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Lord Street EIA SCOPING OPINION REQUEST REPORT

LORD STREET

EIA SCOPING OPINION REQUEST REPORT

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APPENDICES

Appendix 1

ASSESSMENT CRITERIA

Appendix 2

PROPOSED CUMULATIVE SCHEMES

Table A2.1: Proposed Cumulative Schemes

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CONTENT OF ES

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Air Quality Assessment

Appendix 5 Preliminary Ecological Appraisal

1. INTRODUCTION

1.1 Introduction

- 1.1.1 Linear Living Limited, ('the Applicant') intends to submit a detailed planning application for a new residential development of an approximate 0.18 hectares (ha) site off Lord Street, Cheetham Hill, Manchester. The site currently comprises a vacant brownfield land site previously occupied by seven commercial units (the 'site').
- 1.1.2 This report has been prepared by Ramboll to inform a Regulation 15 request for a formal scoping opinion under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended).
- 1.1.3 The site location and boundary is shown in Figure 1.1. The determining authority for the planning application is Manchester City Council (MCC) and the site is located to the northwest of Manchester City Centre, centred on Ordnance Survey (OS) National Grid Reference (NGR) SJ841994.

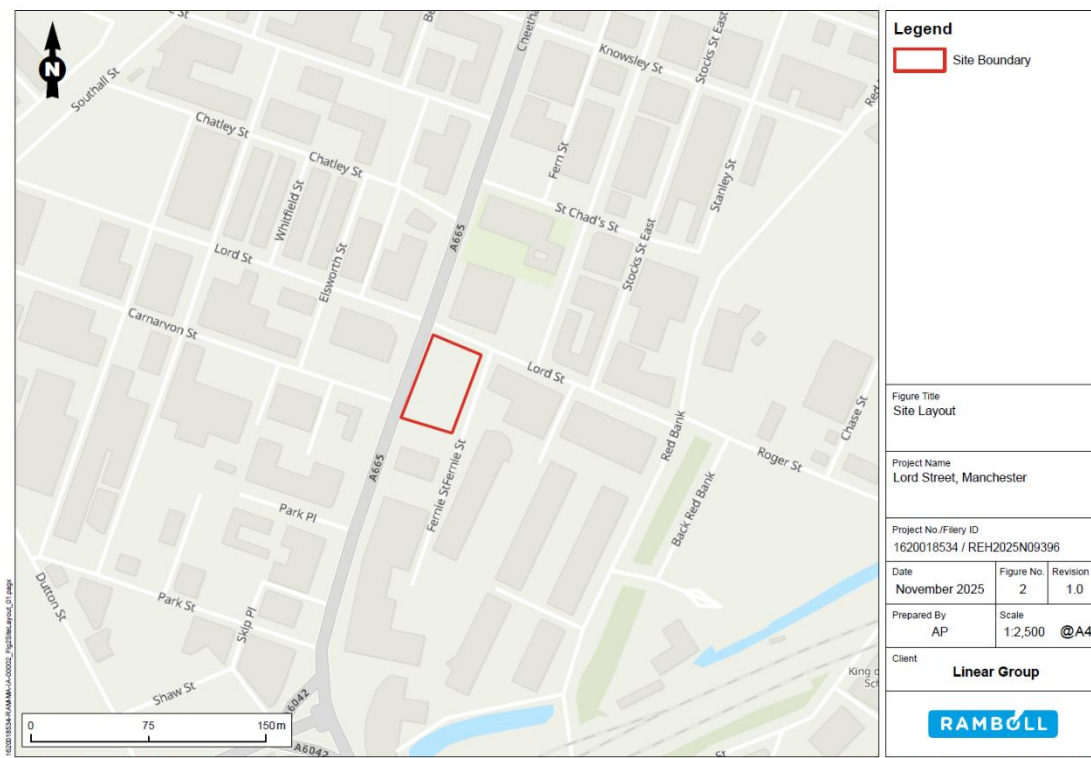


Figure 1.1 Site Location

- 1.1.4 The purpose of this EIA Scoping Report is to confirm with MCC the proposed scope of the EIA and the content of the Environmental Statement.
- 1.1.5 This EIA Scoping Report consists of the following sections;
- Section 1 – Purpose of the Scoping Report;
 - Section 2 - Planning Context;
 - Section 3 – EIA Process and Approach. This section summarises the key considerations of the EIA process and the general approach that will be taken for the EIA;

- Section 4 – Site Description. This section describes the site location, the key characteristics and the surrounding context of the site;
- Sections 5 – Description of the Proposed Development;
- Section 6 – Topics scoped into the EIA. This section identifies the environmental topic areas and their assessment methodologies where the potential for likely significant environmental effects arises and have therefore been scoped into the EIA;
- Section 7 – Topics scoped out of the EIA. This identifies the environmental topic areas where potential significant environmental effects are unlikely to arise and which are therefore proposed to be scoped out of the EIA and ES chapters;
- Section 8 – Summary of the Proposed Scope of the EIA;
- Section 9 – Conclusion and Summary.

1.2 Consultation

- 1.2.6 The process of consultation is a key requirement of EIA and the views of statutory consultees and stakeholders help identify specific issues.
- 1.2.7 As part of the consultation process for the EIA, MCC will identify relevant statutory and non-statutory consultees to be consulted.
- 1.2.8 As part of the design and EIA process, mitigation measures will be developed and discussed with consultation bodies where necessary to avoid, reduce and mitigate likely significant adverse environmental effects, or to provide enhancements.
- 1.2.9 Further, each technical assessment chapter of the ES will include a summary of the relevant consultations undertaken as part of the EIA process.

2. PLANNING CONTEXT

2.1 Planning History

- 2.1.1 This section summarises the key planning history of most relevance to the site and provides background to the existing and consented land uses at the site.
- 2.1.2 Planning permission was first granted on 21 November 2016 under application reference 113914/FO/2016 for the development of a 16 storey building consisting of 192 apartments and a ground floor commercial unit. Since this application, multiple applications have been filed for the proposed development in order to discharge the planning conditions associated with the permission. These are detailed in Table 2.1.
- 2.1.3 The scheme was later amended through a non-material amendment application (138553/NMC/2023) which retained the same number of residential units but reduced the level of onsite parking.

Table 2.1: Site Planning History	
Reference	Description
113914/FO/2016	Erection of a 16 storey building to form 192 residential apartments (Use Class C3a) together with ground floor commercial unit (172 sqm) (Use Class A1, A2, A3 or B1) with associated vehicular access from Fernie Street, car parking and hard and soft landscaping following demolition of existing buildings
CDN/19/0095	Discharge of Condition 4 Part A – Ground Conditions
CDN/19/0182	Discharge of Conditions 5 and 6 – Construction Management Plan and Local Labour
CDN/19/0330	Discharge of Condition 3 - Drainage
CDN/19/0418	Discharge of Condition 4 Part A – Ground Conditions
CDN/19/0536	Discharge of Condition 3 - Drainage
124193/JO/2019	Variation of Condition 10 – Replacement Environmental Standards.
138553/NMC/2023	Non-material amendment to planning permission 124193/JO/2019 to amend condition 2 (Approved drawings) to insert an additional internal staircase and AOV, amend number of car parking spaces, remove sub-basement and change the commercial space to residents' amenity space

2.2 Planning Application Documents

- 2.2.4 The list of documents and reports that is anticipated at this stage will be required to accompany the planning application, is provided below:
- Cover Letter and Application form;
 - Site Plans and Development Plans and elevations;
 - Noise Impact Assessment;
 - Affordable Housing Statement;
 - Air Quality Assessment;
 - Archaeology and Heritage Statement;
 - Broadband Connectivity Assessment and TV/Radio Impact;
 - Crime Impact Statement;
 - Community Involvement Statement;
 - Fire Statement;

- Draft Construction Management Plan;
- Construction Waste Management Plan;
- Design and Access Statement;
- External Lighting Assessment;
- Energy Statement
- Environmental Standards Statement;
- Embodied Carbon Proforma
- Preliminary Ecological Appraisal;
- Biodiversity Net Gain Assessment;
- Land Contamination Phase 1 Preliminary Risk Assessment;
- Local Labour Agreement;
- Planning Obligations and Heads of Terms (Section 106);
- Planning Statement;
- Flood Risk and Sustainable Drainage Systems (SuDS) Strategy;
- Transport Assessment and Travel Plan;
- Ventilation Strategy;
- Viability Statement; and
- Waste Strategy.

2.3 Legislation, Planning Policy and Guidance

2.3.5 Legislation, planning policy and guidance will inform the scope of technical assessments within the EIA and the identification of sensitive receptors.

2.3.6 The proposed development's compliance to and performance against legislation, planning policy and guidance (together with associated planning standards/targets) will be appraised within the Planning Statement for the planning application, and not within the EIA. Accordingly, the ES will not provide an exhaustive discussion of legislation, policies and guidance. Instead, a summary of the key relevant legislation and policies that have been considered in preparing the technical assessments will be presented in each technical ES technical chapter where relevant.

2.4 National Policy and Guidance

2.4.7 The EIA will have regard to the following national policy and guidance in scoping the technical assessments, informing the assessment methodologies and identifying sensitive receptors, as appropriate:

- National Planning Policy Framework (NPPF) (2024); and
- Planning Practice Guidance (PPG).

2.5 Regional Planning Policy

2.5.8 The ES will have regard to the Places for Everyone Joint Development Plan. The Joint Development Plan is a plan for nine of the ten Greater Manchester districts, which will determine the type of development that will take place within the districts, maximising the use of brownfield land and urban spaces, whilst protecting Green Belt land from the risk of unplanned development. It will also ensure all new developments are sustainably integrated into Greater Manchester's transport network or supported by new infrastructure.

2.5.9 The Joint Development Plan Document:

- Sets out how the nine districts should be developed up until 2037;
- Identifies the amount of new development that will come forward, in terms of housing, offices, and industry and warehousing, and the main areas in which this will be focused;
- Supports the delivery of key infrastructure, such as transport and utilities;

- Protects the important environmental assets across the city region;
- Allocates sites for employment and housing outside of the existing urban area; and
- Defines a new Green Belt boundary for Greater Manchester.

2.6 Local Policy

- 2.6.10 The ES will have regard to Manchester City Council's Local Development Framework Core Strategy Development Plan Document and any relevant Supplementary Planning Documents (SPDs) and Supplementary Planning Guidance (SPGs).

2.7 Other Policy and Guidance Considerations

- 2.7.11 There are a number of supporting policy and guidance documents that are relevant to each environmental discipline and will be considered on a topic-by-topic basis within the ES.

3. EIA PROCESS AND APPROACH

3.1 Need for Environmental Impact Assessment

- 3.1.1 EIA is a formal process by which the effects on the environment generated by certain types of development projects are identified, assessed and reported upon, including the identification of mitigation, in order for the effects to be taken into account by the relevant planning authority when considering whether to grant planning permission.
- 3.1.2 The EIA Regulations set out the content of an ES in general terms and allow an applicant to obtain a formal EIA Scoping Opinion from the relevant planning authority regarding the issues to be considered within the EIA for a specific development proposal; what information should be contained in the ES; and what effects are likely to be more significant than others. EIA good practice encourages applicants to consult other organisations likely to have an interest in a development proposal.

3.2 Content and Format of Environmental Impact Assessment

- 3.2.3 The specified information to be included in the ES of the proposed development will comply with Regulations 18(3) to 18(5) and Schedule 4 of the EIA Regulations.¹³
- 3.2.4 The ES that will accompany the planning application will comprise the following four volumes:
- ES Volume 1: Non-Technical Summary NTS: this document will provide a concise summary of the Proposed Development, alternative designs that were considered, environmental impacts and mitigation measures;
 - ES: Volume 2: Main Text: this will contain the main body of the ES.
 - ES Volume 3: Townscape and Visual Impact Assessment (TVIA): the methodology and findings of the TVIA accompanied by a full set of views and verified images; and
 - ES Volume 4: Technical Appendices: these will provide supplementary details of the environmental studies conducted during the EIA including relevant data tables, figures and photographs.
- 3.2.5 The EIA Regulations require that the ES provides an outline of the reasonable alternatives that have been considered by the Applicant and the reasons for the selection of the preferred option. The alternatives considered in the course of the design process, such as site location, land uses, layouts and design evolution, will be presented in the Alternatives and Design Evolution introductory chapter. The environmental factors that informed each of the options will be presented, as appropriate. In addition, the Alternatives and Design Evolution chapter will consider the 'Do Nothing' scenario (the likely evolution of site conditions if the proposed development was not to proceed).

3.3 Assessment Methodology

- 3.3.6 The EIA will be undertaken by reference to good practice guidance, which includes, but is not limited to, the following publications from the Institute of Sustainability and Environmental Professionals (ISEP) (formerly the Institute of Environmental Management and Assessment):
- ISEP: Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance
 - ISEP: Social Impact Assessment in EIA in the UK;
 - ISEP: Guide to Climate Change Resilience and Adaptation;
 - ISEP: Demystifying Cumulative Effects;
 - ISEP: Major Accidents and Disasters in EIA: A Primer
 - ISEP: Delivering Proportionate EIA;
 - ISEP: Determining Significance for Human Health in Environmental Impact Assessment;

- ISEP: Shaping Quality Development;
- ISEP: Special Report into the State of Environmental Impact Assessment Practice in the UK; and
- ISEP: Guidelines for Environmental Impact Assessment.

- 3.3.7 The EIA will assess the environmental effects that are likely to arise as a consequence of the proposed development.
- 3.3.8 The EIA will employ a range of tools and methods to predict the likely scale and nature of environmental effects. These tools and methods will be either quantitative or qualitative or, in certain instances, both.
- 3.3.9 Quantitative methods include:
- Mathematical models and calculations which provide numerical estimates of the environmental impacts or effect, such as the levels of daylight lost or the expected average wind speeds as a result of the Proposed Development;
 - Three-dimensional and/or illustrative/ map-based techniques to model/ plot the environmental conditions and the extent of change, such as the appearance of the proposed development from a particular viewpoint.
- 3.3.10 Qualitative methods rely on expert professional judgement and experience. These methods are exercised within a structured framework and to ensure transparency and consistency of conclusions drawn. Clear distinctions are made between matters of fact, judgement and opinions with all sources identified.
- 3.3.11 The predictions of the EIA may be subject to a degree of uncertainty. As such, the tools and methods employed, the assumptions made in each case, degrees of confidence and areas of uncertainty will be clearly set out.

3.4 Basis of Environmental Impact Assessment

- 3.4.12 As previously set out, the EIA will be undertaken based on the proposed development as described in the introductory chapters of ES Volume 1 (in particular Chapter 4: Proposed Development Description and Chapter 5: Demolition and Construction Description), including any reasonable assumptions, in the absence of information.
- 3.4.13 The proposed development will be principally defined by means of the following:
- Demolition and construction methods and control measures;
 - Detailed planning application drawings;
 - Detailed 3D model;
 - Detailed area schedule; and
 - Detailed residential unit mix and tenure.
- 3.4.14 The following supporting documents will accompany the application and will be considered during the EIA:
- Design and Access Statement;
 - Energy Statement; and
 - Sustainability Statement.

3.5 Baseline Conditions

- 3.5.15 The EIA will predict the likely scale and nature of change in environmental conditions as a result of the proposed development. The assessment of the predicted change will be undertaken against a reference condition, known as the baseline. The following baseline conditions will be considered within the EIA, as appropriate (and subject to the development programme):

- Existing Baseline (2025): the existing on-site conditions, identified through site surveys, desk-based data collection and or modelling;
- Future Baseline, defined by means of, for example:
 - The year when peak demolition and construction works (e.g. in terms of the number of vehicle movements and on-site demolition and construction works) are predicted to occur, established by means of desk-based prediction, calculation and modelling for transport impacts, air quality and noise and vibration;
 - The year of first on-site residential occupation based on the Applicant's development programme;
 - The year by when it is cumulative schemes have been delivered;
 - The year when the proposed development is predicted to be completed, excluding the proposed development, established by means of desk-based prediction, calculation and/ or modelling.

3.5.16 Various baseline surveys have been and will be undertaken at the site to inform the emerging development proposals and to characterise the existing baseline conditions at the site.

3.5.17 Cumulative schemes that are at an advanced stage of construction may be considered to form part of the existing or future baseline, where appropriate. Desk-based collection, prediction, calculation and modelling undertaken during the course of the EIA process will utilise information already available, as well as new information provided in response to this EIA Scoping Report. Collectively the information will establish existing and future baselines against which impacts introduced by the proposed development will be assessed.

3.6 Assessment Scenarios

3.6.18 The EIA will consider the proposed development's likely effects during the development works (the 'Demolition and Construction' stage), upon completion and operation (the 'Completed Development' stage), as well as cumulatively in combination with (or in addition to) 'approved' schemes (the 'Cumulative' stage).

3.6.19 The assessment scenarios will be defined on a topic specific basis; however, the main assessment scenarios will comprise the following:

- Demolition and Construction phase
- Completed Development phase

3.6.20 Within the demolition and construction and completed development phases, the cumulative schemes scenario will be considered and reported.

3.7 Demolition and Construction Stage Effects

3.7.21 Chapter 5: Demolition and Construction will describe the proposed development's anticipated development programme and the key activities which are expected to be undertaken during demolition and construction works. The content of this chapter will form the basis for the assessment of demolition and construction effects.

3.7.22 Final details of the demolition and construction works (methods, techniques, equipment and phasing) is unavailable at the planning application stage. Where detailed information is not available, 'reasonable worst-case' scenarios will be adopted based on the applicant's experience of projects of a similar scale and nature. Where this is the case, the assumptions adopted will be clearly identified in the relevant technical chapters of the ES.

- 3.7.23 The chapter will also outline the measures that will be adopted/ incorporated as part of the proposed development to avoid, reduce and mitigate typical environmental impacts and effects during the demolition and construction stage.
- 3.7.24 Standard measures that will be explored by the Applicant will include:
- Re-use and recycling of demolition materials and excavated waste materials;
 - Appropriate selection and sourcing of construction materials;
 - Appropriate on-site management and siting of activities in relation to sensitive receptors;
 - Public safety;
 - Amenity and site security;
 - Operating hours;
 - Noise and vibration controls;
 - Air and dust management;
 - Noise and air emissions monitoring;
 - Hazardous substances storage and control;
 - Stormwater and sediment control; and
 - Public liaison.
- 3.7.25 Standard industry practice will be considered as embedded mitigation measures within the technical assessments and would therefore not be subject to pre- and post-mitigation assessments. Any measures adopted that are tailored in some way or otherwise 'non-standard' will be considered as additional mitigation and would therefore be subject to pre- and post-mitigation assessment to determine the predicted effectiveness of the mitigation measure and the residual effect. The means of securing these measures will also be made clear within the assessment, e.g. through appropriately worded planning condition or through a control document, such as the construction environmental management plan.
- 3.7.26 ES Chapter 5 will set out the embedded mitigation measures included within the design or control documents for the proposed development. It is anticipated that the measures identified will be secured by means of a suitably worded planning condition and further developed by the appointed principal contractor.

3.8 Completed Development Stage Effects

- 3.8.27 ES Volume 1 will contain an introductory ES chapter; Chapter 4: Proposed Development Description, which will describe the proposed development's physical characteristics, access arrangements, landscaping strategy, estimated emissions, effluents and waste arisings. The description will include mitigation measures embedded within the development proposals. The content of this chapter will form the basis for the assessment of completed development effects.
- 3.8.28 Information will be drawn from relevant planning submission documents as listed in Section 2.2.

3.9 Cumulative Stage Effects

- 3.9.29 The cumulative effects assessment will consider both intra-project cumulative effects and inter-project cumulative effects.

Intra-Project Cumulative Effects

- 3.9.30 Impact interactions from the proposed development itself on receptors at the site and/or within the study area will be considered during the demolition and construction works, and once the proposed development is completed and operational. Potential impact interactions can include, for example, the combined effects of noise, dust and visual impacts during the demolition and construction works of the proposed development on a sensitive receptor.

3.9.31 A qualitative assessment approach will be adopted, comprising the following steps:

- First, a review of the likely residual effects (and in particular, the likely significant environmental effects) of each technical assessment within the EIA;
- Second, the likely receptors or receptor groups will be identified;
- Third, the individual effects which may impact a singular receptor or receptor group will be listed in a tabular/ matrix format;
- Fourth, the potential for individual effects to interact will be identified; and
- Fifth, the scale of the combined intra-project cumulative effects will be assessed qualitatively.

3.9.32 Dependent on the relevant sensitive receptors, the assessment will focus either on key individual receptors or on groups considered to be most sensitive to potential interacting effects. The criteria for identifying those receptors which are potentially sensitive will include, but not be limited to, existing land uses, proximity to the demolition and construction works, and likely duration of exposure to effects.

3.9.33 To ensure a proportionate assessment of intra-cumulative effects, only residual effects that are minor, moderate or major in scale will be considered within the assessment. This is because negligible effects are, by definition, imperceptible in scale.

3.9.34 Due to the 'cross-boundary' and 'overlapping' nature of these effects across various environmental topics, and the assessment approach adopted, the results of intra-project cumulative effects will be holistically presented within a separate Cumulative Effects chapter, and not within each of the technical assessment chapters. This approach avoids unnecessary duplication and repetition, presenting a proportionate approach. All technical topics scoped within the ES as technical assessment chapters will be considered in this assessment.

Inter-Project Cumulative Effects

3.9.35 To ensure a proportionate assessment of inter-project (in-combination/in-addition) cumulative effects, the EIA will focus on the consideration of "existing and/ or approved projects" as required in the EIA Regulations. The following criteria for the selection of such existing or approved projects has been used to enable a proportionate assessment:

- Schemes which are consented or approved or have a 'resolution to grant' or which are currently at an early stage of construction; and
- Schemes which have a minimum total floor space area of approximately 10,000 sqm GEA and comprise at least approximately 150 residential units; and
- Schemes either:
 - Within 1 km of the site redline boundary; or
 - Outside 1 km of the site redline boundary that are:
 - Spatially linked to the proposed development; and/or
 - Visible in protected/important views to and from the site.

3.9.36 These criteria are widely accepted for EIAs of a similar nature and scale.

3.9.37 For consented schemes which have had subsequent amendments, the latest known iteration will be assessed within the EIA. Where a cumulative scheme benefits from multiple unimplemented consents, the consent representing the worst-case will be considered as appropriate to the technical assessment.

3.9.38 It is proposed that schemes that fall within the spatial and quantum parameters defined above, and which are likely to lead to significant cumulative effects, are quantitatively assessed on a topic-by-topic basis, subject to the availability of scheme information in the public domain.

- 3.9.39 Appendix 2 lists the cumulative schemes which are proposed to be considered within the EIA. It is requested that MCC review this list and provide comments on the completeness and acceptability of the list.
- 3.9.40 Information on the cumulative schemes will be drawn from the MCC and neighbouring authorities (specifically Salford City Council) planning application portals at the time of undertaking the assessments. Where detailed information on schemes is not available to enable quantitative assessment, qualitative assessments would be undertaken.
- 3.9.41 Inter-project cumulative effects will be addressed within each of the individual technical assessment chapters in ES Volume 1 and ES Volume 2. All technical ES chapters will clearly state which cumulative schemes have been included within their assessment and will provide justification for those cumulative schemes not considered. Where schemes are at an advanced stage of construction, these may be considered within the existing and future baseline as opposed to the cumulative assessment. This will be made clear within each technical assessment chapter.

3.10 Significance Criteria

- 3.10.42 Significance is usually a function of the sensitivity (susceptibility or vulnerability/ value or importance) of the resource affected (receptor) and the magnitude of the potential impact.
- 3.10.43 The value or importance of a receptor could be a function of designation, whereas the susceptibility or vulnerability could be a function of carrying capacity and ability to respond to, withstand or accept change. Receptor sensitivity will typically be defined based on a rating of high, medium or low.
- 3.10.44 The magnitude of impact refers to the degree of change and will typically be defined based on a rating of high, medium and low.
- 3.10.45 In assessing the scale and significance of resulting effects, regard will be given to the following:
- Likelihood of the effect occurring, based on a scale of certain, likely or unlikely;
 - Duration of the effect, based on a scale of long-term (more than 10 years), medium-term (five to 10 years) and short-term (less than five years);
 - Geographical extent of the effect at site, local, borough, regional, national and international levels;
 - Reversibility of the effect, being either reversible or irreversible; and
 - Scale of effect.
- 3.10.46 Scale of effects will be determined by means of published guidance, matrices and/ or application of professional judgement and defined based on a rating of major, moderate, minor, negligible, unless otherwise specified within the individual technical chapters.
- 3.10.47 Where published industry guidance and terminology do not exist and to provide a consistent approach to the presentation of likely effects, the following terminology will be used throughout the ES:
- Nature and type of Effects:
 - Adverse: Detrimental or negative effect to a receptor;
 - Neutral: An effect that on balance, is neither beneficial nor adverse to a receptor OR an effect that is equally beneficial and adverse to a receptor; and
 - Beneficial: advantageous or positive effect to a receptor.
 - Scale of effects:
 - Negligible: effects which are beneath levels of perception;
 - Minor: slight, very short or highly localised effects;

- Moderate: limited effects (by magnitude, duration, reversibility, value and sensitivity of receptor) which may be considered significant; and
- Major: considerable effect (by magnitude, duration, reversibility, value and sensitivity of receptor, which may be more than of a local significance or lead to a breach of a recognised environmental threshold, policy, legislation or standard).

- 3.10.48 Where a particular absolute value, target criteria or threshold is achieved, negligible will be used in isolation to describe the effect.
- 3.10.49 Residual effects will be defined as either 'significant' or 'not significant'. Significant effects would be considered material to the planning decision making process. Based on the above, residual effects of moderate and major scale may be considered significant, but would be dependent on the relevant technical assessment, as well as the existence of published assessment guidance.
- 3.10.50 Where published assessment guidance is not definitive in respect of categorising/determining significant environmental effects, or where no published guidance is available, professional judgement will be applied, considering the duration, extent and context of the effect, to determine significant effects.
- 3.10.51 Where there are any deviations to the terminology set out above (e.g. due to published industry guidance or professional judgement), this will be clearly identified and explained within the relevant technical assessment of the EIA.

4. SITE DESCRIPTION

4.1 Site Location

- 4.1.1 The site is located on the northwestern portion of Manchester City Centre, centred on Ordnance Survey (OS) National Grid Reference (NGR) SJ841994. Indicative site location is shown in Figure 4.1.
- 4.1.2 The site is bounded by Fernie Road to the east, Lord Street to the north, Cheetham Hill Road to the west and by a Texaco Petrol Station and associated car park to the south.
- 4.1.3 The site consists of brownfield land on the southeastern side of the intersection of Lord Street and Cheetham Hill Road.
- 4.1.4 The immediate surroundings of the site comprises the following:
- North: Immediately north of the site is Lord Street. Following Lord Street is a small commercial unit containing multiple businesses and a car park in the rear. On the north side of this retail unit lies a small garden and Manchester Oratory Catholic Church, which contains two separate Grade II Listed Buildings within its perimeter.
 - South: The site is bordered by a car park and associated Texaco Petrol station located along Cheetham Hill Road. Further south are residential properties located within an apartment complex. Park Place Bus Station is situated outside of this complex, providing services to Piccadilly Gardens and Sale through bus routes 135 and 41.
 - West: The west of the site is completely bound by the A665 Cheetham Hill Road. Beyond this lies the connection to Carnarvon Street and Topps Tiles Clearance Outlet and its associated car park.
 - East: The site is bound by Fernie Street to the east with residential and commercial properties located further beyond the road.

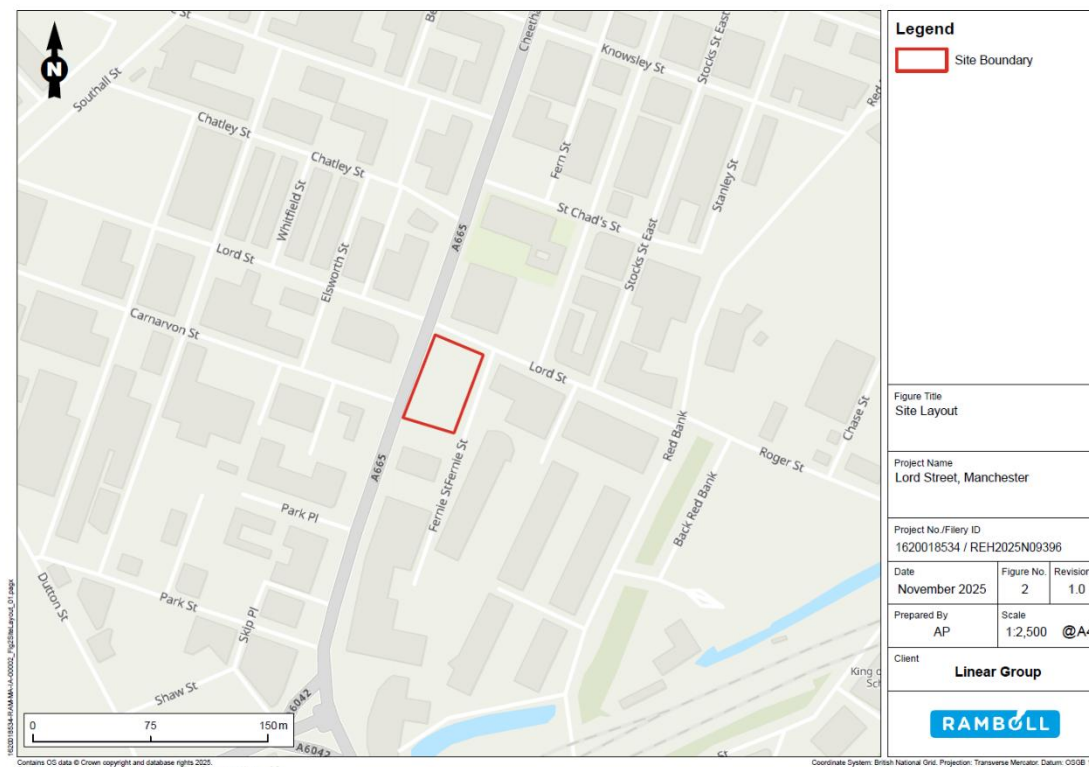


Figure 4.1- Site Location

4.2 Site Description

- 4.2.5 As presented in Figure 4.1, the site is made up of a rectangular parcel of land and comprises vacant, derelict land with one disused building. There are no statutory or non-statutory land-based designations within the site boundary, nor does the site contain any historic statutory or non-statutory designations. The site is however located within the Impact Risk Zone of the Rochdale Canal Site of Special Scientific Interest and Special Conservation Area. There are no further statutory or non-statutory designations located within 1km of the site.
- 4.2.6 The site falls within the Salford Air Quality Management Area, which has measured NO₂ exceedances since 2005.
- 4.2.7 The underlying geographic formation of the site consists of the Chester Formation of sandstone and sedimentary bedrock. The Till, Devensian superficial deposit is also present underneath the site. The site is not located within a Groundwater Source Protection Zone. There are no boreholes present within the site boundary.
- 4.2.8 The EA Flood Mapping confirms that the site is not located within Flood Zone 1 or 2. There are portions of the site located within the northern and northwestern boundaries that are within a 1 in 1000 year annual likelihood of surface water flooding.
- 4.2.9 The site and its surrounding context are shown below in Figure 4.2.

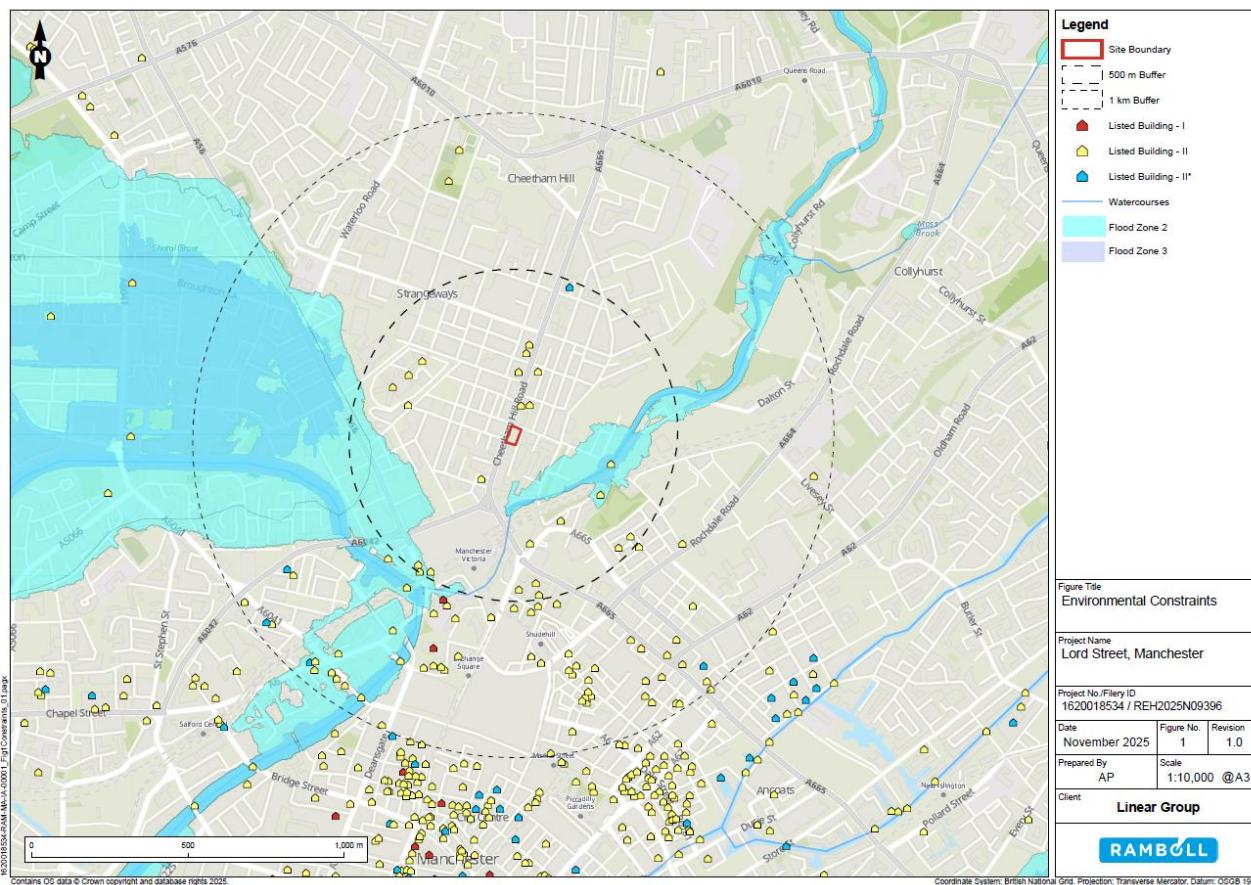


Figure 4.2: Site Context Map

4.3 Current Uses

- 4.3.10 The site has no current uses and is vacant, derelict land.

5. DESCRIPTION OF THE PROPOSED DEVELOPMENT

5.1 Overview

- 5.1.1 The proposed development seeks to deliver a 23-storey tower, including a 935 sqm basement, to provide 221 residential units, including a mix of one and two bedroom apartments and townhouses. Four townhouses will be provided at the ground level, with the remaining levels supporting the 217 residential units. The proposed development will be a car free development and will include dedicated cycle facilities at the basement level.

5.2 Demolition, Construction and Operation Programme

- 5.2.2 It is anticipated that construction of the proposed development will be between 140 and 150 weeks with a construction start in 2027, with completion of the proposed development expected for quarter 4 (Q4) 2029 or Q1 2030.
- 5.2.3 Table 5.1 below provides an overview of the different stages of construction expected and the indicative plant and equipment required to complete each stage:

Table 5.1: Construction Stages and Plant Required

Work Phase	Plant Required
Mobilisation	Delivery vehicles
Site Preparation	Delivery vehicles; excavator; forklift
Piling	Piling rig; excavator; concrete pump; dumper trucks; muck away wagons; delivery vehicles; concrete bowzers
Groundworks/Substructure/Waterproofing	Delivery vehicles; excavators; dumper trucks; concrete pump; dumper trucks; muck away wagons; concrete bowzers; mobile crane
Below ground drainage incl. connections	Delivery vehicles; excavators; dumper trucks; concrete pump; dumper trucks; muck away wagons; concrete bowzers; trenching equipment; traffic controls
Structural Frame	Delivery vehicles; excavators; dumper trucks; concrete pump; dumper trucks; muck away wagons; concrete bowzers; mobile crane; tower crane; goods hoist; passenger hoist
Building Envelope	Delivery vehicles; mobile crane; tower crane; goods hoist; passenger hoist; mast climbers
Roof	Delivery vehicles; tower crane; goods hoist; passenger hoist;
Incoming Utilities	Delivery vehicles; excavators; dumper trucks; concrete pump; dumper trucks; muck away wagons; concrete bowzers; trenching equipment; traffic controls
Mechanical and Electrical	Delivery vehicles; tower crane; scissor lift; MEWPS
Plumbing, Sprinklers and Drainage	Delivery vehicles; tower crane; scissor lift; MEWPS
Vertical Transportation (Lifts)	Delivery vehicles; scissor lift

Work Phase	Plant Required
Ceiling and Partitions	Delivery vehicles; scissor lift
Internal fit-out	Delivery vehicles; scissor lift
Communal Spaces	Delivery vehicles; scissor lift
Externals	Delivery vehicles; excavators; dumper trucks; concrete pump; dumper trucks; muck away wagons; concrete bowzers; trenching equipment; traffic controls
Test and Commissioning	Specialist testing equipment

- 5.2.4 It is estimated that the peak construction period will be between weeks 60 and 140 of the build programme likely within 2028-2029.
- 5.2.5 Construction traffic is expected to reach the site via Cheetham Hill Road before turning onto Lord Street. This will be agreed with local highways authority and will furthermore be included within the Construction Management Plan. Consultation has begun with a local traffic management company to help develop the traffic solution to service the project whilst being sympathetic to the local area and beyond.
- 5.2.6 The construction of the proposed development is estimated to bring forward approximately 120-140 full time roles, with a peak on-site workforce of around 130-150 personnel.
- 5.2.7 Throughout construction of the project, it will be ensured that all site staff, subcontractors and waste management contractors will act in accordance with all environmental legislation in relation to waste management. All movements of waste will be accompanied by waste transfer notes. Site staff will ensure that the waste is described as accurately as possible and that the waste transfer note is signed by both the waste producer and the waste carrier. The waste carrier will hand over a copy of the note to a member of Linear site staff prior to leaving the site.
- 5.2.8 Only registered carriers of waste will be employed for transport purposes and copies of all waste management licenses and exemptions will also be obtained and held on site prior to any movement of waste taking place. For all waste transfers, a copy of the receipt, or a copy of the invoice, from the authorised disposal site as proof that the waste reached the proposed destination.

5.3 Completed Development

- 5.3.9 Once the proposed development is fully operational, it will be occupied by the future residents of the site. This will be detailed further within the ES.

6. TOPICS SCOPED INTO THE EIA

6.1 Daylight, Sunlight and Overshadowing			
Consultations			
No consultations are proposed.			
Baseline Information			
The site is an open parcel of land. No quantitative assessment of the daylight and sunlight amenity has been undertaken in the baseline condition. Daylight and sunlight amenity of the sensitive receptors, identified below, will be measured as part of the assessment.			
Sensitive Receptors			
Daylight and sunlight receptors have been identified with reference to the BRE Guidance. The BRE Guidance emphasises the assessment of residential accommodation, specifically habitable rooms within residential buildings. A non-residential building may be assessed if there is a reasonable expectation of daylight and sunlight, such as hospitals or schools. The following neighbouring receptors rely on the site for the receipt of daylight and sunlight. Construction of the Proposed Development has the potential to reduce daylight and sunlight amenity of these buildings: • Britton House, 21 Lord Street, Manchester M4 4FN; • Jefferson Place, 1 Fernie Street, Manchester M4 4AZ; • The Hallmark, 6 Cheetham Hill Road, Manchester M4 4GA; • Melia House, 19 Lord Street, Manchester, M4 4AX; and • St. Chads Presbytery, Stocks Street, Manchester, M8 8GG The relevant or sensitive daylight and sunlight receptors around the site are therefore those windows that serve anticipated habitable room uses in the neighbouring buildings noted above. There are two external amenity spaces in the vicinity of the site. These are area of lawn associated with Britton House, and the garden and landscaping associated with St. Chads Presbytery. We consider that both of these are "external amenity spaces" that would justify time in sun impact appraisal.			
Scoped In Impacts	Effects	Assessment Guidance	Study Area

Adverse impacts on Daylight and Sunlight Amenity	Reduction in Daylight and Sunlight Amenity of habitable rooms within sensitive receptor buildings.	Building Research Establishment ("BRE") Digest 209 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice'	The sensitive receptor buildings identified above.
Adverse impacts on Sunlight Amenity	Reduction in Sunlight Amenity of identified external amenity spaces		The external amenity spaces identified above
Scoped out Impacts	Effects	Justification	
Adverse impacts on Daylight and Sunlight Amenity Impacts of other residential buildings not identified above.	n/a	Due to their distance from the site and spatial relationship with it, habitable rooms of other buildings in the wider vicinity of the site and beyond will not experience any significant adverse impacts on daylight and sunlight amenity.	
Adverse impacts on Daylight and Sunlight Amenity Impacts of commercial buildings	Reductions in daylight and sunlight	In accordance with the BRE Guidance, commercial buildings are not generally considered to be sensitive receptors. None of the non-residential buildings in the vicinity of the site merit further impact assessment.	
Assessment Method			
A technical assessment of the daylight and sunlight amenity impact of the Proposed Development will be undertaken to acknowledge the baseline, proposed, and cumulative massing conditions of the site and its surroundings in accordance with the Building Research Establishment's ("BRE") Digest 209 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice'. A topographically accurate digital 3D massing model of the site and surrounding will be constructed to reflect the baseline, proposed, and cumulative massing scenarios. The technical modelling will be informed by the following information: • A photogrammetric model of the site and its surroundings; • Researched detail of existing and proposed buildings in the vicinity. • Specialist computer software ("Waldram Tools") will be used to perform the following BRE tests: • Vertical Sky Component ("VSC") – a measure of sky visibility (from which daylight is derived) and daylighting potential, calculated at the midpoint of a window; • The measurement of the 'No Sky Line' ("NSL") – a contour line separating those parts of a room that receive direct skylight from that part which does not;			

- Probable Sunlight Hours received by neighbouring habitable rooms, measured both annually ("APSH") and during the Winter months ("WPSH"); and
- Time in Sun – the extent to which an external amenity area receives 2 hours of direct sunlight on 21 March. Used to determine whether an external amenity space would appear to adequately sunlit throughout the year and be substantially free of permanent shade.

The BRE Guidance confirms that the numerical targets set out within it are purely advisory, and that alternative targets may be established where appropriate to do so. The methodology for the setting of any alternative targets will be confirmed in the Chapter.

Assessment Scenarios

The impact assessment will consider the following scenarios:

- Baseline conditions;
- Baseline vs Proposed Development; and
- Baseline vs Proposed + Cumulative Schemes.

Assumptions and Limitations

An inspection of the site and its surroundings will be undertaken to identify the window provision of the neighbouring buildings that overlook the site (to the extent that such windows are capable of being observed from the adjacent public highways).

This inspection will be supplemented with a review of Google Earth Imagery.

The interior of the neighbouring buildings will not be inspected. It will, therefore, be necessary to make assumptions regarding the internal arrangement of the neighbouring buildings.

The height between the internal floor level and the window cill in each room of the neighbouring buildings will influence the position of the working plane, which is the level at which the distribution of light is measured. The position of the working plane will be assumed.

Assumptions will be made as to the use and function of the neighbouring buildings. Assumptions will be primarily influenced by observations made during the site inspection.

Neighbouring buildings of residential use will also be identified by reference to Valuation Office Agency records – neighbouring buildings with a Council Tax Band being of residential use.

All assumptions will, where possible, be informed by information available from Manchester City Council's Public Access Planning Portal, as well as other sources available in the public domain including Land Registry plans and sales particulars from the internet.

Future, planning-approved developments to be considered as part of the cumulative impact assessment are yet to start on site. The modelling of these neighbouring buildings and future developments will be based on information that can be downloaded via Manchester City Council's Public Access Planning Portal.

6.2 Wind Microclimate			
Consultations			
No consultation has been carried out to date on wind microclimate.			
Baseline Information			
Wind climate data from the northwest region has been acquired from Manchester International Airport, and transposed to the site of interest.			
Sensitive Receptors			
The sensitive receptors of the wind microclimate are pedestrians users both within the proposed site, and within the immediate surrounds.			
Scoped In Impacts	Effects	Assessment Guidance	Study Area
Pedestrian users within the site.	Potential for long term conditions in exceedance of the safety and/or comfort criteria.	Lawson Comfort Criteria	The site
Pedestrian users within the immediate surrounds of the site	Potential for long term conditions in exceedance of the safety and/or comfort criteria.	Lawson Comfort Criteria	The immediate surrounds
Users of the site and immediate surrounds during construction.	Potential for short term exposure to accelerated winds during construction.	Lawson Comfort Criteria	The site and immediate surrounds
Scoped out Impacts	Effects	Justification	
N/A	N/A	N/A	
Assessment Method			
The proposed development will be assessed via CFD modelling against the industry standard Lawson criteria. This will involve the below: • The construction of a digital model of the site and up to 450m radius distance of the surrounding area. • Development of a wind climate model, based of nearby weather stations and translated to the site in line with methods set out in ESDU Item 01008. • CFD modelling of a full range of 16 angles at 22.5 degree increments. Combination of CFD modelling and wind climate model to assess the impacts in line with the Lawson criteria.			

Assessment Scenarios
The assessment will consider the following scenarios: - Existing site conditions, - Proposed development within existing surrounding context, - Proposed development within future surrounding context (cumulative scheme scenario).
7. Assumptions and Limitations
The studies will be carried out computationally via computational fluid dynamics (CFD) methods. The particular method adopted employs turbulence models to approximate the magnitude of velocity fluctuations about the average wind speeds predicted, in order to derive an estimation of the effect of gusts. ArcAero conducts regular validation of proprietary CFD processes against experimental results.

6.3 Socioeconomics and Human Health
Consultations
No consultations have been undertaken on the scope of the socioeconomic and human health chapter. Consultation through the scoping process only.
Baseline Information
The site is located within Manchester City Council's Cheetham ward. The Lower Super Output Area (LSOA) in which the project is located is Cheetham Hill, which is within the 50% least deprived LSOAs in England – however is adjacent to the Strangeways LSOA, which is within the 20% most deprived LSOAs in England¹. Cheetham ward is relatively young - it has a higher proportion of young people than Manchester as a whole (24% when compared with 20% for Manchester) and a lower proportion of older people age 65+ (7% of the population when compared with 10% for Manchester²). The city of Manchester has a life expectancy of birth for females of 79.9 (78.2 for all England) for males at 75.2 (73.4 for all England) and a healthy life expectancy at birth for both sexes of 57.6 (51.8 for all England)³. It performs worse than the England average for some determinants of human health such as night-time noise exposure, air pollution, access to fast food outlets and fuel poverty⁴. There are five GP surgeries within a 1.5km radius distance. The nearest hospital (with Accident and Emergency Department) is North Manchester General Hospital. There are 12 state primary schools within the Department for Education's recommended 2 mile walking distance to school, and 9 secondary

¹ English Indices of Multiple Deprivation available at: <https://imd.localinsight.org>

² ONS (2020). Population estimates - small area based by single year of age - England and Wales

³ PHE Fingertips tool – Public Health Outcomes Framework

⁴ PHE Fingertips tool - Wider Determinants of Health

schools within the recommended 3 mile walking distance. The nearest public open space is St. Michael's Flags and Angel Meadow Park, 0.8 km walk from the site.

The baseline will be established by means of desk-top review using publicly available data (as detailed below) to present the current demographic, housing, economic and health statistics.

The baseline socio-economic profile will be established as follows:

- Demographic, economic and housing baseline will be determined using the most up-to-date publicly available data including Census data (where possible 2021 Census, where not 2011), Business Register and Employment Survey (BRES), Claimant Count, Housing delivery data from the GLA's Residential Completions Dashboard and Indices of Multiple Deprivation (IMD);
- Open space and playspace baseline will be established using MCC information and open source data.

Sensitive Receptors

As well as the population of the site and surrounding area as a whole, consideration will be given to the key identified vulnerable groups in the local area. The assessment will establish whether the sensitivity of these vulnerable groups and the significance of effect on them would differ from that of the general population.

Scoped In Impacts	Effects	Assessment Guidance	Study Area
Housing	Provision of housing to meet local needs	Manchester policy	Manchester (local) and Greater Manchester (regional)
Open space, leisure and play	Increased demand for open space, leisure and play	Manchester policy	Local area (Cheetham Ward)
Employment and income	Will the proposed development increase or reduce employment opportunities for construction workers	Quantitative assessment based upon project costs, output from construction employment and additionality/displacement factors; Department for Business, Energy and Industrial Strategy; ONS (Sub-Regional Productivity); and HCA Additionality Guidance.	Manchester (local) and Greater Manchester (regional)
Built environment	Will the proposed development lead to a reduction in daylight and	See daylight, sunlight and overshadowing (DSO) and wind micro scoping text	See proposed study radiuses for DSO and wind.

	sunlight experienced by surrounding residents Will the proposed development lead to unsuitable or unsafe wind microclimate conditions. Will the proposed development be designed in a way that contributes to health, including principles of inclusive design.	HUDU guidance	Local area (Cheetham Ward)
Scoped out Impacts	Effects	Justification	
Risk-taking behaviour	Increased risk taking behaviour as a result of the Proposed Development.	The Proposed Development will comprise a single tower building with private residential amenity. No aspects of the Proposed Development when operational are expected to encourage risk taking behaviour. Access to the construction site will continue to be prevented by hoarding preventing trespassing on the construction site. Therefore there is not expected to be an increase in risk taking behaviour as a result of the Proposed Development.	
Diet and nutrition	Increased or decreased access to healthy / unhealthy food for existing residents. Introducing new residents to a 'food desert'.	The site is located within the lowest scoring decile for food deserts according to the Consumer Data Research Centre[1], indicating a good level of access to grocery stores and healthy food. The Proposed Development would not introduce fast food establishments or takeaways to the location, and no food establishments are lost by the Proposed Development.	
Employment and income	Will the proposed development increase or reduce employment opportunities.	There will be some employment as a result of construction of the Proposed Development. Our calculations for a similar scheme in Manchester indicated a potential for 305 net direct construction jobs for Greater Manchester residents	
Transport modes, access and connection	Increased traffic Support for new residents to access public and active transport.	As noted in the transport and access section of the Scoping Report, no likely significant effects on pedestrians, cyclists, drivers and public transport users are anticipated. The Proposed Development is car free with a cycle parking space per apartment. The Proposed Development provides	

		access to Cheetham Hill Road adjacent to a traffic light controlled crossing. Therefore, local residents will be able to access public transport and will be able to walk safely around the local area.
Relocation	Relocation of existing residents, businesses or service users from a site prior to demolition.	The site is cleared, vacant land with no site users.
Community identity, culture, resilience and influence	Removal or reduction of access to community venues. Introduction of a large external population to a close community	The proposed development would be located in central Manchester in Cheetham Hill, a culturally diverse area of Manchester that is undergoing substantial transformation under Manchester City Council's long term regeneration strategy. The immediate surroundings comprise a number of similar new, taller residential buildings, as well as larger retail stores and industrial units. The built form of the area is therefore unlikely to be a key factor in community identity in the immediate surroundings. The site is also derelict and does not contribute to community identity.
Social participation, interaction and support	Provision or removal of opportunities for social participation and interaction.	As the site is currently derelict there would be no opportunities for social participation, interaction or support removed as part of the development. No community or commercial uses or public open space are proposed as part of the Proposed Development and therefore no new opportunities would be provided.
Education and training	Increased strain on primary and secondary resources from introduced population.	The Proposed Development comprises 221 residential units however most units comprise bedroom and two bedroom apartments. Child yield is therefore anticipated to be low. There are 228 spaces in primary schools in the surrounding area therefore even on a highly conservative estimate of one child per apartment there would be sufficient spaces to accommodate primary school age children. There are 536 secondary schools in the local area (although only 173 are of no religious character) and on a highly conservative estimate of one child per apartment there would be sufficient spaces to accommodate secondary school age children, assuming that some of these children would be accommodated in the Muslim and Christian character open intake schools in the area. Therefore, there are no likely significant effects on primary or secondary education and therefore no likely associated health effects.

Air Quality	Increased pollution (Nitrogen dioxide and particulate matter) due to the proposed development. Introduction of new residents to an area of poor air quality.	An Air Quality Assessment has been undertaken by Redmore environmental consultants (Appendix 4) which has considered the potential air quality impacts associated with construction dust, operational transport, and the introduction of new receptors. Provided the site specific dust risk mitigation measures set out in that report – which will be detailed in this ES – are secured, all air quality effects are expected to be negligible and there would be no likely significant effects on human health.
Water Quality	Contamination of surface water and groundwater	The site is 240m from the River Irk and 600m from the River Irwell however there is substantial intervening development. Construction will follow all standard pollution control measures. As set out in the scoping section for water resources and flood risk below, no likely significant effects on water quality are expected.
Land Quality	New contact with existing contaminated soil. Contamination of soil.	As set out in the scoping section for contaminated land and ground conditions, no likely significant effects on land quality are expected.
Noise and Vibration	Exposure of site users and surrounding receptors to elevated noise or vibration during construction or operation.	As set out the scoping section for noise and vibration, no likely significant effects on noise and vibration are expected.
Radiation	Exposure of site users and surrounding receptors to radiation during construction or operation	The Proposed Development will not be a source of radiation during either construction or operation
Crime and community safety	Increased rates of crime or increased perception of crime.	The site security arrangements for the Proposed Development during the construction phase will be in line with the requirements set out in the Construction (Design and Management) Regulations 2015. The design of the Proposed Development will be informed by 'Secured by Design' principles and appropriate measures to ensure safety for residents, workers and all others accessing and using on-site spaces.

Climate change mitigation and adaptation	Greenhouse gas emissions and impact of climate change on sensitive populations Adaptation to climate change	As set out the scoping section for climate change and greenhouse gases, no likely significant on climate change mitigation and adaptation are expected.
Health and Social Care Services	Increased demand for health and social care services from introduced residents.	The Proposed Development would include 221 residential units – a mix of 1 and 2 bedroom apartments and townhouses. Using a conservative assumed average of 2.5 residents per residential unit, this would lead to an anticipated population of 553 leading to the requirement for an extra 0.3 FTE GP on the basis of the NHS HUDU unit’s recommendation for one GP per 1,800 patients. There are five medical practices with a total of 35.6 FTE GPs within 1km, serving a total of 45,915 patients. This leads to GP:patient ratio of 1:1,290, within the recommended GP:patient ratio and with space to accommodate an additional 553 patients. Therefore there is not anticipated to be any likely significant effect on demand for health and social care services.
Assessment Method		
The determinants of health above are as set out in IEMA (now ISEP)’s 2022 Guide to Scoping in Human Health Assessment, and are considered the most relevant determinants of human health in the wider framework for developments of this nature. The approach to sensitivity, magnitude and significance will be as set out in IEMA (now ISEP)’s 2022 Guide to Determining Significance for Human Health in Environmental Impact Assessment. The assessment will utilise professional judgement to assign sensitivity, magnitude and significance. The assessment will be based on quantitative estimates of population and child yield from the proposed development.		
Assessment Scenarios		
The construction phase assessment will focus on employment creation from construction only, as all other relevant impacts such as noise, air quality and transport are not anticipated to generate likely significant effects as set out in the relevant topics of this Scoping Report. This will consider the duration of the construction phase. The operational phase assessment will focus on the three determinants of human health likely to be significant (built environment, open and play space, and housing) identified above. The assessment scenarios will be as follows: Demolition and Construction Stage: Scenario 1: Existing Baseline		

- Scenario 2: Existing Baseline + Proposed Development - Scenario 3: Existing Baseline + Proposed Development + Cumulative Schemes (based on information in the public domain, if available) Completed Development Stage: - Scenario 1: Existing Baseline - Scenario 2: Existing Baseline + Proposed Development - Scenario 3: Existing Baseline + Proposed Development + Cumulative Schemes (based on information in the public domain, if available)
Assumptions and Limitations
- The assessment would not seek to demonstrate policy compliance in respect of affordable housing provision as this will be covered in the Planning Statement and/Affordable Housing Statement/Viability Assessment. - The assessment will be desk-based and uses published public sources of information.

6.4 Climate Change and Greenhouse Gases			
Consultations			
No consultations have been undertaken to date relating to climate change and greenhouse gases.			
Baseline Information			
The site is currently vacant and provides no uses. It is therefore assumed that GHG emissions associated with the site are zero.			
Sensitive Receptors			
Global atmosphere from emission of greenhouse gases associated with the proposed development during construction and operation; and Human health from impacts to construction workers and future on-site residents and visitors.			
Scoped In Impacts	Effects	Assessment Guidance	Study Area
Demolition and clearance of the existing derelict structure and habitat on site and construction of the proposed development	Increase in GHG emissions into the global atmosphere	ISEP Guide to 'Assessing Greenhouse Gas Emissions and Evaluating their Significance'	GHG emissions arising from demolition, construction and operational activities within the site and proposed development.

Operation of the proposed development in relation to greenhouse gas emissions	Increase in GHG emissions into the global atmosphere	ISEP Guide to 'Assessing Greenhouse Gas Emissions and Evaluating their Significance'	GHG emissions arising from demolition, construction and operational activities within the site and proposed development.
Scoped out Impacts	Effects	Justification	
Demolition, construction and operation of the proposed development and the resilience of the proposed development to climate and climate change impacts	Increased rainfall and associated water effects including flooding and drainage increases Increases in heatwaves and drought resulting in changes to water availability, working conditions Increased windstorms and conflict with construction and construction programme	The ISEP Guidance includes the following with regard to EIA scoping of climate change resilience: 'In order to complete Scoping of the EIA, agreement with key stakeholders on the most appropriate climate change projection is required to adopt for the assessment and any necessary methodological considerations to ensure climate change is appropriately considered. This may include the exclusion of explicit consideration of climate adaptation and resilience issues if it is agreed that existing design codes or standard assessment methodologies contain adequate in-built consideration of adaptation and resilience issues⁵'. The climate change resilience assessment has been scoped out on the basis that potential impacts from extreme weather and projected impacts on the proposed development as a result of climate change would be sufficiently considered within the other relevant disciplines or standalone planning documents. These include but are not limited to: • Construction Management Plan; • Design and Access Statement; • Flood Risk Assessment and Drainage Strategy; • Landscape Strategy; • Air Quality Assessment; and • Construction and Operational Waste Management Plans.	
Assessment Method			
The Climate Change assessment and ES chapter will draw upon relevant guidance, principally from ISEP's 'EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance'. This will include:			

⁵ ISEP, Environmental Impact Assessment Guide to: Climate Change Resilience & Adaptation

- Estimate GHG emissions from the clearing of the vacant site and demolition of derelict structure using appropriate benchmarks such as BRE⁶
- Estimate GHG emissions from the construction of the Proposed Development from any construction carbon lifecycle assessment (LCA) previously undertaken or using appropriate benchmarks (RICS, LETI).
- Estimate annual operational GHG emissions from the Proposed Development drawing on information on electricity and gas (if proposed) demand provided by the Environmental Standards Statement
- Review the GHG emissions mitigation proposed for the construction and operational phases and support the development of additional mitigation as appropriate;
- Estimate residual construction and operational phase GHG emissions and report the in the context of baseline GHG emissions from within the local authority area, and also future carbon budgets proposed for Manchester, in order to establish their magnitude;
- Evaluation the contribution or otherwise of the proposed development and associated GHG mitigation measures to the UK and Manchester's net zero targets; and
- Report the approach to, and findings of the above within a Climate Change ES Chapter including a summary of mitigation measures, residual GHG effects and whether these are considered significant.

The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible), the magnitude of change (on a scale of large, medium, small and negligible), contribution of the Proposed Development to UK and Manchester net zero targets and also professional judgement in order to determine significance of residual effect on a scale of major adverse, moderate adverse, minor adverse, negligible or beneficial.

Assessment Scenarios

- Demolition and Construction Stage (and Cumulative Stage):
- Scenario 1: Existing Baseline
- Scenario 2: Existing Baseline + Proposed Development
- Scenario 3: Existing Baseline + Proposed Development + Cumulative Schemes (based on information in the public domain, if available).
- Completed Development Stage (and Cumulative Stage):
- Scenario 1: Existing Baseline
- Scenario 2: Existing Baseline + Proposed Development
- Scenario 3: Existing Baseline + Proposed Development + Cumulative Schemes (based on information in the public domain, if available).
- End Of Design Life
- Scenario 1: Completed Proposed Development End of Design Life (60 years)

⁶ Benchmarks for Predicting and Forecasting Construction Waste; Annex 3 (BRE 2009).

Assumptions and Limitations

- Future UK electricity grid factors published by the Department for Business, Energy and Industrial Strategy (BEIS) are projections which may not reflect the actual carbon emissions associated with grid electricity consumption in future. That said, BEIS projections have slightly underestimated the rate of grid decarbonisation in recent years, and as a result any inaccuracy in these projects may actually over-estimate GHG emissions associated with the proposed development.
- Annual GHG emissions for the proposed development are estimated from information on the Dwelling Emissions Rate as provided by the Energy Strategy Report. It is possible that the energy strategy further develops as part of detailed design; however any such changes are considered unlikely to materially change the determined magnitude of change or significance of effect identified within this chapter.
- The proposed development will generate vehicle trips on the local road network during demolition and construction and operational phases. Demolition and construction phase transport CO2 emissions are accounted for in the embodied carbon LCAs undertaken for the project (RICS lifecycle stage A4).

6.5 Townscape and Visual Impact

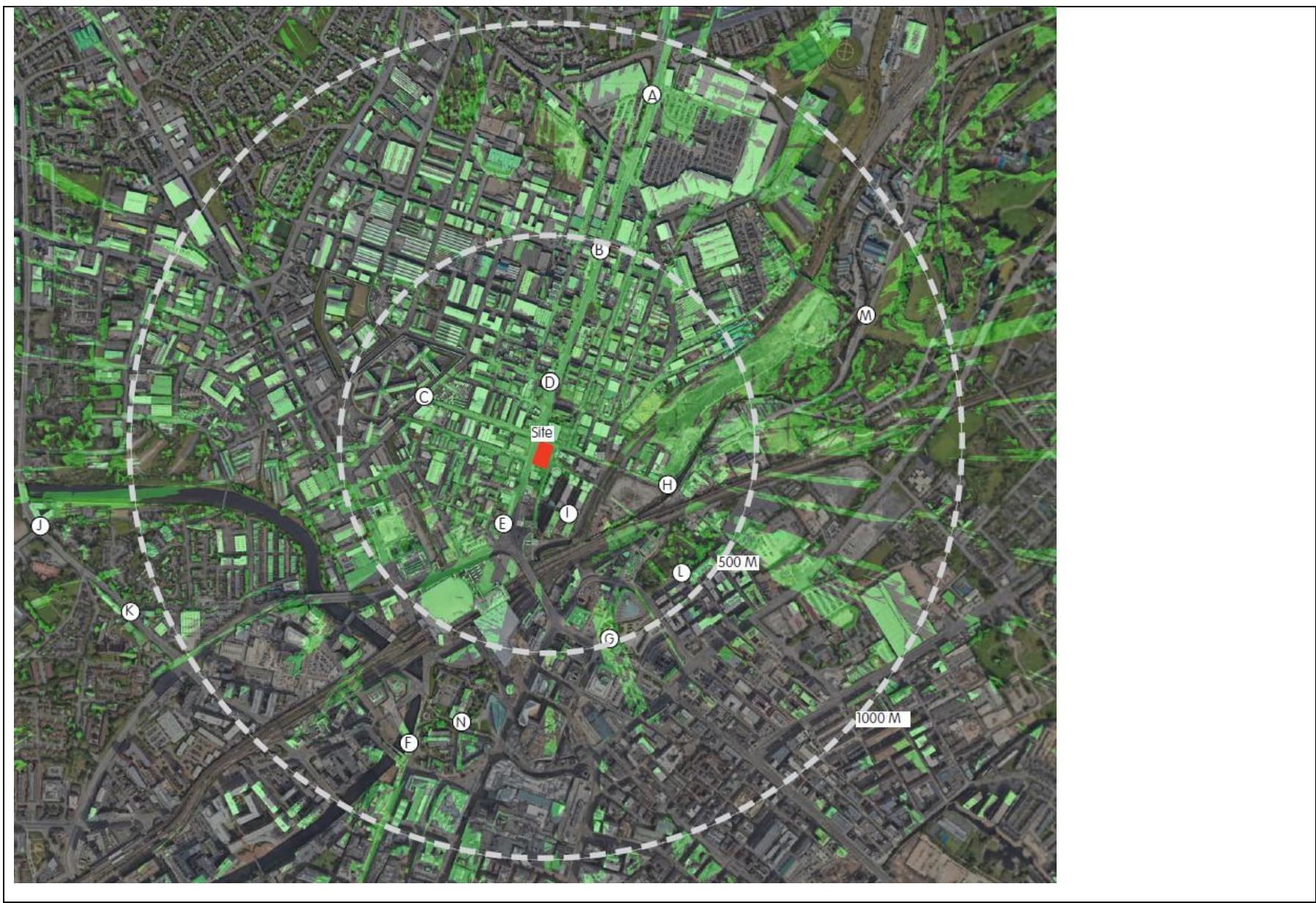
Consultations

Manchester City Council Planning Officers have confirmed proposed the zone of theoretical visibility (ZTV) and Viewpoints on 03/11/2025.

Baseline Information

Townscape baseline – This will set out Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3) definitions of townscape character, conservation areas, landmark corridors, legibility, skyline, grain, height, massing.

ZTV and Viewpoint – A ZTV, and viewpoint locations within a 1km radius of the site, are shown in the plan below.



The proposed verified views are to include: A. Manchester Fort. B. Manchester Jewish Museum. C. Lord Street and Strangeways. D. Manchester Oratory. E. Cheetham Hill Road and Park Street. F. Manchester Cathedral. G. Angel Gardens. H. Roger Street. I. Green Quarter. J. Blackfriars/Silk Street. K. Blackfriars/Greengate West. L. Cathedral Gardens. M. Angel Meadows. N. Collyhurst Road. Policy/context: The following policies are relevant to the TVIA: • National Planning Policy Framework • Place for Everyone • Manchester Local Plan • Strangeways SRF • Great Ducie Street SRF			
Sensitive Receptors			
Residents on Lord Street, Roger Street, Park Street, Angel Gardens and wider Cheetham Hill and Red Bank neighbourhoods. Users of public spaces/routes: Angle Gardens, Cheetham Hill Road corridors, local centres, cathedral precinct, Manchester Fort retail park, pedestrian/cycle links. Heritage/townscape receptors: Manchester Cathedral, Manchester Jewish Museum, Manchester Oratory; designated conservation areas/landmarks contributing to city identity.			
Scoped In Impacts	Effects	Assessment Guidance	Study Area

Townscape character effects (height/scale, massing, grain, skyline contribution)	Altered character, legibility and landmarking; potential beneficial legibility vs adverse scale in fine-grain streets	GLVIA3	1 km
Visual amenity of the public realm	Changes to composition, enclosure, focal points, sky visibility		1 km
Heritage-related views (setting experienced visually)	Changes to how assets are seen in their townscape (e.g., Cathedral, Jewish Museum, Oratory)		1 km
Cumulative visual/townscape effects	Combined skyline and sequential effects with consented/proposed tall buildings		1 km
Scoped out Impacts	Effects	Justification	
Views beyond 1km	Negligible (the site will read as part of the existing skyline)	Not applicable in inner-city context per GLVIA3 townscape definitions.	
Private interior views	Not assessed	Planning considers outdoor visual amenity and outlook; no “right to a view”	
Glare/reflectivity studies	Not material	Façade specs handled under lighting/daylight/solar glare disciplines; TVIA addresses perceptual night presence only	
Assessment Method			
The assessment will be undertaken in line with GLVIA3 (LI/IEMA) and will be significance-led, proportionate TVIA with the following aspects: baseline characterisation; receptor sensitivity; magnitude of change; significance (adverse/beneficial/neutral). This will be based on Accurate Visual Representations (AVRs) from agreed viewpoints using LI TGN 06/19 (camera/lens metadata, survey control, horizon matching; AVR Level 2/3 photomontages as appropriate. The cumulative assessment will include consented/under-construction/allocated tall buildings in the visibility envelope; this will assess combined/sequential effects.			
Assessment Scenarios			
- Baseline (existing). - Demolition and construction phase (cranes/temporary lighting/hoardings). - Completed development phase.			

- Completed development + cumulative schemes (with relevant tall buildings pipeline within the ZTV).

Assumptions and Limitations

The ZTV is prepared to building metres above ordnance datum (AOD) plus typical rooftop plant; tree foliage modelled leaf-on/leaf-off as appropriate; ZTV shows theoretical visibility only. Photography and AVRs are prepared in line with TGN 06/19: with calibrated cameras/lenses, tripod heights, control points; weather/air clarity within LI tolerances; inevitable limits re transient street clutter. Access and safety may restrict some exact camera positions; nearest safe public proxy will be used and reported.

7. TOPICS SCOPED OUT OF THE EIA

7.1 Ecology

- 7.1.1 A Preliminary Ecological Appraisal (PEA – **Appendix 5**) was undertaken for the site on 18th September 2025 alongside a desktop study. Features within the site boundary and accessible features immediately bordering it were evaluated and the extent and distribution of habitats and plant communities were recorded. Fauna using the area were recorded and areas of habitat suitable for statutorily protected species were identified where present, with an active search carried out for evidence of such use. In addition, a review of readily available ecological information and other relevant environmental databases (included Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) website) was undertaken for the site and vicinity. In addition, a biological records search from Greater Manchester Local Records Centre (GMLRC) were reviewed to identify the location and citations of local non-statutory designated sites and presence of records for notable and protected species. This provided the overall ecological context for the site. In addition, a Preliminary Roost Survey was undertaken simultaneously to the PEA, of the one derelict structure still standing on the site.
- 7.1.2 No statutory designated sites were identified within 1 km of the site boundary. However, the site is located within the Impact Risk Zone of the Rochdale Canal Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC), located approximately 5 km to the east. As per the criteria listed on MAGIC, the proposed site will not require further consultation with Natural England to proceed in relation to the SSSI due to the size of the site and the nature of the proposed works. Furthermore, no negative impacts to the SAC are anticipated as a result of the development and therefore a Habitat Regulations Assessment will not be required.
- 7.1.3 The site area is vacant, derelict land with one abandoned structure present. The site context surrounding the site is urban in nature and comprise roads, commercial unites and high-rise residential dwellings. No Biodiversity Action Potential Priority Habitats are present within or around the site, with the closest of these habitats being open mosaic land located approximately 250m east of the site. No invasive non-native plant species were identified on or in proximity to the site. Native species identified on site include field horsetail however this was identified as a low density. No suitable habitat corridors exist between the site and closest priority habitats. Existing habitats on site include sparsely vegetated urban land and structures. The River Irk is the closest body of water to the site, located approximately 560m southwest. There is no ecological or marine connectivity between the site and the river.
- 7.1.4 The site contains no record of amphibians present and contains no suitable waterbodies for amphibians. The vegetation and rubble piles may provide shelter for amphibians within the site however these amphibians could be moved by hand during construction if encountered.
- 7.1.5 The onsite structure was assessed as part of the Preliminary Roost Survey as having low roosting potential for bats and breeding birds. The small size of the site, lack of linear habitats and its surrounding urban context limit its potential to provide value for foraging or commuting bats. Further consultation with GMEU identified records of bats within 1km of the site, with the closest record of a bat being approximately 90m southwest of the site from 2014. It is recommended that bat and bird boxes be implemented into the design of the proposed development.
- 7.1.6 The site provides suitable refuge and foraging habitat for mammals including hedgehogs and badgers, however neither of these species were recorded as present on site. A small mammal hole was located on site however no mammals were found to be present within. It is not anticipated that the proposed development will have a significant negative impact upon mammals within the area. Where vegetation requires removal, it should be checked for the presence of mammals prior to removal.

- 7.1.7 Consultation with the GMEU did not locate any records of reptiles within 1km of the site. The habitats onsite could support reptile species within the vegetation, however due to a lack of suitable habitats and habitat connectivity within the local area and the urban habitats which were present on the site within the recent past, reptiles are not anticipated to be onsite and do not need to be considered further within the construction or operation of the proposed development.
- 7.1.8 As such, impacts to ecological receptors including protected habitats and species are unlikely to be considered significant and should be scoped out of the ES.

7.2 Water Resources and Flood Risk

- 7.2.9 The closest watercourse to the site is the River Irk, located approximately 560m southwest of the site. No water features are present on the site.
- 7.2.10 Environment Agency (EA) Flood Maps for planning show that the entirety of the site is located within Flood Zone 1, therefore the site is at 'low' risk (<0.1% Annual Exceedance Probability) of flooding from rivers and sea.
- 7.2.11 The EA's indicative online surface water flood risk maps show the entirety of the site to be at very low risk of surface water flooding in both the 1 in 30 and 1 in 100 year Annual Likelihood of Flooding calculations. A small portion northern and northwestern area of the site is shown to have a 1 in 1000 Annual Likelihood of flooding, however this still puts the site at a very low potential for surface water flooding.
- 7.2.12 In terms of drainage, there are a number of sewers within the vicinity of the site. Although the site is shown to be at a very low risk of surface water flooding, a majority of Manchester is designated as a Critical Drainage Area. This is detailed in the Level 1 Strategic Flood Risk Assessment (SFRA) Critical Drainage areas map produced jointly by MCC, Salford City Council and Trafford Metropolitan Council⁷.
- 7.2.13 The site is located within Flood Zone 1, which is land considered at Low Probability of flooding from rivers and sea as well as an area predicted to be at a low susceptibility to groundwater flooding. Furthermore, all future surface water generated by the Proposed Development will be managed through a site specific drainage strategy and design. The drainage strategy and design for the Proposed Development will account for any increased surface water runoff (including from the building façades) and maintain or reduce surface water runoff and associated flooding (including surface water attenuation and betterment provided as part of the sustainable drainage system (SuDS) strategy for the site). This will include an allowance for climate change in line with Environment Agency guidance. It will also be designed in line with CIRIA SuDS manual⁸.
- 7.2.14 Drainage features will be developed to provide sufficient control of surface pollutants as necessary, providing suitable levels of treatment for surface water which will remove pollutants prior to discharge to the wider aquatic environment. Details of the treatment plan for all surface water runoff from the development will be included in the final drainage strategy submitted with the planning application.
- 7.2.15 Based on the information provided above, adverse changes to water resources and surface water flooding are unlikely to be considered significant and will not be considered further within the ES.

7.3 Ground Conditions

- 7.3.16 A Phase 1 Detailed Desk Top Study was undertaken for the site as part of the previous site consent under planning application 113914/FO/2016. Previous site uses include residential and commercial uses of the site since the 1840s, with the site becoming disused in the 1990s.

⁷ Salford City Council and Trafford Metropolitan Borough Council (2011) MST SFRA current critical drainage area map

⁸ The SuDS Manual, C753, CIRIA 2015

surrounding land use has historically been residential and industrial, with railway lines 150m east of the site and a disused gas works located 500m east of the site respectively.

- 7.3.17 Envirocheck records and British Geological Survey (BGS) mapping records indicate that the site is underlain by the Chester Formation of sandstone and sedimentary bedrock along with the Till, Devensian superficial deposit. Adjacent to the eastern site boundary artificial made ground has been reported. There are four BGS fault lines located within 1 km of the site, the closest of these being 10m to the northwest of the site and runs in a northwest to southeast direction. There are no boreholes contained within the site boundary, however there are a number of BGS recorded boreholes located around the site boundary, the closest of these being 80m south of the site boundary.
- 7.3.18 Envirocheck records further confirm that there is very low to no risk from ground stability hazards on and around the site including running sands, collapsible ground, landslide ground, shrinking or swelling clay or ground dissolution.
- 7.3.19 The Radon atlas for England and Wales confirms the site is in a lower probability radon area, as less than 1% of homes are above the action level. No radon protective measures would be necessary in the construction of the proposed development.
- 7.3.20 One BGS recorded landfill site is recorded within 1 km of the site approximately 725m northeast of the site.
- 7.3.21 Zetica unexploded ordnance mapping reports the site to be in medium risk for unexploded ordnance. There are two former Luftwaffe target sites within 1 km of the site. A search of Bomb Damage Maps from the University of Manchester has shown that the site and immediate surrounding area did not receive any direct hits. As the site was occupied during WWII, it is unlikely that UXO would remain unrecorded on site.
- 7.3.22 During demolition and construction, there is the potential for adverse environmental effects to arise due to the disturbance of existing on-site contamination, including the migration of contamination to ground, soil, surface water and ground water. There is also the potential for the accidental release of new contamination due to on-site activities. However, all on-site enabling and construction activities will be undertaken in line with Construction Design Management Regulations (CDM), CL:AIRE Development Industry Code of Practice, as well as best practice measures.
- 7.3.23 Based on the information provided above, adverse changes to ground conditions are unlikely to be considered significant and will not be considered further within the ES.

7.4 Transport

- 7.4.24 The site is currently accessible through Lord Street and Cheetham Hill Road, however it is blocked by scaffolding and not open to the public. The site is located within the city centre which offers access to transport and local amenities within a short walk. Manchester Victoria Station is located approximately 355m to the south of the site. The site is not operational and therefore has no vehicle movements associated.
- 7.4.25 The Chartered Institution for Highways and Transportation (CIHT) classifies that an average pedestrian is capable of walking 400m every five minutes. This is the same metric for a 'desirable' walking distance. Within this distance from the site there is a range of local amenities including food shops, public houses and restaurants. CIHT further defines a 1km walk as an 'acceptable' walking distance. Within a 1 km site buffer there are further amenities and opportunities for employment access alongside retail and leisure centres.
- 7.4.26 Based on the above, the site is deemed to be highly accessible on foot and that there are numerous uses within walking distance from the site.

- 7.4.27 Cyclist availability is also considered to be highly accessible from the site area, with an 8km cycle radius providing access to Manchester City Centre and surrounding areas. Local routes are located within close proximity to the site along the A56 Bury New Road, Corporation Street and along the River Irwell. There are cycle lanes along Cheetham Hill Road to the north of the site as well as advanced cycle stop lines on all the signal junctions along this road. These routes link the site to the National Cycle Routes Network.
- 7.4.28 The site benefits from its highly accessible location for public transport with train, tram and bus services available within a short walking distance, with the nearest bus stop being located approximately 75m south of the site along Cheetham Hill Road. The closes rail accessibility is from Victoria Station approximately 700m south of the site, which also provides access to the Manchester Metrolink.
- 7.4.29 The proposed development would be accessed via Fernie Street, which runs along a northeast to southwest alignment linking with lord street to the north. It provides access to the residential apartments along its length as well as the Park Inn Hotel. The proposed development is car free in nature and will not create any operational trips. Proposed cycle parking includes one space per allotment, totalling 221 spaces. The provision includes 11 spaces 5% designed for adapted cycles
- 7.4.30 There have been a total of 11 traffic collisions in the latest five-year data available, with one of these classes as serious. No significant correlations have been identified to suggest that highway condition, layout or design were significant contributory factors within the surrounding site area. It is not considered that there is an existing safety issue that is likely to be exacerbated by the proposed development.
- 7.4.31 Given the surrounding road network and industrial character of the existing area along Cheetham Hill Road, the road is not considered to be a sensitive area or receptor as defined under ISEP's 'Environmental Assessment of Traffic and Movement'⁹.
- 7.4.32 Demolition and construction phase of the Proposed Development will result in the addition of temporary traffic on the local road network as a result of movement of plant/machinery, workers (including subcontractors) and deliveries/collections/removal of waste. The additional traffic generated by demolition and construction activities will include a greater level of Heavy Goods Vehicles (HGVs) alongside general trips from construction staff and contractors.
- 7.4.33 The exact number of trips anticipated to be generated by the construction of the proposed development is currently not know and is subject to the specific construction phasing and timings, which will be determined by the principal contractor. It is considered that the construction traffic generated is likely to be similar to that of associated developments within the area, resulting in a total of 30 2-way Heavy Goods Vehicle (HGVs) trips during peak construction time. This would result in an uplift of 26% HGVs commuting within the site area when compared to the 2024 yearly average annual flow data observed by the Department for Transport, which reported an average of 223 HGVs travelling within the site area in 2024¹⁰. Under ISEP's 'Environmental Assessment of Traffic and Movement', non-sensitive road networks may allow for a temporary increase of under 30% uplift in HGV traffic flows during the construction period without requiring assessment in EIA.
- 7.4.34 In order to reduce adverse effects associated with the construction phase a traffic logistics plan (TLP) (or equivalent) will be implemented through demolition and construction phase and managed as part of the CEMP. The TLP will adopt good practice measures, which will be enforced by the appointed contractor, including provisions of traffic routing, management of deliveries and appropriate signage. Such embedded mitigation measures would be considered an integral part of the Proposed Development and controlled as part of the CEMP. As such, adverse effects resulting

⁹ ISEP – 'Environmental Assessment of Traffic and Movement' 2023

¹⁰ [Road Traffic website - Manchester](#)

from construction traffic are not considered to be significant and will not be considered further within the EIA or reported in the ES.

- 7.4.35 During the operational phase of the proposed development, potential environmental effects relating to traffic and transport are solely associated with the level of operational traffic. To inform the early stages of design development, appraisal of future development trips has been conducted. This is provided within Table 7.1 below and is based upon a figure of 221 residential dwellings.

Table 7.1: Operational Trip data

Time Period	Trip Rates			Trip Generation		
	Arrive	Depart	Total	Arrive	Depart	Total
People						
AM (08:00 – 09:00)	0.077	0.521	0.598	17	113	130
PM (17:00 – 18:00)	0.206	0.108	0.314	45	23	68
Daily (07:00-21:00)	2.212	2.423	4.635	480	526	1006
Vehicles						
AM (08:00 – 09:00)	0.021	0.031	0.052	5	7	11
PM (17:00 – 18:00)	0.046	0.021	0.067	10	5	15
Daily (07:00-21:00)	0.453	0.418	0.871	98	91	189

- 7.4.36 As observed by DfT in 2024, the number of all vehicles passing throughout the site area on the adjacent Cheetham Hill Road was 17,029. Table 7.1 demonstrates that there could be between 11 and 15 two-way vehicular movements generated by the proposed flats in the AM and PM peak respectively. The proposed development is also entirely residential in nature and as such would not require servicing trips for commercial uses.
- 7.4.37 As such, it is not foreseeable that the proposed development, especially given its car-free design, has the potential to create any adverse traffic impacts to existing highway network. Therefore, operational traffic has been scoped out of the assessment and will not be considered further within the ES.

7.5 Air Quality

- 7.5.38 The site lies within the Greater Manchester Combined Authority Air Quality Management Area (AQMA), designated for exceedances in nitrogen dioxide (NO₂).

An Air Quality Assessment (to be submitted alongside the planning application) was undertaken during October 2025. This included a construction phase assessment including risks to human health and an operational phase assessment .

Monitoring as set out in Table 7.2 of annual mean concentration of NO₂ shows that annual mean concentrations are below the Air Quality Objective of 40 µg/m³ at 9 out of 12 local monitoring locations. The remaining three locations, with exceedances in bold in Table 7.1 are located at roadside positions adjacent to an A-road within an AQMA, elevated results would be expected. Concentrations were below the AQO at all other monitoring locations in recent years.

Table 7.2 - Monitoring Results Annual Mean NO₂ Concentration

Monitoring Site	Monitored Annual Mean NO2 Concentration (µg/m3)			
CAP_SALF_060	A6042 (Trinity Way)	31.0	33.7	31.3
CAP_MANC_051	A665 (Miller Street)	50.2	-(a)	49.0
CAP_MANC_076	A665 (Miller Street)	29.5	27.3	26.5
CAP_MANC_077	A665 (Miller Street)	32.2	29.1	27.6
CAP_MANC_115	Gt Ducie St	34.6	33.2	-(b)
CAP_MANC_116	Gt Ducie St	39.1	-(c)	-(c)
CAP_MANC_136	A665	44.1	-(a)	41.7
CAP_MANC_137	A665	46.9	43.6	-(a)
CAP_MANC_192	A56 (Great Ducie Street)	-(d)	-(d)	29.3
MA26ANO	Cheetham's School	27.5	24.5	24.6
MA88NO	Angel St	35.7	32.7	30.3
MA104BNO	Cheetwood Primary School, Waterloo Road	37.9	34.5	31.1

Note: (a) Data not available.

(b) Monitor decommissioned in 2024.

(c) Monitor decommissioned in 2023.

(d) Monitor commissioned in 2024.

Predictions of background annual mean pollutant concentrations on a 1km by 1km grid basis have been produced by DEFRA for the entire of the UK to assist LAs in their Review and Assessment of air quality. As shown in Table 7.3, predicted background annual mean NO2, PM10 and PM2.5 concentrations are below the relevant AQOs and Interim Target at the proposed development site according to these data.

Table 7.3 Defra Background Pollutant Concentration Predictions

Pollutant	Predicted Background Pollutant Concentration			Air Quality Objective
	2024	2025	2026	
NO2	18.65	18.03	16.14	40

PM10	13.42	13.38	13.21	40
PM2.5	7.82	7.76	7.59	12

- 7.5.39 Consequently, it is expected that annual mean pollutant concentrations are expected to be well within the AQOs at the site.
- 7.5.40 With regards to construction traffic emissions, while the construction traffic would be higher than the screening criteria set out in the EPUK/ Institute of Air Quality Management' (IAQM) guidance¹¹ for HDVs (25 HDVs AADT), the addition of around 30 construction vehicle trips at peak is not anticipated to lead to an exceedance of the air quality objective noting the short period of peak construction.
- 7.5.41 The construction dust risk assessment identified that, in the absence of mitigation, the construction of the Proposed Development would have a high risk for adverse dust soiling effects and a medium risk for adverse human health effects. With the implementation of mitigation (such as those typically included within a Construction Management Plan), the risk of dust soiling and human health effects would be effectively reduced to negligible.
- 7.5.42 A qualitative operational phase assessment was undertaken by following the screening criteria provided in the EPUK and IAQM guidance¹². Given that vehicle movements anticipated to be generated by the operational Proposed Development were below the relevant EPUK and IAQM guidance criteria, it is anticipated that no significant adverse effects on local air quality would occur.
- 7.5.43 Based on the evidence above, effects relating to air quality are not expected to be significant and are therefore not considered further within the ES.

7.6 Noise and Vibration

- 7.6.44 During the construction phase there will be a short-term, temporary increase in noise and vibration levels because of construction activities, such as excavation and piling, as well as the operation of other construction plant, equipment and delivery vehicle movements. These temporary, short-term effects will be typical of any urban construction project and may lead to some localised disturbance to residential properties in proximity to the site. However, such impacts and effects are routinely and successfully mitigated via standard means including the use of Best Practicable Means to minimise noise and vibration as far as is practicable and the implementation of standard environmental management control measures detailed within a Construction Management Plan, which is to be secured as a planning condition.
- 7.6.45 The construction Management Plan will include, but not be limited to, the following:
- The use of site hoarding to provide acoustic screening.
 - Adherence to reasonable construction working hours which will avoid early mornings and night-time, with limited weekend working i.e. core hours only.
 - The location of construction plant items away from noise sensitive areas when and where practicable,
 - The use of construction techniques known to reduce the incidence of noise and vibration.
 - The use of modern, low noise emission plant and machinery.
 - Switching off plant and machinery when not in use.
 - Noise and vibration monitoring to assess the effectiveness of the management controls and to indicate if and when additional measures may be required.

¹¹ EPUK and IAQM 2017: Land-Use Planning & Development Control: Planning for Air Quality

- 7.6.46 The ISEP guidelines on Traffic and Movement¹³ state that a 25% increase in traffic flows or a 20% decrease in traffic flows is required to produce only a 1dB change in ambient noise, with a 3dB change indicating likely significant effects. As noted in Section 7.4 of this report, the works are likely to result in a temporary 26% uplift in construction traffic during peak times. As such, no significant road traffic noise effects are expected to occur as a result of the construction of the proposed development.
- 7.6.47 Upon operation, the proposed development will be fully residential in use and will be a car-free development. In line with ISEP Guidelines¹⁴, Section 7.4 of this report notes that operational traffic uplift is not expected to produce either a 25% increase in traffic flows or a 20% decrease in traffic flows. As such, no significant effects relating to operational traffic noise is expected to occur as a result of the operation of the proposed development.
- 7.6.48 With regard to potential noise emanating from the operation of building plant, the design of the proposed development will be informed by noise emission limits set in accordance with British Standard 4142¹⁵ and the relevant planning policies of MCC. This will ensure that noise from the operation of building plant will not give rise to undue noise disturbance or intrusion. The operational proposed development will not generate any perceptible sources of vibration given its entirely residential makeup.
- 7.6.49 An acoustics assessment will be undertaken to identify suitable noise limits for fixed plant and a stand-alone report will be submitted alongside the planning application in line with MCC's validation requirements. The requirement to specify building plant to adhere to certain noise limits can be secured by planning condition.
- 7.6.50 It should be noted that that an assessment of external and internal noise levels within the site in terms of its suitability for residential development will be undertaken. As this does not form an assessment of impact against relevant baseline conditions, the assessment will be presented in a separate standalone report in support of the planning application.

7.7 Materials and Waste

- 7.7.51 The proposed development will require the demolition of the single derelict building on site as well as the excavation of the ground for the basement. Both activities will generate a series of waste arisings, likely to include but not limited to concrete, wood and vegetation removal. Other materials and any contaminated material will be disposed to appropriate landfill facilities. Such waste will be handled, processed and removed from the site by suitably qualified contractors all being undertaken with the Hazardous Waste (England and Wales) Regulations 2005¹⁶. In addition, it is anticipated that waste will be produced as a result of construction activities. Overall, it is anticipated that there will be a surplus of material for disposal off-site.
- 7.7.52 All waste arising during demolition and construction are to be controlled through the implementation of a Construction Management Plan and good practice construction waste management plan (CWMP). The management plans will be informed by waste provisions of the Environmental Protection Act 1990 and will set out the principles and legal requirements relating to waste (including hazardous waste). The CWMP will describe how the materials will be managed and stored efficiently and disposed of legally during the construction phase. It will also outline the aims, objectives and on-going management responsibilities, including management and storage

¹³ ISEP – 'Environmental Assessment of Traffic and Movement' 2023

¹⁴ ISEP – 'Environmental Assessment of Traffic and Movement' 2023

¹⁵

British Standard 4142:2014+A1:2019 Methods for Rating and Assessing Industrial and Commercial Sound. 2019.

1. ¹⁶ The Hazardous Waste (England and Wales) Regulations 2005

practices, to be implemented during the demolition and construction phase, and will set targets for the reduction, diversion from landfill and reuse of waste.

- 7.7.53 Operational waste will be from residents. The proposed development will include provisions for waste storage facilities, which will include facilities for the separation of waste for recycling purposes. An operational waste strategy will be developed for the site which sets out the principles. Strategy and targets for the management of waste and maximise recycling, in accordance with MCC established policy.
- 7.7.54 With regards to materials, it is not anticipated to be any significant issues in terms of availability of materials required for the proposed development. The proposed development will comprise a number of sustainability features and construction methods when compared to the industry standard. Subsequently, there are not anticipated to be any significant effects on materials from the proposed development.
- 7.7.55 Based on the evidence above, effects related to materials and waste are not considered to be significant and will not be assessed within the ES.

7.8 Aviation

- 7.8.56 The site is located approximately 15km north of Manchester Airport. As the site is located a significant distance away from the closest airport, not within any key flight paths and outside of any airport exclusion zones, it can be concluded that there will be no likely adverse impacts on operations at the airport as a result of the proposed development.

7.9 Archaeology

- 7.9.57 An Archaeological Desk Based Assessment was prepared for the site in July 2016. The site does not fall within a conservation area and does not contain any designated heritage assets, such as Scheduled Monuments, Registered Parks and Gardens or listed buildings. In total, 46 archaeological assets have been identified within a 300m radius of the site area. Of these, six lie within the boundary of the proposed development, the majority pertaining to the development of the site in the nineteenth century.
- 7.9.58 The Prehistoric Period to Iron Age Period (c 10,000 BC – AD 43): the current understanding of any human activity in the Manchester region during the prehistoric period is poor, although it is reasonable to suggest that the Castlefield area may have been conducive for late prehistoric settlements on account of the natural topography and its location close to the River Irk. There is no known evidence of prehistoric activity within the site area and the potential for remains from this period is considered to be low.
- 7.9.59 Roman Period (AD 43-410 AD): The nearest evidence for Roman activity is a hoard of coins found in the old river bed of the Irk between Scotland and Ducie bridges, approximately 100m to the southeast of the site area, and the potential for any such buried remains within the site area remaining is considered low.
- 7.9.60 Medieval Period (AD 410 – 1450 AD): there is very little evidence in the Manchester Region for the period between the end of the Roman occupation and the Norman Conquest. A remnant of the period is a funerary urn of probable 6th century date which was found approximately 170m northeast of the site area. Notwithstanding the importance of this discovery, the potential for buried remains of early medieval date to survive in the site area is considered low. Following the Norman Conquest, it is likely that the site was used as agricultural land beyond the area of settlement associated with the town. However, there are there are known remains from the late medieval period within or in close proximity to the site area and the potential for any such buried remains to exist on the site is low.

- 7.9.61 Post-Medieval and Industrial Period (AD 1540 – AD 1914): the area around the site close to the River Irk was likely used for water mills and associated works surrounding the mills. The Castlefield area remained almost fully undeveloped until the 18th century, and the site is likely to have remained agricultural in this period. As the surrounding area was further industrialised, the use of factories in the area became the predominant land use. It is possible that non-designated buried archaeological remains, particularly those pertaining to the nineteenth century, however these are likely to be of low value.
- 7.9.62 The site area is likely to contain two non-statutory below-ground heritage assets of local/borough importance. Any surviving remains of the Fernie Street terrace site or shops/workshops along Cheetham Hill are likely to be of most interest. It is unlikely however that any significant archaeological evidence will have survived the development of the site into the early-mid twentieth century. Other archaeological assets surrounding the site have been deemed to be of low archaeological significance.
- 7.9.63 It is not considered that there are any assets which would preclude the proposed development of the site. Given the limited potential for the survival of archaeological remains, no further mitigation measures are considered to be necessary.
- 7.9.64 Based on the evidence above, effects related to archaeology are not considered to be significant and will not be assessed within the ES.

7.10 Major Accidents and Disasters

- 7.10.65 Under Schedule 3 of the EIA Regulations, the risks of major accidents and natural disasters relevant to the proposed development need to be considered.
- 7.10.66 As a residential development, the proposed development would not be a source of hazard that could result in a major accident or disaster during operation. Measures to eliminate the risk of major accidents or disasters as a result of the demolition and construction of the proposed development will be outlined within a construction management plan.
- 7.10.67 As described in section 7.2: Water Resources and Flood Risk, risk from adverse changes to water resources and surface water flooding are unlikely to be significant and, as described in section 7.3 Ground Conditions, risks from ground conditions and contamination are unlikely to be significant. No structural, geomorphological or geochemical features are recorded on or near the site by BGS mapping. The site is not in an area potentially affected by past coal mining activities and there are no Health and Safety Executive (HSE) Control of Major Accident Hazards (COMAH) sites in close proximity to the site.
- 7.10.68 The site has a medium risk for UXO however as the site was occupied during WWII it is unlikely that UXO will be found during demolition and construction activities. During demolition and construction, a working method statement will be prepared by the construction contractor and will identify safe working practices and response mechanisms should UXO be encountered on the site. This will be managed as part of the Construction Management Plan.
- 7.10.69 Any increased risk of major accidents or disasters as a result of climate change will be addressed in the Climate Change chapter of the ES.
- 7.10.70 It is considered that existing design measures and standard practice will adequately control any potential major accidents and/or disasters; therefore, Major Accidents and Disasters will be considered further within the ES.

8. SUMMARY OF THE PROPOSED SCOPE OF EIA

8.1 Summary of the Proposed Scope of EIA

8.1.1 Table 8.1 sets out the proposed scope of the Environmental Statement.

Table 8-1: Proposed Scope of Environmental Statement

Topic	Scoped In	Scoped Out
Transport		X
Air Quality		X
Noise and Vibration		X
Ecology		X
Archaeology and Cultural Heritage		X
Townscape and Visual Impact Assessment	X	
Climate Change	X	
Water Environment		X
Daylight, Sunlight and Overshadowing and Wind	X	
Waste and Materials		X
Major Accidents and Disasters		X
Ground Conditions/ Agricultural Land		X
Human Health and Socioeconomics	X	
Wind Microclimate	X	

8.2 Proposed Content and Format of Environmental Statement

8.2.2 The proposed standardised structure for the individual assessment chapters is as follows:

- Introduction
- Assessment methodology
 - Legislation and Regulations;
 - Planning Policy;
 - Technical Standards and Guidance;
 - Consultation;
 - Scope of Assessment;
 - Technical Scope;
 - Spatial Scope;

- Temporal Scope
- Assessment Method (across each stage)
- Assessment Criteria;
- Receptor Sensitivity/Value Criteria;
- Impact Magnitude Criteria;
- Scale and Nature of Effect;
- Assumptions and Limitations;
- Baseline Conditions;
- Assessment of Effects;
 - Demolition and Construction Effects;
 - Completed Development Effects
- Assessment of Residual Effects
 - Additional Mitigation (demolition and construction stages);
 - Enhancement Measures;
 - Demolition and Construction Residual Effects;
 - Completed Development Residual Effects
- Residual Effects;
 - Significant residual effects;
- Cumulative Effects
 - Inter-Project Effects
 - Demolition and Construction Cumulative Effects;
 - Completed Development Cumulative Effects.
- Summary of Assessment (Non-Technical Summary)

8.3 Structure of the ES

8.3.3 The ES will comprise the following set of documents:

- ES Volume 1: Non-Technical Summary NTS: this document will provide a concise summary of the Proposed Development, alternative designs that were considered, environmental impacts and mitigation measures;
- ES: Volume 2: Main Text: this will contain the main body of the EIA with the proposed chapter headings as set out below;
- ES Volume 3: Townscape, Visual Impact Assessment (TVIA): the methodology and findings of the TVIA accompanied by a full set of views and verified images; and
- ES Volume 4: Technical Appendices: these will provide supplementary details of the environmental studies conducted during the EIA including relevant data tables, figures and photographs.

8.3.4 It is currently envisaged that the ES Volume 2: Main Text will be structured with the following Chapter Headings

- Chapter 1: Introduction
- Chapter 2: EIA Process and Methodology;
- Chapter 3: Alternatives and Design Evolution;
- Chapter 4: Proposed Development
- Chapter 5: Demolition and Construction
- Chapter 6: Daylight, Sunlight and Overshadowing;
- Chapter 7: Wind Microclimate
- Chapter 8: Socioeconomics and Human Health
- Chapter 9: Climate Change
- Chapter 10: Intra Cumulative Effects; and
- Chapter 11: Summary of Mitigation and Residual Effects

9. CONCLUSION AND SUMMARY

- 9.1.1 This report sets out the scope of the proposed EIA for a residential development for land off Lord Street, Cheetham Hill, Manchester. This report sets out information in line with the EIA Regulations, including the site location and a description of the proposed development.
- 9.1.2 This report is prepared to accompany a requests for a formal Scoping Opinion from MCC in line with Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.
- 9.1.3 Manchester City Council and statutory consultees are invited to consider the contents of this report and comment accordingly within the five-week period prescribed by the EIA Regulations.

APPENDIX 1 ASSESSMENT CRITERIA

A consistent approach to assessment criteria and terminology will be used in the ES where appropriate, unless specific alternative terminology exists within topic specific guidance. Where topics deviate from this criteria, this has been set out in the relevant section and will be defined within the ES.

The sensitivity of receptors will be classified as:

- Low;
- Medium; or
- High.

The magnitude of impact will be classified as:

- Low;
- Medium; or
- High.

The scale of effect will be determined by the consideration of the sensitivity/value of the receptor and the magnitude of impact as presented in Table A1.

Table A1: Scale of Effects Matrix (Significant Effects in Bold)

		Magnitude of Change (Impact)		
		Low	Medium	High
Sensitivity of Receptor	Low	Negligible	Minor	Minor
	Medium	Minor	Moderate	Moderate
	High	Minor	Major	Major

Residual effects will be predicted as either '**significant**' or '**not significant**'. Residual effects of moderate and major scale are typically considered significant, but would be dependent on the relevant technical assessment, as well as the existence of published assessment guidance. Where published assessment guidance is not definitive in respect of categorising/determining significant environmental effects, professional judgement will be applied.

Table A2 sets out additional terminology that will be used to describe the type/nature of effects.

Table A2: Type/Nature of Effects

Effect	Example
Adverse	Detrimental or negative effect to an environmental resource or receptor.
Neutral	An effect that on balance, is neither beneficial nor adverse to an environmental resource or receptor OR an effect that is equally beneficial and adverse to an environmental resource or receptor ¹⁷ .
Beneficial	Advantageous or positive effect to an environmental resource or receptor.

¹⁷ In respect of the TVBHIA it is possible for Neutral residual effects to be classed as 'significant' for situations in which the 'net equation' of beneficial and adverse impacts considered together results in an overall effect which is neither beneficial or adverse on balance (e.g. due to their guidance, a townscape and visual impact assessment can result in a 'moderate neutral' effect, which would be classed as 'significant').

Effect	Example
Direct	Direct effects are those which arise as a direct consequence of a project action, e.g. the loss of habitat or the run-off of surface water to a watercourse.
Indirect (secondary)	Indirect effects include, for example, the decline in the abundance of a species as a result of the loss of habitat or the damage to aquatic vegetation as a result of water pollution. Other common examples include the effect on air quality and ambient noise as a result of increased traffic flows.
Cumulative	The combined effects of impacts.
Intra	Effect of the project in combination of other reasonably foreseeable projects (refer to Cumulative Effects section later in this chapter).
Inter	Effect of the project in combination with each other on the same receptor (refer to Cumulative Effects section later in this chapter).
Long term	10 years +
Medium term	5-10 years
Short Term	up to 5 years.
Reversible	Capable of being reversed so that the previous state or situation is restored.
Irreversible	Permeant.
Adverse	Detrimental or negative effect to an environmental resource or receptor.
Neutral	An effect that on balance, is neither beneficial nor adverse to an environmental resource or receptor OR an effect that is equally beneficial and adverse to an environmental resource or receptor ¹⁸ .

¹⁸ In respect of the TVBHIA it is possible for Neutral residual effects to be classed as 'significant' for situations in which the 'net equation' of beneficial and adverse impacts considered together results in an overall effect which is neither beneficial or adverse on balance (e.g. due to their guidance, a townscape and visual impact assessment can result in a 'moderate neutral' effect, which would be classed as 'significant').

APPENDIX 2

PROPOSED CUMULATIVE SCHEMES

TABLE A2.1: PROPOSED CUMULATIVE SCHEMES

Number	Planning Ref	Proposals	Status
1	137941/FO/2023 Brewery Gardens	Residential led mixed use development for 505 apartments with commercial uses. Development comprises two buildings (one part 29, 25 and 20 storeys, one 12 storeys).	Under construction
2	132416/FO/2021 Land bounded by the Travelodge And Surface Level Carparking to the north, Further Surface Level Carparking to the east, Manchester College to the south and Bury New Road to the west. 935 metres from the site.	Residential led mixed use development for 461 apartments with ground floor commercial uses, comprising two buildings part 27, 20, 17 storeys and part 11 and 10 storeys.	Approved
3	122280/FO/2019 Land bounded by Great Ducie Street and Mirabel Street Manchester M3 1PJ 550 metres from the site.	Residential led mixed use development for 84 residential apartments comprising one ten-storey building for 45 apartments, and one 14 storey building for 84 apartments. Commercial uses on the ground floor.	Approved
4	19/74205/FULEIA Land Corner New Bridge Street And, Greengate, Salford 700 metres from the site.	A single building with two blocks (14 and 55 storeys) to include: 542 residential apartments, commercial at ground.	Approved
5	22/80890/REM (submitted pursuant to 21/78473/HYBEIA (Section 73 permission)) Original consent 19/74465/HYBEIA	Phases 2 and 3 only	Approved

	(Salford City Council) 860 metres from the site.	Phase 2? 40-storey (plus ground) building containing 518 apartments, ground floor commercial space	
6	118831/FO/2018 Former Boddingtons Brewery Site, Dutton Street, Manchester, M3 1LE 935 metres from the site.	Residential led mixed use development for 536 residential units, comprising two buildings (one maximum 17 storeys and one maximum 26 storeys). Commercial floor space included.	Under construction
7	136492/FO/2023 Manchester College 415 metres from the site.	Phase 2 of the new city centre campus for the Manchester College and UCEN Manchester 5,870 square metres educational floorspace within a 5 storey building.	Completed
8	136812/OO/2023 136814/FO/2023 Red Bank Victoria 210 metres from the site.	Residential scheme including 4,800 units across in multiple buildings ranging from 6 to 34 storeys.	Outline / Approved
9	138696/FO/2023 Land At 33 - 41 Cheetham Hill Road Manchester M4 4FT 50 metres from the site.	Residential led development comprising a part 17 / part 23-storey residential development comprising 237 apartments.	Approved
10	138302/FO/2023 1 Park Place Manchester M4 4EZ 110 m from the site.	Part 25 and part 15 storey residential building comprising 154 apartments.	Approved
11	126944/FO/2020	Residential led scheme, comprising three towers (37, 26 and 18 storeys) and podium levels (6 storey) to form	Under construction

	Land Bound by Dantzic Street, Gould Street, Williamson Street and Bromley Street (known as Victoria Riverside) 425 metres from the site.	Residential led mixed use scheme for up to 634 residential apartments and townhouse accommodation together with commercial accommodation (1,222 sqm).	
12	116366/FO/2017 124120/JO/2019 Land Bounded by Dantzic Street and Aspin Lane, Land Bounded by Gould Street and Angel Meadows and Land bounded by Old Mount Street, School Street, Naples Street and Ludgate Street 480 metres from the site.	Four residential buildings (22 storey building, 17 storey building, 40 storey building and part 12, part 9 storey building) to form 756 residential apartments together with ground floor commercial uses (616 sqm).	Three plots completed One further plot Approved
13	134092/FO/2022 Land At Corporation Street "New Victoria Phase 2" 475 metres from the site.	10 storey office building with ground floor commercial unit	Approved
14	EIASCO/25/011 50-54 Red Bank 180 metres from the site.	Residential led scheme for 589 units, comprising one 43 storey and one 18 storey building.	EIA scoping opinion request (pre-planning)

APPENDIX 3 CONTENT OF ES

Appendix 3, Table 1: Proposed Structure of ES	
Section	Content Summary
Non-Technical Summary (NTS)	A summary of the information provided in the ES.
Chapter 1 Introduction	The purpose and layout of the ES, the planning context, and the relevant experience and or qualifications of the experts who have prepared the ES. A description of the site location and its surroundings.
Chapter 2 Process and Methodology	The legislative framework, provides details of scoping outcomes, outlines the assessment methodology, and details of the cumulative schemes that will be considered;
Chapter 3 Alternatives	Provides a description of the reasonable alternatives studied by the applicant as relevant to the Proposed Development (e.g., implementing the consented development), and the reasons for the selection of the chosen option, including a comparison of the environmental effects along with the reasons for the selection of the preferred option. Where applicable it will detail the evolution of the Proposed Development.
Chapter 4 Project Description	A description of the Proposed Development containing information on the physical characteristics and land use requirements of the Proposed Development during the demolition and construction works and the completed development and the main characteristics of the operational stage of the Proposed Development including energy demand, nature and quantity of the materials and natural resources used (water, land, soil and biodiversity).
Chapter 5 Demolition and Construction	Includes information on demolition and construction phase, along with construction management controls that will be in place.
Topic Chapters	Separate Chapters will be provided for each of the scoped in topics. To include: relevant aspects of the baseline and an outline of the likely evolution thereof without the implementation of the Proposed Development; factors of the environment likely to be significantly affected by the Proposed Development; the likely significant effects of the Proposed Development; mitigation; and residual effects.
Cumulative Effects	The following types of cumulative effects will be considered: Intra-Project effects of different types of impact from the Proposed Development on particular receptors at or surrounding the site. Potential impact interactions include the combined effects of noise, dust and visual impacts during construction of the Proposed Development on a particular sensitive receptor; and

	Inter-Project effects which are combined effects generated from the Proposed Development with other existing and/or approved developments. These other developments may generate their own individually insignificant effects but when considered together could amount to a significant cumulative effect, for example, combined townscape and visual impacts from two or more (existing and/or approved) developments.
Residual Effects	A summary of any significant residual effects, subsequent to implementation of mitigation.

APPENDIX 4

AIR QUALITY ASSESSMENT

Air Quality Assessment
Lord Street, Manchester

Client: Linear Living Ltd

Reference: 9835r1

Date: 16th October 2025



Report Issue

Report Title: Air Quality Assessment - Lord Street, Manchester

Report Reference: 9835

Field	Report Version			
	1	2	3	4
Prepared by	Hannah Whitaker			
Position	Graduate Air Quality Consultant			
Reviewed by	Megan Pond			
Position	Air Quality Consultant			
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Date of Issue	16 th October 2025			
Comments	-			

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This report has been prepared by Redmore Environmental Ltd in accordance with the agreed terms and conditions of appointment. Redmore Environmental Ltd cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.

Executive Summary

Redmore Environmental Ltd was commissioned by Linear Living Ltd to undertake an Air Quality Assessment in support of a residential development at Lord Street, Manchester.

An Air Quality Assessment was undertaken to:

- Assess potential impacts associated with fugitive dust emissions during the construction phase of the proposed development;
- Assess potential impacts associated with road transport emissions during the operational phase of the proposed development;
- Assess risk of exposure of future residents to any existing air quality issues; and,
- Identify the requirement for relevant mitigation measures.

Potential construction phase air quality impacts from fugitive dust emissions were assessed as a result of demolition, earthworks, construction and trackout activities. It is considered that the use of the identified site-specific control measures would provide suitable mitigation for a development of this size and nature and reduce potential impacts to an acceptable level.

Potential impacts during the operational phase of the proposals may occur due to road traffic exhaust emissions associated with vehicles travelling to and from the site. These were assessed using standard screening criteria. Based on the nature of the proposals, road traffic exhaust emission impacts were not predicted to be significant.

The proposal has the potential to expose future residents to elevated pollution levels. Dispersion modelling was therefore undertaken in order to predict concentrations across the site as a result of emissions from the highway network. Results were subsequently verified using local monitoring data.

The results of the dispersion modelling assessment indicated that predicted pollutant concentrations were below the relevant criteria across the development. As such, the site is considered suitable for the proposed end use from an air quality perspective and mitigation is not required.

A number of mitigation measures were identified in line with the requirements of Manchester City Council's 'Air Quality and Planning Technical Guidance' in order to reduce vehicle exhaust

emissions associated with the proposals. It is considered these are appropriate for a development of this scale and nature and will further control impacts during the operational phase.

Based on the assessment results, air quality factors are not considered a constraint to planning consent for the development.

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Appendix 1 - Assessment Input Data

Appendix 2 - Curricula Vitae

1.0 INTRODUCTION

1.1 Instruction

- 1.1.1 Redmore Environmental Ltd was commissioned by Linear Living Ltd to undertake an Air Quality Assessment in support of a residential development at Lord Steet, Manchester.

1.2 Site Location and Context

- 1.2.1 The site is located at Lord Street, Manchester, at approximate National Grid Reference (NGR): 384138, 399430. The relevant Local Authority (LA) is Manchester City Council (MCC). Reference should be made to Figure 1 for a map of the site and surrounding area.
- 1.2.2 The proposals comprise the clearance of the existing structure on site and the construction of a 20-storey residential building to provide four townhouses at the ground floor level and 217 single-storey apartments.

1.3 Assessment Scope

- 1.3.1 The development proposals have the potential to cause air quality impacts. As such, an Air Quality Assessment was undertaken to:
- Assess potential impacts associated with fugitive dust emissions during the construction phase of the proposed development;
 - Assess potential impacts associated with road transport emissions during the operational phase of the proposed development;
 - Assess risk of exposure of future residents to any existing air quality issues; and,
 - Identify the requirement for relevant mitigation measures.
- 1.3.2 This is detailed in the following report.

2.0 LEGISLATION AND POLICY

2.1 Legislation

2.1.1 The Air Quality Standards Regulations (2010) and subsequent amendments include Air Quality Limit Values (AQLVs) for the following pollutants:

- Nitrogen dioxide (NO₂);
- Sulphur dioxide;
- Lead;
- Particulate matter with an aerodynamic diameter of less than 10µm (PM₁₀);
- Particulate matter with an aerodynamic diameter of less than 2.5µm (PM_{2.5});
- Benzene; and,
- Carbon monoxide.

2.1.2 Air Quality Target Values have also been provided for several additional pollutants. It should be noted that the AQLV for PM_{2.5} stated in the Air Quality Standards Regulations (2010) was amended in the Environment (Miscellaneous Amendments) (EU Exit) Regulations (2020).

2.1.3 The Air Quality Strategy (AQS) was produced by the Department for Environment, Food and Rural Affairs (DEFRA) and published on 28th April 2023¹. The document contains standards, objectives and measures for improving ambient air quality, including a number of Air Quality Objectives (AQOs). These are maximum ambient pollutant concentrations that are not to be exceeded either without exception or with a permitted number of exceedences over a specified timescale. These are generally in line with the AQLVs, although the requirements for the determination of compliance vary.

2.1.4 The Environmental Improvement Plan 2023² was published in January 2023, providing long term and Interim Targets in order to reduce population exposure to PM_{2.5}. The Concentration Target for 2040 was subsequently adopted in the Environmental Targets (Fine Particulate Matter) (England) Regulations (2023).

¹ AQS: Framework for Local Authority Delivery, DEFRA, 2023.

² Environmental Improvement Plan 2023, DEFRA, 2023.

2.1.5 Table 1 presents the AQOs and Interim Target and Concentration Target for pollutants considered within this assessment.

Table 1 Air Quality Objectives/Interim Target/Concentration Target

Pollutant	Air Quality Objective/Interim Target	
	Concentration ($\mu\text{g}/\text{m}^3$)	Averaging Period
NO ₂	40	Annual mean
	200	1-hour mean, not to be exceeded on more than 18 occasions per annum
PM ₁₀	40	Annual mean
	50	24-hour mean, not to be exceeded on more than 35 occasions per annum
PM _{2.5}	12 ^(a)	Annual mean
	10 ^(b)	Annual Mean

Note: (a) Interim Target to be achieved by end of January 2028.

(b) Concentration Target to be achieved by 2040.

2.1.6 Table 2 summarises the advice provided in DEFRA guidance³ on where the AQOs for pollutants considered within this report apply.

Table 2 Examples of Where the Air Quality Objectives Apply

Averaging Period	Objective Should Apply At	Objective 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

³ Local Air Quality Management Technical Guidance (TG22), DEFRA, 2022.

Averaging Period	Objective Should Apply At	Objective Should Not Apply At
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 and 8-hour mean objectives apply. Kerbside sites (for example, pavements of busy shopping streets) Those parts of car parks, bus stations and 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	Kerbside sites where the public would not be expected to have regular access

2.2 Local Air Quality Management

- 2.2.1 LAs are required to periodically review and assess air quality within their area of jurisdiction under the system of Local Air Quality Management (LAQM). This review and assessment of air quality involves comparing present and likely future pollutant concentrations against the AQOs. If it is predicted that levels at locations of relevant exposure, as summarised in Table 2, are likely to be exceeded, the LA is required to declare an Air Quality Management Area (AQMA). For each AQMA the LA is required to produce an Air Quality Action Plan, the objective of which is to reduce pollutant concentrations in pursuit of the AQOs.

2.3 Dust

- 2.3.1 The main requirements with respect to dust control from industrial or trade premises not regulated under the Environmental Permitting (England and Wales) Regulations (2016) and subsequent amendments, such as construction sites, is that provided in Section 79 of Part III of the Environmental Protection Act (1990). The Act defines nuisance as:

"any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance."

2.3.2 Enforcement of the Act, in regard to nuisance, is currently under the jurisdiction of the local Environmental Health Department, whose officers are deemed to provide an independent evaluation of nuisance. If the LA is satisfied that a statutory nuisance exists, or is likely to occur or happen again, it must serve an Abatement Notice under Part III of the Environmental Protection Act (1990). The only defence is to show that the process to which the nuisance has been attributed and its operation are being controlled according to best practicable means.

2.4 National Planning Policy

2.4.1 The revised National Planning Policy Framework⁴ (NPPF) was published in December 2024 and amended in February 2025. It sets out the Government's planning policies for England and how these are expected to be applied.

2.4.2 The purpose of the planning system is to contribute to the achievements of sustainable development. In order to ensure this, the NPPF recognises three overarching objectives including the following of relevance to air quality:

"c) an environmental objective - to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."

2.4.3 Chapter 15 of the NPPF details objectives in relation to conserving and enhancing the natural environment. It states that:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

[...]

e) preventing new and existing development from contributing to, or being put at unacceptable risk from, or being adversely affected by, unacceptable levels of

⁴ NPPF, Ministry of Housing, Communities and Local Government, 2024.

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 [...]"

- 2.4.4 The NPPF specifically recognises air quality as part of delivering sustainable development and states that:

"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."

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

2.5 **National Planning Practice Guidance**

- 2.5.1 The National Planning Practice Guidance⁵ (NPPG) web-based resource was launched by the Department for Communities and Local Government to support the NPPF and make it more accessible. The air quality pages are summarised under the following headings:

1. What air quality considerations does planning need to address?
2. What is the role of plan-making with regard to air quality?
3. Are air quality concerns relevant to neighbourhood planning?
4. What information is available about air quality?
5. When could air quality be relevant to the planning development management process?
6. What specific issues may need to be considered when assessing air quality impacts?

⁵ <https://www.gov.uk/guidance/air-quality--3>.

7. How detailed does an air quality assessment need to be?
8. How can an impact on air quality be mitigated?

2.5.2 These were reviewed and the relevant guidance considered as necessary throughout the undertaking of this assessment.

2.6 Regional Planning Policy

2.6.1 The Places for Everyone Plan (PfEP)⁶ was produced by the Greater Manchester Combined Authority (GMCA) and became part of the statutory development plan for MCC on 21st March 2024.

2.6.2 A review of the PfEP indicated the following policies of relevance to air quality that have been considered throughout this assessment:

"Policy JP:S5: Clean Air

A comprehensive range of measures will be taken to support improvements in air quality, focusing particularly on locations where people live, where children learn and play, where there are impacts on the green infrastructure network and where air quality targets are not being met, including:

1. Locating and designing development, and focusing transport investment, so as to reduce reliance on forms of transport that generate air pollution;
2. Determining planning applications having regard to the most recent development and planning control guidance published jointly by the Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK), and the most recent IAQM Guidance on the Assessment of Dust from Demolition and Construction, or relevant successor guidance, including the requirement for developers to submit construction management plans as appropriate;
3. Requiring applications for developments that could have an adverse impact on air quality to submit relevant air pollution data so that adverse impacts on air

⁶ PfEP, GMCA, 2024.

quality can be fully assessed and development only permitted where they are acceptable and/or suitable mitigation can be provided;

4. Restricting developments that would generate significant point source pollution such as some types of industrial activity and energy generation;

5. Significantly expanding the existing commercial network of electric vehicle charging points, both for public and private use, including as part of new developments;

6. Implementing the Clean Air Plan and associated measures;

7. Facilitating the more sustainable distribution of goods within the urban area, including through accommodating urban consolidation centres and urban distribution centres that use ultra-low-emission vehicles, and local delivery facilities to reduce repeat delivery attempts;

8. Designing streets to avoid trapping air pollution at ground level, including through the appropriate location and scale of buildings and trees;

9. Controlling traffic and parking within and around schools, early years sites and other locations that are particularly sensitive to air quality;

10. Promoting actions that help remove pollutants from the air, such as enhancing the green infrastructure network and using innovative building materials that capture air pollutants; and,

11. Development should be located in areas that maximise the use of sustainable travel modes and be designed to minimise exposure to high levels of air pollution, particularly for vulnerable users."

"Policy JP-P1 Sustainable Places

We aim to become one of the most liveable city regions in the world, consisting of a series of beautiful, healthy and varied places, each having the following key attributes that all development, wherever appropriate, should be consistent with:

[...]

15. Comfortable and inviting, with indoor and outdoor environments:

A. Offering a high level of amenity that minimises exposure to pollution; and,

[...]."

2.6.3 The above policies were considered as necessary throughout the undertaking of the assessment.

2.7 Local Planning Policy

2.7.1 The Manchester Local Development Framework consists of a series of planning documents of which the Core Strategy Development Plan Document (DPD)⁷ is central. This was adopted by MCC on 11th July 2012.

2.7.2 Review of the Core Strategy DPD indicated the following policies of relevance to the assessment:

"Policy EN 16

Air Quality

The Council will seek to improve the air quality within Manchester, and particularly within Air Quality Management Areas, located along Manchester's principal traffic routes and at Manchester Airport. Developers will be expected to take measures to minimise and mitigate the local effect of emissions from traffic generated by the development, as well as emissions created by the use of the development itself, including from Combined Heat and Power and biomass plant.

When assessing the appropriateness of locations for new development the Council will consider the effects on air quality, alongside other plan objectives. This includes cumulative effects, particularly in Air Quality Management Areas."

⁷ Core Strategy DPD, MCC, 2012.

"Policy DM 1

Development Management

All development should have regard to the following specific issues for which more detailed guidance may be given within a supplementary planning document:

[...]

Effects on amenity, including privacy, light, noise, vibration, air quality, odours, litter, vermin, birds, road safety and traffic generation. This could also include proposals which would be sensitive to existing environmental conditions, such as noise."

2.7.3 MCC has also produced the 'Air Quality & Planning Technical Guidance' Document⁸ which provides guidance on assessing the impact of proposed development on air quality.

2.7.4 The above policies and guidance were taken into consideration throughout the undertaking of the assessment.

2.8 Greater Manchester Clean Air Plan

2.8.1 The UK Government has instructed a number of LAs to take rapid action to reduce harmful roadside levels of NO₂ within their areas of jurisdiction in the quickest possible timeframe. The GMCA and Transport for Greater Manchester (TfGM) have collaborated to develop a Clean Air Plan (CAP) to ensure Greater Manchester achieves compliance with the relevant AQOs for NO₂ by 2026 at the latest. The initial CAP proposal included implementation of a Class C charging Clean Air Zone. The GMCA has subsequently updated the CAP proposals⁹ to comprise an investment-led, non-charging approach. This was approved by the UK Government on 23rd January 2025. The implications of the CAP were taken into account during the undertaking of this assessment.

⁸ Air Quality & Planning Technical Guidance, MCC, 2022.

⁹ Case for a New GM Clean Air Plan, GMCA and TfGM, 2022.

3.0 METHODOLOGY

3.1 Introduction

3.1.1 The proposed development has the potential to cause air quality impacts during the construction and operational phases, as well as expose future residents to elevated pollution levels. These factors have been assessed in accordance with the following methodology.

3.2 Construction Phase Fugitive Dust Emissions

3.2.1 There is the potential for fugitive dust emissions to occur as a result of construction phase activities. These have been assessed in accordance with the methodology outlined within the Institute of Air Quality Management (IAQM) document 'Guidance on the Assessment of Dust from Demolition and Construction V2.2'¹⁰.

3.2.2 Activities on the proposed construction site have been divided into four to reflect their different potential impacts. These are:

- Demolition;
- Earthworks;
- Construction; and,
- Trackout.

3.2.3 The potential for dust emissions was assessed for each activity that is likely to take place and considered three separate dust effects:

- Annoyance due to dust soiling;
- Harm to ecological receptors; and,
- The risk of health effects due to a significant increase in exposure to PM₁₀.

3.2.4 The assessment steps are detailed below.

¹⁰ Guidance on the Assessment of Dust from Demolition and Construction V2.2, IAQM, 2024.

Step 1 - Screen the Need for an Assessment

- 3.2.5 Step 1 screens the requirement for a more detailed assessment. Should human receptors be identified within 250m from the boundary or 50m from the construction vehicle route up to 250m from the site entrance, then the assessment proceeds to Step 2. Additionally, should ecological receptors be identified within 50m of the site or the construction vehicle route up to 250m from the site entrance, then the assessment also proceeds to Step 2.
- 3.2.6 Should sensitive receptors not be present within the relevant distances then **negligible** impacts would be expected and further assessment is not necessary.

Step 2 - Assess the Risk of Dust Impacts

- 3.2.7 Step 2 assesses the risk of potential dust impacts. A site is allocated a risk category based on two factors:
- The scale and nature of the works, which determines the magnitude of dust arising as: small, medium or large (Step 2A); and,
 - The sensitivity of the area to dust impacts, which can be defined as low, medium or high sensitivity (Step 2B).
- 3.2.8 The two factors are combined in Step 2C to determine the risk of dust impacts without mitigation applied.
- 3.2.9 Step 2A defines the potential magnitude of dust emission through the construction phase. The relevant criteria are summarised in Table 3.

Table 3 Construction Dust - Magnitude of Emission

Magnitude	Activity	Criteria
Large	Demolition	• Total building volume greater than 75,000m³ • Potentially dusty construction material (e.g. concrete) • On-site crushing and screening • Demolition activities more than 12m above ground level

Magnitude	Activity	Criteria
	Earthworks	- Total site area greater than 110,000m² - Potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size) - More than 10 heavy earth moving vehicles active at any one time - Formation of bunds greater than 6m in height
	Construction	- Total building volume greater than 75,000m³ - On site concrete batching - Sandblasting
	Trackout	- More than 50 Heavy Duty Vehicle (HDV) trips per day - Potentially dusty surface material (e.g. high clay content) - Unpaved road length greater than 100m
Medium	Demolition	- Total building volume between 12,000m³ and 75,000m³ - Potentially dusty construction material - Demolition activities between 6m and 12m above ground level
	Earthworks	- Total site area 18,000m² to 110,000m² - Moderately dusty soil type (e.g. silt) 5 to 10 heavy earth moving vehicles active at any one time - Formation of bunds 3m to 6m in height
	Construction	- Total building volume 12,000m³ to 75,000m³ - Potentially dusty construction material (e.g. concrete) - On site concrete batching
	Trackout	20 to 50 HDV trips per day - Moderately dusty surface material (e.g. high clay content) - Unpaved road length 50m to 100m
Small	Demolition	- Total building volume less than 12,000m³ - Construction material with low potential for dust release (e.g. metal cladding or timber) - Demolition activities less than 6m above ground - Demolition during wetter months

Magnitude	Activity	Criteria
	Earthworks	- Total site area less than 18,000m² - Soil type with large grain size (e.g. sand) - Less than 5 heavy earth moving vehicles active at any one time - Formation of bunds less than 3m in height
	Construction	- Total building volume less than 12,000m³ - Construction material with low potential for dust release (e.g. metal cladding or timber)
	Trackout	- Less than 20 HDV trips per day - Surface material with low potential for dust release - Unpaved road length less than 50m

3.2.10 Step 2B defines the sensitivity of the area around the development to potential dust impacts. The sensitivities of specific receptors are summarised in Table 4.

Table 4 Construction Dust - Sensitivities of People and Ecological Receptors

Receptor Sensitivity	Examples	
	Human Receptors	Ecological Receptors
High	- Users expect high levels of amenity - High aesthetic or value property - People expected to be present continuously for extended periods of time - Locations where members of the public are exposed over a time period relevant to the AQO for PM₁₀. e.g. residential properties, hospitals, schools and residential care homes	Internationally or nationally designated site e.g. Special Area of Conservation
Medium	- Users would expect to enjoy a reasonable level of amenity - Aesthetics or value of their property could be diminished by soiling - People or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land e.g. parks and places of work	Nationally designated site e.g. Sites of Special Scientific Interest

Receptor Sensitivity	Examples	
	Human Receptors	Ecological Receptors
Low	• Enjoyment of amenity would not reasonably be expected • Property would not be expected to be diminished in appearance • Transient exposure, where people would only be expected to be present for limited periods. e.g. public footpaths, playing fields, shopping streets, farmland, short term car parks and roads	• Locally designated site e.g. Local Nature Reserve

3.2.11 The criteria for determining the sensitivity of the area to dust soiling effects on people and property is summarised in Table 5.

Table 5 Construction Dust - Sensitivity of the Area to Dust Soiling Effects on People and Property

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		Less than 20	Less than 50	Less than 100	Less than 250
High	More than 100	High	High	Medium	Low
	10 - 100	High	Medium	Low	Low
	1 - 10	Medium	Low	Low	Low
Medium	More than 1	Medium	Low	Low	Low
Low	More than 1	Low	Low	Low	Low

3.2.12 Table 6 outlines the criteria for determining the sensitivity of the area to human health impacts.

Table 6 Construction Dust - Sensitivity of the Area to Human Health Impacts

Receptor Sensitivity	Background Annual Mean PM ₁₀ Concentration	Number of Receptors	Distance from the Source (m)			
			Less than 20	Less than 50	Less than 100	Less than 250
High	Greater than 32µg/m ³	More than 100	High	High	High	Medium

Receptor Sensitivity	Background Annual Mean PM ₁₀ Concentration	Number of Receptors	Distance from the Source (m)			
			Less than 20	Less than 50	Less than 100	Less than 250
		10 - 100	High	High	Medium	Low
		1 - 10	High	Medium	Low	Low
	28 - 32µg/m ³	More than 100	High	High	Medium	Low
		10 - 100	High	Medium	Low	Low
		1 - 10	High	Medium	Low	Low
	24 - 28µg/m ³	More than 100	High	Medium	Low	Low
		10 - 100	High	Medium	Low	Low
		1 - 10	Medium	Low	Low	Low
	Less than 24µg/m ³	More than 100	Medium	Low	Low	Low
		10 - 100	Low	Low	Low	Low
		1 - 10	Low	Low	Low	Low
Medium	Greater than 32µg/m ³	More than 10	High	Medium	Low	Low
		1 - 10	Medium	Low	Low	Low
	28 - 32µg/m ³	More than 10	Medium	Low	Low	Low
		1 - 10	Low	Low	Low	Low
	24 - 28µg/m ³	More than 10	Low	Low	Low	Low
		1 - 10	Low	Low	Low	Low
	Less than 24µg/m ³	More than 10	Low	Low	Low	Low
		1 - 10	Low	Low	Low	Low
Low	-	1 or more	Low	Low	Low	Low

3.2.13 Table 7 outlines the criteria for determining the sensitivity of the area to ecological impacts.

Table 7 Construction Dust - Sensitivity of the Area to Ecological Impacts

Receptor Sensitivity	Distance from the Source (m)	
	Less than 20	Less than 50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

3.2.14 Step 2C combines the dust emission magnitude with the sensitivity of the area to determine the risk of unmitigated impacts.

3.2.15 Table 8 outlines the risk category from demolition activities.

Table 8 Construction Dust - Dust Risk Category from Demolition Activities

Receptor Sensitivity	Dust Emission Magnitude		
	Large	Medium	Small
High	High	Medium	Medium
Medium	High	Medium	Low
Low	Medium	Low	Negligible

3.2.16 Table 9 outlines the risk category from earthworks, construction and trackout activities.

Table 9 Construction Dust - Dust Risk Category from Earthworks, Construction and Trackout Activities

Receptor Sensitivity	Dust Emission Magnitude		
	Large	Medium	Small
High	High	Medium	Low
Medium	Medium	Medium	Low
Low	Low	Low	Negligible

Step 3 - Site-specific Mitigation

3.2.17 Step 3 requires the identification of site-specific mitigation measures within the IAQM guidance¹¹ to reduce potential dust impacts based upon the relevant risk categories identified in Step 2. For sites with **negligible** risk, mitigation measures beyond those required by legislation are not required. However, additional controls may be applied as part of good practice.

Step 4 - Determine Significance

3.2.18 Once the risk of dust impacts has been determined and the appropriate mitigation measures identified, the final step is to determine the significance of any residual impacts. For almost all construction activity, the aim should be to control effects through the use of effective mitigation. Experience shows that this is normally possible. Hence the residual effect will normally be **not significant**.

3.2.19 The determination of significance relies on professional judgement and reasoning should be provided as far as practicable. The IAQM guidance suggests the provision of details of the assessor's qualifications and experience. These are provided in Appendix 2.

3.3 Operational Phase Assessment

Potential Development Impacts

3.3.1 The development has the potential to increase concentrations of NO₂, PM₁₀ and PM_{2.5} as a result of road traffic exhaust emissions associated with vehicles travelling to and from the site during the operational phase. A screening assessment was therefore undertaken using the criteria contained within the IAQM 'Land-Use Planning & Development Control: Planning for Air Quality'¹² guidance to determine the potential for trips generated by the development to affect local air quality.

3.3.2 The following criteria are provided to help establish when an assessment of potential impacts on the local area is likely to be considered necessary:

¹¹ Guidance on the Assessment of Dust from Demolition and Construction V2.2, IAQM, 2024.

¹² Land-Use Planning & Development Control: Planning for Air Quality, IAQM, 2017.

A. If any of the following apply:

- 10 or more residential units or a site area of more than 0.5ha; or,
- More than 1,000 m² of floor space for all other uses or a site area greater than 1ha.

B. Coupled with any of the following:

- The development has more than 10 parking spaces; or,
- The development will have a centralised energy facility or other centralised combustion process.

3.3.3 Should these criteria not be met, then the IAQM guidance¹³ considers air quality impacts associated with a scheme to be **not significant** and no further assessment is required.

Potential Future Exposure

3.3.4 The proposals have the potential to expose future residents to elevated pollution levels as a result of road vehicle exhaust emissions in the vicinity of the site. In order to assess NO₂, PM₁₀ and PM_{2.5} concentrations across the development, detailed dispersion modelling was undertaken. Reference should be made to Appendix 1 for a full description of the assessment input data.

3.3.5 The dispersion modelling results were compared against the relevant AQOs and Interim Target in order to determine the potential for exposure of future residents to elevated pollutant concentrations and identify appropriate mitigation, if necessary.

¹³ Land-Use Planning & Development Control: Planning for Air Quality, IAQM, 2017.

4.0 BASELINE

4.1 Introduction

- 4.1.1 Existing air quality conditions in the vicinity of the proposed development site were identified to provide a baseline for assessment. These are detailed in the following Sections.

4.2 Local Air Quality Management

- 4.2.1 As required by the Environment Act (1995), as amended by the Environment Act (2021), MCC has undertaken Review and Assessment of air quality within its area of jurisdiction. This process has indicated that annual mean concentrations of NO₂ are above the AQO within the city. As such, a number of roads within Manchester have been included within the GMCA AQMA. This is described as follows:

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

- 4.2.2 The development is located within the AQMA. As such, there is the potential for vehicles travelling to and from the site to increase pollution levels in this sensitive area, as well as the exposure of future residents to poor air quality. This has been considered throughout the assessment.
- 4.2.3 MCC has concluded that concentrations of all other pollutants considered within the AQS are currently below the relevant AQOs. As such, no further AQMA's have been designated.

4.3 Air Quality Monitoring

- 4.3.1 Monitoring of pollutant levels is undertaken by MCC throughout its area of jurisdiction. Data has also been collected by the GMCA to inform the CAP. Recent NO₂ concentrations recorded in the vicinity of the development, as provided in GMCA's '2024

Air Quality Annual Status Report (ASR)¹⁴ and 'CAP NO₂ Diffusion Tube Results 2011-2024'¹⁵, are shown in Table 10. Exceedances are shown in **bold**.

Table 10 Monitoring Results

Monitoring Site		Monitored Annual Mean NO ₂ Concentration (µg/m ³)		
		2022	2023	2024
CAP_SALF_060	A6042 (Trinity Way)	31.0	33.7	31.3
CAP_MANC_051	A665 (Miller Street)	50.2	-(a)	49.0
CAP_MANC_076	A665 (Miller Street)	29.5	27.3	26.4
CAP_MANC_077	A665 (Miller Street)	32.2	29.1	27.6
CAP_MANC_115	Gt Ducie St	34.6	33.2	-(b)
CAP_MANC_116	Gt Ducie St	39.1	-(c)	-(c)
CAP_MANC_136	A665	44.1	-(a)	41.7
CAP_MANC_137	A665	46.9	43.6	-(a)
CAP_MANC_192	A56 (Great Ducie Street)	-(d)	-(d)	29.3
MA26ANO	Chethams School	27.5	24.5	24.6
MA88NO	Angel St	35.7	32.7	30.3
MA104BNO	Cheetwood Primary School, Waterloo Road	37.9	34.5	31.1

Note: (a) Data not available.

(b) Monitor decommissioned in 2024.

(c) Monitor decommissioned in 2023.

(d) Monitor commissioned in 2024.

- 4.3.2 As shown in Table 10, annual mean NO₂ concentrations were above the AQO of 40µg/m³ at the CAP_MANC_051, CAP_MANC_136 and CAP_MANC_137 monitors in recent years. As the survey sites were located at roadside positions adjacent to an A-road within an AQMA, elevated results would be expected. Concentrations were below the AQO at all other monitoring locations in recent years.

¹⁴ 2024 Air Quality ASR, GMCA, 2025.

¹⁵ Greater Manchester LAQM and CAP NO₂ Diffusion Tube Results 2011-2024, GMCA, 2025.

4.3.3 Monitoring of PM₁₀ and PM_{2.5} is not undertaken within the vicinity of the site.

4.4 **Background Pollutant Concentrations**

4.4.1 Predictions of background annual mean pollutant concentrations on a 1km by 1km grid basis have been produced by DEFRA for the entire of the UK to assist LAs in their Review and Assessment of air quality. The proposed development site is located in grid square NGR: 384500, 399500. Data for this location was downloaded from the DEFRA website¹⁶ for the purpose of the assessment and is summarised in Table 11.

Table 11 Background Pollutant Concentration Predictions

Pollutant	Predicted Background Pollutant Concentration (µg/m ³)		
	2024	2025	2028
NO ₂	18.65	18.03	16.14
PM ₁₀	13.42	13.38	13.21
PM _{2.5}	7.82	7.76	7.59

4.4.2 As shown in Table 11, predicted background annual mean NO₂, PM₁₀ and PM_{2.5} concentrations are below the relevant AQOs and Interim Target at the proposed development site.

4.5 **Sensitive Receptors**

4.5.1 A sensitive receptor is defined as any location which may be affected by changes in air quality as a result of a development. Receptors sensitive to potential dust impacts during demolition, earthworks and construction were identified from a desk-top study of the area up to 250m from the boundary. These are summarised in Table 12.

¹⁶ <http://uk-air.defra.gov.uk/data/laqm-background-maps?year=2021>.

Table 12 Demolition, Earthworks and Construction Dust Sensitive Receptors

Distance from Site Boundary (m)	Approximate Number of Human Receptors	Approximate Number of Ecological Receptors
Up to 20	More than 100	0
Up to 50	More than 100	0
Up to 100	More than 100	-
Up to 250	More than 100	-

- 4.5.2 Receptors sensitive to potential dust impacts from trackout were identified from a desk-top study of the area up to 50m from the road network within 250m of the site access. These are summarised in Table 13.

Table 13 Trackout Dust Sensitive Receptors

Distance from Site Access Route (m)	Approximate Number of Human Receptors	Approximate Number of Ecological Receptors
Up to 20	More than 100	0
Up to 50	More than 100	0

- 4.5.3 There are no ecological receptors within 50m of the development boundary or the access route within 250m of the site entrance. As such, ecological impacts have not been assessed further within this report.
- 4.5.4 Based on the criteria shown in Table 4, the sensitivity of the receiving environment to potential dust impacts was determined as **high**. This was because the identified receptors included residential properties.

5.0 CONSTRUCTION PHASE ASSESSMENT

5.1 Introduction

- 5.1.1 There is the potential for air quality impacts as a result of the construction of the proposed development. These are assessed in the following sections.

5.2 Step 1 - Screen the Need for an Assessment

- 5.2.1 The undertaking of activities such as demolition, excavation, ground works, cutting, construction and storage of materials have the potential to result in fugitive dust emissions throughout the construction phase. Vehicle movements on the local road network also have the potential to result in the re-suspension of dust from highway surfaces.
- 5.2.2 The potential for impacts at sensitive locations depends significantly on local meteorology during the undertaking of dust generating activities, with the most significant effects likely to occur during dry and windy conditions.
- 5.2.3 The desk-study undertaken to inform the baseline, as detailed in Section 4.5, identified a number of sensitive receptors within 250m of the site boundary and 50m of routes to be used by construction vehicles to access the site. As such, a detailed assessment of potential dust impacts was required.

5.3 Step 2a - Define the Potential Dust Emission Magnitude

Demolition

- 5.3.1 Demolition will be undertaken at the start of the construction phase and will involve clearance of the existing structure on the south-west corner of the site. The total building volume to be demolished is less than 12,000m³. In accordance with the criteria outlined in Table 3, the magnitude of potential dust emissions from demolition is therefore **small**.

Earthworks

- 5.3.2 Earthworks will primarily involve excavating material haulage, tipping and stockpiling, as well as site levelling and landscaping. The area of the proposed development site is less

than 18,000m². In accordance with the criteria outlined in Table 3, the magnitude of potential dust emissions from earthworks is therefore **small**.

Construction

- 5.3.3 The total proposed building volume is greater than 75,000m³. In accordance with the criteria outlined in Table 3, the magnitude of potential dust emissions from construction is therefore **large**.

Trackout

- 5.3.4 Based on the total site area and access routes comprising tarmacked surfaces, it is anticipated that the unpaved road length will be less than 50m. In accordance with the criteria outlined in Table 3, the magnitude of potential dust emissions from trackout is therefore **small**.

5.4 Step 2b - Define the Sensitivity of the Area

Dust Soiling

- 5.4.1 Table 12 shows that there are more than 100 **high** sensitivity receptors within 20m of the site boundary. The sensitivity of the area with respect to dust soiling from demolition, earthworks and construction, as defined using the criteria summarised in Table 5, is therefore considered to be **high**.
- 5.4.2 Table 13 shows that there are more than 100 **high** sensitivity receptors within 20m of the road network within 250m of the site access. The sensitivity of the area with respect to dust soiling from trackout, as defined using the criteria summarised in Table 5, is therefore considered **high**.

Human Health

- 5.4.3 Table 11 shows the annual mean PM₁₀ background concentration at the site is 13.38µg/m³. As shown in Table 6, where the background annual mean PM₁₀ concentration is below 24µg/m³ and there are more than 100 **high** sensitivity receptors

within 20m of the site boundary, the sensitivity of the area with respect to human health from demolition, earthworks and construction is considered to be **medium**.

- 5.4.4 There are more than 100 **high** sensitivity receptors within 20m of the road network within 250m of the site access. The sensitivity of the area with respect to human health from trackout, as defined using the criteria summarised in Table 6, is therefore considered to be **medium**.

5.5 Step 2c - Define the Risk of Dust Impacts

- 5.5.1 The derived dust emission magnitude for each activity was combined with the sensitivity of the area to determine the risk of unmitigated impacts in line with the methodology set out in Table 8 and Table 9. A summary of the risk from each dust generating activity is provided in Table 14.

Table 14 Summary of Potential Unmitigated Dust Risks

Potential Impact	Activity	Step 2A - Dust Emission Magnitude	Step 2B - Sensitivity of the Area	Step 2C - Risk
Dust Soiling	Demolition	Small	High	Medium
	Earthworks	Small	High	Low
	Construction	Large	High	High
	Trackout	Small	High	Low
Human Health	Demolition	Small	Medium	Low
	Earthworks	Small	Medium	Low
	Construction	Large	Medium	Medium
	Trackout	Small	Medium	Low

- 5.5.2 As indicated in Table 14, the potential risk of dust soiling is **high** from construction, **medium** from demolition and **low** from earthworks and trackout. The potential risk of human health effects is **medium** from construction and **low** from demolition, earthworks and trackout.
- 5.5.3 It should be noted that the potential for impacts depends significantly on the distance between the dust generating activity and receptor location. Risk was predicted based on

a worst-case scenario of works being undertaken at the site boundary closest to each sensitive area. Therefore, actual risk is likely to be lower than that predicted during the majority of the construction phase.

5.6 **Step 3 - Site-specific Mitigation**

5.6.1 The IAQM guidance¹⁷ provides potential mitigation measures to reduce impacts as a result of fugitive dust emissions during the construction phase. These have been adapted for the development site as summarised in Table 15. These may be reviewed prior to the commencement of construction works and incorporated into a Construction Environmental Management Plan or similar if required by the LA.

Table 15 Fugitive Dust Emission Mitigation Measures

Issue	Control Measure
Communications	• Develop and implement a stakeholder communications plan that includes community engagement before work commences on site • Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager • Display the head or regional office contact information • Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority.
Site management	• Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken • Make the complaints log available to the LA upon request • Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the log book • Hold regular liaison meetings with other high risk construction sites within 250m of the site boundary, to ensure plans are coordinated and dust and particulate matter emissions are minimised

¹⁷ Guidance on the Assessment of Dust from Demolition and Construction V2.2, IAQM, 2024.

Issue	Control Measure
Monitoring	• Undertake daily on-site and off-site inspection, where receptors are nearby, to monitor dust, record inspection results, and make the log available to the LA when asked • Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the LA upon request • Increase the frequency of site inspections when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions
Site preparation	• Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible • Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site • Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period • Avoid site runoff of water or mud • Keep site fencing, barriers and scaffolding clean using wet methods • Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below • Cover, seed or fence stockpiles to prevent wind whipping
Operating vehicle/machinery and sustainable travel	• Ensure all vehicles switch off engines when stationary - no idling vehicles • Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable • Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas • Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials
Operations	• Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques • Ensure an adequate water supply on the site for effective dust suppression, using non-potable water where possible and appropriate • Use enclosed chutes and conveyors and covered skips • Minimise drop heights and use fine water sprays wherever appropriate • Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods
Waste management	• Avoid bonfires or burning of waste materials

Issue	Control Measure
Demolition	• Ensure effective water suppression is used during demolition operations • Avoid explosive blasting, using appropriate manual or mechanical alternatives • Bag and remove any biological debris or damp down such material before demolition
Construction	• Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out • Avoid scabbling (roughening of concrete surfaces) if possible • Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery
Trackout	• Avoid dry sweeping of large areas • Ensure vehicles entering and leaving site are covered to prevent escape of materials

5.7 **Step 4 - Determine Significance**

5.7.1 Assuming the relevant mitigation measures outlined in Table 15 are implemented, the residual impact from all dust generating activities is predicted to be **not significant**, in accordance with the IAQM guidance¹⁸.

¹⁸ Guidance on the Assessment of Dust from Demolition and Construction V2.2, IAQM, 2024.

6.0 OPERATIONAL PHASE ASSESSMENT

6.1 Introduction

- 6.1.1 There is the potential for air quality impacts as a result of the operation of the proposed development. These are assessed in the following Sections.

6.2 Potential Development Impacts

- 6.2.1 The development has the potential to increase concentrations of NO₂, PM₁₀ and PM_{2.5} as a result of road traffic exhaust emissions associated with vehicles travelling to and from the site during the operational phase. These have therefore been assessed against the IAQM¹⁹ screening criteria detailed in Section 3.3. The development proposals do not include onsite car parking. As such, the Stage 1 criteria are not met and potential air quality impacts associated with the operational phase road vehicle exhaust emissions are predicted to be **not significant**.

6.3 Potential Future Exposure

- 6.3.1 The proposals have the potential to expose future residents to elevated pollution levels as a result of road vehicle exhaust emissions in the vicinity of the site. Dispersion modelling was therefore undertaken with the inputs described in Appendix 1 to quantify air quality conditions across the development. Reference should be made to Figures 3, 4 and 5 for graphical representations of predicted annual mean NO₂, PM₁₀ and PM_{2.5} concentrations.
- 6.3.2 As shown in Figure 3, annual mean NO₂ concentrations were predicted to be below the AQO of 40µg/m³ across the site.
- 6.3.3 As shown in Figure 4, annual mean PM₁₀ concentrations were predicted to be below the AQO of 40µg/m³ across the site.
- 6.3.4 As shown in Figure 5, annual mean PM_{2.5} concentrations were predicted to be below the Interim Target of 12µg/m³ across the site.

¹⁹ Land-Use Planning & Development Control: Planning for Air Quality, IAQM, 2017.

6.3.5 Based on the assessment results, future residents are not predicted to be exposed to pollutant concentrations above the relevant AQOs and Interim Target. As such, the site is considered suitable for the proposed use from an air quality perspective.

6.4 Interim Planning Guidance for PM_{2.5}

6.4.1 Interim Planning Guidance²⁰ on the consideration of the PM_{2.5} targets identified in the Environment Act (2021) in planning decisions has been produced by DEFRA. This requires evidence that the key sources of air pollution within a development have been identified and appropriate action to minimise PM_{2.5} and its precursors as far as is reasonably practicable be provided in support of planning applications. To assist the process, two questions and associated considerations are provided. These are summarised in Table 16, along with the development response.

Table 16 Interim Planning Guidance Questions

Question	Response
How has exposure to PM_{2.5} been considered when selecting the development site? • Site proximity to people (particularly large populations and/or vulnerable groups, e.g. schools, hospitals, care homes, areas of deprivation) and the impact of the development on these • Site proximity to pollution sources and the impact of these on users of the development • Exposure and emissions during both construction and in-use	The site is located in Manchester city centre and as such is in close proximity to a large population comprising mixed land uses. However, as outlined in Sections 5.0 and 6.2, impacts associated with the scheme are predicted to be not significant The site is adjacent to the A665 Cheetham Hill Road and associated vehicle emissions. However, the results of the assessment, as shown in Section 6.3, indicated that predicted PM_{2.5} levels are below the Interim Target of 12µg/m³ across the development As outlined in Table 15, a number of mitigation measures will be used throughout the construction phase in order to reduce fugitive dust emissions as far as practicable. This will control potential exposure at off-site locations

²⁰ <https://uk-air.defra.gov.uk/pm25targets/planning>.

Question	Response
What actions and/or mitigations have been considered to reduce PM_{2.5} exposure for development users and nearby receptors (houses, hospitals, schools etc.) and to reduce emissions of PM_{2.5} and its precursors? • Site layout • The development's design • Technology used in the construction or installed for use in the development • Construction and future use of the development	In order to reduce emissions of PM_{2.5} across the site, as well as at nearby receptors, the following measures have been included in the proposals: • No car parking spaces will be included in the proposals, which will minimise PM_{2.5} emissions associated with private vehicles • 228 cycle stores will be provided to encourage the use of sustainable transport modes to and from the site • The site is located within Manchester city centre with good access to public transport links, including bus stops, the metro link and Manchester Victoria train station. This will further encourage sustainable modes of travel Further to the above, in order to reduce emissions during the construction phase, a number of mitigation measures will be used to minimise dust generation from associated activities. These are outlined in Table 15

6.4.2 Based on the responses provided in Table 16 and the assessment results, as outlined in Sections 6.3, it is considered that the development has identified key sources of air pollution and taken appropriate action to minimise emissions of PM_{2.5}.

7.0 MITIGATION

7.1.1 A number of mitigation measures have been included within the development to encourage the use of sustainable transport modes, manage vehicle flow and reduce pollution around the site. These are in accordance with MCC's 'Air Quality and Planning Technical Guidance'²¹, which is based upon the Good Practice Design Principles outlined in the IAQM document 'Land-Use Planning & Development Control: Planning for Air Quality'²². Table 17 describes the good practice principles along with how each has been addressed with regards to the proposals.

Table 17 Good Practice Design Principles for Operational Phase Air Quality Impacts

Phase	Principle	Action
Design Phase	New developments should not contravene the Council's AQAP ²³ , or render any of the measures unworkable	It is confirmed that the proposals will not contravene MCC's AQAP, or render any of the measures unworkable
	Wherever possible, new developments should not create a new "street canyon", or a building configuration that inhibits effective pollution dispersion	The development will create a new street canyon on one side of the road, however, this has been considered within the assessment. As summarised in Section 6.3, the development is not predicted to lead to pollutant concentrations above the relevant criteria
	Delivering sustainable development should be the key theme of any application	The proposals have been designed to encourage sustainable behaviours, such as active and public transport due to its proximity to local bus routes and amenities, as well as the provision of cycle storage
Operational Phase	The provision of at least 1 EV "rapid charge" point per 10 residential dwellings and/or 1,000m ² of commercial floor space. Where on-site parking is provided for residential dwellings, EV charging points for each parking space should be made	The development does not include provision of car parking spaces. Therefore no EV charging points will be required

²¹ Air Quality & Planning Technical Guidance, MCC, 2022.

²² Land-Use Planning & Development Control: Planning for Air Quality, IAQM, 2017.

²³ Greater Manchester AQAP 2016-2021, GMCA, 2016.

Phase	Principle	Action
	Where development generates significant additional traffic, provision of a detailed Travel Plan (with provision to measure its implementation and effect) which sets out measures to encourage sustainable means of transport (public, cycling and walking) via subsidised or free-ticketing, improved links to bus stops, improved infrastructure and layouts to improve accessibility and safety	The development does not include provision of car parking. As such, a Travel Plan is not required
	All gas-fired boilers to meet a minimum standard of <40mgNO_x/kWh. All gas-fired CHP plant to meet a minimum emissions standard of: • Spark ignition engine: 250mgNO_x/Nm³; • Compression ignition engine: 400mgNO_x/Nm³; • Gas turbine: 50mgNO_x/Nm³. A presumption should be to use natural gas-fired installations. Where biomass is proposed within an urban area it is to meet minimum emissions standards of: • Solid biomass boiler: 275mgNO_x/Nm³ and 25mgPM/Nm³	The heating and hot water strategy is yet to be finalised. However, any boilers or CHP plant to be included in the development will be provisioned in accordance with the relevant requirements

7.1.2 It is considered the above methods would further reduce potential impacts associated with the scheme. Specific mitigation suited to the proposals may be stipulated as a planning condition if deemed necessary by the LA.

8.0 CONCLUSION

- 8.1.1 Redmore Environmental Ltd was commissioned by Linear Living Ltd to undertake an Air Quality Assessment in support of a planning application for a residential development at Lord Street, Manchester.
- 8.1.2 The development has the potential to cause air quality impacts at sensitive locations during the construction and operational phases, as well as expose future residents to any existing air quality issues at the site. As such, an Air Quality Assessment was undertaken in order to determine baseline conditions, assess potential impacts as a result of the scheme and consider location suitability for the proposed end use.
- 8.1.3 During the construction phase of the development there is the potential for air quality impacts as a result of fugitive dust emissions from the site. These were assessed in accordance with the IAQM methodology. Site-specific dust control measures were subsequently determined based on the identified risk ratings. Subject to implementation, potential air quality impacts from dust generated by demolition, earthworks, construction and trackout activities are predicted to be **not significant**.
- 8.1.4 Potential impacts during the operational phase of the proposed development may occur due to road traffic exhaust emissions associated with vehicles travelling to and from the site. These were assessed against the screening criteria provided within the IAQM²⁴ guidance document. Due to the nature of the development, road traffic exhaust impacts were predicted to be **not significant**.
- 8.1.5 The proposal has the potential to expose future residents to elevated pollution levels as a result of road vehicle exhaust emissions in the vicinity of the site. Dispersion modelling was therefore undertaken using ADMS-Roads in order to predict concentrations as a result of emissions from the highway network. Results were subsequently verified using local monitoring data.
- 8.1.6 The results of the dispersion modelling assessment indicated that predicted annual mean NO₂, PM₁₀ and PM_{2.5} concentrations were below the relevant AQOs and Interim Target

²⁴ Land-Use Planning & Development Control: Planning for Air Quality, IAQM, 2017.

across the development. As such, the site is considered suitable for the proposed end use from an air quality perspective.

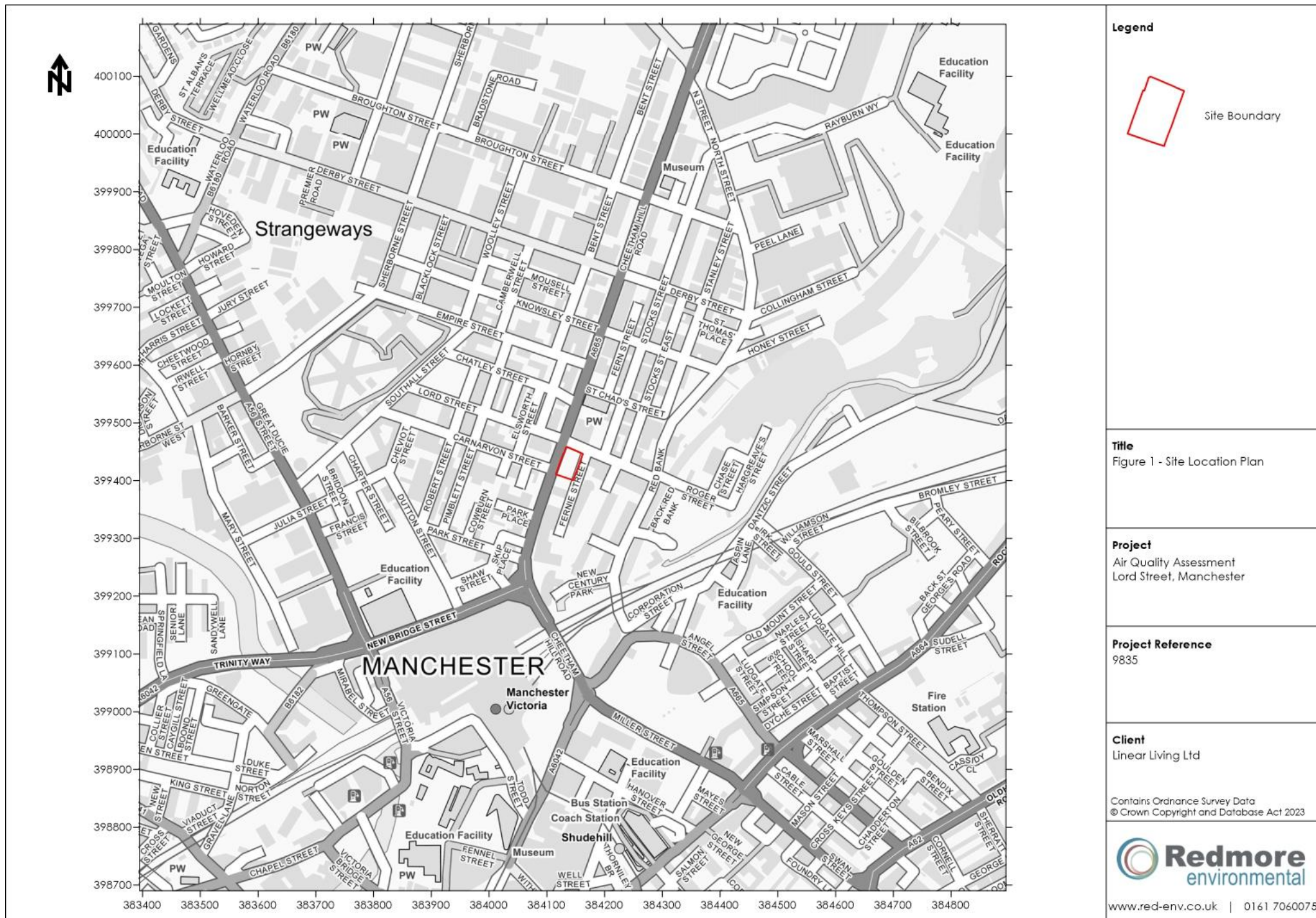
8.1.7 A number of mitigation measures were identified in line with the requirements of MCC's 'Air Quality and Planning Technical Guidance' in order to reduce vehicle exhaust emissions associated with the proposals. It is considered these are appropriate for a development of this scale and nature and will further control impacts during the operational phase.

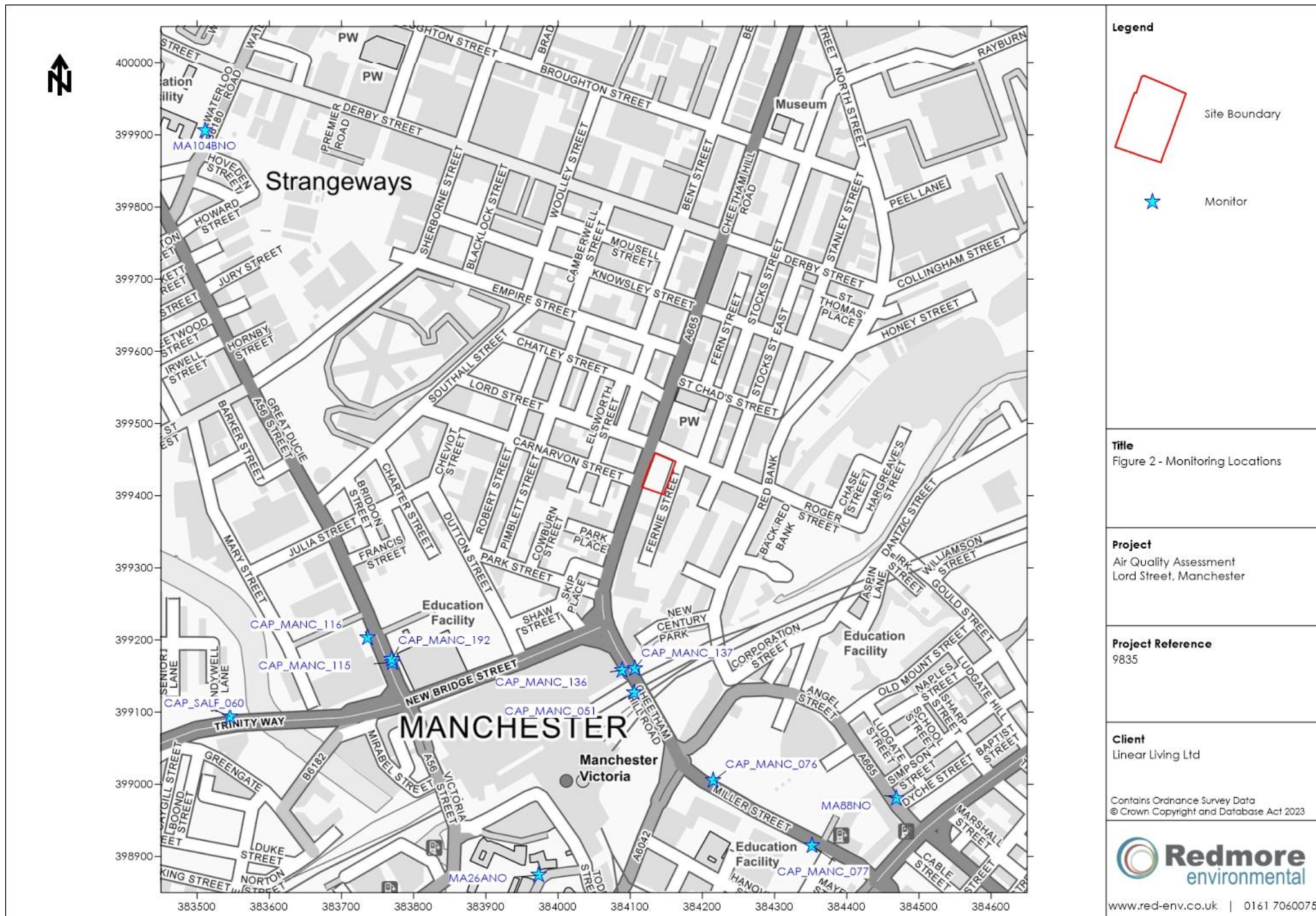
8.1.8 Based on the assessment results, air quality factors are not considered a constraint to planning consent for the development.

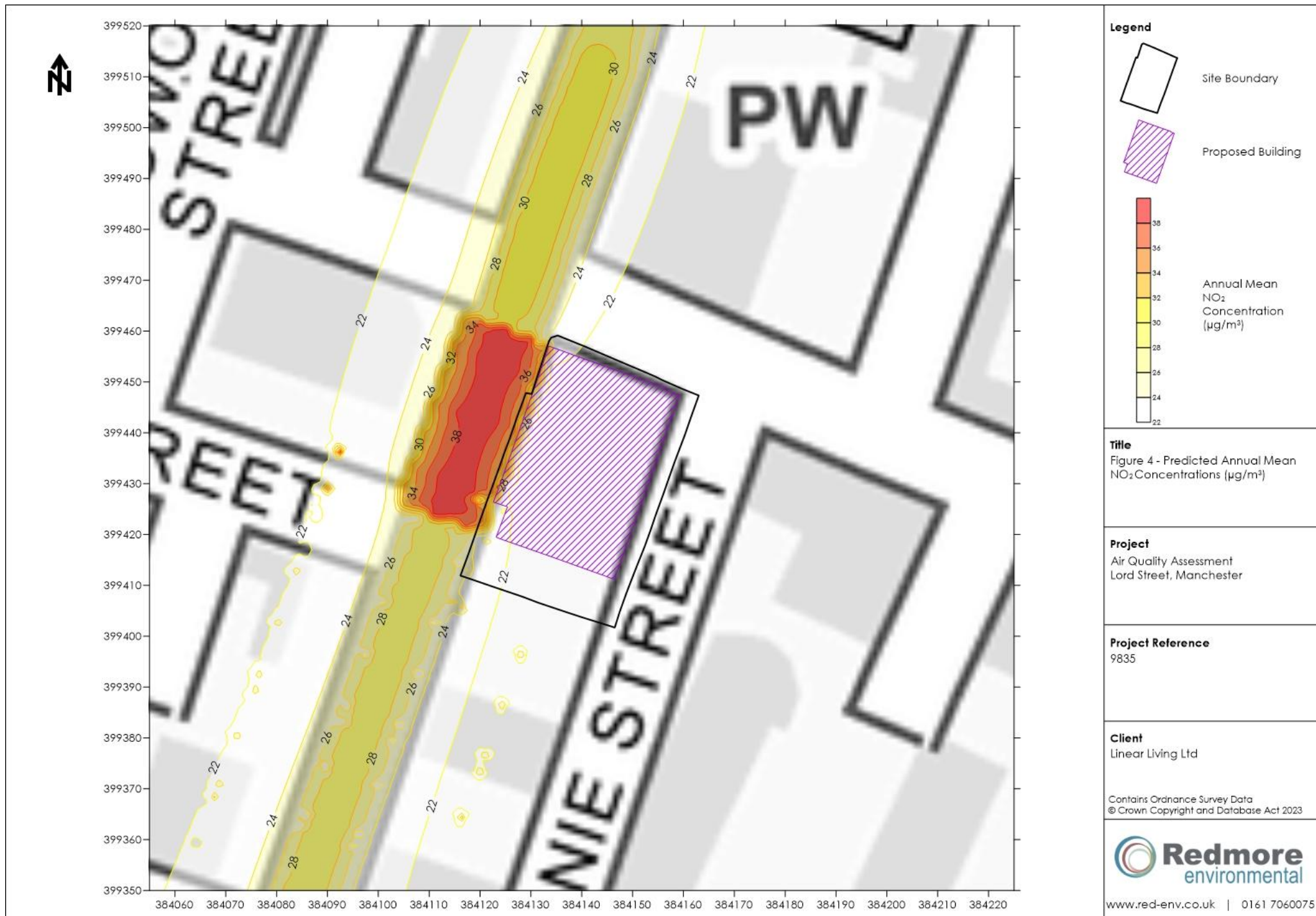
9.0 **ABBREVIATIONS**

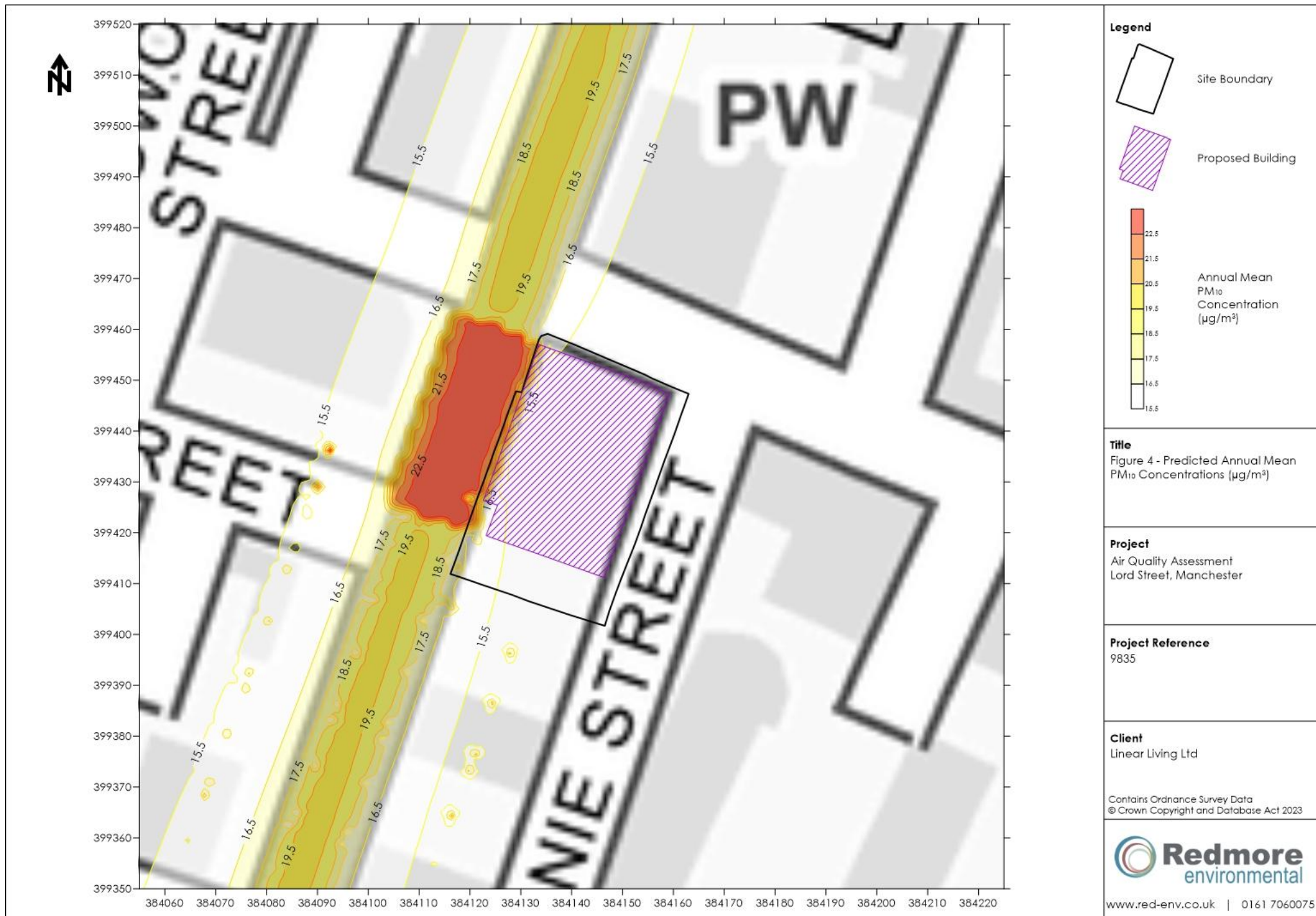
AADT	Annual Average Daily Traffic
AQLV	Air Quality Limit Value
AQMA	Air Quality Management Area
AQO	Air Quality Objective
AQS	Air Quality Strategy
ASR	Annual Status Report
CAP	Clean Air Plan
CERC	Cambridge Environmental Research Consultants
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DPD	Development Plan Document
GMCA	Greater Manchester Combined Authority
HDV	Heavy Duty Vehicle
IAQM	Institute of Air Quality Management
LA	Local Authority
LAQM	Local Air Quality Management
MCC	Manchester City Council
NGR	National Grid Reference
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen
NPPF	National Planning Policy Framework
NPPG	National Planning Policy Guidance
PM ₁₀	Particulate matter with an aerodynamic diameter of less than 10µm
PM _{2.5}	Particulate matter with an aerodynamic diameter of less than 2.5µm
PfEP	Places for Everyone Plan
TfGM	Transport for Greater Manchester
Z ₀	Roughness length

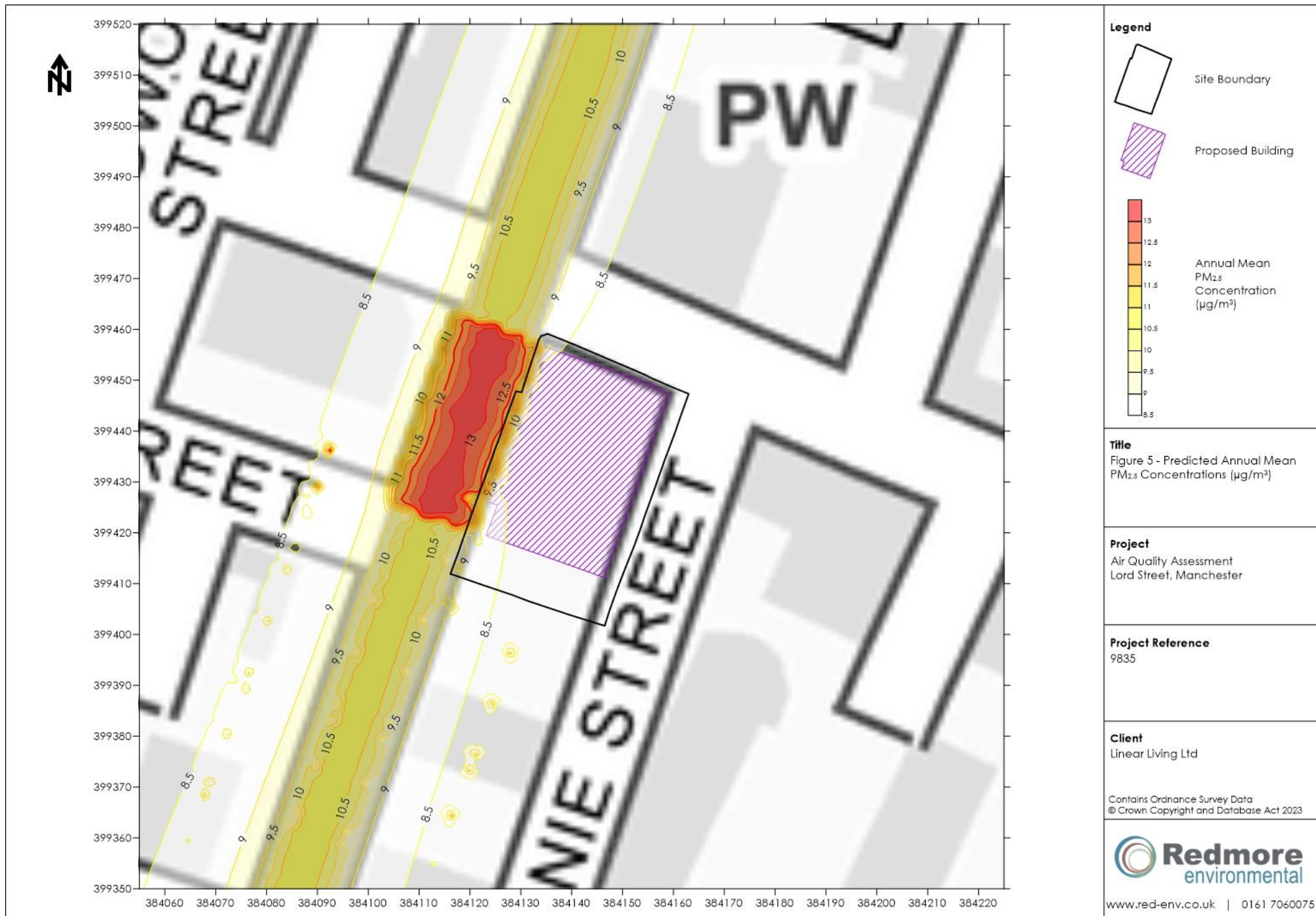
Figures

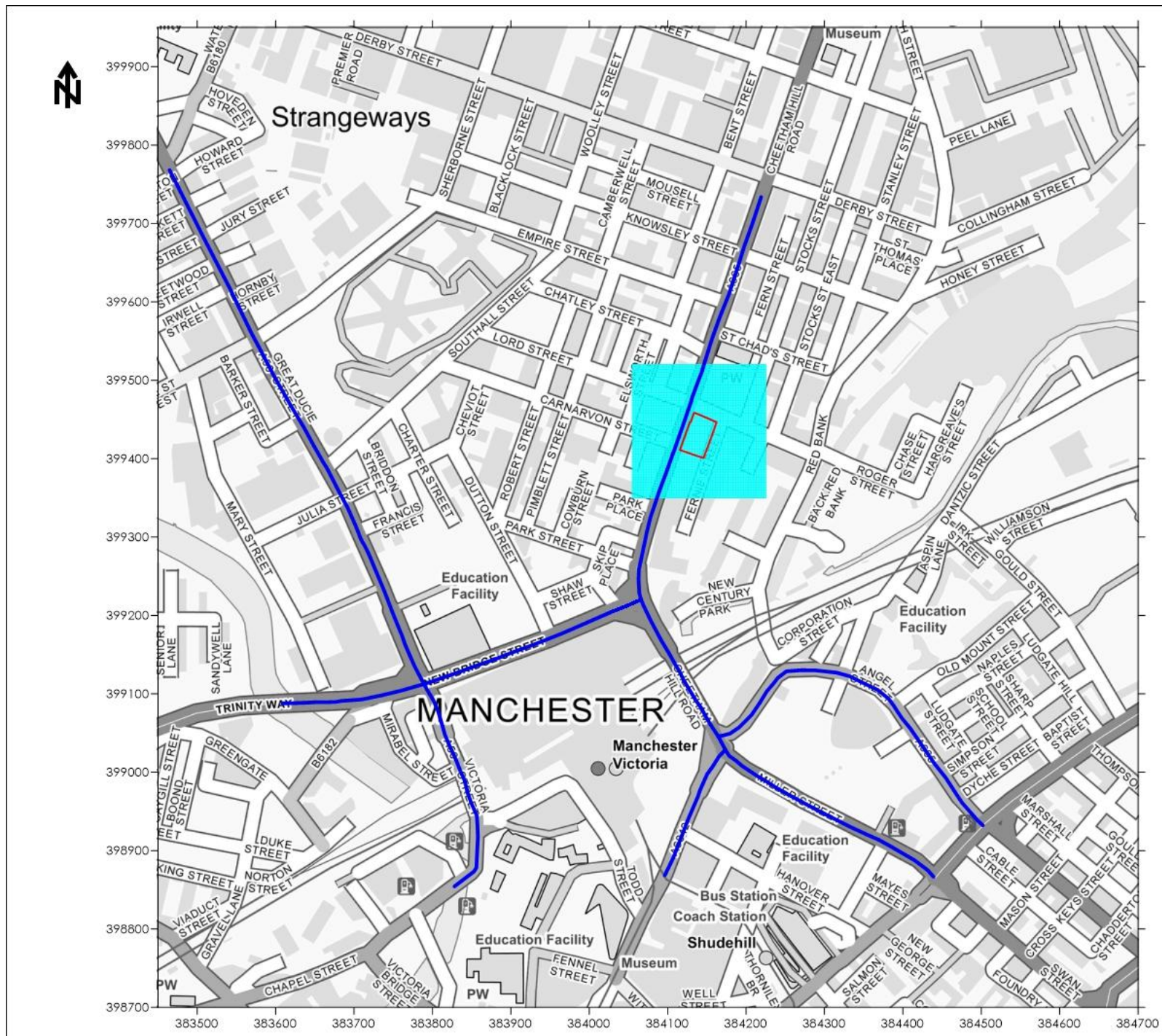




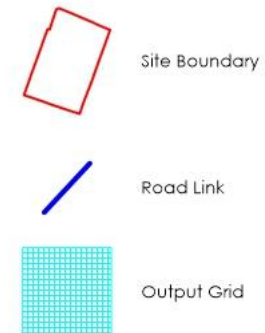








Legend



Title

Figure 6 - ADMS-Roads Inputs

Project

Air Quality Assessment
Lord Street, Manchester

Project Reference

9835

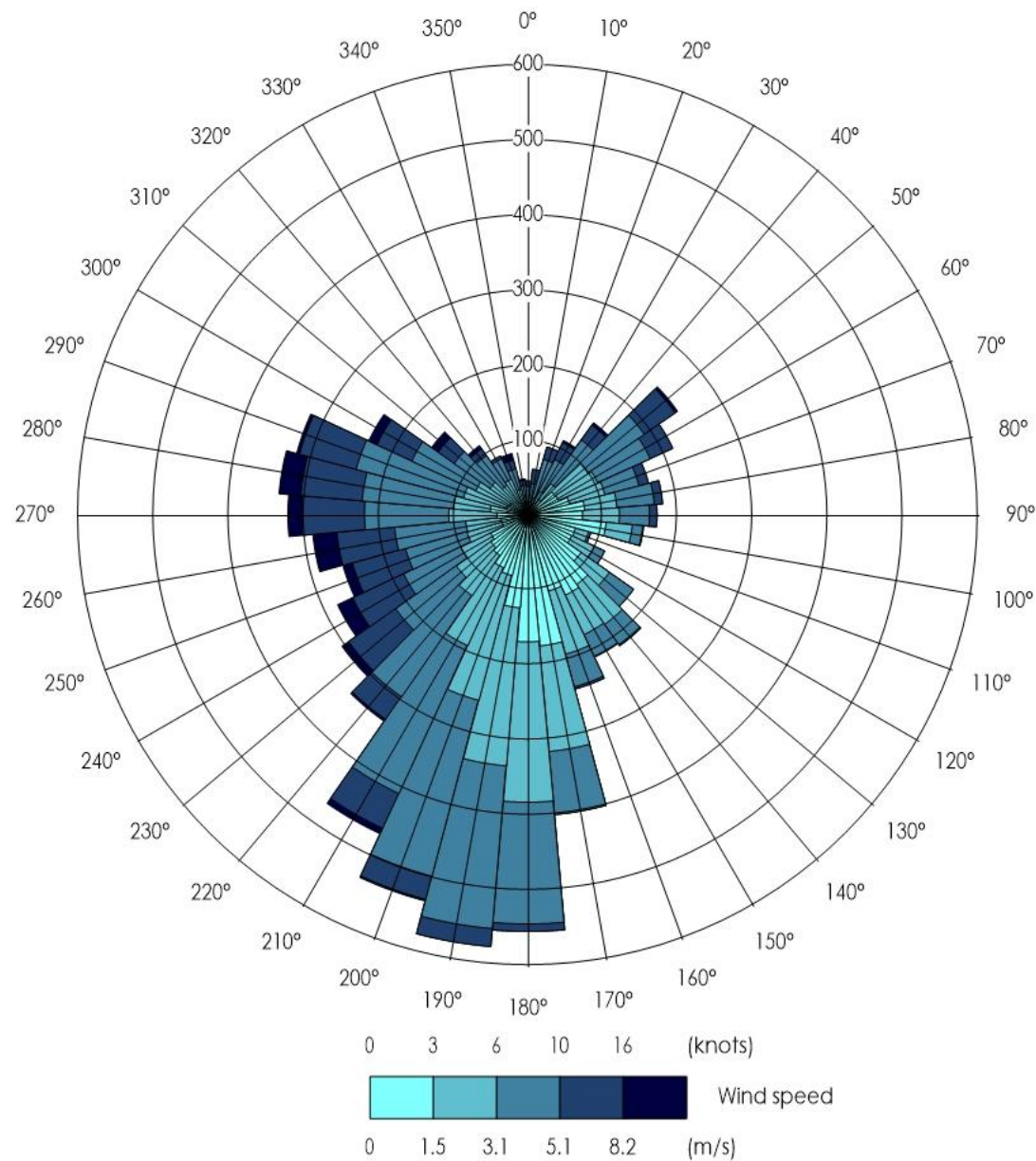
Client

Linear Living Ltd

Contains Ordnance Survey Data
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www.red-env.co.uk | 0161 7060075



Legend

Title
Figure 7 - Wind Rose of 2024
Manchester Airport Meteorological
Data

Project
Air Quality Assessment
Lord Street, Manchester

Project Reference
9835

Client
Linear Living Ltd

Appendix 1 - Assessment Input Data

Introduction

The proposal has the potential to expose future residents to any existing air quality issues as a result of road vehicle exhaust emissions in the vicinity of the site. In order to assess NO₂, PM₁₀ and PM_{2.5} concentrations across the development, detailed dispersion modelling was undertaken in accordance with the following methodology.

Dispersion Model

Dispersion modelling was undertaken using the ADMS-Roads dispersion model (version 5.0.1.3). ADMS-Roads is developed by Cambridge Environmental Research Consultants (CERC) and is routinely used throughout the world for the prediction of pollutant dispersion from road sources. Modelling predictions from this software package are accepted within the UK by the Environment Agency and DEFRA.

The model requires input data that details the following parameters:

- Assessment area;
- Traffic flow data;
- Vehicle emission factors;
- Spatial co-ordinates of emissions;
- Street width;
- Meteorological data;
- Roughness length (z_0); and,
- Monin-Obukhov length.

Additional options can also be selected within the ADMS-Roads interface to take account of site specific characteristics that may affect model output, such as canyons.

The relevant inputs are detailed in the following Sections.

Assessment Area

Ambient concentrations were predicted over the area NGR: 384055, 399350 to 384225, 399520. One Cartesian grid was used within the model to produce data suitable for contour plotting using the Surfer software package. It should be noted that although the grid only covered the

proposed site, road links were extended in order to ensure the impact of all relevant vehicle emissions in the vicinity of the development were considered.

Reference should be made to Figure 6 for a graphical representation of the assessment grid extents.

Traffic Flow Data

Baseline traffic data for use in the assessment, including 24-hour AADT flows and fleet composition as HDV proportion, was obtained from the Department for Transport (DfT)²⁵. The DfT web tool enables the user to view and download traffic flows on every link of the 'A' road and motorway network, as well as selected minor roads, in Great Britain for the years 1999 to 2024. It should be noted that the DfT web tool is referenced in DEFRA guidance²⁶ as being a suitable source of data for air quality assessments and it is therefore considered to provide a reasonable estimate of traffic flows in the vicinity of the site.

The baseline traffic data was converted to the site opening year utilising a factor obtained from TEMPro (version 8.0). This software package has been developed by the DfT to calculate future traffic growth throughout the UK.

Road parameters for input into the model were based on the following:

- Road widths were estimated from aerial photography and UK highway design standards;
- Vehicle speeds were estimated as an average for the relevant road link over the course of a 24-hour period;
- Vehicle speeds were determined following review of speed limits within the study extents, as well as congestion data available from GoogleMaps;
- Vehicle speeds specific to slow phases were determined using the methodology outlined in the DEFRA guidance²⁷;
- Necessary adjustments to slow phase vehicle speeds were based upon congestion data available from GoogleMaps; and,

²⁵ <https://roadtraffic.dft.gov.uk/#6/55.254/-11.107/basemap-regions-countpoints.7>

²⁶ Local Air Quality Management (TG22) Technical Guidance, DEFRA, 2022.

²⁷ Local Air Quality Management Technical Guidance (TG22), DEFRA, 2022.

- The length for slow phases were derived using the approaching distance of 25m outlined in the DEFRA guidance²⁸, and adjusted accordingly based on aerial photography and congestion data available from GoogleMaps.

A summary of the traffic flow data is provided in Table A1.1.

Table A1.1 Traffic Data

Link		24-hour AADT Flow		HDV Prop. of Fleet (%)	Road Width (m)	Avg. Vehicle Speed (km/h)
		2024	2028			
L1	A665 Cheetham Hill Road	17,029	17,720	2.44	11.6	45
L2	Church North of Site Slow Phase (SP)	17,029	17,720	2.44	11.8	20
L3	Canyon at the Site Boundary SP	17,029	17,720	2.44	11.7	20
L4	A665 South of Site	17,029	17,720	2.44	11.8	45
L5	A665 SP into Junction	17,029	17,720	2.44	12.0	20
L6	New Bridge Street SP	30,149	31,373	2.68	22.1	20
L7	New Bridge Street	30,149	31,373	2.68	18.2	45
L8	New Bridge Street SP to Junction West	30,149	31,373	2.68	17.4	20
L9	Trinity Way SP	29,541	30,740	2.46	21.0	20
L10	Trinity Way	29,541	30,740	2.46	25.0	45
L11	A56 Victoria Street SP	4,846	5,043	6.87	15.0	20
L12	A56 Victoria Street	4,846	5,043	6.87	10.8	30
L13	Great Ducie Street after Junction SP	14,318	14,899	2.05	15.9	20
L14	Great Ducie Street	14,318	14,899	2.05	11.1	45
L15	Great Ducie Street near Francis Street	14,318	14,899	2.05	9.3	45
L16	Great Ducie Street after Julia Street	14,318	14,899	2.05	9.2	45
L17	Canyon at New Bridge Street Junction SP	27,709	28,834	3.14	12.6	20
L18	Cheetham Hill Road across Bridge	27,709	28,834	3.14	12.6	45

Link		24-hour AADT Flow		HDV Prop. of Fleet (%)	Road Width (m)	Avg. Vehicle Speed (km/h)
		2024	2028			
L19	Canyon at Miller Street SP	13,506	14,054	2.39	10.0	20
L20	Miller Street	13,506	14,054	2.39	7.2	30
L21	Miller Street South	13,506	14,054	2.39	7.4	30
L22	A6042 SP	3,363	3,500	7.88	11.6	20
L23	Angel Street SP	3,363	3,500	7.88	7.0	20
L24	Angel Street	3,363	3,500	7.88	9.0	45

Reference should be made to Figure 6 for a graphical representation of the road link locations.

Canyons

Where buildings or walls surround roads, pollutant dispersion patterns are altered which can lead to high pollutant concentrations. These street canyons can significantly influence air quality along a road and therefore it is important to take consideration of their effects when undertaking dispersion modelling.

The release of ADMS-Roads version 4.0.1.0 in December 2015 incorporated a number of new features including an advanced street canyon module, which have been retained in version 5.1.0.2. Advanced street canyon modelling allows a number of parameters to be included in the dispersion model in order to predict pollutant dispersion patterns which better reflect air flow within complex urban geometries.

Canyons have five principal effects on dispersion which can influence pollutant concentrations. These are:

- Pollutants are channelled along street canyons;
- Pollutants are dispersed across street canyons by circulating flow at road height;
- Pollutants are trapped in recirculation regions;
- Pollutants leave the canyon through gaps between buildings - as if there was no canyon; and,
- Pollutants leave the canyon from the canyon top.

The combined modelling of these effects will result in concentration patterns unique to each canyon. The parameters used in the model are outlined in Table A1.2. It should be noted that where buildings are only present on one side of the road, parameters were purposely included at 0m.

Table A1.2 Canyon Parameters - Baseline Year

Link	Parameter (m)					
	Canyon Width Left	Average Height of Buildings to Left	Building Length Left	Canyon Width Right	Average Height of Buildings to Right	Building Length Right
L17	14.4	51.0	45.3	0	0	0
L19	12.5	30.4	43.3	0	0	0

The proposals will alter the street geometry along Cheetham Hill Road. As such, the canyon parameters were altered in the future year model to take account of potential changes in street geometry on L3. The parameters are shown in Table A1.3.

Table A1.3 Canyon Parameters - Future Year

Link	Parameter (m)					
	Canyon Width Left	Average Height of Buildings to Left	Building Length Left	Canyon Width Right	Average Height of Buildings to Right	Building Length Right
L3	8.7	60.0	39.0	0	0	0
L17	14.4	51.0	45.3	0	0	0
L19	12.5	30.4	43.3	0	0	0

A choice of two modes is provided for use in the advance canyon module. Standard mode assumes that each road is part of a continuous network of roads with similar canyon properties. Network mode analyses the road network to determine transport of pollutants between adjoining street canyons, allows for varying concentrations along the canyon and accounts for transport of pollutants out of the end of a canyon. Network mode is considered most accurate for detailed local analysis and as such was selected for use in the model.

Emission Factors

Emission factors were calculated using the relevant traffic flows and the Emission Factor Toolkit (version 13.1). This has been produced by DEFRA and incorporates COPERT 5.8 vehicle emission factors and fleet information.

Meteorological Data

Meteorological data used in the assessment was taken from Manchester Airport meteorological station over the period 1st January 2024 to 31st December 2024 (inclusive). Manchester Airport is located at NGR: 382073, 385035 which is approximately 15.4km south of the development. It is anticipated that conditions would be reasonably similar over a distance of this magnitude. The data was therefore considered suitable for an assessment of this nature.

All meteorological records used in the assessment were provided by Atmospheric Dispersion Modelling (ADM) Ltd, which is an established distributor of data within the UK. Reference should be made to Figure 7 for a wind rose of the utilised meteorological data.

Roughness Length

The z_0 is a modelling parameter applied to allow consideration of surface height roughness elements. A z_0 of 1m was used to describe the modelling extents. This is considered appropriate for the morphology of the area and is suggested within ADMS-Roads as being suitable for 'cities, woodlands'.

A z_0 of 0.2m was used to describe the meteorological site. This value is considered appropriate for the morphology of the area due to the large expanse of surrounding flat land use, such as runways and surrounding grassland, and is suggested within ADMS-Roads as being suitable for 'agricultural areas (min)'.

Monin-Obukhov Length

The Monin-Obukhov length provides a measure of the stability of the atmosphere. A minimum Monin-Obukhov length of 30m was used to describe the modelling extents and meteorological data. This value is considered appropriate for the nature of both areas and is suggested within ADMS-Roads as being suitable for 'cities and large towns'.

Background Concentrations

Background NO₂, PM₁₀ and PM_{2.5} concentrations used in the assessment were obtained from the DEFRA mapping study for the grid square, NGR: 384500, 398500, containing the CAP_MANC_077 monitor. These are shown in Table A1.4.

Table A1.4 Background Pollutant Concentrations - Modelling Extents

Pollutant	Predicted Background Pollutant Concentrations (µg/m ³)	
	2024	2028
NO ₂	22.22	19.28
PM ₁₀	14.34	14.13
PM _{2.5}	8.01	7.78

The annual mean NO₂, PM₁₀ and PM_{2.5} concentrations were chosen to represent concentrations throughout the dispersion modelling extents without the contribution from road vehicles as they were higher than the DEFRA background for the grid square containing the site, as shown in Table 11.

NO_x to NO₂ Conversion

Predicted annual mean NO_x concentrations were converted to NO₂ concentrations using the spreadsheet (version 9.1) provided by DEFRA, which is the method detailed within DEFRA guidance²⁹.

Verification

The predicted results from a dispersion model may differ from measured concentrations for a large number of reasons, including:

- Estimates of background concentrations;
- Uncertainties in source activity data such as traffic flows and emission factors;

²⁹ Local Air Quality Management Technical Guidance (TG22), DEFRA, 2022.

- Variations in meteorological conditions;
- Overall model limitations; and,
- Uncertainties associated with monitoring data, including locations.

Model verification is the process by which these and other uncertainties are investigated and where possible minimised. In reality, the differences between modelled and monitored results are likely to be a combination of all of these aspects.

For the purpose of the assessment, model verification was undertaken for 2024 using traffic data, meteorological data and monitoring results from this year.

Monitoring of NO₂ concentrations was undertaken at five locations within the vicinity of roads included in the dispersion model during 2024. Review of the sites indicated that the CAP_MANC_051 - A665 (Miller Street) monitor was positioned in an area of restricted airflow, adjacent to a wall and large street sign. This results in complex dispersion characteristics surrounding the monitor. As such, it was removed from the verification process.

Results for the remaining monitors were obtained and the road contributions to total NO_x concentrations calculated following the methodology contained within DEFRA guidance³⁰. The monitored annual mean NO₂ concentrations and calculated road NO_x concentrations are summarised in Table A1.5.

Table A1.5 NO_x Verification - Monitoring Results

Monitoring Location		Monitored NO ₂ Concentration (µg/m ³)	Calculated Road NO _x Concentration (µg/m ³)
CAP_MANC_076	A665 (Miller Street)	26.40	9.73
CAP_MANC_077	A665 (Miller Street)	27.60	12.66
CAP_MANC_136	A665	41.70	52.81
CAP_MANC_192	A56 (Great Ducie Street)	29.30	16.92

The annual mean road NO_x concentrations predicted from the dispersion model and the 2024 road NO_x concentrations calculated from the monitoring results are summarised in Table A1.6.

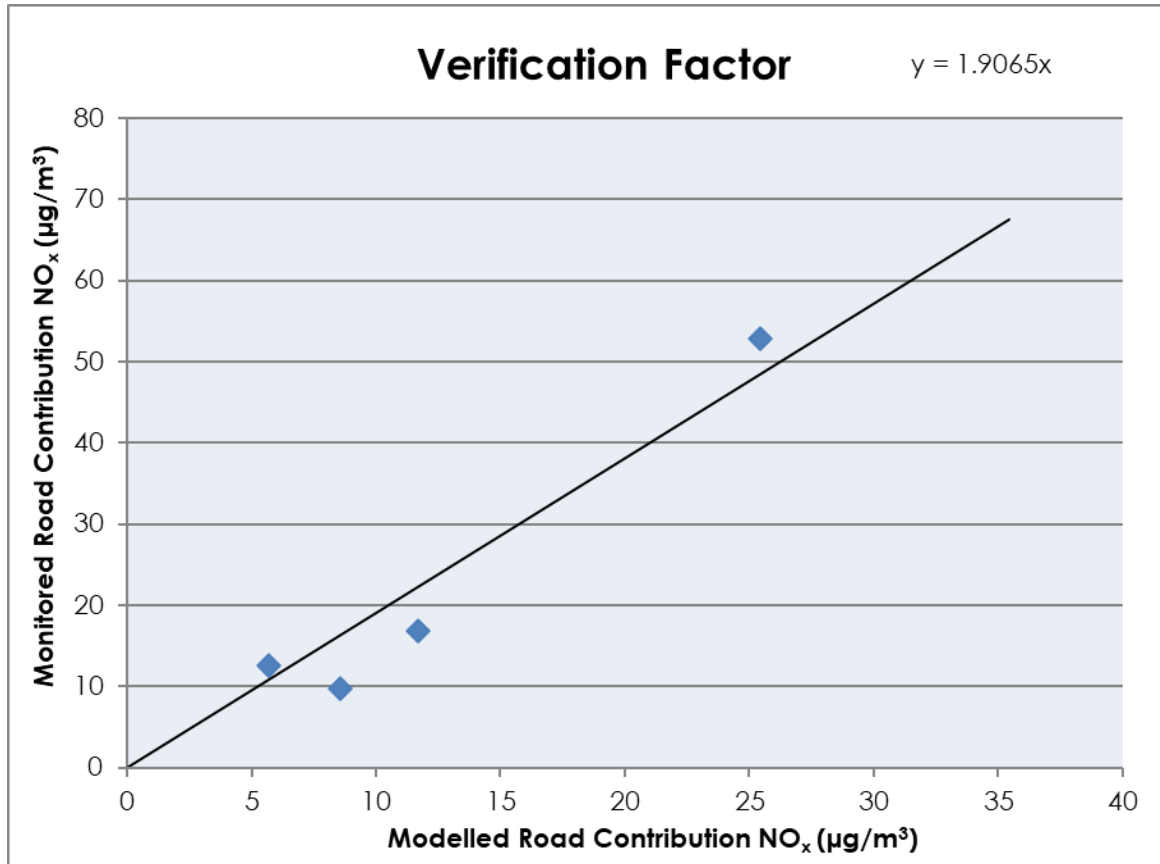
³⁰ Local Air Quality Management Technical Guidance (TG22), DEFRA, 2022.

Table A1.6 NO_x Verification - Modelling Results

Monitoring Location		Calculated Road NO _x Concentration (µg/m ³)	Modelled Road NO _x Concentration (µg/m ³)
CAP_MANC_076	A665 (Miller Street)	9.73	8.58
CAP_MANC_077	A665 (Miller Street)	12.66	5.68
CAP_MANC_136	A665	52.81	25.45
CAP_MANC_192	A56 (Great Ducie Street)	16.92	11.69

The monitored and modelled road NO_x concentrations were graphed and the equation of the trendline based on linear progression through zero calculated. This indicated that a verification factor of 1.9065 was required to be applied to all modelling results, as shown in Graph 1.

Graph 1 NO_x Verification Factor



Monitoring of PM₁₀ and PM_{2.5} concentrations is not undertaken within the assessment extents. The NO_x verification factor was therefore used to adjust model predictions of these species in lieu of more accurate data in accordance with DEFRA guidance³¹.

³¹ Local Air Quality Management Technical Guidance (TG22), DEFRA, 2022.

Date: 16th October 2025

Ref: 9835

Appendix 2 - Curricula Vitae

KEY EXPERIENCE:

Claire is a Director with specialist experience in the air quality sector

Her key capabilities include:

- Production and management of Air Quality, Dust and Odour Assessments for a wide range of clients from the residential, retail, commercial, leisure and industrial and infrastructure sectors.
- Detailed dispersion modelling of road vehicle and industrial emissions using ADMS-Roads, ADMS-6 and AERMOD. Studies have included impact assessment of ground level pollutant and odour concentrations and assessment of suitability of development sites for proposed end-use.
- Project management and co-ordination of Environmental Impact Assessments and scoping reports for developments throughout the UK.
- Assessment of fugitive dust impacts from a range of waste and industrial developments.
- Co-ordination and management of large-scale multi-disciplinary projects and submissions.
- Undertaken and overseeing pollutant monitoring campaigns.
- Provision of expert advice and attendance at DCO examination process.

SELECT PROJECTS SUMMARY:

Residential and Educational

Air Quality Assessments for a large number of proposed residential and educational developments across the UK. The assessments included consideration of construction phase dust emissions and mitigation was recommended to minimise fugitive dust emissions accordingly. The suitability of the sites for the proposed residential and educational uses was also assessed. The assessment utilised a range of assessment tools including relevant screening criteria, air dispersion modelling using ADMS-Roads, local air quality monitoring and Defra published assessment tools. Where required for sites in London, Air Quality Neutral assessments were also undertaken utilised the Greater London Authority guidance.

Air Quality Monitoring

Air Quality Assessments and overseeing air quality monitoring campaigns for a number of sites within Birmingham. Air dispersion modelling was undertaken and air quality monitoring utilising NO₂ diffusion tubes was carried out for use in verification of the dispersion model. Mitigation was recommended where appropriate to reduced the exposure of future uses of the sites to elevated pollutant concentrations.

Odour Assessments

Undertaken to support developments in the UK, including consideration of the impact of existing odour sources on proposed developments or to assess proposed odour releases. A combination of field odour surveys, risk assessments and detailed dispersion modelling were undertaken, with mitigation measures recommended where required.

Commercial and Retail

Foodstores across the UK - Air quality assessments for a number of proposed foodstores across the UK. Consideration was given to construction phase dust emissions and vehicle emissions generated by the foodstore operations. Relevant screening criteria and detailed air dispersion modelling were utilised in the assessment. Mitigation was recommended as required to minimise construction phase dust emissions.

Commercial development,

Workshop - Air quality assessment and input into the EIA for a proposed large scale commercial development near Workshop. Assessments of construction phase dust and operational phase road traffic emissions were undertaken and consideration was given to both human and ecological receptors.

Industrial and Infrastructure

Greater Manchester Waste PFI

Contract - Air Quality and Odour Assessments were undertaken as part of the Planning Applications and Environmental Permit applications for a number of proposed waste facilities in Greater Manchester.

Energy from Waste Development,

Scotland - Air Quality Assessment and coordination of the EIA and Environmental Permit Application for a proposed Energy from Waste development in Scotland. Considered industrial emissions from flue stacks as well as additional road traffic movements generated by the development

Strategic Rail Freight Interchange,

Hinckley - oversaw the Air Quality Assessment for the proposed Rail Freight Interchange and acted as expert witness as part of the Development Consent Order (DCO) examination process.

KEY EXPERIENCE:

Megan is an Environmental Consultant with specialist experience in the air quality sector. Her key capabilities include:

- Production of Air Quality Assessments in accordance with Department for Environment, Food and Rural Affairs (DEFRA) methodologies for a range of residential, commercial and industrial sectors.
- Detailed dispersion modelling of road vehicle exhaust emissions using ADMS-Roads. Studies have included impact assessments on sensitive receptors and exposure of new residents to poor air quality.
- Advanced Canyon Modelling to evaluate the impact of altered urban topography on air quality in built up areas.
- Assessment of construction dust impacts from a range of development sites.
- Production of Air Quality Neutral Assessments in accordance with The London Plan.
- Installation and management of diffusion tube monitoring campaigns in order to determine the potential for exposure of sensitive receptors to poor air quality.

SELECT PROJECTS SUMMARY:

Whitebirk, Blackburn

Air Quality Assessment in support of a residential development comprising demolition of existing buildings and construction of 152 dwellings on land at the Whitebirk Estate, Blackburn. The development had the potential to expose future occupants to any existing air quality issues and cause impacts at sensitive locations. Dispersion modelling was undertaken using ADMS-Roads. A construction dust assessment was also performed to provide mitigation for proposed dust generating activities. Results of the study indicated that air quality impacts and fugitive dust emissions were not significant.

Willow Lane, Mitcham

Air Quality Assessment in support of an industrial development off Willow Lane, Mitcham. Due to the size of the development, it was possible that traffic generated from the scheme may cause negative impacts on sensitive receptors nearby. NO₂ and PM₁₀ concentrations were quantified at specific receptor points to ensure there would be no significant increases in pollution levels. Results revealed negligible impacts at all locations. An Air Quality Neutral Assessment was also undertaken in accordance with the London Plan. Following implementation of relevant mitigation measures, the development was considered Air Quality Neutral.

Harrow Road, London

Air Quality Assessment in support of a nursery. Detailed dispersion modelling, including advanced canyon inputs, was undertaken to evaluate the potential for exposure of future occupants to any existing issues at the site. The results indicated air quality conditions did not present an issue to planning consent.

The Green, Cheadle

Air Quality Assessment in support of a new Aldi store off the Green, Cheadle. Following concerns from the Local Authority regarding the potential for traffic generated by the proposals to cause air quality impacts, dispersion modelling was undertaken in order to quantify changes in pollutant concentrations at sensitive locations in the vicinity of the site. Results revealed negligible impacts at all locations.

Holloway Road, London

Kitchen Odour Assessment undertaken in line with the EMAQ+ and DEFRA guidance in support of a new restaurant on Holloway Road, London. Site-specific odour abatement options were identified in order to conform with best practice guidance. Based on the inclusion of the specified mitigation, odour effects associated with the development were not considered a constraint to planning consent.

Wyebridge Motors, Hereford

Ambient Air Quality Monitoring in support of a residential development. The Local Authority raised concerns regarding the exposure of future residents to poor air quality as a result of pollution from the adjacent A49. Due to the irregular topography of the area, a scheme of diffusion tube monitoring was undertaken to determine baseline NO₂ concentrations at the site. Results indicated that concentrations were below the Air Quality Objective at the building façade and as such, the risk for exposure of future residents to poor air quality was not considered significant.

APPENDIX 5 PRELIMINARY ECOLOGICAL APPRAISAL

Preliminary Ecological Appraisal Report

Lord Street, Manchester
Reference: 82-675-R1-1
Date: October 25





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QUALITY ASSURANCE

Report reference	82-675-R1
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REV REF:	DESCRIPTION	AUTHOR	CHECKED	AUTHORISED	DATE
R1-1	First issue	NS2	HM	CK	08/10/25

This report has been prepared for the sole benefit, use, and information of the client. The liability of Environmental Engineering Partnership Limited T/A E3P with respect to the information contained in the report will not extend to any third party. This report has been prepared by the qualified persons as listed below.

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EXECUTIVE SUMMARY

Site Address	Land south of Lord Street, Strangeways, Manchester M4 4EX
Coordinates	E 384140 N 399435
Site Area	Approximately 0.16 ha
Current Site Use	The site comprises a vacant plot of derelict land colonised by overgrown vegetation. The site is bordered to the east, north and west by Cheetham Hill Road, Lord Street and Fernie Street. A Texaco filling station lies directly adjacent to the south.
Designated Sites	No statutory designated sites were identified within 1 km of the site boundary. However, the site is located within the Impact Risk Zone of the Rochdale Canal Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC), located approximately 5 km to the east. As per the criteria listed on MAGIC, the proposed site will not require further consultation with Natural England to proceed in relation to the SSSI due to the size of the site and the nature of the proposed works. Furthermore, no negative impacts to the SAC are anticipated as a result of the development and therefore a Habitat Regulations Assessment will not be required. No non-statutory designated sites are located within 1 km of the site.
Survey Results	The site was found to contain vacant or derelict land with one structure present. The site was found to have the following potential ecological constraints: ✳ Terrestrial opportunities for common amphibians within rubble piles and scrub. ✳ Structure 1 (S1) was assessed as having a Low bat roosting potential. ✳ Potential presence of badgers, although limited. ✳ Potential presence of hedgehogs within the dense scrub. ✳ One small shallow mammal hole within the southwest of the site. ✳ Opportunities for nesting birds within the structure and scrub.
Conclusions	The following further survey is recommended to inform a planning application: One Nocturnal Bat Survey is required on S1 between May and August (inclusive). If bats are identified roosting within the structure, a further two surveys would be required to characterise the roost, and a European Protected Species Licence will be required and with up-to-date surveys from the survey season prior to the application submission. The following mitigation is recommended: ✳ Common amphibians are to be removed by hand from the working area during the clearance phase. ✳ Precautionary Working Methods for badger.



-  Where vegetation requires removal, it should be checked for the presence of hedgehogs prior to removal. If any vegetation is too dense to be fully inspected, it should be strimmed to 50 cm and checked for hedgehog before being cleared to ground level.
-  The small mammal hole should be inspected before site clearance. Should a small mammal be identified sheltering within the hole, works should cease in this area until the mammal has vacated the hole.
-  The structure and vegetation should be cleared or demolished outside of the breeding bird season (March to September inclusive). If this is not possible, a nesting bird check should be undertaken by a suitably qualified ecologist up to 48 hours before works commence. If a nest, or nest in construction, is located, then a stand-off distance should be maintained until the young have fledged.

A 10% gain in biodiversity will be required on-site. If this cannot be achieved on-site, a conservation offset payment or off-site compensation will be required.



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1. INTRODUCTION

1.1. BACKGROUND

E3P were commissioned by Linear Living Ltd to undertake a Preliminary Ecological Appraisal at Lord Street, Manchester, hereafter referred to as “the site”.

This report has been prepared by Noah Salt BSc (Hons), Graduate Ecologist at E3P. Noah holds a qualifying CIEEM membership, has a Level 4 Field Identification Skills Certificate (FISC) and has experience undertaking Preliminary Ecological Appraisals, protected species surveys and ecological mitigation for a wide variety of projects across the UK.

1.2. PROPOSED DEVELOPMENT

Proposals include the erection of a 20-storey residential building.

1.3. SITE LOCATION

The site is located to the north of Manchester City Centre, in the Strangeways area. The site is bordered by Cheetham Hill Road to the west, Lord Street to the north, and Fernie Street to the east. Please refer to Figure 1 for the approximate site location.

Figure 1 Approximate Site Location





1.4. OBJECTIVES

The objectives of the Preliminary Ecological Appraisal are as follows:

- ✦ Identify the major habitats present.
- ✦ Ascertain the presence or potential presence of any legally protected species and habitats.
- ✦ Recommend any further surveys or mitigation that may be required.

The Preliminary Ecological Appraisal comprises a desk study and site walkover. This survey has been completed as a baseline assessment of the site, and as such please see the end of the report for further surveys and mitigation proposed.



2. METHODOLOGY

2.1. DESKTOP STUDY

The following sources of information and ecological records were consulted:

- ✳ MAGIC – A web-based interactive mapping system, on which geographic information regarding key environmental schemes and designations are collated, including details of statutory conservation sites, accessed September 2025.
- ✳ Aerial mapping and ordnance survey maps.
- ✳ Local data records provided by the Greater Manchester Ecology Unit (GMEU) on the 18th of September 2025.

A 1 km search area was utilised for the data search, with this being deemed an appropriate distance for the zone of influence of the site. The 1 km data search was selected due to the small size of the site as well as the urban nature of the surrounding area.

The data search included the request for details of protected and notable species of flora and fauna within 1 km of the central grid reference of the site. In addition, a request was made for any non-statutory designated sites within 1 km of the site boundary.

Please note that a lack of up-to-date records does not confirm the absence of a species from the area. The lack of records may simply be a result of a lack of protected species surveys being undertaken within the local area.

2.2. VEGETATION AND HABITATS

A Preliminary Ecological Appraisal of the proposed development site was undertaken by Noah Salt on the 18th of September 2025. The weather was warm and dry.

The walkover survey was undertaken to the standard methodology as detailed by the UK Habitat Classification Version 2.0 (UKHab, 2023). The assessment follows the methodology as per “Guidelines for Preliminary Ecological Appraisal” (CIEEM, 2017).

A vegetation and habitat plan has been produced for the proposed development site (please refer to Appendix I). The mapping is based on the UK Habitat Classification Version 2.0 (UKHab, 2023).

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. All plant nomenclature follows Stace (2019).

Searches were carried out for the presence of invasive species, including those listed on the revised (April 2010) Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), including Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).



2.3. FAUNA

A thorough search of the site for signs of protected species of fauna was undertaken during the site walkover. These searches considered the following:

- ✚ Suitability of any ponds to support notable amphibians, and the suitability of the site's terrestrial habitats to support amphibians.
- ✚ Suitability of the site to support reptiles by way of habitat structure and refuge piles, as well as links to the wider landscape.
- ✚ Signs of badgers (*Meles meles*), by way of setts, mammal paths, foraging signs, or latrines to indicate usage of the site by the species.
- ✚ Search of any watercourses for signs or suitability for water vole (*Arvicola amphibius*) and otter (*Lutra lutra*) by way of burrows, resting places, holts, and foraging signs.
- ✚ Suitability of the site to support roosting, foraging and commuting bats.
- ✚ Suitability of the site to support notable bird species.
- ✚ Suitability of the site to support notable invertebrates.
- ✚ Search of the site for any invasive species.

2.4. PRELIMINARY ROOST ASSESSMENT

The Preliminary Roost Assessment was undertaken by Noah Salt on the 18th of September 2025. The survey involved undertaking a systematic search of the structures onsite, searching for signs of bats or spaces where bats would be able to access. The methodology followed that described in *Bat Surveys for Professional Ecologists, 4th Edition (Collins, 2023)*.

The structures were categorised for their bat roosting potential as described in **Table 1** in accordance with Collins (2023).

Table 1 Bat Roosting Potential Classification of Structures

CATEGORY	DESCRIPTION
NONE	No habitat features are likely to be used by any roosting bats at any time of the year.
NEGLIGIBLE	No obvious habitat features on-site are likely to be used by roosting bats; however, a small element of uncertainty remains, as bats can use small and apparently unsuitable features on occasion.
LOW	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions, and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
MODERATE	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but is unlikely to support a roost of high conservation status.
HIGH	A structure with one or more potential roost sites that are obviously suitable for use by a larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity, or classic cool/stable hibernation sites.



2.5. SURVEY LIMITATIONS

A Preliminary Ecological Appraisal does not constitute a full botanical survey. Instead, key species are identified to give a representative description of each habitat type. Additionally, due to different flowering times, some plant species present may have been missed. These limitations have been considered.



3. SURVEY RESULTS

3.1. SITE CONTEXT

The site comprised a small plot of vacant, derelict land to the north of Manchester City Centre. The surrounding habitats were predominantly urban in nature, with the immediate surroundings comprising roads, commercial units and high-rise residential dwellings. This urban arrangement of habitats is anticipated to provide limited value for local wildlife, however, the buildings may be used by nesting birds and small numbers of opportunistic roosting bats.

No Biodiversity Action Potential (BAP) Priority Habitats are present within the site or directly adjacent to the site boundary however, numerous isolated parcels were present within 1 km. The closest of which were Deciduous Woodland and Open Mosaic Habitat on Previously Developed Land located approximately 250 m and 470 m east of the site, respectively. These habitats are likely to provide value for a number of flora species, including plants seen in early successional communities and specialist fungi. These habitats will also offer high value for local animal species, including birds, terrestrial mammals and amphibians. Despite this, no suitable habitat corridors exist between these habitats and the site, with numerous high-rise buildings and high disturbance roads in between.

An active and inactive railway line and embankment is located approximately 150 m to the east of the site. This habitat could provide valuable commuting habitat for birds, bats and other terrestrial mammals. Despite this, numerous roads and buildings form a barrier between these habitats and the site itself.

The River Irk, a tributary of the river Irwell with the confluence located approximately 560 m southwest of the site, flows approximately 175 m south from the site at its closest point. The aquatic habitat present could provide valuable habitat for species such as otter, water vole and Daubenton's bat (*Myotis daubentonii*) however, there is no connectivity between the watercourse and the site.

An unvegetated ornamental fountain was located approximately 60 m south of the site. No other waterbodies were located within 250 m of the site.

3.2. DESIGNATED SITES

No statutory designated sites were identified within 1 km of the site boundary. However, the site is located within the Impact Risk Zone of the Rochdale Canal Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC), located approximately 5 km to the east. Rochdale Canal is designated as a SSSI for supporting a diverse assemblage of aquatic vegetation, including the nationally scarce floating water-plantain (*Luronium natans*), for which it receives its SAC status. As per the criteria listed on MAGIC, no further consultation with Natural England is required with regards to Rochdale Canal SSSI. Furthermore, due to the distance between the site and the SAC, and the anticipation that the proposed residential building will not have a significant impact on air quality, a Habitat Regulations Assessment (HRA) will not be required.

No non-statutory Sites of Biological Importance were identified by GMEU.



3.3. HABITATS

The main habitats encountered during the survey are described in the following subsections. Please refer to Appendix I for the UKHab Habitat Plan.

3.3.1. SPARSELY VEGETATED URBAN LAND – VACANT OR DERELICT LAND U1F - 82

The majority of the site comprised derelict land which had been left vacant following the demolition of the previous building in early 2020. The peripheries of the site were dominated by butterfly bush (*Buddleja davidii*) with scattered silver birch (*Betula pendula*), goat willow (*Salix caprea*) and crack willow (*Salix fragilis*) saplings. Towards the centre of the site, there was a mosaic of hardstanding and hardcore which was colonised by a range of urban, disturbed ground, ruderal species including mugwort (*Artemisia vulgaris*), michaelmas-daisy (*Aster* sp.), Canadian fleabane (*Solidago canadensis*), bramble (*Rubus fruticosus* agg.), field horsetail (*Equisetum arvense*), mouse-ear-hawkweed (*Pilosella officinarum*), cat's ear (*Hypochaeris radicata*), coltsfoot (*Tussilago farfara*), dandelion (*Taraxacum officinale* agg.), black medic (*Medicago lupulina*), herb Robert (*Geranium robertianum*), ribwort plantain (*Plantago lanceolata*), red clover (*Trifolium pratense*), petty spurge (*Euphorbia peplus*), ribbed melilot (*Melilotus officinalis*), yellow-wort (*Blackstonia perfoliata*), common centaury (*Centaureum erythraea*), Yorkshire fog (*Holcus lanatus*), red fescue (*Festuca rubra*) and smaller cat's-tail (*Phleum bertolonii*). The habitat does not meet the criteria for open mosaic habitats on previously developed land, as the area of this habitat is less than 0.25 ha. Furthermore, only a small number of ruderal and annual indicator species were present.

Figure 2 Sparsely Vegetated Urban Land - Vacant or Derelict Land (u1f – 82)



3.3.2. STRUCTURES

One small structure was located within the southwest corner of the site. This structure was a remaining section of the building, which was demolished in 2020. The structure comprised red brick and breeze block walls, with part demolished walls providing access into the interior. Dense butterfly bush scrub surrounded the walls of the structure, and the species had also colonised the roof.



Figure 3 **Showing Structure**



3.4. PROTECTED AND NOTABLE SPECIES

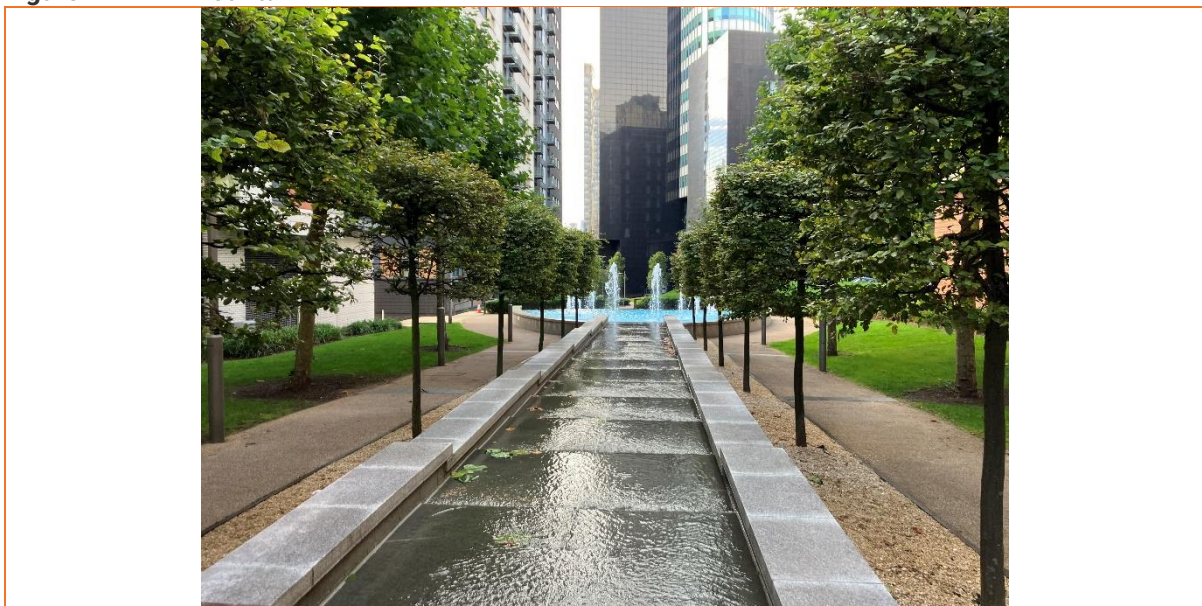
3.4.1. AMPHIBIANS

No records of great crested newts (*Triturus cristatus*) were identified by GMEU during the record search.

Consultation with MAGIC did not identify any great crested newt European Protected Species Licenses (EPSLs) within 1 km of the site. The closest EPSL was located approximately 5.4 km northwest of the site, active between 2014 and 2015 for the destruction of a great crested newt resting place.

An ornamental fountain was located approximately 60 m south of the site. No vegetation was present in the fountain, and it did not offer suitable breeding habitat for great crested newts. Please see Figure 4 for an image of the fountain.

Figure 4 **Fountain**





No further waterbodies were identified within 250 m of the site.

Great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though the occurrence of greater distances does exist where habitat connectivity is of high quality) (English Nature, 2001). As there are no suitable waterbodies located on-site or within 250 m of the site boundary, the presence of great crested newts on-site is reasonably discounted.

Further consultation with GMEU did not identify any records of common amphibians within 1 km of the site. The site does not offer a suitable breeding habitat for common amphibians due to a lack of waterbodies on-site. However, the vegetation and rubble piles may provide suitable shelter and protection for the species group within their terrestrial phase. As such, common amphibians may be present on-site.

3.4.2. BATS

Consultation with GMEU identified multiple records of bats within 1 km of the site, with recent records including common pipistrelle (*Pipistrellus pipistrellus*) and older records including soprano pipistrelle (*Pipistrellus pygmaeus*) and Daubenton's bat (*Myotis daubentonii*). The closest record was located approximately 90 m southwest of the site from 2014, comprising a record of an injured common pipistrelle.

Consultation with MAGIC identified four Natural England Bat Mitigation Licences within 1 km of the site, the details of which can be found in Table 2.

Table 2 Summary of Natural England Bat Licences

LICENCE REFERENCE	APPROXIMATE DISTANCE FROM SITE (M)	DESCRIPTION
2014-6380-EPS-MIT	600 m south	Active between 2015 and 2023 for the destruction of a common pipistrelle non-breeding roost.
2014-4219-EPS-MIT	750 m southwest	Active between 2014 and 2020 for the destruction of a common pipistrelle non-breeding roost.
2017-31569-EPS-MIT	800 m southwest	Active between 2017 and 2019 for the destruction of a common pipistrelle non-breeding roost.
EPSM2013-5644	950 m southeast	Active between 2013 and 2015 for the destruction of a common pipistrelle non-breeding roost.

The building on site (S1) was assessed as having Low bat roosting potential. A detailed assessment and photographs of the building are outlined in Appendix II.

Although the site comprised habitats which could support invertebrates, which could provide foraging opportunities for bat species, the site is small, lacks linear habitats and is situated within an area with high anthropogenic disturbance from traffic and street lighting. As such, the site is not anticipated to provide value for commuting and foraging bats.

3.4.3. BADGER

Consultation with GMEU identified one record of badger within 1 km of the site from 2011.



No badger setts or field signs were located on-site or within 30 m of the site boundary. However, badgers may occasionally utilise the site for foraging within the vegetation. Furthermore, although unlikely, the looser ground could be used by badgers for sett building.

3.4.4. OTTER AND WATER VOLE

Consultation with GMEU identified multiple records of otter within 1 km of the site. The closest of which comprised a record of an otter pair from 2018, approximately 600 m to the southwest of the site associated with the River Irwell.

No records of water vole were identified within the data search.

No watercourses are located on-site or directly adjacent to the site boundary. The closest watercourse is the River Irk, located approximately 175 m south at its closest point. Due to a lack of suitable aquatic and terrestrial habitat for otter and water vole within or adjacent to the site boundary, both species have been ruled out of further assessment.

3.4.5. OTHER TERRESTRIAL MAMMALS

A single record of a common hedgehog from 2020 was identified approximately 400 m south of the site.

The site was assessed as providing suitable refuge and foraging habitat for hedgehogs within the vegetation understorey however the habitat was isolated from other suitable habitat in the surrounding area. As such, hedgehogs may occasionally be present on-site.

A small mammal hole, approximately 1 m deep was present within the hardstanding embankment to the southwest of the site. A full inspection of the hole was possible during the survey.

Figure 5 Mammal Hole



3.4.6. BREEDING BIRDS

Consultation with GMEU identified numerous records of notable and protected bird species within 1 km of the site. Species included black redstart (*Phoenicurus ochruros*), hobby (*Falco subbuteo*), kingfisher (*Alcedo atthis*), peregrine (*Falco peregrinus*), bullfinch (*Pyrrhula pyrrhula*), cuckoo (*Cuculus canorus*),



dunnoek (*Prunella modularis*), herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), song thrush (*Turdus philomelos*), spotted flycatcher (*Muscicapa striata*), starling (*Sturnus vulgaris*) and yellow wagtail (*Motacilla flava*).

Common bird species are anticipated to be present within the habitats onsite and may use the vegetation and structure for nesting. Due to the small size of the site and the high disturbance of the habitats directly adjacent to the site, it is not anticipated that the site supports an important assemblage of bird species or any ground-nesting birds.

3.4.7. REPTILES

Consultation with GMEU did not identify any records of reptiles within 1 km of the site.

The habitats onsite could support reptile species within the vegetation; however, due to a lack of suitable habitats and habitat connectivity within the local area and the urban habitats which were present on the site within the recent past, reptiles are not anticipated to be onsite and have been ruled out of further assessment.

3.4.8. NOTABLE INVERTEBRATES

Consultation with GMEU identified multiple records of notable invertebrates within 1 km of the site, including cinnabar (*Tyria jacobaeae*) and common carpet (*Epirrhoe alternata*).

Due to the small size of the site and the lack of connectivity to any high-quality habitats, an important assemblage of notable invertebrate species is not anticipated to be present on-site.

3.5. INVASIVE PLANT SPECIES

No invasive non-native plant species listed on the Wildlife and Countryside Act 1981 were identified on, or within close proximity to, the site. The native species, field horsetail, was identified at a low density on-site. This species can cause damage to hardstanding and structures.



4. ECOLOGICAL CONSTRAINTS AND MITIGATION

4.1. DEVELOPMENT PROPOSALS

Proposals include the erection of a 20-storey residential building.

4.2. PROTECTED AND NOTABLE SPECIES

4.2.1. AMPHIBIANS

The site may support small numbers of common amphibians within the vegetation and rubble piles. It is recommended that during the clearance phase of works, any common amphibians encountered should be moved by hand away from construction activities.

4.2.2. BATS

The onsite structure was assessed as having a Low roosting potential. Please see Section 5.1 for the information regarding further surveys in relation to bats.

It is recommended that any planting within the site be of native fruiting/flowering species in order to enhance the site for foraging bats post-completion.

Furthermore, bat boxes could be included in the design to enhance the sites value for the species group.

4.2.3. BADGERS

The habitats onsite may occasionally be visited by foraging badgers. As such, the following precautionary working methods will be adhered to during the construction phase to ensure that no badgers within the local area are impacted by the proposed development:

- ✚ All site operatives will be inducted to the presence of the species and their working limits and legal responsibilities. If they suspect that they locate a new sett during works, works should cease immediately, and the site manager and project ecologist should be notified.
- ✚ All excavations will be battered at a 45-degree angle, or ramps will be installed, to allow the escape should animals become trapped. Alternatively, excavations will be covered overnight.
- ✚ All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November (inclusive) each year when extra care is needed to avoid potential impacts on pregnant females.

It is not anticipated that the development will have a significant negative impact on badgers within the local area.

4.2.4. HEDGEHOGS

The site was assessed as providing suitable refuge and foraging habitat for hedgehogs within the denser vegetation. Where vegetation requires removal, it should be checked for the presence of hedgehog prior to removal. If any vegetation is too dense to be fully inspected, it should be strimmed to 50 cm and checked for hedgehog before being cleared to ground level.



4.2.5. OTHER MAMMALS

The small mammal hole should be inspected to ensure that no animal is occupying the shallow hole before clearance. Should any small mammal be identified, works within proximity to the hole should cease until the mammal has vacated the hole.

4.2.6. BREEDING BIRDS

The site was assessed as having value for common bird species within the peripheral vegetation and the onsite structure. Demolition and clearance of these features should be carried out outside of nesting bird season. Breeding bird season occurs between March-September (inclusive). If this is not possible, a suitably qualified ecologist should inspect the area no more than 48 hours prior to the removal. Should any nests, or nests in construction, be located, a suitable stand-off distance should be maintained until the young have fledged. The ecologist will advise on suitable standoff and provide a toolbox talk to all site contractors regarding their working limits and legal implications.

Post-development, bird boxes could be installed on the development to enhance the site's value for the species group.



5. FURTHER SURVEYS

5.1. BATS

The structure onsite (S1) was found to have Low bat roosting potential. As such, one Nocturnal Bat Survey is required on the structure between May and August (inclusive). If bats are identified roosting within the structure, a further two surveys would be required to characterise the roost, and a European Protected Species Licence will be required and with up-to-date surveys from the survey season prior to the application submission.

5.2. TABLE OF FURTHER SURVEYS

Please refer to Table 3 for a summary of further surveys required to inform a planning application.

Table 3 Further Surveys Recommended

SURVEY TYPE	TIMESCALES
Bat Survey on S1	One survey should be undertaken between May to August (inclusive)



6. BIODIVERSITY NET GAIN

The scheme will be required to achieve a 10% in Biodiversity Net Gain. In line with The Environment Act 2021, this is a mandatory requirement. Full details of this and a calculation of net gain could be finalised after detailed landscape plans have been prepared. It is recommended that an ecologist is consulted during the design stage to ensure, where possible, that biodiversity net gain can be achieved. If this is not feasible on-site, a conservation offset payment or off-site compensation may be required.

Habitat measures should be provided within areas of open space or designated wildlife zones. Planting should consist of native species and be of local provenance where possible. A 30-year management plan should be produced to ensure any significant biodiversity enhancements are secured on-site.



7. REFERENCES

- ✿ Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal.
- ✿ Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition. The Bat Conservation Trust, London.
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END OF REPORT

APPENDIX I

UKHAB HABITAT PLAN





Key:

- Red line boundary
- Approximate field horsetail location
- Structure
- Vacant or derelict land

Notes

Issue: 1	Revision: 1	Date: 18/09/2025	Drawn: NS2	Authorised: CK
Client: Linear Living Ltd			Job No. 82-675	Date: 18/09/2025
			Drawing No. 82-675-001	Scale: 1:400 @ A4
Job title: Lord Street, Manchester			Drawing title: UKHab Habitat Plan	

APPENDIX II

STRUCTURE 1

DESCRIPTION





STRUCTURE REFERENCE	DESCRIPTION	PHOTOS
S1	S1 comprised a small section of the building which previously occupied the site, which was not demolished in 2020. As such, the features described below would only have been available to bats for the past five years. The structure was surrounded by dense vegetation along the sides and on the roof. The structure comprised two rooms, which were both missing walls on the northern aspect, providing access into the structure. Within both the internal rooms, small crevices in which a small number of bats could opportunistically roost in were present. Within the eastern room, a breeze block was missing from the internal wall, which provided access into the cavity wall. Within the western room, the roof and wall had flexed, creating a long crevice along the back wall. No evidence of bats was identified during the survey.	



STRUCTURE REFERENCE	DESCRIPTION	PHOTOS
		