative pedestrian and user	Scoped In

		comfort on completion of the Proposed Development	
Pedestrians and users of external spaces within the site and the surrounding area	Significant	Long-term effects on pedestrian and user safety on completion of the Proposed Development	Scoped In

5.389 For completeness, an assessment of the committed developments has been collated into a dedicated table within Appendix 3.

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:

NORTH

Rev	Date	Description
00	2021-04-14	First Issue

Project Title
Trinity Island
Manchester

Drawing Title
Ownership boundary, Topo survey & OS map

Job No
10364

Scale
1:1000 @ A3

Status
FOR INFORMATION

Drawing No
Z1-SHP-Z460-PL-GRD-0003

Revision
P01

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Appendix 2 – List of Committed Developments

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
Baseline					
Orsdall Chord Pedestrian Bridge MCC PP. Ref.: 111826/JO/2016/C1	Minor Material Change to Vary Deemed Planning Permission. Alterations to the design of proposed pedestrian and cycle bridge over River Irwell next to Hampson Street	June 2016	1	0.07km	Constructed but not open to public due to ongoing construction in St. Johns. To be considered as under construction (baseline).
The Factory PP. Ref.: MCC 119890/VO/2018	City Council Development of a new flexible arts and events space comprising a range of activities including theatre, music, dance, art, other performance and non-performance related events, exhibitions and conferences (Sui Generis) with ancillary facilities including retail exhibitions and conferences (Sui Generis) with ancillary facilities including retail and bar uses (Use Classes A1 and A3), offices, administrative and back of house functions (Use Class B1), training and educational facilities (Use Class D1), servicing and access arrangements, highways works, creation of new public realm, removal of 4 trees, cycle parking and provision of new plant and associated works. Demolition of the Starlight Theatre, existing workshop and other structures and perimeter wall and alterations to the Grade II listed Colonnaded Railway Viaduct. (Amendment of application ref no 114294/VO/2016 approved in January 2017)	July 2018	2	0.098km	On site, with main structure complete
Potato Wharf Phase II MCC PP. Ref.: 109335/FO/2015/C1	Erection of two residential buildings (Use Class C3) comprising 191no apartments, car parking, bicycle parking, public realm and landscape works, access and servicing arrangements, and associated works, following demolition of the existing buildings and plant.	November 2015	3	0.13km	On site, with main structure complete

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
Union T1, St John's MCC PP. Ref.: 125655/FO/2019	Full Planning Permission for the erection of 32 storey plus two basement level mixed use building (sui generis), comprising co-living units, amenity space, gym and flexible commercial space, landscaping, access and other associated works	July 2021	34	0.14km	Basement works begun under previous permission: 114385/FO/2016
Middlewood Locks PP Ref.: 06/52762/OUT(subsequently extended by 13/64081/OUTEIA and varied by 14/65457/OUTEIA) 16/67987/OUTEIA	Outline application (access only) for mixed use development comprising 142,697 sq. m residential use (Class C1 and C3); 67,773 sq. m commercial use (Class B1); and 27,191 sq. m leisure/retail use (Class A1, A2, A3, A4 and D2) together with associated uses, car parking, landscaping and infrastructure. Variation of conditions 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 22, 25, 26, 27, 28, 29, 36, 37, 45, 47, 48, 51, 54, 56, 57, 59, attached to planning permission 13/64081/OUTEIA. Plot A – up to 25 max storeys, 500 max residential units, 46,500 sqm max GIA, (Use Classes E (a,b,c,d,e,f,g,), C1, F1, F2 (c-d) and Sui Generis) 2,000 max parking spaces across Middlewood Locks development. Plot B – up to 13 max storeys, 250 max residential units, 23,300 sqm max GIA, (Use Classes E (a,b,c,d,e,f,g,), C1, F1, F2 (c-d) and Sui Generis), 2,000 max parking spaces across Middlewood Locks development. Plots C, D – up to 13 max storeys, 400 max residential units, 35,000 sqm max GIA, (Use Classes E (a,b,c,d,e,f,g,), C1, F1, F2 (c-d) and Sui Generis), 2,000 max parking spaces across Middlewood Locks development. Plot E – up to max 32 storeys, 700 max residential units, 65,100 sqm max GIA, (Use Classes E (a,b,c,d,e,f,g,), C1, F1, F2 (c-d) and Sui Generis), 2,000 max parking	April 2007 June 2016	4	0.16km	(Plots I,J,F,O) – Complete (Plots G,H) – Map ref. 7 (Plots K, L, M) –Map ref. 11 (Plot N) – Map ref. 35 Plots A, B, C, D, E – No reserved matters submitted (see description to the left)

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
	spaces across Middlewood Locks development.				
Manchester Goods Yard MCC PP. Ref.: 121511/FO/2018	Erection of two buildings comprising: 11 storey mixed use building (including ground and mezzanine) comprising workspace (Use Class B1), with retail uses at ground and mezzanine levels (Use Class A1/A2/A3/A4 and / or D2) and rooftop amenity spaces known as Manchester Goods Yard; and, a further 10 storey mixed use building (including ground) comprising workspace (Use Class B1), with retail uses at ground level (Use Class A1/A2/A3/A4 and / or D2) known as No.1 Grape Street, above two levels of basement parking for 391 cars and cycle storage, together with new public realm, landscaping, provision of external seating areas, access and other associated works.	December 2018	5	0.21km	On site, with main structure complete
Plot C1, Salford Central SCC PP. Ref.: 19/73721/REM	Details of reserved matters for access, appearance, landscaping, layout and scale for development of Plot C1 for the erection of a 23-storey building with associated 6-storey podium block to provide 211 apartments and ground floor commercial uses, together with associated ancillary facilities and servicing pursuant to outline planning permission 16/68325/OUT (map ref. 14).	October 2019	6	0.21km	On site.
Middlewood Locks (Plots G, H) SCC PP. Ref.: 16/68904/REM	Details of reserved matters application for the appearance, landscaping, layout and scale of development of plots G & H for the erection of buildings ranging in height from 8 to 10 storeys to provide 546 residential units (use class C3); together with servicing, access, parking, landscaping and public realm, pursuant to outline planning permission 16/67987/OUTEIA (map ref. 4)	December 2016	7	0.26km	On site, and with structure well progressed.
Gresham Mill, Salford SCC PP. Ref.: 15/67048/FUL	The retention of existing offices, reconfiguration of existing car park and erection of 7 storey residential block comprising of 142 No. apartments	March 2016	8	0.27km	Under construction.
Old Granada Studios MCC PP. Ref.: 127612/FO/2020	Part redevelopment and part refurbishment including the conversion of the existing Granada House building into a	November 2020	9	0.28km	Under construction.

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
	175 bed hotel (Use Class C1) with associated private members club (Sui Generis); and erection of new single storey rooftop bar and restaurant (Use Classes A3 and A4); external terrace and rooftop pool in addition to the erection of a new ten storey building for office (Use Class B1) and ground floor retail or workspaces (Use Class A1/A3 and/or B1); retention of Studios for current use as filming studios (Use Class B1) and erection of modular workspaces (Use Class B1) with associated access and servicing arrangements; public realm and other associated works				
Plot A7 Salford Central SCC PP. Ref.: 17/70082/REM	Details of reserved matters for access, appearance, landscaping, layout and scale for development of Plot A7 for erection of a 21-storey building to provide 199 apartments (use class C3); together with associated ancillary facilities, servicing, access, landscaping and public realm, pursuant to outline planning permission 16/68325/OUT	July 2017	10	0.28km	Under construction.
Middlewood locks (Plots K, L, M) SCC PP. Ref.: 20/75275/REM	Details of Reserved matters for the appearance, landscaping, layout and scale of development for plots K, L & M pursuant to outline planning permission 16/67987/OUTEIA.	September 2020	11	0.3km	Under construction.
Globe and Simpson MCC PP. Ref.: 121721/FO/2018	Erection of a 9 storey building (including ground) comprising workspace (Use Class B1) and flexible commercial floorspace at ground level (Use Class A1, A3 and / or B1), referred to as Building 2, above basement level for car and cycle parking, together with new public realm, landscaping, provision of external seating areas, access and other associated works.	January 2019	12	0.33km	Under construction.
Salford Central SCC PP. Ref.: 09/57950/EIAHYB	Outline application for a comprehensive phased regeneration of Salford Central, including selective demolition, for a mixed-use development of new, improved, altered and replacement buildings, for offices/commercial use (use classes A2 and B1, maximum 197,010sq.m), retail, food and drink and entertainment (use classes A1, A3, A4 and A5, maximum 24,255sq.m), leisure (class D1), hotels (class C1 maximum 140 and 250 bedrooms) and residential use (maximum 849 dwellings) together with	January 2010	13	0.35km	Zone A – Map ref.: 10, 40 Zone B – Map ref.: 18, 44 Zone C – Map ref.: 6 Zone D – Map ref.: 25 Zone E – Map ref.: 27 Zone G, H - No reserved matters submitted (see description to the left) Zone L – Map ref.: 32

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
	associated car parking, landscaping and infrastructure. Detailed application for highway and associated works to Chapel Street (between Oldfield Rd and Trinity Way) and the laying out of public space at Stanley Street. Zone A (Irwell Quays Commercial District) – 490 max car parking spaces, 10 max storeys, 77,550 sqm max floorspace, (Use Classes E (a,b,c,e,f,g), F1 and Sui Generis). Zone B (Commercial Quarter) - 859 max car parking spaces, 10 max storeys, 137,990 sqm max floorspace, (Use Classes C1, E (a,b,c,e,f,g), F1 and Sui Generis). Zone C (Irwell Quays) - 92 max car parking spaces, 13 max storeys, 208 max residential dwellings, 20,220 sqm max floorspace, (Use Class C3). Zone D (Gore Street) – 210 max car parking spaces, 10 max storeys, 21,200 sqm max floorspace, (Use Classes C1, E (a,b,c,e,f,g), F1 and Sui Generis). Zone E (Chapel Street South) – 210 max car parking spaces, 6 max storeys, 31,600 sqm max floorspace, (Use Classes E (a,b,c,e,f,g), F1 and Sui Generis). Zone G (St Philip's Church (NE)) – 34 max car parking spaces, 4 max storeys, 3,550 sqm max floorspace, 41 max residential dwellings, (Use Class C3). Zone H (St Philip's Church (SE)) – 37 max car parking spaces, 5 max storeys, 6,820 sqm max floorspace, 50 max residential dwellings, (Use Classes C3 and E(g)). Zone L (Adelphi Street) – 235 max car parking spaces, 14 max storeys, 190 max dwellings, 22,050 sqm max floorspace, (Use Classes E(a,b, g), C3).				
Irwell Quays Commercial District/Irwell Quays (Zone A/C) SCC PP. Ref.: 16/68325/OUT	Outline application for the comprehensive phased regeneration of Zone A/C of the Salford Central masterplan area for a residential led (maximum 843 dwellings) mixed use development including tall building (up to 100 metres / 33 storeys)	October 2016	14	0.35km	This supersedes elements of 2009 EIA above PP. Ref.: 09/57950/EIAHYB

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
	and ground floor commercial units with potential for offices, retail, food and drink, entertainment and leisure uses (Use Classes A1, A2, A3, A4, A5, B1 and D1) together with associated car parking, landscaping and infrastructure.				
CityView Salford (Regent Plaza) SCC PP. Ref.: 16/68723/FUL	Demolition of existing buildings and redevelopment to provide a residential-led development of 525 residential units (Use Class C3) of up to 26 storeys comprising 488 apartments and 37 town houses, provision of a residents gym (418sqm), cafe (Use Class A3) (103sqm), residents lounge (280sqm), management reception (68sqm) and residential lobby (210sqm), associated landscaping and drainage works, and vehicle and cycle parking, with vehicular, cycle and pedestrian access from Duncan Street and additional pedestrian access points at Regent Road and Oldfield Road	November 2016	15	0.42km	Under construction, and with structure well progressed for initial phases.
St George's Gardens Phase I and II MCC PP. Ref.: 115087/FO/2017	Redevelopment of the site with a mixed use development comprising 59 residential apartments (Use Class C3) and a ground floor commercial unit (to include Use Classes A1, A2, A3, A4, B1), with associated car parking and public realm.	May 2017	16	0.43km	Under construction, with main structure complete
X1 The Landmark SCC PP. Ref.: 16/68977/FUL	Demolition of existing building and erection of part 5, 10 and 14 storey residential building comprising 178 no. apartments, 13 no. townhouses, residents gym, elevated communal courtyard and basement level car parking.	June 2017	17	0.46km	Under construction, and with structure well progressed.
Two New Bailey SCC PP. Ref.: 16/68199/REM	Reserved matters application for the access, appearance, landscaping, layout and scale for the development of Plot B5/B6 for erection of an 11 storey building to provide circa 24,400sqm of B1 office floorspace and 833sqm of flexible commercial floorspace with associated ancillary facilities, servicing, access, landscaping and public realm, pursuant to outline planning permission 09/57950/EIAHYB	October 2016	18	0.47km	Under construction, with main structure complete
City Gardens MCC PP. Ref.: 114961/FO/2017	Redevelopment of the site with a residential development comprising 109 dwellings (Use Class C3), with associated car parking and public realm.	May 2017	19	0.48km	Under construction, with main structure complete

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
The Sky Gardens MCC PP. Ref.: 115211/FO/2017	Redevelopment of site with a mixed-use development comprising 174 dwellings (Use Class C3) and 4 commercial units (to include Use Classes A1, A2, A3, A4, B1a), with associated car parking and a landscaped public square.	May 2017	20	0.49km	Under construction with main structure complete
Crown Street Phase I MCC PP. Ref.: 119806/FO/2018	Erection of two tall buildings (51 storeys and 21 storeys) comprising 664no residential units (use class C3) and commercial space (A1, A3 or D1), provision of two levels of basement parking, alterations to surface level car park, landscaping, highway alterations, access and associated works.	July 2018	21	0.5km	Under construction, with main structure complete
Middlewood Plaza SCC PP. Ref.: 17/70615/FUL	Construction of a building standing to a height of between 6 and 9 storeys and comprising 127 dwellings together with landscaping, car parking and associated works	April 2018	22	0.52km	Under construction, and with structure well progressed.
Castle Wharf MCC PP. Ref.: 113870/FO/2016	Construction of two residential apartment buildings with ancillary amenity facilities for residents including a gym, landscaped terrace and swimming pool, new public realm and landscaping including two new pedestrian connections to the Castlefield basin from Chester Road, basement car parking and related highway, access, servicing and associated works.	April 2017	23	0.53km	Under construction, with main structure complete
Owen Street Phase II (Deansgate Square) MCC PP. Ref.: 111719/FO/2016/C1	Construction of four residential buildings, ancillary amenity building for residents accommodating a tennis court, swimming pool and gym facilities (Use Class C3), ground floor retail units (Use Classes A1, A2, or A3), amenity space for residents within residential buildings, new public realm and landscaping, basement car parking and related highway, access, servicing, engineering and associated works.	July 2016	24	0.56km	Under construction, with main structure complete
Gore Street (The Filaments), Salford Central SCC PP. Ref.: 15/66415/FUL	Demolition of existing building and redevelopment of site to provide: three residential buildings ranging from 13 to 22 storeys comprising 364 apartments (Use Class C3) sitting on two storey podiums containing commercial and retail floorspace (727sqm) (Use Classes A1, A2, A3, A4, A5 and/or B1), car parking (104 spaces) and related servicing and plant; eleven townhouses; new access and landscaping and associated works.	July 2017	25	0.58km	Under construction, with main structure complete

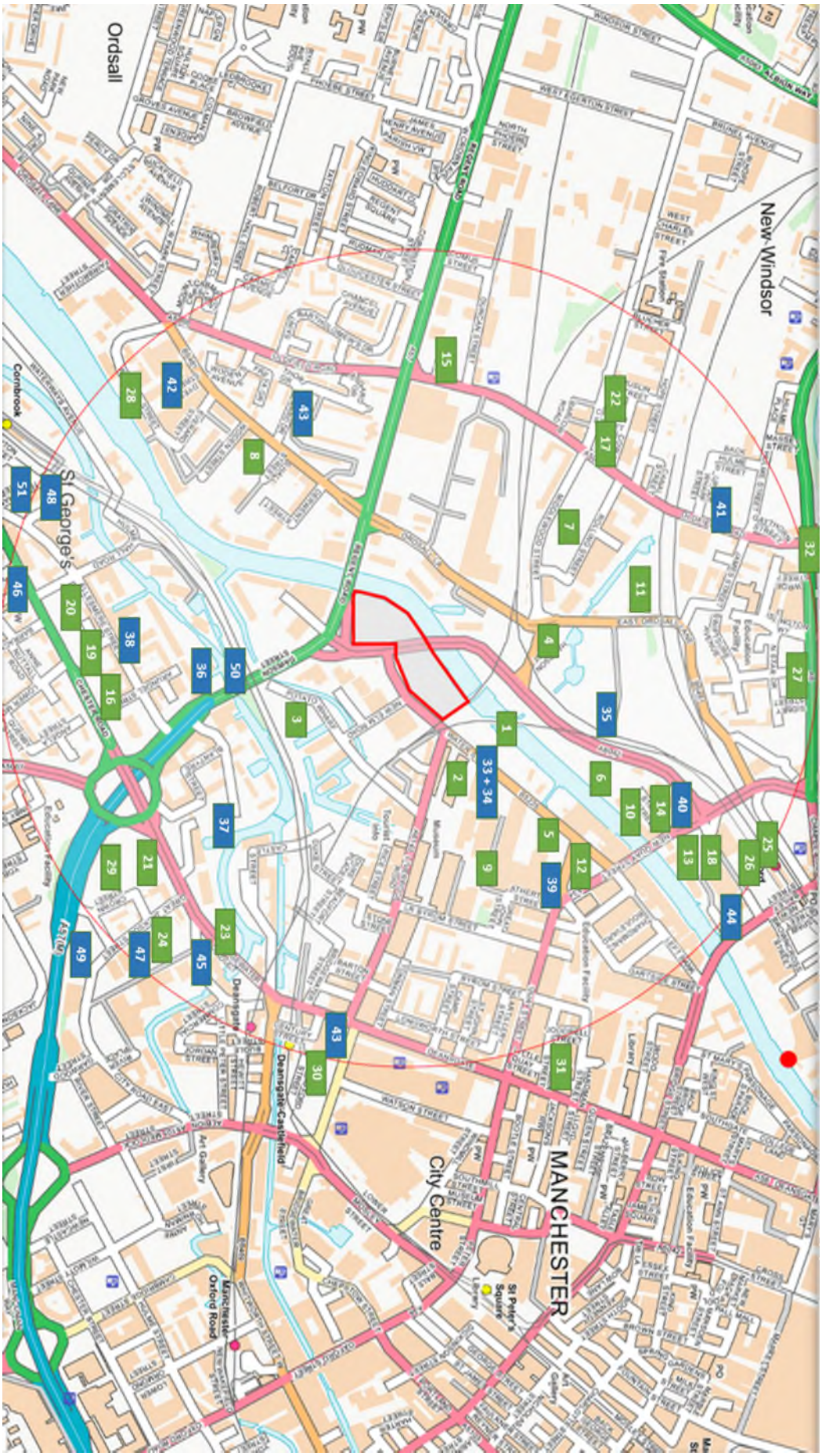
Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
3 New Bailey, Salford Central SCC PP. Ref.: 18/71823/FUL	Erection of 7-storey office building (Use Class B1a) and formation of parking area within railway arches and pedestrian link between New Bailey and Gore Street, means of access, landscaping, together with ancillary facilities, servicing and public realm, associated localised repair and redecoration of the Southern Railway Viaduct (Grade II* Listed)	July 2018	26	0.58km	Under construction, with main structure complete
Atelier, Salford Central, (Plots E7,8) SCC PP. Ref.: 18/71782/REM	Details of reserved matters for access, appearance, landscaping, layout and scale for development of Plots E7 and E8 for erection of a mixed use development comprising four blocks of up to 7 storeys to provide 167 apartments and 11 townhouses (use class C3), 1,333sqm of ground floor commercial uses together with associated ancillary facilities, servicing, access, landscaping and public realm, pursuant to outline planning permission 09/57950/EIAHYB	July 2018	27	0.58km	Under construction, with structures significantly progressed.
The Waterhouse - Worall Street SCC PP Ref.: 18/71363/FUL	Demolition of existing building and erection of a building of part 8 / part 9 storey's comprising 86 residential units together with gym, cycle and car parking and associated works	May 2018	28	0.58km	Under construction, but works have not commenced on main structure.
Crown Street Phase II MCC PP. Ref.: 126668/FO/2020	Full planning permission for the erection of two 52-storey residential buildings (Use Class C3) each incorporating a podium accommodating residential amenity facilities and ground floor and first floor commercial units (Use Classes A1, A2, A3, or D1), private and public basement car parking, landscaping and a public park, servicing and access arrangements, highways improvements, and associated works (Phases A, B, and D as defined on Drawing Reference: 10292Z1SHPG000PL00 B5D802 and 10292Z1SHPG000PLB1B5D801). Outline planning permission (with all matters reserved) for an educational facility (Use Class D1) (Phase C as defined on Drawing References: 10292Z1SHPG000PL00B5D802 and 10292Z1SHPG000PLB1B5D801)	August 2020	29	0.59km	Under construction.
Viadux Residential PP. Ref.: MCC 115871/FO/2017	Erection of a 40 storey building to form 375 residential apartments (Use Class C3a) and the erection of a 14 storey building for	July 2017	30	0.65km	Under construction, but works have not

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
	form offices (Use Class B1) (31,756 sqm) together with ground floor commercial space (Use Class A1, A3 or A4) (1010 sqm) with associated enclosed service yard, public realm including staircase and lift to connect with viaduct, car and le parking, landscaping and other associated works				commenced on main structure.
Moxy Hotel MCC PP. Ref.: 126945/FO/2020	Redevelopment for a hotel use (Use Class C1), with ground floor ancillary facilities, comprising retention and refurbishment of main facade of Invicta House, erection of a ten-storey building to the rear, and other associated works.	September 2020	31	0.68km	Under construction, with structures significantly progressed.
Plot L, Salford Central SCC PP. Ref.: 19/73075/REM	Details of reserved matters for access, appearance, landscaping, layout and scale for development of Zone L for the erection of 33 townhouses and car park with associated ancillary facilities, servicing, access, and public realm, pursuant to outline planning permission 09/57950/EIAHYB	May 2019	32	0.77km	Under construction.
Cumulative					
Union T2, St Johns MCC PP. Ref.: 126648/FO/2020	Full Planning Permission for the erection of 36 storey plus basement level mixed use building comprising co-living units, amenity space and flexible commercial space (Sui Generis), co-work (Use Class B1), landscaping, access and other associated works.	Minded to approved at Planning Committee on 30th July 2020.	33	0.13km	Awaiting agreement on S.106 prior to a decision notice being issued. Include in a relevant assessments.
Middlewood Locks Plot N, Salford Central SCC PP. Ref.: 14/65793/OUT	Mixed use development including residential (C3) and commercial uses (B1, A1, A2, A3, A4, A5) together with ancillary car parking and public realm/landscaping	March 2015	35	0.17km	Planning permission granted but no reserved matters.
Arundel Street, Manchester MCC PP. Ref.: 123261/FO/2019	Erection of a part 8 and 9 storey building located on Arundel Street and Worsley Street, a part 11 and 23-storey residential building located on the Mancunian Way and refurbishment and conversion of the existing DOT Building to form 355 residential apartments in total (Use Class C3a) together with commercial uses (Use Classes A1, A2, B1, D1 and D2) along with associated car parking, cycle parking, access, landscaping and other associated work	August 2019	36	0.32km	Planning permission granted, but not started on site.
Slate Wharf MCC PP. Ref.: 113617/FO/2016	Erection of a four storey building to form 24 residential apartments (Use Class C3) with associated hard and soft landscaping and ancillary development thereto.	January 2021	37	0.34km	Planning permission granted, but not started on site.

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
Talbot Mill MCC PP. Ref.: 117595/FO/2017	Conversion of the Talbot Mill complex to create 114 residential apartments (Use Class C3), including rooftop extensions to Mill 1 and 2, and rear extension to Mill 1; demolition of Buildings A, B and C; retrospective application for demolition of Building E; erection of a 9 storey building plus 1 basement level, to provide 88 residential apartments (Use Class C3); and creation of new landscaped courtyard, lighting and other associated works.	March 2018	38	0.37km	Planning permission granted, and legally implemented but no meaningful start on site yet.
St Johns Place MCC PP. Ref.: 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	June 2016	39	0.38km	Whilst the planning application has lapsed, we suggest the application is considered in the cumulative scenario. This is because it can represent a 'worst case' scenario of what is likely to be delivered on the brownfield site.
Plot A3, Salford Central SCC PP. Ref.: 20/76306/FUL	Demolition of existing on-site structures and the development of an office building including ground floor unit (for shop, financial/professional services, restaurant/cafe, drinking establishment, hot food takeaway, business or leisure use) together with associated landscaping, highways and other works.	February 2021	40	0.42km	Not to be included in assessments at this stage. But noted as likely to be granted planning permission in June 2021.
Land Bound By Hulme Street, Gaythorn Street And Upper Wharf Street Salford SCC PP. Ref.: 18/71512/FUL	Full application for the redevelopment of the site to create Phase 2 of Outwood Wharf. Erection of three interlinked blocks, of 8, 10 and 23 storeys, to provide 296 dwellings (Use Class C3) and 380sqm of supporting commercial floor-space (to be used flexibly within Use Classes A1, A2,	June 2018	41	0.54km	Planning permission granted but no start on site and therefore potentially lapsing in June 2021.

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
	A3, or B1), with associated car parking, landscaping and other associated works				
Land At Worrall Street Salford M5 4TH (Dye Works) SCC PP. Ref.: 20/76684/FUL	Demolition of existing buildings and erection of two buildings ranging from 7 to 8 storeys in height comprising 178 no. residential units together with public realm, landscaping, car parking and associated works	Awaiting Decision	42	0.54km	Not to be included in assessments at this stage. But noted as likely to be granted planning permission in April 2021.
325-327 Deansgate MCC PP. Ref.: 125804/FO/2019	Demolition of existing buildings and structures on-site and erection of 22-storey building comprising apart-hotel (Use Class C1) with flexible commercial uses at ground floor and within existing viaduct arches (Use Class A1, A2, A3, A4, D2), access, landscaping and other associated works	June 2020	43	0.58km	Planning permission granted but no start on site
Plot B7, Salford Central Masterplan SCC PP. Ref.: 20/75571/FUL	Erection of a 10-storey B1(a) office building with flexible ground floor commercial units (A1/A2/A3/A4/B1) with associated ancillary facilities, servicing, means of access, landscaping and public realm	October 2020	44	0.61km	Planning permission granted, but not started on site.
Land at Deansgate South MCC PP. Ref.: 129406/FO/2021	Full planning permission for a 28-storey purpose built student accommodation building (Sui Generis)	Awaiting decision	45	0.61km	
Former Bulls Head Public House Corner Of Chester Road And Cleworth Street MCC PP. Ref.: 118303/FO/2017	Erection of a three, four and six storey building to form 27 self contained flats with associated car parking and hard and soft landscaping.	November 2018	46	0.63km	Planning permission granted, but not started on site.
Great Jackson Street – Plot E MCC PP. Ref.: 116850/FO/2017	Demolition of the existing buildings on the site and construction of three residential buildings, 32, 26 and 18 storeys in height, comprising a total of 399 residential units (C3) and 50 retirement living units (C2) with roof top ancillary restaurant; 675 sq. m of commercial floor space (Use Classes A1, A2, A3, A4, B1, D1 or D2); associated car and cycle parking within a basement level; public realm and landscaping; access and servicing arrangements; and other associated works	May 2019	47	0.66km	Planning permission granted. Not started on site but conditions have been discharged to suggest it will be implemented shortly.
Thorncross Close, Off Ellesmere Street, Manchester, M15 4LU	Demolition and redevelopment of the site to create a mixed use development comprising 419 apartments within five new residential buildings rising from 5 to	Awaiting decsion	48	0.59km	Planning permission granted. Not started on site but conditions have been discharged to

Application Reference	Description of Development Proposals	Date Approved	Map No	Distance from Site	Status
MCC - 113473/FO/2016	16 storeys in height together with 2,997 sq. m of commercial / leisure floorspace (A1, A2, A3, A4, B1, D2) at the lower floor levels. The development also includes associated car and cycle parking, hard and soft landscaping and ancillary works				suggest it may be implemented shortly.
Plot G, Great Jackson Street MCC: 129273/FO/2021	Demolition of existing structures and the construction of two residential buildings of 56 storeys (plus basement and roof plant) (use class C3), with ground floor commercial uses (use class E), car parking, cycle provision, landscaping, access and other associated works	Approved at planning committee 29 July 2021	49	0.8km	Approved. Start on site subject to S106 ongoingnegotiations.
Embassy Village Land Bound By The River Medlock, Bridgewater Canal, Hulme Lock Branch Canal And Egerton Street Manchester M15 4LE MCC: 129923/FO/21	Full planning permission for the creation of the Embassy Village (Sui Generis) comprising 40 single-occupancy residential accommodation pods; a site reception pod; a flexible multi-use 'Village Hall' providing internal amenity space, and a staff accommodation pod, four car parking spaces and cycle parking provision; soft and hard landscaping; drainage arrangements; servicing and access arrangements; and other associated works.	Approved 2 August 2021	50	0.19km	No start on site.
Cornbrook Hotel Land Bounded By Dinton Street, Cornbrook Road, Chester Road And Trentham Street Manchester M15 4FX MCC: 131163/MO/2021	Reserved Matters Application for the approval of appearance, layout, scale and landscaping, following the approval of outline permission referenced118625/FO/2017 for the erection of a part 11, part 15 building to form a 154 bed hotel and 88 bed apart-hotel building (Use Class C1) with associated public realm, car parking, and other associated works following demolition of existing buildings	Awaiting decision (validated 22 July 2021)	51	0.72km	No start on site.


Ordsall
New Windsor
Cornbrook
St George's
City Centre
MANCHESTER
Deansgate-Castlefield
Manchester Oxford Road
Irwell
Art Gallery
Museum
Tourist Info
Education Facility
Library
St Peter's Square
Lowry
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Appendix 3 – Committed Developments by discipline

Air Quality

Application Reference	Map No	Distance from Site	Scoped In / Out
Baseline Scenario			
Orsdall Chord Pedestrian Bridge MCC PP. Ref.: 111826/JO/2016/C1	1	0.07km	Out
The Factory PP. Ref.: MCC 119890/VO/2018	2	0.098km	In
Potato Wharf Phase II MCC PP. Ref.: 109335/FO/2015/C1	3	0.13km	In
Middlewood Locks PP Ref.: 06/52762/OUT(subsequently extended by 13/64081/OUTEIA and varied by 14/65457/OUTEIA) 16/67987/OUTEIA	4	0.16km	In
Manchester Goods Yard MCC PP. Ref.: 121511/FO/2018	5	0.21km	In
Plot C1, Salford Central SCC PP. Ref.: 19/73721/REM	6	0.21km	In
Middlewood Locks (Plots G, H) SCC PP. Ref.: 16/68904/REM	7	0.26km	In
Gresham Mill, Salford SCC PP. Ref.: 15/67048/FUL	8	0.27km	In
Old Granada Studios MCC PP. Ref.: 127612/FO/2020	9	0.28km	In
Plot A7 Salford Central SCC PP. Ref.: 17/70082/REM	10	0.28km	In
Middlewood locks (Plots K, L, M) SCC PP. Ref.: 20/75275/REM	11	0.3km	In
Globe and Simpson MCC PP. Ref.: 121721/FO/2018	12	0.33km	In
Salford Central SCC PP. Ref.: 09/57950/EIAHYB	13	0.35km	In
Irwell Quays Commercial District/Irwell Quays (Zone A/C) SCC PP. Ref.: 16/68325/OUT	14	0.35km	In

Application Reference	Map No	Distance from Site	Scoped In / Out
City View Salford (Regent Plaza) SCC PP. Ref.: 16/68723/FUL	15	0.42km	In
St George's Gardens Phase I and II MCC PP. Ref.: 115087/FO/2017	16	0.43km	In
X1 The Landmark SCC PP. Ref.: 16/68977/FUL	17	0.46km	In
Two New Bailey SCC PP. Ref.: 16/68199/REM	18	0.47km	Out
City Gardens MCC PP. Ref.: 114961/FO/2017	19	0.48km	In
The Sky Gardens MCC PP. Ref.: 115211/FO/2017	20	0.49km	In
Crown Street Phase I MCC PP. Ref.: 119806/FO/2018	21	0.5km	In
Middlewood Plaza SCC PP. Ref.: 17/70615/FUL	22	0.52km	In
Castle Wharf MCC PP. Ref.: 113870/FO/2016	23	0.53km	In
Owen Street Phase II (Deansgate Square) MCC PP. Ref.: 111719/FO/2016/C1	24	0.56km	In
Gore Street (The Filaments), Salford Central SCC PP. Ref.: 15/66415/FUL	25	0.58km	In
3 New Bailey, Salford Central SCC PP. Ref.: 18/71823/FUL	26	0.58km	In
Atelier, Salford Central, (Plots E7,8) SCC PP. Ref.: 18/71782/REM	27	0.58km	In
The Waterhouse - Worall Street SCC PP Ref.: 18/71363/FUL	28	0.58km	Out
Crown Street Phase II MCC PP. Ref.: 126668/FO/2020	29	0.59km	In
Viadux Residential PP. Ref.: MCC 115871/FO/2017	30	0.65km	Out
Moxy Hotel MCC PP. Ref.: 126945/FO/2020	31	0.68km	Out
Plot L, Salford Central SCC PP. Ref.: 19/73075/REM	32	0.77km	
Union T1, St Johns MCC PP. Ref.: 125655/FO/2019	34	0.14km	In
Cumulative Scenario			
Union T2, St Johns MCC PP. Ref.: 126648/FO/2020	33	0.13km	In
Middlewood Locks Plot N, Salford Central	35	0.17km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
SCC PP. Ref.: 14/65793/OUT			
Arundel Street, Manchester MCC PP. Ref.: 123261/FO/2019	36	0.32km	Out
Slate Wharf MCC PP. Ref.: 113617/FO/2016	37	0.34km	Out
Talbot Mill MCC PP. Ref.: 117595/FO/2017	38	0.37km	Out
St Johns Place MCC PP. Ref.: 109660/FO/2015/C1	39	0.38km	In
Plot A3, Salford Central SCC PP. Ref.: 20/76306/FUL	40	0.42km	In
Land Bound By Hulme Street, Gaythorn Street And Upper Wharf Street Salford SCC PP. Ref.: 18/71512/FUL	41	0.54km	Out
Land At Worrall Street Salford M5 4TH (Dye Works) SCC PP. Ref.: 20/76684/FUL	42	0.54km	Out
325-327 Deansgate MCC PP. Ref.: 125804/FO/2019	43	0.58km	Out
Plot B7, Salford Central Masterplan SCC PP. Ref.: 20/75571/FUL	44	0.61km	Out
Land at Deansgate South MCC PP. Ref.: 129406/FO/2021	45	0.61km	Out
Former Bulls Head Public House Corner Of Chester Road And Cleworth Street MCC PP. Ref.: 118303/FO/2017	46	0.63km	Out
Great Jackson Street – Plot E MCC PP. Ref.: 116850/FO/2017	47	0.66km	In
Thorncross Close, Off Ellesmere Street, Manchester, M15 4LU MCC - 113473/FO/2016	48	0.59km	To be agreed within the ES chapter.
Plot G, Great Jackson Street MCC: 129273/FO/2021	49	0.8km	To be agreed within the ES chapter.
Embassy Village Land Bound By The River Medlock, Bridgewater Canal, Hulme Lock Branch Canal And Egerton Street Manchester M15 4LE MCC: 129923/FO/21	50	0.19km	To be agreed within the ES chapter.

Application Reference	Map No	Distance from Site	Scoped In / Out
Cornbrook Hotel Land Bounded By Dinton Street, Cornbrook Road, Chester Road And Trentham Street Manchester M15 4FX MCC: 131163/MO/2021	51	0.72km	To be agreed within the ES chapter.

Built Heritage

Application Reference	Map No	Distance from Site	Scoped In / Out
Baseline Scenario			
Orsdall Chord Pedestrian Bridge MCC PP. Ref.: 111826/JO/2016/C1	1	0.07km	In
The Factory PP. Ref.: MCC 119890/VO/2018	2	0.098km	In
Potato Wharf Phase II MCC PP. Ref.: 109335/FO/2015/C1	3	0.13km	Out
Middlewood Locks PP Ref.: 06/52762/OUT(subsequently extended by 13/64081/OUTEIA and varied by 14/65457/OUTEIA) 16/67987/OUTEIA	4	0.16km	In
Manchester Goods Yard MCC PP. Ref.: 121511/FO/2018	5	0.21km	In
Plot C1, Salford Central SCC PP. Ref.: 19/73721/REM	6	0.21km	In
Middlewood Locks (Plots G, H) SCC PP. Ref.: 16/68904/REM	7	0.26km	Out
Gresham Mill, Salford SCC PP. Ref.: 15/67048/FUL	8	0.27km	Out
Old Granada Studios MCC PP. Ref.: 127612/FO/2020	9	0.28km	In
Plot A7 Salford Central SCC PP. Ref.: 17/70082/REM	10	0.28km	In
Middlewood locks (Plots K, L, M) SCC PP. Ref.: 20/75275/REM	11	0.3km	Out
Globe and Simpson MCC PP. Ref.: 121721/FO/2018	12	0.33km	In
Salford Central SCC PP. Ref.: 09/57950/EIAHYB	13	0.35km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
Irwell Quays Commercial District/Irwell Quays (Zone A/C) SCC PP. Ref.: 16/68325/OUT	14	0.35km	In
CityView Salford (Regent Plaza) SCC PP. Ref.: 16/68723/FUL	15	0.42km	Out
St George's Gardens Phase I and II MCC PP. Ref.: 115087/FO/2017	16	0.43km	Out
X1 The Landmark SCC PP. Ref.: 16/68977/FUL	17	0.46km	Out
Two New Bailey SCC PP. Ref.: 16/68199/REM	18	0.47km	Out
City Gardens MCC PP. Ref.: 114961/FO/2017	19	0.48km	Out
The Sky Gardens MCC PP. Ref.: 115211/FO/2017	20	0.49km	Out
Crown Street Phase I MCC PP. Ref.: 119806/FO/2018	21	0.5km	Out
Middlewood Plaza SCC PP. Ref.: 17/70615/FUL	22	0.52km	Out
Castle Wharf MCC PP. Ref.: 113870/FO/2016	23	0.53km	out
Owen Street Phase II (Deansgate Square) MCC PP. Ref.: 111719/FO/2016/C1	24	0.56km	Out
Gore Street (The Filaments), Salford Central SCC PP. Ref.: 15/66415/FUL	25	0.58km	Out
3 New Bailey, Salford Central SCC PP. Ref.: 18/71823/FUL	26	0.58km	Out
Atelier, Salford Central, (Plots E7,8) SCC PP. Ref.: 18/71782/REM	27	0.58km	Out
The Waterhouse - Worall Street SCC PP Ref.: 18/71363/FUL	28	0.58km	Out
Crown Street Phase II MCC PP. Ref.: 126668/FO/2020	29	0.59km	Out
Viadux Residential PP. Ref.: MCC 115871/FO/2017	30	0.65km	Out
Moxy Hotel MCC PP. Ref.: 126945/FO/2020	31	0.68km	Out
Plot L, Salford Central SCC PP. Ref.: 19/73075/REM	32	0.77km	Out
Union T1, St Johns MCC PP. Ref.: 125655/FO/2019	34	0.14km	In
Cumulative Scenario			
Union T2, St Johns	33	0.13km	In

Application Reference	Map No	Distance from Site	Scoped In / Out
MCC PP. Ref.: 126648/FO/2020			
Middlewood Locks Plot N, Salford Central SCC PP. Ref.: 14/65793/OUT	35	0.17km	out
Arundel Street, Manchester MCC PP. Ref.: 123261/FO/2019	36	0.32km	out
Slate Wharf MCC PP. Ref.: 113617/FO/2016	37	0.34km	Out
Talbot Mill MCC PP. Ref.: 117595/FO/2017	38	0.37km	Out
St Johns Place MCC PP. Ref.: 109660/FO/2015/C1	39	0.38km	In
Plot A3, Salford Central SCC PP. Ref.: 20/76306/FUL	40	0.42km	In
Land Bound By Hulme Street, Gaythorn Street And Upper Wharf Street Salford SCC PP. Ref.: 18/71512/FUL	41	0.54km	Out
Land At Worrall Street Salford M5 4TH (Dye Works) SCC PP. Ref.: 20/76684/FUL	42	0.54km	Out
325-327 Deansgate MCC PP. Ref.: 125804/FO/2019	43	0.58km	Out
Plot B7, Salford Central Masterplan SCC PP. Ref.: 20/75571/FUL	44	0.61km	Out
Land at Deansgate South MCC PP. Ref.: 129406/FO/2021	45	0.61km	Out
Former Bulls Head Public House Corner Of Chester Road And Cleworth Street MCC PP. Ref.: 118303/FO/2017	46	0.63km	Out
Great Jackson Street – Plot E MCC PP. Ref.: 116850/FO/2017	47	0.66km	Out
Thorncross Close, Off Ellesmere Street, Manchester, M15 4LU MCC - 113473/FO/2016	48	0.59km	Out
Plot G, Great Jackson Street MCC: 129273/FO/2021	49	0.8km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
Embassy Village Land Bound By The River Medlock, Bridgewater Canal, Hulme Lock Branch Canal And Egerton Street Manchester M15 4LE MCC: 129923/FO/21	50	0.19km	Out
Cornbrook Hotel Land Bounded By Dinton Street, Cornbrook Road, Chester Road And Trentham Street Manchester M15 4FX MCC: 131163/MO/2021	51	0.72km	Out

Daylight and Sunlight

Application Reference	Map No	Distance from Site	Scoped In / Out
Baseline Scenario			
Orsdall Chord Pedestrian Bridge MCC PP. Ref.: 111826/JO/2016/C1	1	0.07km	In
The Factory PP. Ref.: MCC 119890/VO/2018	2	0.098km	In
Potato Wharf Phase II MCC PP. Ref.: 109335/FO/2015/C1	3	0.13km	In
Middlewood Locks PP Ref.: 06/52762/OUT(subsequently extended by 13/64081/OUTEIA and varied by 14/65457/OUTEIA) 16/67987/OUTEIA	4	0.16km	In
Manchester Goods Yard MCC PP. Ref.: 121511/FO/2018	5	0.21km	In
Plot C1, Salford Central SCC PP. Ref.: 19/73721/REM	6	0.21km	In
Middlewood Locks (Plots G, H) SCC PP. Ref.: 16/68904/REM	7	0.26km	In
Gresham Mill, Salford SCC PP. Ref.: 15/67048/FUL	8	0.27km	In
Old Granada Studios MCC PP. Ref.: 127612/FO/2020	9	0.28km	In
Plot A7 Salford Central SCC PP. Ref.: 17/70082/REM	10	0.28km	In
Middlewood locks (Plots K, L, M) SCC PP. Ref.: 20/75275/REM	11	0.3km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
Globe and Simpson MCC PP. Ref.: 121721/FO/2018	12	0.33km	Out
Salford Central SCC PP. Ref.: 09/57950/EIAHYB	13	0.35km	Out
Irwell Quays Commercial District/Irwell Quays (Zone A/C) SCC PP. Ref.: 16/68325/OUT	14	0.35km	Out
CityView Salford (Regent Plaza) SCC PP. Ref.: 16/68723/FUL	15	0.42km	Out
St George's Gardens Phase I and II MCC PP. Ref.: 115087/FO/2017	16	0.43km	Out
X1 The Landmark SCC PP. Ref.: 16/68977/FUL	17	0.46km	Out
Two New Bailey SCC PP. Ref.: 16/68199/REM	18	0.47km	Out
City Gardens MCC PP. Ref.: 114961/FO/2017	19	0.48km	Out
The Sky Gardens MCC PP. Ref.: 115211/FO/2017	20	0.49km	Out
Crown Street Phase I MCC PP. Ref.: 119806/FO/2018	21	0.5km	Out
Middlewood Plaza SCC PP. Ref.: 17/70615/FUL	22	0.52km	Out
Castle Wharf MCC PP. Ref.: 113870/FO/2016	23	0.53km	Out
Owen Street Phase II (Deansgate Square) MCC PP. Ref.: 111719/FO/2016/C1	24	0.56km	Out
Gore Street (The Filaments), Salford Central SCC PP. Ref.: 15/66415/FUL	25	0.58km	Out
3 New Bailey, Salford Central SCC PP. Ref.: 18/71823/FUL	26	0.58km	Out
Atelier, Salford Central, (Plots E7,8) SCC PP. Ref.: 18/71782/REM	27	0.58km	Out
The Waterhouse - Worall Street SCC PP Ref.: 18/71363/FUL	28	0.58km	Out
Crown Street Phase II MCC PP. Ref.: 126668/FO/2020	29	0.59km	Out
Viadux Residential PP. Ref.: MCC 115871/FO/2017	30	0.65km	Out
Moxy Hotel MCC PP. Ref.: 126945/FO/2020	31	0.68km	Out
Plot L, Salford Central	32	0.77km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
SCC PP. Ref.: 19/73075/REM			
Union T1, St Johns MCC PP. Ref.: 125655/FO/2019	34	0.14km	In
Cumulative Scenario			
Union T2, St Johns MCC PP. Ref.: 126648/FO/2020	33	0.13km	In
Middlewood Locks Plot N, Salford Central SCC PP. Ref.: 14/65793/OUT	35	0.17km	In
Arundel Street, Manchester MCC PP. Ref.: 123261/FO/2019	36	0.32km	In
Slate Wharf MCC PP. Ref.: 113617/FO/2016	37	0.34km	In
Talbot Mill MCC PP. Ref.: 117595/FO/2017	38	0.37km	Out
St Johns Place MCC PP. Ref.: 109660/FO/2015/C1	39	0.38km	Out
Plot A3, Salford Central SCC PP. Ref.: 20/76306/FUL	40	0.42km	Out
Land Bound By Hulme Street, Gaythorn Street And Upper Wharf Street Salford SCC PP. Ref.: 18/71512/FUL	41	0.54km	Out
Land At Worrall Street Salford M5 4TH (Dye Works) SCC PP. Ref.: 20/76684/FUL	42	0.54km	Out
325-327 Deansgate MCC PP. Ref.: 125804/FO/2019	43	0.58km	Out
Plot B7, Salford Central Masterplan SCC PP. Ref.: 20/75571/FUL	44	0.61km	Out
Land at Deansgate South MCC PP. Ref.: 129406/FO/2021	45	0.61km	Out
Former Bulls Head Public House Corner Of Chester Road And Cleworth Street MCC PP. Ref.: 118303/FO/2017	46	0.63km	Out
Great Jackson Street – Plot E MCC PP. Ref.: 116850/FO/2017	47	0.66km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
Thorncross Close, Off Ellesmere Street, Manchester, M15 4LU MCC - 113473/FO/2016	48	0.59km	Out
Plot G, Great Jackson Street MCC: 129273/FO/2021	49	0.8km	Out
Embassy Village Land Bound By The River Medlock, Bridgewater Canal, Hulme Lock Branch Canal And Egerton Street Manchester M15 4LE MCC: 129923/FO/21	50	0.19km	Out
Cornbrook Hotel Land Bounded By Dinton Street, Cornbrook Road, Chester Road And Trentham Street Manchester M15 4FX MCC: 131163/MO/2021	51	0.72km	Out

Flood Risk Flood Risk and Drainage

The technical consultatant will review the committed development table as relevant.

Noise and Vibration

The technical consultatant will review the committed development table as relevant and agree with EHO.

Solar Glare

Application Reference	Map No	Distance from Site	Scoped In / Out
Baseline Scenario			
Orsdall Chord Pedestrian Bridge MCC PP. Ref.: 111826/JO/2016/C1	1	0.07km	Scoped In
The Factory PP. Ref.: MCC 119890/VO/2018	2	0.098km	Scoped In
Potato Wharf Phase II MCC PP. Ref.: 109335/FO/2015/C1	3	0.13km	Scoped In
Middlewood Locks PP Ref.: 06/52762/OUT(subsequently extended by 13/64081/OUTEIA and varied by 14/65457/OUTEIA)	4	0.16km	Scoped In

Application Reference	Map No	Distance from Site	Scoped In / Out
16/67987/OUTEIA			
Manchester Goods Yard MCC PP. Ref.: 121511/FO/2018	5	0.21km	Scoped In
Plot C1, Salford Central SCC PP. Ref.: 19/73721/REM	6	0.21km	Scoped In
Middlewood Locks (Plots G, H) SCC PP. Ref.: 16/68904/REM	7	0.26km	Scoped In
Gresham Mill, Salford SCC PP. Ref.: 15/67048/FUL	8	0.27km	Scoped In
Old Granada Studios MCC PP. Ref.: 127612/FO/2020	9	0.28km	Scoped In
Plot A7 Salford Central SCC PP. Ref.: 17/70082/REM	10	0.28km	Scoped In
Middlewood locks (Plots K, L, M) SCC PP. Ref.: 20/75275/REM	11	0.3km	Scoped In
Globe and Simpson MCC PP. Ref.: 121721/FO/2018	12	0.33km	Scoped In
Salford Central SCC PP. Ref.: 09/57950/EIAHYB	13	0.35km	Scoped In
Irwell Quays Commercial District/Irwell Quays (Zone A/C) SCC PP. Ref.: 16/68325/OUT	14	0.35km	Scoped In
CityView Salford (Regent Plaza) SCC PP. Ref.: 16/68723/FUL	15	0.42km	Scoped In
St George's Gardens Phase I and II MCC PP. Ref.: 115087/FO/2017	16	0.43km	Scoped In
X1 The Landmark SCC PP. Ref.: 16/68977/FUL	17	0.46km	Scoped In
Two New Bailey SCC PP. Ref.: 16/68199/REM	18	0.47km	Scoped In
City Gardens MCC PP. Ref.: 114961/FO/2017	19	0.48km	Scoped In
The Sky Gardens MCC PP. Ref.: 115211/FO/2017	20	0.49km	Scoped In
Crown Street Phase I MCC PP. Ref.: 119806/FO/2018	21	0.5km	Scoped Out
Middlewood Plaza SCC PP. Ref.: 17/70615/FUL	22	0.52km	Scoped Out
Castle Wharf MCC PP. Ref.: 113870/FO/2016	23	0.53km	Scoped Out
Owen Street Phase II (Deansgate Square) MCC PP. Ref.: 111719/FO/2016/C1	24	0.56km	Scoped Out
Gore Street (The Filaments), Salford Central SCC PP. Ref.: 15/66415/FUL	25	0.58km	Scoped Out

Application Reference	Map No	Distance from Site	Scoped In / Out
3 New Bailey, Salford Central SCC PP. Ref.: 18/71823/FUL	26	0.58km	Scoped Out
Atelier, Salford Central, (Plots E7,8) SCC PP. Ref.: 18/71782/REM	27	0.58km	Scoped Out
The Waterhouse - Worall Street SCC PP Ref.: 18/71363/FUL	28	0.58km	Scoped Out
Crown Street Phase II MCC PP. Ref.: 126668/FO/2020	29	0.59km	Scoped Out
Viadux Residential PP. Ref.: MCC 115871/FO/2017	30	0.65km	Scoped Out
Moxy Hotel MCC PP. Ref.: 126945/FO/2020	31	0.68km	Scoped Out
Plot L, Salford Central SCC PP. Ref.: 19/73075/REM	32	0.77km	Scoped Out
Union T1, St Johns MCC PP. Ref.: 125655/FO/2019	34	0.14km	Scoped Out
Cumulative Scenario			
Union T2, St Johns MCC PP. Ref.: 126648/FO/2020	33	0.13km	Scoped Out
Middlewood Locks Plot N, Salford Central SCC PP. Ref.: 14/65793/OUT	35	0.17km	Scoped Out
Arundel Street, Manchester MCC PP. Ref.: 123261/FO/2019	36	0.32km	Scoped Out
Slate Wharf MCC PP. Ref.: 113617/FO/2016	37	0.34km	Scoped Out
Talbot Mill MCC PP. Ref.: 117595/FO/2017	38	0.37km	Scoped Out
St Johns Place MCC PP. Ref.: 109660/FO/2015/C1	39	0.38km	Scoped Out
Plot A3, Salford Central SCC PP. Ref.: 20/76306/FUL	40	0.42km	Scoped Out
Land Bound By Hulme Street, Gaythorn Street And Upper Wharf Street Salford SCC PP. Ref.: 18/71512/FUL	41	0.54km	Scoped Out
Land At Worrall Street Salford M5 4TH (Dye Works) SCC PP. Ref.: 20/76684/FUL	42	0.54km	Scoped Out

Application Reference	Map No	Distance from Site	Scoped In / Out
325-327 Deansgate MCC PP. Ref.: 125804/FO/2019	43	0.58km	Scoped Out
Plot B7, Salford Central Masterplan SCC PP. Ref.: 20/75571/FUL	44	0.61km	Scoped Out
Land at Deansgate South MCC PP. Ref.: 129406/FO/2021	45	0.61km	Scoped Out
Former Bulls Head Public House Corner Of Chester Road And Cleworth Street MCC PP. Ref.: 118303/FO/2017	46	0.63km	Scoped Out
Great Jackson Street – Plot E MCC PP. Ref.: 116850/FO/2017	47	0.66km	Scoped Out
Thorncross Close, Off Ellesmere Street, Manchester, M15 4LU MCC - 113473/FO/2016	48	0.59km	Scoped Out
Plot G, Great Jackson Street MCC: 129273/FO/2021	49	0.8km	Scoped Out
Embassy Village Land Bound By The River Medlock, Bridgewater Canal, Hulme Lock Branch Canal And Egerton Street Manchester M15 4LE MCC: 129923/FO/21	50	0.19km	Scoped Out
Cornbrook Hotel Land Bounded By Dinton Street, Cornbrook Road, Chester Road And Trentham Street Manchester M15 4FX MCC: 131163/MO/2021	51	0.72km	Scoped Out

Townscape and Visual Assessment

Application Reference	Map No	Distance from Site	Scoped In / Out
Baseline Scenario			
Orsdall Chord Pedestrian Bridge MCC PP. Ref.: 111826/JO/2016/C1	1	0.07km	In
The Factory PP. Ref.: MCC 119890/VO/2018	2	0.098km	In
Potato Wharf Phase II MCC PP. Ref.: 109335/FO/2015/C1	3	0.13km	In

Middlewood Locks PP Ref.: 06/52762/OUT(subsequently extended by 13/64081/OUTEIA and varied by 14/65457/OUTEIA) 16/67987/OUTEIA	4	0.16km	In
Manchester Goods Yard MCC PP. Ref.: 121511/FO/2018	5	0.21km	In
Plot C1, Salford Central SCC PP. Ref.: 19/73721/REM	6	0.21km	In
Middlewood Locks (Plots G, H) SCC PP. Ref.: 16/68904/REM	7	0.26km	In
Gresham Mill, Salford SCC PP. Ref.: 15/67048/FUL	8	0.27km	Out
Old Granada Studios MCC PP. Ref.: 127612/FO/2020	9	0.28km	In
Plot A7 Salford Central SCC PP. Ref.: 17/70082/REM	10	0.28km	In
Middlewood locks (Plots K, L, M) SCC PP. Ref.: 20/75275/REM	11	0.3km	In
Globe and Simpson MCC PP. Ref.: 121721/FO/2018	12	0.33km	In
Salford Central SCC PP. Ref.: 09/57950/EIAHYB	13	0.35km	In
Irwell Quays Commercial District/Irwell Quays (Zone A/C) SCC PP. Ref.: 16/68325/OUT	14	0.35km	In
CityView Salford (Regent Plaza) SCC PP. Ref.: 16/68723/FUL	15	0.42km	Out
St George's Gardens Phase I and II MCC PP. Ref.: 115087/FO/2017	16	0.43km	Out
X1 The Landmark SCC PP. Ref.: 16/68977/FUL	17	0.46km	Out
Two New Bailey SCC PP. Ref.: 16/68199/REM	18	0.47km	In
City Gardens MCC PP. Ref.: 114961/FO/2017	19	0.48km	Out
The Sky Gardens MCC PP. Ref.: 115211/FO/2017	20	0.49km	Out
Crown Street Phase I MCC PP. Ref.: 119806/FO/2018	21	0.5km	In
Middlewood Plaza SCC PP. Ref.: 17/70615/FUL	22	0.52km	Out
Castle Wharf MCC PP. Ref.: 113870/FO/2016	23	0.53km	In

Owen Street Phase II (Deansgate Square) MCC PP. Ref.: 111719/FO/2016/C1	24	0.56km	In
Gore Street (The Filaments), Salford Central SCC PP. Ref.: 15/66415/FUL	25	0.58km	Out
3 New Bailey, Salford Central SCC PP. Ref.: 18/71823/FUL	26	0.58km	Out
Atelier, Salford Central, (Plots E7,8) SCC PP. Ref.: 18/71782/REM	27	0.58km	Out
The Waterhouse - Worall Street SCC PP Ref.: 18/71363/FUL	28	0.58km	Out
Crown Street Phase II MCC PP. Ref.: 126668/FO/2020	29	0.59km	In
Viadux Residential PP. Ref.: MCC 115871/FO/2017	30	0.65km	Out
Moxy Hotel MCC PP. Ref.: 126945/FO/2020	31	0.68km	Out
Plot L, Salford Central SCC PP. Ref.: 19/73075/REM	32	0.77km	Out
Union T1, St Johns MCC PP. Ref.: 125655/FO/2019	34	0.14km	In
Cumulative Scenario			
Union T2, St Johns MCC PP. Ref.: 126648/FO/2020	33	0.13km	Out
Middlewood Locks Plot N, Salford Central SCC PP. Ref.: 14/65793/OUT	35	0.17km	In
Arundel Street, Manchester MCC PP. Ref.: 123261/FO/2019	36	0.32km	Out
Slate Wharf MCC PP. Ref.: 113617/FO/2016	37	0.34km	Out
Talbot Mill MCC PP. Ref.: 117595/FO/2017	38	0.37km	In
St Johns Place MCC PP. Ref.: 109660/FO/2015/C1	39	0.38km	In
Plot A3, Salford Central SCC PP. Ref.: 20/76306/FUL	40	0.42km	
Land Bound By Hulme Street, Gaythorn Street And Upper Wharf Street Salford SCC PP. Ref.: 18/71512/FUL	41	0.54km	In

Land At Worrall Street Salford M5 4TH (Dye Works) SCC PP. Ref.: 20/76684/FUL	42	0.54km	
325-327 Deansgate MCC PP. Ref.: 125804/FO/2019	43	0.58km	
Plot B7, Salford Central Masterplan SCC PP. Ref.: 20/75571/FUL	44	0.61km	Out
Land at Deansgate South MCC PP. Ref.: 129406/FO/2021	45	0.61km	
Former Bulls Head Public House Corner Of Chester Road And Cleworth Street MCC PP. Ref.: 118303/FO/2017	46	0.63km	In
Great Jackson Street – Plot E MCC PP. Ref.: 116850/FO/2017	47	0.66km	In
Thorncross Close, Off Ellesmere Street, Manchester, M15 4LU MCC - 113473/FO/2016	48	0.59km	
Plot G, Great Jackson Street MCC: 129273/FO/2021	49	0.8km	
Embassy Village Land Bound By The River Medlock, Bridgewater Canal, Hulme Lock Branch Canal And Egerton Street Manchester M15 4LE MCC: 129923/FO/21	50	0.19km	
Cornbrook Hotel Land Bounded By Dinton Street, Cornbrook Road, Chester Road And Trentham Street Manchester M15 4FX MCC: 131163/MO/2021	51	0.72km	

Traffic and Transport

The technical consultatant will review the committed development table as relevant and agree with MCC Highways and in line with agreed traffic modelling.

Wind

Application Reference	Map No	Distance from Site	Scoped In / Out
Baseline Scenario			

Application Reference	Map No	Distance from Site	Scoped In / Out
Orsdall Chord Pedestrian Bridge MCC PP. Ref.: 111826/JO/2016/C1	1	0.07km	In
The Factory PP. Ref.: MCC 119890/VO/2018	2	0.098km	In
Potato Wharf Phase II MCC PP. Ref.: 109335/FO/2015/C1	3	0.13km	In
Middlewood Locks PP Ref.: 06/52762/OUT(subsequently extended by 13/64081/OUTEIA and varied by 14/65457/OUTEIA) 16/67987/OUTEIA	4	0.16km	In
Manchester Goods Yard MCC PP. Ref.: 121511/FO/2018	5	0.21km	In
Plot C1, Salford Central SCC PP. Ref.: 19/73721/REM	6	0.21km	In
Middlewood Locks (Plots G, H) SCC PP. Ref.: 16/68904/REM	7	0.26km	In
Gresham Mill, Salford SCC PP. Ref.: 15/67048/FUL	8	0.27km	In
Old Granada Studios MCC PP. Ref.: 127612/FO/2020	9	0.28km	In
Plot A7 Salford Central SCC PP. Ref.: 17/70082/REM	10	0.28km	In
Middlewood locks (Plots K, L, M) SCC PP. Ref.: 20/75275/REM	11	0.3km	In
Globe and Simpson MCC PP. Ref.: 121721/FO/2018	12	0.33km	Out
Salford Central SCC PP. Ref.: 09/57950/EIAHYB	13	0.35km	In
Irwell Quays Commercial District/Irwell Quays (Zone A/C) SCC PP. Ref.: 16/68325/OUT	14	0.35km	In
CityView Salford (Regent Plaza) SCC PP. Ref.: 16/68723/FUL	15	0.42km	Out
St George's Gardens Phase I and II MCC PP. Ref.: 115087/FO/2017	16	0.43km	Out
X1 The Landmark SCC PP. Ref.: 16/68977/FUL	17	0.46km	Out
Two New Bailey SCC PP. Ref.: 16/68199/REM	18	0.47km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
City Gardens MCC PP. Ref.: 114961/FO/2017	19	0.48km	Out
The Sky Gardens MCC PP. Ref.: 115211/FO/2017	20	0.49km	Out
Crown Street Phase I MCC PP. Ref.: 119806/FO/2018	21	0.5km	In
Middlewood Plaza SCC PP. Ref.: 17/70615/FUL	22	0.52km	Out
Castle Wharf MCC PP. Ref.: 113870/FO/2016	23	0.53km	Out
Owen Street Phase II (Deansgate Square) MCC PP. Ref.: 111719/FO/2016/C1	24	0.56km	In
Gore Street (The Filaments), Salford Central SCC PP. Ref.: 15/66415/FUL	25	0.58km	Out
3 New Bailey, Salford Central SCC PP. Ref.: 18/71823/FUL	26	0.58km	Out
Atelier, Salford Central, (Plots E7,8) SCC PP. Ref.: 18/71782/REM	27	0.58km	Out
The Waterhouse - Worall Street SCC PP Ref.: 18/71363/FUL	28	0.58km	Out
Crown Street Phase II MCC PP. Ref.: 126668/FO/2020	29	0.59km	In
Viadux Residential PP. Ref.: MCC 115871/FO/2017	30	0.65km	Out
Moxy Hotel MCC PP. Ref.: 126945/FO/2020	31	0.68km	Out
Plot L, Salford Central SCC PP. Ref.: 19/73075/REM	32	0.77km	Out
Union T1, St Johns MCC PP. Ref.: 125655/FO/2019	34	0.14km	In
Cumulative Scenario			
Union T2, St Johns MCC PP. Ref.: 126648/FO/2020	33	0.13km	In
Middlewood Locks Plot N, Salford Central SCC PP. Ref.: 14/65793/OUT	35	0.17km	In
Arundel Street, Manchester MCC PP. Ref.: 123261/FO/2019	36	0.32km	In
Slate Wharf MCC PP. Ref.: 113617/FO/2016	37	0.34km	In
Talbot Mill MCC PP. Ref.: 117595/FO/2017	38	0.37km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
St Johns Place MCC PP. Ref.: 109660/FO/2015/C1	39	0.38km	Out
Plot A3, Salford Central SCC PP. Ref.: 20/76306/FUL	40	0.42km	Out
Land Bound By Hulme Street, Gaythorn Street And Upper Wharf Street Salford SCC PP. Ref.: 18/71512/FUL	41	0.54km	Out
Land At Worrall Street Salford M5 4TH (Dye Works) SCC PP. Ref.: 20/76684/FUL	42	0.54km	Out
325-327 Deansgate MCC PP. Ref.: 125804/FO/2019	43	0.58km	Out
Plot B7, Salford Central Masterplan SCC PP. Ref.: 20/75571/FUL	44	0.61km	Out
Land at Deansgate South MCC PP. Ref.: 129406/FO/2021	45	0.61km	Out
Former Bulls Head Public House Corner Of Chester Road And Cleworth Street MCC PP. Ref.: 118303/FO/2017	46	0.63km	Out
Great Jackson Street – Plot E MCC PP. Ref.: 116850/FO/2017	47	0.66km	Out
Thorncross Close, Off Ellesmere Street, Manchester, M15 4LU MCC - 113473/FO/2016	48	0.59km	Out
Plot G, Great Jackson Street MCC: 129273/FO/2021	49	0.8km	Out
Embassy Village Land Bound By The River Medlock, Bridgewater Canal, Hulme Lock Branch Canal And Egerton Street Manchester M15 4LE MCC: 129923/FO/21	50	0.19km	Out
Cornbrook Hotel	51	0.72km	Out

Application Reference	Map No	Distance from Site	Scoped In / Out
Land Bounded By Dinton Street, Cornbrook Road, Chester Road And Trentham Street Manchester M15 4FX MCC: 131163/MO/2021			

Appendix 4 – Phase 1 Ecology Report

Trinity Islands, Sites C and D, Manchester, M5 4XP

ECOLOGICAL SURVEY AND ASSESSMENT (including a Licensed Bat Survey)

May 2021

[ERAP (Consultant Ecologists) Ltd ref: 2020-374]

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Document Control

Survey Type:	Surveyors[1]	Survey Date(s)
Phase 1 Habitat survey	Brian Robinson B.Sc. (Hons) MCIEEM & Amy Sharples B.Sc. (Hons) M.Sc. ACIEEM	10th March 2021
Daylight bat survey	Brian Robinson B.Sc. (Hons) MCIEEM	10th March 2021
Reporting	**Personnel**	**Date**
Author	Amy Sharples B.Sc. (Hons) M.Sc. ACIEEM Senior Ecologist, and Brian Robinson B.Sc. (Hons) MCIEEM Senior Ecologist	17th May 2021
Signature(s)		
Checked	Luke Atherton B.Sc. (Hons) M.Sc.	21st May 2021
Revised and issued	Amy Sharples B.Sc. (Hons) M.Sc. ACIEEM	25th May 2021
Report issued to	Renaker Build Ltd	
Version Number	1	

[1] Licence reference number
Bats
Brian Robinson Natural England Class Survey Licence (bats, Level 2) Registration Number 2015-13161-CLS-CLS

SUMMARY

Introduction and Scope

i. This ecological survey and assessment presents the ecological, biodiversity and nature conservation status of the land at Trinity Islands, Sites C and D, Manchester, M5 4XP. The assessment was requested in connection with proposals to develop the sites for residential purposes.

ii. This report presents the results of a desktop study, extended Phase 1 Habitat Survey and a licensed bat survey carried out in March 2021. The scope of survey undertaken is appropriate to identify potential ecological constraints, the remit of mitigation required and opportunities for biodiversity associated with the development proposals.

iii. The sites comprise asphalt car parks with very locally frequent colonising ruderal herbs, and localised areas of unmanaged grassland, tall-herb vegetation, scrub and tall-herb vegetation colonising the bankside wall of the canalised and adjacent River Irwell. The site-side abutments and spans of the bridges located at the underpass adjacent to the sites were additionally surveyed for completeness.

Results of Survey and Assessment

iv. The proposals will have no adverse effect on statutory or non-statutory designated sites for nature conservation.

v. The sites contain only common and widespread plant species. None of the habitats within the sites are of significant interest in terms of their plant species composition. None of the habitats present are representative of semi-natural habitat. No Priority Habitats are present.

vi. The River Irwell, located adjacent to the north-western boundaries of both sites is of importance in terms of its suitability for use as a wildlife corridor; recommendations to protect River Irwell and maintain its value as an wildlife corridor are presented at **Section 5.1** of this report.

vii. Invasive species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), namely Giant Hogweed and Indian Balsam, were detected at the boundary vegetation. Guidance on the control and management of these species is presented at **Section 5.3**.

Recommendations

viii. The recommendations in **Section 5.0** outline all the mandatory measures and additional actions to be applied to ensure compliance with wildlife legislation, the National Planning Policy Framework (NPPF) and best practice.

ix. The proposals will secure an opportunity to implement beneficial measures such as habitat creation that will safeguard habitats for wildlife such as birds and bats, with the aim of providing a net gain in biodiversity in accordance with the principles of the NPPF.

Conclusion

x. It is concluded that the proposals are feasible and acceptable in accordance with ecological considerations and relevant planning policy. Development at the sites will provide an opportunity to secure ecological enhancement for wildlife associated with residential development.

1.0 INTRODUCTION

1.1 Background and Rationale

1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Renaker Build Ltd to carry out an ecological assessment of land at Trinity Islands, Sites C and D, Manchester (hereafter referred to as the 'sites'). The Ordnance Survey (OS) grid reference at the centre of the sites is SJ 8278 9769. An aerial image of the sites and their surrounding habitats is appended at **Figure 1** (source image: ESRI World Imagery).

1.1.2 The assessment was requested in connection with a planning application to develop the sites for residential purposes.

1.2 Scope of Works

1.2.1 The scope of ecological works undertaken in March 2021 comprised:

a. A desktop study and data search for known ecological information at the sites and the local area;

b. An Extended Phase 1 Habitat Survey and assessment;

c. Assessment of the ecological value of the habitats within the sites with the use of the National Vegetation Classification (NVC) and the Ratcliffe criteria, as presented in *A Nature Conservation Review* (Ratcliffe, 1977);

d. Survey and assessment of all habitats for relevant statutorily protected species[1] and other wildlife including badger (*Meles meles*), water vole (*Arvicola amphibius*), otter (*Lutra lutra)*, bird species and reptiles;

e. A licensed daylight bat survey of the underpasses of the road bridge and pedestrian footbridge which bisect the sites;

f. The identification of any potential ecological constraints on the proposals and the specification of the scope of mitigation and ecological enhancement required in accordance with wildlife legislation, planning policy guidance and other relevant guidance; and

g. The identification of any further surveys or precautionary actions that may be required prior to the commencement of any development activities.

2.0 METHOD OF SURVEY

2.1 Desktop Study and Data Search

2.1.1 The following sources of information and ecological records were consulted:

a. MAGiC: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites;

b. Environment Agency Main River Map (Environment Agency, 2018);

c. Greater Manchester Local Record Centre (GMLRC); and

d. Greater Manchester Biodiversity Action Plan (BAP).

[1] In accordance with *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact on the Planning System* (Ministry of Housing, Communities & Local Government, 2005) developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development. In this instance (for example) there are no ponds within 500 metres of the sites; there has therefore been no requirement to consider great crested newt (*Triturus cristatus*) as part of this assessment.

2.2 Vegetation and Habitats

2.2.1 An Extended Phase 1 Habitat Survey of the sites was carried out by Brian Robinson B.Sc. (Hons) MCIEEM and Amy Sharples B.Sc. (Hons) M.Sc. ACIEEM on 10th March 2021. The weather was overcast with scattered showers, a moderate breeze (Beaufort scale 4) and an air temperature of 6°C. The time of year was favourable for the ecological survey.

2.2.2 A habitat and vegetation map was produced for the sites and the immediate surrounding area at a scale of 1:1,500 (refer to **Figure 2**). The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC, 2010) with minor adjustments to illustrate and examine the habitats with greater precision.

2.2.3 The plant species within each site boundary were determined with estimates of the distribution, ground cover, abundance and constancy of individual species. The estimation of abundance was based on the DAFOR system, where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare, this being a widely used and accepted system employed by ecological surveyors. The terms L = Locally and V = Very were additionally used to describe the plant species distributions with greater precision.

2.2.4 Stands of vegetation and habitats were described and evaluated using the National Vegetation Classification (NVC). The NVC provides a systematic and comprehensive analysis of British vegetation and is a reliable framework for nature conservation and land-use planning.

2.2.5 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and uncommon plant communities. Plant nomenclature follows *New Flora of the British Isles 3rd Edition* (Stace, 2010).

2.2.6 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), including Japanese Knotweed (*Fallopia japonica*), Indian Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*).

2.3 Animal Life

Badger

2.3.1 The survey area for badger covered the sites (as annotated on **Figure 2**) and extended to accessible land within a radius of 50 metres from each site boundary. Private land was excluded from the survey.

2.3.2 The survey was conducted in accordance with guidance presented within *Badgers and Development* (Natural England, 2007) and *Badgers: surveys and mitigation for development projects* (Natural England, 2015).

2.3.3 The following signs of badger activity were searched for:

a. Sett entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;

b. Large spoil heaps outside sett entrances;

c. Bedding outside sett entrances;

d. Badger footprints;

e. Badger paths;

f. Latrines;

g. Badger hairs on fences or bushes;

h. Scratching posts; and

i. Signs of digging for food.

2.3.4 Habitats within and surrounding the sites were assessed in terms of their suitability for use by foraging and sheltering badger in accordance with their known habitat preferences as detailed in current guidance and *Badger* (Roper, 2010).

Bat Species

Daylight Survey

Survey Personnel

2.3.5 The sites were assessed for their suitability to support roosting bats by Brian Robinson, Natural England Class Survey Licence WML CL18 (Bat Survey Level 2), Registration Number 2015-13161-CLS-CLS. In addition the suitability of the underpasses of the road bridge and pedestrian footbridges which bisect the sites were assessed.

2.3.6 The surveyor's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats* (CIEEM, 2013).

Underpasses to Road and Pedestrian Foot Bridges

2.3.7 The survey was carried out in accordance with standard methodology including the *Bat Mitigation Guidelines* (Mitchell-Jones, 2004), the *Bat Workers' Manual 3rd Edition* (Mitchell-Jones & Mcleish, 2004) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* (Collins, J. (ed), 2016).

2.3.8 An inspection of the external surfaces, walls and underside of the bridges at the underpass was carried out to find potential bat roosting habitat or accesses into internal areas where roosts may be present. Searches for evidence of bat presence in the form of droppings, urine stains, feeding signs, grease marks and other evidence were also carried out.

2.3.9 A list of equipment used is detailed at **Table 2.1**, below:

Table 2.1: Survey Equipment used during Daylight Bat Survey

Ladders
LED Lenser P14 torch
Canon Ixus digital camera
8x20 binoculars

2.3.10 The suitability of the underpass has been assessed in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn),* (Collins, J. (ed), 2016), taking into account any presence of gaps suitable for access by bats, features suitable for use by roosting bats within the building (including crevice dwelling species and species which can roost in the open in roof voids), and the suitability of the surrounding habitats for use by foraging and commuting bats.

Trees

2.3.11 A preliminary assessment of the trees within the sites was conducted to assess their suitability for use by roosting bats, and to inform whether further surveys or precautionary measures were required.

2.3.12 Trees were assessed from the ground using binoculars and a high-powered torch. Each tree was searched for the presence of the following features:

Woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed platey bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy (Hedera helix) with stem diameters in excess of 50mm and bat, bird or dormouse (Muscardinus avellanarius) boxes.

2.3.13 Terms used to describe any features present follow (where possible) those outlined and described in *Bat Tree Habitat Key, 2nd Edition* (Andrews, H (ed), 2013) and *Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-care and Ecology Professionals* (BTHK, 2018).

2.3.14 The requirement for further presence / absence surveys at each tree was then considered.

Habitat Assessment for Commuting / Foraging Bats

2.3.15 Habitats within and adjacent to the sites were assessed for their value and suitability for commuting and foraging bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn),* (Collins, J. (ed), 2016). Reference has been made to the categories and descriptions / examples, presented at **Table 2.2**, below.

Table 2.2: Consideration of Suitability of Foraging and Commuting Habitat for Bats

Suitability	Commuting Habitat	Foraging Habitat
Negligible	Negligible habitat features on site likely to be used by commuting bats.	Negligible habitat features on site likely to be used by foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated i.e. not very well connected to the surrounding landscape by other habitat.	Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree or patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.	Habitat that is linked to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape and is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. Habitats close to and connected to known roosts.	High-quality habitat that is well-connected to the wider landscape and is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Habitats close to and connected to known roosts.

Bird Species

2.3.16 Bird species observed and heard during the survey were recorded.

2.3.17 Habitats throughout the sites and in the immediate surrounding area were assessed for their value to roosting, feeding and nesting birds, as indicated by the amount of shelter, feeding value, woody vegetation structure and species diversity of tree and shrub species in the sites.

Water Vole and Otter

2.3.18 The approximately 300 metres long section of the River Irwell which lies adjacent to the north-western site boundaries was assessed in terms of its suitability for use by water vole and otter (*Lutra lutra*). The banks of the river were walked to determine the suitability of the section of the river for foraging and sheltering water vole and otter. No access was possible to the sections of river to the north-east and south-west of the sites.

2.4 Survey and Reporting Limitations

2.4.1 Both banks of the River Irwell are canalised, fenced, and could not be checked directly for field signs of water vole or otter, however it is considered that a habitat assessment and assessment of likely impact of the proposed development are sufficient to determine the likely presence or absence of either species, and the likely impacts of the proposed development on either.

2.4.2 Otherwise, the whole of sites was accessible and the survey was conducted under suitable conditions.

2.4.3 The survey was completed outside the bat active season, when any field signs of bats may have weathered from the external elevations of the underpasses. Daylight bat inspections can be completed at any time of year, however and it is considered that a reliable assessment of the likely presence or absence of bats has been possible.

2.4.4 No significant survey limitations were experienced.

2.4.5 No photograph of the River Irwell was taken during the survey, and a photograph of the river taken adjacent to the sites in 2016 has been provided for completeness. It is confirmed that the river remains as presented in the 2016 photograph.

2.4.6 All measurements within this report are approximate only, and have been either measured (using QField) or estimated whilst on site or calculated using mapping software (QGIS) or internet-based mapping services such as MAGiC and Google Earth.

2.5 Evaluation Methods

2.5.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977) and *Guidelines for the Selection of Biological SSSIs* (Bainbridge, et al., 2013). These are size (extent), diversity, naturalness, rarity, fragility, typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.

2.5.2 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities* (NERC) *Act 2006*. Where suitable, the ecological value of the habitats present has been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018).

2.5.3 Government advice on wildlife, as set out in the *National Planning Policy Framework* (Ministry of Housing, Communities and Local Government, 2019) and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedules 1, 5, 6 and 8 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species Regulations 2017*, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.

2.5.4 The presence of any Priority Species, as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of habitats and/or species listed by the Greater Manchester Biodiversity Action Plans has been taken into account in the evaluation of the sites.

3.0 SURVEY RESULTS

3.1 Desktop Study and Data Search

Designated Sites for Nature Conservation

Statutory Designated Sites for Nature Conservation and SSSI Impact Risk Zones

3.1.1 The sites do not hold any statutory or non-statutory designation for nature conservation.

3.1.2 The sites lie within a Site of Special Scientific Interest (SSSI) Impact Risk Zone for Rochdale Canal Special Area of Conservation (SAC) and SSSI. The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Ordnance Survey, 2021):

Air pollution: Livestock and poultry units with floorspace greater than 500m^2 and slurry lagoons greater than 4000m^2.

Combustion: General combustion processes greater than 50 megawatt energy input including energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis / gasification, anaerobic digestion, sewage treatment works and other incineration / combustion.

Non-statutory Designated Sites for Nature Conservation

3.1.3 The sites lie within 2 kilometres of three Sites of Biological Importance (SBIs). These locally designated sites comprise the River Irwell SBI, located 1.2 kilometres to the north-west of the sites, and the Rochdale Canal, Stott's Lane – Ducie Street Basin SBI, and Ashton Canal (West) SBI, both of which lie 1.5 kilometres to the east of the sites.

3.1.4 The presence of locally designated sites within 2 kilometres of the sites is considered further at **Section 4.1**, below.

Main River Designation

3.1.5 Both sites lie adjacent to the River Irwell. The section of the River Irwell which lies adjacent to the sites is not identified as a main river on the Environment Agency Main River Map (Environment Agency, 2018).

Priority Habitats Inventory

3.1.6 The Priority Habitats Inventory[2] was checked via MAGiC Map. No Priority Habitats are listed for the sites or the area directly adjacent to the sites on the Priority Habitats Inventory.

Protected and Notable Species

3.1.7 The following records of protected and notable species adjacent to the site boundaries are held by GMEU:

a. Two records of dunnock (*Prunella modularis*), a Priority Species;

b. Kingfisher (*Alcedo atthis*), listed under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended) adjacent to the north-western site boundary (associated with the River Irwell).

c. *Pipistrelle* species and common pipistrelle (*Pipistrellus pipistrellus*), both European Protected Species and GMBAP Priority species. Two records (one per species) of roosts are noted for the approximate middle of the eastern boundary of Site C. Note that this area currently supports hard standing; no buildings or trees capable of supporting a bat roost are present at this location and it is considered that the records are historic; and

d. Soprano pipistrelle (*Pipistrellus pygmaeus*) EPS, PS and GMBAP, one record of bat activity adjacent to the north-western site boundary (associated with the River Irwell).

3.1.8 Further records of protected and notable species for a 1 kilometre radius of the sites are summarised at **Table 3.1** below.

[2] A spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.

Table 3.1: Records of Protected Species Within a 1 Kilometre Radius of the Sites

Taxon Group	Species Name and Designations[1] and Notes
Bird	**PS** Bullfinch (*Pyrrhula pyrrhula*), dunnock (*Prunella modularis*), herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), linnet (*Linaria cannabina*), skylark (*Alauda arvensis*), song thrush (*Turdus philomelos*) and starling (*Sturnus vulgaris*) **WCAs1 & GMBAP** Black redstart (*Phoenicurus ochruros*) **WCAs1** Kingfisher (*Alcedo atthis*), little ringed plover (*Charadrius dubius*) and peregrine (*Falco peregrinus*)
Insect	PS moth species (unnamed). 5 records, the closest of which is 70 metres north of the site.
Terrestrial mammal	Hedgehog (*Erinaceus europaeus*) PS. One record 875 metres south of the site.
	Otter (*Lutra lutra*) EPS, WCAs5 & PS. One record 795 metres north-west of the site.
	Bat species EPS, WCAs5 & GMBAP. One record of bat activity 800 metres south of the site.
	Pipistrelle species EPS, WCAs5 & GMBAP. One record of a roost and 4 records of bat activity. The closest roost (apart from the one named above) is 200 metres to the south of the site.
	Common pipistrelle (*Pipistrelle pipistrelle*) WCAs5, PS & GMBAP. 12 records of roosts and 34 records of bat activity. The closest record of a roost (apart from the one named above) is 45 metres north of the site.
	Soprano pipistrelle (*Pipistrellus pygmaeus*) EPS, PS, WCAs5 & GMBAP. One record of a roost and 3 records of bat activity. The closest record of a roost is 45 metres north of the site.
	Daubenton's bat (*Myotis daubentonii*) EPS, WCAs5 & GMBAP. One record of a roost 80 metres to the north-east boundary of Site C.
	Brown long-eared bat (*Plecotus auritus*) EPS, WCAs5, PS & GMBAP. One record of bat activity 750 metres north-east of the site.

[1]Key to Designation Codes:
EPS = European Protected Species under the *Conservation of Habitats and Species Regulations 2017.*
WCAs1 = Species receives full protection under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended).
WCAs5 = Species receives full protection under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended).
PS = Priority Species listed under Section 41 of the NERC Act 2006
GMBAP = Species listed on the Great Manchester Biodiversity Action Plan

3.1.9 The presence of these protected and notable species within the wider area has been taken into account throughout this report.

3.2 Vegetation and Habitats

General Description

3.2.1 Both sites are located within an urban area of Manchester, and are chiefly composed of hard standing. The sites are separated by the A6042 road. Areas of unmanaged grassland are located within Site C, and an area of scrub vegetation is present at the southern end of Site D. Both sites are adjacent to the River Irwell at their north-western boundaries, and are otherwise surrounded by roads and hard standing at each boundary.

3.2.2 The two sites are described in detail below. Refer to **Figure 1** for all habitat descriptions. Photographs are appended at **Table 8.3**.

Site C

Overview of Site C

3.2.3 The approximately 0.91 hectare site is located in an urban area and comprises an asphalt car park with very locally frequent colonising ruderal herbs, and localised areas of unmanaged grassland and tall-herb and scrub vegetation, young trees, scrub and tall-herb vegetation.

3.2.4 The north-western site boundary is defined by the River Irwell, beyond which lies the A6042 and a railway bridge. The north-eastern site boundary is defined by the railway bridge, beyond which lies further asphalt

hard standing, a second railway bridge, Princes Bridge and further car parking. The south-eastern site boundary is defined by Water Street, beyond which lies further buildings and roads. The south-western site boundary is defined by the A6042, beyond which lies an asphalt car park, at which site offices associated with building activity have been recently erected.

3.2.5 A plant species list is appended at **Table 8.1**.

Hard Standing

3.2.6 Refer to **Photos 1** and **2**. The hard standing at the site is composed of asphalt, with very locally frequent colonising herbs principally found at the interfaces between the asphalt and the mortared brick walls at the site's gateway and walkways.

3.2.7 The colonising ruderal herbs are characterised by very locally frequent Butterfly-bush (*Buddleja davidii*). Dandelion (*Taraxacum officinale*), Herb-Robert (*Geranium robertianum*), Mugwort (*Artemisia vulgaris*), and rare occurrences of Broad-leaved Dock (*Rumex obtusifolius*) and Common Nettle (*Urtica dioica*).

3.2.8 None of the plant species present are constant or attain a percentage cover of 1% or greater. The vegetation is not characteristic of any NVC community.

Unmanaged Grassland and Tall-herb Vegetation

3.2.9 The unmanaged grassland and tall-herb vegetation is characterised by locally abundant Common Nettle (*Urtica dioica*) very locally frequent Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*), Yarrow (*Achillea millefolium*) and Cock's-foot (*Dactylis glomerata*).

3.2.10 The vegetation is not characteristic of an NVC community.

Tall-herb and Scrub Vegetation at the North-eastern Corner of the Site

3.2.11 A small (approximately 7 metres long, 2 metres wide) area of tall-herb and scrub vegetation is present at the north-western site boundary, and is characterised by locally abundant Common Nettle and Butterfly-bush (*Buddleja davidii*) with frequent and locally abundant Dogwood (*Cornus sanguinea)*.

3.2.12 The vegetation is not characteristic of an NVC community.

Site D

Overview of Site D

3.2.13 The approximately 0.89 hectare site is located in an urban area and comprises an asphalt car park with very locally frequent colonising ruderal herbs and a small area of scrub vegetation at its southern end. Young trees and shrubs have colonised the bankside wall at a canalised section of the River Irwell, which lies immediately adjacent to the western site boundary.

3.2.14 The western and northern site boundaries are defined by the River Irwell, beyond which lies an area of scrubland, Wilburn Street and buildings. The eastern site boundary is defined by fencing, beyond which lies the A6042 and further hard standing. The southern site boundary is defined by a wall, beyond which lies Regent Road and further areas of hard standing.

3.2.15 A plant species list is appended at **Table 8.2**.

Hard Standing with Colonising Ruderal Herbs

3.2.16 Refer to **Photos 3** and **4**. The hard standing at the site is composed of asphalt and concrete with very locally frequent colonising herbs.

3.2.17 The colonising ruderal herbs are characterised by very locally frequent Butterfly-bush , Ribwort Plantain (*Plantago lanceolata*), Dandelion ,Common Ragwort (*Senecio jacobaea*), Oxford Ragwort (*Senecio squalidus*), Mugwort (*Artemisia vulgaris*) and Yarrow.

3.2.18 The vegetation is not characteristic of any NVC community.

3.2.19 The mortared brick wall located at the southern site boundary is colonised by locally frequent Butterfly-bush and Dandelion. The vegetation is not characteristic of any NVC community.

Scrub Vegetation

3.2.20 Refer to **Photo 5.** A small (approximately 6 metres long and wide) area of young trees and scrub vegetation is present at the south-western corner of the site. The vegetation is characterised by frequent and locally abundant Rowan (*Sorbus aucuparia*), Goat Willow (*Salix caprea*), Sycamore *(Acer pseudoplatanus)* and Ash (*Fraxinus excelsior*) with an understorey of frequent Common Nettle, Herb-Robert, Common Ragwort (*Senecio jacobaea*), False Oat-grass (*Arrhenatherum elatius*), Yorkshire-fog and Bramble (*Rubus fruticosus* agg.).

3.2.21 The vegetation is not characteristic of any NVC Community.

Invasive Plant Species (Both Sites)

3.2.22 As illustrated on **Figure 2,** Giant Hogweed (*Heracleum mantegazzianum*) and Indian Balsam are present at the eastern bank of the River Irwell to the north of the site, and Small-leaved Cotoneaster (*Cotoneaster microphyllus)* is present at both Sites C and D. The potential for invasive species to colonise the sites during the construction and operational phases of the proposed development of the sites must be considered. The plant species are listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended); it is an offence to spread or cause the spread of these species in the wild.

3.2.23 It is understood from conversation with the Network Rail contractors present at the site during the survey that control of both Indian Balsam and Giant Hogweed plants is currently being undertaken (namely herbicide application).

3.2.24 Further guidance is described in **Section 4.3.**

Habitats Adjacent to Both Sites: River Irwell

3.2.25 Refer to **Photos 6**. The section of the River Irwell which lies immediately adjacent to the north-western site boundary of Sites C and D is canalised along its length by mortared brick walls which are approximately 3 metres high (from the water mark at the time of the survey) and set at an angle of 90°.

3.2.26 The water channel is approximately 30 metres wide and supports a southerly flow. The River did not support any observable aquatic or emergent vegetation along the section which lies adjacent to the site.

3.2.27 The walls at Site C support locally abundant colonising scrub and tall-herb vegetation characterised by frequent and locally abundant Giant Hogweed, Dogwood, Butterfly-bush and very locally frequent Perforate St. John's-wort (*Hypericum perforatum*) and Yarrow.

3.2.28 The walls at Site D support locally abundant colonising scrub and tall-herb vegetation characterised by frequent and locally abundant Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*), Butterfly-bush, Rowan, Sycamore and Goat Willow with an understorey of locally abundant Bracken (*Pteridium aquilinum*), Bramble, Rosebay Willowherb (*Chamerion angustifolium*), Great Willowherb (*Epilobium hirsutum*) and Common Nettle.

3.2.29 The vegetation is not characteristic of any NVC community.

3.3 Animal Life

Badger

3.3.1 The habitats within and surrounding the sites are wholly unsuitable for use by badger. No signs of badger were detected within the sites. The presence of badger is reasonably discounted.

Bat Species

Daylight Survey: Underpass

3.3.2 Refer to **Photos 7** to **9**. Both the road bridge and pedestrian footpath are constructed in a similar fashion, with abutments of mortared brick and stone with supports. Both spans are composed of metal arches and decks supported by concrete slabs.

3.3.3 No gaps suitable for access by bats were noted at the underside of the road bridge. A shallow (approximately 0.1 metres deep) 0.2 metres wide gap is present between the cladding at the guard rails of the bridge; no bats or signs of bats were detected along this gap, which is considered to be sub-optimal for use by roosting bats due to its exposed nature.

3.3.4 No bats or signs of bats were detected at either the underpass to the road bridge or the pedestrian footbridge. The presence of roosting bats is reasonably discounted.

Trees

3.3.5 None of the trees within or adjacent to either site are suitable for use by roosting bats. None support any features suitable for use by roosting bats. The presence of roosting bats within the site is reasonably discounted.

Habitat Assessment for Commuting and Foraging Bats

3.3.6 The habitats within the sites are of poor suitability for use by foraging or commuting bats. The hard standing habitats will support no invertebrate prey.

3.3.7 The River Irwell is suitable for use by both foraging and commuting bats, and may act as a wildlife corridor for bats through the surrounding urban landscape. This is considered further at **Section 5.1**, below.

Bird Species

3.3.8 No birds were detected within the site during the walkover survey of March 2021.

3.3.9 The young trees and scrub vegetation at the boundaries of the sites is suitable for use by passerine (perching) bird species; measures for the protection of nesting birds are presented at **Section 5.3**, below.

Water Vole and Otter

3.3.10 The canalised section of the River Irwell supports no emergent or aquatic vegetation suitable for use by sheltering or foraging water vole, and the mortared brick bankside walls are unlikely to provide suitable access for sheltering and burrowing water voles.

3.3.11 The sides of the River do not support any suitable locations for otter holts or areas to shelter. The heavily disturbed habitats at either bank are such that it is considered the section of River which lies adjacent to the sites is of poor suitability for use by otter, and the presence of otters is reasonably discounted from the sites.

4.0 EVALUATION AND ASSESSMENT

4.1 Introduction and Description of Proposals

4.1.1 At the time of writing a proposals plan was not available for the sites.

4.1.2 **Section 4.2** provides an assessment of any impacts of the proposed development on the designated sites for nature conservation present in the wider area. The ecological value of habitats within the sites is evaluated at **Section 4.3**, and protected and notable species are considered at **Section 4.4**.

4.2 Designated Sites for Nature Conservation

4.2.1 Provided the measures to protect the River Irwell outlined at **Section 5.2** below are adhered to it is considered reasonably unlikely that the proposed development at the sites will have any effect on designated sites for nature conservation present in the in the wider area.

4.3 Vegetation and Habitats

4.3.1 The sites contain only common and widespread plant species. None of the habitats within the sites are of significant interest in terms of their plant species composition. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. No Priority Habitats are present.

4.3.2 The River Irwell adjacent to the north-western boundaries of the sites is of importance in terms of its suitability for use as a wildlife corridor; recommendations to protect River Irwell and maintain its value as a wildlife corridor are presented at **Section 5.2**.

4.3.3 Invasive species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), namely Indian Balsam, Small-leaved Cotoneaster and Giant Hogweed, were detected at the site boundary associated within the River Irwell. It is an offence to cause the spread of these species in the wild. The proposed development of the sites represents an opportunity to control the spread of these species; guidance on the control and management of both species is described at **Section 5.3**.

4.4 Protected Species and Other Wildlife

4.4.1 No protected or notable animal species were detected within the sites. The young trees and shrubs at the boundaries of the sites are suitable for use by nesting birds, otherwise neither site supports any habitats suitable for use by protected species. Measures for the protection of nesting birds are presented at **Section 5.5**.

5.0 RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENT

5.1 Introduction

5.1.1 These recommendations aim to ensure that the development is implemented in accordance with relevant wildlife legislation, Natural England guidance, the principles of the National Planning Policy Framework (NPPF), local planning policy and best practice.

5.1.2 In accordance with Chapter 15, paragraph 175 point ‘d’ of the NPPF, when determining planning applications, local planning authorities should encourage opportunities to incorporate biodiversity improvements in and around developments, especially where this can secure measurable net gains for biodiversity.

5.1.3 Where possible, opportunities to enhance the ecological interest and habitat connectivity and seek biodiversity gain through appropriate landscape planting and habitat creation have been identified.

5.1.4 All recommendations are appropriate to the geographical area, the habitats in the wider area, the wildlife present in the local area (and likely to use the sites post-construction) and take into consideration the end use of the sites as a residential development.

5.2 Protection of Existing Vegetation and Recommendations in Relation to Site Layouts

Protection of Trees and Shrubs

5.2.1 During the construction phase, temporary protective demarcation fencing will be used to protect the trees and scrub to be retained. The fencing must extend outside the canopy of the retained trees and must remain in position until all areas have been developed to ensure protection is provided throughout the construction phase.

5.2.2 The fencing will be in accordance with BS5837:2012 *Trees in Relation to Design, Demolition and Construction: Recommendations* (BSI, 2012).

Protection of River Irwell

5.2.3 In the absence of updated guidance, the following Pollution Prevention Guidelines (PPG) will be adhered to at any works near the River Irwell:

a. PPG1: Basic good environmental practices (Environment Agency, 2013);
b. PPG5: Works in, near or over watercourses (Environment Agency, 2014);
c. PPG6: Construction and demolition sites (Environment Agency, 2012); and
d. PPG7: Operating refuelling sites (Environment Agency, 2011).

5.3 Invasive Plant Species

5.3.1 It is an offence under the *Wildlife and Countryside Act 1981* (as amended) to cause the spread of Indian Balsam, Small-leaved Cotoneaster and Giant Hogweed in the wild.

5.3.2 It is recommended that a specialist contractor is employed for the eradication of Giant Hogweed and Small-leaved Cotoneaster and the control of Indian Balsam at the sites, and that this is completed under a suitable Invasive Species Management Plan.

5.4 Bats

Lighting

5.4.1 Paragraph 180, bullet point ‘c’ in Chapter 15 (conserving and enhancing the natural environment) of the NPPF states that development should:

‘limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.’

Construction Phase

5.4.2 Any lighting to be used at the sites during construction should be directional and screened where possible, this specification should be included within a Construction Environment Management Plan (CEMP), or similar.

Development Lighting Design

5.4.3 The lighting scheme to be implemented at the developed sites must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over the River Irwell, areas of ecological enhancement and any landscape planting, as lighting overspill may deter use by wildlife such as foraging bats.

5.4.4 The lighting scheme will be designed with reference to current guidance, namely:

a. *Guidance Note 8: Bats and Artificial Lighting in the UK* (Institution of Lighting Professionals & Bat Conservation Trust, 2018); and

b. *Bats and lighting: Overview of current evidence and mitigation guidance* (Stone, 2014).

Enhancing Habitats for Roosting Bats

5.4.5 It is recommended that the development incorporates the installation of two bat access panels (per site) at the new buildings[3]. Where feasible the bat access panels will be installed facing onto the River Irwell.

5.4.6 The bat access panels should be sited at least 4 metres above ground level, ideally facing or close to areas of landscape planting or facing onto the River Irwell. The access panels should not be positioned over windows or doorways where bat droppings may become a nuisance. Once the development layout has been finalised, an ecologist should advise on appropriate positions for the bat access panels. Suitable bat access panels are available from NHBS Ecology (www.nhbs.com) or Wild Care (www.wildcare.co.uk) and are presented at **Insert 1**, below:



Insert 1: Examples of integrated bat access panels and an externally mounted box[4]

5.5 Birds

Protection

5.5.1 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. It is advised that any works such as vegetation clearance that will affect habitats suitable for use by nesting birds are scheduled to commence outside the bird nesting season. Commencement of works in the nesting season must be informed by a pre-works nesting bird survey, carried out by a suitably

[3] Whilst the sites are not currently suitable for use by roosting bats, evidence shows that common pipistrelle can hibernate within large buildings such as apartment blocks within urban areas (Korsten, et al., 2016). Due to the type of building likely to be developed at the sites, it is considered that bat access panels installed at the upper floors of the proposed buildings may provide suitable features for use by roosting bats (including hibernating common pipistrelle), despite the lack of favourable surrounding foraging and commuting habitats within the wider area.

[4] Left to right: IBstock Enclosed Bat Box 'c' (left); Habibat Bat Access Panels (centre left and centre right) and Greenwood's Ecohabitat's two crevice bat box (right). Products with a brick face are illustrated, however the Habibat bat access panels can be supplied unfaced to enable the additional of matching material.

experienced ecologist. The bird breeding season typically extends between March to August inclusive (Natural England, 2015).

5.5.2 If breeding birds are detected the ecologist will issue guidance in relation to the protection of the nesting birds in conjunction with the scheduled works. This may involve cordoning off an area of the sites until the young birds have fledged.

Enhancing Habitats for Nesting Birds

General and Swift Bird Boxes

5.5.3 The installation of two general bird nest boxes and two swift nest boxes (per site) is recommended at the proposed new buildings.

5.5.4 The boxes will not be positioned over windows or doorways where droppings may become a nuisance. RSPB advice states that boxes should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest. Suitable bird nest boxes are available from NHBS Ecology (www.nhbs.com) or Wild Care (www.wildcare.co.uk) and an example is presented at **Insert 2**:



Insert 2: Schwegler 1MR Avianex and swift nest box

Black Redstart

5.5.5 If flat roofs are proposed at the new development at the sites, the opportunity to create suitable habitats for use by black redstart (*Phoenicurus ochruros*), a GMBAP Priority Species, should be taken.

5.5.6 The species action plan states that '*Records held from 1992 to 2007 show that black redstarts have bred or attempted to breed within the Piccadilly Basin area of central Greater Manchester every year except 2003. The total city population is unknown, but may be as low as 2 to 3 pairs.*' (Greater Manchester Biodiversity Project, 2008).

5.5.7 The inclusion of feeding and nesting habitat onto any proposed areas of flat roof at the proposed development will enhance the ecological value of the sites.

Habitat for Feeding Black Redstart

5.5.8 To boost the availability of invertebrate food for black redstart it is recommended that a section of the roof is covered with a mixed sized aggregate to a varied depth of between 0.05 and 0.2 metres.

5.5.9 The aggregate pieces should range in size from 0.10 to 0.15 metres diameter. The aggregate must cover a minimum area of 30m^2 to be effective.

5.5.10 **Insert 3** shows an example of a more extensive aggregate covered roof as an example. The aggregate will be colonised by small plants and will attract invertebrates for foraging black redstart and their young.



Insert 3: Example of aggregate placed on city roof for the attraction of Black Redstart

Installation of Two Black Redstart Boxes

5.5.11 Two Schwegler 2HW nest boxes will be installed on a north-facing wall within the roofing area. These nest boxes are recommended in the GMBAP for black redstart.

5.5.12 The model of box is shown at **Insert 4**, below.



Insert 4: Suitable bird boxes for black redstart

5.5.13 Suitable boxes can be purchased from www.nhbs.com.

Management and Maintenance

5.5.14 The black redstart nest boxes are to be checked annually in September/October. Old nest material and other debris will be removed and any damaged or fallen boxes to be repaired/reinstated.

5.6 Landscape Planting

5.6.1 It is recommended that the landscape planting within the sites is composed from native species and species known to be of value for the attraction of wildlife.

5.6.2 It is recommended that trees which support blossom and fruit which will attract insects are incorporated into the landscape planting. Suitable species are presented at **Table 5.1**, below.

Table 5.1: Suitable Native Species for Tree and Shrub Planting

Scientific Name	Common Name	Scientific Name	Common Name
Acer campestre	Field Maple	*Prunus spinosa*	Blackthorn
Corylus avellana	Hazel	*Rosa arvensis*	Field Rose
Crataegus monogyna	Hawthorn	*Rosa canina*	Dog-rose
Ilex aquifolium	Holly	*Sambucus nigra*	Elder
Malus sylvestris	Crab Apple	*Sorbus aucuparia*	Rowan
Prunus avium	Wild Cherry	*Ulmus glabra*	Wych Elm
Prunus padus	Bird Cherry	*Viburnum opulus*	Guelder Rose

5.6.3 The understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.

5.6.4 Planting schemes that include flowering species such as *Viburnum, Ceanothus, Hebe*, *Lavandula*, *Lonicera, Potentilla, Rosmarinus* and *Vinca* can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.

5.6.5 For further plants suitable for the attraction of pollinators please refer to the *Perfect for Pollinators Plant List* (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the sites ensures that a variety of flowering species are available throughout the year.

6.0 CONCLUSION

6.1 This ecological assessment has demonstrated that development at the sites is feasible and acceptable in accordance with ecological considerations and the National Planning Policy Framework.

6.1.2 It is possible to implement reasonable actions for the protection and long-term conservation of fauna such as commuting/foraging bats and birds associated with the habitats surrounding the sites.

6.1.3 Development at the sites will provide an opportunity to secure ecological enhancement for fauna typically associated with urban areas such as breeding birds and roosting bats.

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8.0 APPENDIX: TABLES AND FIGURES

8.1 Plant Species Lists and Photographs

Table 8.1: Plant Species List for Site C

Scientific Name	Common Name	DAFOR[1]	Cover
	Ornamental species	VLF	<1%
Achillea millefolium	Yarrow	VLF	<1%
Artemisia vulgaris	Mugwort	VLF	<1%
Buddleja davidii	Butterfly-bush	LA	10%
Cardamine flexuosa	Wavy Bitter-cress	VLF	<1%
Cerastium fontanum	Common Mouse-ear	VLF	<1%
Conyza canadensis	Canadian Fleabane	VLF	<1%
Cornus sanguinea	Dogwood	VLF/VLA	3%
Cotoneaster microphyllus	Small-leaved Cotoneaster	VLF	<1%
Dactylis glomerata	Cock's-foot	VLF	<1%
Euphorbia peplus	Petty Spurge	VLF	<1%
Festuca rubra	Red Fescue	VLF	<1%
Heracleum mantegazzianum	Giant Hogweed	VLF	2%
Hypericum perforatum	Perforate St John's-wort	VLF	<1%
Reseda luteola	Weld	VLF	<1%
Rumex obtusifolius	Broad-leaved Dock	R	<1%
Salix fragilis	Crack-willow	VLF	<1%
Sedum sp.	Stonecrop species	VLF	<1%
Senecio vulgaris	Groundsel	VLF	<1%
Sisymbrium officinale	Hedge Mustard	VLF	<1%
Tanacetum parthenium	Feverfew	VLF	<1%
Taraxacum officinale agg.	Dandelion	VLF	<1%
Urtica dioica	Common Nettle	VLA	5%
[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species			

Table 8.2: Plant Species List for Site D

Scientific Name	Common Name	DAFOR[1]	Cover
Acer pseudoplatanus	Sycamore	VLF	<1%
Arrhenatherum elatius	False Oat-grass	VLF	<1%
Agrostis stolonifera	Creeping Bent	VLF	<1%
Artemisia vulgaris	Mugwort	VLF	<1%
Bergenia crassifolia	Elephant-ears	VLF	<1%
Buddleja davidii	Butterfly-bush	VLF	<1%
Cerastium fontanum	Common Mouse-ear	VLF	<1%
Chamerion angustifolium	Rosebay Willowherb	VLF	<1%
Cirsium arvense	Creeping Thistle	VLF	<1%
Cotoneaster microphyllus	Small-leaved Cotoneaster	VLF	<1%
Epilobium montanum	Broad-leaved Willowherb	VLF	<1%
Fraxinus excelsior	Ash	VLF	<1%
Geranium mole	Dove's-foot Crane's-bill	VLF	<1%
Geranium robertianum	Herb-Robert	VLF	<1%
Hedera helix	Ivy	VLA	2%
Holcus lanatus	Yorkshire-fog	VLF	5%
Lolium perenne	Perennial Rye-grass	VLF	<1%
Medicago lupulina	Black Medick	VLF	<1%
Narcissus pseudonarcissus	Daffodil	VLF	<1%
Plantago lanceolata	Ribwort Plantain	VLF	<1%
Prunus sp.	Cherry species	VLF	<1%
Pteridium aquilinum	Bracken	VLF	<1%
Reseda luteola	Weld	VLF	<1%
Rubus fruticosus agg.	Bramble	VLF	5%
Rumex obtusifolius	Broad-leaved Dock	VLF	<1%
Senecio jacobaea	Common Ragwort	O/VLF	5%
Senecio squalidus	Oxford Ragwort	VLF	<1%
Senecio vulgaris	Groundsel	VLF	<1%
Sorbus aucuparia	Rowan	VLF	<1%
Taraxacum officinale agg.	Dandelion	VLF	<1%
Trifolium repens	White Clover	VLF	<1%
Urtica dioica	Common Nettle	O/VLF	5%

[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

Table 8.3: Table of Photographs



Photo 1: Car park at Site C



Photo 2: Boundary vegetation at Site C



Photo 3: Car park at Site D



Photo 4: Boundary vegetation at Site D



Photo 5: Trees at south-western area of Site D



Photo 6: River Irwell (taken 2016)



Photo 7: Underpass



Photo 8: Underpass



Photo 9: Underside of pedestrian footbridge

8.2 Figures

Figure 1: Aerial Image of the Site and its Surrounding Habitats

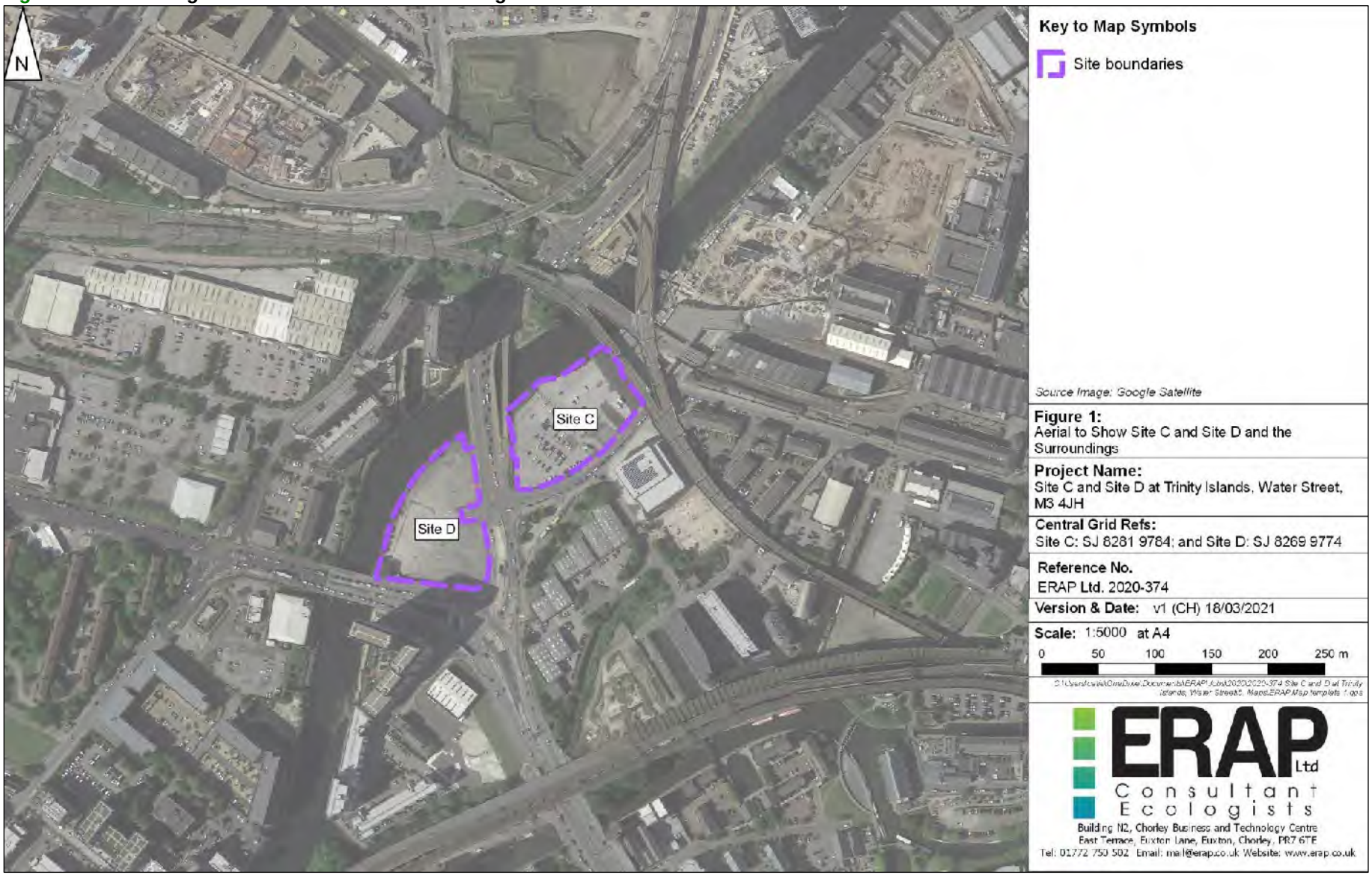
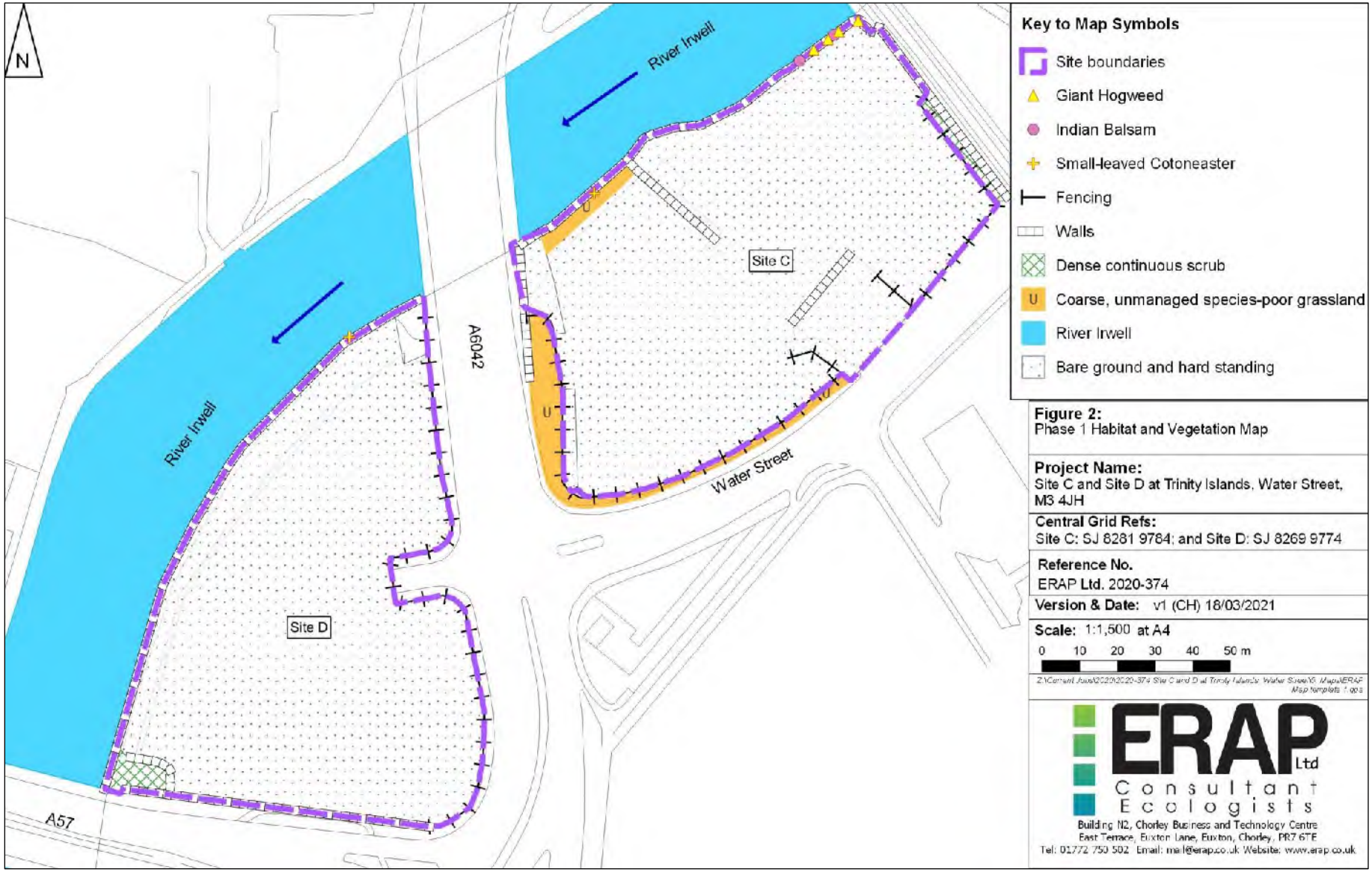


Figure 2: **Phase 1 Habitat and Vegetation Map**



Appendix 5 – Phase 1 Ground Conditions Report

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Phase 1 Desktop Study

On

Trinity Islands, Manchester

For

Manchester Quays Ltd

June 2015

PHASE 1 DESKTOP STUDY

ON

TRINITY ISLANDS, MANCHESTER

FOR

MANCHESTER QUAYS LTD

ISSUED	DESCRIPTION	DATE	AUTHOR	CHECKER
1	Phase 1 Desktop Study Report FINAL	15/06/15	Jason Bradley 	Alex Smiles 
REVISION	**DESCRIPTION**	**DATE**	**AUTHOR**	
A	Updated Development Layout Drawings & Proposed Development Description (Sect 2.11)	23/07/2015		
B	Update development layout and description for amended planning application	27/07/2016		
C	Updated Development Layout Drawings & Proposed Development Description (Sect 2.11)	03/08/2016		
D	Updated Development Layout Drawings & Proposed Development Description (Sect 2.11)	08/12/2016		
E	Updated Development Layout Drawings & Proposed Development Description (Sect 2.11)	27/02/2017		

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1.0 INTRODUCTION

1.1 Background

1.1.1 RºC Consulting has been appointed by Manchester Quays Ltd to conduct a Phase 1 Desktop Study and site walkover across the Trinity Islands development site. It is understood that the site is to be subject to a comprehensive redevelopment to provide a new residential-led, mixed-use neighbourhood comprising residential, restaurant, retail, bar, public realm, landscaping and other amenity uses (the 'Proposed Development').

1.1.2 The Proposed Development will comprise five residential towers that sit on a park-topped podium, ranging in height between 24 and 63 storeys; a basement car park structure is proposed across the bulk of the development site. The Proposed Development layout plans have been provided by CGL Architects and are included within Appendix A; a development description has been provided within Section 2.11 of this report.

1.1.3 The purpose of this desk based study is to provide a preliminary assessment of the site relating to current and historic operations to establish base line geo-environmental and geotechnical conditions. This report presents a factual account and highlights the more pertinent points with interpretation relating to potential sources of soil or ground water contamination that may be present within site soils. The Report supports the planning application for the development site and should also be read in conjunction with Chapter 13 of the Environmental Statement.

1.1.4 The information obtained during this assessment has also been used to collate a Preliminary Conceptual Site model for the Proposed Development to assist with the estimation of risks arising from contaminated land related concerns. Where required this model will form the basis for the future Phase 2 Intrusive Site Investigation works to further refine (and mitigate against) risks posed to future site users.

2.11 Redevelopment Proposals

2.11.1 The proposals involve comprehensive redevelopment of the Site to provide a new residential-led, mixed-use neighbourhood comprising residential, restaurant, retail, bar, public realm, landscaping and other amenity uses (the 'Proposed Development').

2.11.2 The Proposed Development will comprise five residential towers, which sit on a park-topped podium. The buildings vary in height between 22 to 66 Storeys and include a basement car parking structure across much of the building footprint.

2.11.3 The podium levels will incorporate a mix of retail, gym, restaurant, café and bar uses at ground floor together with two levels of residential car parking above. At the top of each podium a selection of residential amenity and commercial uses are accommodated, including retail, restaurant, bar, amenity and social uses to support the residential community above. In addition, on both sites podium-level parks are proposed, with trees, landscaping and water features, linked by a pedestrian bridge over Trinity Way.

2.11.4 The Proposed Development layout plans have been provided by CGL Architects and are included within Appendix A of this report. These plans include a Ground Floor Layout plan (Ref: P15-069_CGL-Z0-00-DR-A-16000); Site Elevations (ref: P15-069_CGL-Z0-EL-DR-A-170E4) and a Basement Plan (ref: P15-069_CGL-Z0-B1-DR-A-160B1).

2.11.5 With reference to the above plans it is noted that the proposed basement extends across the bulk of the site footprint beneath each tower development, although specific level information and construction depth remains unknown at this stage. As such it is likely excavation works to form the basement structures will encounter (and remove) large quantities of made ground from beneath the site, although the precise quantity cannot be reconciled until level and ground investigation information is available.

2.11.6 It is envisaged (given the nature of the development and proposed basement construction) soft landscaping zones are likely to be limited to public realm space and likely to be constructed using planting boxes integrated into the basement ground floor slab.

1.2 Terms of Reference

1.2.1 The desk based environmental assessment was carried out following receipt of an instruction from Mr Graham Skinner of Allied London Ltd.

1.3 Objectives

1.3.1 The objectives of the desk-based study were:

- To characterise the environmental setting of the site, including the geology, hydrogeology and hydrology of the site and surrounding areas from published data
- To identify (where possible) potential sources of ground, groundwater or surface water contamination and/or soil gas (hazardous materials) arising from past and/or current activities at the site and/or neighbouring properties
- To formulate a Preliminary Conceptual Site model and assess the risks posed to identify receptors soil and / or groundwater contamination or ground gas ingress
- As required provide an initial indication of any intrusive site investigation works or remedial works required to ensure the safe redevelopment of the site
- To undertake a preliminary geotechnical assessment of site conditions to identify potential abnormal items that may arise as a result of the site redevelopment

1.4 Scope of Work

1.4.1 The overall scope of work comprised reference to a Landmark 'Envirocheck' report as well as other published sources, and includes:

- Review of published geological, hydrogeological and hydrological information to establish environmental sensitivities at the site and within the surrounding environment
- Completion of a site walkover survey to establish present day site settings and conditions
- Review of historical map information to identify previous usage of the site, its immediate surroundings and search of a commercial environmental database, to identify potential sources of land contamination and potential environmental impacts
- Preparation of a report, outlining the findings and recommendations, including requirements for any further work considered necessary in order to better quantify any environmental hazards identified, and taking account of the site's current status

1.5 Limitations of Study Assessment

1.5.1 The comments made in this report are based on the data available at the time of its completion. Any unusual or conflicting evidence discovered during any future site works must be presented to RºC Consulting as soon as possible so that any implications may be considered.

1.5.2 Additional information, changes in legislation or revised practices may necessitate re-interpretation of part or all of this report. Additionally, site redevelopment and/or a change in end use will require reinterpretation of the assessment.

1.5.3 The accuracy of the data supplied by third parties should be considered in the context of any known site conditions for which RºC Consulting cannot be held liable.

1.5.4 It should be noted that any subsequent revision of the proposed redevelopment or site boundary away from the above mentioned drawing may result in the full or partial re-interpretation of this report and assessment.

1.5.5 The report has been produced by RºC Consulting for the client solely, for the purpose of a review of information for the above mentioned site. It may not be used by any person for any other purpose other than that specified without the express written permission of RºC Consulting. Any liability arising out of its use by a third party for purposes not wholly connected with the above shall be the responsibility of that party who shall indemnify RºC Consulting against all claims costs damages and losses arising out of such use.

2.0 DESK TOP REVIEW

2.0.1 The following chapter provides an overview to most salient findings of our desk based geo-environmental assessment. This information has been used to formulate the collation of a Preliminary Conceptual Site Model (as discussed in Section 3.0) to assess the potential impacts and risks associated with geo-environmental and geotechnical concerns across the site. Supporting information and evidence has been provided within the Appendices and it is recommended reference be made to these documents / plans when reviewing this report.

2.1 Sources of Information

2.1.1 Background information on the site was acquired from the following sources:

- Envirocheck at the Ordnance Survey
- British Geological Survey 1" to 1 mile/1:10'000, solid & drift
- Environment Agency Groundwater Vulnerability Map
- Radon Atlas of England
- Observations from site walkover survey completed on the 26th May 2015
- Review of publically available information for the recently constructed Network Rail Utility Bridge (via the Manchester City Council Planning Portal)

2.2 Site Location and Description

2.2.1 The site is located off Water Street, roughly one mile from Manchester City Centre (NGR: 382760, 397790), and is separated into two portions by the A6042 Inner City Ring Road. Covering a total area of approximately 1.79ha, the sites boundaries comprise the River Irwell and an active railway viaduct to the north; Regent Road and mixed commercial / industrial units to the south and east and the River Irwell to the west. The Inner City Relief road River Irwell Bridge (A6042) bisects the sites centre running in a roughly north to south orientation. At the time of writing no topographical or level information is currently available for the site; however it is believed the site is set at a level between 25 and 26mAOD.

2.2.2 Land use across the parcel of land to the area east of the A6042 comprised a mixture of open tarmac hard standing and the recently constructed River Irwell Utility Pipe Bridge (running parallel to the road bridge). It is understood this portion of the site was formerly used as public car parking and that the facility was closed during 2014 to facilitate the construction of the aforementioned utility bridge. The site was subsequently turned over for use as the construction compound for the utility bridge during and, more recently, as a construction works compound for the adjacent Network Rail Ordsall Chord rail link development.

2.2.3 Land to the west of the A6042 was also recently been employed as car parking, however at the time of the inspection the site was being developed for use as temporary offices and site compound for Network Rail. It is understood Network Rail will be using this portion of the site as their main offices during the construction of the nearby Ordsall Chord rail link and numerous portable office units and associated infrastructure was noted on site at the time of inspection. A reasonable condition tarmac surfacing covers the majority of the site.

2.2.4 Some sparse vegetation (trees) was noted along the perimeter of the River Irwell, adjacent the rail bridge (north), and along the sites eastern boundary. With the exception of construction compound operations and works relating to the Ordsall Chord, no current industrial activity was noted at the time of the site walkover. The sites boundary with the River Irwell to the north and west comprises several masonry river walls, of varying age and construction.

2.2.5 Land use adjacent the site comprises an area to the east used for car parking, and a number of disused industrial buildings which formerly encompassed Manchester Industrial Centre. Immediately adjacent the sites southern extent is Regent Road, and a new residential development (under construction) on Water Street. West of the site is the River Irwell and an area of open green space along with the Campanile Hotel on the opposite bank of the River Irwell. To the north, beyond the rail line land use encompasses an area of car parking, Princes Bridge and an area of residential town houses to the north east.

2.2.6 A selection of photographs showing the site at the time of inspection (June 2015) have been provided within Appendix A.

2.3 Site History

2.3.1 The site history has been compiled by reference to historical Ordnance Survey maps obtained from Envirocheck presented in Appendix B. It should be noted that site boundaries have changed since the construction of the A6042 (Regent Bridge) and adjoining A6143 which now forms the present day eastern site boundary. Therefore certain historic site features are shown to be partially located within the sites current boundary.

On site historical land uses

2.3.2 Earliest mapping records (1851) show the site as an area comprising mixed industrial type operations which include a chemical works (central), storage buildings (central), 'Fustian Dye Works'(north west), office (east), manure pit (east) and boat house (south). The central portion of the site is identified as 'New Quay' and encompasses an associated basin (north east) on the banks of the River Irwell.

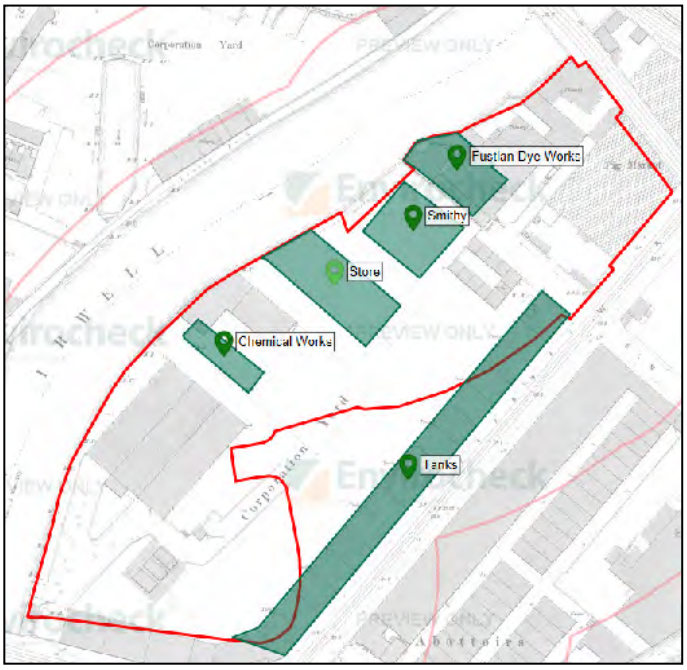


Fig 2.1: 1891's Map Extract with 1850's features overlain

2.3.3 Towards the end of the 19th century (1891) partial redevelopment occurs with the construction of a 'Corporation Yard' which includes a Refuse Destructor / Incinerator (to the south central extent), with 'Irwell Size Works' and a 'Pig Market' (pig sale depot) to the north of the site. Other on-site features of note include chimneys, and an arrangement of tanks along the sites north east to south east perimeter (although no information regarding the use or operation of the tanks is noted).



Fig 2.2: Extracts from 1930's Map Records

2.3.4 During the late 1940s a number of other features are also shown including a paper salvage shed, garage and a section of the refuse destructor as a ruin. Other features of note which are shown during this period include a 'Cattle Pen', 'Hopper', a number of chimneys, and a weigh bridge. The site is cleared during the late 1980s and turned over to public car parking, remaining in operation as car parking through until the present day

2.3.5 In 2006 the site had undergone boundary realignment to form the eastern perimeter which is recognisable in its present day form. Construction of the A6042 (Regent Bridge) to provide city centre access over the River Irwell from the A57 required intersecting through the site south-east to north-west. The bridge passing over the site is raised above ground level, separating the sites north and south portions, although access can be made beneath the Regent Road bridge.

Adjacent historical land uses

2.3.6 Historical land use and operations in the surrounding area generally comprised typical industrial and dockland activity. Table 2.1 (provided below) gives detail as to the most noteworthy industrial activities and features situated in close proximity to the site.

Table 2.1: Site History Overview

Distance (m)	Direction	Description	From	To
1	NW	River Irwell	1851	Present
3	NE	Railway	1851	Present
6	N	Basin	1851	1882
13	SE	Manure pit	1851	1882
17	E	Gravel Pit	1851	1882
23	E	Garage	1891	1909
45	SW	Reservoir conduit	1851	1882
45	SE	Meat Market	1948	1965
53	SW	Water Street dye works	1851	1909
54	W	Regent Bridge Mill	1851	1891
58	W	Regent Road Brewery	1891	1956
79	SE	Elm Street Paper Mill	1851	1931

UXO Risks

2.3.7 It should be noted the 1948 – 1949 historical map indicates that an associated building of the Refuse Destructor, is indicated as a 'Ruin'. This historical map is the subsequent map after 1938 and represents the site post-WWII, and therefore the ruin could suggest the site had been subject to enemy action during WWII.

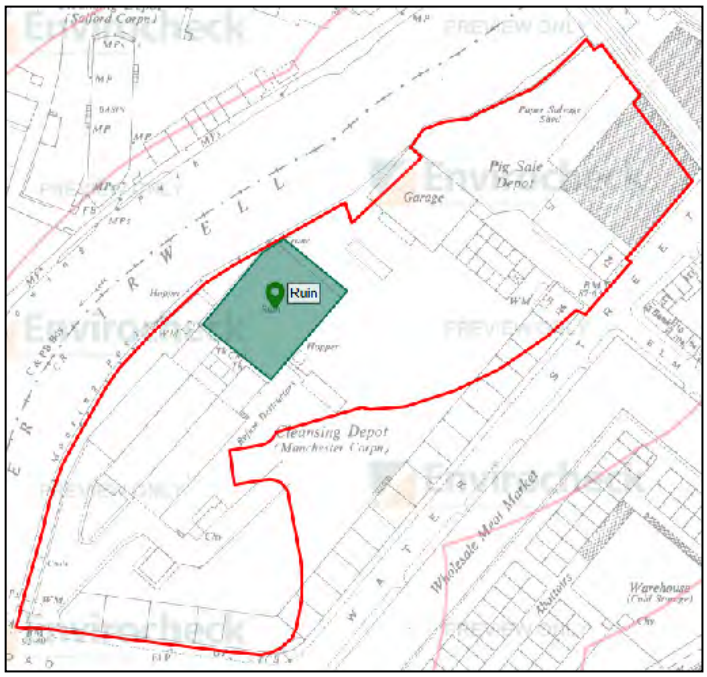


Fig 2.3: Extent of areas cleared as a result of possible WWII enemy action

2.4 Geology

2.4.1 Review of BGS geological map records (Sheet 85) indicate the site is underlain by the following:

Drift Geology: None recorded, potential Alluvium deposits running along the sites boundary with the River Irwell.

Solid Geology: Chester Pebble Beds Formation – Sandstone.

2.4.2 The Envirocheck report included in Appendix C indicates that the site is not located in an area which may be affected by historic Coal Mining or Brine extraction and a Coal Authority report is not required.

2.4.3 However, with reference to the abovementioned geological map records it is apparent the site falls outside an area where Coal Measures bedrock is present at shallow depth. In addition we are not aware of any commercial mineral or below ground mining workings within the Triassic Sandstone formation that underlies the site. As such it is considered a Coal Authority report is not warranted at this time.

2.4.4 A search has also been completed using the BGS Borehole Scans facility to establish what (if any) historic site investigation or borehole data may be available for the development. A total of 4 borehole records have been identified, and are located within 200m north east of the site and relate to ground investigation works associated with the adjacent residential 'Woollam Place'. The findings of the site investigations are described below in Table 2.4 below.

BH ID.	Strata	Depth	Date
SJ89NW641	Made Ground Clay Sandstone	0 – 3.00m 3.00m - 4.50m 4.50m -	31/07/1992
SJ89NW643	Made Ground Sandstone	0 – 2.70m 2.70m –	06/08/1992
SJ89NW642	Made Ground Clay Sandstone	0 – 3.80m 3.80 – 4.50m 4.50m –	04/08/1992
SJ89NW644	Made Ground Sandstone	0 – 2.10m 2.10m –	07/08/1992

Table 2.4: Overview to BGS Borehole records for the area surrounding the site

2.4.5 There are no geological faults or features indicated within 500m of the site.

2.5 Agency and Hydrological

2.5.1 The Envirocheck Groundwater Vulnerability Map indicates the drift geology is classified a Secondary Aquifer A with the underlying sandstone bedrock classed as a Principal Aquifer. The site is not located within one of the Environment Agency Source Protection Zones.

2.5.2 The site is not located in close proximity to a sensitive water abstraction point (e.g. potable water supply well). However, the underlying bedrock aquifer is known to be of significance with regard to local groundwater supply. The nearest general water abstraction point is indicated 333m to the south west relating to 'Cds computer Design Systems Ltd.' Water is abstracted from the surface of the River Irwell, at Irwell Works, Ordsall Lane for use in industrial, commercial, and public services.

2.5.3 The nearest surface water feature is indicated immediately adjacent the site, bounding the western perimeter of the site in the form of the River Irwell. Water quality of this receptor (sample year - 2000) indicates a GQA Grade of "E" (poor) and a flow rate of less than 40 cumecs.

2.5.4 The nearest discharge consent is indicated 2m to the north east held by United Utilities Water Plc, for the release of public sewage - storm sewage overflow into the River Irwell.

2.5.5 A number of historic pollution incidents have been noted in close proximity to the site, the closest being a spillage of mixed detergent chemicals into the Manchester Ship Canal (Category 3 minor incident) 305m south of the site in February 1996. Ten other category 3 minor incidents have previously been reported within a 500m distance of the site, all of which occurred during the 1990s and included the release of oils, unknown sewage and agricultural wastes within the catchment area of the Bridgewater Canal.

2.6 Hazardous Substances

2.6.1 There are no active Control of Major Accident Hazards Sites (COMAH), Explosive Sites, Notification of Installations Handling Hazardous Substances (NIHHS), Planning Hazardous Substance Consents, Radioactive Substance or Planning Hazardous Substance Enforcements within 500m of site.

2.7 Landfill Sites and Other Waste Disposal Facilities

2.7.1 There are 2 historic land fill sites within a 500m radius of the site, the closest of which is indicated 38m to the north of the site in the form of the Wilburn Street historical landfill. Limited / no information regarding the nature or volume of waste deposited in this facility are provided. The British Rail Property Board held the other license which was situated 38m north-west of the site on Oldfield Road, Salford and included land filling of deposited and inert waste, which later ceased operations in 1986.

2.7.2 There are no current operational landfill sites in operation within 500m of the subject site.

2.7.3 There is one registered waste transfer site located within 500m of the site, and is held by Spray Shop Supplies Ltd. (87m east) located on Manchester Trading estate, Water Street. The max input rate is indicated as <10,000 tonnes/year (very small) for the authorised waste transfer of solvents and thinners.

2.8 Industrial Land Use

2.8.1 Contemporary trade directory entries indicate there are no industrial or potentially contaminative activities on the site. Active entries for the immediate area indicate activity includes 'the Great Man Beer' Brewery situated 149m south-east of the site, other active entries within 500m of the site comprise Printers, fuel stations, toiletries manufacturers, cleaning services, and gas suppliers.

2.8.2 The nearest fuel station entry is indicated 151m to the west located on Regent Road comprising the active Sainsbury's (Salford) fuel filling station. In addition, another fuel station is indicated 304m west of the site, operated by Shell, also located on Regent Road, Salford.

2.9 Ecological Setting & Invasive Plant Species

2.9.1 The site is not said to be located on or adjacent an area of Greenbelt or within an area of special scientific / biological interest. The Ecological Assessment of the site has indicated the presence of Giant Hogweed and Indian Balsam adjacent to the site on the bank of the River Irwell.

2.10 Former Site Investigation information

2.10.1 With the exception of the aforementioned British Geological Survey borehole records, no site investigation information is currently available for the study site.

2.10.2 Reference has been made to the Manchester City Council planning portal to ascertain what recent applications have been submitted for the study site and review any salient accompanying plans or reports. A number of planning applications are noted for the site although only a single record contains plans or reference to the sites geology, relating to the construction of the aforementioned Utility Pipe Bridge.

2.10.3 This scheme (application ref: 103409/FO/2013/C1) includes a general foundation arrangement (plan ref: 127523-A-ECV-DRG-PBL-000103) indicating the new bridge is constructed using a piled foundation solution and that the underlying Sandstone Bedrock is assumed to occur at a depth circa 20.8mAOD beneath the site (or 5m below existing ground level.). No other supporting site investigation information, borehole log records etc. is provided as part of the application.

2.10.4 This geological sequence indicated above is typical of conditions noted across the southern edge of Manchester City Centre, comprising relatively shallow granular fluvio glacial deposits overlying Sandstone bedrock at depths circa 3-5m. Similar conditions are likely beneath the current development site.

3.0 PRELIMINARY CONCEPTUAL SITE MODEL

3.0.1 The information obtained during the desk study has been reviewed to establish the Preliminary Conceptual Model for the site. This model is based around the Source / Pathway / Receptor methodology as outlined in Fig 3.0.

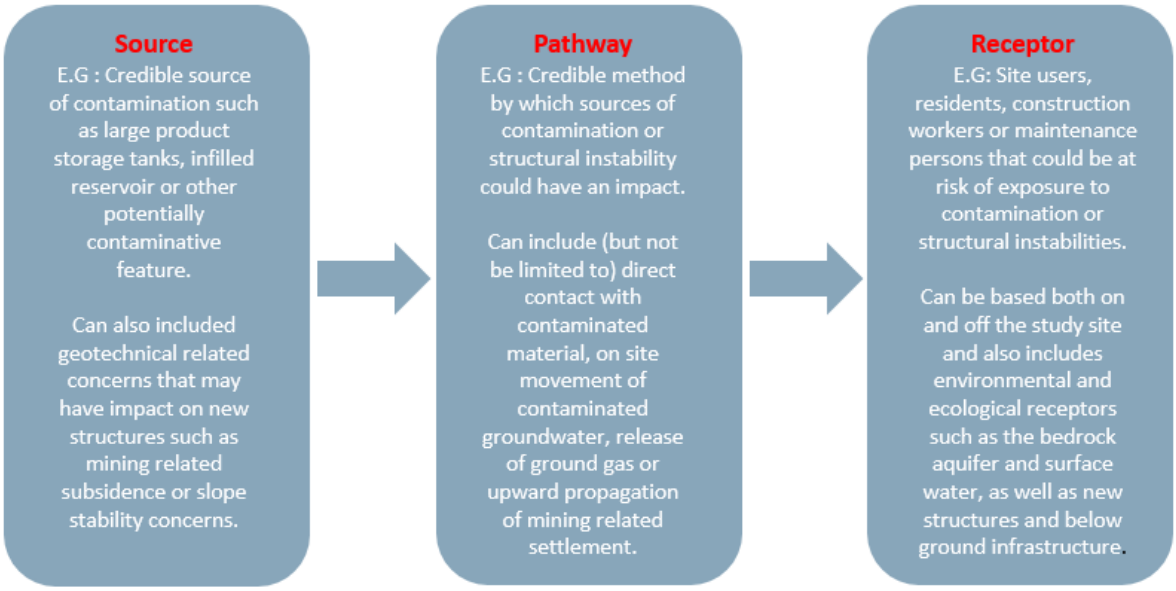


Figure 3.0 Source Pathway Receptor Diagram

3.0.2 Risk assessment is the process of collating known information on a hazard or set hazards in order to establish actual or potential risks to receptors. The receptor may be human health, controlled waters, a sensitive local ecosystem or even construction materials. Receptors can be connected with the hazard under consideration via one or several exposure pathways (e.g. the pathway of direct skin contact and oral exposure).

3.0.3 Risks are generally managed by isolating or removing the hazard, isolating the receptor, or by intercepting the exposure pathway. Without the three essential components of a source (hazard), pathway and receptor, there is deemed to be no risk. In other words, the mere presence of a hazard at a site does not mean that there will necessarily be risks.

3.0.4 CLEA CLR 8 provides a selection of contaminants that may be relevant for the assessment of contaminated land, based on site usage, because they are likely to be found on a large number of industrial sites in the UK and have the potential to affect human health and the environment. The CLEA CLR 8 documentation, along with other relevant guidance, forms the basis against which the site has been assessed.

Potential Sources

3.0.5 Based on the current / historical uses of the site, and the surrounding area, the following potential sources of contamination / abnormal items have been identified:

On site contamination

3.0.6 Arising as a result of previous industrial activity including:

- Heavy metals, Poly Aromatic Hydrocarbons (PAH) and Asbestos fragments associated with building demolition and the backfilling of below ground structures
- Hydrocarbon (fuel and lubrication oils) associated with garage and council depot operations that may be present in plumes beneath the site.
- Heavy metals, PAH, Dye stuffs, Volatile and Semi Volatile Organic Compounds associated with historic chemical and dye work operations
- Point sources of contamination arising as a result of historic site features including unspecified storage tanks, a refuse destructor, chimneys, castle pens and manure pits. Range of contaminants could include Heavy metals, PAH's and fuel range hydrocarbons.

On site generation of ground gas

3.0.7 Associated with the backfilling of basements, manure pits, dockland basins, machine pits and other below ground structures or infilled land across the site.

Offsite migration

3.0.8 Specifically the release and movement of mobile contaminants towards adjacent River Irwell.

On site migration of ground gases

3.0.9 Relating to nearby landfill sites situated in close proximity to the site.

UXO's

3.0.10 Risk of exposure to Unexploded World War 2 Ordinance as a result of enemy action.

Potential Pathways and Receptors

3.0.11 The following potential pathways and receptors have been identified for the above potential sources of contamination:

- End users of the site (future residents and users) could be at risk of exposure to contaminated soils and materials at the site via ingestion, direct contact and inhalation of contaminated dust, vapours or hazardous gas.
- Construction persons could also be at risk of exposure to contaminated soils via ingestion, direct contact and inhalation of contaminated dust / vapours / hazardous gas.
- Leaching of potential contaminants into bedrock aquifer beneath the site or adjacent River Irwell water course.
- Nearby commercial office developments, business and the general public could be at risk of exposure to windblown contaminated dust.
- Below ground structures such as concrete foundations or water supply pipe work could be at risk of chemical attack and damage as a result of aggressive ground conditions.

Assessment of Risk –Linkages

3.0.12 Risk is normally defined by the consequences of the risk (i.e. severity) and the probability of the risk occurring. For each pollutant linkage both the probability and severity is assessed to determine whether there may be an unacceptable risk. Risk is classified as follows:

- Low - no action required
- Medium - some mitigation measures may be required
- High - mitigation measures definitely required

3.0.13 Table 3.1 (provided overleaf) assesses and summarises the pollutant linkages that may exist at the site; the assessment has assumed that the site is to be redeveloped for mixed apartment style Residential led end uses with basement structures.

TABLE 3.1: PRELIMINARY CONCEPTUAL SITE MODEL

Potential Sources		
Contamination Source	**Risks Posed**	**Comment**
Current Land Use	Low	The site is covered in hard standing and is unlikely to be significantly impacted by current operations. Fuel or product storage within the Network Rail compound has the potential to create localised hotspots, although the actual risks will be low owing to the aforementioned hard standing coverage.
Historical Land Use	Medium	**On Site** The site has been used for a range of heavy industrial activities including dye works, a waste treatment facility, garages, a council depot and other potentially contaminative activities. It is highly likely deep areas of made ground and contamination hot spots will be present within site soils as a result.
	Low to Medium	**Off Site** A number of landfill sites are indicated within close proximity to the site and a theoretical risk of gas ingress from these features is evident. However, the actual nature of risks is likely to be low owing to the time that has elapsed since closure of landfills and the cut off effect of the River Irwell water table.
Proposed Land Use	Low	The site is to be developed for high rise mixed residential led end uses and is unlikely to impact on soil or groundwater quality.
Ground Gas	Medium	Credible sources of ground gas ingress have been identified on site and will require further investigation and, as necessary, remedial measures.
Off-site Sources	Low to Medium	A number of sources of ground gas has been identified in close proximity to the site including an infilled gravel pit and two historic landfill sites.
Potential Receptors		
Human Health– Construction Personnel		Construction persons are considered to be at greatest risk of exposure to contaminants during the sites redevelopment as they are most likely to come into frequent contact with potentially contaminated soils and groundwater.
Human Health –Future Residents		Future residents and site users are considered at risk of exposure to contaminated soils whilst using any public realm, landscaped or garden spaces proposed as part of the development. In addition this group may also be at risk of exposure to contaminants via the consumption of any produce grown across the site in communal gardens or allotment plots.
Off-site properties – Residential developments and other businesses.		Users and residents of nearby developments and busy thoroughfares will be at risk of exposure to wind blow contaminated dust during the construction process.
Controlled waters - Surface waters		The River Irwell forms the sites northern and western boundary and will be at risk of exposure to contaminants via direct surface run-off and groundwater flows.
Controlled waters – Bedrock Aquifer		The underlying Principal bedrock aquifer is at risk of exposure to contaminated groundwater and leachate arising as a result of historic industrial activity.

Cont'd over leaf

TABLE 3.1: PRELIMINARY CONCEPTUAL SITE MODEL (Cont'd)		
Potential Pathways		
Pathway route	**Likelihood of linkage**	**Reason**
Direct dermal contact, ingestion and inhalation of contaminated soil / dust	Medium	**Construction Workers:** A comprehensive program of site investigation works will be required to identify sources of contamination beneath the site and design appropriate remedial measures. This information will be essential to the protection of Construction Workers, particularly when designing earth works, basement and foundation excavations.
	Low to Medium	**Future site users:** As with construction persons a detailed understanding as to the form and spatial distribution of contaminants beneath the site will be required to estimate risks posed. The use of a clean soil capping system is likely within all new soft landscaping and garden plots to break exposure pathways with contaminated soils.
Leaching of contaminated soil and impact to Aquifer beneath site	Medium	Limited drift deposits are likely to be present beneath the site and, given the proximity of the River Irwell, it is likely these deposits will be of a permeable granular nature. Further assessment of groundwater quality within both soils and bedrock will be necessary to facilitate a thorough risk assessment of risks posed to the bedrock aquifer.
Migration of contaminated groundwater into surface water features	Medium	As with protection of the bedrock aquifer, an understanding of groundwater flows and quality will be required to ascertain risks posed to the River Irwell. In addition due consideration and protection of this water course will be required during the construction period to prevent surface run-off of any spillages that may occur.
Ground Gas	Medium	Credible sources of ground gas generation have been identified on and in close proximity to the site. An assessment of the sites gas regime will be necessary to quantify risks posed.
Below ground structures and pipe works	Low to Medium	The use of protective water supply pipe work and Sulphate resistant concrete may be required depending on the nature and extent of any contaminants that are present beneath the site.
Off site receptors	Low	Good site practices during the construction process, and particularly dust suppression measures, will be required to reduce risks posed.

4.0 CONCLUSIONS & RECOMENDATIONS

4.01 The desk-based assessment has identified the following:

- Situated on the banks of the River Irwell at an elevation circa 25mAOD, the site currently comprises an area of open tarmac hard standing the most recent operation of which was as a car park and construction compound. The site is bisected through its centre by the Inner Relief Ring Road in a roughly north to south orientation.

- Historical map records indicate the site has been used for a range of potentially contaminative end uses including a Dye Works, Chemical Works, a Black Smiths, a Corporation Yard, a Garage, a Paper Salvage Company and a Pig Market. In addition a number of point sources of contamination are noted including manure pits, un-specific tank structures, chimneys, cattle pens and a refuse destructor. A gradual de-industrialisation is noted across the site during the post war era with only the Council Yard and Refuse Destructor remaining evident. These developments are cleared during the 1990's and the site turned over for use as car parking. It is likely the underlying soils (and possibly groundwater) have been impacted as a result.

- Historic land uses within the immediate vicinity of the site comprises a mixture of industrial and wharf side related end uses, features of note include railway land associated with Liverpool Road Goods Station, manure and gravel pits, garages, dye works, cotton mills and garages.

- Although no site investigation information is available for the site, plans relating to the construction of a Utility Pipe Bridge toward the sites centre indicate the Sandstone bedrock occurs at a depth circa 5.0m below ground level beneath the site (circa 20mAOD.).

- The site is located within a relatively low risk environmental setting and is unlikely to be impacted or affected by nearby current or historic industrial activities. However, the proximity of the River Irwell to the north will be of concern during the development process when there will be an increased potential for contaminants to be disturbed and mobilised. Due consideration and mitigation will be required during the construction process to reduce the risks posed.

- Portions of the site are annotated as "Ruins" on historical map records and are likely to have been subject to enemy action. A UXO Assessment should be completed across the site by suitably qualified specialists to further assess risks posed.

4.0.2 With reference to the above it is noted the site has the potential to impact on identified receptors, both during the construction process and as part of its subsequent operation. In addition the site locality with respect to the River Irwell will require further consideration, both in terms of risks posed from contaminant migration from the site to this water course as well as the potential impact of groundwater forces on new structures.

4.1 Development considerations & recommendations for further works

4.1.1 It is recommended that a program of site investigation works be completed to further investigate the quality and composition of soils with respect to risks posed by sources of contamination and ground gas ingress. Consideration should also be given to establishing the foundation design parameters and sufficient geotechnical information to support a new building design.

4.1.2 Judgemental borehole placement should be deployed to target potential sources of contamination identified during this study and specifically in areas of known former industrial activity (e.g. chemical works, refuse destructor etc).

4.1.3 A detailed assessment of the site hydrogeological regime will also be required and should include (and not be limited to) the installation of groundwater monitoring wells sealed into appropriate made ground / natural soils / bedrock response zones to identify groundwater level and quality. Given the potential for basement structures within new development it is also recommended the in situ monitoring of groundwater be completed over a representative study period to establish resting water levels and fluctuations.

4.1.4 The presence of below ground obstructions, structures, remnant basements, foundations etc. is likely beneath the site and should be considered as part of the design process. Due consideration to the further assessment of these features should be given during the design of any site investigation works.

4.1.5 The presence of possible Unexploded Ordinance has been identified on site and it is recommended a suitably qualified specialist be appointed to further assess risk posed.

4.1.6 Copies of this report, and all associated appendices, should be issued to the Local Planning Authority in support of the site planning application. Any comments received should be brought to the attention of RºC Consulting for consideration and comment.

APPENDIX A - SITE PHOTOS AND DRAWINGS

3233 St. Johns MP Southern Site

Photo 1



Photo 2



Photo 3



Photo 4



Photo 1 – Looking east towards the site from the A6042
Photo 2 – Looking east towards the site from the A6042 and the Irwell River wall in the foreground
Photo 3 – Looking north east across the site from the A6042
Photo 4 – Looking south east across the site toward the perimeter bound by the A6143

ROC CONSULTING

EARTH SCIENCES DIV SKETCH

INFORMATION

Job No:	3233
Project Title:	
Sketch No:	ESK01
Sketch Title	Site Photos
Drawn by:	JB – 26/05/15

3233 St. Johns MP Southern Site

Photo 5



Photo 6



Photo 7



Photo 8



Photo 5– Looking south across the site toward the A6042 from a central position on the site.
Photo 6 – Looking south west across the site toward the A6042 underpass from a central position on the site
Photo 7 – Looking north west across the site toward the XXXX railway bridge
Photo 8 – Looking south west toward the A6042 and underpass from the west of the site.

R⊙C CONSULTING

EARTH SCIENCES DIV SKETCH

INFORMATION

Job No:	3233
Project Title:	
Sketch No:	ESK01
Sketch Title	Site Photos
Drawn by:	JB – 26/05/15

3233 St. Johns MP Southern Site

Photo 9



Photo 10



Photo 11



Photo 12



Photo 9 – Looking north east across the site toward the A6042 from the A57.
Photo 10 – Looking north across the site toward the River bound perimeter from the A57.
Photo 11 – Looking south across the site from the A6042.
Photo 12 – Looking west across the site toward the River Irwell bound perimeter from the A6042.

R⊙C CONSULTING

EARTH SCIENCES DIV SKETCH

INFORMATION

Job No:	3233
Project Title:	
Sketch No:	ESK01
Sketch Title	Site Photos
Drawn by:	JB – 26/05/15

3233 St. Johns MP Southern Site

Photo 13



Photo 14



Photo 13 – Looking south east across the site toward the River Irwell perimeter from the A6042.
Photo 14 – Looking south across the site toward the site access point from the A6042

R∂C CONSULTING

EARTH SCIENCES DIV SKETCH

INFORMATION	
Job No:	3233
Project Title:	
Sketch No:	ESK01
Sketch Title	Site Photos
Drawn by:	JB – 26/05/15



All structural positions TBC

1 00 - Ground Floor - GA
1 : 500

N

0m 10m 20m 30m 40m 50m

SCALE BAR 1:500 @ A1
SCALE BAR 1:1000 @ A3

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NOTES

-Do not scale from this drawing, except for planning purposes.
-Check all dimensions on site.
-Subject to survey.
-Subject to site inspection.
-Site boundary lines are indicative only.

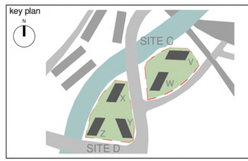
Legend

- Ancillary
- Commercial - A1
- Commercial - A3/A4
- Corridor
- D2
- D2 - Gym
- Educational Facility
- Office - B1
- Public
- Residential - Communal
- Vertical Circulation

Rev	Date	By	Description
C	02.12.2016		PLANNING
B	31.10.2016		PLANNING
A	02.08.2016		PLANNING
-	29.07.2016		PLANNING

Revision Schedule

key plan



ALLIED LONDON

project
TRINITY ISLANDS
TRINITY WAY, MANCHESTER

title
PROPOSED GROUND FLOOR

drawing status
PLANNING

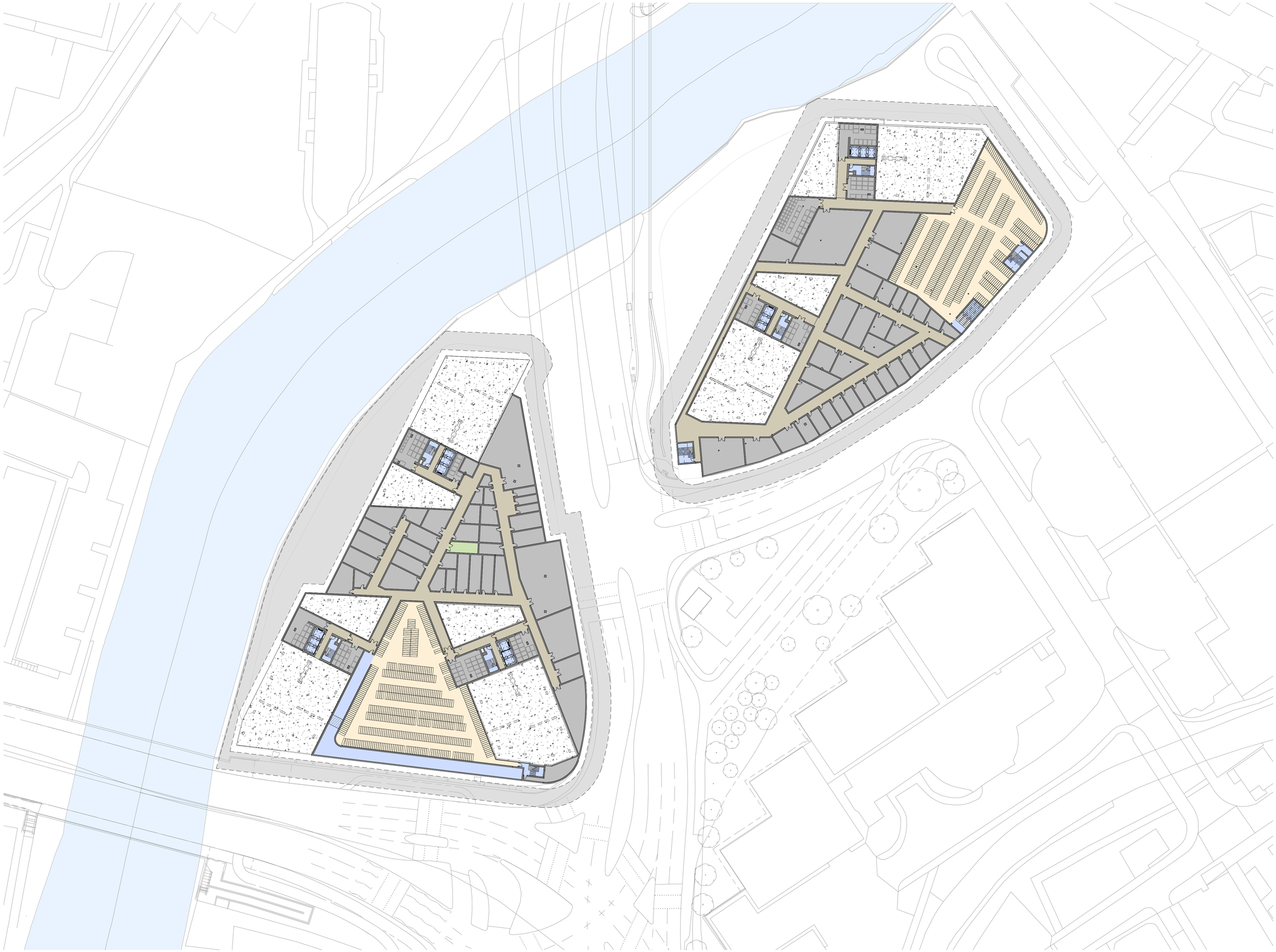
contract no. -	scale 1 : 500 @ A1
client ref. ALLIED LONDON	date JULY 16
drawn by LD	checked by GJ

project no.	drawing number	revision
P15-069	CGL-Z0-00-DR-A-16000 (originator -zone -level -type -role -number)	C

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-Site boundary lines are indicative only.

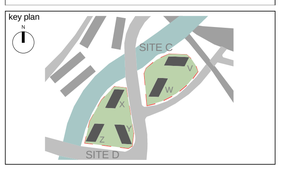
Legend

- Ancillary
- Corridor
- Residential - Communal
- Storage
- Vertical Circulation

Rev	Date	By	Description
B	13.12.2016		PLANNING
A	02.12.2016		PLANNING
-	29.07.2016		PLANNING

Revision Schedule

key plan



ALLIED LONDON

project
TRINITY ISLANDS
TRINITY WAY, MANCHESTER

title
PROPOSED BASEMENT PLAN

drawing status
PLANNING

contract no. -	scale 1 : 500 @ A1
client ref. ALLIED LONDON	date JULY 16
drawn by LD	checked by GJ

project no.	drawing number	revision
P15-069	CGL-Z0-B1-DR-A-160B1 (originator -zone -level -type -role -number)	B

1 B01 - Basement - GA
1 : 500

N

0m 10m 20m 30m 40m 50m

SCALE BAR 1:500 @ A1
SCALE BAR 1:1000 @ A3

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1 Proposed Elevation - Water Street - Colour

1 : 500

0m 10m 20m 30m 40m 50m

SCALE BAR 1:500 @ A1
SCALE BAR 1:1000 @ A3

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NOTES

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-Check all dimensions on site.
-Subject to survey.
-Subject to site inspection.
-Site boundary lines are indicative only.

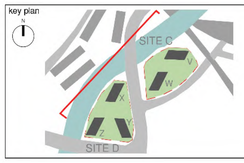
MATERIAL PALETTE

1. Vision glass
2. Glass fronted shadow box spandrel panel
3. White reconstituted stone rainscreen
4. Aluminium rainscreen panel PPC finished to metalic smoked silver [solid panel]
5. Aluminium rainscreen panel PPC finished to metalic smoked silver [perforated panel]
6. Aluminium reveal or fin PPC to one of a range of accent colours
7. In-situ concrete with fair faced finish
8. Aluminium fins PPC finished to metalic smoked silver
9. Aluminium rainscreen panel PPC finished to range of accent colours

Rev	Date	By	Description
B	06.02.2017	EMF	Tower Links Removed
A	31.10.2016		PLANNING
-	29.07.2016		PLANNING

Revision Schedule

key plan



ALLIED LONDON

project
TRINITY ISLANDS
TRINITY WAY, MANCHESTER

title
PROPOSED ELEVATION -
WATER STREET - COLOUR

drawing status
PLANNING

contract no.	scale
-	1 : 500 @ A1
client ref.	date
ALLIED LONDON	JULY 16
drawn by	checked by
LD	GJ

project no.	drawing number (originator -zone -level -type -role -number)	revision
P15-069	CGL-Z0-EL-DR-A-170E4	B

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APPENDIX B - HISTORICAL MAPS

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit
Sand Pit
Other Pits
Quarry
Shingle
Orchard
Osiers
Reeds
Marsh
Mixed Wood
Deciduous
Brushwood
Fir
Furze
Rough Pasture
Arrow denotes flow of water
Trigonometrical Station
Site of Antiquities
Bench Mark
Pump, Guide Post, Signal Post
Well, Spring, Boundary Post
285 Surface Level
Sketched Contour
Instrumental Contour
Main Roads
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
Sunken Road
Raised Road
Road over Railway
Railway over River
Railway over Road
Level Crossing
Road over River or Canal
Road over Stream
Road over Stream
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy.
County Borough Boundary (England)
Co. Burgh Bdy.
County Burgh Boundary (Scotland)
R.D. Bdy.
Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Electricity Transmission Line
Pole
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

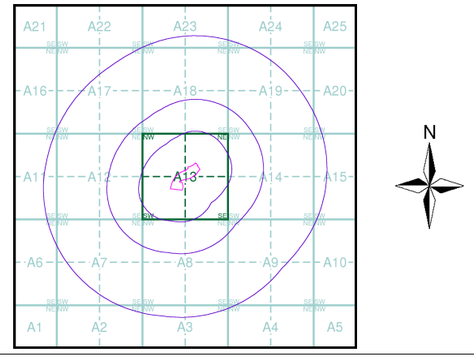
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

RoC CONSULTING

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848	3
Cheshire	1:10,560	1882	4
Lancashire And Furness	1:10,560	1894 - 1896	5
Lancashire And Furness	1:10,560	1909	6
Lancashire And Furness	1:10,560	1923	7
Lancashire And Furness	1:10,560	1931 - 1932	8
Lancashire And Furness	1:10,560	1938	9
Ordnance Survey Plan	1:10,000	1956	10
Ordnance Survey Plan	1:10,000	1972	11
Manchester	1:25,000	1975	12
Ordnance Survey Plan	1:10,000	1980	13
Ordnance Survey Plan	1:10,000	1985	14
Ordnance Survey Plan	1:10,000	1989	15
Ordnance Survey Plan	1:10,000	1994	16
10K Raster Mapping	1:10,000	1999	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2015	19

Historical Map - Slice A



Order Details

Order Number: 67439542_1_1
Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 1000

Site Details

Zone 9, St Johns Quarter, Water Street, MANCHESTER, M3 4JU

Landmark Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Fireproof Building
- Prominent Fireproof Building
- Non-fireproof Building
- Non-fireproof Building (non-dwelling)
- Factory, mill, and flour mill, with chimneys
- Factory, mill, and flour mill, without chimneys
- Power Station, drawn to scale
- Hydroelectric Power Station
- Radio Station, drawn to scale
- Telephone Station, drawn to scale
- Abandoned Open-pit Mine or Quarry
- Open-pit Salt Mine
- Pit
- Oil Deposit or Well
- Oil Seepage
- Tailings Pile
- Fuel Storage Tanks
- Natural Gas Tank
- Bench Mark
- Drill Hole
- Burial Mound
- Triangulation Point on Burial Mound
- Single-track Railroad
- Double-track Railroad and Station Building
- Coniferous Forest
- Deciduous Forest
- Mixed Forest
- Lawns
- Citrus Orchard
- Wet Ground
- Scattered Vegetation

243,8 — Values for prominent elevations

186.0 — Numbers for spot elevations, depth soundings, contour lines, etc.

0,2 — Velocity of the current, width of river bed, depth of river

Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	ъ (–)
Д д (D)	Л л (L)	У у (U)	ы (Y)
Е е (E)	М м (M)	Ф ф (F)	ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Partly Demolished Buildings
- Demolished Buildings
- Built-Up Area with Fireproof Buildings Predominant
- Built-Up Area with Non-Fireproof Buildings Predominant
- Individual Fireproof Building
- Prominent Industrial Building
- Individual Dwelling, Fireproof
- Ruins of an Individual Dwelling
- Factory or Mill Chimney
- Factory or Mill with Chimney
- Factory or Mill without Chimney
- Mine or Open Pit Mine
- Operating Shaft or Mine
- Non-Operating Shaft or Mine
- Salt Mine
- Tailings Pile
- Pit
- Stone Quarry
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station
- Cemetery
- Burial Mound (height in metres)
- Triangulation Point on Burial Mound
- Triangulation Point
- Bench Mark
- Bench Mark (monumented)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Main Highway
- Highway under Construction
- Improved Dirt Road (former truck road)
- Double-track Railroad with First Class Station
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment
- Direction and velocity of current
- Well
- Water Reservoir or Rain Water Pit
- Spring
- Isobath with value
- Heavy (Index) Contour Line
- Contour Line and Value
- Half Contour Line
- Spot Elevation Value
- Coniferous
- Deciduous
- Mixed
- Scrub

Key to Numbers on Mapping

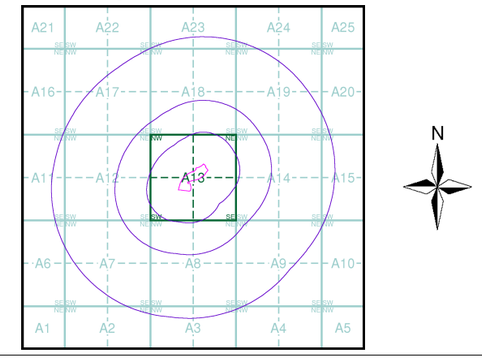
SJ89_Manchester

No.	Description
1	Airfield/Airport
6	Railway Station
62	Factory (Gas)
94	Factory (Metal Works)
158	Police Station/Headquarters
195	Railway Station (Freight)
197	Railway Station

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848	3
Cheshire	1:10,560	1882	4
Lancashire And Furness	1:10,560	1894 - 1896	5
Lancashire And Furness	1:10,560	1909	6
Lancashire And Furness	1:10,560	1923	7
Lancashire And Furness	1:10,560	1931 - 1932	8
Lancashire And Furness	1:10,560	1938	9
Ordnance Survey Plan	1:10,000	1956	10
Ordnance Survey Plan	1:10,000	1972	11
Manchester	1:25,000	1975	12
Ordnance Survey Plan	1:10,000	1980	13
Ordnance Survey Plan	1:10,000	1985	14
Ordnance Survey Plan	1:10,000	1989	15
Ordnance Survey Plan	1:10,000	1994	16
10K Raster Mapping	1:10,000	1999	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2015	19

Russian Map - Slice A



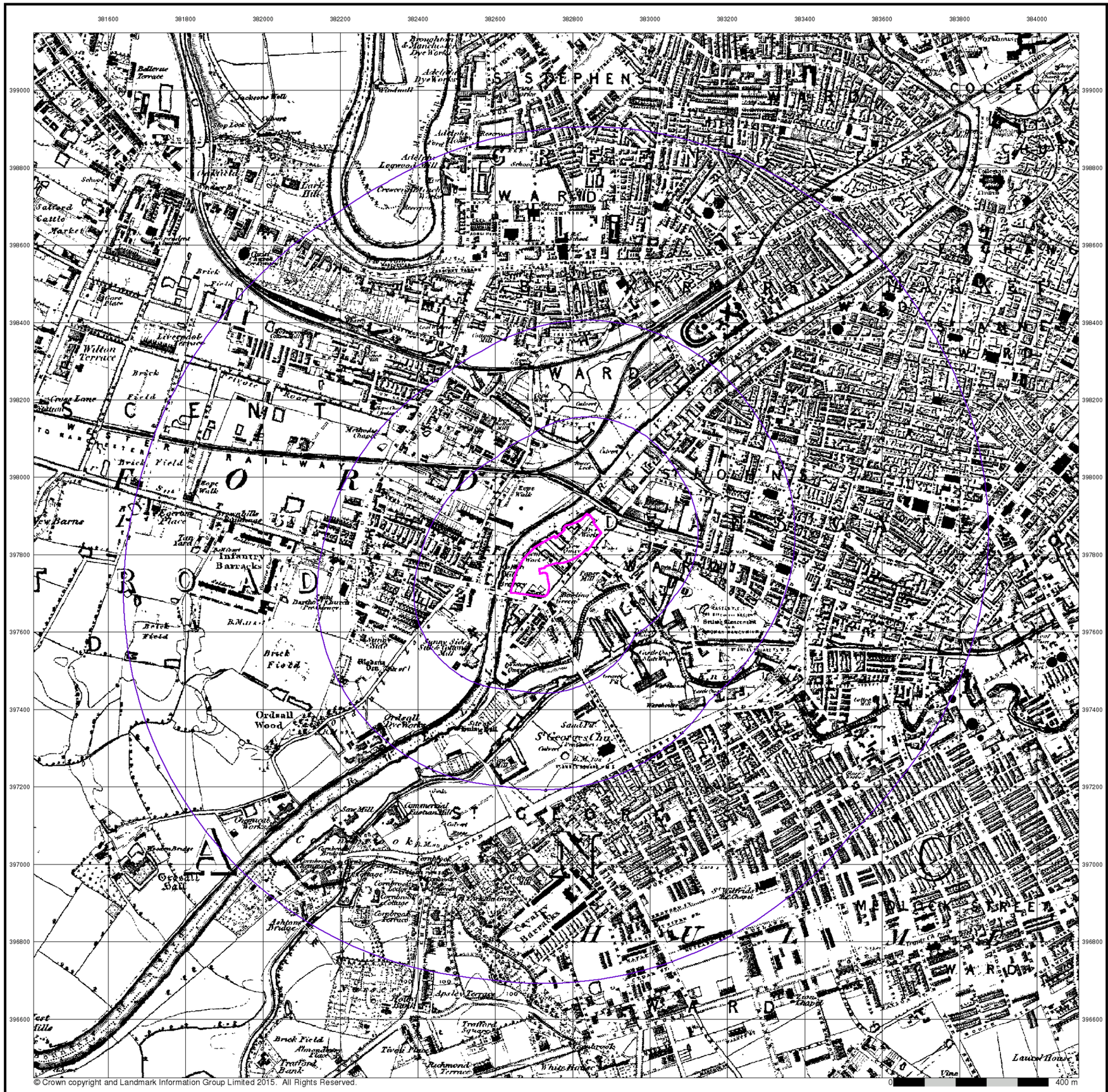
Order Details

Order Number: 67439542_1_1
Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 1000

Site Details

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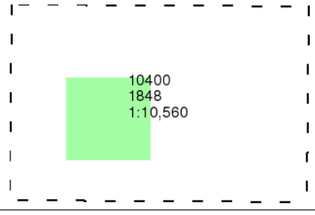
Lancashire And Furness

Published 1848

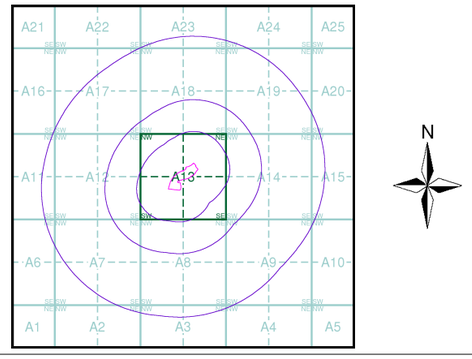
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

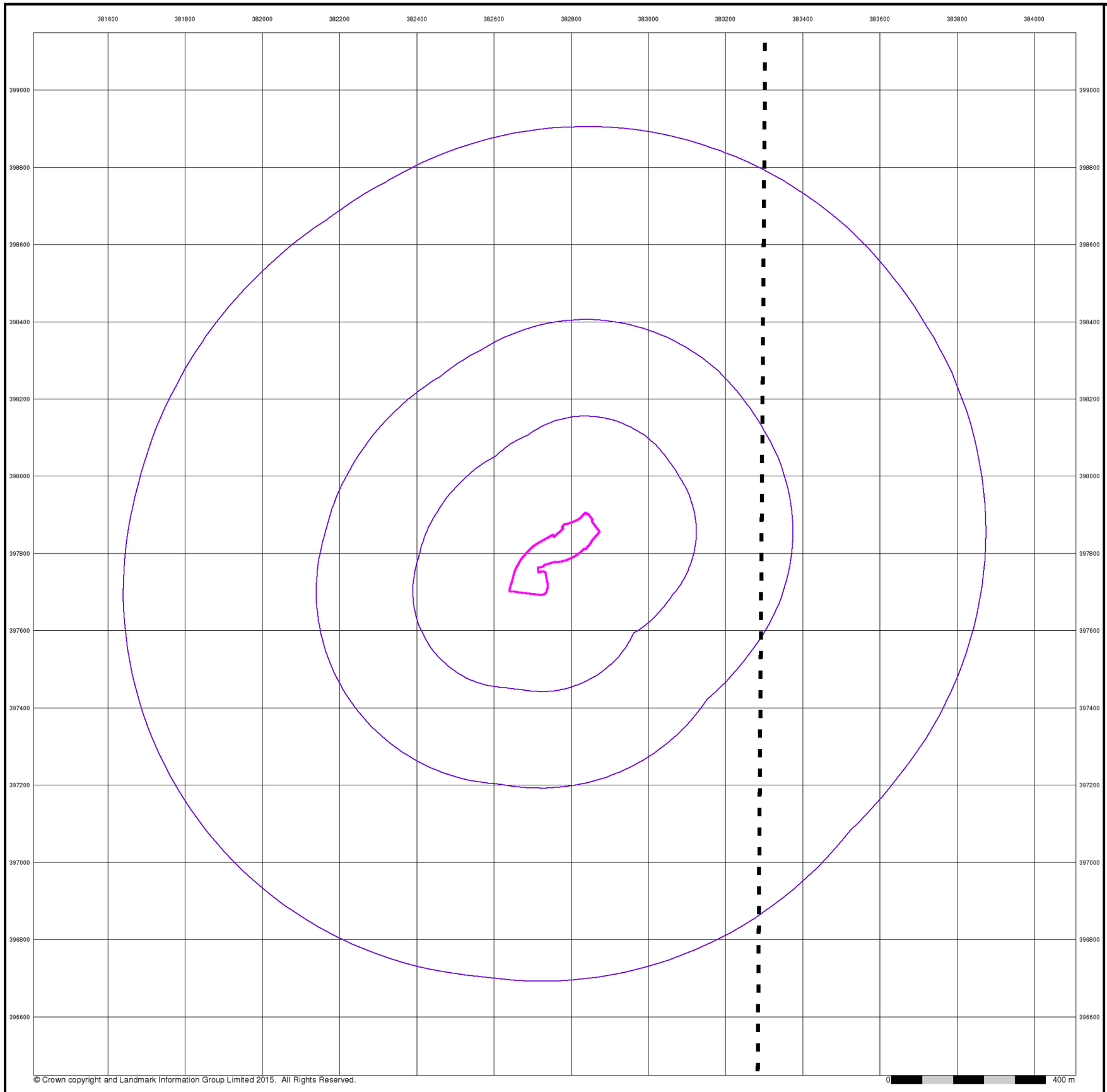
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Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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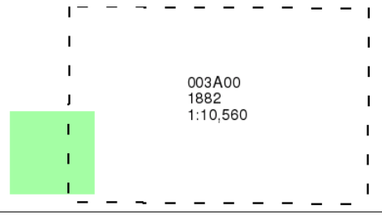
Cheshire

Published 1882

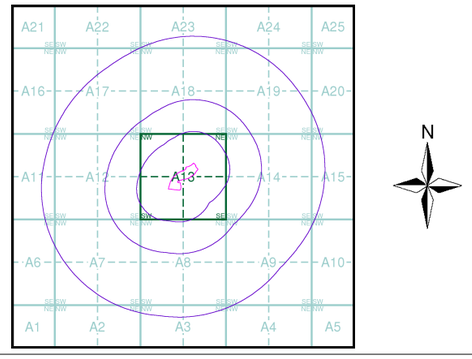
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

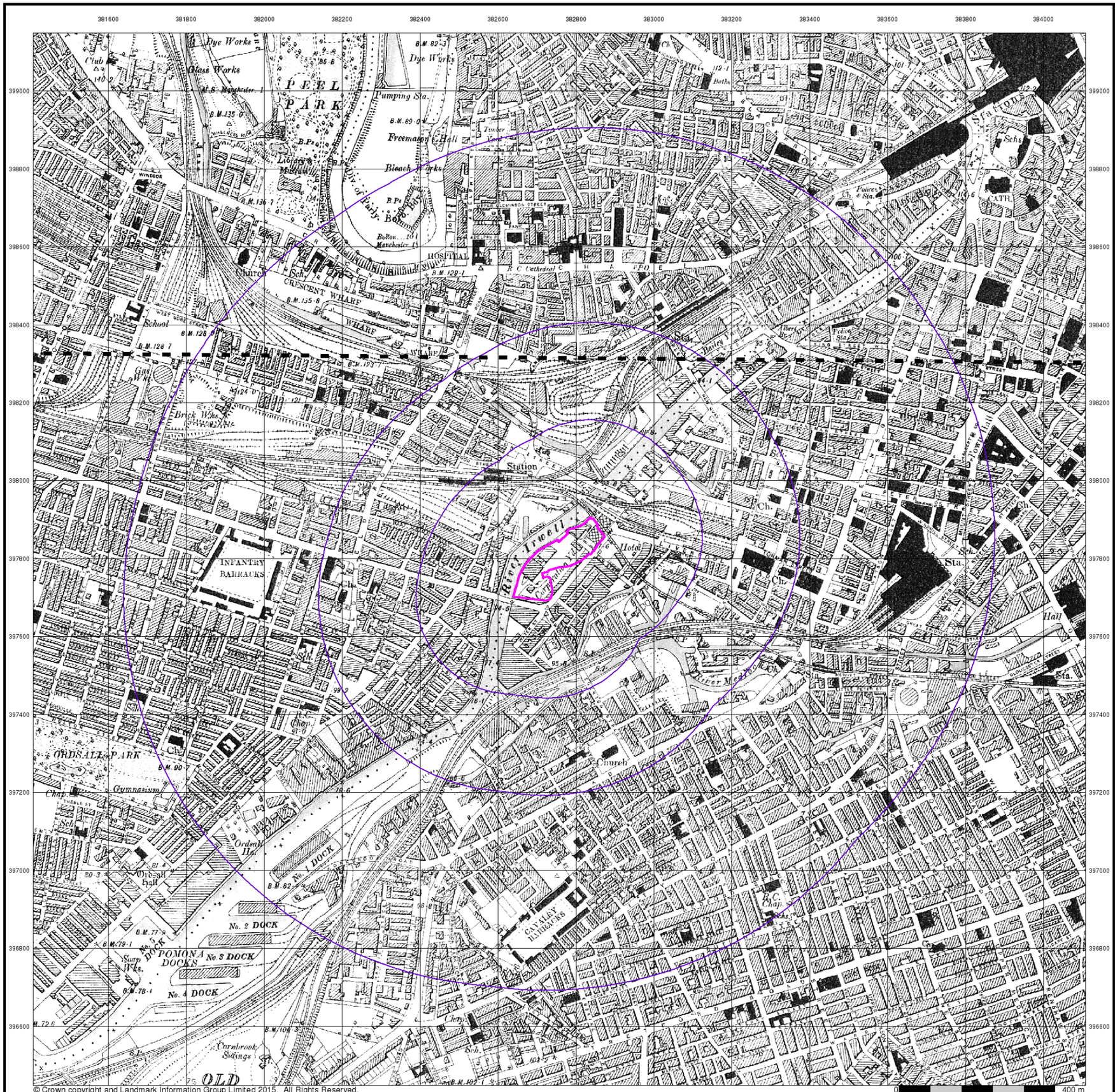
Order Number:	67439542_1_1
Customer Ref:	3233
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Site Area (Ha):	1.96
Search Buffer (m):	1000

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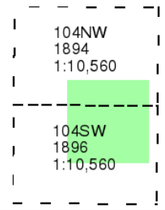
Lancashire And Furness

Published 1894 - 1896

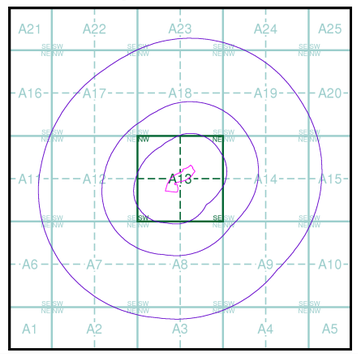
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

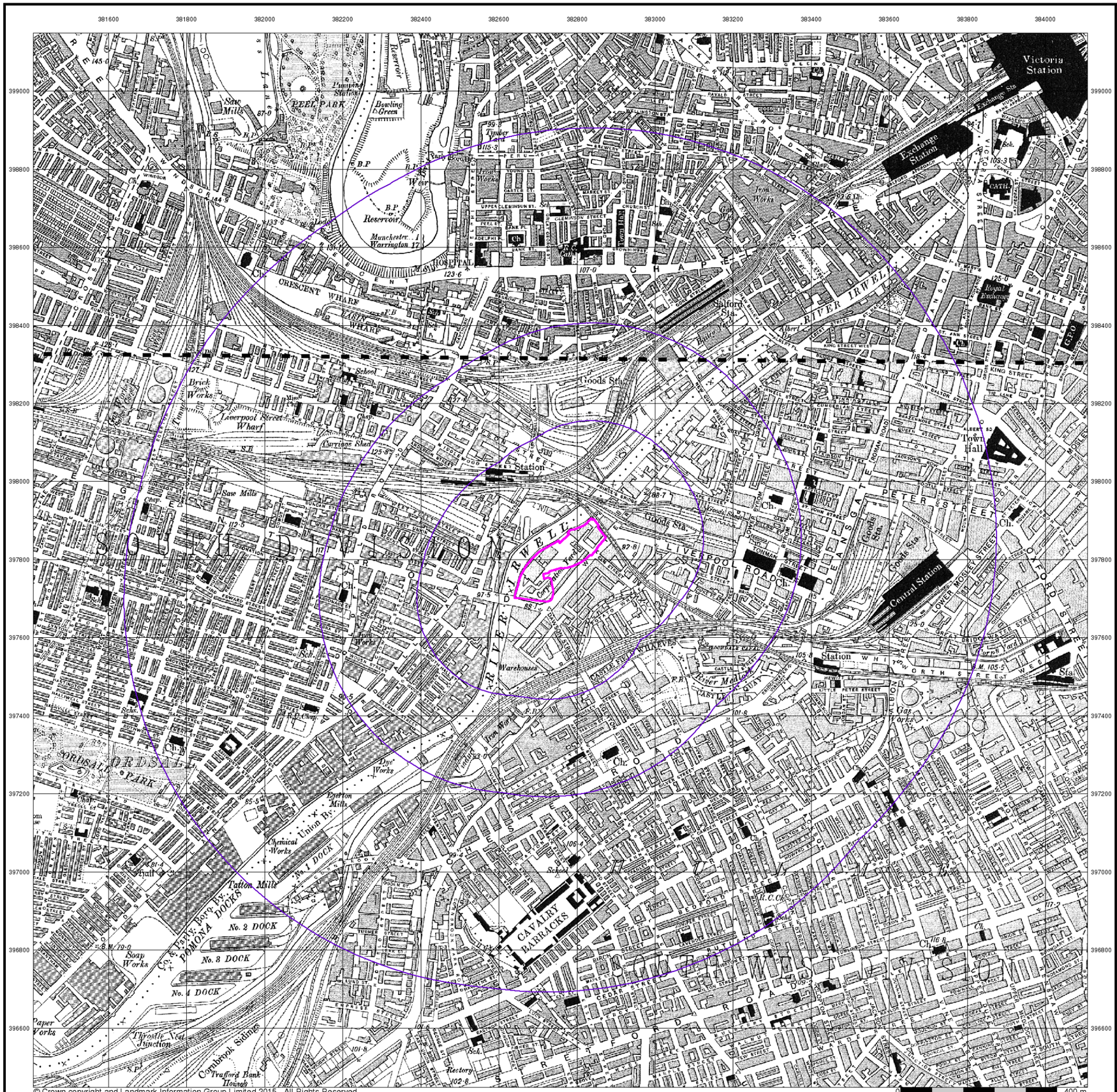
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Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
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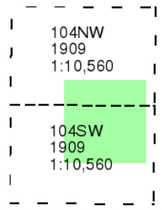
Lancashire And Furness

Published 1909

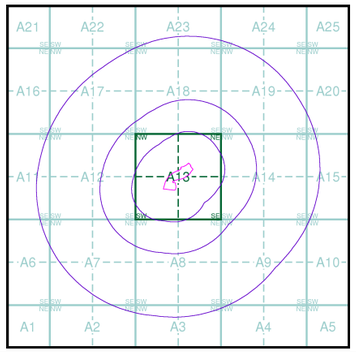
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



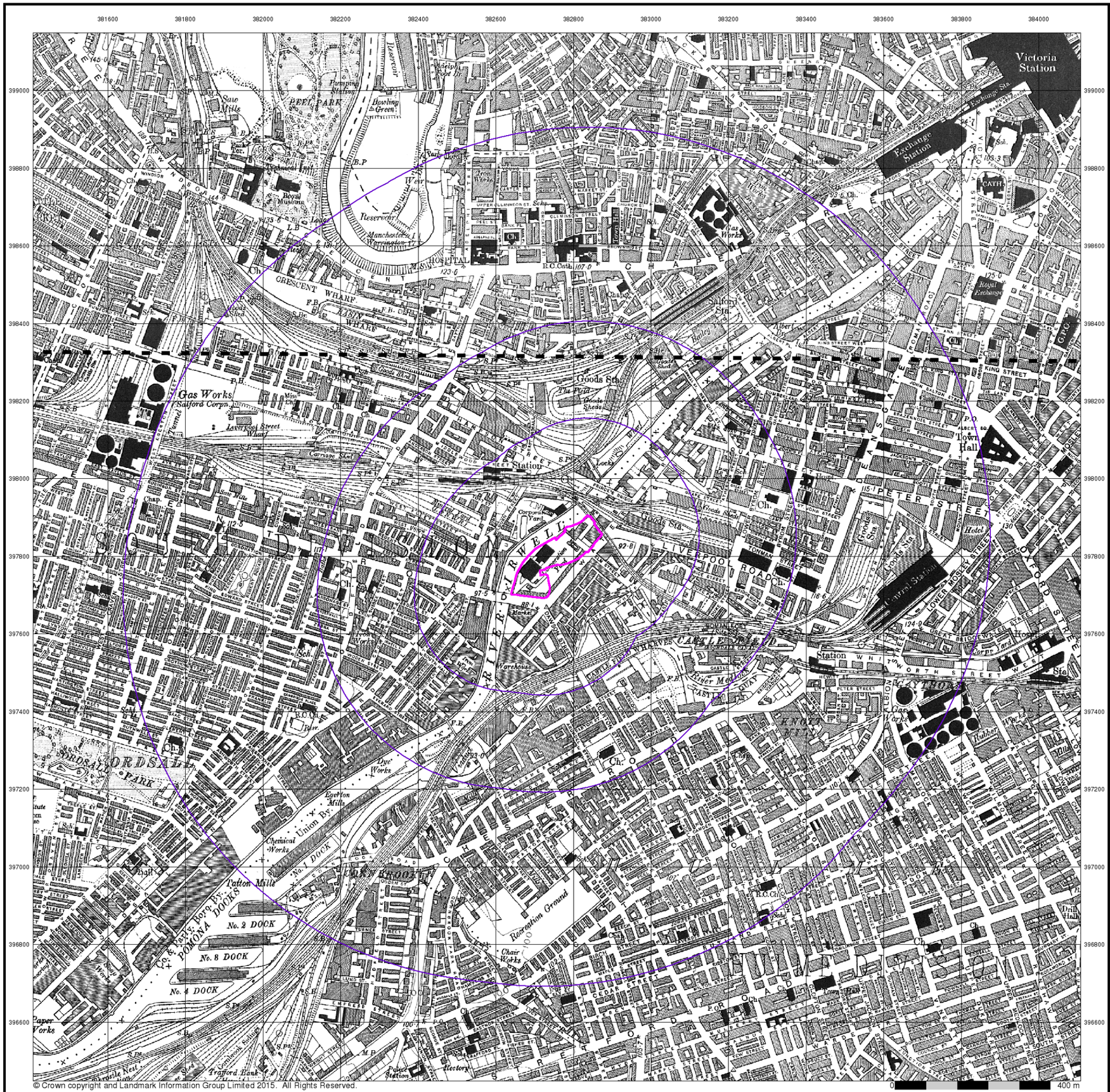
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National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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ROC CONSULTING

Lancashire And Furness

Published 1923

Source map scale - 1:10,560

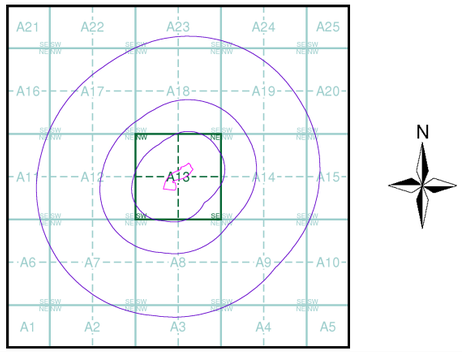
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

104NW
1923
1:10,560

104SW
1923
1:10,560

Historical Map - Slice A



Order Details

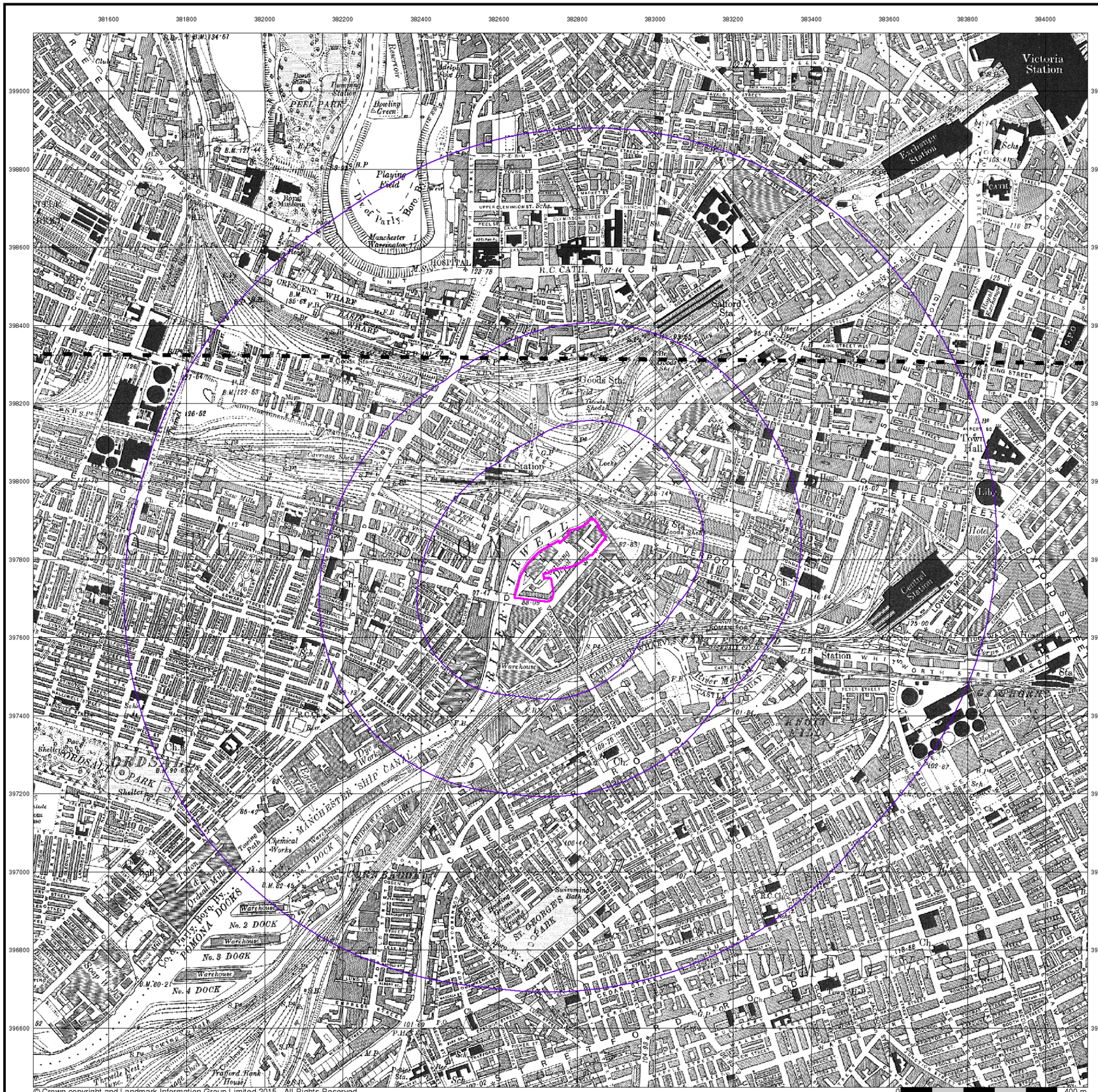
Order Number:	67439542_1_1
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Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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ROC CONSULTING

Lancashire And Furness

Published 1931 - 1932

Source map scale - 1:10,560

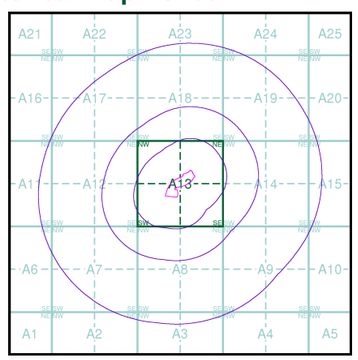
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

104NW
1931
1:10,560

104SW
1932
1:10,560

Historical Map - Slice A



Order Details

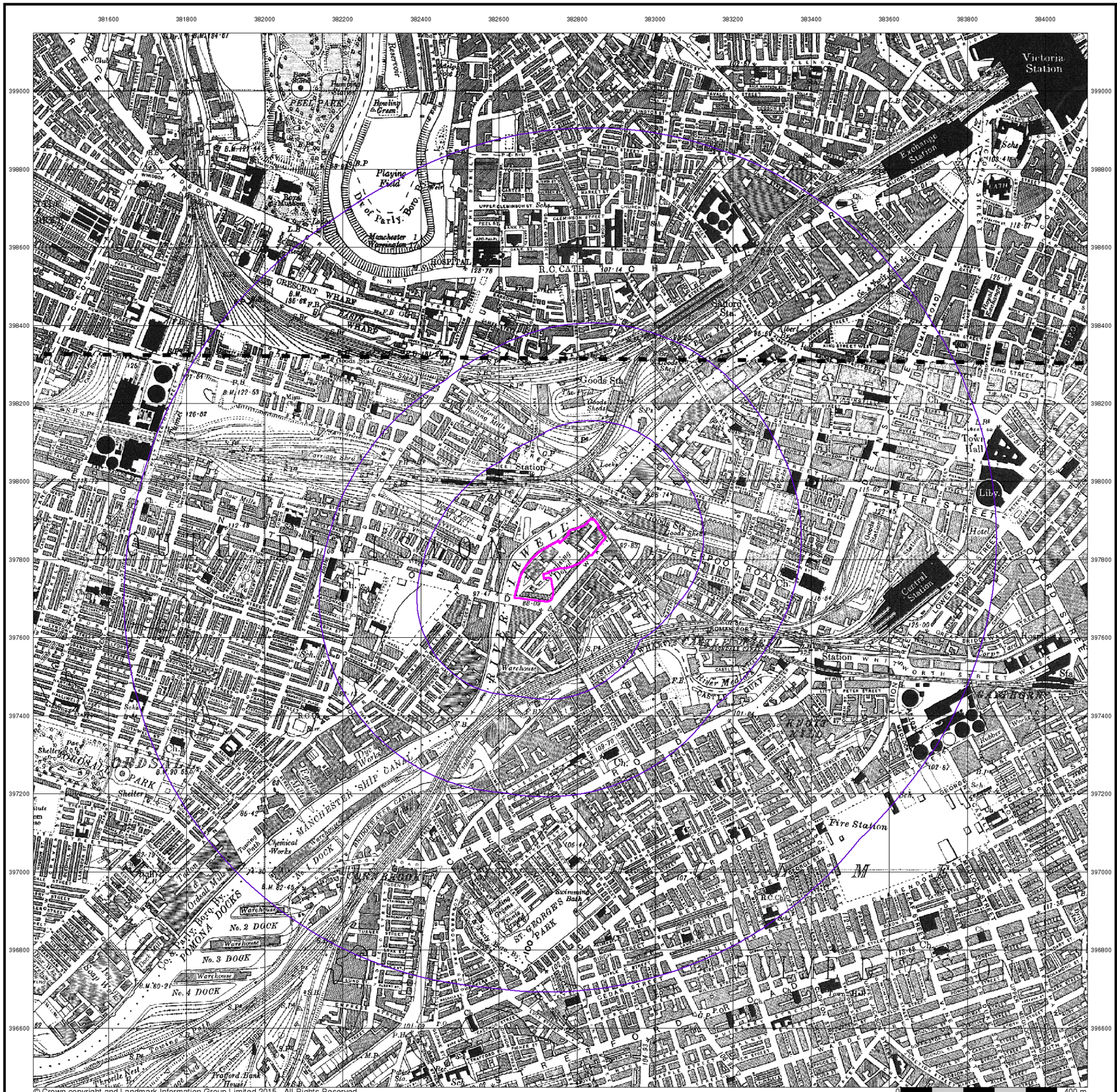
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Site Details

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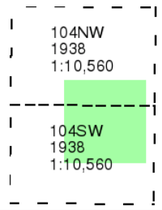
Lancashire And Furness

Published 1938

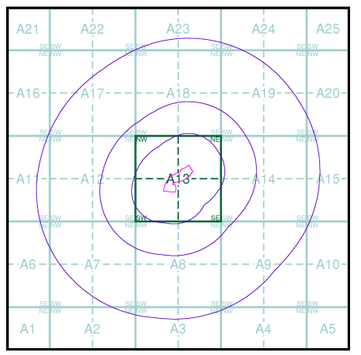
Source map scale - 1:10,560

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

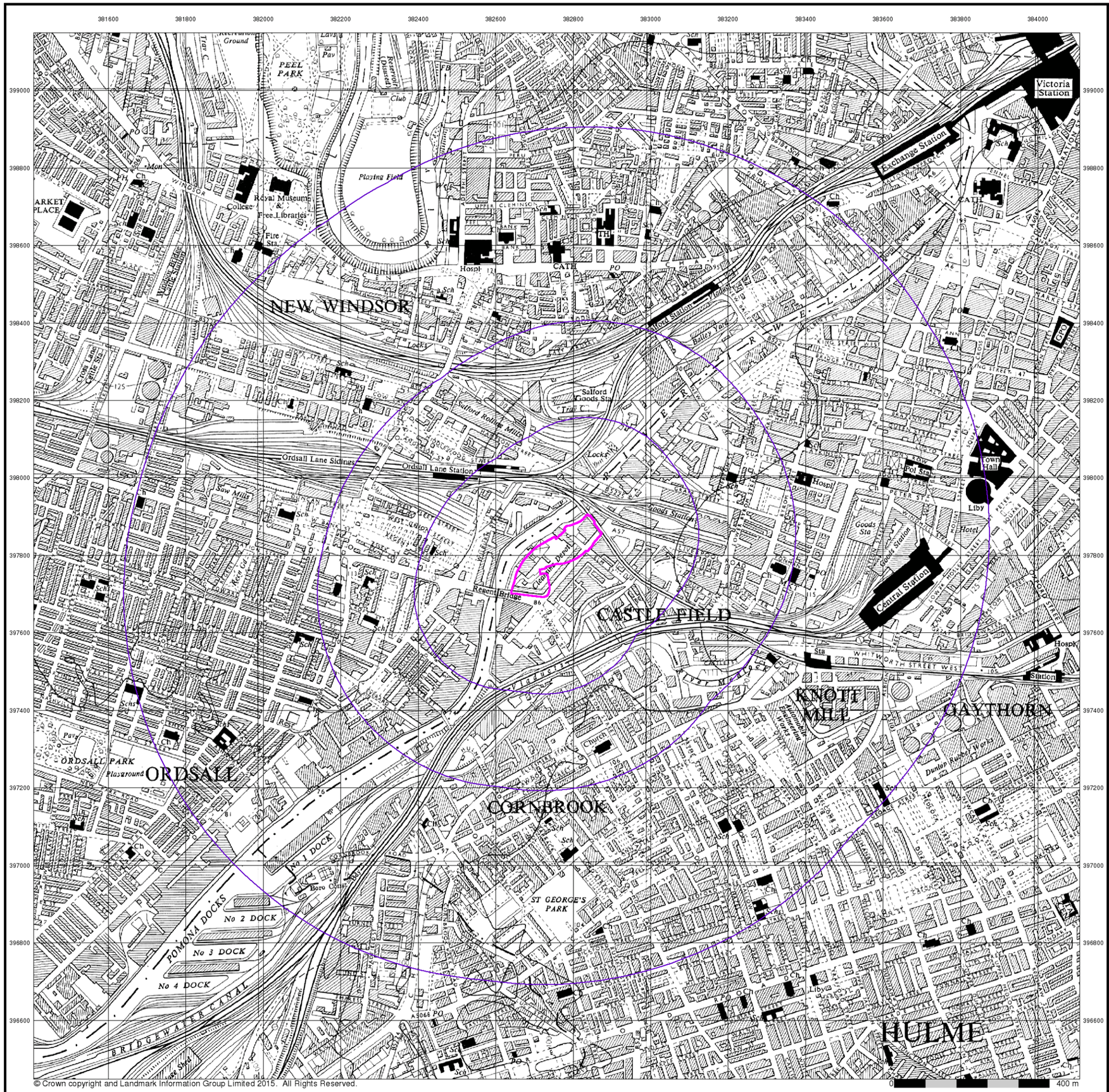
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Site Details

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Ordnance Survey Plan

Published 1956

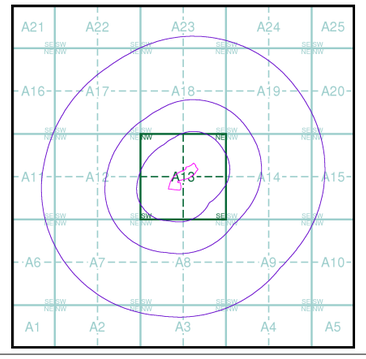
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Map Name(s) and Date(s)

SJ89NW
1956
1:10,560

Historical Map - Slice A



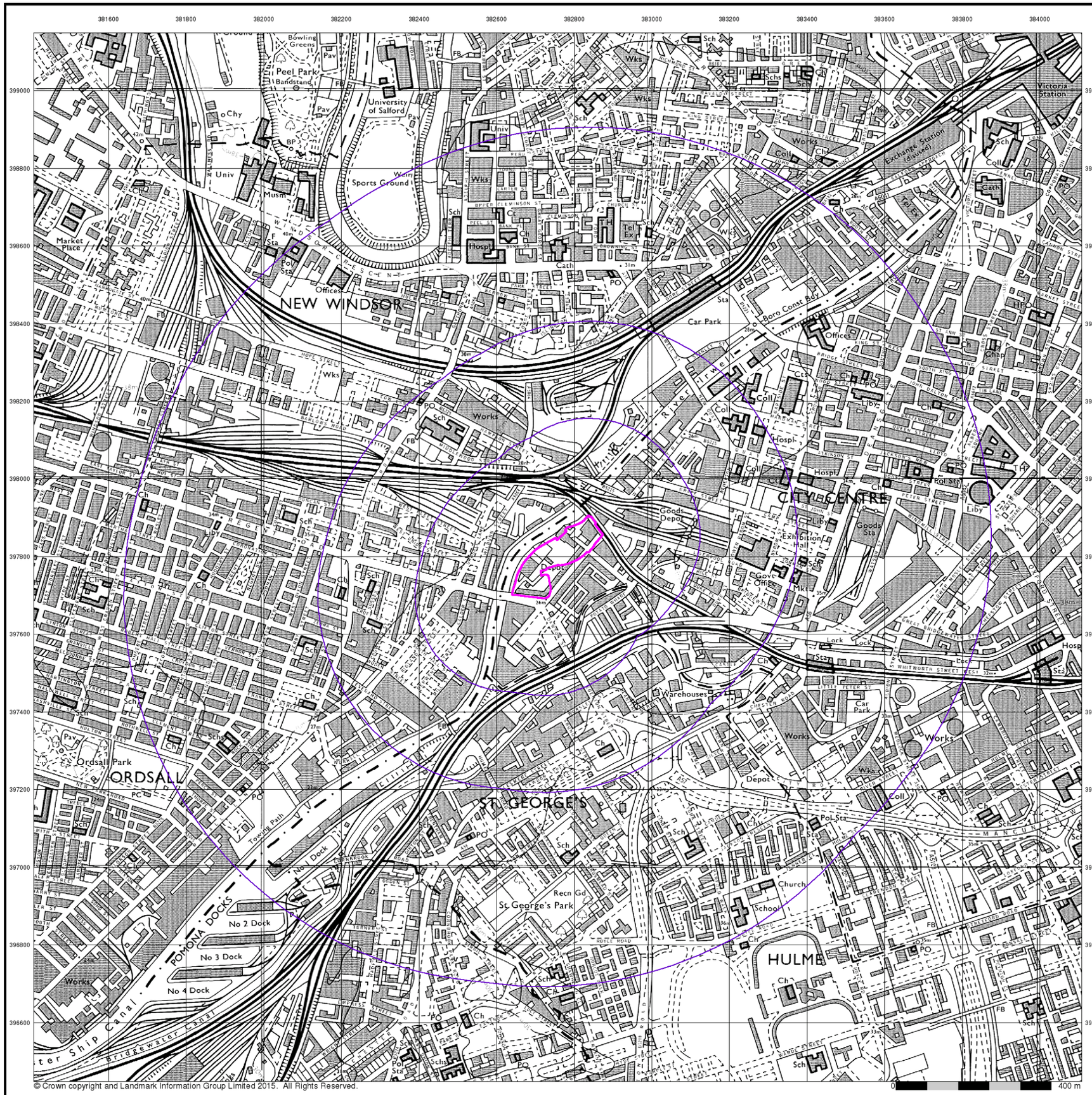
Order Details

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Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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ROC CONSULTING

Ordnance Survey Plan

Published 1972

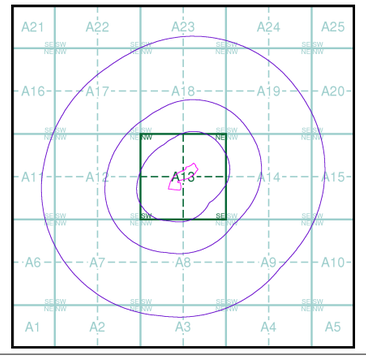
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

SJ89NW
1972
1:10,000

Historical Map - Slice A



Order Details

Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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R&C CONSULTING

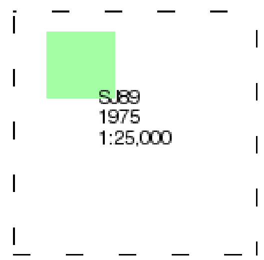
Manchester

Published 1975

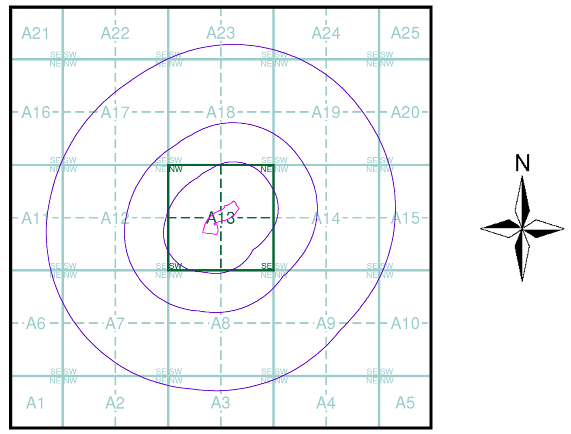
Source map scale - 1:25,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.
They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)



Russian Map - Slice A



Order Details

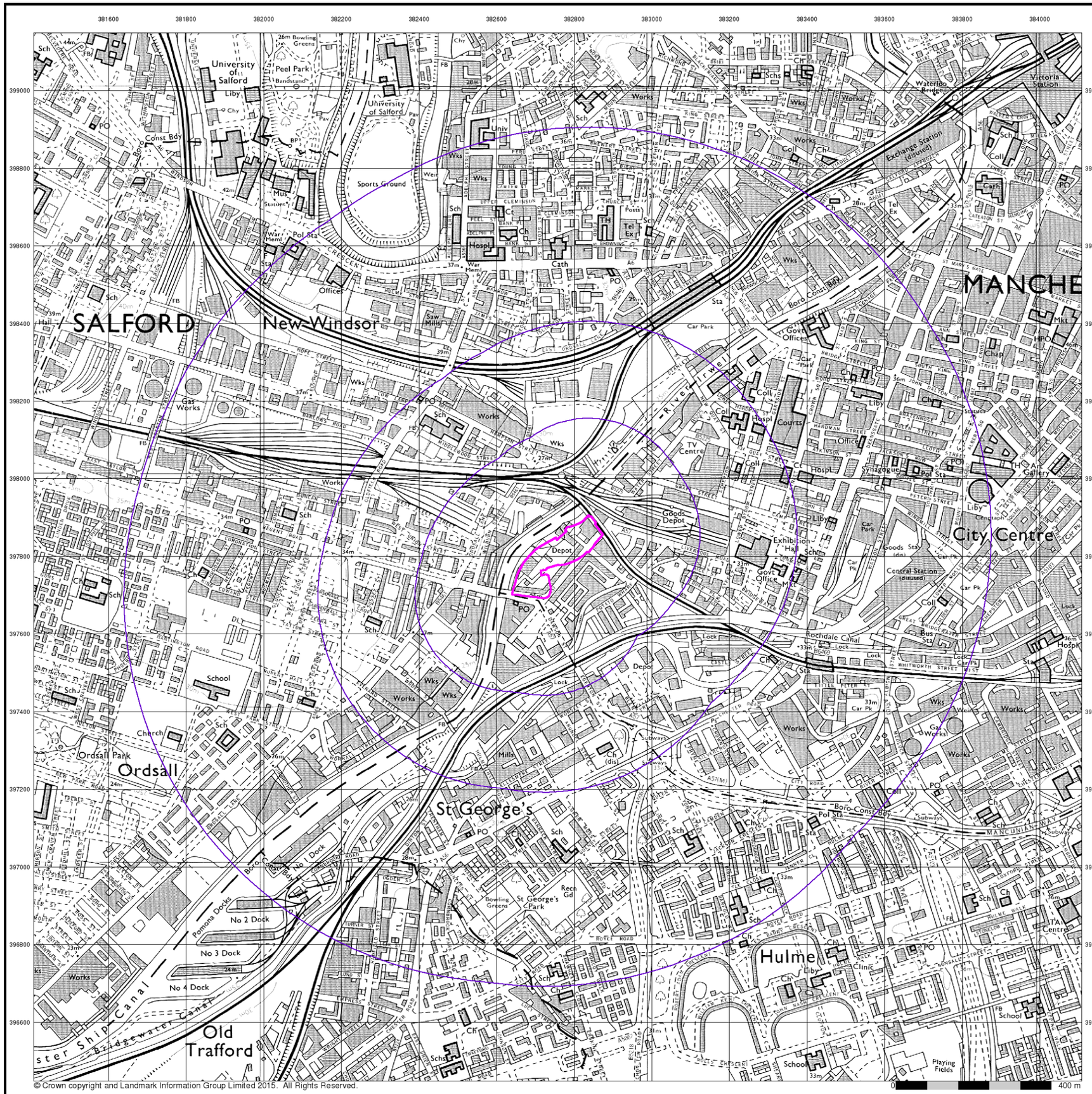
Order Number: 67439542_1_1
Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 1000

Site Details

Zone 9, St Johns Quarter, Water Street, MANCHESTER, M3 4JU

Landmark Information Group

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Fax: 0844 844 9951
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RoC CONSULTING

Ordnance Survey Plan

Published 1980

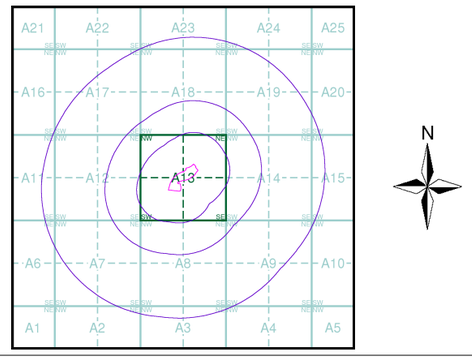
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

SJ89NW
1980
1:10,000

Historical Map - Slice A



Order Details

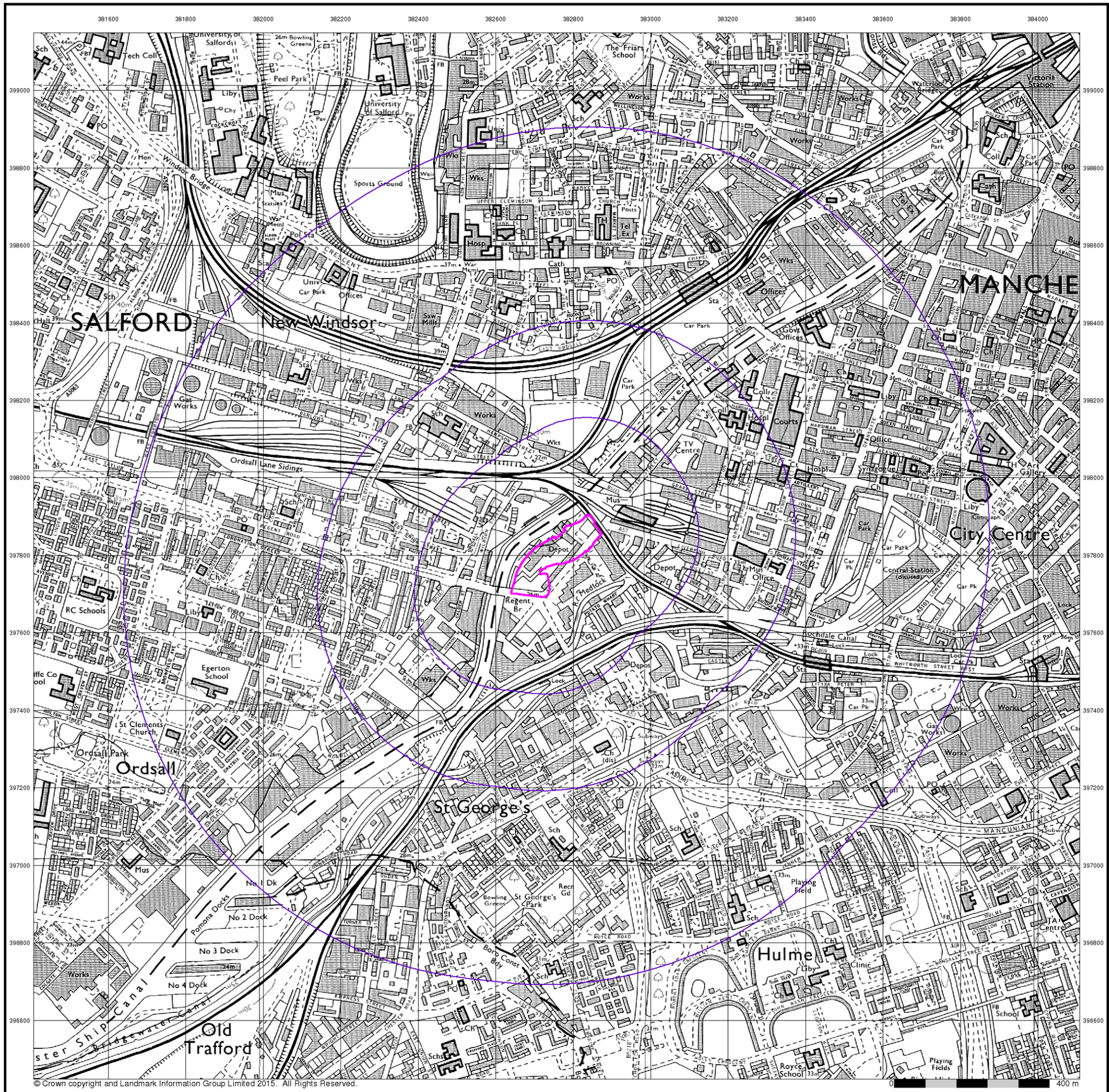
Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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ROC CONSULTING

Ordnance Survey Plan

Published 1985

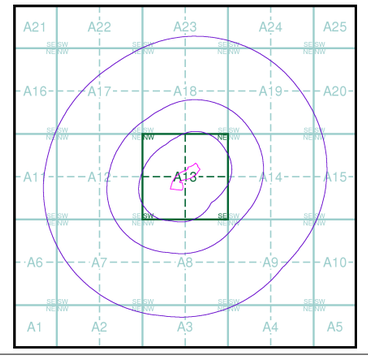
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

SJ89NW
1985
1:10,000

Historical Map - Slice A



Order Details

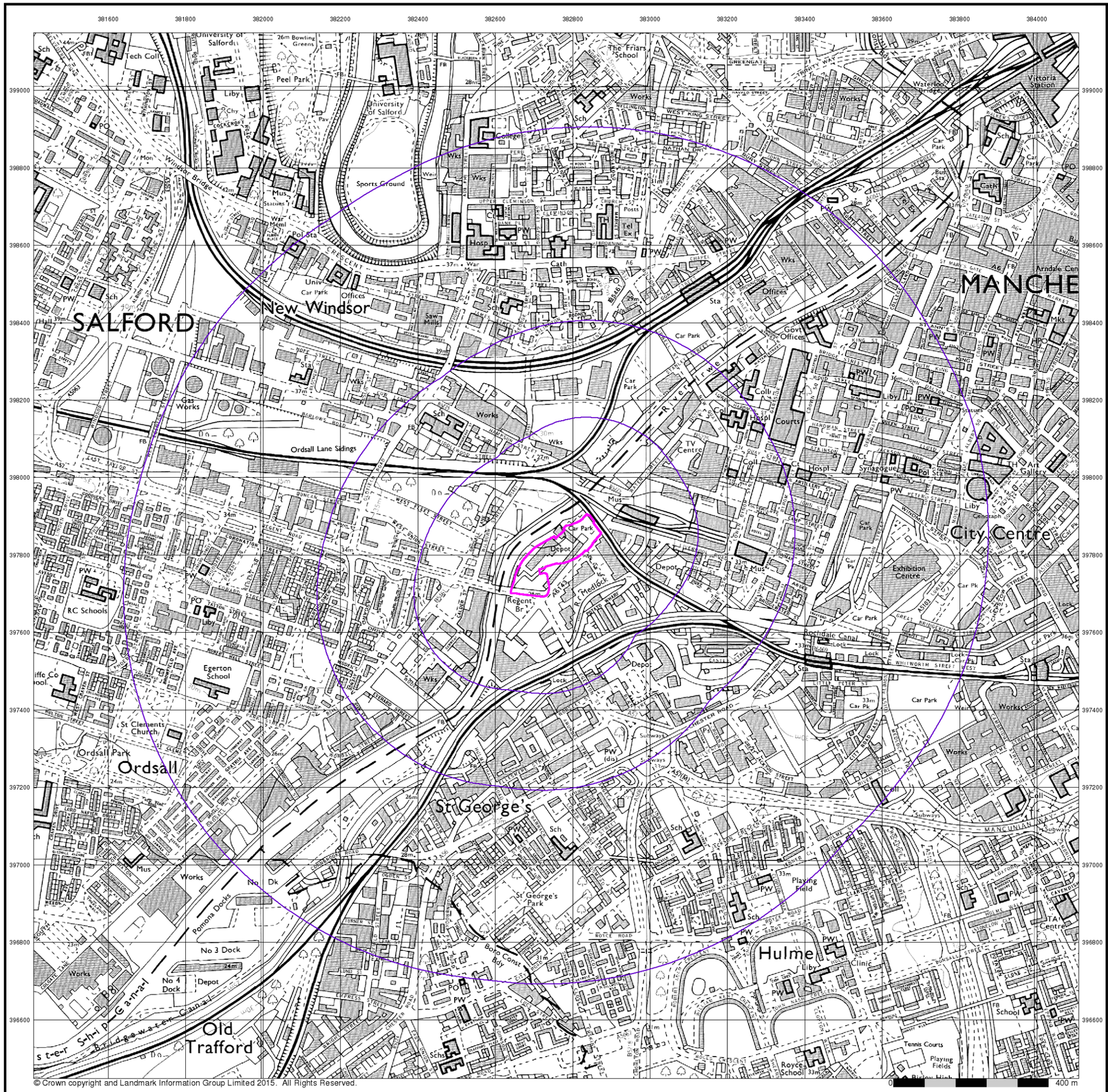
Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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RoC CONSULTING

Ordnance Survey Plan

Published 1989

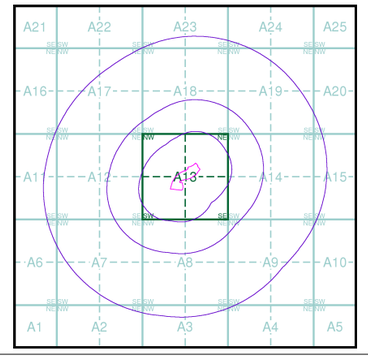
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

SJ89NW
1989
1:10,000

Historical Map - Slice A



Order Details

Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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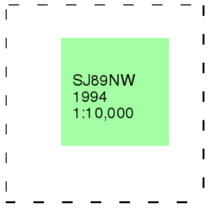
Ordnance Survey Plan

Published 1994

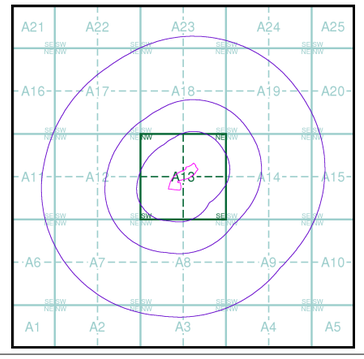
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

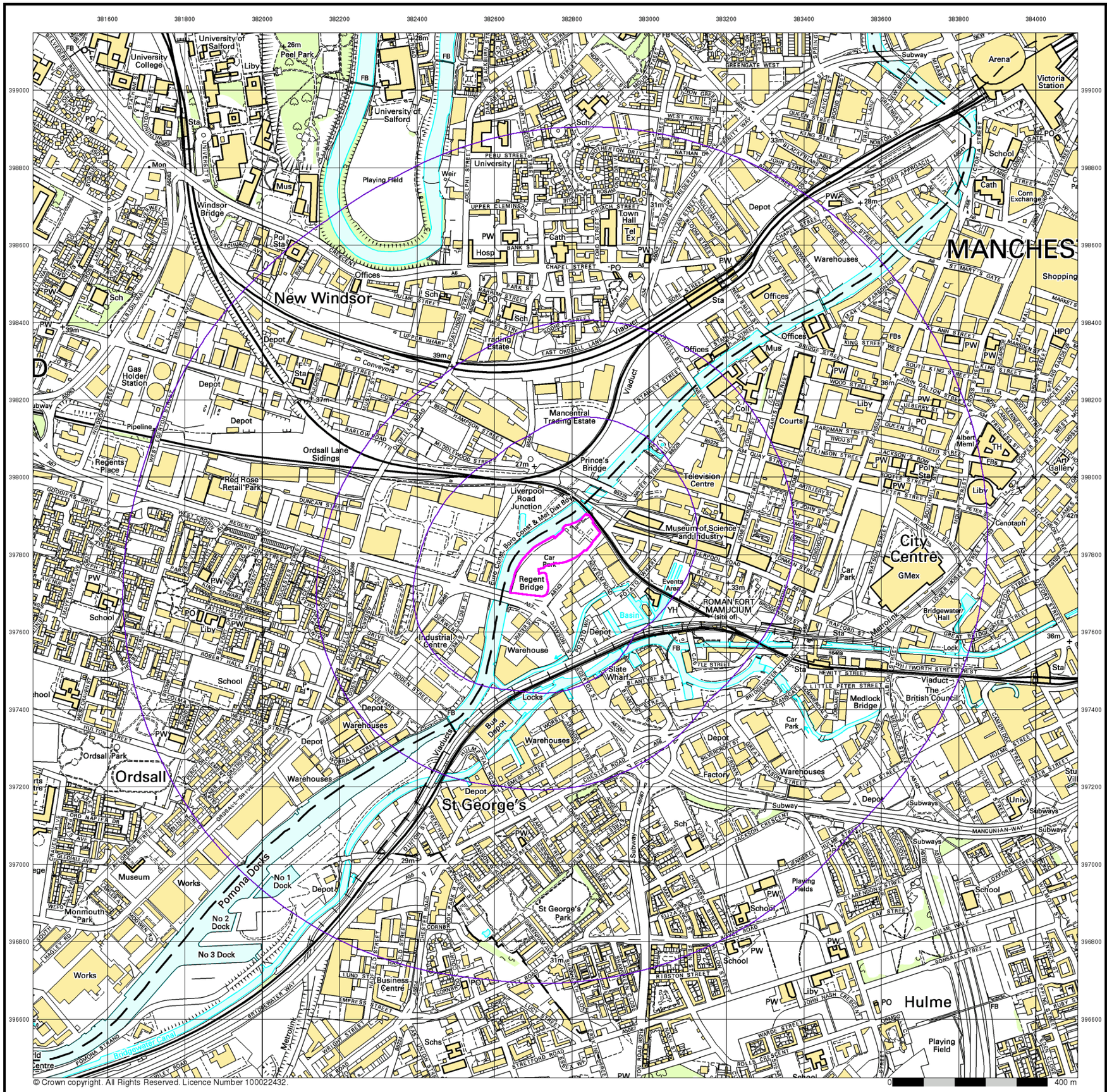
Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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10k Raster Mapping

Published 1999

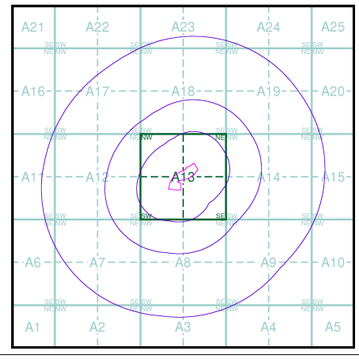
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

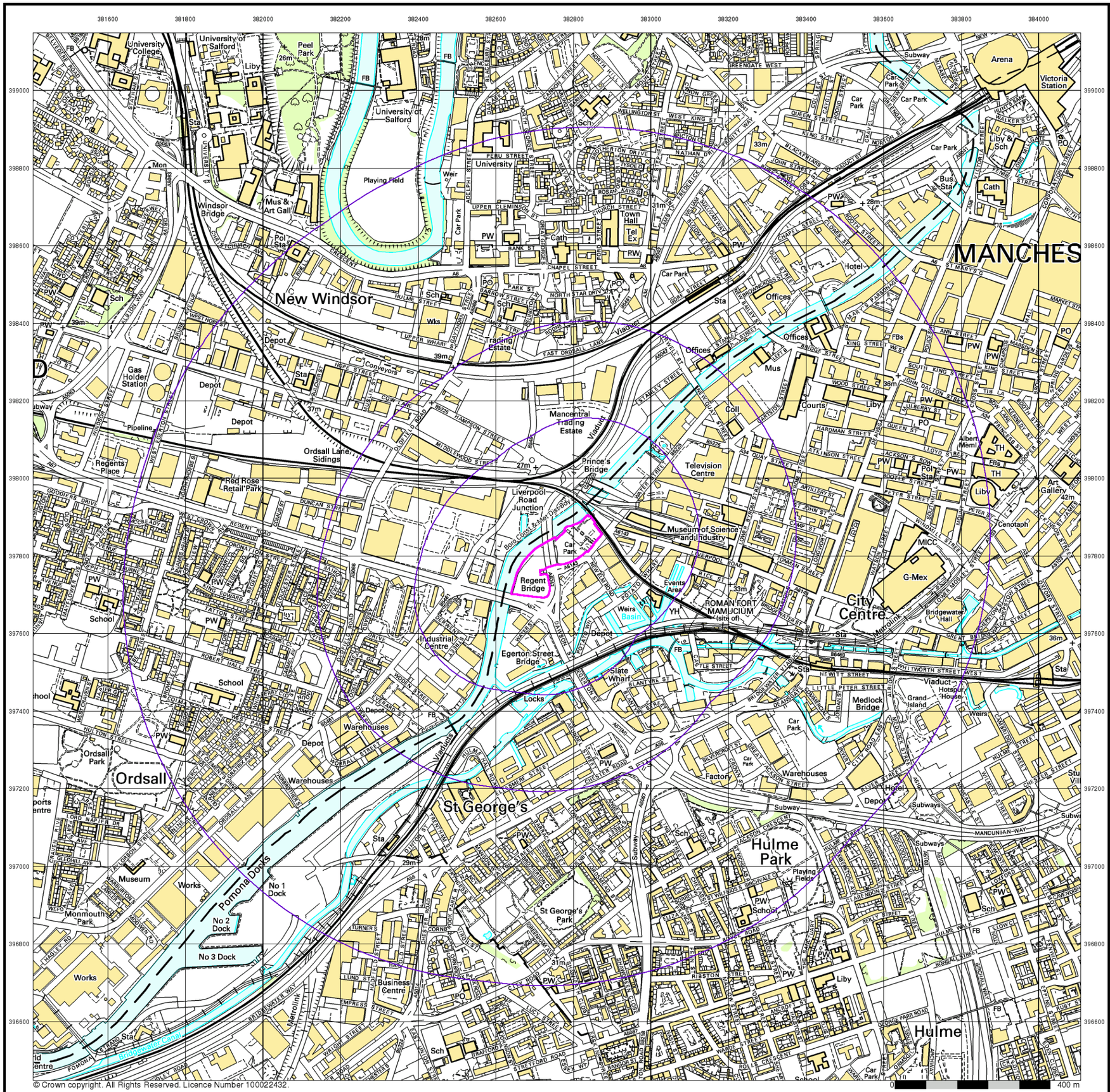
Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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ROC CONSULTING

10k Raster Mapping

Published 2006

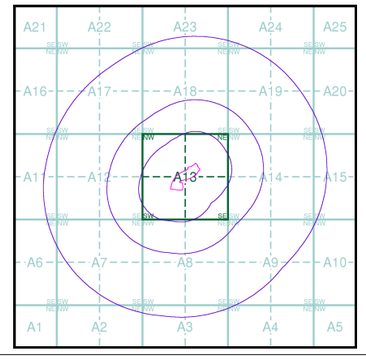
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

SJ89NW
2006
1:10,000

Historical Map - Slice A



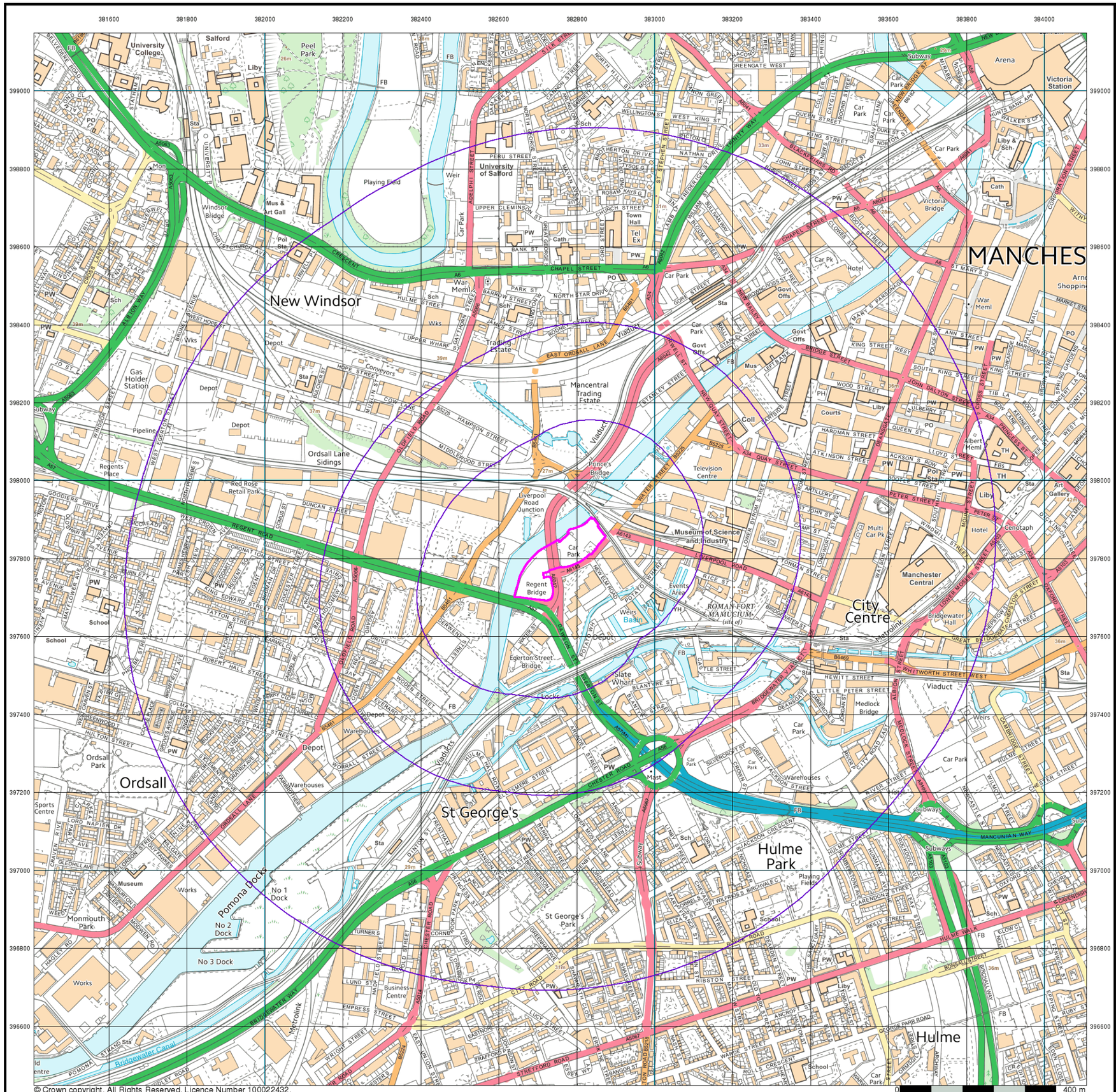
Order Details

Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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ROC CONSULTING

VectorMap Local

Published 2015

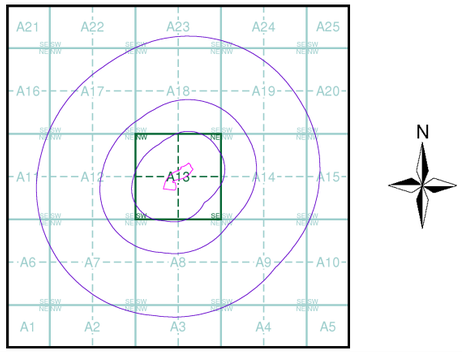
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

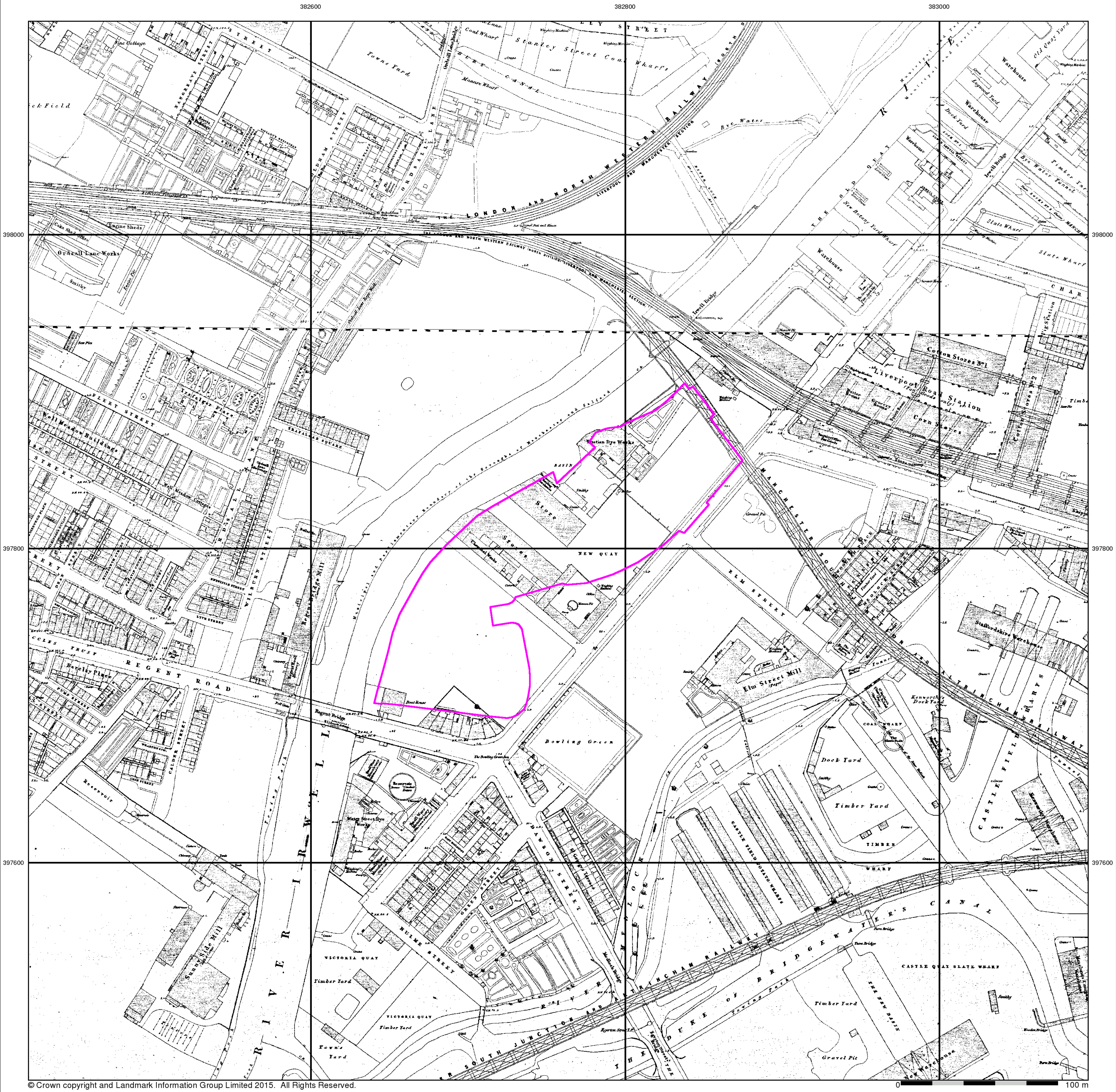
Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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ROC CONSULTING

Lancashire And Furness

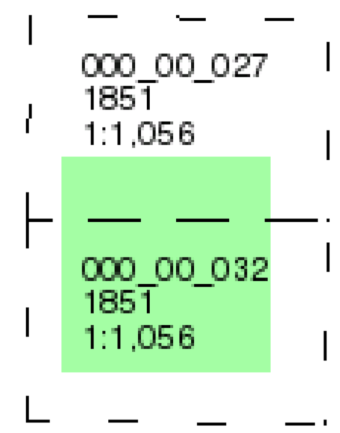
Published 1851

Source map scale - 1:1,056

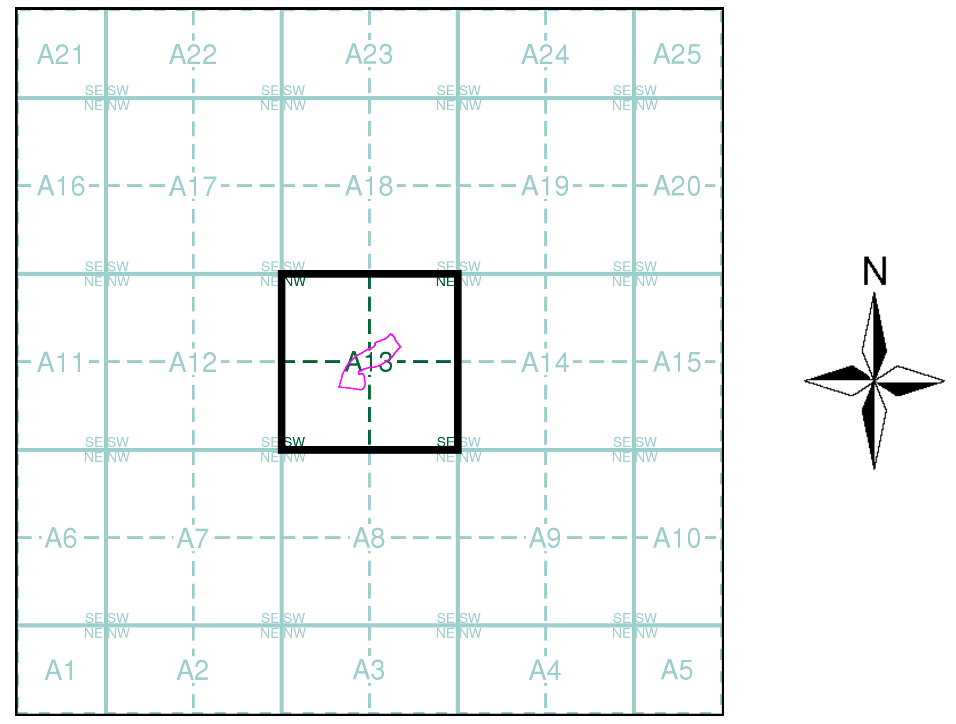
The 1:1056 scale of Ordnance Survey mapping was adopted from Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the Ordnance Survey and a 'skeleton' survey of the capital, showing little more than streets, street names, frontages and altitudes, was undertaken between 1848 and 1850. The majority of the 1:1056 surveys were later replaced by 1:500 surveys; although almost all the remainder were revised at this scale, sometimes more than once before 1895. The type of detail shown on the 1:1056 scale is broadly similar to that on 1:500; the apparent omission of minor details such as sewer access points and street lights may be as much a reflection of the generally earlier date of these plans, as of the specification of the map.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)



Historical Town Plan - Segment A13



Order Details

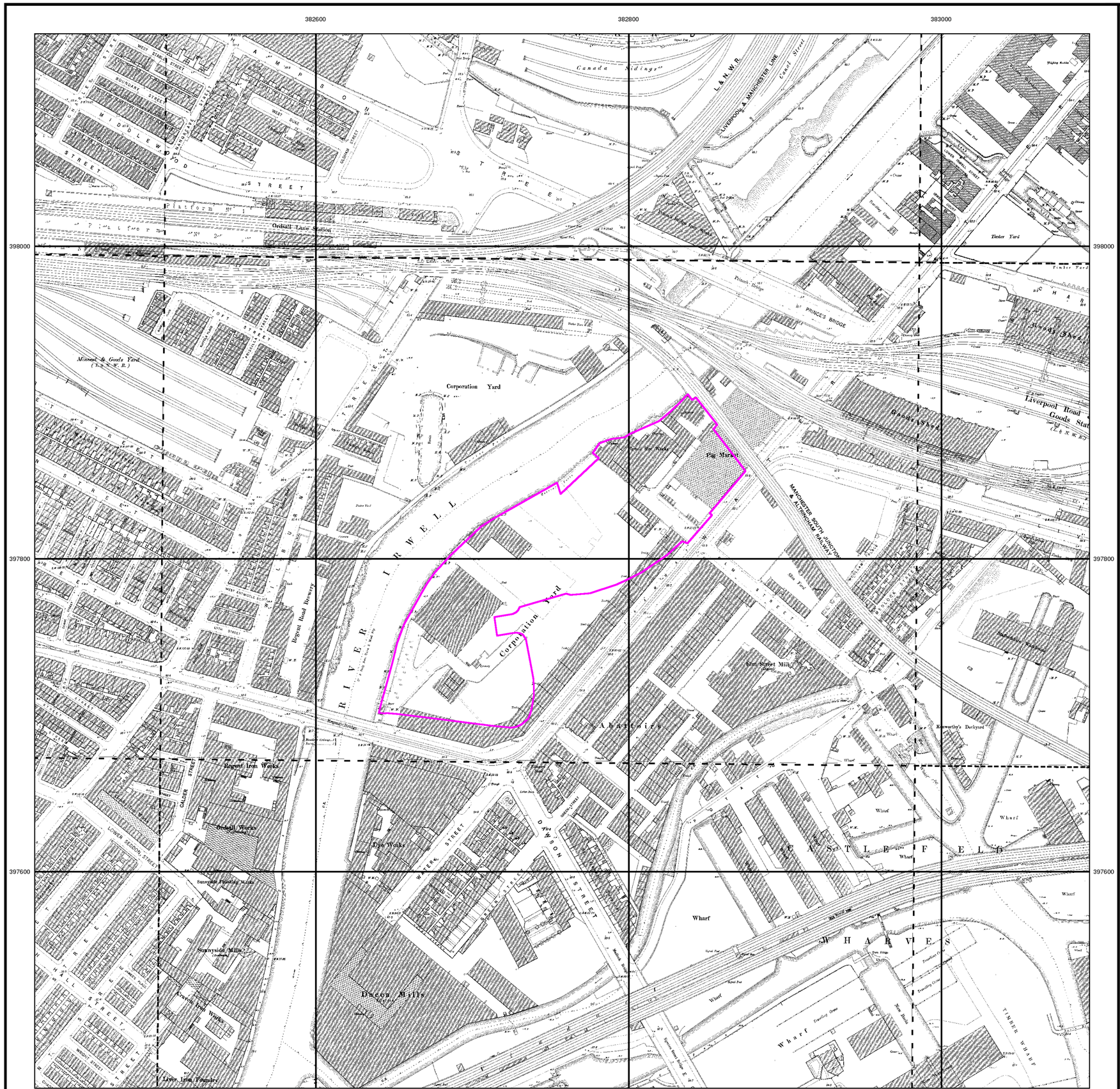
Order Number: 67439542_1_1
Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 0

Site Details

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0 100 m

Lancashire And Furness

Published 1891

Source map scale - 1:500

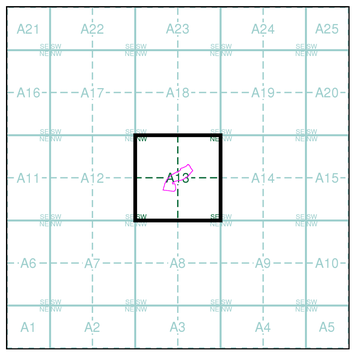
The 1:500 scale Ordnance Survey mapping was introduced in 1855 as a replacement for the 1:528 scale and to compliment the 1:2500 scale that had been implemented in 1853. By 1895, the 1:500 scale covered most towns over a population of about 4000 at the time of survey, although very few towns were mapped more than once at this scale, and none have been since 1910. The 1:500 scale gives particular emphasis to such features as lamp posts, man holes, arched passages and minor building projections. Also often featured are divisions between tenements, interior ground floor layouts of public buildings, and on earlier plans, the functions of the various parts of larger industrial premises are also indicated. Content of the plans does vary however, from one town to the next in terms of, for example, the completeness of railway tracks and the coverage of public buildings.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)

104_10_001 1891 1:500	104_10_002 1891 1:500	104_10_003 1891 1:500
104_10_006 1891 1:500	104_10_007 1891 1:500	104_10_008 1891 1:500
104_10_011 1891 1:500	104_10_012 1891 1:500	104_10_013 1891 1:500

Historical Town Plan - Segment A13



Order Details

Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	0

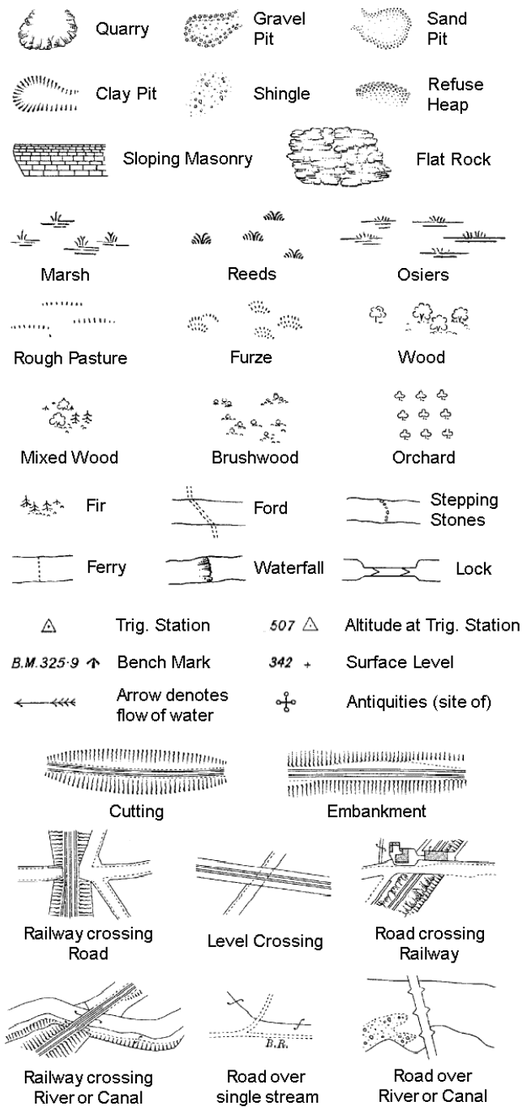
Site Details

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Web: www.envirocheck.co.uk

Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)

County & Civil Parish Boundary

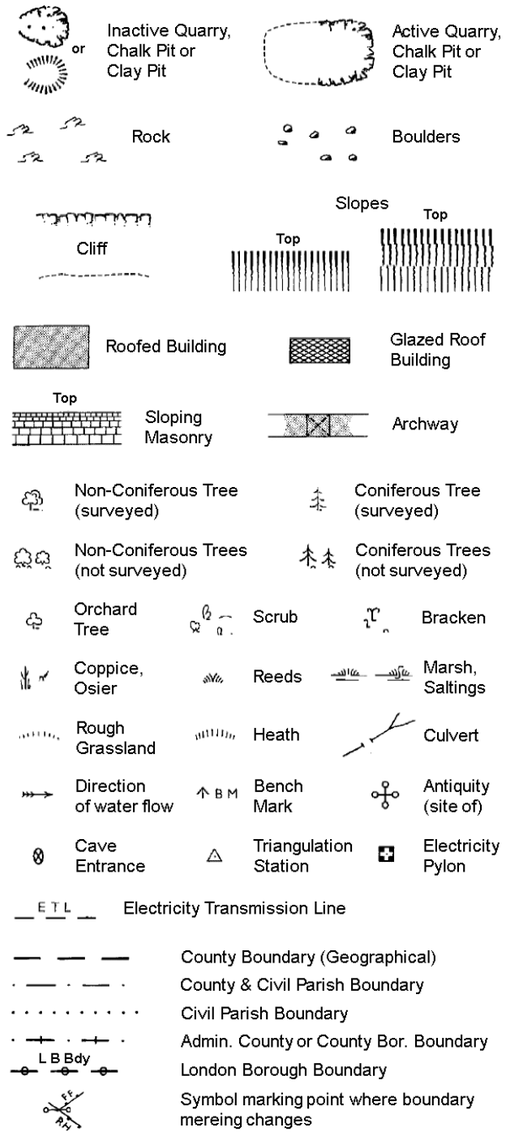
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

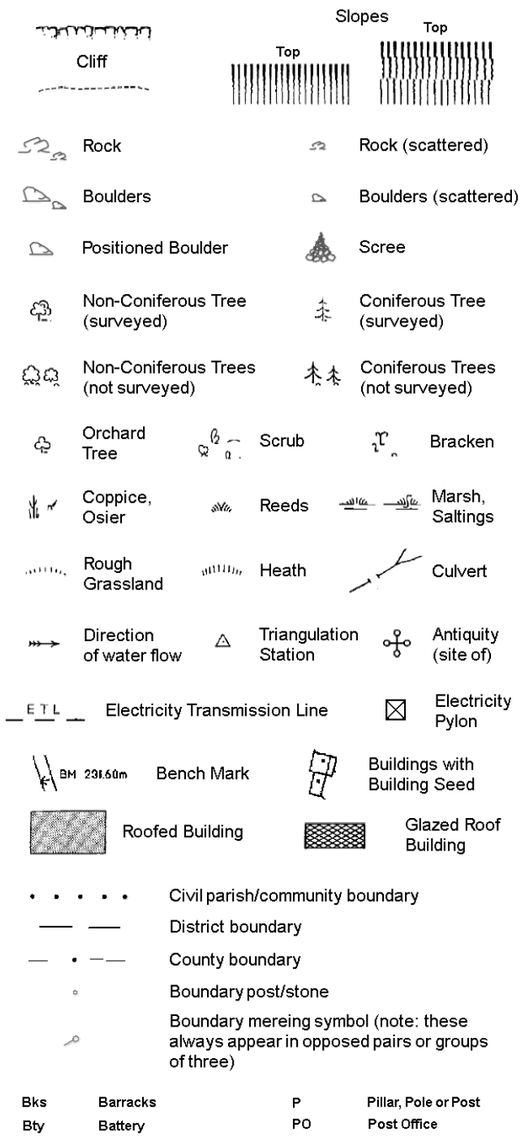
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

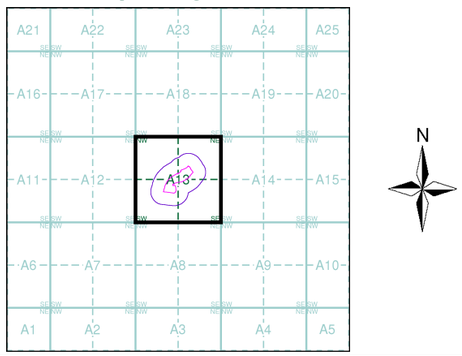
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

ROC CONSULTING

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:2,500	1908	2
Lancashire And Furness	1:2,500	1922	3
Ordnance Survey Plan	1:1,250	1948 - 1949	4
Ordnance Survey Plan	1:2,500	1950 - 1951	5
Ordnance Survey Plan	1:1,250	1953 - 1963	6
Ordnance Survey Plan	1:2,500	1956 - 1965	7
Ordnance Survey Plan	1:1,250	1960 - 1980	8
Ordnance Survey Plan	1:2,500	1963 - 1965	9
Ordnance Survey Plan	1:1,250	1969 - 1982	10
Ordnance Survey Plan	1:2,500	1971	11
Supply of Unpublished Survey Information	1:1,250	1974 - 1975	12
Additional SIMs	1:1,250	1978 - 1984	13
Ordnance Survey Plan	1:1,250	1982	14
Additional SIMs	1:1,250	1984 - 1990	15
Additional SIMs	1:1,250	1990	16
Additional SIMs	1:1,250	1990	17
Large-Scale National Grid Data	1:1,250	1992	18
Additional SIMs	1:1,250	1992	19
Large-Scale National Grid Data	1:1,250	1993 - 1995	20
Large-Scale National Grid Data	1:1,250	1993 - 1995	21
Large-Scale National Grid Data	1:1,250	1994 - 1995	22
Large-Scale National Grid Data	1:1,250	1995	23
Large-Scale National Grid Data	1:1,250	1996	24

Historical Map - Segment A13



Order Details

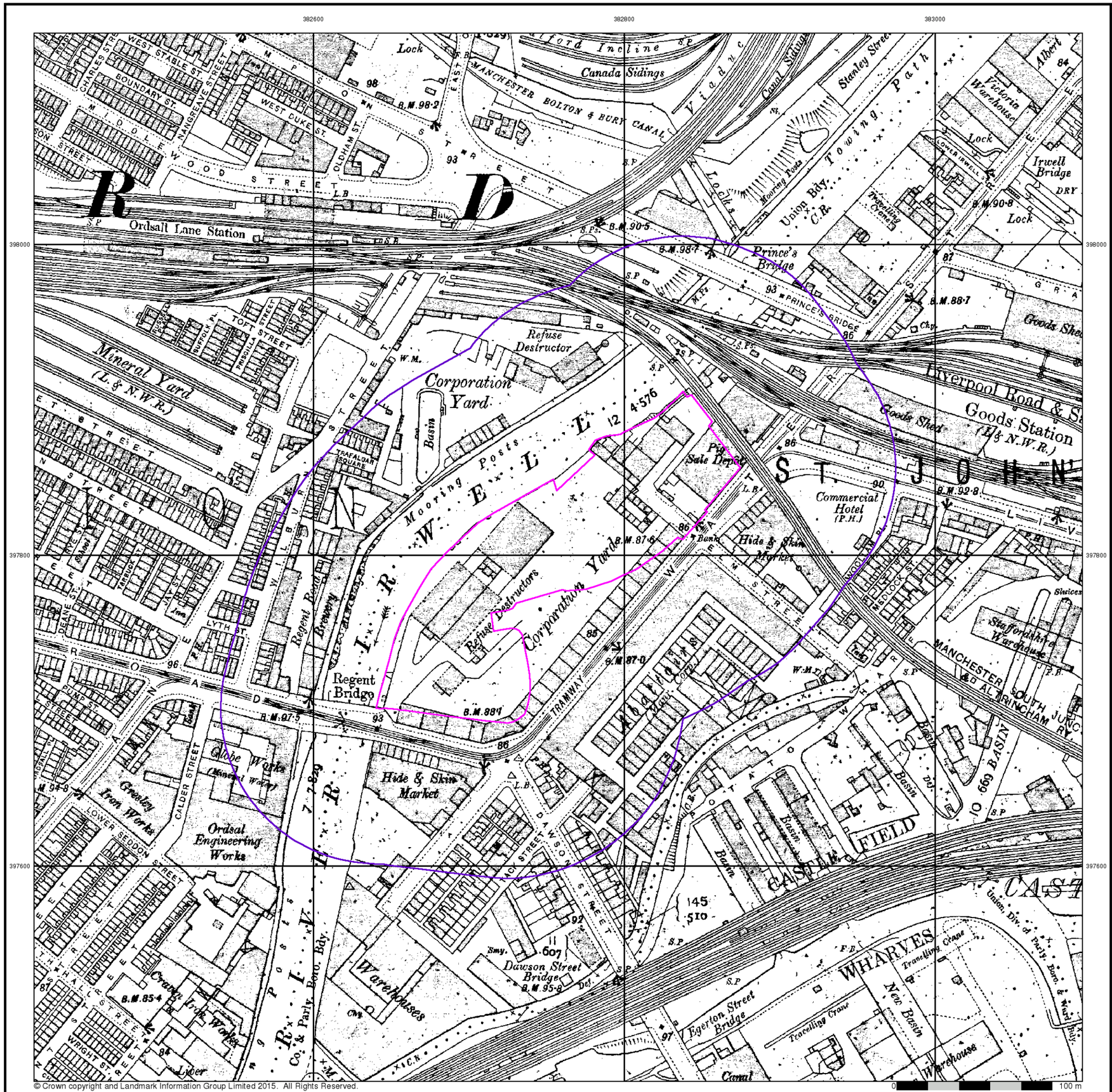
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Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	100

Site Details

Zone 9, St Johns Quarter, Water Street, MANCHESTER, M3 4JU

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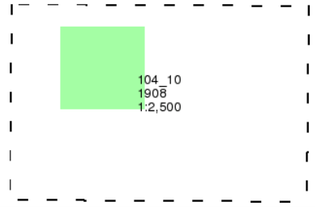
Lancashire And Furness

Published 1908

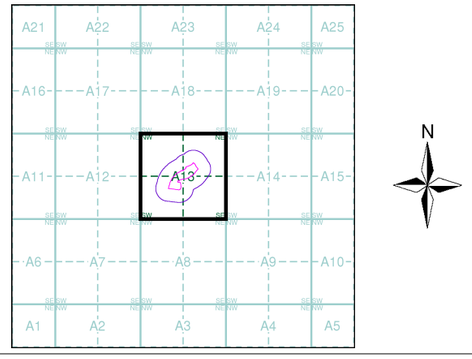
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

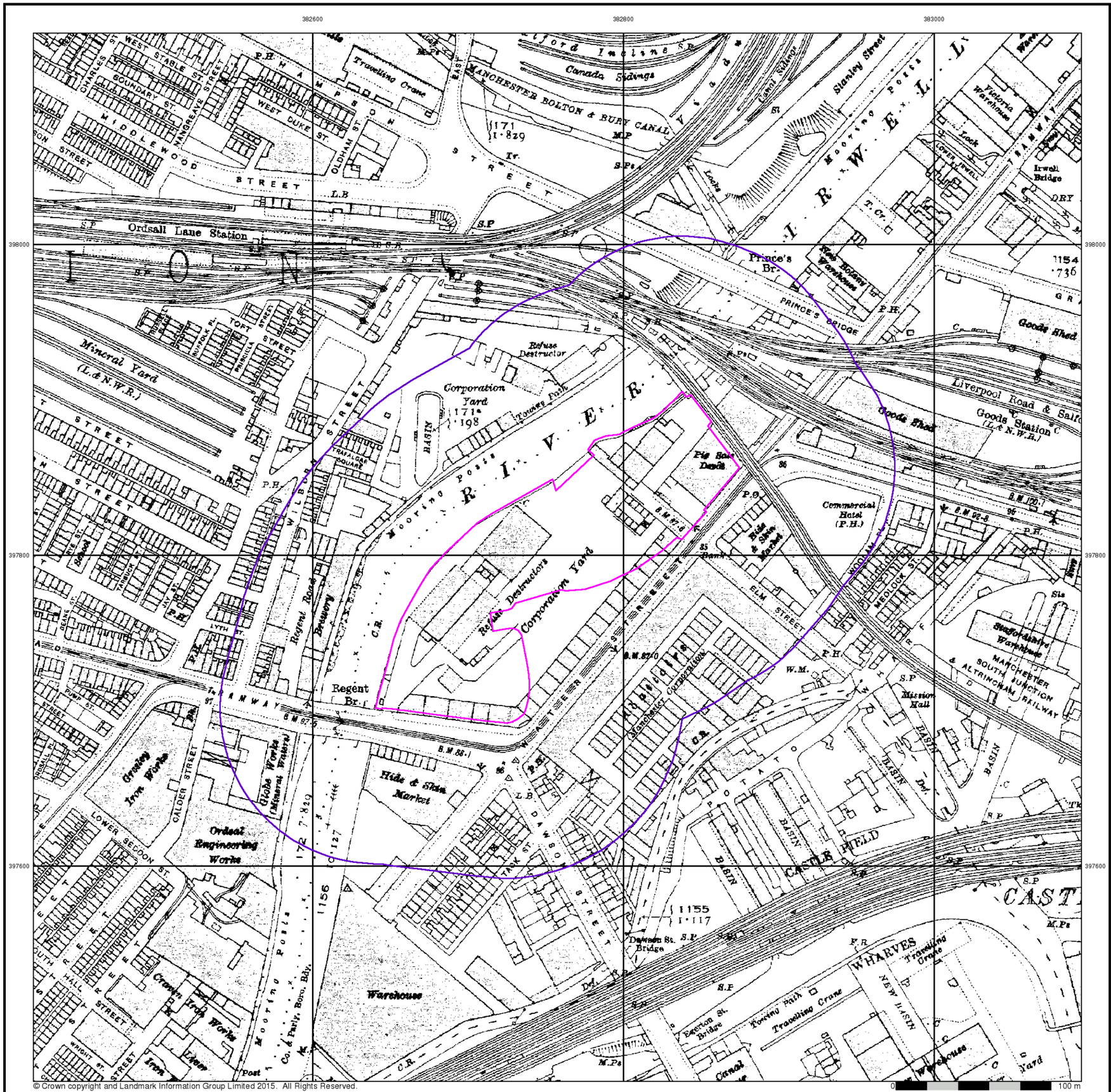
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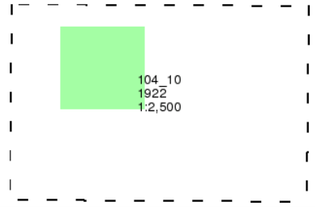
Lancashire And Furness

Published 1922

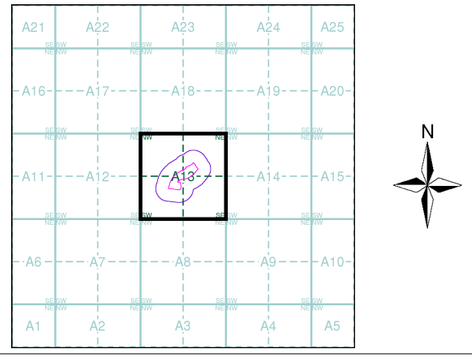
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

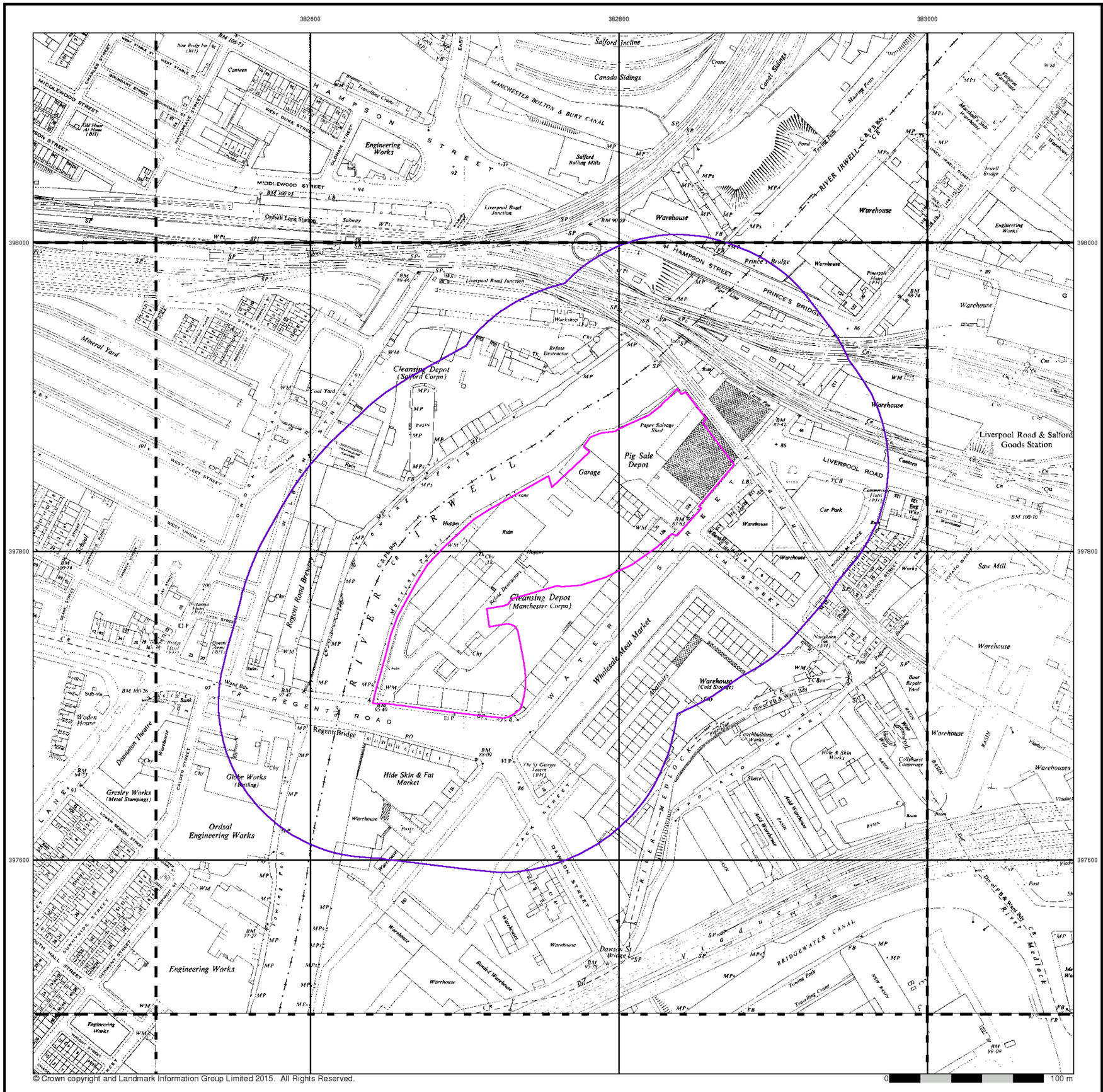
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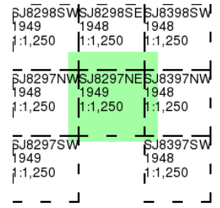
Ordnance Survey Plan

Published 1948 - 1949

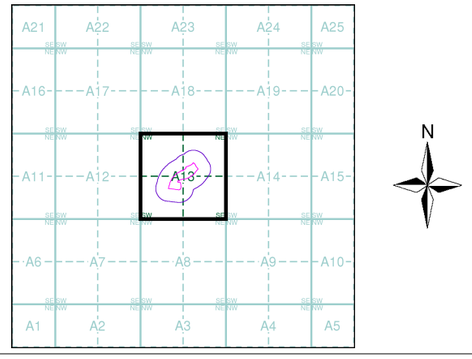
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

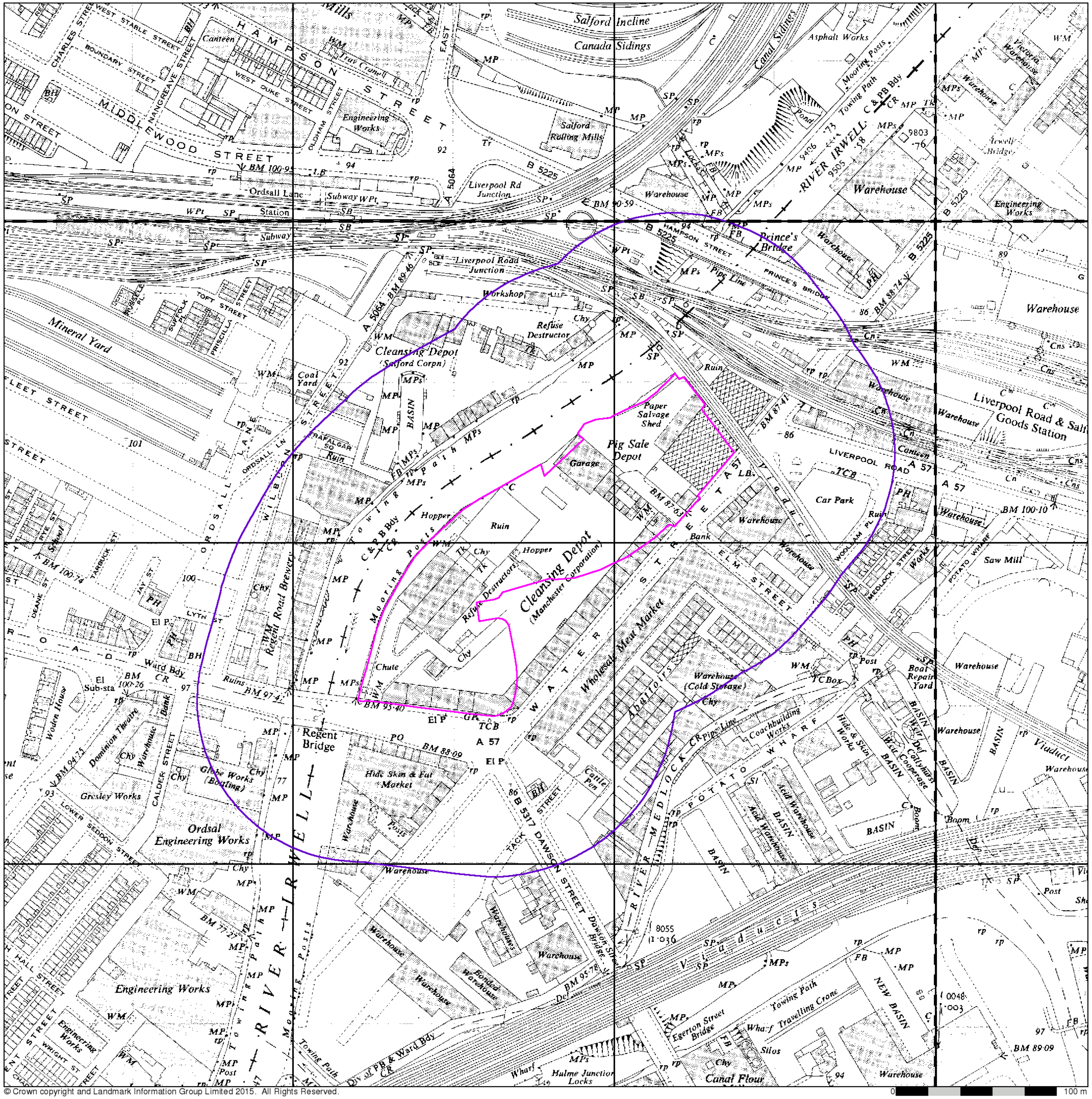
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Site Area (Ha):	1.96
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Ordnance Survey Plan

Published 1950 - 1951

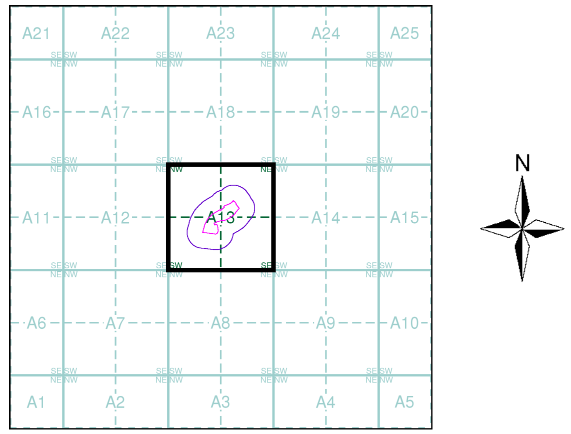
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8298 1951 1:2,500	SJ8398 1951 1:2,500
SJ8297 1950 1:2,500	SJ8397 1950 1:2,500

Historical Map - Segment A13



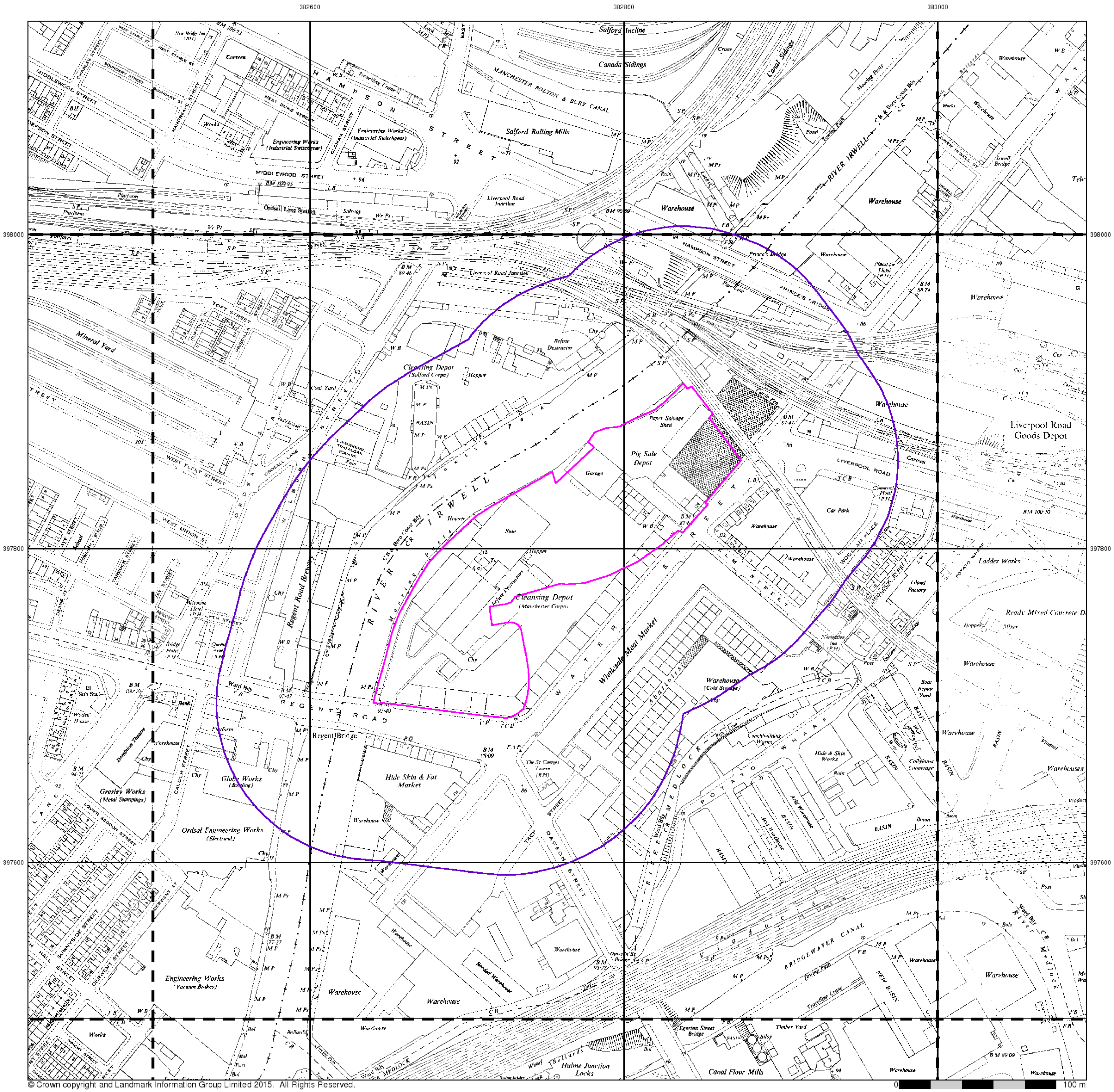
Order Details

Order Number: 67439542_1_1
Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 100

Site Details

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Ordnance Survey Plan

Published 1953 - 1963

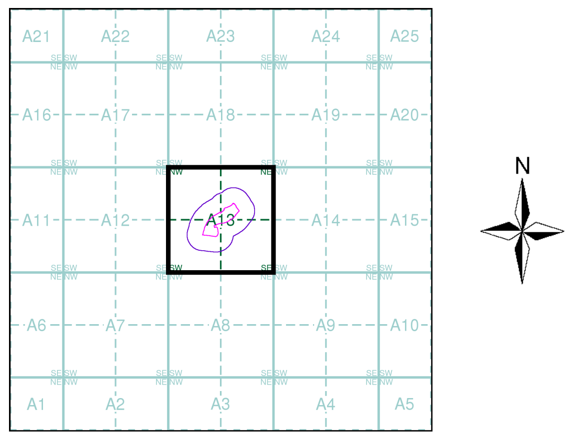
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8298SW 1956 1:1,250	SJ8298SE 1954 1:1,250	SJ8398SW 1957 1:1,250
SJ8297NW 1953 1:1,250	SJ8297NE 1953 1:1,250	SJ8397NW 1955 1:1,250
SJ8297SW 1963 1:1,250	SJ8297SE 1955 1:1,250	SJ8397SW 1954 1:1,250

Historical Map - Segment A13



Order Details

Order Number: 67439542_1_1
Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 100

Site Details

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Ordnance Survey Plan

Published 1956 - 1965

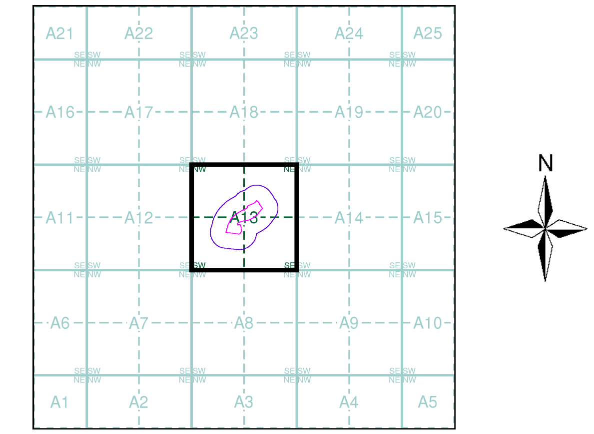
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8298 1956 1:2,500	SJ8398 1958 1:2,500
SJ8297 1965 1:2,500	SJ8397 1956 1:2,500

Historical Map - Segment A13



Order Details

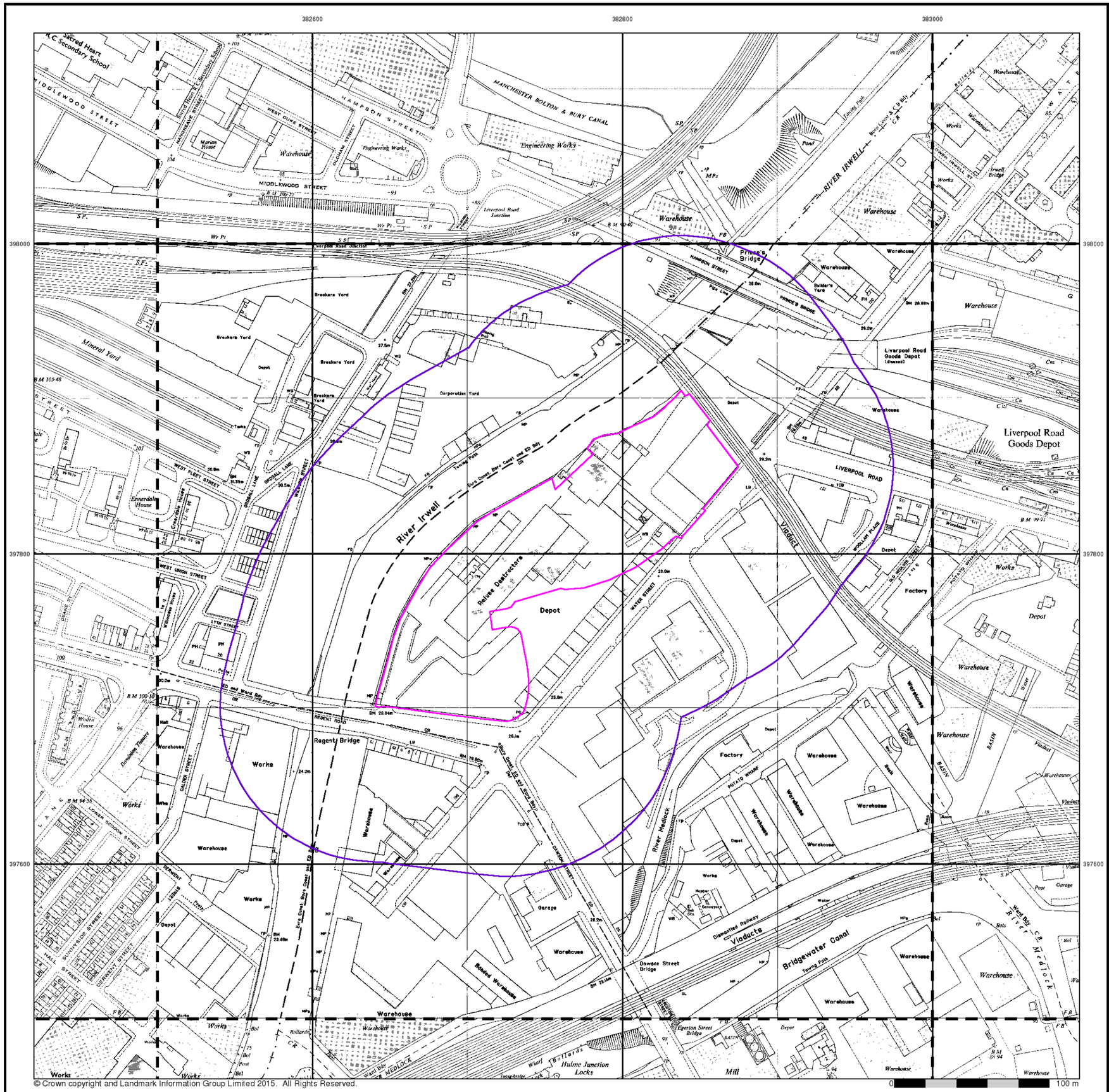
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Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
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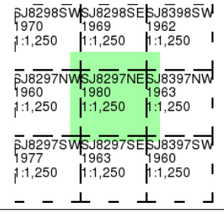
Ordnance Survey Plan

Published 1960 - 1980

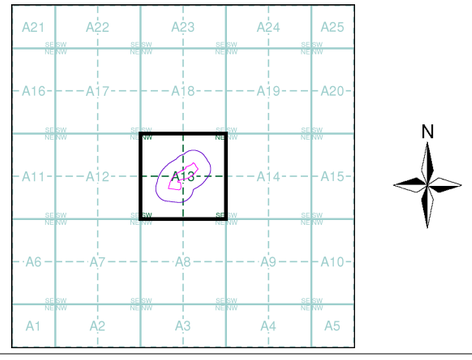
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



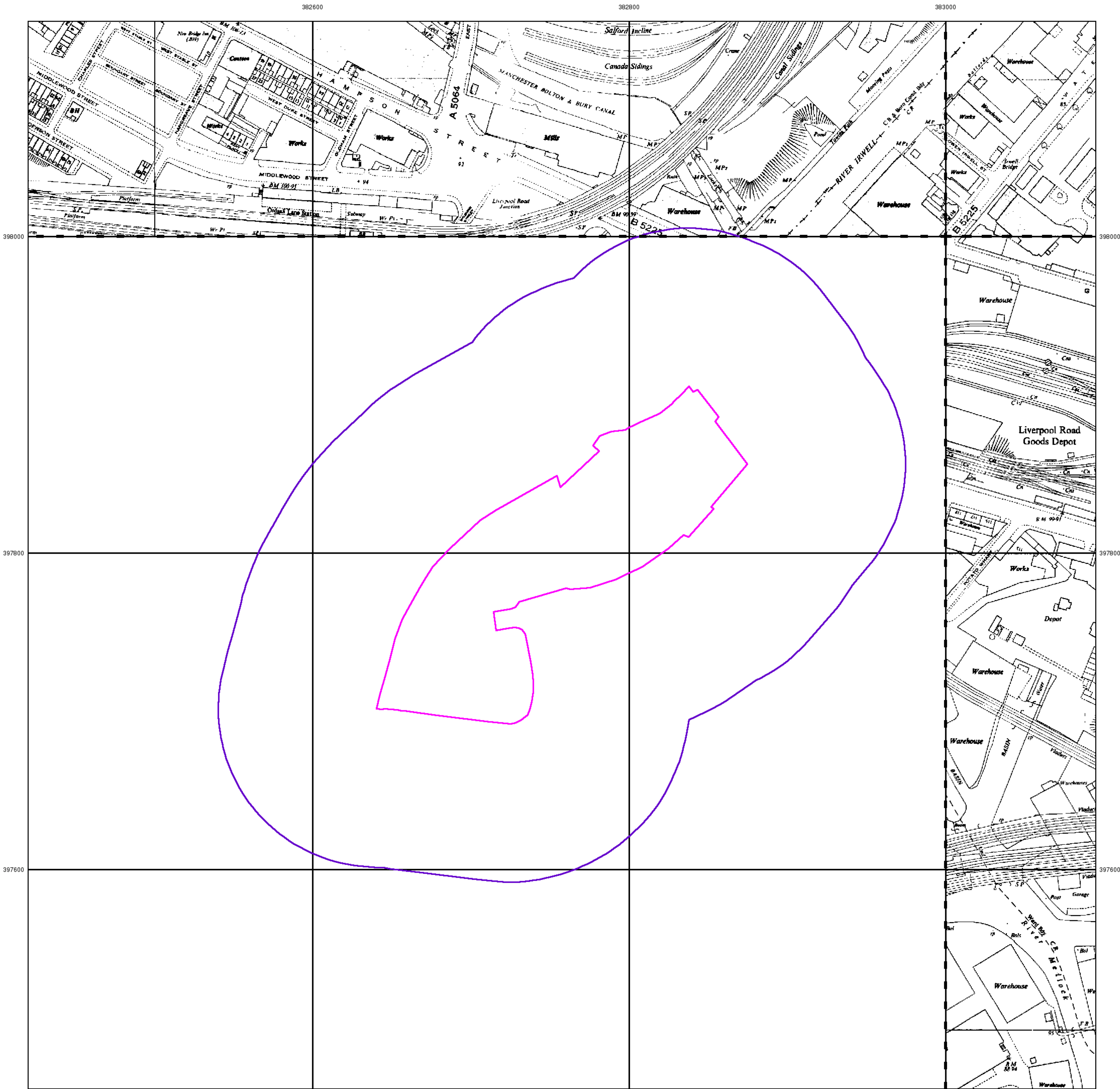
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Slice:	A
Site Area (Ha):	1.96
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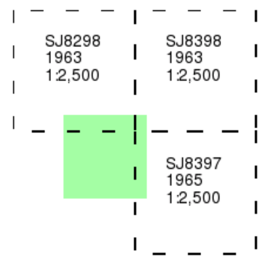
Ordnance Survey Plan

Published 1963 - 1965

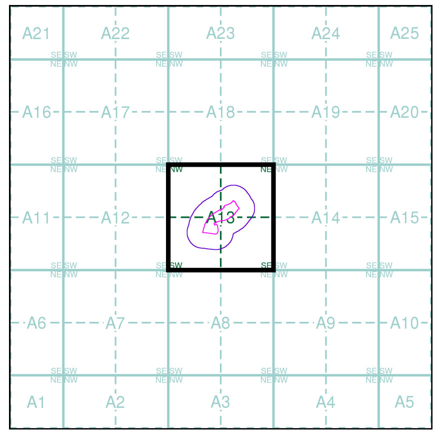
Source map scale - 1:2,500

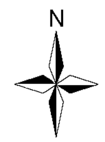
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13





Order Details

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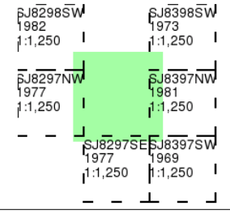
Ordnance Survey Plan

Published 1969 - 1982

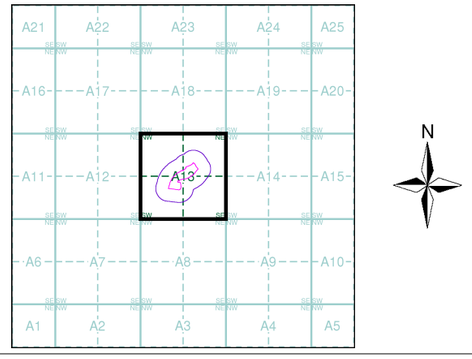
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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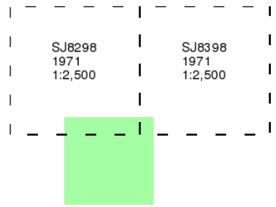
Ordnance Survey Plan

Published 1971

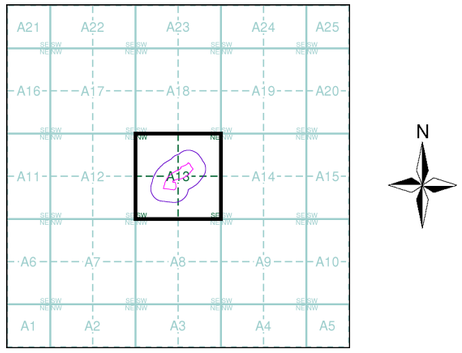
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Historical Map - Segment A13



Order Details

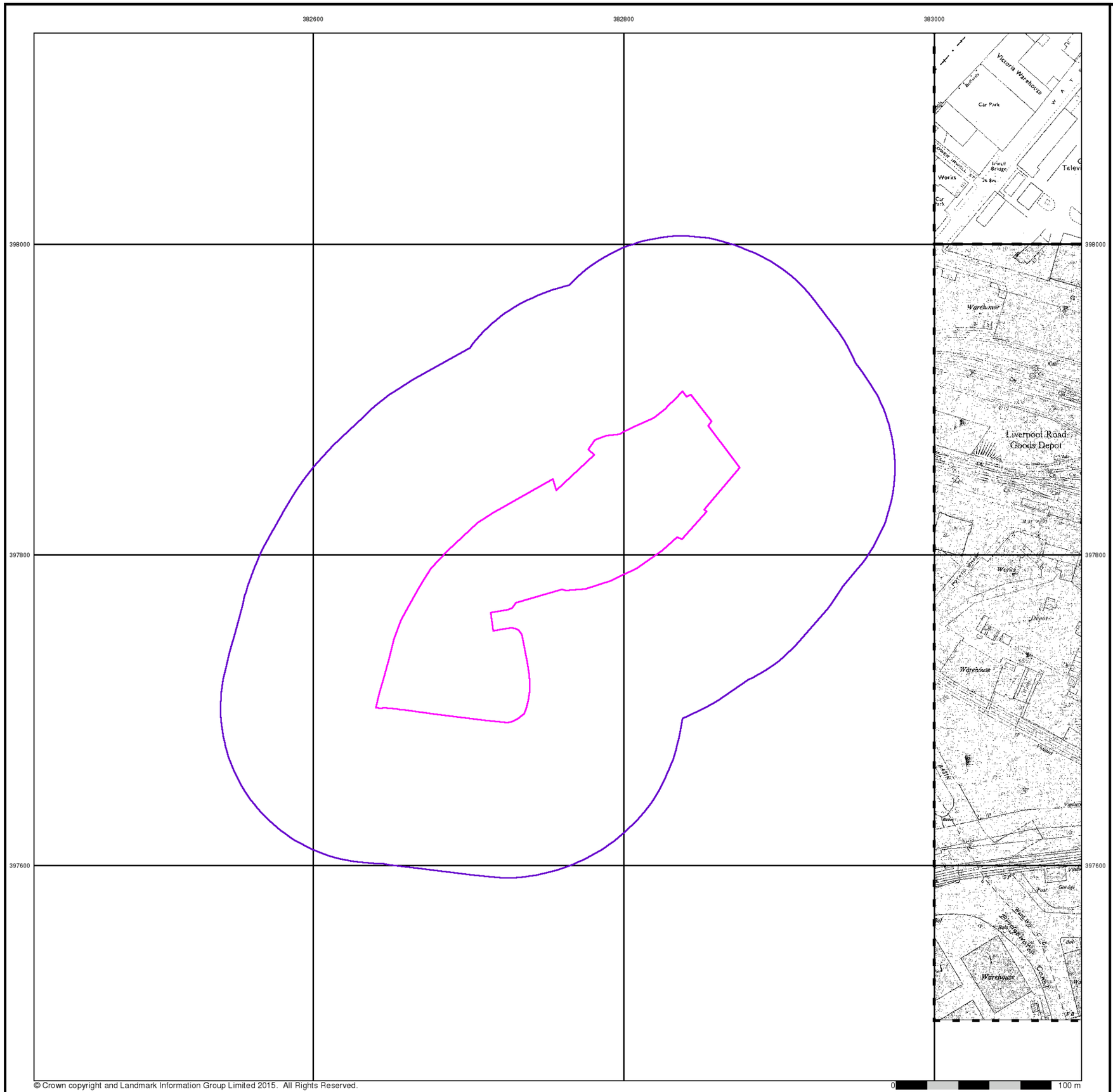
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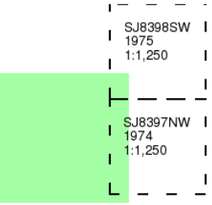
Supply of Unpublished Survey Information

Published 1974 - 1975

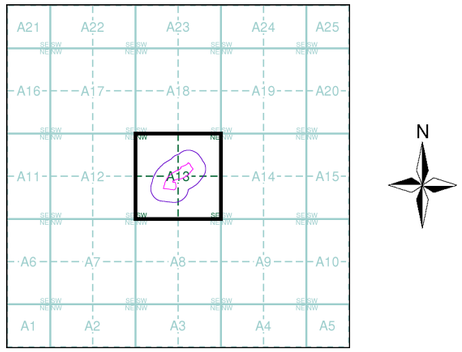
Source map scale - 1:1,250

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a `work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

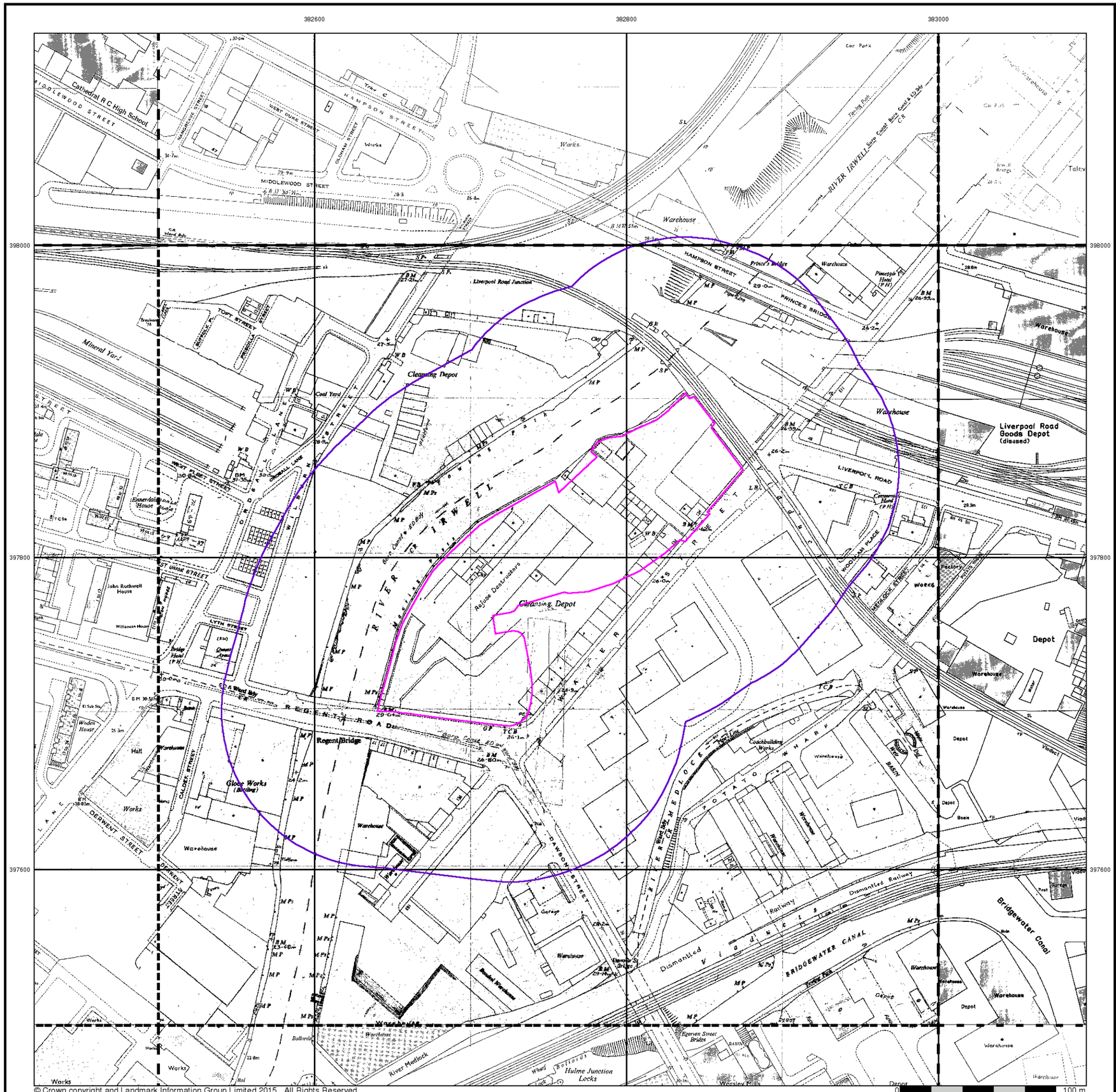
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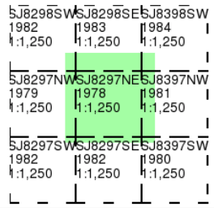
Additional SIMs

Published 1978 - 1984

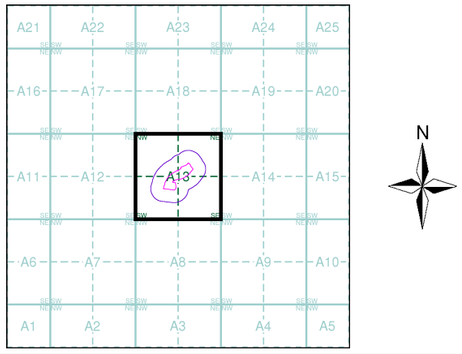
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



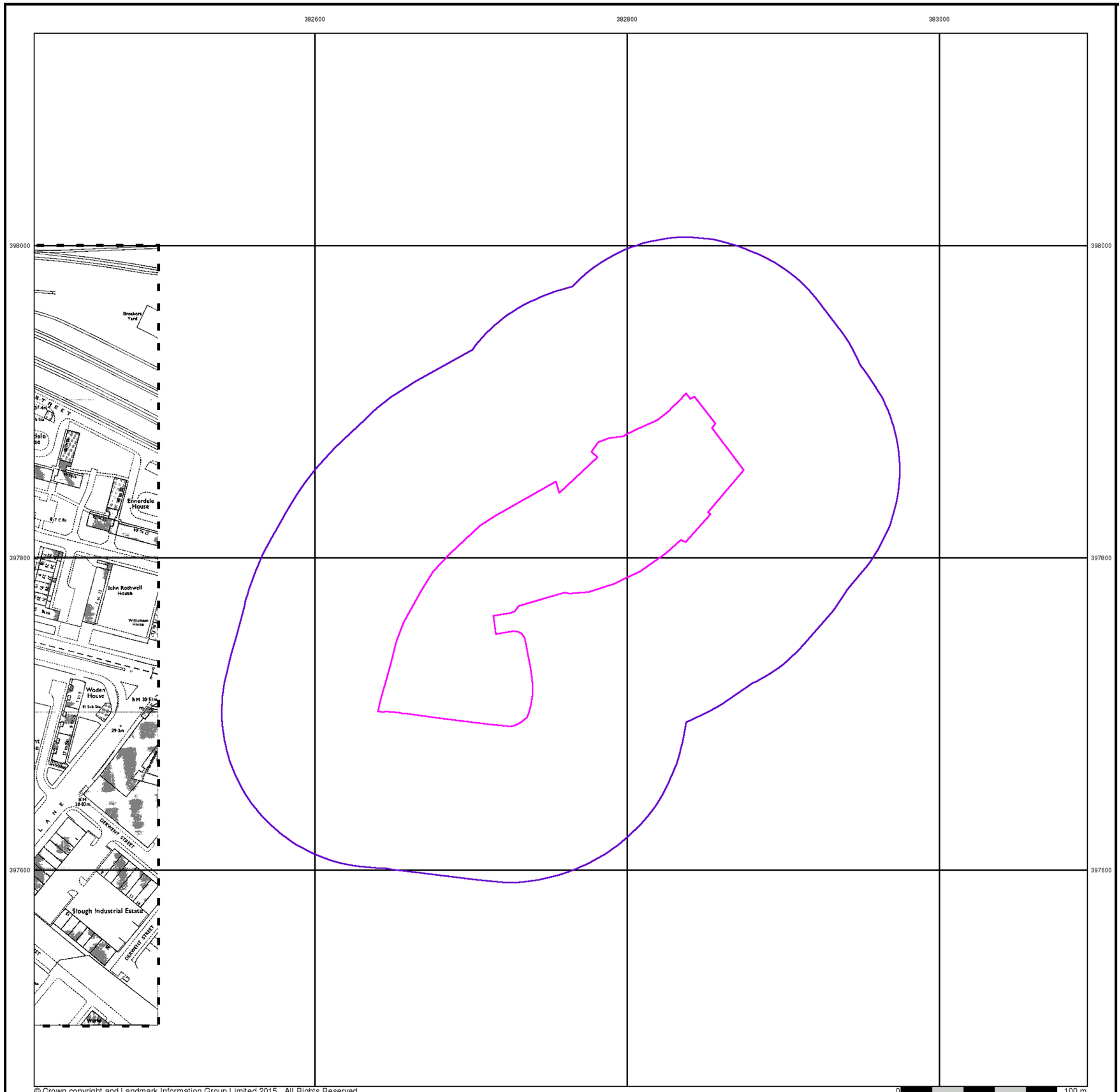
Order Details

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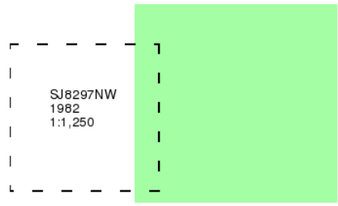
Ordnance Survey Plan

Published 1982

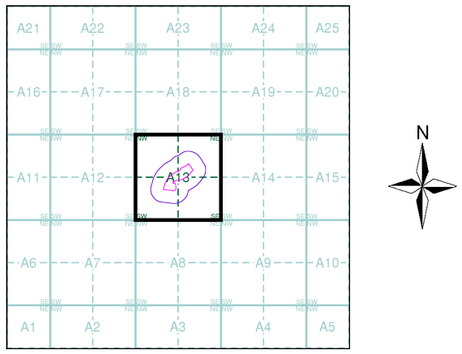
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

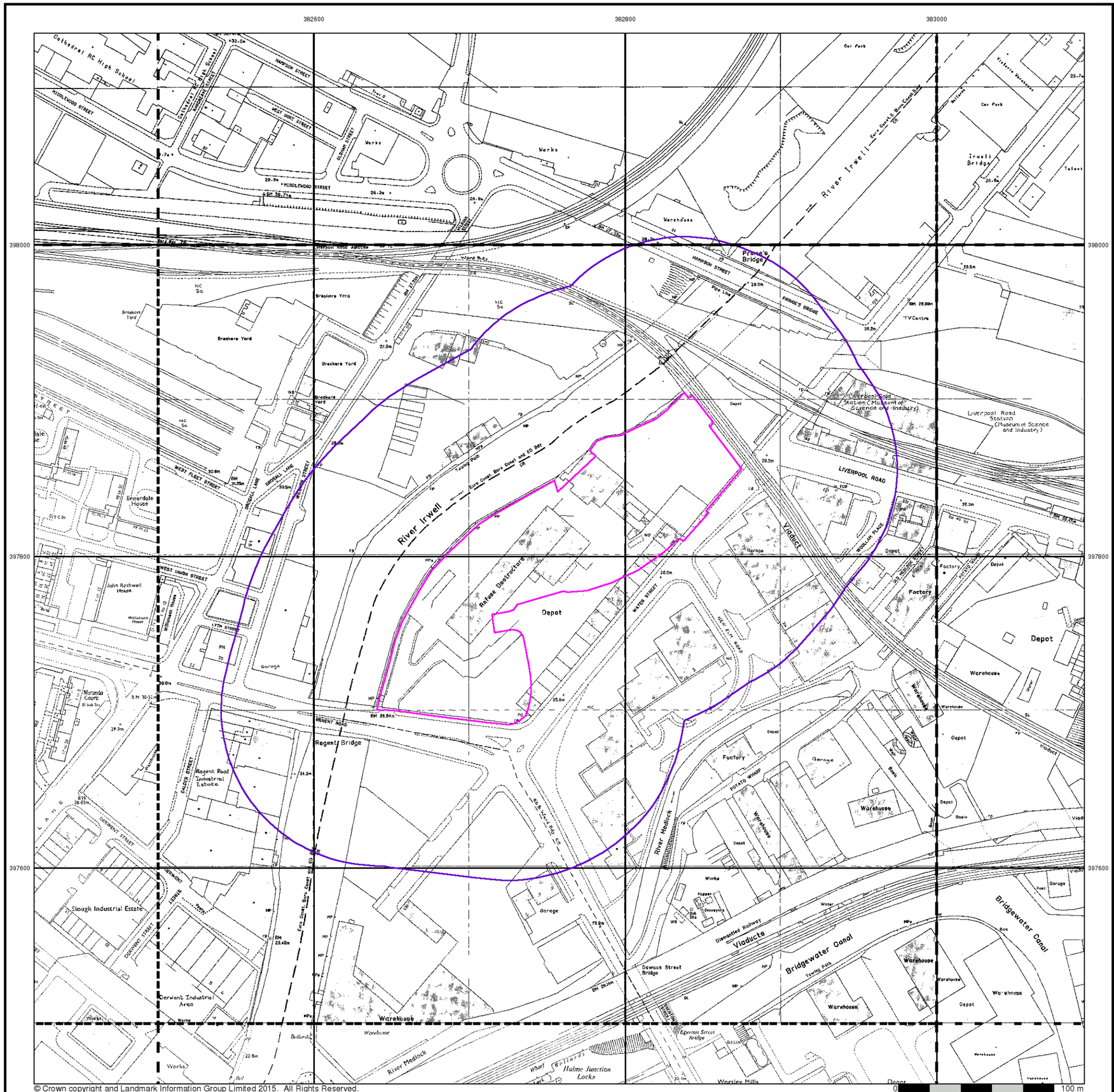
Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	100

Site Details

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Additional SIMs

Published 1984 - 1990

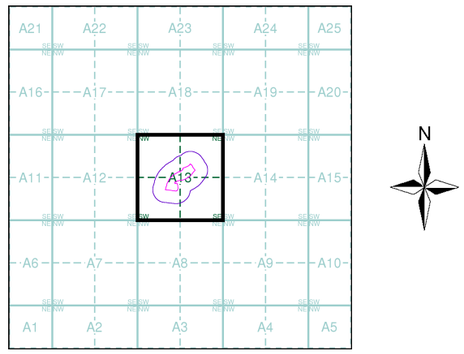
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SJ8298SW 1989 1:1,250	SJ8298SE 1990 1:1,250	SJ8398SW 1990 1:1,250
SJ8297NW 1985 1:1,250	SJ8297NE 1986 1:1,250	SJ8397NW 1986 1:1,250
SJ8297SW 1990 1:1,250	SJ8297SE 1984 1:1,250	SJ8397SW 1990 1:1,250

Historical Map - Segment A13



Order Details

Order Number:	67439542_1_1
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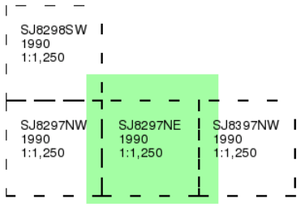
Additional SIMs

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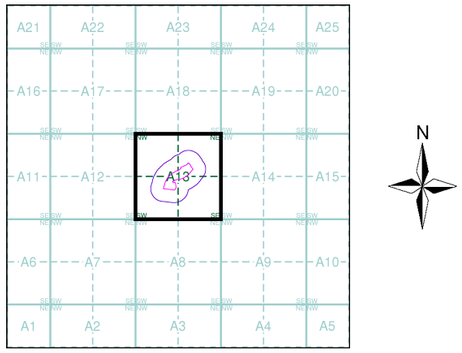
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	67439542_1_1
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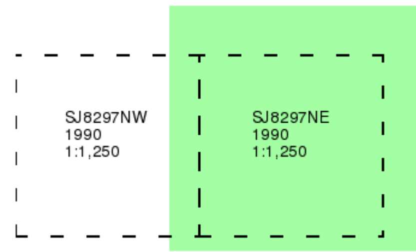
Additional SIMs

Published 1990

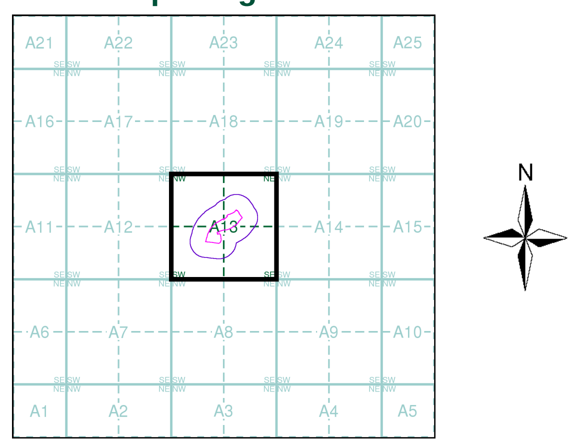
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

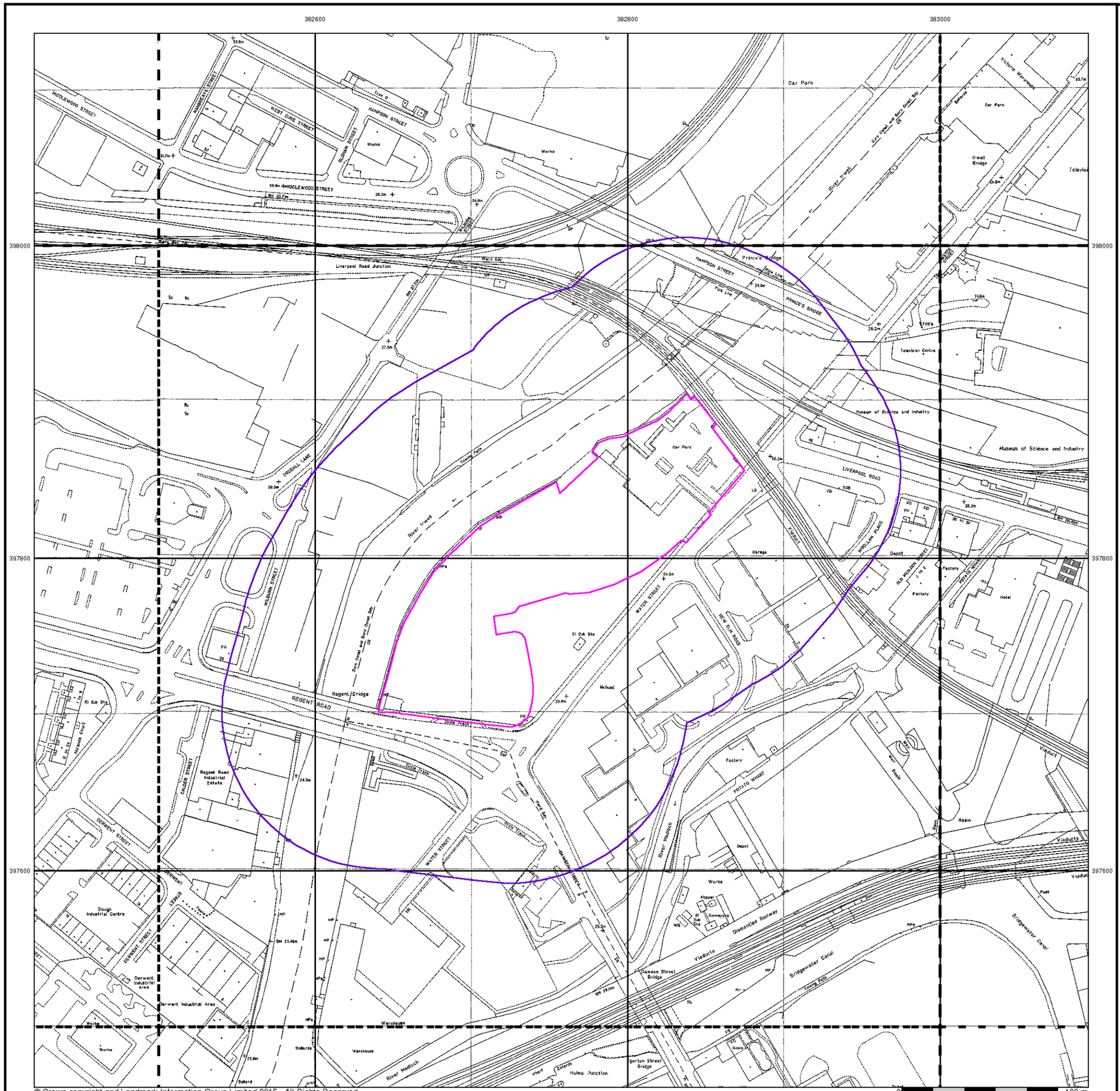
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Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 100

Site Details

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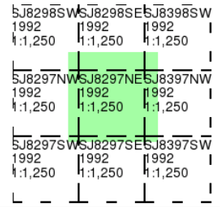
Large-Scale National Grid Data

Published 1992

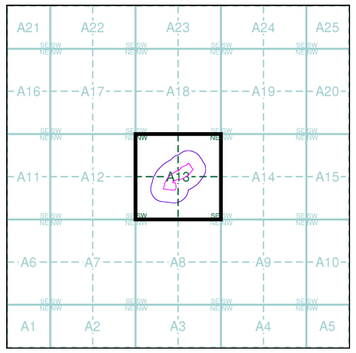
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

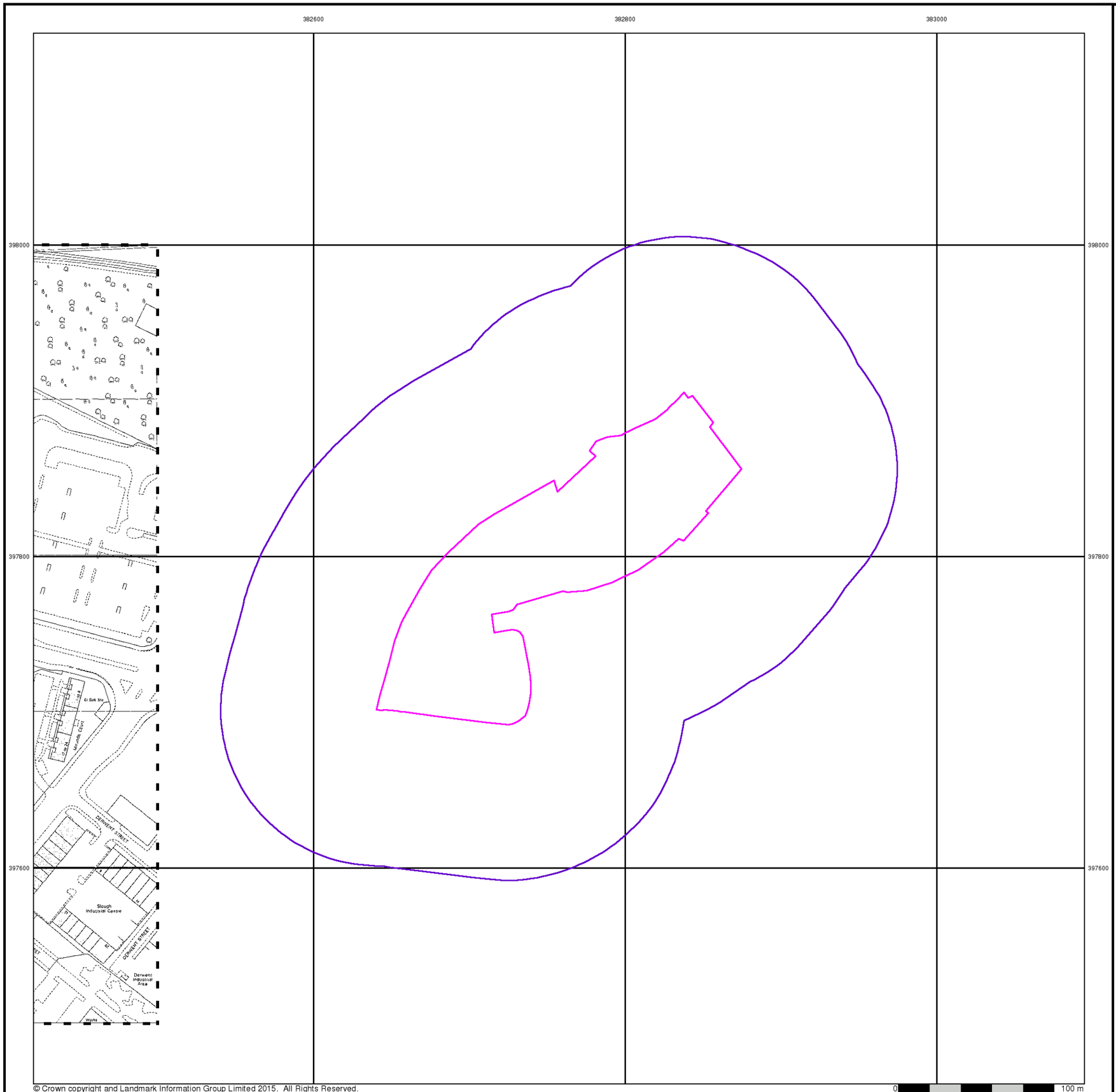
Order Number:	67439542_1_1
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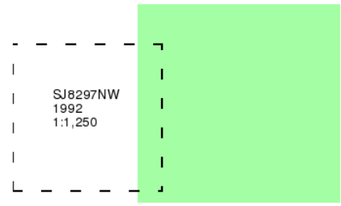
Additional SIMs

Published 1992

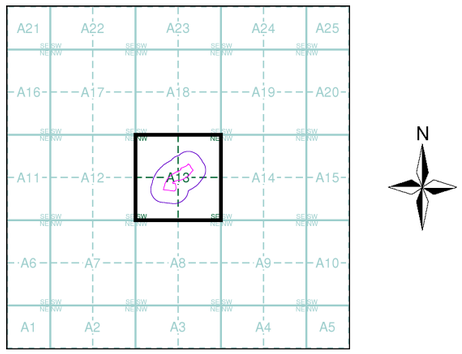
Source map scale - 1:1,250

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

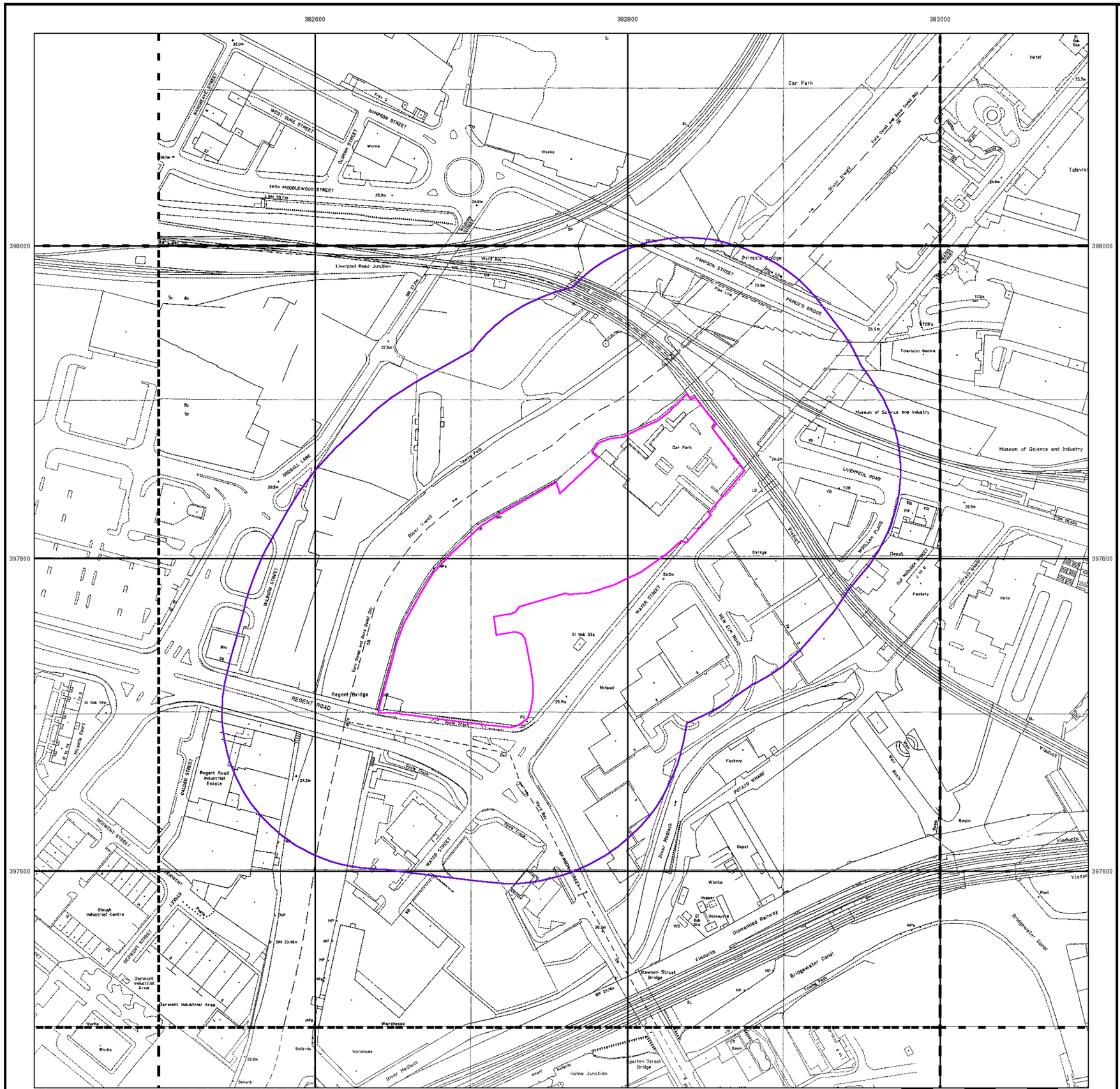
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National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
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Site Details

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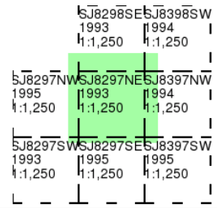
Large-Scale National Grid Data

Published 1993 - 1995

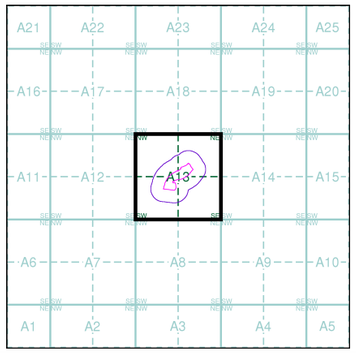
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



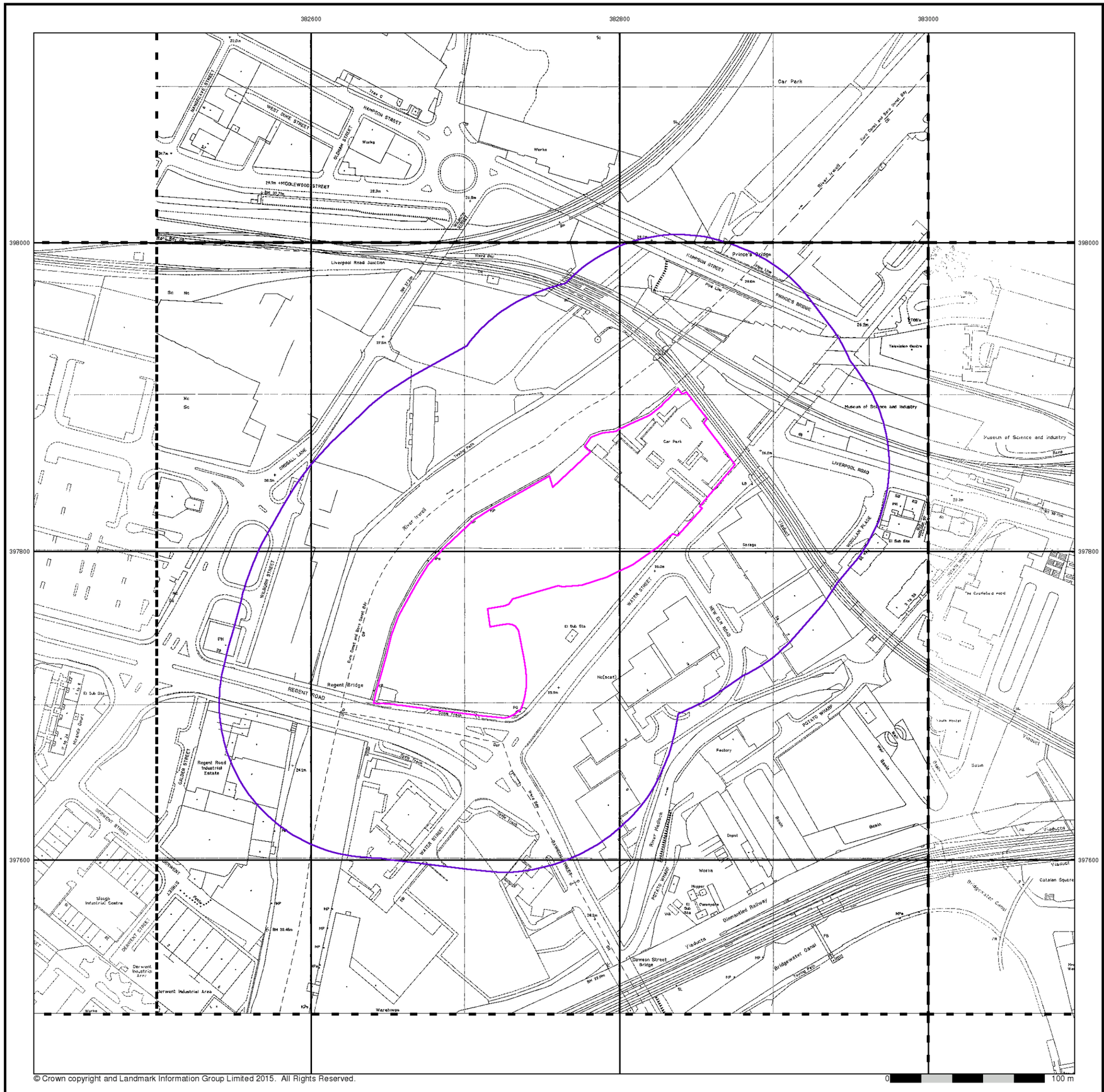
Order Details

Order Number:	67439542_1_1
Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
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Site Details

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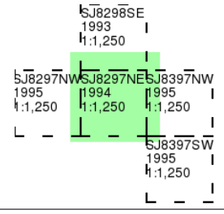
Large-Scale National Grid Data

Published 1993 - 1995

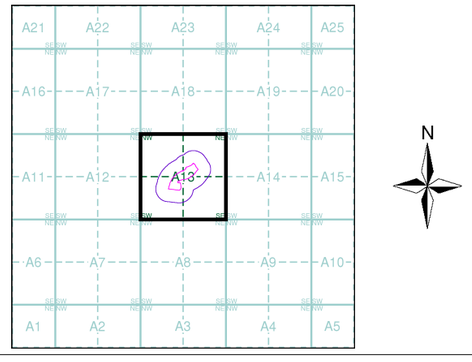
Source map scale - 1:1,250

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

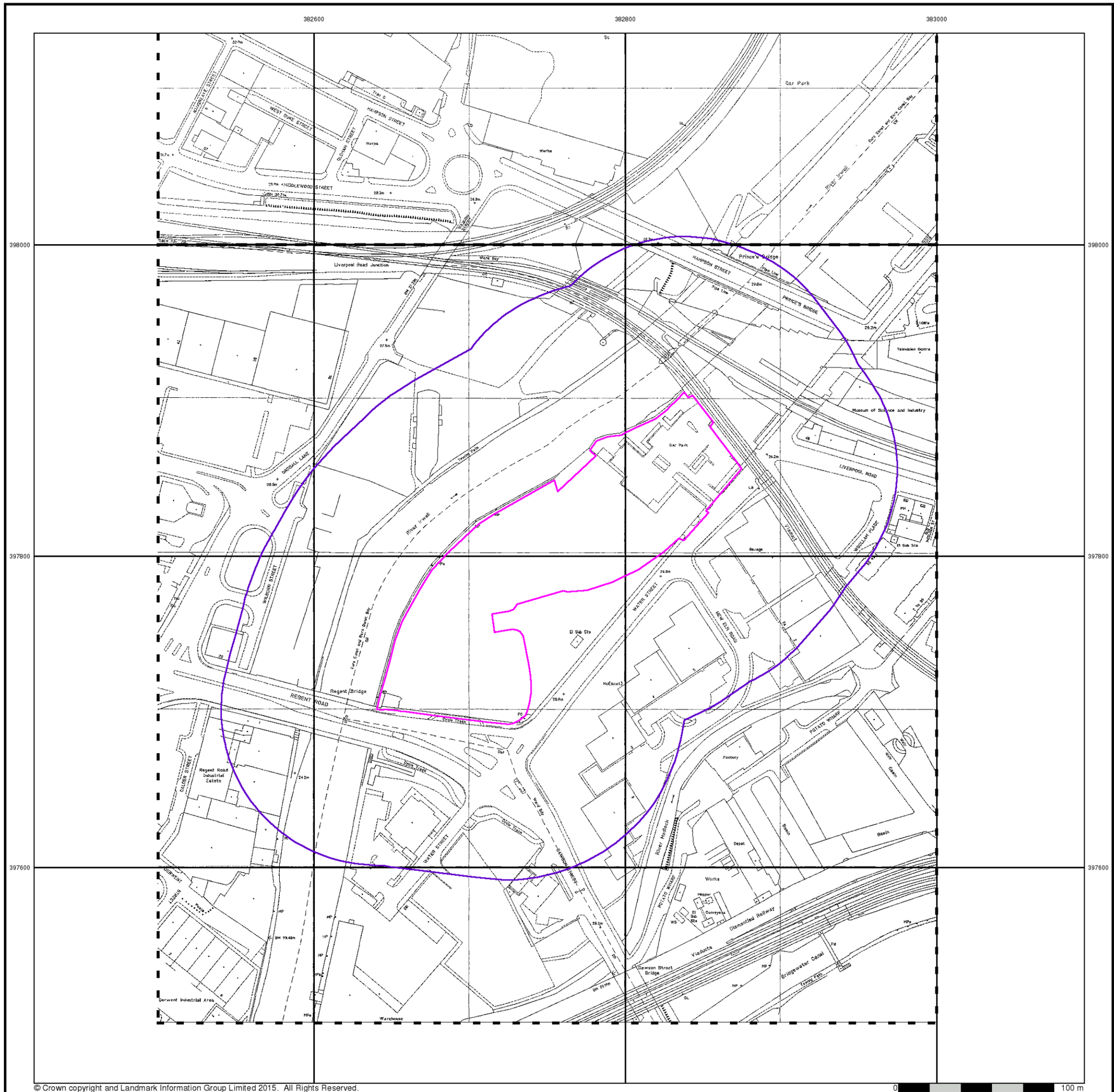
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Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	100

Site Details

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Large-Scale National Grid Data

Published 1994 - 1995

Source map scale - 1:1,250

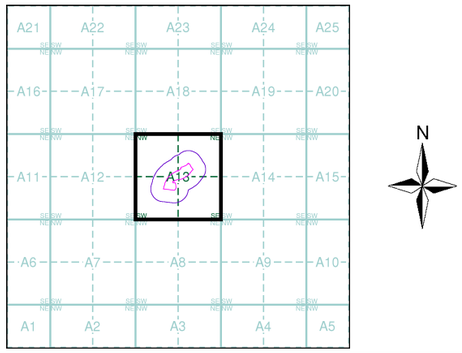
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SJ8298SE
1994
1:1,250

SJ8297NE
1995
1:1,250

Historical Map - Segment A13



Order Details

Order Number:	67439542_1_1
Customer Ref:	3233
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Slice:	A
Site Area (Ha):	1.96
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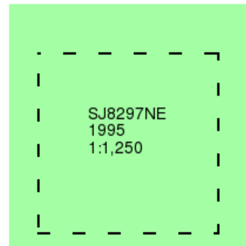
Large-Scale National Grid Data

Published 1995

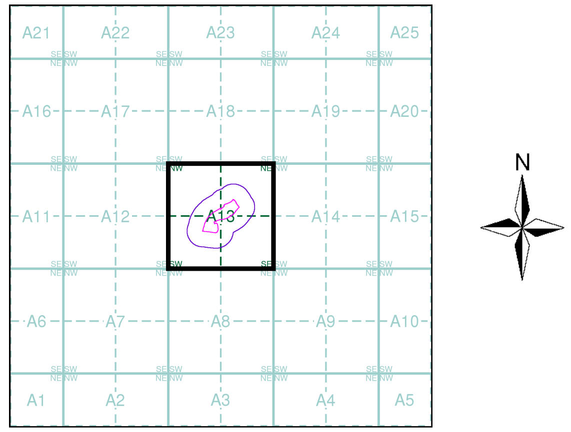
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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

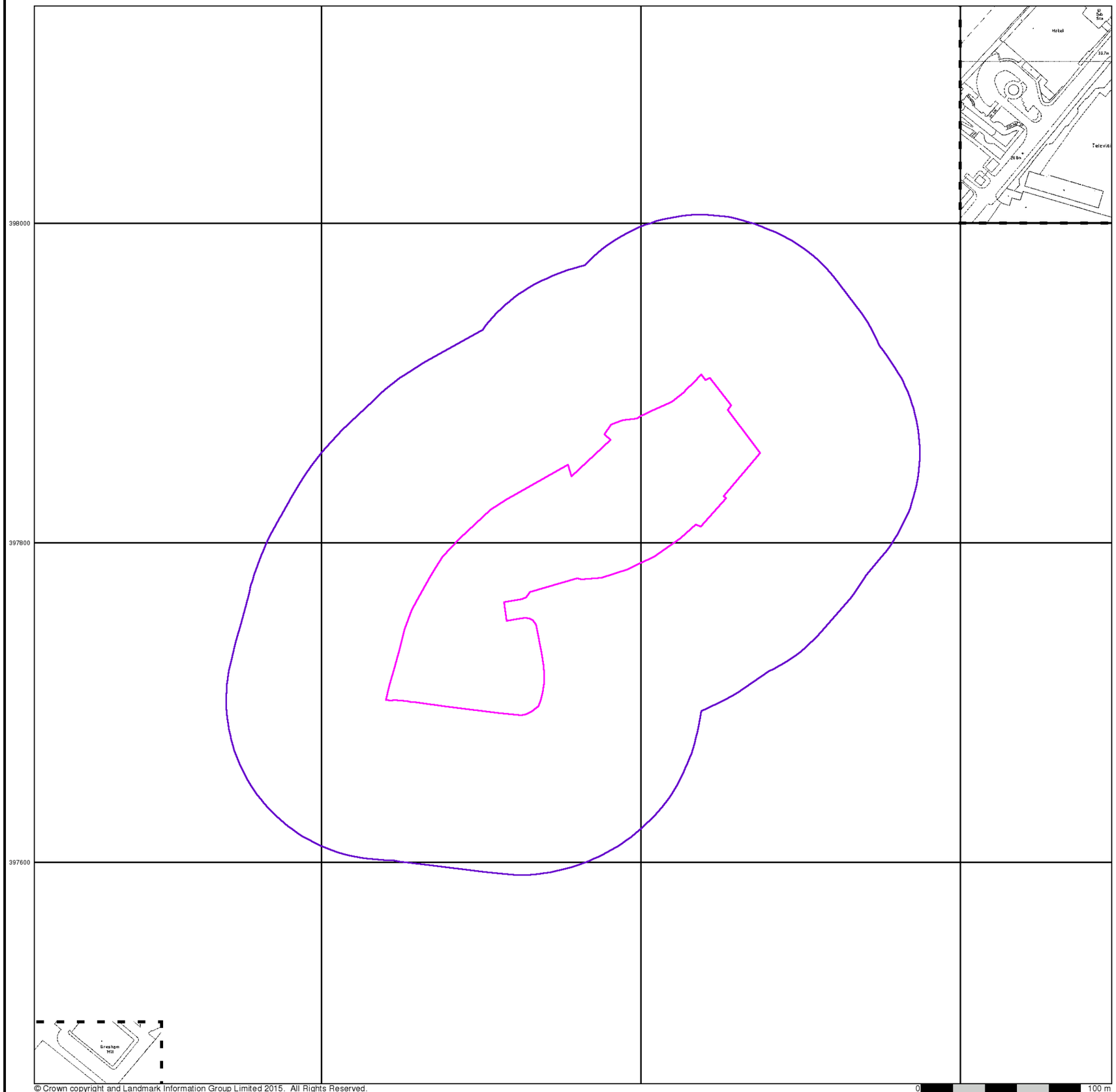
Order Number: 67439542_1_1
Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 100

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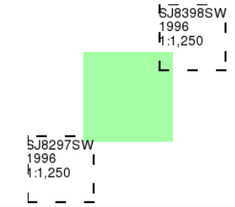
Large-Scale National Grid Data

Published 1996

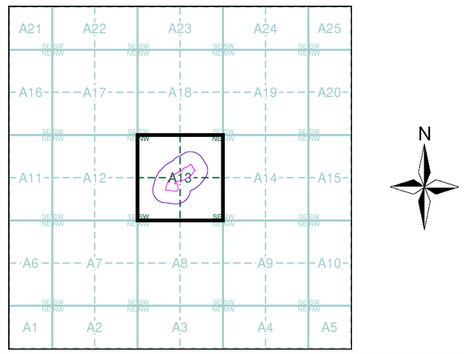
Source map scale - 1:1,250

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	67439542_1_1
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National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
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APPENDIX C - ENVIROCHECK REPORT AND DATASHEETS

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
67439542_1_1

Customer Reference:
3233

National Grid Reference:
382760, 397790

Slice:
A

Site Area (Ha):
1.96

Search Buffer (m):
1000

Site Details:

Zone 9
St Johns Quarter
Water Street
MANCHESTER
M3 4JU

Client Details:

Mr A Smiles
Roc Consulting
81/83 Chapel Street
Salford
Manchester
M3 5DF

Contents

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	45
Hazardous Substances	52
Geological	53
Industrial Land Use	65
Sensitive Land Use	91
Data Currency	92
Data Suppliers	97
Useful Contacts	98

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v49.0

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		20	16	23
Enforcement and Prohibition Notices	pg 15			1	
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 15		2	4	15
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 18	Yes			
Pollution Incidents to Controlled Waters	pg 18			12	27
Prosecutions Relating to Authorised Processes	pg 25				2
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances	pg 25				7
River Quality	pg 26	1		2	3
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points	pg 28				1
Substantiated Pollution Incident Register	pg 28				2
Water Abstractions	pg 29			1	6 (*45)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 41	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 42	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 42	Yes	n/a	n/a	n/a
Source Protection Zones	pg 42				1
Extreme Flooding from Rivers or Sea without Defences	pg 42	Yes		n/a	n/a
Flooding from Rivers or Sea without Defences	pg 42	Yes	Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Detailed River Network Lines	pg 42		Yes	Yes	n/a
Detailed River Network Offline Drainage					n/a

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 45		1	1	3
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 46		1		7
Local Authority Recorded Landfill Sites					
Registered Landfill Sites	pg 48				2
Registered Waste Transfer Sites	pg 49		1		2
Registered Waste Treatment or Disposal Sites	pg 50		1		1
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)	pg 52				2
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)	pg 52				1
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 53	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 53	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 59				2
BGS Urban Soil Chemistry	pg 60		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 63	Yes			
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas	pg 63	Yes	n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities	pg 63				1
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 63	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 63		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 64	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 64	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 64		Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries	pg 65		17	49	221
Fuel Station Entries	pg 89		2	2	3
Sensitive Land Use					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 91			1	
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Water St/Liverpool Rd Cso, St George'S, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 016993597 Permit Version: 1 Effective Date: 5th October 2004 Issued Date: 5th October 2004 Revocation Date: 30th August 2014 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	1	3	382820 397890
1	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Water St/Liverpool Rd Cso, St George'S, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0169 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 25th October 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	1	3	382820 397890
1	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Water St/Liverpool Rd Cso, St George'S, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 016993597 Permit Version: 2 Effective Date: 31st August 2014 Issued Date: 24th March 2014 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	2	3	382836 397905
2	**Discharge Consents** Operator: J Sainsbury Plc Property Type: Sewage Disposal Works - Other Location: J Sainsbury Plc Swo Regent Road, End Of Ordsall Alne, Salford, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991422 Permit Version: 1 Effective Date: 1st November 1994 Issued Date: Not Supplied Revocation Date: 1st November 1994 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A13SW (W)	39	3	382630 397790

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	**Discharge Consents** Operator: Hanson Quarry Products Europe Limited Property Type: Sewage Disposal Works - Other Location: Potato Wharf, Off Liverpool Rd, Manchester, Greater Manchester, M3 4la Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 0175/5 Permit Version: 1 Effective Date: 20th January 1975 Issued Date: Not Supplied Revocation Date: 31st March 1991 Discharge Type: Trade Discharge - Process Water Discharge Environment: Freshwater Stream/River Receiving Water: Crowton Brook **Status: Authorisation revokedRevoked** Positional Accuracy: Manually corrected supplier location	A13SE (S)	117	3	382800 397600
3	**Discharge Consents** Operator: Hanson Quarry Products Europe Limited Property Type: Sewage Disposal Works - Other Location: Potato Wharf, Off Liverpool Rd, Manchester, Greater Manchester, M3 4la Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 0175/5 Permit Version: 4 Effective Date: 1st July 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Crowton Brook **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A13SE (S)	117	3	382800 397600
3	**Discharge Consents** Operator: Hanson Quarry Products Europe Limited Property Type: Sewage Disposal Works - Other Location: Potato Wharf, Off Liverpool Rd, Manchester, Greater Manchester, M3 4la Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 0175/5 Permit Version: 3 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 30th June 1995 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Crowton Brook **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A13SE (S)	117	3	382800 397600
3	**Discharge Consents** Operator: Hanson Quarry Products Europe Limited Property Type: Sewage Disposal Works - Other Location: Potato Wharf, Off Liverpool Rd, Manchester, Greater Manchester, M3 4la Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 0175/5 Permit Version: 2 Effective Date: 1st April 1991 Issued Date: Not Supplied Revocation Date: 31st December 1994 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Crowton Brook **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A13SE (S)	117	3	382800 397600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Water Street Cso, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982993 Permit Version: 1 Effective Date: 23rd June 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	166	3	382950 398030
5	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewage Disposal Works - Water Company Location: Egerton St/Worsley St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0181 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 1st January 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Consent revoked or revised: New Consent issued (Section 37(1))** Positional Accuracy: Located by supplier to within 100m	A13SE (S)	171	3	382780 397530
5	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Egerton St/Worsley St Cso, Cornbrook, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016983277 Permit Version: 1 Effective Date: 1st November 1999 Issued Date: 19th February 1999 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: The River Medlock **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A13SE (S)	175	3	382791 397530
5	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewage Disposal Works - Water Company Location: Chester Rd At York St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982720 Permit Version: 1 Effective Date: 30th September 1994 Issued Date: Not Supplied Revocation Date: 18th February 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 10m	A13SE (S)	175	3	382790 397530

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewage Disposal Works - Water Company Location: Chester Rd/York St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0279 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 19th December 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A13SE (S)	175	3	382790 397530
5	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewage Disposal Works - Water Company Location: Egerton St/Elesmere St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0180 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 12th August 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 10m	A13SE (S)	175	3	382790 397530
5	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewage Disposal Works - Water Company Location: Chester Rd At York St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982720 Permit Version: 2 Effective Date: 19th February 1999 Issued Date: Not Supplied Revocation Date: 14th July 2000 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A13SE (S)	175	3	382790 397530
6	**Discharge Consents** Operator: Rmc Roadstone Ltd - North West Property Type: Manufacture Of Cement, Lime Plaster Location: Ready Mixed Concrete Depot, Liverpool Road, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016990275 Permit Version: 1 Effective Date: 10th March 1977 Issued Date: Not Supplied Revocation Date: 31st August 1989 Discharge Type: Trade Discharge - Process Water Discharge Environment: Canal Receiving Water: Bridgewater Canal **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A13SE (E)	177	3	383000 397730

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	**Discharge Consents** Operator: Charles Topham (Developments) Ltd Property Type: Domestic Property (Multiple) Location: Topham Res Development Swo, Liverpool Road/Potato Wharf, Castlefield, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991276 Permit Version: 1 Effective Date: 18th May 1988 Issued Date: Not Supplied Revocation Date: 1st July 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Canal Receiving Water: Bridgewater Canal **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A13SE (E)	195	3	383000 397700
7	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Hampton St/Ordsall Lane, Salford, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01SAL0183 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Unknown Receiving Water: Not Supplied **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A13NW (N)	178	3	382680 398020
8	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Grape Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0170 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Varied under EPR 2010** Positional Accuracy: Approximate location provided by supplier	A13NE (NE)	184	3	383000 398000
8	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Grape Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0170 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 2nd September 2010 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	184	3	383000 398000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Discharge Consents** Operator: Dandara Limited Property Type: Sewage Disposal Works - Other Location: St Georges Island Projects Office, Hulme Hall Road, Manchester, M15 4ly Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 016993598 Permit Version: 1 Effective Date: 14th September 2004 Issued Date: 14th September 2004 Revocation Date: 14th January 2005 Discharge Type: Trade Effluent Discharge-Site Drainage Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Consent expired** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	254	3	382610 397450
10	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Pumping Station - Water Company Location: Rice St Near Castle St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0171 Permit Version: 1 Effective Date: 15th September 1993 Issued Date: Not Supplied Revocation Date: 15th September 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Canal Receiving Water: Bridgewater Canal **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A14SW (E)	297	3	383120 397690
11	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Water St/New Quay St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 016993831 Permit Version: 1 Effective Date: 21st March 2006 Issued Date: 21st March 2006 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: The River Irwell **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18SE (NE)	357	3	383080 398170
12	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: City Rd Cso, Hulme, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982954 Permit Version: 3 Effective Date: 1st January 2015 Issued Date: 29th March 2010 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Canal Receiving Water: Manchester Ship Canal **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	363	3	382520 397360

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Junction Rolls Cres/Yew Street Cso, Hulme, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982958 Permit Version: 3 Effective Date: 1st January 2015 Issued Date: 29th March 2010 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Canal Receiving Water: Manchester Ship Canal **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	363	3	382520 397360
12	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Stretford Rd/Upper Moss Lane Cso, Hulme, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0365 Permit Version: 3 Effective Date: 1st January 2015 Issued Date: 29th March 2010 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Canal Receiving Water: Manchester Ship Canal **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	363	3	382520 397360
12	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Junction Rolls Cres/Yew Street Cso, Hulme, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982958 Permit Version: 2 Effective Date: 31st March 2005 Issued Date: 14th March 2005 Revocation Date: 31st December 2014 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Canal Receiving Water: Manchester Ship Canal **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	363	3	382520 397360
12	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: City Rd Cso, Hulme, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982954 Permit Version: 2 Effective Date: 31st March 2005 Issued Date: 7th March 2005 Revocation Date: 31st December 2014 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Canal Receiving Water: Manchester Ship Canal **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	363	3	382520 397360

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Stretford Rd/Upper Moss Lane Cso, Hulme, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0365 Permit Version: 2 Effective Date: 31st March 2005 Issued Date: 7th March 2005 Revocation Date: 31st December 2014 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Canal Receiving Water: Manchester Ship Canal **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	363	3	382520 397360
12	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: City Rd Cso, Hulme, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982954 Permit Version: 1 Effective Date: 23rd June 1995 Issued Date: Not Supplied Revocation Date: 30th March 2005 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Canal Receiving Water: Manchester Ship Canal **Status: Consent revoked or revised: New Consent issued (Section 37(1))** Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	363	3	382520 397360
12	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Marple St/Rolls Cres Cso, Hulme, Greater Manchester, M15 5ft Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982958 Permit Version: 1 Effective Date: 8th August 1995 Issued Date: Not Supplied Revocation Date: 30th March 2005 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Canal Receiving Water: Manchester Ship Canal **Status: Consent revoked or revised: New Consent issued (Section 37(1))** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	363	3	382520 397360
13	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Water St/New Quay St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 01MAN0172 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: 1st January 1995 Revocation Date: 20th March 2006 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Consent revoked or revised: New Consent issued (Section 37(1))** Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	421	3	383120 398220

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
14	**Discharge Consents** Operator: North Western Road Car Co Ltd Property Type: Sewage Disposal Works - Other Location: Garage @ Hulme Hall Rd Hulme Hall Road, Stockport, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 0168/800 Permit Version: 1 Effective Date: 1st April 1991 Issued Date: Not Supplied Revocation Date: 31st December 1994 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status:** **Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	459	3	382492 397268
14	**Discharge Consents** Operator: Peel Investments (North) Limited Property Type: Sewage Disposal Works - Other Location: Garage @ Hulme Hall Rd Hulme Hall Road, Stockport, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 0168/800 Permit Version: 2 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 16th April 2002 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status:** **Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	459	3	382492 397268
15	**Discharge Consents** Operator: Fearnley Developments Ltd Property Type: General Construction Work Location: Fearnley Developments Ltd, Salford, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991429 Permit Version: 1 Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: 1st November 1994 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status:** **Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	472	3	383140 398270
16	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Mancunian Way Roundabout, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0368 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Unknown Receiving Water: Not Supplied **Status:** **Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A8NE (S)	473	3	382960 397280

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
17	**Discharge Consents** Operator: Fearnley Developments Ltd Property Type: General Construction Work Location: Fearnley Developments Ltd, Salford, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991429 Permit Version: 1 Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: 1st November 1994 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	529	3	383180 398310
18	**Discharge Consents** Operator: Hanson Quarry Products Europe Limited Property Type: Sewage Disposal Works - Other Location: Potato Wharf, Off Liverpool Rd, Manchester, Greater Manchester, M3 4la Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 0175/5 Permit Version: 1 Effective Date: 20th January 1975 Issued Date: Not Supplied Revocation Date: 31st March 1991 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Crowton Brook **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A14SW (SE)	555	3	383300 397500
18	**Discharge Consents** Operator: Hanson Quarry Products Europe Limited Property Type: Sewage Disposal Works - Other Location: Potato Wharf, Off Liverpool Rd, Manchester, Greater Manchester, M3 4la Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 0175/5 Permit Version: 2 Effective Date: 1st April 1991 Issued Date: Not Supplied Revocation Date: 31st December 1994 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Crowton Brook **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A14SW (SE)	555	3	383300 397500
18	**Discharge Consents** Operator: Hanson Quarry Products Europe Limited Property Type: Sewage Disposal Works - Other Location: Potato Wharf, Off Liverpool Rd, Manchester, Greater Manchester, M3 4la Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 0175/5 Permit Version: 3 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 30th June 1995 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Crowton Brook **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A14SW (SE)	555	3	383300 397500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	**Discharge Consents** Operator: Hanson Quarry Products Europe Limited Property Type: Sewage Disposal Works - Other Location: Potato Wharf, Off Liverpool Rd, Manchester, Greater Manchester, M3 4la Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 0175/5 Permit Version: 4 Effective Date: 1st July 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Crowton Brook **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A14SW (SE)	555	3	383300 397500
19	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Deansgate, L. Peter St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 01man0157 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 18th July 2014 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Tunnel To Medlock **Status: Surrendered under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	641	3	383370 397450
19	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Deansgate, L. Peter St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0157 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 2nd September 2010 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Into And/Or Watercourse Receiving Water: Tunnel To Medlock **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	641	3	383370 397450
19	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Chester Rd At Owen St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0276 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 1st December 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Consent revoked or revised: New Consent issued (Section 37(1))** Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	645	3	383360 397430

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Chester Rd At Owen St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982719 Permit Version: 1 Effective Date: 30th September 1994 Issued Date: Not Supplied Revocation Date: 30th November 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Manually corrected supplier location	A9NW (SE)	645	3	383360 397430
19	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Chester Rd At Owen St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982719 Permit Version: 2 Effective Date: 1st December 1999 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	648	3	383360 397425
20	**Discharge Consents** Operator: The Lord Chancellor Property Type: Trade (Unknown/Other) Location: Manchester Civil Justice Centre, Gartside Street, Manchester, M3 3el Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 016993601 Permit Version: 2 Effective Date: 1st January 2007 Issued Date: 26th April 2006 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Cooling Water Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	647	3	383310 398350
20	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Water St/Bridge St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 016993550 Permit Version: 1 Effective Date: 12th April 2006 Issued Date: 12th April 2006 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: The River Irwell **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	661	3	383320 398360

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Water St/Bridge St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 01MAN0174 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: 1st January 1995 Revocation Date: 11th April 2006 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Consent revoked or revised: New Consent issued (Section 37(1))** Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	661	3	383320 398360
20	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Bridge Street Cso, Bridge Street, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982898 Permit Version: 3 Effective Date: 14th November 1995 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	668	3	383330 398360
20	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Bridge Street Cso, Bridge Street, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982898 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 10th May 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	668	3	383330 398360
20	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Bridge Street Cso, Bridge Street, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Supplied Reference: 016982898 Permit Version: 2 Effective Date: 11th May 1995 Issued Date: Not Supplied Revocation Date: 13th November 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	668	3	383330 398360

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	**Discharge Consents** Operator: Bovis Lend Lease Limited Property Type: Trade (Unknown/Other) Location: Manchester Civil Justice Centre, Gartside Street, Manchester, M3 3el Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 016993601 Permit Version: 1 Effective Date: 1st January 2007 Issued Date: 5th October 2004 Revocation Date: 25th April 2006 Discharge Type: Trade Discharges - Cooling Water Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	676	3	383350 398350
21	**Discharge Consents** Operator: Riverside Developments Property Type: Domestic Property (Multiple) Location: Riverside Res Development Swo, The Crescent/Adelphi Street, Salford, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016991216 Permit Version: 1 Effective Date: 1st July 1991 Issued Date: Not Supplied Revocation Date: 1st July 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: River Irwell **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A18NW (N)	773	3	382500 398600
22	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Pumping Station - Water Company Location: Trumpet Street, Sso, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0168 Permit Version: 1 Effective Date: 15th September 1993 Issued Date: Not Supplied Revocation Date: 15th September 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Tib Culvert-Medlock **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A14SE (E)	900	3	383720 397550
23	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Albion Street/Hewitt St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01MAN0251 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: Not Supplied Revocation Date: 1st January 1995 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Consent revoked or revised: New Consent issued (Section 37(1))** Positional Accuracy: Located by supplier to within 100m	A14SE (E)	912	3	383700 397470

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Albion Street/Hewitt St, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016982706 Permit Version: 1 Effective Date: 30th September 1994 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Medlock **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A14SE (E)	914	3	383700 397465
24	**Discharge Consents** Operator: Acroy Ltd Property Type: Trade (Unknown/Other) Location: Chapel Wharf, Dearmans Place, Salford, Manchester, M3 5lh Authority: Environment Agency, North West Region Catchment Area: Irwell Reference: 016993796 Permit Version: 1 Effective Date: 22nd June 2005 Issued Date: 22nd June 2005 Revocation Date: 10th June 2008 Discharge Type: Trade Effluent Discharge-Site Drainage Discharge Environment: Freshwater Stream/River Receiving Water: Via Ditch To River Irwell **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19NE (NE)	924	3	383530 398520
25	**Discharge Consents** Operator: United Utilities Water Plc Property Type: Sewerage Network - Sewers - Water Company Location: Great Bridgewater St, Opposite Chepstow Street, Manchester, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 01man0163 Permit Version: 1 Effective Date: 15th September 1993 Issued Date: Not Supplied Revocation Date: 15th September 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Tib Culvert **Status: Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 100m	A15SW (E)	948	3	383790 397610
26	**Enforcement and Prohibition Notices** Location: Manchester Children's Hospital, Gartside Street, MANCHESTER, M3 3FJ Permit Reference: Not Given Enforcement Date: 4th August 1995 Details: Press Release HM269, Breach of conditions relating to accumulation & disposal of radioactive wastes; under RSA93. Positional Accuracy: Unknown	A14NW (NE)	493	3	383285 398129
27	**Local Authority Pollution Prevention and Controls** Name: Sainsbury'S Plc Location: 100 Regent Road, SALFORD, Lancashire, M5 4QU Authority: Salford City Council, Environmental Health Department Permit Reference: 23071/010311 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A13NW (W)	151	4	382524 397829

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
28	**Local Authority Pollution Prevention and Controls** Name: Hanson Aggregates Location: Potato Wharf, Off Liverpool Road, MANCHESTER, M3 4NB Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/B/03/05/AW Dated: 7th August 1992 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A13SE (E)	189	5	382997 397705
29	**Local Authority Pollution Prevention and Controls** Name: Shell Phoenix Location: Regent Road, SALFORD, Lancashire, M5 4TS Authority: Salford City Council, Environmental Health Department Permit Reference: 23188/090210 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status:** **Authorised** Positional Accuracy: Automatically positioned to the address	A12SE (W)	304	4	382339 397732
30	**Local Authority Pollution Prevention and Controls** Name: Timpson Ltd (Sainsbury) Location: 100 Regent Road, Salford, M5 4qu Authority: Salford City Council, Environmental Health Department Permit Reference: 123814/241007 Dated: 24th October 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status:** **Authorisation revokedRevoked** Positional Accuracy: Manually positioned to the address or location	A12NE (W)	359	4	382305 397835
31	**Local Authority Pollution Prevention and Controls** Name: H Jackson Company Location: 84 Oldfield Road, SALFORD, Lancashire, M5 3SR Authority: Salford City Council, Environmental Health Department Permit Reference: 29/33 Dated: 16th June 1994 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorisation revokedRevoked** Positional Accuracy: Manually positioned to the address or location	A12NE (W)	455	4	382220 397888
31	**Local Authority Pollution Prevention and Controls** Name: Synergie - Texaco Service Station Location: Oldfield Road, SALFORD, Lancashire, M5 4NE Authority: Salford City Council, Environmental Health Department Permit Reference: 23297/190912 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A12NE (W)	459	4	382233 397934
32	**Local Authority Pollution Prevention and Controls** Name: Cemex Uk Materials Ltd - Readymix Location: Hope Street, SALFORD, Lancashire, M5 4WN Authority: Salford City Council, Environmental Health Department Permit Reference: 7235/041212 Dated: 10th August 1993 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	596	4	382332 398285
32	**Local Authority Pollution Prevention and Controls** Name: Cemex Uk Materials Ltd - Aggregates Location: Hope Street, SALFORD, Lancashire, M5 4WN Authority: Salford City Council, Environmental Health Department Permit Reference: 8186/250811 Dated: 28th October 1993 Process Type: Local Authority Air Pollution Control Description: Part B - General Mineral Process (No Specific Reference) **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	621	4	382306 398296

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	**Local Authority Pollution Prevention and Controls** Name: Concept Automotive Services Location: Upper Wharfe Street, SALFORD, Lancashire, M5 4TY Authority: Salford City Council, Environmental Health Department Permit Reference: NOT GIVEN Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorised** Positional Accuracy: Manually positioned to the road within the address or location	A18SW (NW)	598	4	382425 398354
33	**Local Authority Pollution Prevention and Controls** Name: Citroen UK Ltd Location: Upper Wharf Street, SALFORD, Lancashire, M5 4PG Authority: Salford City Council, Environmental Health Department Permit Reference: 29/56 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorised** Positional Accuracy: Manually positioned to the road within the address or location	A17SE (NW)	616	4	382400 398357
34	**Local Authority Pollution Prevention and Controls** Name: Salford Quays Laundry & Dry Cleaning Location: 6 Muslin Street, Salford, M5 4nf Authority: Salford City Council, Environmental Health Department Permit Reference: 122043/280907 Dated: 28th September 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status:** **Permitted** Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	607	4	382254 398228
35	**Local Authority Pollution Prevention and Controls** Name: Tom Garner Motors Location: Chester Road, MANCHESTER, Lancashire, M15 4GA Authority: Manchester City Council, Environmental Health Department Permit Reference: 43/93 Dated: 21st June 1993 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorised** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	625	5	383280 397369
36	**Local Authority Pollution Prevention and Controls** Name: Henry Sutcliffe Location: Hulme Street, SALFORD, Lancashire, M5 Authority: Salford City Council, Environmental Health Department Permit Reference: 30/17 Dated: 30th April 1993 Process Type: Local Authority Air Pollution Control Description: PG6/2 Manufacture of timber and wood-based products **Status:** **Authorised** Positional Accuracy: Manually positioned to the road within the address or location	A18SW (NW)	671	4	382434 398447
37	**Local Authority Pollution Prevention and Controls** Name: Tilcon Ltd Location: Pomona Docks, Cornbrook Road, MANCHESTER, M15 4NE Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/26/92 Dated: 1st April 1996 Process Type: Local Authority Air Pollution Control Description: PG3/10 China and ball clay **Status:** **Authorisation revokedRevoked** Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	779	5	382255 397025
38	**Local Authority Pollution Prevention and Controls** Name: Horners Accident Repair Centre Location: 21 Hope Street, SALFORD, M5 4WN Authority: Salford City Council, Environmental Health Department Permit Reference: Not Given Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A17SW (NW)	784	4	382078 398297

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	**Local Authority Pollution Prevention and Controls** Name: Granada Dry Cleaners Location: 71-73 Bridge Street, Manchester Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/DC/RM/20/07 Dated: 26th February 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	815	5	383558 398300
40	**Local Authority Pollution Prevention and Controls** Name: Tarmac Central Ltd Location: Queens Road, Miles Platting, MANCHESTER, Lancashire, M10 8AU Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/B/01/04/AW Dated: 12th August 1992 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A7SE (SW)	834	5	382191 396999
40	**Local Authority Pollution Prevention and Controls** Name: Tarmac (Central) Ltd Location: Pomona Docks, Cornbrook Road, MANCHESTER, M15 4NE Authority: Trafford Metropolitan Borough Council, Environmental Health Department Permit Reference: Ip98 Dated: 16th September 1992 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status: Authorisation revokedRevoked** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	835	6	382190 396999
40	**Local Authority Pollution Prevention and Controls** Name: Tilcon Ltd Location: Pomona Docks, Cornbrook Road, MANCHESTER, Lanacashire, M15 4NE Authority: Trafford Metropolitan Borough Council, Environmental Health Department Permit Reference: Not Given Dated: 1st April 1993 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status: Authorisation revokedRevoked** Positional Accuracy: Manually positioned to the address or location	A7SE (SW)	842	6	382195 396988
41	**Local Authority Pollution Prevention and Controls** Name: Williams Motor Co Location: 6 Hadfield Street, Cornbrook, MANCHESTER, Lancashire, M16 9FG Authority: Trafford Metropolitan Borough Council, Environmental Health Department Permit Reference: 87 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status: Authorised** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	905	6	382267 396878
42	**Local Authority Pollution Prevention and Controls** Name: European Metal Recycling Location: West Egerton Street, SALFORD, Lancashire, M5 4DY Authority: Salford City Council, Environmental Health Department Permit Reference: Not Given Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input **Status: Authorised** Positional Accuracy: Manually positioned to the road within the address or location	A16SE (W)	995	4	381739 398142
	Nearest Surface Water Feature	A13NE (N)	0	-	382777 397868
43	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Chemicals - Detergents/Surfactant Note: Manchester Ship Canal; Detergent Incident Date: 1st February 1996 Incident Reference: 96650187 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	305	3	382600 397400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
44	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Other Oil Note: Engine Oil Incident Date: 8th January 1995 Incident Reference: 95650025 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Land Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	336	3	382505 397395
44	**Pollution Incidents to Controlled Waters** Property Type: Connection To Surface Drains Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: Not Supplied Incident Date: 2nd November 1995 Incident Reference: 95652741 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Wrong Connection Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	338	3	382500 397395
45	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 27th October 1992 Incident Reference: 92741897 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	393	3	382700 397300
46	**Pollution Incidents to Controlled Waters** Property Type: Private Sewage: Sewage Works And Septic Tanks Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Unknown Sewage Note: Not Supplied Incident Date: 8th November 1992 Incident Reference: 92611933 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	404	3	382600 397300
46	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Bridgewater Canal Incident Date: 20th April 1995 Incident Reference: 95650862 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	409	3	382600 397295
46	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Not Given Note: None Pollution Found Incident Date: 27th October 1992 Incident Reference: 92741898 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	409	3	382605 397295

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
47	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 27th October 1992 Incident Reference: 92741896 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	426	3	382500 397300
47	**Pollution Incidents to Controlled Waters** Property Type: Road Location: Chester Road , OLD TRAFFORD Authority: Environment Agency, North West Region Pollutant: Oils - Diesel (Including Agricultural) Note: Diesel Spillage; Bridgewater Incident Date: 19th July 1997 Incident Reference: 97651312 Catchment Area: Bridgewater Canal Receiving Water: Canal Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	429	3	382505 397295
47	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Oils - Diesel (Including Agricultural) Note: Bridge Water Canal; Oily Site Drainage Incident Date: 14th May 1996 Incident Reference: 96651037 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Wrong Connection Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	431	3	382500 397295
48	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 15th March 1991 Incident Reference: 91510370 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	468	3	382400 397300
48	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Oils - Waste Oil Note: Bridgewater Canal; Oil Incident Date: 9th September 1996 Incident Reference: 96651986 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Miscellaneous/Other Pollution Type Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	473	3	382400 397295
49	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Inert Suspended Solids Note: River Medlock; Cement Washings Incident Date: 21st February 1995 Incident Reference: 95650362 Catchment Area: Medlock Receiving Water: Not Given Cause of Incident: Land Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	619	3	383300 397400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 8th July 1992 Incident Reference: 92611241 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SW (SE)	635	3	383400 397500
51	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Affected; None Pollution Found Incident Date: 8th December 1995 Incident Reference: 95653071 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	648	3	382400 397100
52	**Pollution Incidents to Controlled Waters** Property Type: Pollution Found Source Not Determined Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Minor Oil Film Incident Date: 22nd August 1995 Incident Reference: 95612163 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	668	3	382200 397200
53	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Moorefield Cres, LOWTON Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Stream Discoloured Incident Date: 30th May 1998 Incident Reference: SO980959 Catchment Area: Glaze Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	695	3	383400 397400
54	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Not Supplied Incident Date: 11th July 1995 Incident Reference: 95611699 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	700	3	382000 398000
55	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Industrial Effluent Note: River Irwell; Drum Washings Incident Date: 4th November 1991 Incident Reference: 91611716 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	707	3	382100 398200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: No Water Affected; No Pollution Found Incident Date: 6th February 1995 Incident Reference: 95650237 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	742	3	382400 397000
57	**Pollution Incidents to Controlled Waters** Property Type: Pollution Found Source Not Determined Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Other Note: General Debris Incident Date: 13th September 1994 Incident Reference: 94652060 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	745	3	383000 397000
58	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Manchester Ship Canal, Exchange Quay, SALFORD Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Quite Alot Of Grey Material Incident Date: 17th September 1998 Incident Reference: SO981692 Catchment Area: Manchester Ship Canal Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	746	3	382200 397100
59	**Pollution Incidents to Controlled Waters** Property Type: Construction Location: Diesel To Bwc At , Inner Relief Road Scheme, MANCHESTER Authority: Environment Agency, North West Region Pollutant: Oils - Diesel (Including Agricultural) Note: Bridgewater Canal; Diesel Incident Date: 10th December 1997 Incident Reference: 97652026 Catchment Area: Bridgewater Canal Receiving Water: Canal Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12SW (W)	748	3	381900 397600
60	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Fire water / Foam Note: Not Supplied Incident Date: 17th March 1995 Incident Reference: 95610557 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Fire Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	767	3	381900 397900
61	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Chemicals - Detergents/Surfactant Note: River Irwell; Foam Incident Date: 31st January 1996 Incident Reference: 96610198 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Miscellaneous/Other Pollution Type Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NW (N)	773	3	382500 398600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
62	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Inert Suspended Solids Note: Corn Brook Incident Date: 1st December 1995 Incident Reference: 95652893 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Inadequate Construction Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	829	3	382200 397000
62	**Pollution Incidents to Controlled Waters** Property Type: Pollution Found Source Not Determined Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Organic Wastes: Unknown Note: Corn Brook Incident Date: 23rd November 1995 Incident Reference: 95652940 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	833	3	382200 396995
63	**Pollution Incidents to Controlled Waters** Property Type: Pollution Found Source Not Determined Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Chemicals - Detergents/Surfactant Note: River Irwell Incident Date: 5th September 1995 Incident Reference: 95612250 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NW (N)	830	3	382600 398700
64	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Industrial Effluent Note: Not Supplied Incident Date: 27th August 1993 Incident Reference: 93711673 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (S)	837	3	382400 396900
65	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Chemicals - Detergents/Surfactant Note: River Irwell Incident Date: 13th January 1993 Incident Reference: 93610055 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NW (N)	864	3	382500 398700
66	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: No Water Affected; No Pollution Found Incident Date: 6th June 1996 Incident Reference: 96651200 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	871	3	382300 396900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
67	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 19th September 1994 Incident Reference: 94652158 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Inadequate Construction Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	886	3	382100 397000
67	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Bridge Water Canal; No Pollution Found Incident Date: 11th September 1995 Incident Reference: 95652290 Catchment Area: Bridgewater Canal Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	887	3	382105 396995
67	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 5th April 1995 Incident Reference: 95650708 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	890	3	382100 396995
68	**Pollution Incidents to Controlled Waters** Property Type: Private Sewage (Non-PLC): Sewerage Systems Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Unknown Sewage Note: River Irwell Incident Date: 14th May 1993 Incident Reference: 93611003 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NE (NE)	888	3	383500 398500
69	**Pollution Incidents to Controlled Waters** Property Type: Road Location: Mancunian Way , HULME Authority: Environment Agency, North West Region Pollutant: Chemicals - Unknown Note: 20 Litres Of Chemical Irgasol In Drains Incident Date: 7th September 1998 Incident Reference: SO981631 Catchment Area: Manchester Ship Canal Receiving Water: Freshwater Stream/River Cause of Incident: Road Traffic Accident Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	901	3	383500 397200
70	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Inert Suspended Solids Note: Corn Brook; Sandy Water Incident Date: 22nd March 1996 Incident Reference: 96650529 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	915	3	382200 396900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
71	**Pollution Incidents to Controlled Waters** Property Type: Pollution Found Source Not Determined Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Unknown Note: River Irwell Incident Date: 26th May 1992 Incident Reference: 92610872 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NE (NE)	964	3	383600 398500
72	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Pollution Found Incident Date: 12th November 1995 Incident Reference: 95652773 Catchment Area: Irwell Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (W)	986	3	381700 398000
73	**Prosecutions Relating to Authorised Processes** Location: Comus Street, Salford, Lancashire, M5 3bq Prosecution Text: Company Found Guilty Of Using An Unregistered Radioactive Substance, Polonium 210 Prosecution Act: Rsa93 S32(1)(A) Hearing Date: 26th September 2002 Verdict: Guilty Fine: 3000 Costs: 1377 Positional Accuracy: Manually positioned to the road within the address or location	A12NW (W)	637	3	382035 397901
74	**Prosecutions Relating to Authorised Processes** Location: Hope Street, SALFORD, Lancashire, M5 4WN Prosecution Text: Failure to use BPM to prevent the release of offensive & noxious substances to atmosphere. Prosecution Act: HSWA74 Hearing Date: 7th January 1994 Verdict: Guilty Fine: 8000 Costs: 11000 Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	666	3	382249 398305
75	**Registered Radioactive Substances** Name: National Vulcan Eng Ins Group Ltd Location: St Marys Parsonage, MANCHESTER, M60 9AP Authority: Scottish Environment Protection Agency, Head Office Permit Reference: IPB/3/3/023 Dated: 24th April 1980 Process Type: Registration under S10 RSA for the keeping and use of mobile Radioactive sources (was RSA60 S3) Description: Registration under S7 or S10 RSA for the keeping and use of radioactive material or apparatus for 1 or more tracer test sources dated pre April 1991 **Status: Not Given** Positional Accuracy: Manually positioned to the road within the address or location	A19SE (NE)	866	7	383532 398427
76	**Registered Radioactive Substances** Name: Scientific Analysis Laboratories Ltd Location: Hadfield House,9 Hadfield Street,Cornbrook,Old Trafford, MANCHESTER, M16 9FE Authority: Environment Agency, North West Region Permit Reference: CC5568 Dated: 16th June 2008 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is not the subject of an authorisation, or an application for an authorisation **Status: Application has been authorised and any conditions apply to the operatorAuthorised** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	915	3	382347 396835

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	**Registered Radioactive Substances** Name: University Of Salford Location: Faraday House, 43, Crescent, Salford, M5 4WT Authority: Environment Agency, North West Region Permit Reference: CB6704 Dated: 10th December 2007 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA **Status: Application has been authorised and any conditions apply to the operatorAuthorised** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	942	3	382136 398570
77	**Registered Radioactive Substances** Name: University Of Salford Location: Faraday House, 43, Crescent, Salford, M5 4WT Authority: Environment Agency, North West Region Permit Reference: Bw5870 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA **Status: Authorisation superseded by a substantial or non substantial variationSuperseded** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	942	3	382136 398570
77	**Registered Radioactive Substances** Name: University Of Salford Location: Faraday House, 43, Crescent, Salford, M5 4WT Authority: Environment Agency, North West Region Permit Reference: AZ8315 Dated: 13th February 1998 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA **Status: Authorisation superseded by a substantial or non substantial variationSuperseded** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	942	3	382136 398570
77	**Registered Radioactive Substances** Name: University Of Salford Location: Faraday House, 43, Crescent, Salford, M5 4WT Authority: Environment Agency, North West Region Permit Reference: AH6155 Dated: 19th July 1993 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation **Status: Application has been authorised and any conditions apply to the operatorAuthorised** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	942	3	382136 398570
77	**Registered Radioactive Substances** Name: University Of Salford Location: Faraday House, 43, Crescent, Salford, M5 4WT Authority: Environment Agency, North West Region Permit Reference: AD0201 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA **Status: Authorisation superseded by a substantial or non substantial variationSuperseded** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	942	3	382136 398570
	River Quality Name: Irwell (Msc) GQA Grade: River Quality E Reach: Salford University To Salford Docks Estimated Distance (km): 8.2 Flow Rate: Flow less than 40 cumecs Flow Type: River Year: 2000	A13SE (SE)	0	3	382770 397781

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	River Quality Name: Bridgewater Canal GQA Grade: River Quality B Reach: Waters Meeting To Conf Rochdale Canal Estimated Distance (km): 3.6 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A13SE (SE)	319	3	382988 397498
	River Quality Name: Bridgewater Canal GQA Grade: River Quality B Reach: Conf Rochdale Canal To Tilting Weir Estimated Distance (km): .4 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A13SE (SE)	322	3	382988 397498
	River Quality Name: Medlock GQA Grade: River Quality E Reach: Lords Bk To Irwell Estimated Distance (km): 9.5 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A9NW (SE)	535	3	383178 397398
	River Quality Name: Rochdale Canal GQA Grade: River Quality B Reach: Ashton Canal To Knott Mill Estimated Distance (km): 1.8 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A9NW (SE)	646	3	383335 397398
	River Quality Name: Corn Bk GQA Grade: River Quality C Reach: Qsl At Openshaw To Msc Estimated Distance (km): 5.6 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A8SE (S)	842	3	382797 396818

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
78	**River Quality Chemistry Sampling Points** Name: Rochdale Canal Reach: Ashton Canal To Knott Mill Estimated Distance: 1.80 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade D - Fair Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A14SW (E)	545	3	383330 397558
79	**Substantiated Pollution Incident Register** Authority: Environment Agency - North West Region, South Area Incident Date: 3rd March 2014 Incident Reference: 1213413 Water Impact: Category 2 - Significant Incident Air Impact: Category 2 - Significant Incident Land Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Atmospheric Pollutants And Effects: Smoke Pollutant: Contaminated Water: Firefighting Run-Off	A12NE (W)	527	3	382167 397952
80	**Substantiated Pollution Incident Register** Authority: Environment Agency - North West Region, South Area Incident Date: 14th August 2013 Incident Reference: 1147703 Water Impact: Category 4 - No Impact Air Impact: Category 4 - No Impact Land Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Pollutant: General Biodegradable : Other	A17SE (NW)	600	3	382248 398211

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
81	**Water Abstractions** Operator: Cds Computer Design Systems Ltd Licence Number: 2569007053 Permit Version: 100 Location: R Irwell At Irwell Works, Ordsall Lane, Salford Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 455 Yearly Rate (m3): 22730 Details: Irwell Works, Ordsall Lane, Salford Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st November 1987 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	333	3	382500 397400
82	**Water Abstractions** Operator: Her Majesty'S Court Service Licence Number: 2569007089 Permit Version: 2 Location: 2 Boreholes At Gartside Street Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Gartside Street Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th July 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	639	3	383335 398310
82	**Water Abstractions** Operator: Bovis Lend Lease Ltd Licence Number: 2569007089 Permit Version: 1 Location: 2 Boreholes At Gartside Street Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Gartside Street Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th January 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	639	3	383335 398310
83	**Water Abstractions** Operator: Cemex Uk Materials Ltd Licence Number: 2569007085 Permit Version: 3 Location: Borehole At Hope Street, Salford, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Hope Street, Salford, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th October 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	725	3	382190 398330

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
83	**Water Abstractions** Operator: Cemex Uk Materials Ltd Licence Number: 2569007085 Permit Version: 2 Location: Borehole At Hope Street, Salford, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Hope Street, Salford, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd March 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	725	3	382190 398330
83	**Water Abstractions** Operator: Ready Mixed Concrete (North West) Limited Licence Number: 2569007085 Permit Version: 1 Location: Borehole At Hope Street, Salford, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Hope Street, Salford, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st November 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	725	3	382190 398330
84	**Water Abstractions** Operator: Threlfalls (Salford) Ltd. Licence Number: 2569006009 Permit Version: Not Supplied Location: Four Boreholes, Cook Street, SALFORD Authority: Environment Agency, North West Region Abstraction: Cooling & Manufacturing Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 977 Yearly Rate (m3): 227300 Details: Additional Purpose: Cooling; Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	966	3	383200 398800
	Water Abstractions Operator: British Telecommunications Plc Licence Number: 2569007070 Permit Version: 101 Location: Borehole At Dial House Chapel Street Salford Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Dial House, Salford Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A19NE (NE)	1171	3	383700 398700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: British Telecom Licence Number: 2569007070 Permit Version: 100 Location: Borehole At Dial House, Chapel St, Salford Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 30 Yearly Rate (m3): 45 Details: Premises At Dial House, Salford Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th January 1971 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A19NE (NE)	1171	3	383700 398700
	Water Abstractions Operator: British Telecommunications Plc Licence Number: 2569007069 Permit Version: 100 Location: Borehole At George St, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 860 Yearly Rate (m3): 1100 Details: Premises At Rutherford Hse, York St Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A15NW (E)	1234	3	384100 398000
	Water Abstractions Operator: North Western Electricity Board Licence Number: 2569006023 Permit Version: Not Supplied Location: Rochdale Canal, Dickinson Street, MANCHESTER Authority: Environment Agency, North West Region Abstraction: Cooling Abstraction Type: Not Supplied Source: Canal Daily Rate (m3): 82 Yearly Rate (m3): 25230 Details: Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A15SW (E)	1236	3	384100 397700
	Water Abstractions Operator: Dunlop Rubber Co Limited Licence Number: 2569007027 Permit Version: Not Supplied Location: Borehole, Cambridge Street, MANCHESTER Authority: Environment Agency, North West Region Abstraction: Cooling Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 1811 Yearly Rate (m3): 154564 Details: Licence Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A10NW (SE)	1303	3	384000 397200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0004/003 Permit Version: 1 Location: Borehole At Manchester Metropolitan University Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: Heat Pump Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 20th September 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1366	3	383715 396746
	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0004/003 Permit Version: 1 Location: Borehole At Manchester Metropolitan University Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 20th September 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1366	3	383715 396746
	Water Abstractions Operator: Colgate Palmolive Ltd Licence Number: 2569007002 Permit Version: 100 Location: Borehole At 371 Ordsall Lane, Manchester 5 Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 1637 Yearly Rate (m3): 409140 Details: Premises At 371 Ordsall Lane Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th December 1985 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	1444	3	381605 396695
	Water Abstractions Operator: Cerep Iii Investment R Sarl Licence Number: 2569007001 Permit Version: 102 Location: Manchester Ship Canal At Premises Ordsall Lane Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At 371 Ordsall Lane Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 29th October 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	1445	3	381600 396700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Cerep Iii Investment R Sarl Licence Number: 2569007002 Permit Version: 102 Location: Borehole At 371 Ordsall Lane, Manchester 5 Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At 371 Ordsall Lane Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 29th October 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	1445	3	381600 396700
	Water Abstractions Operator: Colgate-Palmolive Manufacturing (Uk) Ltd Licence Number: 2569007001 Permit Version: 101 Location: Manchester Ship Canal At Premises Ordsall Lane Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 4910 Yearly Rate (m3): 1363800 Details: Premises At 371 Ordsall Lane Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st December 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	1445	3	381600 396700
	Water Abstractions Operator: Colgate-Palmolive Manufacturing (Uk) Ltd Licence Number: 2569007002 Permit Version: 101 Location: Borehole At 371 Ordsall Lane, Manchester 5 Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At 371 Ordsall Lane Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st December 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	1445	3	381600 396700
	Water Abstractions Operator: Colgate Palmolive Ltd Licence Number: 2569007001 Permit Version: 100 Location: Manchester Ship Canal At Premises Ordsall Lane Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 4910 Yearly Rate (m3): 1363800 Details: Premises At 371 Ordsall Lane Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th April 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	1445	3	381600 396700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: West Contracting Licence Number: Nw0690006001 Permit Version: 1 Location: Boreholes At Origin Developments, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 May Authorised End: 30 September Permit Start Date: 19th January 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A15SE (E)	1509	3	384378 397733
	Water Abstractions Operator: West Contracting Licence Number: Nw/069/0006/001 Permit Version: 1 Location: Boreholes At Origin Developments, Manchester Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 May Authorised End: 30 September Permit Start Date: 19th January 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A15SE (E)	1509	3	384378 397733
	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0006/003 Permit Version: 2 Location: Borehole 1 At Lower Chatham Street Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 4th April 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10SE (SE)	1514	3	384180 397091
	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0006/003 Permit Version: 2 Location: Borehole 1 At Lower Chatham Street Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: Heat Pump Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 4th April 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10SE (SE)	1514	3	384180 397091

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0006/003 Permit Version: 1 Location: Borehole 1 At Lower Chatham Street Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10SE (SE)	1514	3	384180 397091
	Water Abstractions Operator: Manchester Metropolitan University Licence Number: Nw/069/0006/003 Permit Version: 1 Location: Borehole 1 At Lower Chatham Street Authority: Environment Agency, North West Region Abstraction: Schools and Colleges: Heat Pump Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10SE (SE)	1514	3	384180 397091
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole Number 2 At Premises Strangeways Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1616	3	383820 399190
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole (No 2) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1616	3	383820 399190

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole Number 2 At Premises Strangeways Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1616	3	383820 399190
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole Number 2 At Premises Strangeways Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1616	3	383820 399190
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 101 Location: Borehole (No 2) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 682 Yearly Rate (m3): 194755 Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1616	3	383820 399190
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 101 Location: Borehole (No 2) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1616	3	383820 399190

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole Number 3 At Premises Strangeways Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1646	3	383830 399220
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole Number 3 At Premises Strangeways Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1646	3	383830 399220
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole Number 3 At Premises Strangeways Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1646	3	383830 399220
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole (No 3) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Borehole At Strangeways Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1646	3	383830 399220

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 101 Location: Borehole (No 3) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1646	3	383830 399220
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 101 Location: Borehole (No 3) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1646	3	383830 399220
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole Number 1 At Premises Strangeways Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1682	3	383850 399250
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole (No 1) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1682	3	383850 399250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole (No 1) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Borehole At Strangeways, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1682	3	383850 399250
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 102 Location: Borehole Number 1 At Premises Strangeways Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1682	3	383850 399250
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 101 Location: Borehole (No 1) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1682	3	383850 399250
	Water Abstractions Operator: Interbrew Uk Ltd Licence Number: 2569004023 Permit Version: 101 Location: Borehole (No 1) At Premises, Strangeways, Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Strangeways Brewery, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1682	3	383850 399250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Peel South East Ltd Licence Number: 2569007074 Permit Version: 105 Location: Manchester Ship Canal And Docks At Salford Quays Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st February 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1767	3	380900 397400
	Water Abstractions Operator: Peel Investments North Ltd Licence Number: 2569007074 Permit Version: 103 Location: Manchester Ship Canal And Docks At Salford Quays Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st August 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1767	3	380900 397400
	Water Abstractions Operator: Manchester Ship Canal Co Licence Number: 2569007074 Permit Version: 101 Location: Manchester Ship Canal And Docks At Salford Quays Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Salford Quays,Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th January 2003 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1767	3	380900 397400
	Water Abstractions Operator: Manchester Ship Canal Co Licence Number: 2569007074 Permit Version: 102 Location: Manchester Ship Canal And Docks At Salford Quays Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th January 2003 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1767	3	380900 397400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Manchester Ship Canal Co Licence Number: 2569007074 Permit Version: 100 Location: Manchester Ship Canal And Docks At Salford Quays Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 3350 Yearly Rate (m3): 318056 Details: Premises At Salford Quays,Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 6th February 1997 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1767	3	380900 397400
	Water Abstractions Operator: Hydes Brewery Ltd Licence Number: 2569007009 Permit Version: 102 Location: Borehole At Premises, Moss Lane West Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: 46 Moss Lane West Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 12th April 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1908	3	383220 395850
	Water Abstractions Operator: Hydes Brewery Ltd Licence Number: 2569007009 Permit Version: 101 Location: Borehole At Premises, Moss Lane West Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 373 Yearly Rate (m3): 66826 Details: 46 Moss Lane West, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th October 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1908	3	383220 395850
	Water Abstractions Operator: Hydes Brewery Ltd Licence Number: 2569007009 Permit Version: 101 Location: Borehole At Premises, Moss Lane West Manchester Authority: Environment Agency, North West Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: 46 Moss Lane West, Manchester Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th October 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1908	3	383220 395850
	Groundwater Vulnerability Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise Map Sheet: Sheet 17 Derbyshire & North Staffordshire Scale: 1:100,000	A13SW (NW)	0	3	382756 397793
	Drift Deposits None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	A13SW (NW)	0	2	382756 397793
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SW (NW)	0	2	382756 397793
85	**Source Protection Zones** Name: Moss Side Source: Environment Agency, Head Office Reference: Nw097 Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A14SE (E)	812	3	383679 397745
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (E)	0	3	382758 397793
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NW (NW)	0	3	382724 397822
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NW (N)	0	3	382757 397835
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SW (SW)	27	3	382635 397676
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	53	3	382835 397961
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	91	3	382859 397995
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	105	3	382853 397683
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	122	3	382902 397707
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
86	**Detailed River Network Lines** River Type: Primary River River Name: River Irwell Hydrographic Area: D011 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Currently Undefined Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13NW (NW)	16	3	382718 397852

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
87	**Detailed River Network Lines** River Type: Secondary River River Name: River Medlock Hydrographic Area: D011 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Other Rivers Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13SE (SE)	108	3	382853 397677
88	**Detailed River Network Lines** River Type: Primary River River Name: River Irwell Hydrographic Area: D011 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Currently Undefined Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13SW (SW)	225	3	382579 397485
89	**Detailed River Network Lines** River Type: Primary River River Name: Not Supplied Hydrographic Area: D011 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Currently Undefined Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13SW (SW)	225	3	382598 397476
90	**Detailed River Network Lines** River Type: Primary River River Name: Hulme Locks Hydrographic Area: D011 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Currently Undefined Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13SE (S)	227	3	382766 397469
91	**Detailed River Network Lines** River Type: Canal River Name: Bridgewater Canal Hydrographic Area: D011 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Currently Undefined Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13SE (SE)	230	3	382917 397540
92	**Detailed River Network Lines** River Type: Canal River Name: Bridgewater Canal Hydrographic Area: D011 River Flow Type: Secondary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Other Rivers Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13SE (S)	234	3	382790 397468

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
93	**Detailed River Network Lines** River Type: Canal River Name: Bridgewater Canal Hydrographic Area: D011 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Currently Undefined Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13SE (SE)	334	3	383060 397561
94	**Detailed River Network Lines** River Type: Canal River Name: Albion Mill Lock Hydrographic Area: D011 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Other Rivers Water Course Name: Not Supplied Water Course Reference: Not Supplied	A13SE (SE)	334	3	383060 397561
	Detailed River Network Offline Drainage None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
95	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Salford, Greater Manchester Name: Wilburn Street Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD16529 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Not Supplied EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: E052	A13NW (NW)	38	3	382706 397871
96	**Historical Landfill Sites** Licence Holder: British Rail Property Board Location: Oldfield Road, Salford, Greater Manchester Name: Former Ordsall Lane Sidings Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD16525 First Input Date: 1st May 1986 Last Input Date: 31st December 1986 Specified Waste Type: Deposited Waste included Inert Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4200/9121 BGS Ref: Not Supplied Other Ref: E020, RD/LIC/414/85	A12NE (NW)	438	3	382320 398050
97	**Historical Landfill Sites** Licence Holder: Manchester Ship Canal Company Location: Pomona Dock Estate, Off Trafford Road, Stretford Name: Pomona Dock No 1 Operator Location: Port of Manchester, Ship Canal House, King Street, Manchester Boundary Accuracy: As Supplied Provider Reference: EAHLD16554 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Inert and Household Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: RD/LIC/036/76, H028, F039	A7SE (SW)	774	3	382183 397077
98	**Historical Landfill Sites** Licence Holder: Manchester Ship Canal Company Location: Pomona Dock Estate, Off Trafford Road, Stretford Name: Pomona Dock No 2 Operator Location: Port of Manchester, Ship Canal House, King Street, Manchester Boundary Accuracy: As Supplied Provider Reference: EAHLD16564 First Input Date: 31st July 1976 Last Input Date: 31st December 1984 Specified Waste Type: Deposited Waste included Inert Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4200/9301 BGS Ref: Not Supplied Other Ref: RD/LIC/036/76, H028	A7SW (SW)	992	3	382081 396883
99	**Historical Landfill Sites** Licence Holder: George Robinson (Demolition) Limited Location: Salford, Greater Manchester Name: Liverpool Street - West Egerton Street Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD16512 First Input Date: 30th April 1978 Last Input Date: 31st December 1982 Specified Waste Type: Deposited Waste included Inert Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4200/9056 BGS Ref: Not Supplied Other Ref: E031, RD/LIC/143/78	A17SW (NW)	999	3	381816 398300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
100	**Licensed Waste Management Facilities (Locations)** Licence Number: 50480 Location: Mobile Plant Permit Operator Name: Soil & Water Remediation Ltd Operator Location: Not Supplied Authority: Environment Agency - South East Region, Solent & South Downs Area Site Category: Mobile Plant **Licence Status: Transferred** Issued: 12th December 2006 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	62	3	382841 397739
101	**Licensed Waste Management Facilities (Locations)** Licence Number: 401934 Location: Duncan Street, Slaford, M5 3SQ Operator Name: Excalon Limited Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Inert & Excavation Waste TS **Licence Status: Issued** Issued: 17th December 2014 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12NE (W)	529	3	382165 397952
102	**Licensed Waste Management Facilities (Locations)** Licence Number: 50251 Location: Land/premises At, Trentham Street, Cornbrook, Manchester, M15 4LW Operator Name: P A Bennett, B Bennett, R J Bennett, J A Pesticcio Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: End of Life Vehicles **Licence Status: Issued** Issued: 16th July 2004 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	580	3	382380 397184
103	**Licensed Waste Management Facilities (Locations)** Licence Number: 53487 Location: Manchester Tippers And Aggregates, Upper Wharf Street, Salford, Lancashire, M5 4TY Operator Name: Canal & River Trust Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Physical Treatment Facilities **Licence Status: Transferred** Issued: 17th August 1998 Last Modified: 2nd December 2013 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	612	3	382389 398344

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
104	**Licensed Waste Management Facilities (Locations)** Licence Number: 104096 Location: Duncan Street, Salford, Lancashire, M5 3SQ Operator Name: Recovered Fuels Shipping Ltd Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Revoked** Issued: 28th February 2013 Last Modified: 2nd December 2013 Expires: Not Supplied Suspended: Not Supplied Revoked: 18th September 2014 Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12NW (W)	663	3	382038 397995
105	**Licensed Waste Management Facilities (Locations)** Licence Number: 53734 Location: 2a Hulme Street, Salford, Lancashire, M5 4PY Operator Name: A Cohen & Co Ltd Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Metal Recycling Sites (Mixed) **Licence Status: Surrendered** Issued: 17th May 1994 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 25th March 2002 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18SW (NW)	663	3	382428 398434
106	**Licensed Waste Management Facilities (Locations)** Licence Number: 50325 Location: Afos Car Dismantlers, Dinton Street, Cornbrook, Manchester, M15 4WA Operator Name: Mr Arthur Kirk And Mr Wilfred Smith Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Vehicle Depollution Facility <5000 tps **Licence Status: Modified** Issued: 19th May 2005 Last Modified: 29th July 2013 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	682	3	382410 397060
107	**Licensed Waste Management Facilities (Locations)** Licence Number: 50065 Location: Land/premises At, West Egerton Street, Salford, Manchester, M5 4LQ Operator Name: European Metal Recycling Ltd Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Metal Recycling Sites (Mixed) **Licence Status: Modified** Issued: 18th July 2002 Last Modified: 11th December 2009 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	790	3	382000 398200
	Local Authority Landfill Coverage Name: Manchester City Council - Had landfill data but passed it to the relevant environment agency		0	12	382756 397793
	Local Authority Landfill Coverage Name: Salford Metropolitan District Council - Has no landfill data to supply		15	4	382718 397847
	Local Authority Landfill Coverage Name: Trafford Metropolitan Borough Council - Has not been able to supply Landfill data		372	6	382486 397364

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
108	**Registered Landfill Sites** Licence Holder: B.R. London Midland Region Licence Reference: 00414/85 Site Location: Ordsall Lane Sidings, Oldfield Road, Salford, Greater Manchester Licence Easting: 382100 Licence Northing: 398100 Operator Location: 67/87 Hampstead Road, Camden, London Authority: Environment Agency - North West Region, South Area Site Category: Landfill Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st May 1986 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Brick,Concrete,Slate; Ceramic Materials; Construction Industry Waste; Fibreglass; Glass; Metals; Non Leachate Forming Wastes; Plastics; Soil,Clay,Sand,Stone; Wood Prohibited Waste: Animal Flesh; Chemical Wastes; Foodstuffs; Liquid Wastes; Mat'L Giving Rise To Pollut'G Leachate; Paper/Cardboard; Plasterboard; Sawdust; Sludge Wastes; Textiles; Vegetable Matter; Waste At Temp.Endangering People	A12NE (NW)	653	3	382100 398100
109	**Registered Landfill Sites** Licence Holder: Salford City Council Licence Reference: 00761/92/M1 Site Location: Ordsall Park, Trafford Road, Ordsall, Salford, Greater Manchester Licence Easting: 381650 Licence Northing: 397250 Operator Location: Civic Centre, Chorley Road, Swinton, Greater Manchester Authority: Environment Agency - North West Region, South Area Site Category: Landfill Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: Waste produced/controlled by licence holder Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st June 1992 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Gmwda Group 1 - Non/V.Slow Decomp.Wast Prohibited Waste: Asbestos Waste; Foundry Sand; Glass, Pottery,China,Enamel,Ceram.Mica; Liquid/Sludge Wastes; Mineral Processing Wastes; Pretreated Wastes Not Permit.By Lic.; Skip Waste; Slag; Special Wastes; Waste In Drums; Waste N.O.S.; Weathered Tar/Bitumen	A6NE (SW)	989	3	381740 397294

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
110	**Registered Waste Transfer Sites** Licence Holder: Spray Shop Supplies Ltd Licence Reference: 00858/92 Site Location: 2A Manchester Trading Estate, New Elm Road, Water Street, MANCHESTER, Greater Manchester, M3 4JV Operator Location: As Site Address Authority: Environment Agency - North West Region, South Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Site exempt from licenceExempt Dated: 1st May 1993 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Max.Storage In Licence Solvents & Thinners Prohibited Waste: Explosive Waste Malodorous Waste Pressurized Containers/Waste Therein Violently Reactive Wastes Waste N.O.S.	A13SE (E)	87	3	382903 397754
111	**Registered Waste Transfer Sites** Licence Holder: Manchester Tippers & Aggregates Ltd Licence Reference: 80041 Site Location: Upper Wharf Street, Oldfield Road, SALFORD, Greater Manchester, M5 4TY Operator Location: As Site Address Authority: Environment Agency - North West Region, South Area Site Category: Transfer Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 17th August 1998 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Inert Solid Waste Comprising Max.Storage In Licence Max.Waste Permitted By Licence Uncontam. Concrete Uncontam. Sand Uncontam. Soil/Subsoil Prohibited Waste: Asbestos Batteries Bulk Powders Clinical Wastes Contaminated Materials Contaminated Soils Foundry/Moulding Sand Pressurised Containers Sand Filter Materials Spec.Waste (Epa'90:S62/1996 Regs) Waste In Drums Waste In Pressurised Containers Waste N.O.S.	A17SE (NW)	621	3	382395 398360

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
112	**Registered Waste Transfer Sites** Licence Holder: Supertune Automotive Ltd Licence Reference: 00604/90 Site Location: Gore Street, SALFORD, Greater Manchester, M3 5FP Operator Location: Oldham Central Trading Park, Coulton Close, OLDHAM, Lancashire, OL1 4EB Authority: Environment Agency - North West Region, South Area Site Category: Transfer Max Input Rate: Undefined Waste Source Restrictions: No known restriction on source of waste Licence Status: Site exempt from licenceExempt Dated: 1st August 1990 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Hydrocarbons Oxygen Containing Organic Compounds Paint Waste $	A19NW (NE)	632	3	383100 398480
113	**Registered Waste Treatment or Disposal Sites** Licence Holder: Manchester Wharf Steel Ltd Licence Reference: 00587 Site Location: Potato Wharf, MANCHESTER, Greater Manchester, M3 4LA Operator Location: As Site Address Authority: Environment Agency - North West Region, South Area Site Category: Scrapyard Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st May 1996 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Associated Non-Scrap Max.Storage Of Ferrous Scrap Pre-Sorted Scrap Metal Incl. Scrap Vehicles Prohibited Waste: Asbestos (Other Than Integral To Veh.) Bulk Powders Clinical Wastes Explosive Waste Highly Reactive Wastes Pcbs And Analogues Pressurised Wastes Or Cont'Rs Special Wastes N.O.S. Waste Drums (Unless Pre-Cleaned) Waste N.O.S.	A13SE (E)	152	3	382960 397720

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Waste Treatment or Disposal Sites				
114	Licence Holder: A Cohen & Co (GB) Ltd Licence Reference: 00933 Site Location: 2A Hulme Street, SALFORD, Greater Manchester, M5 4PY Operator Location: Clareville House, 25/27 Oxenden Street, LONDON, Greater London, SW1Y 4EL Authority: Environment Agency - North West Region, South Area Site Category: Scrapyard Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Site dormant Dated: 1st May 1994 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Copper Compounds From Wire Drawing Lead/Acid Batteries (Incl.Plastic) Max.Waste Permitted By Licence Scrap Mach'Y/Equip. - Non-Ferrous Prohibited Waste: Explosive Waste Liquid Waste N.O.S. Press'D Containers Or Waste Therein Waste N.O.S Whether/Not Pack.'Pre-Trt Waste Reacting Violently With Water	A18SW (N)	641	3	382500 398450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	**Control of Major Accident Hazards Sites (COMAH)** Name: British Gas TransCo (North & East) Location: Site A, Salford Holder Station, Liverpool Street, SALFORD, Lancashire, M5 4LQ Reference: Not Supplied Type: Lower Tier **Status: Record Ceased To Be Supplied Under COMAH Regulations** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	871	8	381925 398232
115	**Control of Major Accident Hazards Sites (COMAH)** Name: Transco Plc Location: Liverpool Street, Salford, MANCHESTER, Lancashire, M5 4LQ Reference: 1036510 Type: Lower Tier **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	871	8	381925 398232
116	**Notification of Installations Handling Hazardous Substances (NIHHS)** Name: Transco Location: Site A, Salford Holder Station, Liverpool Street, SALFORD, Lancashire, M5 4LQ **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	868	8	381925 398227

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic Rocks (Undifferentiated)	A13SW (NW)	0	2	382756 397793
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NW (W)	0	2	382676 397806
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SW (NW)	0	2	382756 397793
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NW (NW)	26	2	382703 397852
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NW (N)	95	2	382756 398000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: <15 mg/kg	A13SE (SE)	102	2	382852 397685
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NE (NE)	116	2	382906 398000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (E)	126	2	383000 397793
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: <15 mg/kg	A13SE (E)	152	2	383000 397771
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NE (NE)	184	2	383000 398000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NE (NE)	254	2	383000 398102
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A8NE (SE)	323	2	382942 397450
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NW (NE)	574	2	383396 398094

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14NE (E)	602	2	383459 398000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12SW (W)	641	2	382000 397793
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A19SW (NE)	647	2	383350 398305
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A19SW (NE)	651	2	383287 398379
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12SW (W)	670	2	382005 397484
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12SW (W)	673	2	382000 397497

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7NW (SW)	683	2	382073 397322
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A8SW (S)	692	2	382756 397000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12NW (W)	700	2	382000 398000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14NE (E)	729	2	383589 398000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A8SE (S)	745	2	383000 397000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14NE (E)	754	2	383614 398000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NE (E)	764	2	383638 397800
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14SE (E)	776	2	383646 397777
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18NW (N)	780	2	382446 398579
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14NE (E)	784	2	383651 397958
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14NE (E)	798	2	383659 398000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7NW (SW)	815	2	382000 397197

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7SE (SW)	819	2	382218 397000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7SE (SW)	820	2	382217 397000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A7SE (SW)	821	2	382218 396998
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A18NE (N)	829	2	383000 398718
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12NW (W)	884	2	381806 398000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 30 - 45 mg/kg	A19NE (NE)	944	2	383531 398550

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A19NE (NE)	945	2	383544 398537
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7SW (SW)	950	2	382000 397000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A7SE (SW)	958	2	382292 396810
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A7SE (SW)	962	2	382302 396802
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 150 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A2NE (SW)	974	2	382309 396786
117	**BGS Recorded Mineral Sites** Site Name: Pendleton Rail Depot Location: Hope Street, Pendleton, Salford Source: British Geological Survey, National Geoscience Information Service Reference: 31708 Type: Rail Depot **Status: Active** Operator: Cemex Uk Materials Ltd Operator Location: Cemex Uk Materials Ltd, Cemex House, Coldharbour Lane, Thorpe, Egham, Surrey, Tw20 8td Periodic Type: Carboniferous Geology: Carboniferous Limestone Supergroup From Dove Holes Commodity: Crushed Rock Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	653	2	382285 398320

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
118	**BGS Recorded Mineral Sites** Site Name: Salford Brick Works Location: , Salford, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 95112 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Unknown Operator Periodic Type: Quaternary Geology: Till, Devensian Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	944	2	381823 398200
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 382820, 397770 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 20.00 mg/kg Cadmium Measured Concentration: 1.00 mg/kg Chromium Measured Concentration: 68.00 mg/kg Lead Measured Concentration: 233.00 mg/kg Nickel Measured Concentration: 26.00 mg/kg	A13SE (E)	25	2	382820 397770
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 382710, 398200 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 18.00 mg/kg Cadmium Measured Concentration: 0.80 mg/kg Chromium Measured Concentration: 51.00 mg/kg Lead Measured Concentration: 215.00 mg/kg Nickel Measured Concentration: 19.00 mg/kg	A18SW (N)	322	2	382710 398200
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383120, 398090 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 28.00 mg/kg Cadmium Measured Concentration: 0.90 mg/kg Chromium Measured Concentration: 66.00 mg/kg Lead Measured Concentration: 436.00 mg/kg Nickel Measured Concentration: 32.00 mg/kg	A14NW (NE)	334	2	383120 398090
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 382250, 397680 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 13.00 mg/kg Cadmium Measured Concentration: 0.50 mg/kg Chromium Measured Concentration: 53.00 mg/kg Lead Measured Concentration: 99.00 mg/kg Nickel Measured Concentration: 16.00 mg/kg	A12SE (W)	391	2	382250 397680

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383250, 397700 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 16.00 mg/kg Cadmium Measured Concentration: 0.50 mg/kg Chromium Measured Concentration: 49.00 mg/kg Lead Measured Concentration: 148.00 mg/kg Nickel Measured Concentration: 21.00 mg/kg	A14SW (E)	407	2	383250 397700
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 382680, 397160 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 15.00 mg/kg Cadmium Measured Concentration: 0.70 mg/kg Chromium Measured Concentration: 56.00 mg/kg Lead Measured Concentration: 209.00 mg/kg Nickel Measured Concentration: 18.00 mg/kg	A8NW (S)	534	2	382680 397160
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383070, 397210 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 18.00 mg/kg Cadmium Measured Concentration: 0.70 mg/kg Chromium Measured Concentration: 64.00 mg/kg Lead Measured Concentration: 159.00 mg/kg Nickel Measured Concentration: 27.00 mg/kg	A8NE (SE)	591	2	383070 397210
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 382220, 398190 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 44.00 mg/kg Cadmium Measured Concentration: 3.60 mg/kg Chromium Measured Concentration: 397.00 mg/kg Lead Measured Concentration: 713.00 mg/kg Nickel Measured Concentration: 42.00 mg/kg	A17SE (NW)	606	2	382220 398190
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 382150, 397290 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 16.00 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 49.00 mg/kg Lead Measured Concentration: 172.00 mg/kg Nickel Measured Concentration: 19.00 mg/kg	A7NE (SW)	641	2	382150 397290

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 381930, 397710 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 19.00 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 71.00 mg/kg Lead Measured Concentration: 371.00 mg/kg Nickel Measured Concentration: 32.00 mg/kg	A12SW (W)	711	2	381930 397710
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 382800, 396860 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 10.00 mg/kg Cadmium Measured Concentration: 0.50 mg/kg Chromium Measured Concentration: 43.00 mg/kg Lead Measured Concentration: 70.00 mg/kg Nickel Measured Concentration: 13.00 mg/kg	A8SE (S)	836	2	382800 396860
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383240, 398740 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 26.00 mg/kg Cadmium Measured Concentration: 1.00 mg/kg Chromium Measured Concentration: 91.00 mg/kg Lead Measured Concentration: 212.00 mg/kg Nickel Measured Concentration: 33.00 mg/kg	A19NW (NE)	927	2	383240 398740
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 382770, 398840 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 19.00 mg/kg Cadmium Measured Concentration: 1.20 mg/kg Chromium Measured Concentration: 67.00 mg/kg Lead Measured Concentration: 317.00 mg/kg Nickel Measured Concentration: 30.00 mg/kg	A23SE (N)	938	2	382770 398840
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 383620, 398440 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 25.00 mg/kg Cadmium Measured Concentration: 2.20 mg/kg Chromium Measured Concentration: 74.00 mg/kg Lead Measured Concentration: 377.00 mg/kg Nickel Measured Concentration: 26.00 mg/kg	A19SE (NE)	944	2	383620 398440

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 381750, 397250 Soil Sample Type: Topsoil Sample Area: Manchester Arsenic Measured Concentration: 19.00 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 64.00 mg/kg Lead Measured Concentration: 173.00 mg/kg Nickel Measured Concentration: 28.00 mg/kg	A7NW (SW)	999	2	381750 397250
	BGS Urban Soil Chemistry Averages Source: British Geological Survey, National Geoscience Information Service Sample Area: Manchester Count Id: 300 Arsenic Minimum Concentration: 3.00 mg/kg Arsenic Average Concentration: 28.00 mg/kg Arsenic Maximum Concentration: 1008.00 mg/kg Cadmium Minimum Concentration: 0.30 mg/kg Cadmium Average Concentration: 1.40 mg/kg Cadmium Maximum Concentration: 80.30 mg/kg Chromium Minimum Concentration: 29.00 mg/kg Chromium Average Concentration: 92.00 mg/kg Chromium Maximum Concentration: 1252.00 mg/kg Lead Minimum Concentration: 21.00 mg/kg Lead Average Concentration: 270.00 mg/kg Lead Maximum Concentration: 2687.00 mg/kg Nickel Minimum Concentration: 6.00 mg/kg Nickel Average Concentration: 32.00 mg/kg Nickel Maximum Concentration: 137.00 mg/kg	A13SW (NW)	0	2	382756 397793
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13SW (NW)	0	9	382756 397793
	Man-Made Mining Cavities Easting: 382200 Northing: 397400 Distance: 534 Quadrant Reference: A7 Quadrant Reference: NE Bearing Ref: SW Cavity Type: Adit Entry Sandstone Mines Commodity: Sandstone Solid Geology Detail: BUNTER SANDSTONE Superficial Geology Detail: Glacial Gravel	A7NE (SW)	534	10	382200 397400
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	2	382730 397835
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	2	382756 397793
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	2	382756 397793

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	53	2	382595 397674
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	2	382756 397793
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	2	382756 397793
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	2	382756 397793
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	2	382730 397835
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	53	2	382670 397906
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	53	2	382643 397840
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	177	2	382469 397659
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	2	382756 397793
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	91	2	382670 397906
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	2	382756 397793
	Radon Potential - Radon Affected Areas Affected Area: The property is in a lower probability radon area, as less than 1% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	2	382756 397793

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
119	**Contemporary Trade Directory Entries** Name: Atlantis Location: 121, Water Street, Manchester, M3 4JU Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	56	-	382909 397904
120	**Contemporary Trade Directory Entries** Name: Stratstone Saab Location: Unit 5, Manchester Industrial Centre, Water Street, Manchester, M3 4JW Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (S)	59	-	382792 397682
120	**Contemporary Trade Directory Entries** Name: E A P International Ltd Location: Unit 6, Manchester Industrial Centre, Water Street, Manchester, Lancashire, M3 4JW Classification: Rubber & Plastic Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (S)	86	-	382793 397634
120	**Contemporary Trade Directory Entries** Name: Robins & Day Location: Unit 6, Manchester Industrial Centre, Water Street, Manchester, M3 4JW Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (S)	86	-	382793 397634
121	**Contemporary Trade Directory Entries** Name: Robins & Day Location: Unit 3, Manchester Industrial Centre, Water Street, Manchester, Lancashire, M3 4JW Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	62	-	382841 397739
122	**Contemporary Trade Directory Entries** Name: Spray Shop Supplies Location: 2a, New Elm Road, Manchester, M3 4JH Classification: Car Paint & Lacquer Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (E)	85	-	382914 397769
123	**Contemporary Trade Directory Entries** Name: Atlantis Piccadilly Laundry Services Location: 121 Woollam Pl, Manchester, M3 4JJ Classification: Laundries & Launderettes **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A13NE (E)	96	-	382968 397836
124	**Contemporary Trade Directory Entries** Name: Great Man Beer Location: 202 Potato Wharf, Castlefield, Manchester, Lancashire, M3 4BB Classification: Brewers **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A13SE (SE)	149	-	382915 397683
124	**Contemporary Trade Directory Entries** Name: Hanson Premix Location: Potato Wharf, Manchester, M3 4NB Classification: Concrete & Mortar Ready Mixed **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A13SE (SE)	151	-	382928 397690
125	**Contemporary Trade Directory Entries** Name: Derwent Industrial Services Ltd Location: Derwent Ho,Derwent St, Salford, Lancashire, M5 4RE Classification: Blast Cleaning **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A13SW (SW)	186	-	382504 397575
125	**Contemporary Trade Directory Entries** Name: H C Slingsby Plc Location: Unit 1, Derwent Street Trading Estate, Salford, M5 4RE Classification: Machinery - Industrial & Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SW (SW)	190	-	382510 397564

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
126	**Contemporary Trade Directory Entries** Name: Egerton Narrow Boat Ltd Location: The Arches Boatyard, Potato Wharf, Manchester, M3 4NB Classification: Boatbuilders & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A13SE (SE)	221	-	382932 397597
127	**Contemporary Trade Directory Entries** Name: Office World Location: Regents Park, Ordsall Lane, Salford, Lancashire, M5 3TP Classification: Office Furniture & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	224	-	382507 397938
127	**Contemporary Trade Directory Entries** Name: Office World Location: Regents Park, Ordsall Lane, Salford, Lancashire, M5 3TP Classification: Office Furniture & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	224	-	382507 397938
128	**Contemporary Trade Directory Entries** Name: Arletti Ltd Location: Grafton Works, Oldham Street, Salford, Lancashire, M5 4NN Classification: Tool Design, Manufacturers & Makers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	236	-	382636 398059
129	**Contemporary Trade Directory Entries** Name: The Snack Co Location: Unit 16/18, Slough Industrial Estate, Ordsall Lane, Salford, M5 4SZ Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SW (SW)	242	-	382446 397557
130	**Contemporary Trade Directory Entries** Name: Fires R Us Location: Unit 7, Slough Industrial Estate, Ordsall Lane, Salford, Lancashire, M5 4SZ Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (SW)	246	-	382419 397593
131	**Contemporary Trade Directory Entries** Name: Greengate Motors Location: 57, Middlewood Street, Salford, M5 4RF Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	298	-	382534 398063
132	**Contemporary Trade Directory Entries** Name: Service Point Uk Ltd Location: Liverpool Road, Manchester, M3 4AQ Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SW (E)	301	-	383162 397768
133	**Contemporary Trade Directory Entries** Name: Shell Uk Ltd Location: Regent Road, Salford, M5 4TS Classification: Petrol Filling Stations - 24 Hour **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	304	-	382339 397732
134	**Contemporary Trade Directory Entries** Name: M G Trading Castlefield Location: Flat 1, Ship Canal House, 25, Slate Wharf, Manchester, M15 4SX Classification: Toiletries **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	319	-	383027 397554
135	**Contemporary Trade Directory Entries** Name: Pallets Wanted Location: Mancentral Indust Est,47c East Ordsall La, Salford, Lancashire, M5 4RW Classification: Pallets, Crates & Packing Cases **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A18SW (N)	344	-	382692 398216
136	**Contemporary Trade Directory Entries** Name: Timsons Location: 100, Regent Road, Salford, M5 4QU Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (W)	357	-	382306 397835

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
137	**Contemporary Trade Directory Entries** Name: A Bigger Splash (Manchester) Ltd Location: 40, Ellesmere Street, Manchester, M15 4JY Classification: Greeting Card Publishers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	371	-	382787 397327
137	**Contemporary Trade Directory Entries** Name: Manchester Radiators Location: St. Georges House, 36, Ellesmere Street, Manchester, M15 4JW Classification: Boilers - Servicing, Replacements & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	379	-	382834 397329
137	**Contemporary Trade Directory Entries** Name: Futura Tech (Uk) Location: St. Georges House, 36, Ellesmere Street, Manchester, M15 4JW Classification: Plastics - Raw Materials **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	379	-	382834 397329
137	**Contemporary Trade Directory Entries** Name: Urban Angel Designs Location: St. Georges House, 36, Ellesmere Street, Manchester, Lancashire, M15 4JW Classification: Stationery Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NE (S)	379	-	382834 397329
138	**Contemporary Trade Directory Entries** Name: Pressed & Polished Location: The Fusion,Middlewood St, Salford, Lancashire, M5 4LW Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A13NW (NW)	384	-	382457 398113
139	**Contemporary Trade Directory Entries** Name: Gazprom Marketing & Trading Retail Ltd Location: 27, Quay Street, Manchester, M3 3GY Classification: Gas Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	401	-	383232 398036
139	**Contemporary Trade Directory Entries** Name: Gazprom Marketing & Trading Location: 27, Quay Street, Manchester, M3 3GY Classification: Gas Companies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	401	-	383232 398036
139	**Contemporary Trade Directory Entries** Name: Gazprom Marketing & Trading Retail Ltd Location: Quay St, Manchester, Lancashire, M3 3GY Classification: Gas Suppliers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14NW (NE)	445	-	383270 398058
140	**Contemporary Trade Directory Entries** Name: Avon Tyres Ltd Location: 8, Blantyre Street, Manchester, M15 4LH Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (SE)	419	-	383021 397391
141	**Contemporary Trade Directory Entries** Name: Fast Track Upvc Location: Floor 1, Unit 2,Talbot Mill,Ellesmere St, Manchester, Lancashire, M15 4JY Classification: Window Frame Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	420	-	382683 397275
141	**Contemporary Trade Directory Entries** Name: In Situ Location: Talbot Mill,44 Ellesmere St, Manchester, Lancashire, M15 4FY Classification: Salvage Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	422	-	382720 397271
141	**Contemporary Trade Directory Entries** Name: Batian Engineering Location: Talbot Mill, 44, Ellesmere Street, Manchester, M15 4JY Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	425	-	382717 397268

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
141	**Contemporary Trade Directory Entries** Name: A & M Reproductions Location: Talbot Mill, 44, Ellesmere Street, Manchester, M15 4JY Classification: Furniture - Reproduction **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	425	-	382717 397268
141	**Contemporary Trade Directory Entries** Name: Advance Knitwear Location: Talbot Mill, 44, Ellesmere Street, Manchester, M15 4JY Classification: Knitwear Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	425	-	382717 397268
141	**Contemporary Trade Directory Entries** Name: M & R Textiles Ltd Location: Talbot Mill, 44, Ellesmere Street, Manchester, Lancashire, M15 4JY Classification: Knitwear Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	425	-	382717 397268
141	**Contemporary Trade Directory Entries** Name: Vacuum Scientific Services Ltd Location: Talbot Mill, 44, Ellesmere Street, Manchester, M15 4JY Classification: Scientific Apparatus & Instruments - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (S)	425	-	382717 397268
141	**Contemporary Trade Directory Entries** Name: S Ryan Location: Talbot Mill, 44, Ellesmere Street, Manchester, M15 4JY Classification: Window Frame Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	425	-	382717 397268
141	**Contemporary Trade Directory Entries** Name: Kyran Hall Art Glass Studio Location: Talbot Mill, 44, Ellesmere Street, Manchester, Lancashire, M15 4JY Classification: Stained Glass Designers & Producers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	425	-	382717 397268
141	**Contemporary Trade Directory Entries** Name: Hayes Location: Unit 2,Ellesmere St, Manchester, Lancashire, M15 4FY Classification: Bed & Mattress Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A8NW (S)	429	-	382735 397264
142	**Contemporary Trade Directory Entries** Name: Texaco Location: Oldfield Rd, Salford, Lancashire, M5 4NE Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	423	-	382268 397924
143	**Contemporary Trade Directory Entries** Name: P & K Taxi Services Location: 51, Hulme Hall Road, Manchester, Lancashire, M15 4LY Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	426	-	382508 397297
144	**Contemporary Trade Directory Entries** Name: Pumpcare Technical Services Location: Unit 3, Cornbrook Estate, Ellesmere Street, Manchester, M15 4JY Classification: Pump Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	436	-	382792 397262
144	**Contemporary Trade Directory Entries** Name: Seal Services Ltd Location: Unit 3, Cornbrook Estate, Ellesmere Street, Manchester, M15 4JY Classification: Pumps - Sales, Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	436	-	382792 397262
145	**Contemporary Trade Directory Entries** Name: Precast Concrete Structures Location: Oldfield Rd, Salford, Lancashire, M5 4LZ Classification: Concrete Products **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12NE (NW)	437	-	382352 398084

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
145	**Contemporary Trade Directory Entries** Name: Youngs Investment Location: Ivy House,1 Liverpool St, Salford, Lancashire, M5 4LY Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A12NE (NW)	485	-	382315 398115
146	**Contemporary Trade Directory Entries** Name: Andrew'S Auto Repairs Location: Unit 6, Bentinck Street Industrial Estate, Bentinck Street Ind Est, Manchester, Lancashire, M15 4LN Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NE (S)	463	-	382839 397243
146	**Contemporary Trade Directory Entries** Name: Peter Stone Co Ltd Location: Unit 6, Bentinck Street Industrial Estate, Manchester, M15 4LN Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	463	-	382839 397243
147	**Contemporary Trade Directory Entries** Name: A Wise Move Waste Location: Unit 4 Allwood St, Salford, Lancashire, M5 4GL Classification: Waste Disposal Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A18SW (NW)	466	-	382502 398246
148	**Contemporary Trade Directory Entries** Name: James & Taylor Ltd Location: Eastagte, 2, Castle Street, Manchester, M3 4LZ Classification: Cladding Suppliers & Installers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (SE)	470	-	383235 397554
149	**Contemporary Trade Directory Entries** Name: Ace Decor Location: Unit 4, Regent Trading Estate, Oldfield Road, Salford, M5 4DE Classification: Painting & Decorating Supplies **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (N)	474	-	382606 398318
150	**Contemporary Trade Directory Entries** Name: Till & Whitehead Ltd Location: Ellesmere Street, Manchester, Lancashire, M15 4JX Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	476	-	382690 397218
150	**Contemporary Trade Directory Entries** Name: Grove Galleries Ltd Location: Phoenix House, Ellesmere Street, Manchester, M15 4JY Classification: Art Restoration & Picture Cleaning **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	485	-	382671 397210
150	**Contemporary Trade Directory Entries** Name: G & M Knitwear Ltd Location: Hulme Hall Road, Manchester, M15 4LY Classification: Knitwear Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	512	-	382634 397188
151	**Contemporary Trade Directory Entries** Name: Clare Tooling Systems Ltd Location: Excelsior Works, Manchester, Lancashire, M15 4LY Classification: Hardware **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A8NW (S)	477	-	382564 397231
151	**Contemporary Trade Directory Entries** Name: F Higginbottom & Son Ltd Location: 10, Hulme Hall Road, Manchester, M15 4LY Classification: Bookbinders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	499	-	382584 397207

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
151	**Contemporary Trade Directory Entries** Name: Higginbottom & Son Ltd Location: 10, Hulme Hall Road, Manchester, M15 4LY Classification: Bookbinders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	499	-	382584 397207
152	**Contemporary Trade Directory Entries** Name: Jook Design Location: Unit 2, Manchester, Lancashire, M15 4LN Classification: Soft Furnishings - Manufacturers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A8NE (S)	486	-	382776 397209
153	**Contemporary Trade Directory Entries** Name: Amek Systems & Controls Ltd Location: Regent Trading Estate, Oldfield Road, Salford, M5 4DE Classification: Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A18SW (N)	492	-	382581 398324
153	**Contemporary Trade Directory Entries** Name: J Cash Metals Ltd Location: Unit 2-3, Regent Trading Estate, Oldfield Road, Salford, M5 4DE Classification: Scrap Metal Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (N)	510	-	382540 398322
154	**Contemporary Trade Directory Entries** Name: New Look Location: 30, Chancel Avenue, Salford, M5 3SJ Classification: Waste Disposal Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (W)	493	-	382148 397732
154	**Contemporary Trade Directory Entries** Name: New Look Location: 30, Chancel Avenue, Salford, M5 3SJ Classification: Waste Disposal Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	493	-	382148 397732
155	**Contemporary Trade Directory Entries** Name: Manchester Pathology Group Location: 27, Byrom Street, Manchester, M3 4PF Classification: Medical & Dental Laboratories **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	495	-	383367 397905
156	**Contemporary Trade Directory Entries** Name: Parkgate Shipping Ltd Location: Third Floor, Byrom House, 21, Quay Street, Manchester, M3 3JD Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	497	-	383345 398013
156	**Contemporary Trade Directory Entries** Name: Direct Line Rescue Location: 17, Quay Street, Manchester, M3 3HN Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	541	-	383394 398004
157	**Contemporary Trade Directory Entries** Name: Car Care Express Location: Arch 4, Irwell Street, Salford, Lancashire, M3 5EN Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	498	-	382967 398385
157	**Contemporary Trade Directory Entries** Name: Zico Cars Location: Arch 4, Irwell Street, Salford, M3 5EN Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	498	-	382967 398385
158	**Contemporary Trade Directory Entries** Name: R Lewtas Shopfitters Ltd Location: Unit 12, Bentinck Street Industrial Estate, Manchester, Lancashire, M15 4LN Classification: Joinery Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	502	-	382743 397191

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
158	**Contemporary Trade Directory Entries** Name: Star Auto Glass Location: Unit 12, Bentinck Street Industrial Estate, Manchester, M15 4LN Classification: Car Customisation & Conversion Specialists **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	502	-	382743 397191
158	**Contemporary Trade Directory Entries** Name: Lloyd Worrall (Manchester) Ltd Location: Unit 1/2, Bentinck Street Industrial Estate, Manchester, M15 4LN Classification: Hardware **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (S)	527	-	382702 397166
159	**Contemporary Trade Directory Entries** Name: Fleetwood Agencies Ltd Location: 6, Porchfield Square, Manchester, M3 4FG Classification: Rubber & Plastic Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	503	-	383376 397824
160	**Contemporary Trade Directory Entries** Name: Pentel Contracts Ltd Location: Dyer Street, Salford, M5 4TB Classification: Blinds, Awnings & Canopies **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	503	-	382245 397392
161	**Contemporary Trade Directory Entries** Name: Serck Intertruck Location: Worrall Street, Salford, M5 4TA Classification: Car Radiator Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	504	-	382325 397309
161	**Contemporary Trade Directory Entries** Name: Warton Freight Services (Northern) Ltd Location: 14, Worrall Street, Salford, Lancashire, M5 4TH Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	504	-	382325 397309
162	**Contemporary Trade Directory Entries** Name: Windsor Garage Location: 2, Oldfield Road, Salford, M5 4WB Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	510	-	382453 398264
163	**Contemporary Trade Directory Entries** Name: Holt Springs (Manchester) Ltd Location: 16, Bridgewater Street, Manchester, M3 4NH Classification: Spring Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	514	-	383347 397656
163	**Contemporary Trade Directory Entries** Name: E E Chrisp Location: 6, Southern Street, Manchester, M3 4WP Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	523	-	383368 397686
164	**Contemporary Trade Directory Entries** Name: Warton Freight Services Northern Ltd Location: 9, Worrall Street, Salford, M5 4TH Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	517	-	382276 397336
164	**Contemporary Trade Directory Entries** Name: Paromatta Tool & Gauge Co Ltd Location: 3, Worrall Street, Salford, M5 4TH Classification: Tool Design, Manufacturers & Makers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	547	-	382283 397288
164	**Contemporary Trade Directory Entries** Name: S Y Electronics Location: 7, Worrall Street, Salford, Lancashire, M5 4TH Classification: Electronic Component Manufacturers & Distributors **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	556	-	382242 397314

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
164	**Contemporary Trade Directory Entries** Name: Centre Glass & Hygiene Location: Worrall St, Salford, Lancashire, M5 4TH Classification: Cleaning Materials & Equipment **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	574	-	382247 397284
164	**Contemporary Trade Directory Entries** Name: Resistance Technology Ltd Location: 8 Worrall St, Salford, Lancashire, M5 4TH Classification: Manufacturers **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	589	-	382234 397276
164	**Contemporary Trade Directory Entries** Name: Warton Freight Services (Northern) Ltd Location: 14, Worrall Street, Salford, M5 4TH Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A7NE (SW)	590	-	382209 397300
164	**Contemporary Trade Directory Entries** Name: Warton Freight Services Location: 14, Worrall Street, Salford, M5 4TH Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A7NE (SW)	590	-	382209 397300
164	**Contemporary Trade Directory Entries** Name: Meridian Reprographics Location: 5, Worrall Street, Salford, M5 4TH Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	593	-	382210 397293
164	**Contemporary Trade Directory Entries** Name: Crystal Print Ltd Location: Graphic House,Worrall St, Salford, Lancashire, M5 4TH Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	601	-	382222 397270
165	**Contemporary Trade Directory Entries** Name: Creative Logistics Ltd Location: Duncan Street, SALFORD, M5 3SQ Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	523	-	382162 397929
165	**Contemporary Trade Directory Entries** Name: Deliverall Direct Location: Duncan St, Salford, Lancashire, M5 3SQ Classification: Distribution Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	524	-	382161 397928
165	**Contemporary Trade Directory Entries** Name: Rf Tyres Location: 34 Duncan St, Salford, Lancashire, M5 3SQ Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A12NE (W)	526	-	382168 397953
165	**Contemporary Trade Directory Entries** Name: Manchester Auto Electrical Ltd Location: 30, Duncan Street, Salford, M5 3SQ Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NE (W)	526	-	382168 397953
165	**Contemporary Trade Directory Entries** Name: Ali Autos Location: Unit 34,Duncan St, Salford, Lancashire, M5 3SQ Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	533	-	382152 397930
165	**Contemporary Trade Directory Entries** Name: Ali Autos Location: 34 Duncan St, Salford, Lancashire, M5 3SQ Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	542	-	382143 397932

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
165	**Contemporary Trade Directory Entries** Name: I S S Service Systems Ltd Location: Duncan St, Salford, Lancashire, M5 3SQ Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	558	-	382128 397936
166	**Contemporary Trade Directory Entries** Name: One69a Location: Islington Mill, James Street, Salford, M3 5HW Classification: Screen Process Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (N)	523	-	382620 398380
167	**Contemporary Trade Directory Entries** Name: Newlock Tool Co Location: Casket Works,Cow La, Salford, Lancashire, M5 4NB Classification: Tool Design, Manufacturers & Makers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A17SE (NW)	527	-	382338 398198
167	**Contemporary Trade Directory Entries** Name: J Cocker Ltd Location: Cow Lane, SALFORD, M5 4NB Classification: Sheet Metal Work **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	563	-	382322 398232
167	**Contemporary Trade Directory Entries** Name: Lga Europe Ltd Location: Cow Lane, Salford, M5 4NB Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	563	-	382322 398232
168	**Contemporary Trade Directory Entries** Name: Aaa Office Emporium Location: Pryme Works, Silvercroft Street, Manchester, M15 4WG Classification: Office Furniture & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	546	-	383117 397307
169	**Contemporary Trade Directory Entries** Name: Dr'S Batley & Bisset Location: 11, St. John Street, Manchester, M3 4DW Classification: X-Ray Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	547	-	383419 397905
170	**Contemporary Trade Directory Entries** Name: Johnstone'S Layland Decorating Centre Location: Regent Road, Salford, M5 4SX Classification: Painting & Decorating Supplies **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NE (W)	551	-	382115 397868
170	**Contemporary Trade Directory Entries** Name: Lancashire Footwear Ltd Location: Duncan Street, SALFORD, M5 3SQ Classification: Footwear Manufacturers & Wholesale **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A12NW (W)	589	-	382080 397884
170	**Contemporary Trade Directory Entries** Name: Garage Equipment Location: Draftwell House, 2, Duncan Street, Salford, Lancashire, M5 3SQ Classification: Garage Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	589	-	382080 397885
170	**Contemporary Trade Directory Entries** Name: British Cement Location: Duncan Street, Salford, M5 3SQ Classification: Cement Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A12NW (W)	589	-	382080 397884
171	**Contemporary Trade Directory Entries** Name: Harverson'S Cleaning & Ironing Service Location: 9, Gloucester Street, Salford, M5 3SG Classification: Ironing & Home Laundry Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	554	-	382089 397750

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
172	**Contemporary Trade Directory Entries** Name: Sheldons Manchester Ltd Location: 26, Liverpool Street, Salford, M5 4LE Classification: Alloys **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	558	-	382282 398187
172	**Contemporary Trade Directory Entries** Name: M A P Engineers Ltd Location: 26, Liverpool Street, Salford, M5 4LE Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	558	-	382282 398187
172	**Contemporary Trade Directory Entries** Name: Sheldon Location: 26, Liverpool Street, Salford, M5 4LE Classification: Tyre Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	558	-	382282 398187
172	**Contemporary Trade Directory Entries** Name: Ecosky Enviromental Solutions Location: 38, Liverpool Street, Salford, M5 4LT Classification: Plastics - Extrusion **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	590	-	382240 398189
173	**Contemporary Trade Directory Entries** Name: Dale Garages Location: 45-47, Oldfield Road, Salford, M5 4NE Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	559	-	382555 398388
173	**Contemporary Trade Directory Entries** Name: Total Location: 45-47, Oldfield Road, Salford, M5 4NE Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	559	-	382555 398388
174	**Contemporary Trade Directory Entries** Name: National Tyres Chester Road Location: 25, Ellesmere Street, Manchester, M15 4LZ Classification: Tyre Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (S)	562	-	382609 397140
174	**Contemporary Trade Directory Entries** Name: National Tyres And Autocare Location: 200 Chester Rd, Hulme, Manchester, Lancashire, M15 4LZ Classification: Tyre Dealers **Status: Active** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	562	-	382609 397140
175	**Contemporary Trade Directory Entries** Name: Gliptone Leather Care Location: 5, Bridgewater Street, Manchester, M3 4NH Classification: Leather Products - Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	562	-	383381 397613
176	**Contemporary Trade Directory Entries** Name: Tenens Location: Duncan St, Salford, Lancashire, M5 3SQ Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	568	-	382118 397937
177	**Contemporary Trade Directory Entries** Name: Scrap My Car Now For Money Manchester Kws Location: 4, Hardman Square, Manchester, M3 3EB Classification: Car Breakers & Dismantlers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	571	-	383358 398160
178	**Contemporary Trade Directory Entries** Name: Greengate Motors Ltd Location: 57, Canal Street, Salford, M5 4ST Classification: Car Body Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	586	-	382344 398282

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
179	**Contemporary Trade Directory Entries** Name: Farrow & Ball Location: 270, Deansgate, Manchester, M3 4JB Classification: Wallpapers & Wall Coverings **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	595	-	383469 397880
179	**Contemporary Trade Directory Entries** Name: Buildings 2 Clean Location: 249, Deansgate, Manchester, M3 4EN Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	626	-	383500 397851
180	**Contemporary Trade Directory Entries** Name: Autopaint International Location: 293, Deansgate, Manchester, M3 4EW Classification: Car Painters & Sprayers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	601	-	383458 397713
181	**Contemporary Trade Directory Entries** Name: Concept Automotive Services Ltd Location: Upper Wharfe St, Salford, Lancashire, M5 4PQ Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A18SW (NW)	601	-	382420 398354
182	**Contemporary Trade Directory Entries** Name: Timberwise (Uk) Ltd Location: Great Northern Warehouse, 275, Deansgate, Manchester, M3 4EW Classification: Damp & Dry Rot Control **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	609	-	383476 397770
182	**Contemporary Trade Directory Entries** Name: Bright & Beautiful Location: Great Northern Warehouse, 275, Deansgate, Manchester, M3 4EL Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	610	-	383478 397769
182	**Contemporary Trade Directory Entries** Name: Docutech Solutions Location: Great Northern Warehouse, 275, Deansgate, Manchester, M3 4EL Classification: Photographic Equipment Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	610	-	383478 397769
182	**Contemporary Trade Directory Entries** Name: Studio Macs Location: Great Northern Warehouse, 275, Deansgate, Manchester, M3 4EL Classification: Electrical Heating Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	610	-	383478 397769
182	**Contemporary Trade Directory Entries** Name: Scrap Car Now Today Cash Manchester Location: Great Northern Warehouse, 275, Deansgate, Manchester, M3 4EL Classification: Car Breakers & Dismantlers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	610	-	383478 397769
182	**Contemporary Trade Directory Entries** Name: Cushy Living Location: Unit 24 275, Manchester, Lancashire, M3 4EL Classification: Textile Manufacturing **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A14SE (E)	610	-	383478 397769
182	**Contemporary Trade Directory Entries** Name: Accountancy & Payroll Services Location: Great Northern Warehouse, 275, Deansgate, Manchester, Lancashire, M3 4EL Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	610	-	383478 397769

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
182	**Contemporary Trade Directory Entries** Name: Automation Providers Location: Great Northern Warehouse, 275, Deansgate, Manchester, Lancashire, M3 4EW Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	610	-	383478 397769
182	**Contemporary Trade Directory Entries** Name: Dalton Automation Ltd Location: Great Northern Warehouse, 275, Deansgate, Manchester, Lancashire, M3 4EL Classification: Automation Systems & Equipment **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14SE (E)	610	-	383478 397769
182	**Contemporary Trade Directory Entries** Name: Docutech Solutions Ltd Location: Great Northern Warehouse, 275, Deansgate, Manchester, M3 4EL Classification: Photocopiers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14SE (E)	610	-	383478 397769
182	**Contemporary Trade Directory Entries** Name: Rimo Designs Location: 269-273, Deansgate, Manchester, M3 4EW Classification: Carpets & Rugs - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	614	-	383484 397787
183	**Contemporary Trade Directory Entries** Name: Villerstrand Ltd Location: Ellesmere Street, Manchester, M15 4LT Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (SW)	622	-	382466 397104
183	**Contemporary Trade Directory Entries** Name: Roche Design Ltd Location: Ellesmere Street, Manchester, M15 4LT Classification: Furniture Manufacturers - Home & Office **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (SW)	622	-	382466 397104
183	**Contemporary Trade Directory Entries** Name: M D Motors Location: 72 Trentham St, Manchester, Lancashire, M15 4LW Classification: Garage Services **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A8SW (S)	648	-	382464 397078
184	**Contemporary Trade Directory Entries** Name: Bass Leisure Retail Location: 29, Ellesmere Street, Manchester, M15 4LZ Classification: Brewers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	625	-	382540 397085
184	**Contemporary Trade Directory Entries** Name: Pun Enterprises Location: Phoenix House, Ellesmere Street, Manchester, M15 4JY Classification: Clothing & Fabrics - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	625	-	382540 397085
184	**Contemporary Trade Directory Entries** Name: Kyran Hall Art Glass Studio Location: 252, Chester Road, Manchester, M15 4EX Classification: Stained Glass Designers & Producers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	660	-	382503 397057
185	**Contemporary Trade Directory Entries** Name: Tom Garner Location: Chester Road, Manchester, M15 4GA Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	625	-	383280 397369

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
186	**Contemporary Trade Directory Entries** Name: Kmg Ltd Location: Ivy House, Liverpool Street, Salford, M5 4LY Classification: Nuts, Bolts & Fixings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	627	-	382171 398162
187	**Contemporary Trade Directory Entries** Name: Texaco Location: Oldfield Rd, Salford, Lancashire, M5 4NE Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A18SW (N)	628	-	382548 398462
188	**Contemporary Trade Directory Entries** Name: Easy Cars Location: 5, Hulme Street, Salford, Lancashire, M5 4PX Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18SW (NW)	629	-	382470 398420
189	**Contemporary Trade Directory Entries** Name: Hobs On Site Location: 244, Deansgate, Manchester, Lancashire, M3 4BQ Classification: Copying & Duplicating Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14NE (E)	636	-	383503 397945
189	**Contemporary Trade Directory Entries** Name: Lotus (Manchester) Location: 229-235, Deansgate, Manchester, Lancashire, M3 4EN Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	651	-	383524 397905
190	**Contemporary Trade Directory Entries** Name: Love Energy Savings Location: 6th Floor City Wharf, New Bailey Street, Salford, Lancashire, M3 5ER Classification: Tyre Dealers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A19SW (NE)	646	-	383233 398418
191	**Contemporary Trade Directory Entries** Name: Burofloor Location: 3, Hardman Street, Manchester, M3 3AW Classification: Carpets & Rugs - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	653	-	383454 398156
191	**Contemporary Trade Directory Entries** Name: Laserox Location: 3, Hardman Street, Manchester, M3 3HF Classification: Medical Equipment Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	653	-	383454 398156
191	**Contemporary Trade Directory Entries** Name: Merlin Specialists Repairs Ltd Location: 3, Hardman Street, Manchester, M3 3HF Classification: Bath Resurfacing **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	653	-	383454 398156
192	**Contemporary Trade Directory Entries** Name: Q Street Domestic Appliances Location: 45, Quenby Street, Manchester, M15 4HX Classification: Vacuum Cleaners - Sales & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SE (S)	655	-	382895 397060
192	**Contemporary Trade Directory Entries** Name: Q Street Domestic Appliances Location: 45, Quenby Street, Manchester, M15 4HX Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SE (S)	655	-	382895 397060
193	**Contemporary Trade Directory Entries** Name: Uk Platforms Location: 2, Worrall Street, Salford, Lancashire, M5 4TH Classification: Scaffolding & Work Platforms **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	665	-	382122 397286

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
193	**Contemporary Trade Directory Entries** Name: E B L Distributors Location: 249, Ordsall Lane, Salford, Lancashire, M5 3WH Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	702	-	382108 397245
194	**Contemporary Trade Directory Entries** Name: Cemex (Uk) Ltd Location: Hope Street, Salford, M5 4WN Classification: Asphalt & Macadam Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	666	-	382248 398304
195	**Contemporary Trade Directory Entries** Name: Afos Location: Dinton Street, Manchester, Lancashire, M15 4WA Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SW)	667	-	382402 397079
195	**Contemporary Trade Directory Entries** Name: Afos Location: Dinton St, Manchester, Lancashire, M15 4WA Classification: Scrap Metal Merchants **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SW)	669	-	382401 397077
195	**Contemporary Trade Directory Entries** Name: C T T Motors Location: 2, Westminster Street, Manchester, M15 4FX Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	687	-	382457 397040
195	**Contemporary Trade Directory Entries** Name: J D Motor Services Location: 1, Westminster Street, Manchester, M15 4FX Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (SW)	693	-	382423 397044
195	**Contemporary Trade Directory Entries** Name: M C Autos Location: 1, Westminster Street, Manchester, M15 4FX Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (SW)	693	-	382423 397044
195	**Contemporary Trade Directory Entries** Name: Mancunian Spring Co Location: Cornbrook Road, Manchester, M15 4WB Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	715	-	382391 397032
196	**Contemporary Trade Directory Entries** Name: Crown Fire Equipment Location: 23, Whimberry Close, Salford, M5 3WL Classification: Firefighting Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	670	-	382029 397429
197	**Contemporary Trade Directory Entries** Name: Clifton Eyewear Ltd Location: 1, St. Stephen Street, Salford, M3 6AY Classification: Optical Goods - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	671	-	382971 398563
198	**Contemporary Trade Directory Entries** Name: Pps Print Communications Location: 198, Deansgate, Manchester, M3 3NE Classification: Copying & Duplicating Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	671	-	383526 398016
198	**Contemporary Trade Directory Entries** Name: Northern Image Centre Location: Invicta House, 2-4, Atkinson Street, Manchester, Lancashire, M3 3HH Classification: Copying & Duplicating Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14NE (E)	678	-	383520 398062

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
199	**Contemporary Trade Directory Entries** Name: Boniecki Motors Location: 272-280, Chapel Street, Salford, M3 5JZ Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	676	-	382670 398560
200	**Contemporary Trade Directory Entries** Name: B B G R Ltd Location: Comus Street, Salford, M5 3BQ Classification: Optical Goods - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	683	-	381998 397940
200	**Contemporary Trade Directory Entries** Name: Barloworld Handling Ltd Location: Red Rose Retail Centre, Regent Road, Salford, Lancashire, M5 3GR Classification: Fork Lift Trucks **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	703	-	381969 397910
201	**Contemporary Trade Directory Entries** Name: Zedkay Textiles Ltd Location: 52 Liverpool St, Salford, Lancashire, M5 4LT Classification: Textile Manufacturing **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	683	-	382180 398260
201	**Contemporary Trade Directory Entries** Name: Lamscot Textile Manufacturing Location: Linden Court House, 52, Liverpool Street, Salford, Lancashire, M5 4LT Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	685	-	382182 398266
202	**Contemporary Trade Directory Entries** Name: Multi Metal Stockholders Ltd Location: 7-19, Hulme Street, Salford, M5 4PY Classification: Non-Ferrous Metals **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	687	-	382393 398439
203	**Contemporary Trade Directory Entries** Name: Hulley & Kirkwood Consulting Engineers Location: 2 Commercial St, Manchester, Lancashire, M15 4RQ Classification: Mechanical Engineers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A9NW (SE)	695	-	383405 397406
204	**Contemporary Trade Directory Entries** Name: John C Hewitt Location: Hewitt Street, Manchester, M15 4GB Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (SE)	700	-	383462 397477
204	**Contemporary Trade Directory Entries** Name: Texco Location: 10, Little Peter Street, Manchester, Lancashire, M15 4PS Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	710	-	383457 397450
204	**Contemporary Trade Directory Entries** Name: G & M Fabrics Location: Symco House,Little Peter St, Manchester, M15 4PS Classification: Pattern Makers - Paper **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	735	-	383493 397460
205	**Contemporary Trade Directory Entries** Name: Duffy Motors (Manchester) Ltd Location: Arch 16-17, Watson Street, Manchester, M3 4LP Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	706	-	383563 397703
205	**Contemporary Trade Directory Entries** Name: Manchester Radiator Co Ltd Location: Arch 19, Watson Street, Manchester, M3 4LP Classification: Car Radiator Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	708	-	383561 397683

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
206	**Contemporary Trade Directory Entries** Name: Colour Point (Manchester) Ltd Location: Unit 4, Olympia Trading Estate, Great Jackson Street, Manchester, M15 4NP Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	715	-	383320 397283
206	**Contemporary Trade Directory Entries** Name: Pro2col Imaging Ltd Location: Unit 4, Olympia Trading Estate, Great Jackson Street, Manchester, Lancashire, M15 4NP Classification: Photo & Digital Imaging Bureaus **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	715	-	383320 397283
207	**Contemporary Trade Directory Entries** Name: John Roberts Location: Chapel House, 172, Chapel Street, Salford, M3 6BG Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (NE)	717	-	383089 398577
207	**Contemporary Trade Directory Entries** Name: Printing.Com Location: 2, City Point, 156, Chapel Street, Salford, Lancashire, M3 6BF Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18NE (N)	727	-	383064 398596
207	**Contemporary Trade Directory Entries** Name: M C W Plant Location: City Point,156 Chapel St, Salford, Lancashire, M3 6ET Classification: Plant & Machinery Repairs **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A18NE (N)	727	-	383064 398596
208	**Contemporary Trade Directory Entries** Name: City Auto Service (Manchester) Location: 15, New Bailey Street, Salford, M3 5FS Classification: Mot Testing Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	720	-	383221 398516
209	**Contemporary Trade Directory Entries** Name: G T Autos Location: 88, Hewitt Street, Manchester, M15 4GB Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	721	-	383505 397506
209	**Contemporary Trade Directory Entries** Name: Hobs Legal Docs Location: 4, Whitworth Street West, Manchester, M1 5WY Classification: Copying & Duplicating Services **Status: Active** Positional Accuracy: Manually positioned to the address or location	A14SE (E)	739	-	383532 397520
210	**Contemporary Trade Directory Entries** Name: Liverpool Street Motors Location: 71 Liverpool St, Salford, Lancashire, M5 4LG Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A17SW (NW)	738	-	382074 398217
211	**Contemporary Trade Directory Entries** Name: Mottershead Location: 70 Cornbrook Rd, Manchester, Lancashire, M15 4WB Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SW)	746	-	382342 397018
212	**Contemporary Trade Directory Entries** Name: Bright House Trading Location: Flat 46, Ledburn Court, Ledburn Close, Manchester, M15 4HR Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SE (S)	746	-	382944 396979

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
212	**Contemporary Trade Directory Entries** Name: Greenhalls Location: Flat 33, Ledburn Court, Ledburn Close, Manchester, M15 4HR Classification: Breakdown and Recovery **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (S)	746	-	382944 396979
213	**Contemporary Trade Directory Entries** Name: Redgrave Motors Location: 91-97, Liverpool Street, Salford, M5 4LG Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	747	-	382043 398188
213	**Contemporary Trade Directory Entries** Name: Salford Salvage Location: 99-101, Liverpool Street, Salford, M5 4LG Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	792	-	382011 398221
213	**Contemporary Trade Directory Entries** Name: Salford Salvage Location: 99-101, Liverpool Street, Salford, M5 4LG Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	792	-	382011 398221
214	**Contemporary Trade Directory Entries** Name: Victoria Valeting Location: 6 Princess St, Manchester, Lancashire, M15 4HA Classification: Car Body Repairs **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A8SW (S)	750	-	382496 396966
214	**Contemporary Trade Directory Entries** Name: Chester Road Mot Centre Location: 325, Chester Road, Manchester, M15 4EZ Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	753	-	382477 396967
214	**Contemporary Trade Directory Entries** Name: Cornbrook Diesel Location: 325, Chester Road, Manchester, M15 4EZ Classification: Fuel Injection Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	753	-	382477 396967
214	**Contemporary Trade Directory Entries** Name: G E S Automotive Location: 325, Chester Road, Manchester, M15 4EZ Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	753	-	382477 396967
215	**Contemporary Trade Directory Entries** Name: Viageo Ltd Location: 23, Crescent, Salford, M5 4PF Classification: Car Engine Tuning & Diagnostic Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	753	-	382349 398491
215	**Contemporary Trade Directory Entries** Name: Ludwig Chocolate Ltd Location: 27, The Crescent, Salford, M5 4PF Classification: Confectionery Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	769	-	382323 398491
216	**Contemporary Trade Directory Entries** Name: Bauer Millett & Co Ltd Location: Lawrence House, 8, Albion Street, Manchester, M1 5NZ Classification: Car Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	760	-	383592 397607
216	**Contemporary Trade Directory Entries** Name: Grand Central Autos Location: 19 Trafford St, Manchester, M1 5LH Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14SE (E)	786	-	383608 397575

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
217	**Contemporary Trade Directory Entries** Name: Woodlands Export Packaging Ltd Location: Unit 3,Fairbrother St, Salford, Lancashire, M5 3EN Classification: Case Manufacturers **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A7NW (SW)	763	-	382063 397203
217	**Contemporary Trade Directory Entries** Name: Whitbread Food Logistics Location: 257, Ordsall Lane, Salford, M5 3WH Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	808	-	382028 397175
217	**Contemporary Trade Directory Entries** Name: A & Q Gateway Location: 2, Fairbrother Street, Salford, M5 3EN Classification: Gate Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	808	-	382028 397175
218	**Contemporary Trade Directory Entries** Name: Bright & Clean Manchester Location: 26, Wood Street, Manchester, M3 3EF Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	767	-	383535 398245
218	**Contemporary Trade Directory Entries** Name: Bright And Clean Manchester Location: 26, Wood Street, Manchester, M3 3EF Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	767	-	383535 398245
218	**Contemporary Trade Directory Entries** Name: National Cleaning & Painting Location: 52, Bridge Street, Manchester, M3 3BW Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	787	-	383539 398277
218	**Contemporary Trade Directory Entries** Name: National Cleaning Location: 52, Bridge Street, Manchester, M3 3BW Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	787	-	383539 398277
218	**Contemporary Trade Directory Entries** Name: National Cleaning Location: 52, Bridge Street, MANCHESTER, M3 3BW Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	787	-	383539 398277
218	**Contemporary Trade Directory Entries** Name: Granada Dry Cleaners Ltd Location: 71-73, Bridge Street, Manchester, M3 2RH Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	817	-	383560 398299
219	**Contemporary Trade Directory Entries** Name: Premier Environmental Ltd Location: 14, Commercial Street, Manchester, M15 4PZ Classification: Pest & Vermin Control **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	768	-	383460 397358
219	**Contemporary Trade Directory Entries** Name: Manchester Pest Control Location: 14, Commercial Street, Manchester, M15 4PZ Classification: Pest & Vermin Control **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	768	-	383460 397358
220	**Contemporary Trade Directory Entries** Name: Kinnarps (Uk) Ltd Location: Colchester House, 38-40, Peter Street, Manchester, M2 5GP Classification: Office Furniture & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	774	-	383644 397937

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
220	**Contemporary Trade Directory Entries** Name: R M R I Ltd Location: 44, Peter Street, Manchester, Lancashire, M2 5GP Classification: Materials Handling Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	791	-	383661 397930
221	**Contemporary Trade Directory Entries** Name: Manchester Accident Repair Centre Location: 21, Hope Street, Salford, M5 4WN Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	782	-	382080 398297
222	**Contemporary Trade Directory Entries** Name: Bridgewater Ales Location: 142, Chapel Street, Salford, M3 6AF Classification: Brewers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	788	-	383192 398610
222	**Contemporary Trade Directory Entries** Name: Manchester City Clean Location: Apartment 710, Fresh, 138, Chapel Street, Salford, M3 6DE Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	806	-	383235 398607
223	**Contemporary Trade Directory Entries** Name: William Street Motors Location: 32, William Street, Salford, M3 6AU Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	795	-	383085 398660
224	**Contemporary Trade Directory Entries** Name: Tyrone Davis Location: 628 Cornbrook Pk Rd, Manchester, Lancashire, M15 4EE Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A8SW (S)	797	-	382479 396922
224	**Contemporary Trade Directory Entries** Name: Williams Mini Location: 326, Chester Road, Manchester, M16 9EZ Classification: Car Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (S)	803	-	382404 396934
224	**Contemporary Trade Directory Entries** Name: Able Scaffolding Ltd Location: 349, Chester Road, Manchester, M16 9FD Classification: Scaffolding & Work Platforms **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	804	-	382448 396922
224	**Contemporary Trade Directory Entries** Name: Union Leisurewear & Screenprint Co Location: 12, Cornbrook Park Road, Manchester, M15 4EE Classification: T-Shirts **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	825	-	382466 396896
224	**Contemporary Trade Directory Entries** Name: Rowson Print Location: 12, Cornbrook Park Road, Manchester, M15 4EE Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	825	-	382466 396896
225	**Contemporary Trade Directory Entries** Name: Bennett Bros Metal Recycling Location: 25, Cornbrook Arches, Manchester, Lancashire, M15 4WD Classification: Scrap Metal Merchants **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	798	-	382245 397009
225	**Contemporary Trade Directory Entries** Name: P Mottershead Location: 70 Cornbrook Arches, Manchester, M15 4WD Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A7SE (SW)	816	-	382245 396988

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
226	**Contemporary Trade Directory Entries** Name: Entwistle Location: 27-29, King Street West, Manchester, M3 2PN Classification: Copying & Duplicating Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	809	-	383511 398361
226	**Contemporary Trade Directory Entries** Name: Blue Print Reprographics Location: 27-29, King Street West, Manchester, M3 2PN Classification: Copying & Duplicating Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	809	-	383511 398361
226	**Contemporary Trade Directory Entries** Name: Simply Nails Location: 38, King Street West, Manchester, Lancashire, M3 2WZ Classification: Shop Fittings Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	814	-	383538 398330
226	**Contemporary Trade Directory Entries** Name: Toye Kenning & Spencer Ltd Location: Reedham House, 31, King Street West, Manchester, M3 2PJ Classification: Clothing & Fabrics - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	823	-	383518 398375
226	**Contemporary Trade Directory Entries** Name: K B Cleaning Location: 31-33 King Street West, Manchester, M3 2PN Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	823	-	383518 398374
227	**Contemporary Trade Directory Entries** Name: M & M Office Cleaning Services Ltd Location: Grampian House, 144, Deansgate, Manchester, M3 3EE Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	821	-	383603 398234
227	**Contemporary Trade Directory Entries** Name: Mbnk Ltd Location: 123, Deansgate, Manchester, M3 2BY Classification: Cookers - Sales & Service **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	845	-	383642 398209
227	**Contemporary Trade Directory Entries** Name: Pharma Karma Location: 123, Deansgate, Manchester, M3 2BY Classification: Pharmaceutical Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	845	-	383642 398209
228	**Contemporary Trade Directory Entries** Name: Scrap My Car Now For Money Manchester Kws Location: Croxley House, Manchester, Lancashire, M2 5ND Classification: Car Breakers & Dismantlers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A14NE (E)	822	-	383667 398074
228	**Contemporary Trade Directory Entries** Name: The Leaflet Co Ltd Location: Croxley House, 14, Lloyd Street, Manchester, Lancashire, M2 5ND Classification: Distribution Services **Status: Active** Positional Accuracy: Manually positioned to the address or location	A14NE (E)	822	-	383667 398074
229	**Contemporary Trade Directory Entries** Name: Victoria Ceramics Ltd Location: A, 1, Cleminson Street, Salford, M3 6EJ Classification: Medical & Dental Laboratories **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	825	-	382575 398687
230	**Contemporary Trade Directory Entries** Name: Scottys Location: 62, Grenham Avenue, Manchester, M15 4HD Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	833	-	382701 396860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
231	**Contemporary Trade Directory Entries** Name: Tilcon Ltd Location: Pomona Docks, Manchester, M15 4NE Classification: Concrete & Mortar Ready Mixed **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	835	-	382190 396999
232	**Contemporary Trade Directory Entries** Name: E F G Matthews Office Furniture Ltd Location: Albion Street, Manchester, M1 5LL Classification: Office Furniture & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	836	-	383661 397574
232	**Contemporary Trade Directory Entries** Name: Claire Giles Location: Albion Wharf, 19, Albion Street, Manchester, Lancashire, M1 5LN Classification: Greeting Card Publishers & Wholesalers **Status: Active** Positional Accuracy: Manually positioned to the address or location	A14SE (E)	836	-	383661 397574
233	**Contemporary Trade Directory Entries** Name: Watt Energy Ltd Location: River Pl,City Rd East, Manchester, M15 4PG Classification: Gas Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	843	-	383510 397300
234	**Contemporary Trade Directory Entries** Name: A Kenny Asphalt Ltd Location: Unit 4, The Cottages, Deva Centre, Trinity Way, Salford, Lancashire, M3 7BE Classification: Asphalt & Coated Macadam Laying Contractors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	851	-	383242 398655
234	**Contemporary Trade Directory Entries** Name: E B Office Interiors Location: The Cottages,Unit 4a Deva Centre,Trinity Way, Salford, Lancashire, M3 7BE Classification: Office Furniture & Equipment **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A19NW (NE)	856	-	383252 398655
235	**Contemporary Trade Directory Entries** Name: Colloides Naturels Ltd Location: 121 Deansgate, Manchester, M3 2BW Classification: Food Colouring, Flavouring & Additive Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	861	-	383650 398230
235	**Contemporary Trade Directory Entries** Name: Apollo Blinds Location: 9, John Dalton Street, Manchester, M2 6FW Classification: Blinds, Awnings & Canopies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	903	-	383683 398258
235	**Contemporary Trade Directory Entries** Name: Klick Location: 103 Deansgate, Manchester, Lancashire, M3 2BQ Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	912	-	383672 398298
235	**Contemporary Trade Directory Entries** Name: The Flight Centre Location: 103 Deansgate, Manchester, Lancashire, M3 2BQ Classification: Airports **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	912	-	383672 398298
235	**Contemporary Trade Directory Entries** Name: Scavolini Store Location: 19 John Dalton St, Manchester, Lancashire, M2 6FW Classification: Kitchen Furniture Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	926	-	383713 398248
235	**Contemporary Trade Directory Entries** Name: Advanced Photo Location: 25, John Dalton Street, Manchester, M2 6FW Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	930	-	383719 398245

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
236	**Contemporary Trade Directory Entries** Name: French Auto Parts Location: 355-357, Chester Road, Manchester, M16 9FD Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	865	-	382443 396860
236	**Contemporary Trade Directory Entries** Name: C M Turpin & Son Location: 328, Chester Road, Manchester, Lancashire, M16 9EZ Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (S)	871	-	382399 396866
237	**Contemporary Trade Directory Entries** Name: Boda Skins Location: Lloyds House, 18-22, Lloyd Street, Manchester, M2 5WA Classification: Leather Garments & Products **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	867	-	383718 398054
237	**Contemporary Trade Directory Entries** Name: Manchester Chemicals & Pigments Ltd Location: Lloyds House, 18-22, Lloyd Street, Manchester, Lancashire, M2 5WA Classification: Chemicals - Distributors & Wholesalers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14NE (E)	867	-	383718 398054
238	**Contemporary Trade Directory Entries** Name: Williams Service Centre Location: 4, Hadfield Street, Manchester, M16 9FG Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	867	-	382333 396892
239	**Contemporary Trade Directory Entries** Name: Recycle Nw Location: Fourth Floor,Brazennose House, Brazennose Street, Manchester, Lancashire, M2 5AS Classification: Office Furniture & Equipment **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A19SE (E)	869	-	383683 398174
239	**Contemporary Trade Directory Entries** Name: Instadrinks Ltd Location: Ridgefield House, 14, John Dalton Street, Manchester, Lancashire, M2 6JR Classification: Vending Machine Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	899	-	383705 398200
239	**Contemporary Trade Directory Entries** Name: Commercial Facilities Location: Ridgefield House, 14, John Dalton Street, Manchester, Lancashire, M2 6JR Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	899	-	383705 398200
240	**Contemporary Trade Directory Entries** Name: A & B Containers Ltd Location: Liverpool Street, Salford, M5 4LQ Classification: Pallets, Crates & Packing Cases **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	871	-	381925 398232
241	**Contemporary Trade Directory Entries** Name: Down Under Location: 47, Peter Street, Manchester, Lancashire, M2 3NG Classification: Abattoirs **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14NE (E)	873	-	383742 397958
241	**Contemporary Trade Directory Entries** Name: Strong Mechanical Services Location: Peter St, Manchester, Lancashire, M2 3NQ Classification: Mechanical Engineers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A15NW (E)	899	-	383770 397932

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
242	**Contemporary Trade Directory Entries** Name: Hunt & Merriman Location: Liverpool St, Salford, Lancashire, M5 4LQ Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A17SW (NW)	880	-	381930 398258
242	**Contemporary Trade Directory Entries** Name: Colorama Processing Laboratories Location: 76, Liverpool Street, Salford, M5 4LS Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	912	-	381917 398296
242	**Contemporary Trade Directory Entries** Name: Colorama Photos & Films Ltd Location: 76, Liverpool Street, Salford, Lancashire, M5 4LS Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	912	-	381917 398296
242	**Contemporary Trade Directory Entries** Name: Worsley Glass Location: 76, Liverpool Street, Salford, Lancashire, M5 4LS Classification: Window Frame Manufacturers **Status: Active** Positional Accuracy: Manually positioned to the address or location	A17SW (NW)	912	-	381917 398296
242	**Contemporary Trade Directory Entries** Name: William Eagles Ltd Location: 100, Liverpool Street, SALFORD, M5 4LP Classification: Firefighting Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	943	-	381890 398312
243	**Contemporary Trade Directory Entries** Name: C B I Location: Cardinal House, 20, St. Marys Parsonage, Manchester, M3 2LY Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	882	-	383531 398454
243	**Contemporary Trade Directory Entries** Name: The Bedding Company Location: Cardinal House, 20, St. Marys Parsonage, Manchester, M3 2LG Classification: Bed & Mattress Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	882	-	383531 398454
244	**Contemporary Trade Directory Entries** Name: Copybook Press Ltd Location: 45-47 City Road East, Manchester, M15 4PN Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	890	-	383522 397242
245	**Contemporary Trade Directory Entries** Name: L A Design Marketing Location: Palmer House, 11, Virgil Street, Manchester, M15 4ED Classification: Leather Garments & Products **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	897	-	382542 396811
246	**Contemporary Trade Directory Entries** Name: New World Of Leather Location: 1, Phoebe Street, Salford, M5 3PJ Classification: Leather Products - Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	899	-	381764 397899
247	**Contemporary Trade Directory Entries** Name: T Walker & Co Location: Top Floor,University House,Peel Park Campus,, Salford, Lancashire, M5 4WT Classification: Bookbinding & Equipment **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A17NE (NW)	903	-	382140 398524
247	**Contemporary Trade Directory Entries** Name: Walker & Co Location: House,43 Cr, Salford, Lancashire, M5 4WT Classification: Bookbinding & Equipment **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A17NE (NW)	942	-	382136 398570

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
248	**Contemporary Trade Directory Entries** Name: Williams Body Repair Centre Location: 6, Hadfield Street, Manchester, Lancashire, M16 9FG Classification: Car Body Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	905	-	382267 396878
248	**Contemporary Trade Directory Entries** Name: Williams Location: 6, Hadfield Street, Manchester, M16 9FG Classification: Car Body Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	905	-	382267 396878
248	**Contemporary Trade Directory Entries** Name: S A L Ltd Location: 9, Hadfield Street, Manchester, M16 9FE Classification: Laboratories **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	915	-	382347 396835
248	**Contemporary Trade Directory Entries** Name: Norman Location: Hadfield St, Manchester, M16 9FE Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SW)	915	-	382302 396852
249	**Contemporary Trade Directory Entries** Name: C G (Europe) Ltd Location: Enterprise House, 15, Whitworth Street West, Manchester, Lancashire, M1 5WG Classification: China & Glassware Manufacturers & Repairs **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14SE (E)	909	-	383721 397526
250	**Contemporary Trade Directory Entries** Name: Scrap My Car Now For Money Manchester Kws Location: Lawrence Buildings, Manchester, Lancashire, M2 5WQ Classification: Car Breakers & Dismantlers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A15NW (E)	915	-	383774 398020
251	**Contemporary Trade Directory Entries** Name: North Country Quality Foods Ltd Location: 39, Hope Street, Salford, M5 4WN Classification: Meat Product Manufacturers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	922	-	381941 398347
252	**Contemporary Trade Directory Entries** Name: Autogas Cars Direct Location: 1, City Road East, Manchester, Lancashire, M15 4PN Classification: Car Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	932	-	383625 397305
253	**Contemporary Trade Directory Entries** Name: Complete Office Printer Support Location: Birchvale Cl, Manchester, Lancashire, M15 5BJ Classification: Office Equipment Servicing & Maintenance **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A9SW (SE)	942	-	383282 396930
254	**Contemporary Trade Directory Entries** Name: Pro2col Location: 101-115, Chapel Street, Salford, M3 5DN Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	955	-	383445 398645
254	**Contemporary Trade Directory Entries** Name: Silk Thomas Made To Measure Shirts Location: Caxton Hall, 88-92, Chapel Street, Salford, Lancashire, M3 5DW Classification: Shirt Makers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19NW (NE)	975	-	383423 398686

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
254	**Contemporary Trade Directory Entries** Name: The Graphics Location: Caxton Hall, 88-92, Chapel Street, Salford, Lancashire, M3 5DW Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19NW (NE)	975	-	383423 398686
255	**Contemporary Trade Directory Entries** Name: Access Pest Control Location: 16, Peter Street, Manchester, M60 2DS Classification: Pest & Vermin Control **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15NW (E)	959	-	383833 397848
256	**Contemporary Trade Directory Entries** Name: Davidson Powell Design Location: 40, John Dalton Street, Manchester, M2 6LE Classification: Jewellery Manufacturers & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A20SW (E)	966	-	383781 398190
257	**Contemporary Trade Directory Entries** Name: Paul Moy Associates Location: Unit 5, Brewery Yard, Deva Centre, Trinity Way, Salford, M3 7BB Classification: Mechanical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	989	-	383322 398768
258	**Contemporary Trade Directory Entries** Name: E M R Location: West Egerton Street, Salford, Greater Manchester, M5 4DY Classification: Scrap Metal Merchants **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A11NE (W)	991	-	381737 398126
259	**Contemporary Trade Directory Entries** Name: Smart Alex Location: 16, Barlow's Croft, Salford, M3 5DY Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	997	-	383505 398649
260	**Fuel Station Entries** Name: Sainsburys Salford Location: 100 Regent Road, Ordsall Lane, Salford, Lancashire, M5 4QU Brand: Sainsburys Premises Type: Hypermarket **Status: Open** Positional Accuracy: Manually positioned to the address or location	A13NW (W)	151	-	382524 397829
261	**Fuel Station Entries** Name: Castlefield Travellers Check Location: Dawson Street, Manchester, M3 4JZ Brand: OBSOLETE Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Approximate location provided by supplier	A13SE (S)	245	-	382813 397463
262	**Fuel Station Entries** Name: Shell Phoenix Location: Regent Road, Salford, Lancashire, M5 4TS Brand: SHELL Premises Type: Petrol Station **Status: Open** Positional Accuracy: Automatically positioned to the address	A12SE (W)	304	-	382339 397732
263	**Fuel Station Entries** Name: Oldfield Road Service Station Location: Oldfield Road, Salford, M5 4NE Brand: Texaco Premises Type: Petrol Station **Status: Open** Positional Accuracy: Automatically positioned to the address	A12NE (W)	459	-	382233 397934
264	**Fuel Station Entries** Name: Castlefield Service Station Location: 14 Great Jackson Street, Castlefield, Manchester, M15 4NG Brand: Obsolete Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	662	-	383248 397279

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
265	**Fuel Station Entries** Name: Redgrave Motors Location: 91-97 Liverpool Street, SALFORD, Lancashire, M5 4LG Brand: UNBRANDED Premises Type: Petrol Station **Status: Closed** Positional Accuracy: Manually positioned to the address or location	A17SW (NW)	752	-	382035 398184
266	**Fuel Station Entries** Name: Cornbrook Service Station Location: 326 Chester Road, Manchester, M16 9EZ Brand: OBSOLETE Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Located by supplier to within 100m	A8SW (S)	898	-	382420 396832

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
267	**Nitrate Vulnerable Zones** Name: Not Supplied Description: Surface Water Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	A18SW (N)	461	11	382600 398300

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Tameside Metropolitan Borough Council - Environmental Health Department	May 2013	Annual Rolling Update
Salford City Council - Environmental Health Department	November 2013	Annual Rolling Update
Trafford Metropolitan Borough Council - Renewal and Environmental Protection	November 2013	Annual Rolling Update
Bury Metropolitan Borough Council - Environmental Health Department	October 2013	Annual Rolling Update
Manchester City Council - Environmental Health Department	September 2014	Annual Rolling Update
Discharge Consents		
Environment Agency - North West Region	January 2015	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - North West Region	March 2013	As notified
Integrated Pollution Controls		
Environment Agency - North West Region	October 2008	Not Applicable
Integrated Pollution Prevention And Control		
Environment Agency - North West Region	January 2015	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Tameside Metropolitan Borough Council - Environmental Health Department	February 2013	Annual Rolling Update
Bury Metropolitan Borough Council - Environmental Health Department	February 2015	Annual Rolling Update
Salford City Council - Environmental Health Department	March 2015	Annual Rolling Update
Trafford Metropolitan Borough Council - Environmental Health Department	October 2014	Annual Rolling Update
Manchester City Council - Environmental Health Department	September 2014	Annual Rolling Update
Local Authority Pollution Prevention and Controls		
Tameside Metropolitan Borough Council - Environmental Health Department	February 2013	Annual Rolling Update
Bury Metropolitan Borough Council - Environmental Health Department	February 2015	Annual Rolling Update
Trafford Metropolitan Borough Council - Environmental Health Department	January 2013	Annual Rolling Update
Salford City Council - Environmental Health Department	March 2015	Annual Rolling Update
Manchester City Council - Environmental Health Department	September 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Tameside Metropolitan Borough Council - Environmental Health Department	February 2013	Annual Rolling Update
Bury Metropolitan Borough Council - Environmental Health Department	February 2015	Annual Rolling Update
Salford City Council - Environmental Health Department	March 2015	Annual Rolling Update
Trafford Metropolitan Borough Council - Environmental Health Department	October 2014	Annual Rolling Update
Manchester City Council - Environmental Health Department	September 2014	Annual Rolling Update
Nearest Surface Water Feature		
Ordnance Survey	July 2012	Quarterly
Pollution Incidents to Controlled Waters		
Environment Agency - North West Region	January 2000	Not Applicable
Prosecutions Relating to Authorised Processes		
Environment Agency - North West Region	March 2013	As notified
Prosecutions Relating to Controlled Waters		
Environment Agency - North West Region	March 2013	As notified
Registered Radioactive Substances		
Scottish Environment Protection Agency - Head Office	January 1998	Not Applicable
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register		
Environment Agency - North West Region - South Area	January 2015	Quarterly
Water Abstractions		
Environment Agency - North West Region	January 2015	Quarterly

Agency & Hydrological	Version	Update Cycle
Water Industry Act Referrals Environment Agency - North West Region	January 2015	Quarterly
Groundwater Vulnerability Environment Agency - Head Office	April 2015	Not Applicable
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations British Geological Survey - National Geoscience Information Service	October 2012	As notified
Superficial Aquifer Designations British Geological Survey - National Geoscience Information Service	January 2015	As notified
Source Protection Zones Environment Agency - Head Office	January 2015	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	October 2014	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	October 2014	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	October 2014	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	October 2014	Quarterly
Flood Defences Environment Agency - Head Office	October 2014	Quarterly
Detailed River Network Lines Environment Agency - Head Office	March 2012	Annually
Detailed River Network Offline Drainage Environment Agency - Head Office	March 2012	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites		
Environment Agency - North West Region - South Area	February 2015	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - North West Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - North West Region - South Area	August 2014	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North West Region - South Area	August 2014	Quarterly
Environment Agency - South East Region - Solent & South Downs Area	August 2014	Quarterly
Local Authority Landfill Coverage		
Bury Metropolitan Borough Council	May 2000	Not Applicable
Manchester City Council - Planning Department	May 2000	Not Applicable
Salford City Council - Environmental Health Department	May 2000	Not Applicable
Tameside Metropolitan Borough Council	May 2000	Not Applicable
Trafford Metropolitan Borough Council - Environmental Health Department	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Bury Metropolitan Borough Council	May 2000	Not Applicable
Manchester City Council - Planning Department	May 2000	Not Applicable
Salford City Council - Environmental Health Department	May 2000	Not Applicable
Tameside Metropolitan Borough Council	May 2000	Not Applicable
Trafford Metropolitan Borough Council - Environmental Health Department	May 2000	Not Applicable
Registered Landfill Sites		
Environment Agency - North West Region - South Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North West Region - South Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - North West Region - South Area	March 2003	Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	January 2015	Bi-Annually
Explosive Sites		
Health and Safety Executive	October 2014	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Bury Metropolitan Borough Council	March 2015	Annual Rolling Update
Trafford Metropolitan Borough Council	November 2014	Annual Rolling Update
Manchester City Council - Planning Department	September 2014	Annual Rolling Update
Salford City Council	September 2014	Annual Rolling Update
Tameside Metropolitan Borough Council - Planning and Building Control	September 2014	Annual Rolling Update
Planning Hazardous Substance Consents		
Bury Metropolitan Borough Council	March 2015	Annual Rolling Update
Trafford Metropolitan Borough Council	November 2014	Annual Rolling Update
Manchester City Council - Planning Department	September 2014	Annual Rolling Update
Salford City Council	September 2014	Annual Rolling Update
Tameside Metropolitan Borough Council - Planning and Building Control	September 2014	Annual Rolling Update

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	January 2010	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	October 2014	Bi-Annually
BGS Urban Soil Chemistry British Geological Survey - National Geoscience Information Service	June 2011	Annually
BGS Urban Soil Chemistry Averages British Geological Survey - National Geoscience Information Service	June 2011	Annually
Brine Compensation Area Cheshire Brine Subsidence Compensation Board	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Mining Report Service	March 2014	As notified
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	July 2014	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2014	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2014	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	June 2014	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2014	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2014	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2014	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	As notified
Industrial Land Use	**Version**	**Update Cycle**
Contemporary Trade Directory Entries Thomson Directories	February 2015	Quarterly
Fuel Station Entries Catalist Ltd - Experian	November 2014	Quarterly

Sensitive Land Use	Version	Update Cycle
Areas of Adopted Green Belt		
Bury Metropolitan Borough Council	May 2015	As notified
Manchester City Council	May 2015	As notified
Salford City Council	May 2015	As notified
Tameside Metropolitan Borough Council	May 2015	As notified
Trafford Metropolitan Borough Council	May 2015	As notified
Areas of Unadopted Green Belt		
Bury Metropolitan Borough Council	May 2015	As notified
Manchester City Council	May 2015	As notified
Salford City Council	May 2015	As notified
Tameside Metropolitan Borough Council	May 2015	As notified
Trafford Metropolitan Borough Council	May 2015	As notified
Areas of Outstanding Natural Beauty		
Natural England	February 2015	Bi-Annually
Environmentally Sensitive Areas		
Natural England	August 2014	Annually
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	April 2015	Bi-Annually
Marine Nature Reserves		
Natural England	July 2013	Bi-Annually
National Nature Reserves		
Natural England	March 2015	Bi-Annually
National Parks		
Natural England	February 2015	Bi-Annually
Nitrate Sensitive Areas		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	February 2012	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	July 2014	Annually
Ramsar Sites		
Natural England	March 2014	Bi-Annually
Sites of Special Scientific Interest		
Natural England	April 2015	Bi-Annually
Special Areas of Conservation		
Natural England	March 2014	Bi-Annually
Special Protection Areas		
Natural England	April 2015	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

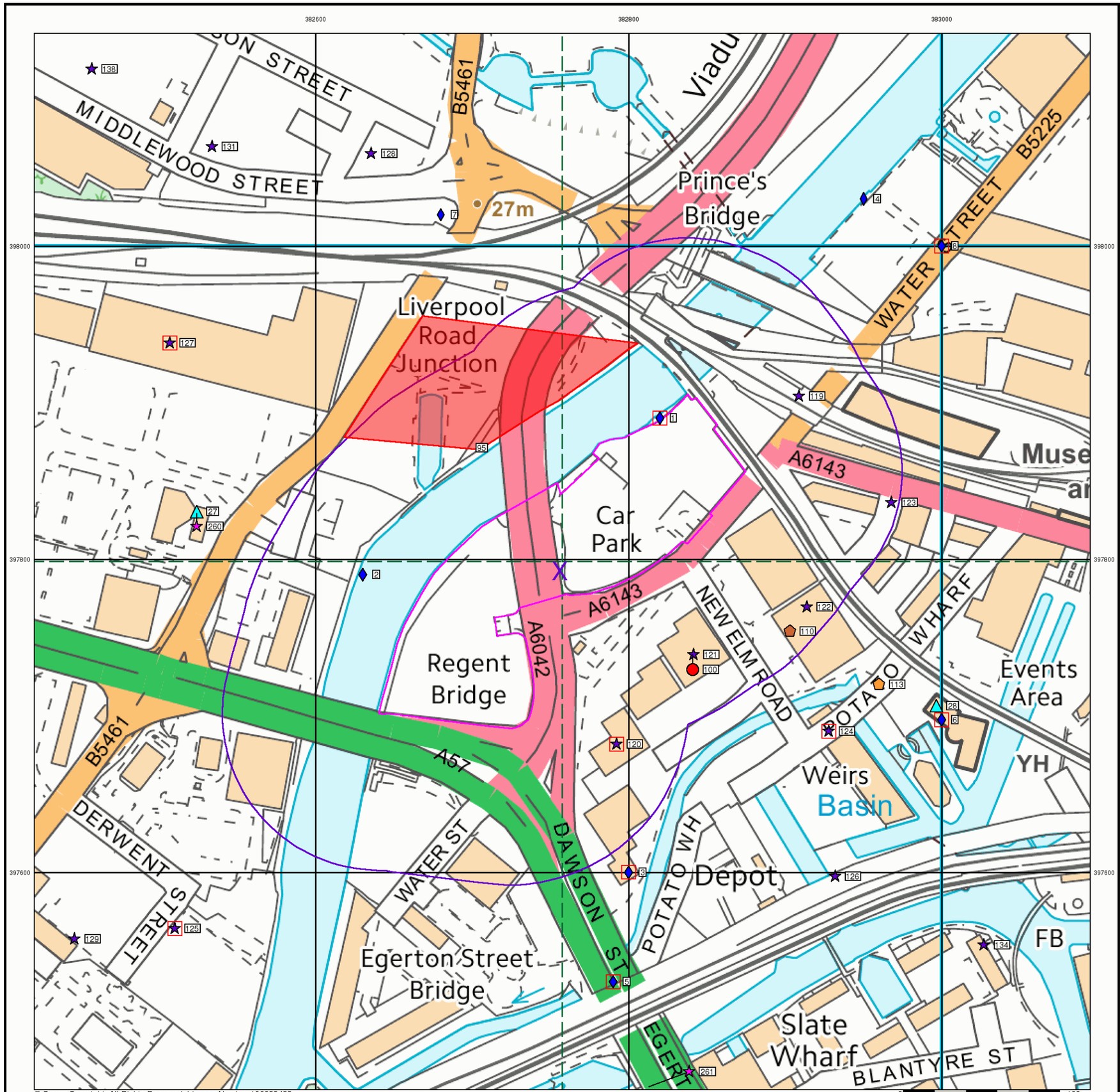
Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Peter Brett Associates	

Useful Contacts

Contact	Name and Address	Contact Details
2	**British Geological Survey - Enquiry Service** British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
3	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 08708 506 506 Email: enquiries@environment-agency.gov.uk
4	**Salford City Council - Environmental Health Department** Crompton House, 100 Chorley Road, Swinton, Manchester, Greater Manchester, M27 2ES	Telephone: 0161 7370551 Fax: 0161 728 1956 Website: www.salford.gov.uk
5	**Manchester City Council - Environmental Health Department** PO Box 463, Town Hall Extension, Albert Square, Manchester, Greater Manchester, M60 3NY	Telephone: 0161 234 4884 / 234 4873. Fax: 0161 234 4508 Website: www.manchester.gov.uk
6	**Trafford Metropolitan Borough Council - Environmental Health Department** P O Box 14, Trafford Town Hall, Talbot Road, Stretford, Greater Manchester, M32 0YJ	Telephone: 0161 912 4566 Fax: 0161 873 7783 Website: www.trafford.gov.uk
7	**Scottish Environment Protection Agency - Head Office** Erskine Court, The Castle Business Park, Stirling, Stirlingshire, FK9 4TR	Telephone: 01786 457700 Fax: 01786 446885
8	**Health and Safety Executive** 5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS	Website: www.hse.gov.uk
9	**The Coal Authority - Mining Report Service** 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0845 7626848 Email: thecoalauthority@coal.gov.uk
10	**Peter Brett Associates** Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN	Telephone: 0118 950 0761 Fax: 0118 959 7498 Email: reading@pba.co.uk Website: www.pba.co.uk
11	**Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)** Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT	Telephone: 0113 2613333 Fax: 0113 230 0879
12	**Manchester City Council - Planning Department** Town Hall, Manchester, Greater Manchester, M60 2LA	Telephone: 0161 234 5000 Fax: 0161 234 4508 Website: www.manchester.gov.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.

APPENDIX D - ENVIRONMENTAL & GEOLOGICAL MAPS



ROC CONSULTING

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Geological

- BGS Recorded Mineral Site

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry

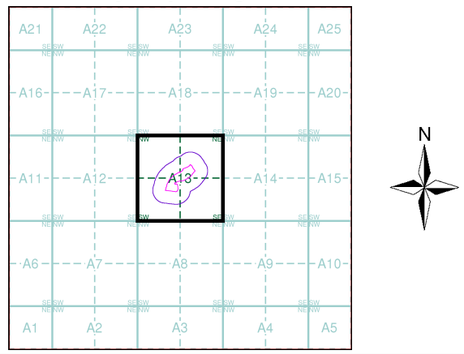
Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Site Sensitivity Map - Segment A13



Order Details

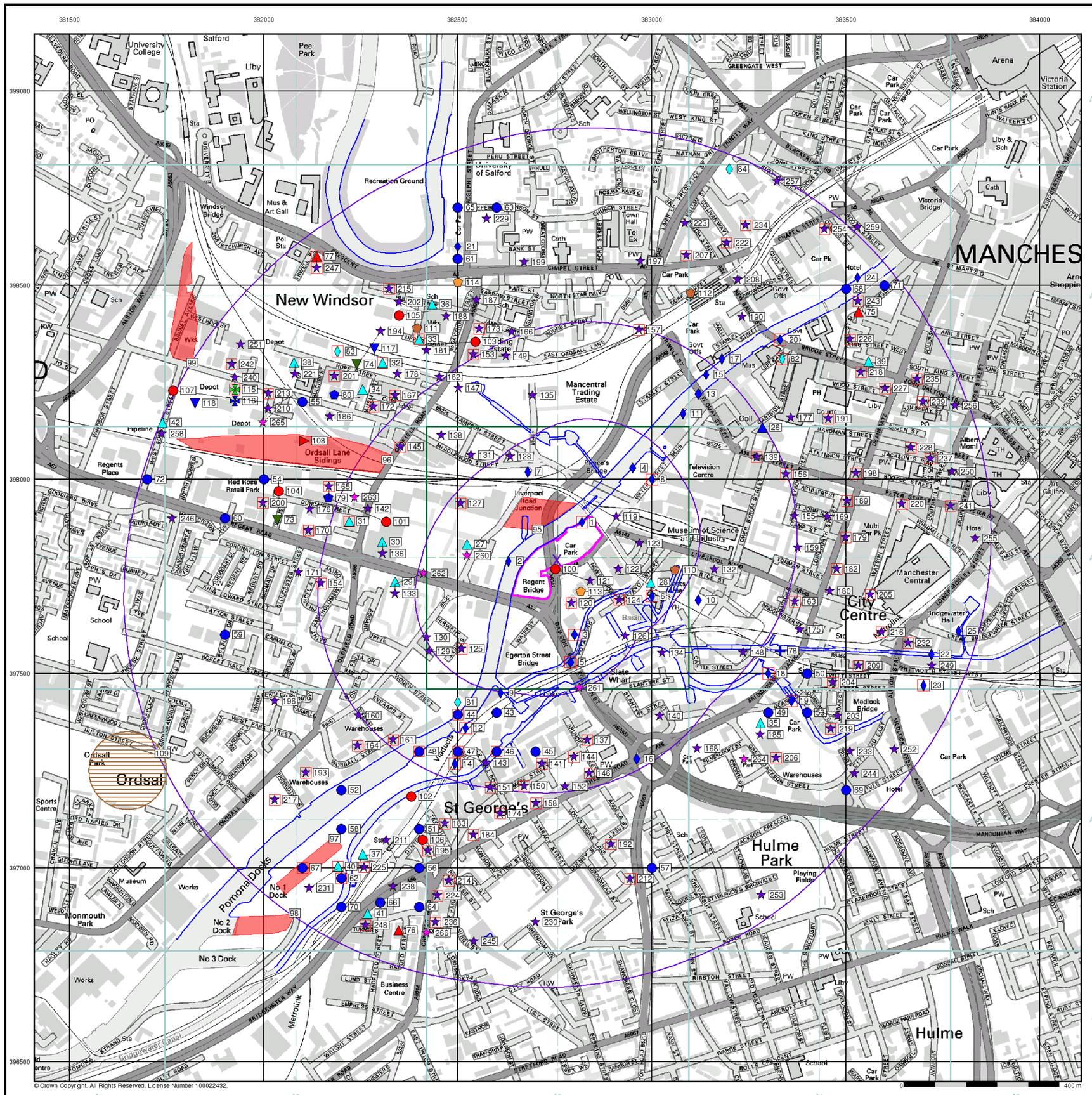
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Site Details

Zone 9, St Johns Quarter, Water Street, MANCHESTER, M3 4JU

Landmark Information Group

Tel: 0844 844 9952
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Web: www.envirocheck.co.uk



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RoC CONSULTING

General

- Specified Site
- Specified Buffer(s)
- Several of Type at Location
- Bearing Reference Point
- Map ID

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Geological

- BGS Recorded Mineral Site

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry

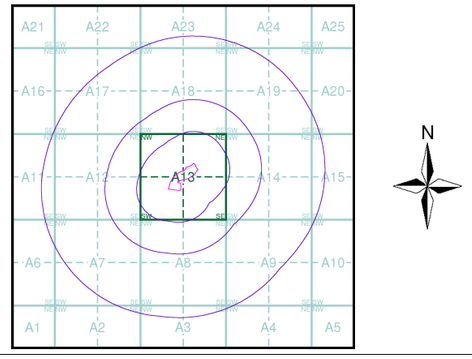
Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Site Sensitivity Map - Slice A



Order Details

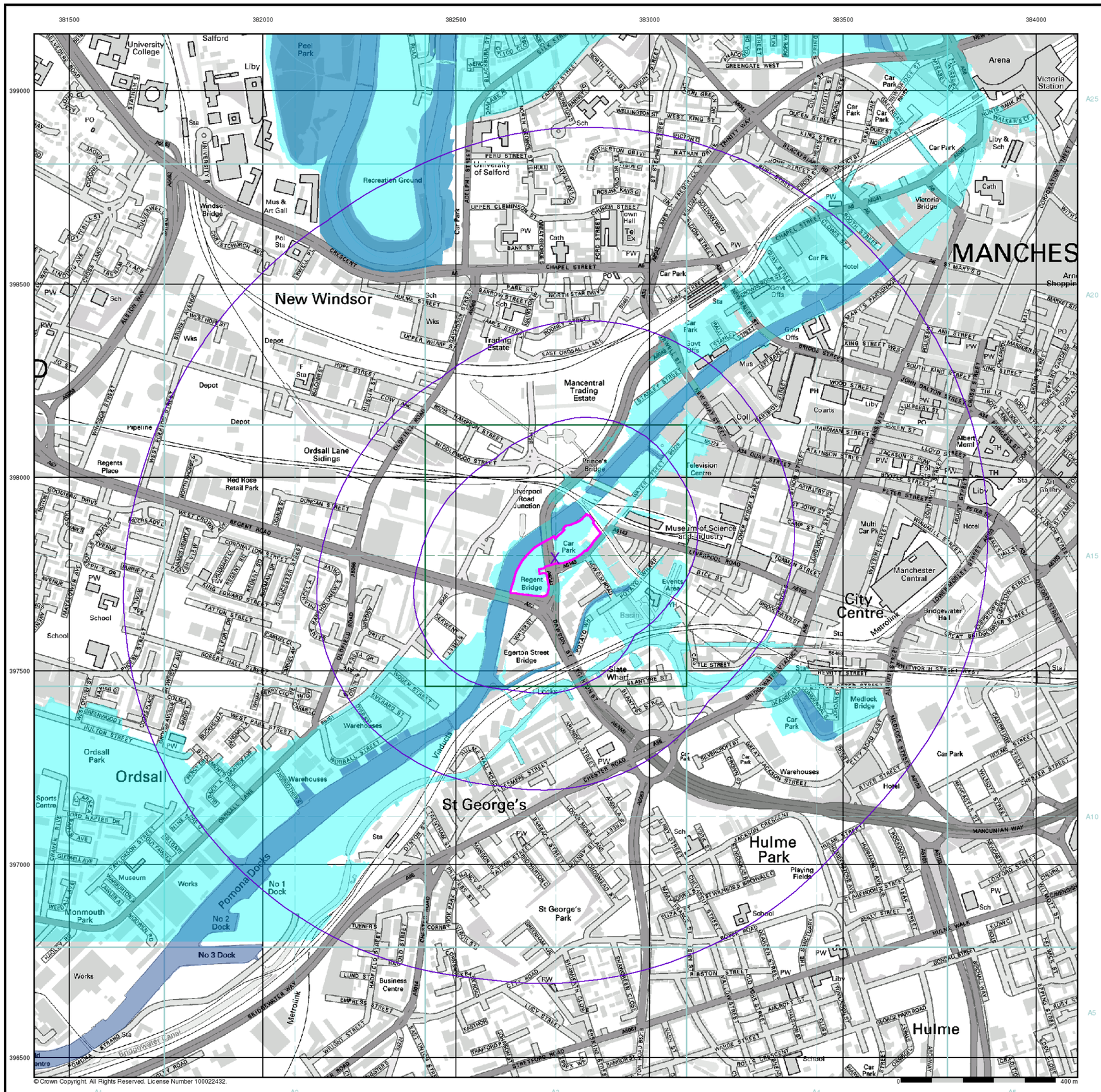
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Search Buffer (m):	1000

Site Details

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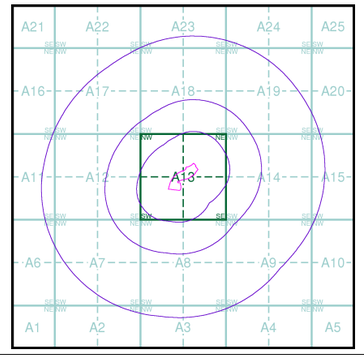
General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



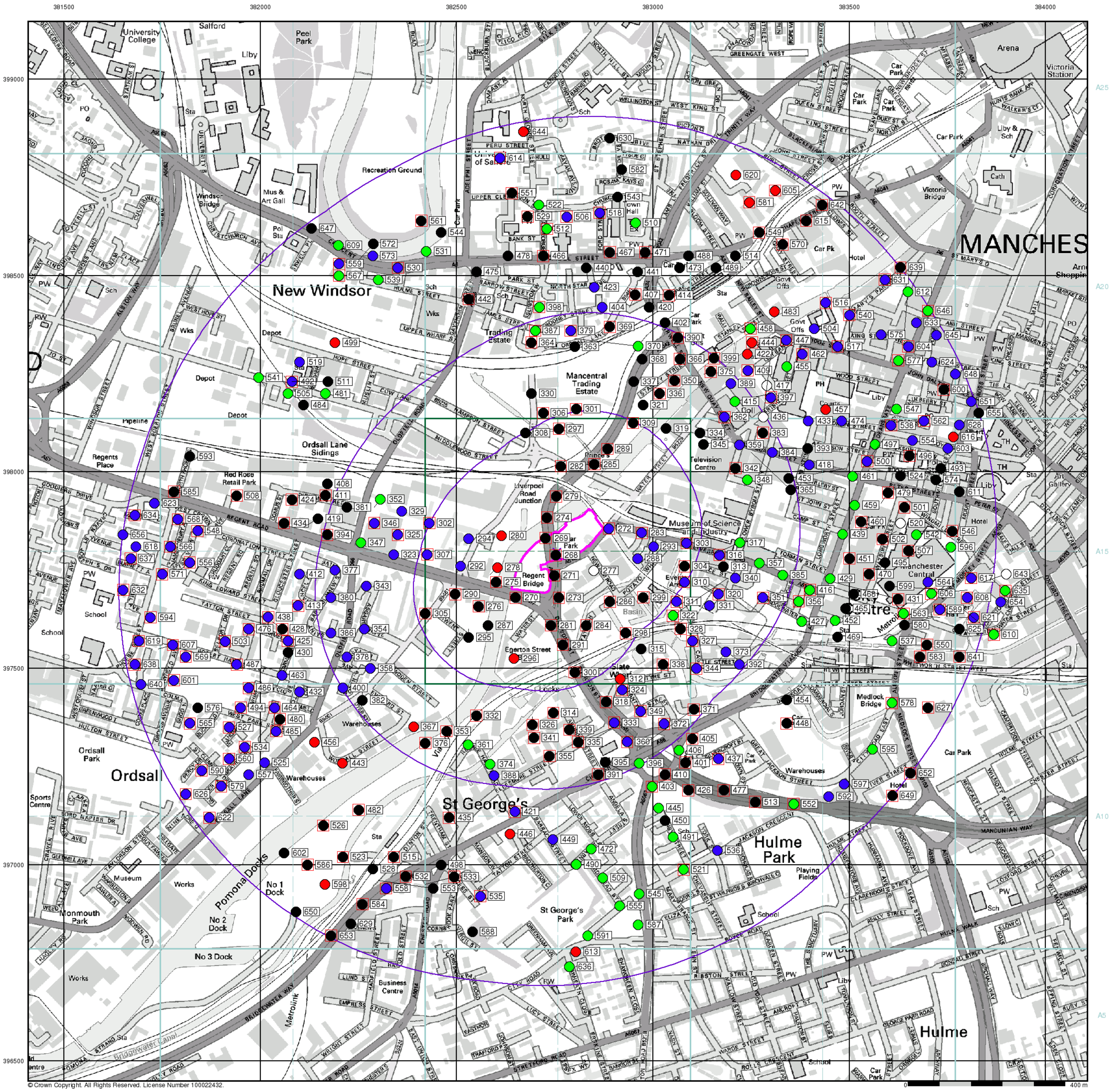
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National Grid Reference:	382760, 397790
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Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

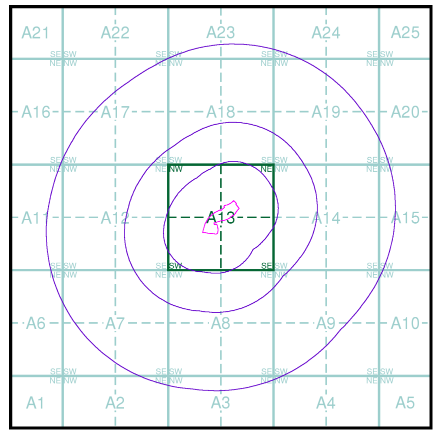
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

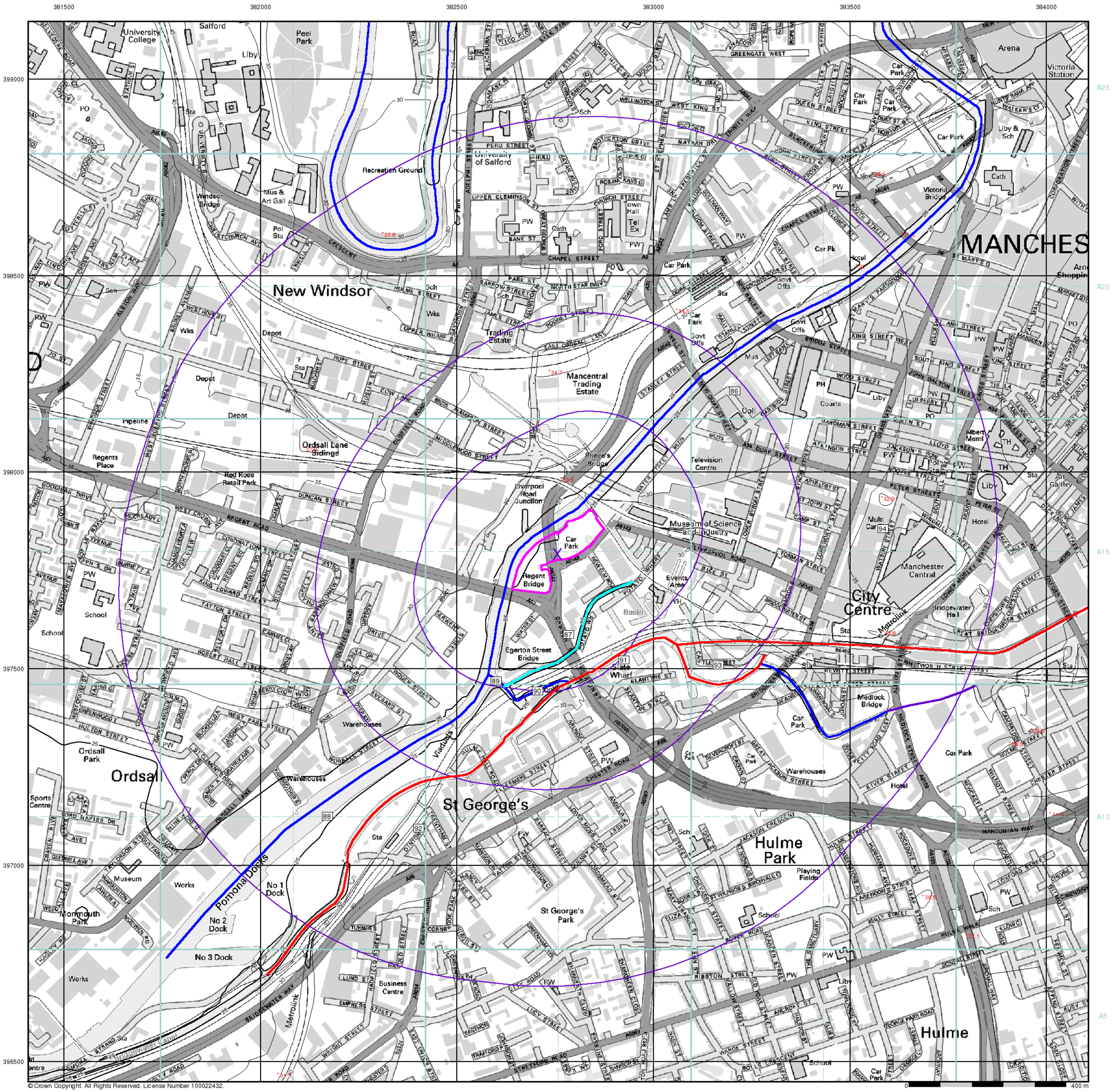
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Site Details

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General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Map ID

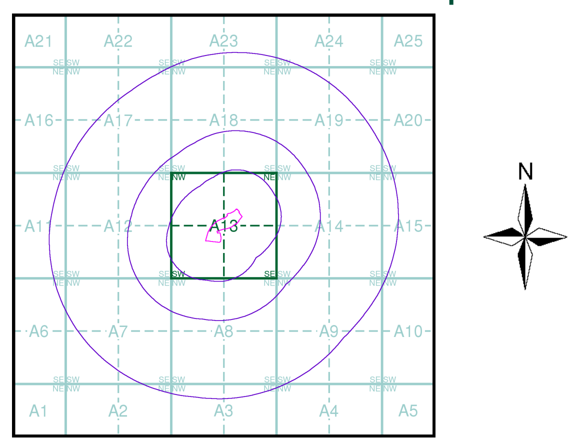
Detailed River Network Data

- Primary River
- Secondary River
- Tertiary River
- Canal
- Canal Tunnel
- Undefined River
- Lake/Reservoir
- Offline Drainage Feature
- Extended Culvert (greater than 50m)
- Underground River (inferred)
- Underground River (local knowledge)
- Downstream of High Water Mark
- Downstream of Seaward Extension
- Not assigned River feature

Contours (height in metres)

- Standard Contour — 105
- Master Contour — 100, 95
- Spot Height — 167.3
- MLW Mean Low Water
- MHW Mean High Water

EA/NRW Detailed River Network Map - Slice A



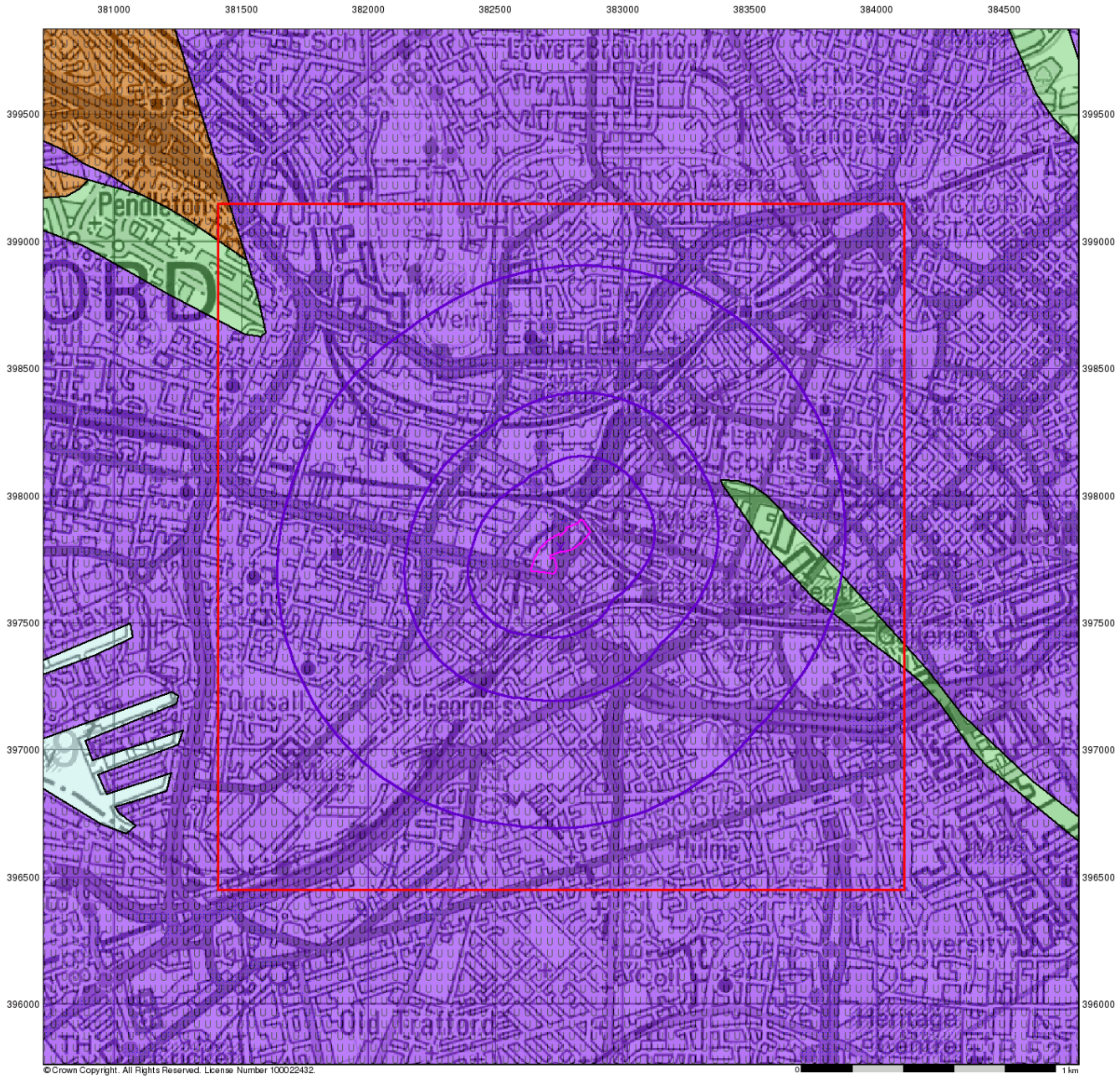
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Site Area (Ha): 1.96
Search Buffer (m): 1000

Site Details

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Groundwater Vulnerability

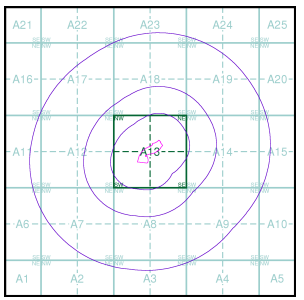
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes	Soil Classes
Major Aquifer (Highly Permeable)	High (H) 1, 2, 3, U
	Intermediate (I) 1, 2
	Low
Minor Aquifer (Variably Permeable)	High (H) 1, 2, 3, U
	Intermediate (I) 1, 2
	Low
Non Aquifer (Negligibly Permeable)	
Water or Sea	
Drift Deposit	

Site Sensitivity Context Map - Slice A



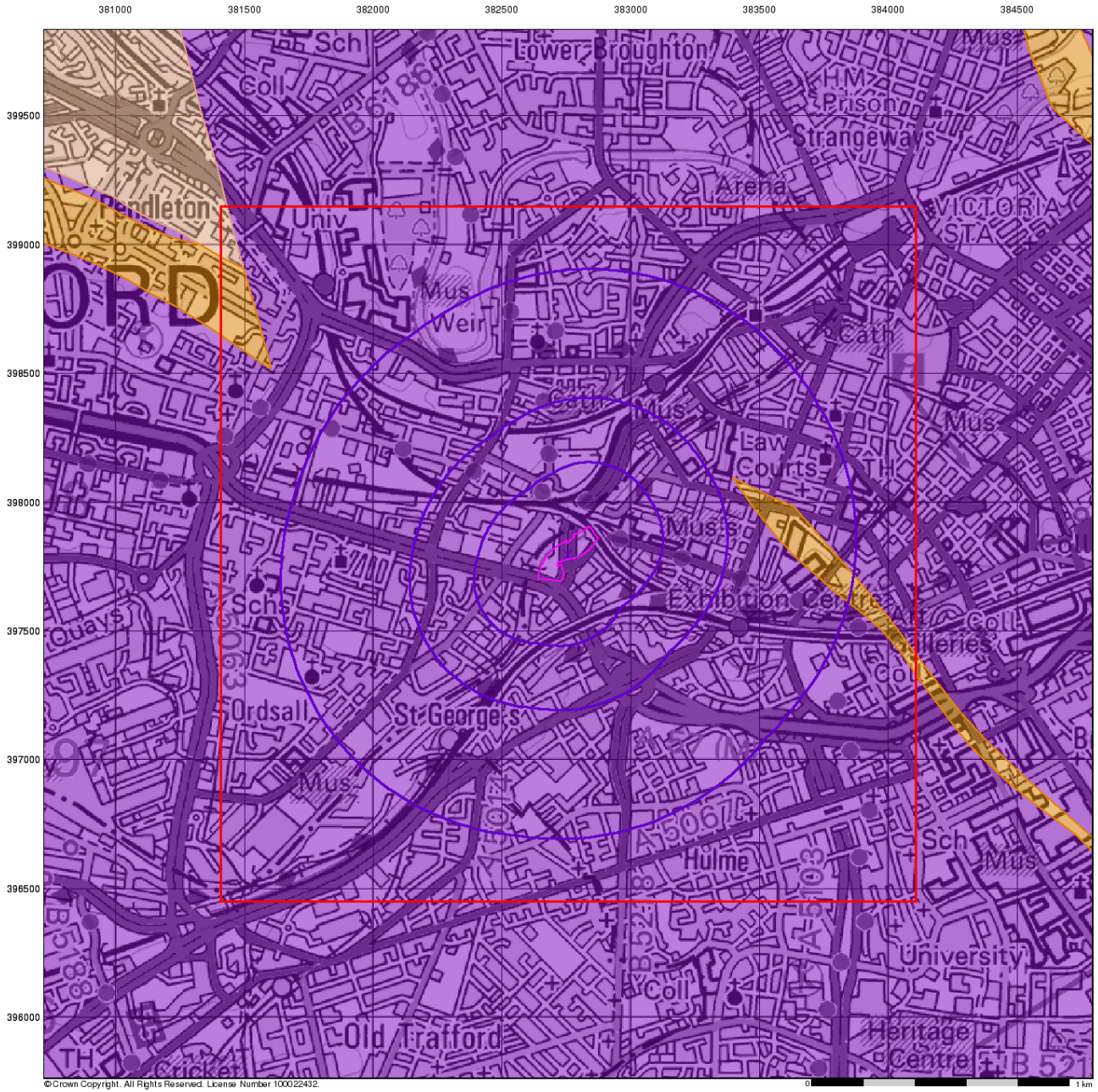
Order Details

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National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

Zone 9, St Johns Quarter, Water Street, MANCHESTER, M3 4JU

Landmark Information Group
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Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Bedrock Aquifer Designation

General

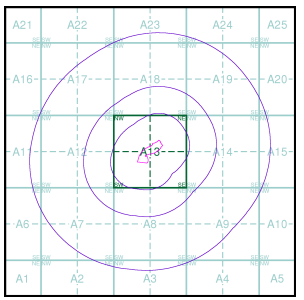
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown

Site Sensitivity Context Map - Slice A



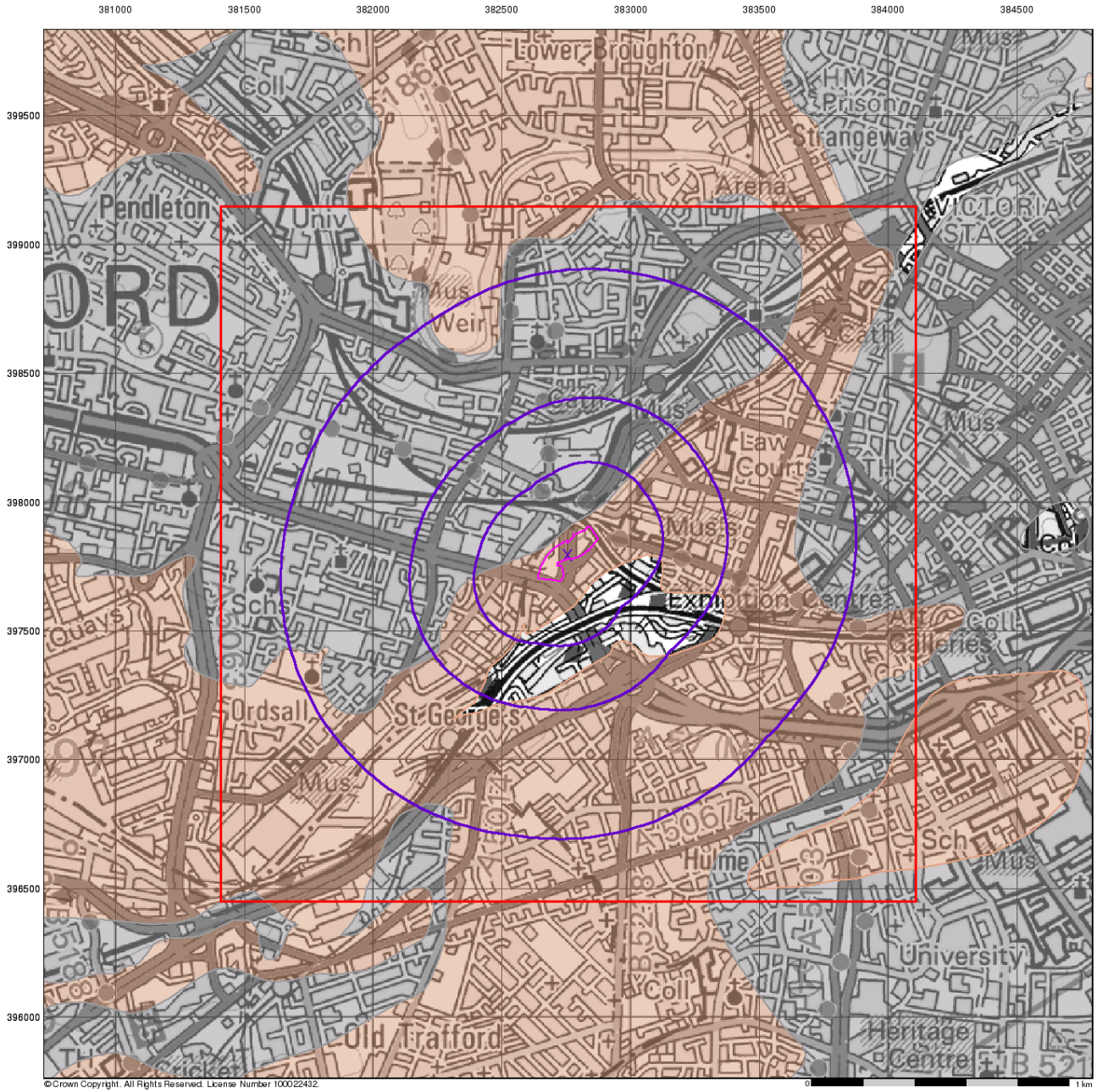
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Search Buffer (m):	1000

Site Details

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Web: www.envirocheck.co.uk



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Superficial Aquifer Designation

General

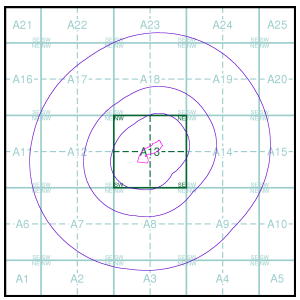
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown

Site Sensitivity Context Map - Slice A



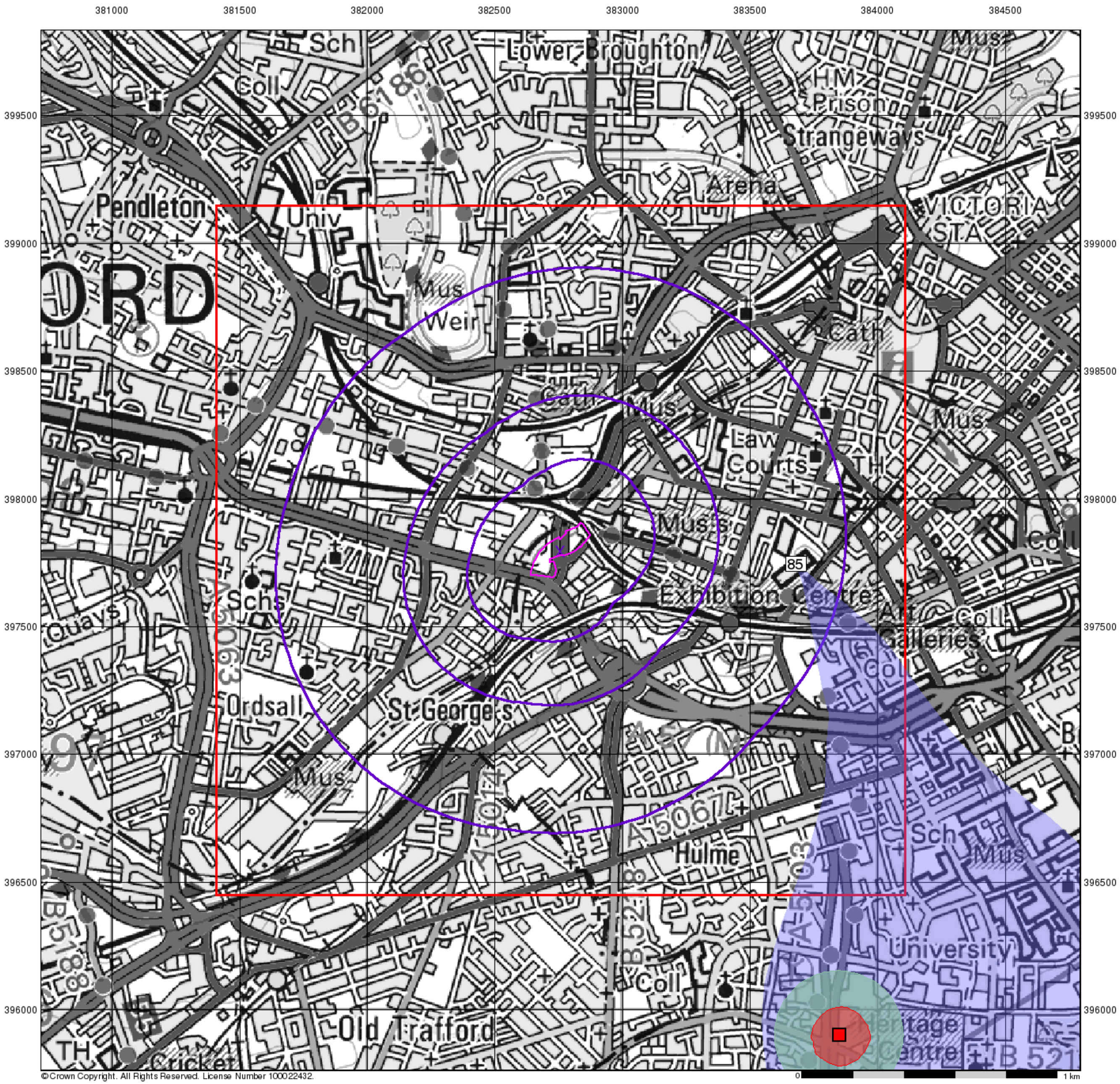
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Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

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Source Protection Zones

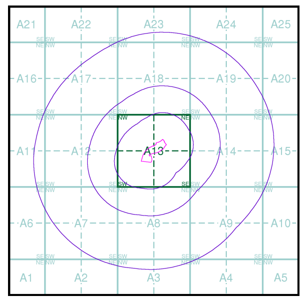
General

Specified Site
Specified Buffer(s)
Bearing Reference Point
Slice
Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)
- Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A



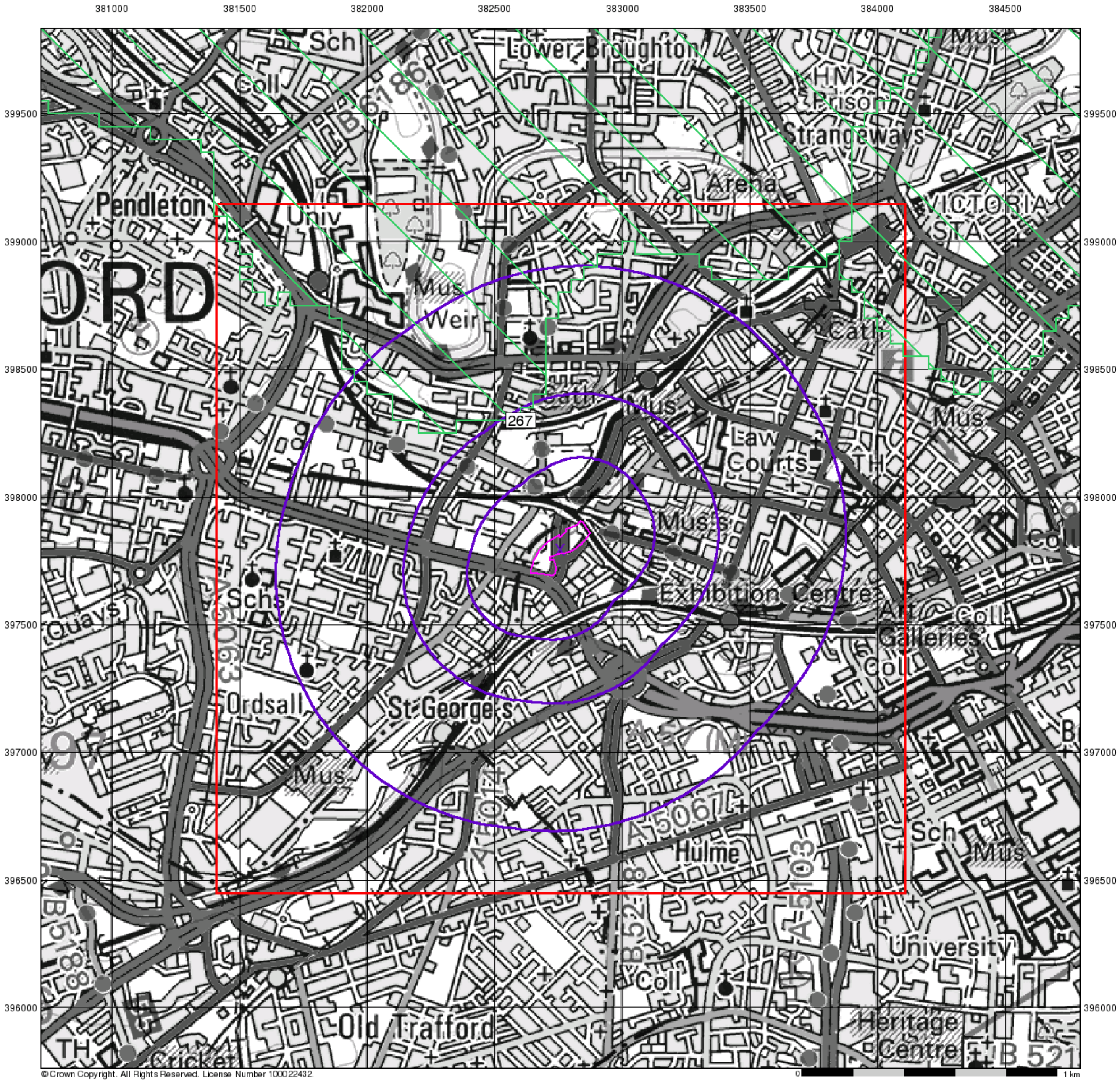
Order Details

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Customer Ref:	3233
National Grid Reference:	382760, 397790
Slice:	A
Site Area (Ha):	1.96
Search Buffer (m):	1000

Site Details

Zone 9, St Johns Quarter, Water Street, MANCHESTER, M3 4JU

Landmark Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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Sensitive Land Uses

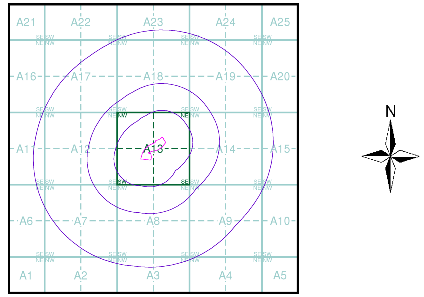
General

Specified Site
Specified Buffer(s)
Bearing Reference Point
Slice
Map ID

Sensitive Land Uses

Area of Adopted Green Belt
Area of Unadopted Green Belt
Area of Outstanding Natural Beauty
Environmentally Sensitive Area
Forest Park
Local Nature Reserve
Marine Nature Reserve
National Nature Reserve
National Park
Nitrate Sensitive Area
Nitrate Vulnerable Zone
Ramsar Site
Site of Special Scientific Interest
Special Area of Conservation
Special Protection Area

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 67439542_1_1
Customer Ref: 3233
National Grid Reference: 382760, 397790
Slice: A
Site Area (Ha): 1.96
Search Buffer (m): 1000

Site Details

Zone 9, St Johns Quarter, Water Street, MANCHESTER, M3 4JU

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Appendix 6 – TVIA and Heritage Viewpoint Locations and Viewpoint Methodology

TOWNSCAPE AND VISUAL IMPACT ASSESSMENT: VISUAL REPRESENTATION OF DEVELOPMENT PROPOSALS

Introduction

New guidance published by the Landscape Guidance in October 2019, LI Technical Guidance Note 06/19 Visual Representation of Development Proposals, recommends that not only TVIA Representative Viewpoints are agreed with the competent authority , Manchester City Council, (MCC) in this case, but also the methodology used in the Visual Representation of Development Proposals itself is agreed.

This advice note seeks to explain why, and seek agreement for, the need for specialist lens equipment is necessary in the preparation of Verified Views for tall buildings.

AVR TYPE

TYPE 4 PHOTOMONTAGE / PHOTOWIRE (SURVEY/ SCALE VERIFIABLE)

This is the most sophisticated form of visualization and judged to be the most appropriate level in these circumstances where the planning application is supported by a full EIA and the subject is a tall building.

As LI Technical Guidance note 06 / 19 states:

'Type 4 photomontages and / or photowires require the use of equipment and processes which provide quantifiable verification data, such that they may be checked for accuracy (as per industry-standard 'AVRs' or 'Verified Views'). Precise survey of features and viewpoint / camera locations may be included where warranted. Type 4 visualisations represent the highest level of accuracy and verifiability for use in the most demanding of situations'

and

'Type 4 visualisations are photomontages or photowires, produced using quantifiable data, with procedural transparency and appropriate levels of

accuracy. This involves using a defined camera / lens combination and establishing the camera location with sufficient locational accuracy to enable accurate scaling and location of the 3D model within the view. In addition, the print presentation size can be determined to provide binocular image scaling when appropriate.'

The guidance states that a 50mm lens should be used ***'unless there are exceptional circumstances'*** *we believe that the assessment of a tall building in a townscape setting is an exceptional circumstance where a wide angle tilt shift lens is justified. This is because:*

- *The height of the building will inevitably mean that the top of the building is often cut off if a standard 50mm lens is used as the ridgeline is often more than 18°from the horizontal*
- *Often close up views are necessary to assess the effect of the Proposed Development on the immediate streetscape, often in areas of tight urban grain*
- *Skylines and clusters of tall buildings are an important part of a TVIA where the insertion of a new tall building into an existing cluster or, as a new feature on the skyline or horizon, is an essential part of understanding its contextual fit.*

For these reasons we are proposing to use a Cannon 5DMkII FFS with a Canon 24 TS-E 24mm Lens.

This is not without precedent as most TVIAs produced as part of EIAs for Tall Buildings in Manchester to date have used this equipment effectively to demonstrate accurately and verifiably the visual and townscape effects of a tall building on the townscape and views. As Technical Guidance note 06 / 19 notes:

'If the site / setting cannot be captured with the 50mm lens (e.g. close, tall buildings), consider alternative lenses. If a 50mm FL lens cannot capture the view in landscape or portrait orientation (for example, if the highest point of the development is approaching 18° above horizontal) the use of

wider-angled prime lenses should be considered, working through the following sequence of fixed lenses in this order: 35mm FL > 28mm FL > 24mm FL > 24mm FL Tilt-Shift'

PRESENTATION AND VIEWING DISTANCE

An equally important feature of the new guidance is how the images are presented and how they are viewed. Again, the guidance offers some useful advice which we propose to follow in this instance.

Research by the LI Working Group in the preparation of this guidance, carried out across several cities, suggests that, in mid- to smaller-scale landscapes / townscapes, an enlargement around halfway between 100% and 150% results in a binocular relationship between the presented image and reality..... notwithstanding the above, SNH considers that consistent use of 150% enlargement is beneficial

So in these circumstances we propose to present each image, consisting of baseline, proposed and cumulative for each viewpoint is presented as an A3 PDF which then be viewed digitally or printed , if necessary, at A2 to obtain a 141% enlargement to achieved the recommended enlargement ratio. Each image when printed should be viewed, again as stated in the guidance at a comfortable arms length.

Chris Burnett Associates April 2021
Landscape Architects

Key

- building footprints
- buildings visible
- buildings not visible
- OS Local Vector building footprints and/or DSM no-data values
- townscape viewpoint location

(NB Viewshed analysis is calculated from the top of the proposed buildings to locations 1.6m above the surface of the DSM data taking into account a normal earth surface curvature correction.)

Key

- Study Area boundary

0 1.0 2.0 metres

Date	Details	Revision
04/05/21	Revised viewpoint locations 01 Hide wireframe	-01

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Viewshed Analysis & Viewpoint Locations

CHRIS BURNETT associates
Landscape Architects

Client: **Manchester Quays Limited**

Project: **Trinity Islands TVIA**

Scale: **1:7,100 @ A3**

Date	Drawn	Checked
04/05/21	JHD	CB

Dwg No. **TITVIA21.04** Revision **-01**

TRINITY ISLANDS VIEWPOINTS

Chris Burnett Associates

25 05 21

Viewpoint	Street/Location	Rendered/ Wireline
1	Mancunian way	R ?
W	Regent Road	W
3	Liverpool Road	R
4	Liverpool Road	R
5	Footbridge over R Irwell	W
6	Bridge St	R
7	Chapel street POS	W
8	Chapel St Trinity Way junction	W
9	Castlefields events arena	R
10	Castle Street	W
11	Castlefield Basin footbridge	W
12	Castlefield Basin	R
13	Castlefield Basin	W
14	Bridgewater Viaduct	W
15	Liverpool Road	R
16	Mancunian Way / A56 interchnage	W
17	Hulme Park	W
18	Regent Rd / Oldfield Rd	W
19	Left Bank	W
20	Cathedral Approach	W
21	MOSI	R



TRINITY ISLANDS

Townscape and Visual Impact Assessment: VIEWPOINT PHOTOS

DRAFT BASELINE VIEWPOINTS

APPENDIX 6.2

Chris Burnett Associates

4 05 21

KEY FOR CUMULATIVE / PERMITTED DEVELOPMENT SCHEMES



All photographs and verified photomontages supplied by Ambiente . See Technical Appendix for details.

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