



NOMA 2 & 3 Angel Square, Manchester

Environmental Impact Assessment (EIA)

Screening and Scoping Report

June 2022

Contents

	1
1 Introduction	3
2 Site Description and Proposed Development	6
3 Scope, Structure and Consultation	11
4 EIA Methodology	46
5 Environmental Statement Chapters	50
Appendix 1: Site Location Plan	56
Appendix 2 – Committed Developments	57
Appendix 3: Salford Archaeology Archaeological Evaluation Report October 2021	68
Appendix 4: 2&3 Angel Square 2015 Environmental Statement	69
Appendix 5: 2015 Air Quality Assessment	70
Appendix 6: 2019 Air Quality Assessment	71
Appendix 7: 2019 Ecology Survey	72
Appendix 8: 2 Angel Square 2015 Flood Risk Assessment and Drainage Strategy	73
Appendix 9: 3 Angel Square 2015 Flood Risk Assessment and Drainage Strategy	74
Appendix 10: NOMA 2&3 Angel Square Flood Risk Assessment 2019	75
Appendix 11: NOMA 2&3 Angel Square Drainage Strategy 2019	76
Appendix 12: Ground Condition Reports	77
Appendix 13: 2015 Transport Statement	78
Appendix 14 – 2015 Travel Plan	79
Appendix 15 – 2019 Transport Statement	80

Appendix 16 – 2019 Travel Plan	81
Appendix 17 – TV Baseline Survey 2015	82
Appendix 18 – TV Baseline Survey 2019	83
Appendix 19 – Noise and Vibration Assessment Data 2015	84
Appendix 20 – Noise Impact Assessment 2019	85
Appendix 21 – Heritage Statement 2020	86

1 Introduction

- 1.1 This Environmental Impact Assessment ('EIA') Screening and Scoping Report has been prepared in respect of proposals for the sites identified as Plots M & N (also referred to as, 2 & 3 Angel Square within this report) ("the Site") on the endorsed NOMA Masterplan.
- 1.2 NOMA (GP) Limited ('the Applicant') will be submitting an application for Planning Permission for an office-led scheme with ground floor commercial uses and public realm ('the Proposed Development'). The term 'Proposed Development' used within this Report refers to all stages of construction and the operation of the development.
- 1.3 The Site is located to the north of Manchester City Centre and is bounded by Rochdale Road to the north, Miller Street to the south, Angel Square and 1 Angel Square (the Co-operative Group Headquarters building) to the west and Angel Gardens residential tower to the east. The Site is currently used as surface car parking.
- 1.4 In November 2015, Planning Permission was granted at 2 and 3 Angel Square for the *"Erection of a part 10 / part 11 storey, and a part 12 / part 13 storey building with plant rooms above to form a mixed use development comprising Class B1 office use (maximum of 49,622 sq.m) and commercial units maximum of 1,591 sq.m (Use Classes A1, A2, A3, B1 and D1) along with associated basement car parking, hard and soft landscaping and associated works, including the creation of a new pedestrian route between Angel Street and Miller Street"* (Ref. 109865/FO/2015/N1) ('the 2015 Planning Permission').
- 1.5 The 2015 Planning Permission was accompanied by an EIA, which was prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended) ('the 2011 EIA Regulations').
- 1.6 The 2015 Planning Permission allowed for a phased delivery of the scheme, so that 2 Angel Square could be delivered ahead of 3 Angel Square. As such, the permission for 2 Angel Square expired in November 2018 whilst the permission for 3 Angel Square remained extant until 12 November 2020.
- 1.7 In February 2020, Planning Permission was granted for a revised scheme for 2 and 3 Angel Square comprising the *"Erection of an 11 storey building and a 12 storey building with plant rooms above to form a mixed use development comprising 39,184 sq.m (NIA) of Class B1a office use and commercial units of 1,286 sq.m (NIA) (Use Classes A1, A2, A3, A4, B1a and D1) along with associated lower ground level car parking, hard and soft landscaping and associated works, including the creation of a new pedestrian route between Angel Street and Miller Street"* (Ref. 124973/FO/2019) ('the 2020 Planning Permission').
- 1.8 The Proposed Development represents a further revised scheme for both 2 and 3 Angel Square. This is currently being developed with a new application for Full Planning Permission scheduled for submission in June 2022.
- 1.9 Overall, the Proposed Development will comprise 57,453 sq. m (GIA) which compares to the previous 2015 scheme which proposed to deliver 55,257 sq. m (GIA) and the 2019 scheme which proposed to deliver 53,835 sq. m (GIA).
- 1.10 The 2020 Planning Permission was accompanied by an EIA. which concluded that the Proposed Development might give rise to significant environmental effects in relation to wind and sunlight, daylight and overshadowing. Given that the revised scheme proposes a change in mass and location of the buildings, it is proposed to undertake a new EIA in respect of the Proposed Development.
- 1.11 This Screening and Scoping Report is therefore submitted to Manchester City Council ('MCC') as a request for a Scoping Opinion under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the 2017 EIA Regulations'), which

came into force on 16 May 2017. In accordance with Regulation 15, paragraph 2, this report contains:

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

EIA Requirements

- 1.12 The EIA process is the mechanism by which development proposals are appraised in relation to the environmental criteria as well as socio-economic, engineering and technical considerations. The EIA process defines the context of the Proposed Development and examines the issues considered pertinent.
- 1.13 The purpose of the EIA is to establish both the nature of the Proposed Development and the environment within which it is likely to take place in order to identify likely significant effects on the environment that may arise. This is also undertaken by comparing the existing situation at the start of the work (baseline) with the situation once the Proposed Development is in place.
- 1.14 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 require that any Proposed Development falling within the description of a 'Schedule 2 development' within the meaning of the Regulations, will be subject to an EIA where such development is likely to have 'significant' effects on the environment by virtue of such factors as its nature, size or location (Regulation 4(2)).
- 1.15 The Proposed Development falls under the category of "Infrastructure Projects – Urban Development Projects" (Schedule 2, 10, (b)) as described in the Regulations. The applicable threshold above which EIA is likely to be required is (i) The development includes more than 1 hectare of urban development which is not dwellinghouse development; or (ii) the development includes more than 150 dwellings; or (iii) the overall area of the development exceeds 5 hectares. The indicative thresholds and criteria state that:
- "In addition to the physical scale of such developments, consideration should be given to the potential increase in traffic, emissions and noise. EIA is unlikely to be required for the redevelopment of land unless the new development is on a significantly greater scale than the previous use, or the types of impact are of a markedly different nature or there is a high level of contamination".
- 1.16 The Site covers an area of approximately 0.85 ha, so does not exceed the thresholds in relation to parts (i) or (iii) listed in Schedule 2, 10, (b) of the Regulations. However, given the nature of the Proposed Development will result in development of a greater scale than the previous use as a surface car park, an EIA is therefore considered appropriate to test the likely significant effects of the Proposed Development.
- 1.17 The Applicant therefore proposes to submit an Environmental Statement ('ES') (in relation to certain topic areas where there is likely to be a significant effect of the environment) in support of the planning application for the Proposed Development.

Purpose of the Scoping Report

- 1.18 The process of identifying likely significant effects on the environment which should be addressed by the EIA is termed 'scoping' and the results are presented as a Scoping Report.
- 1.19 Regulation 15 of the EIA Regulations set out the requirements for obtaining a scoping opinion from the relevant planning authority.
- 1.20 This Scoping Report sets out the framework within which the ES will be produced and the topic areas and information that will be contained within the document. It is issued to MCC as the Local Planning Authority ('LPA') for circulation to Statutory Consultees and other

organisations who are invited to express their views on the proposed scope of the EIA, or suggest additional issues which may be considered to be of significance. The views expressed by Statutory Consultees will then be used by the LPA to inform the formal Scoping Opinion.

- 1.21 The LPA is required to respond to a formal request for a Scoping Opinion within five weeks of registering receipt.
- 1.22 Should the proposed scope of the EIA be accepted by MCC, the EIA team, as set out in Table 1.1, will be co-ordinated and led by Deloitte LLP.

Table 1.1: EIA Project Team

Topic	Assessment Carried Out By
Sunlight, Daylight and Overshadowing	Buro Happold
Wind Microclimate	Buro Happold

- 1.23 The remainder of this report is structured as follows:
- Section 2: Site and the Proposed Development
 - Section 3: Scope, Structure and Consultation
 - Section 4: EIA Methodology
 - Section 5: ES Chapters

2 Site Description and Proposed Development

Site Description

- 2.1 The Site has a combined site area of approximately 0.85ha and comprises Plots M and N of the NOMA Masterplan as defined in the NOMA Strategic Regeneration Framework Update 2020 (SRF), as shown in Figure 2.1 below.

Figure 2.1: NOMA Masterplan 2020 (NOMA SRF 2020)

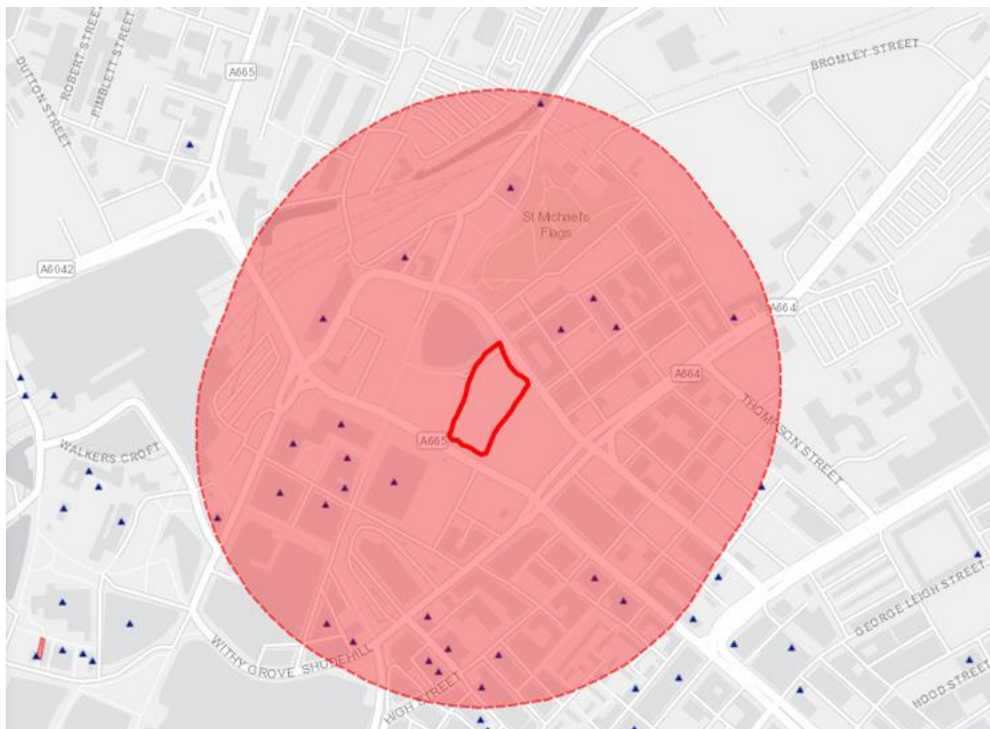


- 2.2 It is bounded by Rochdale Road / Angel Street to the north and Miller Street to the south. To the east of the Site is Angel Mews which provides a north / south pedestrian link and public space between the Site and Angel Gardens. The Co-operative Group Headquarters, 1 Angel Square, is located to the west beyond Angel Square.
- 2.3 Please refer to the Site Location Plan at Appendix 1.
- 2.4 The site has been used as surface car parking for a number of years. The Site comprises areas of a hardstanding for surface car parking alongside informal and formal areas of shrubbery and trees.
- 2.5 The NOMA Marketing Suite (as approved in May 2021 under temporary Planning Permission Ref. 129631/FO/2021) is currently under construction within and to the south of the Site adjacent to Miller Street.
- 2.6 There is a significant change in levels across the Site, with the lowest part being in the west corner, rising to the north and east towards Angel Street. The difference in level across the

Site between Angel Street and Miller Street is typically a storey, creating a lower and upper ground floor.

- 2.7 The Site is currently accessed from Angel Street to the north and also from the south of Angel Mews off Miller Street.
- 2.8 The Site has historical and archaeological significance due to its association with Richard Arkwright's Shudehill Mill and the pioneering use of technology, which signalled the birth of Manchester's factory-based cotton industry.
- 2.9 The Site is not located within a Conservation Area, nor are there any listed buildings within the red line boundary.

Figure 2.2: Listed Buildings within 300m of the Site (Historic England Map, 2022)



- 2.10 The Site is located within close proximity to several Conservation Areas, including Shudehill and Smithfield Conservation Area, and close to a number of Grade II listed buildings, principally associated with the NOMA historic estate as shown in Figure 2.2 above. These include:

- New Century House and Hall, Grade II listed
- Cooperative Wholesale Society, Corporation Street
- CIS Tower, Grade II listed
- Smithfield Market Hall, Grade II listed
- Redfern Building, Grade II listed
- Holyoake House, Grade II listed
- 29 Swan Street, Grade II listed
- Former Midland Bank, Grade II listed

- Crown and Kettle, Grade II listed
 - Daily Express Building, Grade II* listed
 - Derros Building, Grade II listed
 - Shudehill Conservation Area
 - Cathedral Conservation Area
 - Smithfields Conservation Area
 - Ancoats Conservation Area
- 2.11 The Site is located within Flood Zone 1 and within a Critical Drainage Area.
- 2.12 As with the majority of Manchester City Centre, the Site is located within the Greater Manchester Air Quality Management Area (AQMA).
- 2.13 The Site does not include any designated areas afforded special protection, such as areas of ecological or biodiversity value.

Site Context

- 2.14 The Site is located on the northern fringe of Manchester City Centre and is located within the North Manchester Area of the Regional Centre as defined in the Manchester City Council Local Development Framework. The Site is also allocated for commercial / business uses under Unitary Development Plan Saved Policy HC10b.
- 2.15 The Site forms Plots M and N of the NOMA SRF Masterplan area which was endorsed by Manchester City Council's Executive Committee in 2020.
- 2.16 Such high level political and policy support provides a very clear mandate in terms of delivering development within NOMA, which will support the next phase of growth in Manchester and enhance the City's productivity in the process. In doing so, it should maximise the opportunities that NOMA presents in terms of delivering positive regeneration outcomes for the City's communities. This translates into supporting a new high quality urban neighbourhood at NOMA for a mix of uses that is employment-led but includes a component of residential development.
- 2.17 The Site is immediately adjacent to a number of NOMA developments, including 1 Angel Square, the Co-operative Group Headquarters building, and Angel Gardens, a residential-led development that completed in 2020.
- 2.18 Angel Square public space is located immediately to the west and adjoining the Site. It is a key element of public space within the NOMA Masterplan that provides links between the area north of Angel Street and Angel Meadows through NOMA and into Manchester City Centre.
- 2.19 To the east of the Site is Angel Mews which provides a north / south pedestrian link and public space between the Site and Angel Gardens.
- 2.20 St Michael's Flags / Angel Meadow Park is a short walk to the north and is well used by surrounding residential developments.
- 2.21 4 Angel Square (as approved in July 2019 under Planning Permission Ref. 123437/FO/2019) is currently under construction at Plot P to the west of Angel Square.
- 2.22 The Site is bound to the north by Miller Street and south by Angel Street which both form part of Manchester's Inner Ring Road (IRR). The IRR connects all of the major road routes into the City Centre (including Rochdale Road) and as a result carries a high volume of traffic at all times of the day.

- 2.23 Beyond to the south is the NOMA historic estate (former Co-operative Group estate), which includes a number of Grade II Listed Buildings, including CIS Tower, New Century House and Hall, Redfern and Dantzic.
- 2.24 Beyond Angel Street to the north is the Linx residential development and other 7/8 storey residential apartment buildings.
- 2.25 The Site is extremely well-located. It is in close proximity to Shudehill Interchange, which provides access to Manchester's Metrolink network as well as local bus services.
- 2.26 It is also within a short walking distance of Manchester Victoria Station, which is an important hub on the north-west railway network and serves destinations throughout Greater Manchester and the north of England. In recent years, it has been the subject of significant investment from Network Rail to upgrade facilities and increase the number and location of services, including direct services to Manchester Airport.
- 2.27 The Site is also within easy walking distance to employment opportunities and the services and facilities offered by Manchester City Centre and in close proximity to the predominantly residential areas of New Cross and Ancoats to the east.

Planning History

- 2.28 A planning history search for the Site has been undertaken using Manchester City Council's Public Access system. The results of the search have identified the following planning permission which is of relevance to the current application:

Reference No	Address	Description of Development	Status
129631/FO/2021	Land North Of Miller Street NOMA Manchester M4 4PR	<i>Erection of a single-storey marketing suite building (Sui Generis), including photovoltaics and related access, landscaping, bicycle parking, plant and servicing and associated works for a temporary period of up to 5 years.</i>	Approved 5 May 2021. Under construction.
124973/FO/2019	Land Bounded By Co-op Headquarters Miller Street And Angel Street Manchester	<i>Erection of an 11 storey building and a 12 storey building with plant rooms above to form a mixed use development comprising 39,184 sq.m (NIA) of Class B1a office use and commercial units of 1,286 sqm (NIA) (Use Classes A1, A2, A3, A4, B1a and D1) along with associated lower ground level car parking, hard and soft landscaping and associated works, including the creation of a new pedestrian route between Angel Street and Miller Street.</i>	Approved 12 Feb 2020. Not implemented. Permission expires 12 Feb 2023. Relates to this Site.
109865/FO/2015/N1	Nos 2 and 3 Angel Square, Ancoats, Manchester, M4 4FW	<i>Erection of a part 10 / part 11 storey, and a part 12 / part 13 storey building with plant rooms above to form a mixed use development comprising Class B1 office use (maximum of 49,622sqm) and commercial units maximum of 1,591sqm (Use Classes A1, A2, A3, B1 and D1) along with associated basement car parking, hard and soft landscaping and associated works, including the creation of a new pedestrian route between Angel Street and Miller Street.</i>	Approved 12 November 2015. Not implemented. 2 Angel Square lapsed 12 November 2018; and 3 Angel Square 12 November 2020. Relates to this Site.

- 2.29 As noted above, MCC have endorsed an SRF for NOMA, which provides a positive vision for the development of the NOMA area as an employment-led mixed-use destination.
- 2.30 The Site is currently underutilised and in need of regeneration to enable the site to realise its full potential as a key contributor to the city centre economy.

The Development Proposals

- 2.31 The development proposals comprise the erection of two high quality commercial office buildings of 13 and 14 storeys, alongside public realm, car parking, extensive cycle parking facilities, and associated highways and access arrangements.
- 2.32 The proposed overall quantum of development is set out within Table 2.1.
- 2.33 For the Screening and Scoping stage of the EIA, we have asked that all consultants consider the parameters with the 5% buffer as shown in Table 2.1.

Table 2.1: Proposed Development Statistics

	2 Angel Square	3 Angel Square	TOTAL
Site Area	0.85 ha		
Office (sq. m GIA)	27,500	32,500	60,000
Retail (sq. m NIA)	0	620	620
Heights (storeys)	14 (LG, UG,12 upper)	13 (LG, UG,11 upper)	N/A
Height (AOD)	110.775	106.575	N/A
Car Parking Spaces	17	16	33
Cycle Parking Spaces	158	193	351
Public Realm	0.3 hectares		

- 2.34 Overall, the Proposed Development will comprise 60,000 sq. m (GIA) which compares to the previous 2015 scheme which proposed to deliver 55,257 sq. m (GIA) and the 2019 schemes which proposed to deliver 53,835 sq. m (GIA).

Phasing and Delivery

- 2.35 The Proposed Development will be phased. At this stage the phasing and delivery strategy is not fixed. It is possible that either 2 Angel Square or 3 Angel Square could be delivered first as a standalone building, or the delivery could be concurrent. This is reflected in the proposed EIA methodology.
- 2.36 A detailed Phasing Plan will be provided to support preparation of ES Chapters. The following testing scenarios will be considered within the EIA:
1. Existing site (baseline)
 2. 2 Angel Square
 3. 3 Angel Square
 4. 2 & 3 Angel Square
 5. 2 & 3 Angel Square with committed development
- 2.37 For wind, additional testing scenarios are proposed and considered within Section 5 of this Report.
- 2.38 The construction programme is indicative at this stage and assumes commencement of the scheme in Q1 2023 and completion in Q1 2025.

3 Scope, Structure and Consultation

Scope

- 3.1 A screening and scoping exercise has been carried out in order to determine the likely significant effects on the environment that may arise as a result from the Proposed Development. This process has enabled the team to determine which technical disciplines are pertinent to the Proposed Development and the scope of assessment required in order for any likely significant effects on the environment to be addressed as part of the EIA process.
- 3.2 This process has taken account of the conclusions of the 2020 EIA, relevant planning policy, the 2017 EIA Regulations, knowledge of the Site, and the professional opinion of the project team.
- 3.3 The information presented in the ES will be provided in accordance with Schedule 4 of the EIA Regulations and will include:
- A description of the Proposed Development;
 - An outline of the main alternatives studied;
 - A description of the aspects of the environment likely to be significantly affected by the proposals;
 - A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment;
 - A non-technical summary; and
 - An indication of any difficulties encountered by the Applicant in compiling the required information.
- 3.4 The introductory chapters for the ES will provide the following information:
- An introduction to the ES in a legislative and the site-specific context;
 - Description of the Site and Proposed Development;
 - Alternatives considered and project design evolution;
 - EIA methodology;
 - Construction methodology and programme;
 - ES Structure; and
 - Details of the EIA project team.
- 3.5 The geographical coverage of the EIA will be determined by a number of factors including:

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

Environmental Disciplines to be Scoped Out of the EIA

- 3.6 It is considered that the following disciplines will not give rise to likely significant effects on the environment and would therefore not require inclusion in the ES.
- 3.7 An explanation for each discipline is provided; this references the conclusions of the 2015 and 2020 Application EIAs, which identified in a number of instances that the disciplines would not give rise to likely significant effects. Each discipline also takes into consideration the new proposals, any changes in context, legislation and guidance from the previous EIAs.

Archaeology

- 3.8 This screening input has been prepared by Ashley Brogan at Salford Archaeology. Salford Archaeology are a registered CIfA organisation and Ashley Brogan holds an Archaeology BA from the University of Nottingham and an Archaeology MA from the University of Liverpool.
- 3.9 This screening assessment considers the impact on archaeological remains within the development area at 2-3 Angel Square. The Site (centred on NGR 384390 398980) is situated on the northern fringe of the city centre, lying on the north-eastern side of Miller Street, and to the south of the Cooperative Group’s Headquarters Building. The majority of the Site was cleared of buildings in the later 20th and early 21st century and is currently for car-parking purposes.

Baseline Conditions

- 3.10 The Site was occupied in the late 18th century by Manchester’s first steam-powered cotton mill, established by Richard Arkwright in 1780-83 and the footprint of another cotton mill that had been added to Arkwright’s Shudehill Mill complex by 1786, and was the first to be powered by a Boulton & Watt steam engine. The site of this mill was subject to redevelopment in the 19th and 20th centuries.
- 3.11 In May 2021, Salford Archaeology carried out the archaeological evaluation, consisting of seven trenches. The Report is contained in Appendix 3. During the evaluation remains were encountered below the former right-hand carriageway of Miller Street that had the potential to be part of the 18th-century mill, later known as Mottershead’s Mill. Due to this, Greater Manchester Archaeological Advisory Service (GMAAS) recommended an excavation be carried out within this area to ascertain the nature of the remains and record any remnants of the early mill.
- 3.12 A 41m by 6m trench was excavated which uncovered the remains of floors and walls associated with the late 19th-century warehousing erected on the Site as part of Baxendale’s Ironworks complex. No elements of the early mill had survived within the excavation area. The full results of the excavation are given in Salford Archaeology’s 2021 excavation report Appended.
- 3.13 Potential: Excavation has recorded the remains within the Site associated with the late 19th-century warehousing. The remaining archaeological potential of the Site include remains of the water management system associated with Arkwright’s Mill. Remains of the water management system would be deeper than the depths reached in the 2021 excavation and therefore further investigation may be required to identify and, if present, record these remains. Without any development these remains would be retained in situ.

- 3.14 Significance: Remains of the water management system would share a group value with Arkwright's Mill, which is considered to be of high significance. Therefore, the remains have the potential to contribute to the understanding of an important industrial site and would therefore be considered to have high local/borough significance.

Method of Assessment

- 3.15 The assessment has been carried out in accordance with the relevant Chartered Institute for Archaeologists' and Historic England guidelines (CIfA 2020, Standard and Guidance for Historic Environment Desk-based Assessments; English Heritage 2006, Management of Research Projects in the Historic Environment (MoRPHE)). The principal sources of information consulted were historical and modern maps, although published and unpublished secondary sources were also reviewed.
- 3.16 The results of the assessment identified the significance of the archaeological resource of the Site. In order to assess the potential impact of any future development, consideration was afforded to:
- assessing any impact and the significance of the effects arising from any future development of the Site;
 - reviewing the evidence for past impacts that may have affected the archaeological sites of interest;
 - outlining suitable mitigation measures, where possible at this stage, to avoid, reduce, or remedy adverse impacts.
- 3.17 Such impacts on the identified archaeological sites may be:
- positive or negative;
 - short, medium or long term;
 - direct or indirect;
 - reversible or irreversible.
- 3.18 Key impacts were identified as those that would potentially lead to a change to buried archaeological remains. Each potential impact was determined as the predicted deviation from the baseline conditions, in accordance with current knowledge of the Site and the Proposed Development. Table 3.1 shows the sensitivity of the Site scaled in accordance with its relative importance using the following terms for the archaeology issues, with guideline recommendations for a mitigation strategy.
- 3.19 The impact was assessed in terms of the sensitivity of the site to the magnitude of change or scale of impact during any future redevelopment scheme. The magnitude, or scale of an impact is often difficult to define, but has been termed as substantial, moderate, slight, or negligible, as shown in Table 3.2.

Table 3.1: Criteria used to determine Importance of Sites

Importance	Examples of Site Type	Mitigation
National	Scheduled Monuments (SMs), Grade I and II* Listed Buildings, Grade II Listed Buildings	To be avoided
Regional/County	Conservation Areas, Registered Parks and Gardens (Statutory Designated Sites), Sites and Monuments Record/Historic Environment Record	Avoidance recommended
High Local / Borough	Sites with a high local or borough archaeological value or interest Sites that are so badly damaged that too little remains to justify inclusion into a higher grade	Avoidance not envisaged

Importance	Examples of Site Type	Mitigation
Low Local	Sites with a low local archaeological value Sites that are so badly damaged that too little remains to justify inclusion into a higher grade	Avoidance not envisaged
Negligible	Sites or features with no significant archaeological value or interest	Avoidance unnecessary

Table 3.2: Criteria used to determine Scale of Impact

Scale of Impact	Description
Substantial	Change to the site or feature resulting in a fundamental change in ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Moderate	Significant change in environmental factors; Change to the site or feature resulting in an appreciable change in ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Slight	Change to the site or feature resulting in a small change in our ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Negligible	Negligible change or no material changes to the site or feature. No real change in our ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.

3.20 The interaction of the scale of impact (Table 3.2) and the importance of the archaeological site (Table 3.1) produce the impact significance. This may be calculated by using the matrix shown in Table 3.3:

Table 3.3: Impact Significance Matrix

Resource Value (Importance)	Scale of Impact Upon Archaeological Site			
	Substantial	Moderate	Slight	Negligible
National	Major	Major	Intermediate / Minor	Neutral
Regional/County	Major	Major/ Intermediate	Minor	Neutral
High Local / Borough	Intermediate	Intermediate	Minor	Neutral
Local (low)	Intermediate/ Minor	Minor	Minor/ Neutral	Neutral
Negligible	Neutral	Neutral	Neutral	Neutral

Summary of Assessment Scope

3.21 The screening assessment of the Site concluded that the Proposed Development, in the absence of any mitigation, has potential to cause Minor harm to non-designated buried archaeological remains, namely those associated with the water management system of Arkwright's Mill. This is based on an assumption that the scale of impact will be slight as any such archaeological remains that do survive are likely to be fragmentary, and development

will not radically alter an ability to understand and appreciate the resource and its archaeological value/historical context and setting.

- 3.22 Whilst there is some potential for below-ground remains of high local / borough importance to survive in-situ, it is unlikely that the predicted impact of development will be significant. It would thus be appropriate for archaeological issues to be 'scoped out' of an EIA, given that a comprehensive archaeological desk-based assessment to assess the potential impact of the Proposed Development on the sub-surface archaeological resource has been prepared and intrusive archaeological investigation has already recorded the surviving remains within the Site to a certain depth. This is set out in Table 3.4 below.
- 3.23 Whilst the majority of the archaeological investigations outlined in condition 36 of the 2020 Application Decision Notice have been undertaken, there may still be a need to undertake an archaeological watching brief to confirm the presence of the water management system of Arkwright's Mill and, if present, record the remains.

Table 3.4: Summary of Assessment Scope: Archaeology

Receptor	Impact	Potential Effect	Scoped In / Out
Remains of Arkwright's Mill Water Management System	Impact on the significance of Remains of Arkwright's Mill Water Management System	Minor	Scoped out

Agricultural Circumstances

- 3.24 The Site is entirely on brownfield land so there would be no effects with respect to agriculture. This discipline can therefore be scoped out of the EIA.

Table 3.5: Summary of Assessment Scope: Agricultural Circumstances

Receptor	Impact	Potential Effect	Scoped In / Out
Agriculture	None – Site is brownfield land.	None	Scoped out

Air Quality

- 3.25 This screening input has been prepared by Buro Happold and considers the impact from the Proposed Development on Air Quality.
- 3.26 In 2015, Buro Happold carried out an assessment of Air Quality which formed part of the 2015 EIA, which included an assessment of the proposed gas-fired CHP and gas boilers proposed for the scheme, as well as effects arising from traffic emissions associated with car parking, by reference to relevant planning policy and legislation. It also included an assessment of potential construction phase effects arising from dust associated with construction activity.
- 3.27 The 2015 EIA concluded that, with appropriate mitigation (i.e. a Construction Management Plan secured through a planning condition) construction phase effects would be negligible. Operational phase effects would also be negligible.
- 3.28 The 2015 ES Chapter referenced, and followed, the most up to date industry guidance at the time of writing, however the majority of this policy and guidance has since been updated notably IAQM (2017) Land use planning and development control: Planning for Air Quality and local policy in Manchester.
- 3.29 The 2015 ES Chapter is contained in Chapter 9 of Appendix 4 and the 2015 Air Quality Assessment is contained in Appendix 5 of this Report.
- 3.30 A further Air Quality Assessment was prepared for the scheme in 2019 as contained in Appendix 6. The policy/guidance referred to in this assessment is aligned with current policy

and guidance, and any minor changes in policy/guidance that have occurred since this assessment will not impact the conclusions presented. The assessment found the air quality impacts to be insignificant given the overall reduction in car parking and negligible impact of the proposed combustion plant. This has all been considered in the context of the updated cumulative developments as outlined in Appendix 2.

- 3.31 On the basis of this information and given that the Proposed Development is considered to represent an improvement on the 2015 and 2020 Planning Permissions in terms of a reduced number of proposed car parking spaces, it is considered that Air Quality can therefore be scoped out of the EIA.
- 3.32 A standalone Air Quality Assessment (AQA) will be submitted with the planning application. This assessment will assess the impact of the scheme on nearby receptors and recommend mitigation where required. The AQA will assess the impact of both phases of the development (construction and operational) on existing and proposed sensitive receptors. Emissions arising during the construction phase of the development will be assessed in line with industry guidance: Institute of Air Quality Management (IAQM) (2014) Guidance on the Assessment of Dust from Demolition and Construction. Mitigation measures will be recommended in line with the assessed level of risk and sensitivity, these measures will be implemented within the Construction Management Plan.
- 3.33 Emissions arising during the operational phase of the Proposed Development will be assessed in line with industry guidance: IAQM (2017) Land Use Planning and Development Control: Planning for Air Quality. The Site is located within the Greater Manchester Air Quality Management Area (AQMA), as such an assessment on the exposure of proposed receptors to poor air quality will also be undertaken. Given the Proposed Development is replacing a surface car park, and the energy strategy is likely to be emission free, significant air quality impacts are not expected. As such, Air Quality can be 'scoped out' of the EIA.

Table 3.6: Summary of Assessment Scope: Air Quality

Receptor	Impact	Potential Effect	Scoped In / Out
Existing Residential Uses	Construction Phase Fugitive Dust Emissions	Reduced levels of amenity, annoyance due to dust soiling and human health impacts.	Scoped out
Existing Residential Uses	Construction Phase Road Vehicle Traffic Exhaust Emissions	Human health impacts on existing sensitive locations within the AQMA and surrounding area	Scoped out
Existing Residential Uses	Operational Phase Road Vehicle Traffic Exhaust Emissions	Human health impacts on existing sensitive locations within the AQMA and surrounding area	Scoped out

Aviation

- 3.34 This screening input has been prepared by Kai Frolic at Pager Power and considers the impact from the Proposed Development on Aviation. Pager Power prides itself on providing comprehensive, understandable, and accurate assessments of complex issues in line with national and international standards.
- 3.35 The Proposed Development does exceed the 90m AOD aviation safeguarding threshold that requires Manchester Airport/NATS to be consulted for parts of the city centre, moreover it is best practice to engage with NATS and Manchester Airport for any development of potential concern. The scale and location are commensurate with proposals on neighbouring sites, where no significant effects on aviation were identified.
- 3.36 Specifically, NATS' main concern for developments in the city centre is potential impact on the Manchester Airport radar, which is safeguarded by NATS. Radar line of sight to the development is significantly obstructed by existing developments such that potential impacts are not predicted.
- 3.37 Manchester Airport's main concerns for developments in the city centre relate to collision risk, impacts on their procedures and safe levels for aircraft under their control. The Proposed Development is not predicted to impact any of these aspects due in part to its height relative to the existing baseline and due to its overall range and altitude relative to Manchester Airport.
- 3.38 Within this context, alongside professional experience of similar scale developments, Pager Power has confirmed that the Proposed Development will not give rise to significant EIA effects with regard to aviation and is therefore proposed to be scoped out of the ES.
- 3.39 An Aviation Safety Assessment has been prepared by Pager Power and submitted as part of the application, which will be prepared in consultation with both Manchester Airport Group and NATS.

Table 3.7: Summary of Assessment Scope: Aviation

Receptor	Potential Impact	Potential Effect	Scoped In / Out
Manchester Airport Radar	Adverse effects on coverage/performance.	Effects are not predicted because the Proposed Development is screened from the radar by existing developments including the Radisson at the airport itself.	Scoped out.
Manchester Airport Obstacle Limitation Surfaces	Structures that breach these surfaces present a potential collision risk.	The proposed development is clear laterally and vertically of the OLS at Manchester Airport. No significant collision risk is therefore predicted.	Scoped out.
Manchester Airport Instrument Flight Procedures	Aircraft flying in accordance with published procedures are kept safe by ensuring there is sufficient obstacle	Effects are not predicted because the of the lateral and or vertical clearance	Scoped Out

Receptor	Potential Impact	Potential Effect	Scoped In / Out
	clearance around the published routes.	between the Proposed Developments and the published Instrument Flight Procedures at Manchester Airport.	
Minimum Safe Altitudes / Surveillance Minima	When new structures are taller than previous ones in their vicinity, they can have consequences with regard to the altitudes at which aircraft are permitted to fly under certain circumstances.	The Proposed Development's location and altitude are such that it is not predicted to impact available altitudes for aircraft.	Scoped Out

Climate Change

- 3.40 This Screening input has been prepared by Buro Happold and considers the impact from the Proposed Development on Climate Change.
- 3.41 Sustainability and the impact of the Proposed Development on climate change is an integral part of the design process and will also be considered throughout the EIA.
- 3.42 The Proposed Development will have an impact on climate change during the operational phase of the development through the emission of greenhouse gasses. Sustainability measures have informed the design process from the outset, including climate change mitigation and energy usage.
- 3.43 The building is targeting NABERS 5-stars, which is ahead of the UKGBC's target on their Net Zero Carbon Pathway (which recommends targeting 4.5 stars). The following measures are proposed to mitigate against the impacts of climate change:
- Careful consideration of structural design.
 - Thermal analysis informed glazing percentage on each orientation. The elevations subjected to higher solar gains have a lower glazing percentage, which allows:
 - more efficient mechanical plant
 - less mechanical plant than comparable buildings with a larger glazing area (lower embodied carbon)
 - provision of double-glazed windows rather than triple-glazed windows (lower embodied carbon)
 - MEP systems were selected using an options appraisal that considered embodied carbon and operational energy.
 - All electric heating and cooling plant (heat pumps).
 - Onsite renewable energy generation via rooftop photovoltaics.
- 3.44 An Energy Statement and Environmental Standards Statement will be submitted alongside the planning application, outlining this process in greater detail including an assessment of the energy efficiency of the Proposed Development and use of low carbon technologies.
- 3.45 It is not considered that the Site or the proposal is particularly vulnerable to climate change.
- 3.46 Any impacts of climate change on the wind microclimate will be considered as part of the Wind Assessment and associated ES Chapter.

- 3.47 The Site is located within Flood Zone 1 and a Critical Drainage Area; a standalone Flood Risk Assessment and Drainage Strategy submitted with the planning application will fully consider the impacts of climate change and present a proposed strategy for handling surface water drainage.
- 3.48 It is not considered that the proposals will result in any likely significant effects to climate change. The Proposed Development's effects on climate change and climatic factors for individual topics will be considered within the relevant chapters of the ES.

Table 3.8: Summary of Assessment Scope: Climate Change

Receptor	Impact	Potential Effect	Scoped In / Out
Climate Change	Impact on and vulnerability to Climate Change during construction	Raw materials required for the Proposed Development will result in embodied emissions.	Scoped out
Climate Change	Impact on and vulnerability to Climate Change during construction	Construction stage emissions from fuel / energy consumption due to the delivery of material to site.	Scoped out
Climate Change	Impact on and vulnerability to Climate Change during construction	Fuel / energy consumption of plant and equipment used during construction would generate GHG emissions.	Scoped out
Climate Change	Impact on and vulnerability to Climate Change during construction	Emissions from the disposal of biomass are not expected to be large.	Scoped out
Climate Change	Impact on and vulnerability to Climate Change during construction	Emissions from the disposal of waste are unlikely to be large, due to a large proportion of construction waste being inert.	Scoped out

Receptor	Impact	Potential Effect	Scoped In / Out
Climate Change	Impact on and vulnerability to Climate Change during operation	In-use electricity emissions expected to be low due to sustainable design.	Scoped out
Climate Change	Impact on and vulnerability to Climate Change during operation	End-user emissions (regional traffic flows) to be reduced due to reduction in parking on-site.	Scoped out

Ecology and Nature Conservation

- 3.49 This Screening input has been prepared by ERAP (Consultant Ecologists) Ltd and considers the impact from the Proposed Development on Ecology.
- 3.50 ERAP (Consultant Ecologists) Ltd previously completed a study of the site in 2019 to support the 2019 Planning Application; data from that assessment have been used to inform this EIA Screening and Scoping Assessment. The 2019 Ecology Study of the Site contained in Appendix 7 of this Report.
- 3.51 Although the data used to inform this scoping assessment is 3 years old it is considered (in our professional opinion) that any changes at the Site are unlikely to be significant in terms of the scoping exercise to determine the requirement for an EIA.
- 3.52 Updated surveys will be completed to inform the current application. It is considered that any changes identified the updated surveys are unlikely to be sufficiently significant that that Ecology would need to be scoped into the EIA.
- 3.53 The Site is located within an urban area of Manchester City Centre and was described in 2019 as comprising a hard standing car park with areas of unmanaged vegetation (comprising vegetation colonising hard standing and areas of unmanaged trees, scrub and tall-herb vegetation), ornamental planting, semi-improved neutral grassland (a seeded wildflower mix) and an allotment area.
- 3.54 This Screening and Scoping Assessment has been completed as a desktop study, using online resources and the previous (2019) ecology report for the Site. Note that updated ecological surveys are currently being undertaken to inform the ongoing application.
- 3.55 It is considered that ecological considerations can be scoped out of the EIA at this stage. An ecology report will be provided to inform the proposed development at the site, however no significant impacts to receptors are considered reasonably likely at this stage.

Table 3.9: Summary of Assessment Scope: Ecology

Receptor	Impact	Potential Effect	Scoped In / Out
Designated Sites for Nature Conservation The Rochdale Canal SSSI and SAC is located 5 kilometres to the north-east of the site.	Degrading quality of off-site designated sites for nature conservation; this could be (for example) due to loss of contributory habitat,	No effects are predicted; the site is sufficiently distant from the designated sites that the proposals will have no effect.	Scoped out

Receptor	Impact	Potential Effect	Scoped In / Out
The Rochdale Canal, Stott's Lane – Ducie Street Basin SBI is located 0.76 kilometres to the east. The Ashton Canal (West) SBI is located 0.9 kilometres to the east The River Irwell SBI is located 1.82 kilometres to the north-west	shading, air pollution or water pollution	Additionally the proposals will	
Vegetation and Habitats	Habitat loss	In accordance with the 2019 ecology report, the site contains only common and widespread plant species. None of the habitats within the site are of significant interest in terms of their plant species composition. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. No Priority Habitats are present. The trees and seeded wildflower grassland were identified as being of 'site' value (in terms of their importance in a geographical context) as they provide structural diversity and will provide habitats suitable for nectaring invertebrates and foraging and nesting birds. The seeded wildflower grassland is not semi-natural in character however and is not considered to be	Scoped out

Receptor	Impact	Potential Effect	Scoped In / Out
		species-rich. The proposals present an opportunity to provide a greater number of trees and areas of habitat favourable for use by nectaring invertebrates as part of the landscaping at the site	
Protected and Notable Species	Works have the potential to harm protected species during the construction phase and remove habitats suitable for use by protected species	Other than habitats supporting features suitable for use by nesting birds no protected species were noted within the site in the 2019 report. Reasonable measures are feasible to avoid impacts to birds whilst they are nesting. It is not considered likely that a significant population of any protected species is likely to have colonised the site since the 2019 report. Reasonable measures to provide habitats for wildlife (including protected species) will be provided as part of the updated ecology report.	Scoped out

Water Resources

- 3.56 This screening input has been prepared by Mark Crowther at Buro Happold and considers the impact from the Proposed Development on Water Resources. Mark is a Chartered Environmentalist with the Society for the Environment and Full Member of the Institute of Environmental Management and Assessment. He studied Catchment Dynamics and Management (Hydrology) at the University of Leeds for his masters and has authored or contributed to over 50 Water EIA Chapter over the last 12 years.
- 3.57 In 2015, Buro Happold carried out an assessment as part of the EIA for the 2015 planning application to assess the likely significant effects of the development on the Site with respect to Water Resources, including: water quality, flood risk, water services infrastructure and site users (human health). The ES Chapter, as contained in Chapter 14 of Appendix 4 was prepared by Buro Happold and was supported by two separate flood risk assessments and drainage strategies (one for each plot), which were completed in accordance with relevant planning policy and legislation at that time. The Flood Risk Assessment and Drainage Strategies are contained in Appendix 8 and 9 of this Report.

- 3.58 The 2015 EIA concluded that potential environmental effects during the construction phase would be reduced to negligible and temporary in nature, with the implementation of proposed mitigation including the adoption of good site practice and an appropriate Construction Management Plan (to be secured through planning condition).
- 3.59 For the operational phase, the 2015 EIA concluded that residual effects following mitigation (to include an appropriate drainage strategy, secured through planning condition and agreed external finish levels) would range from minor adverse to minor beneficial (i.e. not significant in EIA terms).
- 3.60 Water Resources was subsequently scoped out of the 2020 planning application and the supporting Flood Risk Assessment and Drainage Strategy for this 2020 application are contained in Appendix 10 and 11.
- 3.61 Whilst there is revised policy and legislation now in place and new committed developments compared to 2015 and 2019, Buro Happold still consider that it is appropriate for water resources, water quality and flood risk to be scoped out of the EIA. Specifically, a new Flood Risk Assessment and Drainage Strategy will be prepared that adheres to current policy and legislation to manage operational effects so that they will continue to be insignificant. Good site practice, to be included in a Construction Management Plan secured in the way of a planning condition, will continue to ensure that construction effects are not significant.
- 3.62 Buro Happold have also been instructed to produce an updated Flood Risk Assessment and Drainage Strategy, in accordance with current planning policy and legislation, which will form a standalone technical report with the planning application.
- 3.63 On the basis of this information, the conclusions of the 2015 EIA and given that the baseline position of the Site has not otherwise changed since 2015 or 2020, plus the Proposed Development is not significantly altered from the 2015 or 2020 schemes, it is considered that the mitigation will effectively reduce or offset any impacts in respect of water resources and this discipline can therefore be scoped out of the EIA.

Table 3.10: Summary of Assessment Scope: Water Resources

Receptor	Impact	Potential Effect	Scoped In / Out
Water Quality during construction	Degradation of water quality to the River Irk, River Irwell and within the surface water drainage network.	Negligible and temporary in nature	Out
Flood Risk to construction workers and plant	Increased flood risk on the site and to other areas.	Negligible and temporary in nature	Out
Water quality during construction	Pollutants contained in surface water degrading water quality to the River Irk, River Irwell and within the surface water drainage network.	Negligible to minor beneficial	Out
Increased flood risk downstream during operation	Changes to surface water flows increasing or decreasing flood risk downstream	Negligible to minor beneficial	Out
Increased potable and foul water demand during operation	Increased population on site increasing potable and foul water demand	Negligible to minor adverse	Out

Receptor	Impact	Potential Effect	Scoped In / Out
Flood risk to site users during operation	Flood risk on site, to new introduced receptor	Negligible	Out

Ground Conditions

- 3.64 This screening input has been prepared by Pip Hunsworth at Buro Happold who holds the following professional qualifications and accreditations: BSc Hons in Geography & Geology, MSc in Engineering Geology. Pip also holds status as Chartered Geologist (C Geol), Fellow of the Geological Society (FGS), Member of the British Geotechnical Association (BGA), Member of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), Member of the International Society for Rock Mechanics (ISEM), Associated Member of Institution of Civil Engineers (ICE).
- 3.65 This screening input considers the impact from the Proposed Development on Ground Conditions.
- 3.66 In 2015, Buro Happold carried out an assessment, as part of the EIA for the 2015 planning application, of the likely significant effects of redevelopment of the Site in relation to ground conditions. This is contained in Chapter 13 of Appendix 4. The 2015 EIA was accompanied by the following appendices, which can be provided upon request:
- Landmark Envirocheck Report (Ref: 24099085_1_1) including historical OS maps (Landmark Information Group Service, 2008).
 - British Geological Society geological maps (BGS, 1970 and 1975).
 - National Rivers Authority Groundwater Vulnerability Map 1996 (Sheet 17).
 - Buro Happold Report entitled 'Ground Engineering Desk Study Report – The Co-Operative Group HQ Building, Manchester' (Ref: 023842), dated July 2009, on behalf of The Cooperative Group Limited.
 - BuroHappold Engineering Ground Engineering Desk Study Report (2013) NOMA Plot L, Manchester (Rev 032292 Rev 00).
 - Structural Soils Limited (Factual) Report (2009) 'Report on Ground Investigation at Cooperative Head Office, Manchester' (Ref: 761072 Rev 1 Final).
 - Structural Soils Limited (2014) 'Factual Report on Ground Investigation - NOMA Plot L, Manchester' (Ref: 762850 Rev 2 Final).
 - Buro Happold Report entitled 'Ground Engineering Interpretative Report – The CoOperative Group Head Office, Manchester' (Ref: 023842), dated October 2009, on behalf of The Co-operative Group Limited
 - Buro Happold Engineering Report (2013) 'NOMA Plot L, Manchester Ground Engineering Interpretative Report' (Ref: 032292 Rev 00)
- 3.67 Since the 2015 application was submitted, a series of further investigations and associated reports have been completed as detailed below and contained within Appendix 12:
- Sanctus Report entitled 'Angel Square – Site Investigation Report' (Report No. S1933-001), dated May 2015, on behalf of NOMA;
 - Sanctus Limited report entitled 'Contract Completion Report, Angel Square, Manchester' (Report No. S1918), dated June 2015, on behalf of NOMA;
 - Structural Soils Limited Report entitled 'Factual Report on Ground Investigation – 2&3 Angel Square, Manchester (Ref: 763315 Rev 2 Final), dated July 2015, prepared on behalf of the Co-operative Group Limited (ref: SSL 2015 GI);

- Sanctus testing – 6 No. samples SS1 - SS4, EMB1 - EMB2: plan and chemical results only, dated September/October 2015, on behalf of Turner & Townsend Limited;
- W.Maher testing - 6 No. samples Stockpile 1 – Stockpile 4, Embankment 1 – Embankment 2: plan and chemical results only, dated October/November 2015, on behalf of Turner & Townsend Limited;
- Churchill Enviro Limited report entitled 'Validation Report For Works Carried Out By W Maher and Sons At Angel Gardens, Manchester', dated March 2016, on behalf of Turner & Townsend;
- RSK report entitled 'NOMA Angel Gardens, Manchester – Geo-environmental site assessment' (Report No. 322162), dated January 2016, on behalf of Moda Living (Angel Gardens) Limited;
- Churchill Enviro Limited report entitled 'Validation Report For Remediation Work Carried Out as Part of the Enabling Works Contract by W Maher and Sons at Angel Gardens, Manchester', dated October 2016, on behalf of Turner & Townsend;
- First Line Defence report 'Detailed Unexploded Ordnance (UXO) Risk Assessment' (ref: DA13039-00) dated April 2021, on behalf of MEPC;
- Salford Archaeology report entitled 'NOMA Plots 2&3, Angel Street, Manchester – Archaeological Evaluation Report' dated June 2021, on behalf of NOMA GP Limited;
- Structural Soils reported entitled 'Report on Ground Investigation, 2 & 3 Angel Square and NOMA Marketing Suite, Manchester (ref:765325-1(2)) Revision 2, 3rd November 2021
- Buro Happold report entitled '2&3 Angel Square & Marketing Suite Ground Engineering Summary Report' dated 16/12/21 (ref: 043434-BH-XX-XX-RP-GE-0001 P03), on behalf of MEPC.

Baseline Conditions

- 3.68 The ground conditions comprise varying depths of Made Ground which is underlain by superficial deposits (dense to very dense sand, gravel and firm to very stiff clay), underlain by completely weathered sandstone bedrock, in turn underlain by very weak to weak sandstone bedrock (Chester Formation).
- 3.69 Potential sources of contamination were identified (Table 3.11). These are primarily associated with Made Ground present on the Site and due to the historical use of the Site. Receptors are detailed in Table 3.12. Chemical testing has been undertaken which suggests that Commercial development of the Site could take place with limited remediation requirements, if any.

Table 3.11: Potential Sources and Contaminants

Potential Source	Location	Likely Age	Potential Contaminants of Concern
Made Ground	Onsite	From 1800s to present	Metals, sulphates, PAHs, solvents, fuel and oil waste and asbestos.
Fuel and oil spills from car parking retained within soils	On and off site	From 1970s to present	Petroleum hydrocarbon, fuel, oils.
Ground gas sourced from Made Ground and	On and off site	From 1800s to present	Methane, carbon dioxide.

Potential Source	Location	Likely Age	Potential Contaminants of Concern
nearby infilled reservoir			
Various commercial / industrial site uses	On and off site	From 1800 to present	Leachable contaminants: metals, PAHs, petroleum, hydrocarbons.

Table 3.12: Receptors to Ground Contamination

Receptor	Pathway	
Human Health	Future site users / visitors.	Direct / dermal contact. Inhalation of contaminated dusts, gas & vapour.
	Offsite land users.	Inhalation / ingestion of contaminated dust.
	Investigation and construction workers.	Direct / dermal contact. Ingestion / inhalation of contaminated soils. Inhalation of gas / vapour.
Controlled Waters	Principal Aquifer within the Chester Formation.	Leaching of contaminants through permeable strata.
Below Ground Infrastructure	Buried concrete foundations. Services pipework (if any).	Direct contact.

Method of Assessment

- 3.70 The 2015 EIA set out the following assessment in relation to ground conditions at the Site:
- The baseline condition based upon available desk study and ground investigation data;
 - Impacts upon current site receptors with respect to current geo-environmental conditions;
 - Expected impacts upon receptors during construction and operational phases with respect to the baseline condition;
 - Cumulative effects in relation to other known developments in the vicinity of the Site; and,
 - Mitigation measures for all identified impacts and an assessment of residual impact following implementation of these mitigation measures.

Summary of Assessment Scope

- 3.71 Information from ground investigation undertaken at the Site to date, including the Report on Ground Investigation from Nov 2021 and Buro Happold report entitled '2&3 Angel Square & Marketing Suite Ground Engineering Summary Report' from December 2021 (ref: 043434-BH-XX-XX-RP-GE-0001 P03), have not identified any significant ground constraints that might render the Site unsuitable for the Proposed Development. The presence of Made Ground presents minor potential impacts on the construction phase but an overall improvement for the operational phase of the Proposed Development.
- 3.72 Further investigation / clarification of the ground model has been carried out since 2015 with respect to areas of Made Ground which has further clarified baseline conditions with respect to

ground contamination, groundwater contamination and potential for ground gas from on-site and off-site sources.

- 3.73 The risks associated with UXO during construction need to be managed in accordance with CIRIA 681 Unexploded Ordnance (UXO) Five Point Plan.
- 3.74 Buro Happold have also been instructed to produce updated ground conditions reports in respect of the Proposed Development, in accordance with current planning policy and legislation, which will form a standalone technical report with the planning application.
- 3.75 The baseline position of the Site has not otherwise changed significantly since 2015 and the Proposed Development is not significantly altered from the 2015 scheme. In light of the conclusions of the 2015 EIA and on the basis of the latest ground investigations, it is considered that ground conditions can therefore be scoped out of the EIA.

Table 3.13: Summary of Assessment Scope – Ground Conditions

Receptor	Impact	Potential Effect	Scoped In / Out
Human Health	Impact to future site users / visitors, offsite land users and investigation and construction workers health.	Minor construction phase effects. Beneficial effects for the operational phase.	Scoped out
Controlled Waters	Impact to quality of controlled waters.	Minor construction phase effects. Beneficial effects for the operational phase.	Scoped out
Below Ground Infrastructure	Impacts to below ground infrastructure	Minor construction phase effects. Beneficial effects for the operational phase.	Scoped out

Human Health

- 3.76 This screening input has been prepared by Buro Happold.
- 3.77 The 2017 EIA Regulations introduced human health as a factor that could be subject to significant environmental effects arising from new development and as such, the potential for the Proposed Development to give rise to effects of this nature has been considered within this EIA Scoping Report.
- 3.78 The Site is located in an urban environment, which is in use as a temporary surface car park in advance of its permanent redevelopment. The Site is surrounded by existing buildings and structures, with a range of uses from office, commercial and retail to residential. The Manchester IRR is also located adjacent to the Site. The Site and its adjacencies are typical of the city centre.
- 3.79 There will be some short-term impacts to human health during the construction phase with the potential for accidental spillages, dust and noise and vibration arising from construction activity. These will be considered and mitigation will be proposed as part of a Construction Management Plan, submitted with the Planning Application.
- 3.80 During the operational phase, the Proposed Development could potentially have impacts on human health, as a result of traffic movements and the associated air quality and noise impacts. However, given that the scheme proposes a reduced quantum of car parking than the baseline position and that secured under the 2015 Planning Permission, and the 2015 EIA concluded that effects arising from air quality and noise would be negligible during the

operational phase, it is proposed to scope out effects on human health arising from these matters from the EIA.

- 3.81 The potential effects on human health as a result of air quality and noise will be considered in the standalone technical reports to be submitted in support of the planning application.
- 3.82 There is also potential for significant environmental effects to human health related to the wind and sunlight and daylight environment during the operational phase of the Proposed Development. These matters will be considered as part of the technical chapters relating to those disciplines, to be prepared by Buro Happold.

Table 3.14: Summary of Assessment Scope: Human Health

Receptor	Impact	Potential Effect	Scoped In / Out
Human Health – current site users / future site users. Construction workers.	Release of contaminants / ground gas during construction	Exposure pathways to contamination in Made Ground - oral ingestion of soil, dermal contact of soil, soil dust inhalation. Migration of ground gas.	Scoped out – construction phase mitigation measures to mitigate
Human health – off-site land users	Release of contaminants / ground gas during construction	Outdoor inhalation of site dust. Migration of ground gas.	Scoped out - construction phase mitigation measures to mitigate
Environment – Controlled Waters (Principal Aquifer – Chester Formation)	Release of contaminants during construction	Vertical migration of leachate from on-site Made Ground. Spillage from fuel in car parks/construction plant/storage areas.	Scoped out - construction phase mitigation measures to mitigate
Property – Below Ground Infrastructure	Release of contaminants during construction	Vertical migration of leachate from on-site Made Ground. Spillage from fuel in car parks/construction plant/storage areas.	Scoped out - construction phase mitigation measures to mitigate

- 3.83 Other developments within a 500m radius of the Site are considered unlikely to have a significant cumulative effect in terms of ground and groundwater due to the nature of the baseline ground conditions and immobile nature of the ground contamination recorded.

Socio-economics

- 3.84 This section of the Screening and Scoping report has been prepared by Jennifer Chatfield at Deloitte LLP (MPlan Master of Planning and Chartered Member of the Royal Town Planning institute). The socio-economic effects will be considered in detail as relevant as part of the supporting Planning Statement for the application.
- 3.85 The Proposed Development may create some short-term employment during the construction phase; however, the effect is not considered to be significant.
- 3.86 The Proposed Development would create long-term employment opportunities during the operational phase through the introduction of new office and retail uses, the effect of which would be positive. However, these are not considered to be of a significant scale in the

context of the Site's location on the edge of Manchester City Centre and it would be in accordance with Manchester's Local Planning Policy and planned growth agenda.

- 3.87 Therefore, likely significant effects on the environment with respect to socio-economic issues are not anticipated and it is considered that an ES chapter is not required.

Table 3.15: Summary of Assessment Scope: Socio-economics

Receptor	Impact	Potential Effect	Scoped In / Out
Local Expenditure	Changes in local expenditure during construction and operational phase.	Potential effects on local expenditure during both construction and operation. Potential for linked trips to the City Centre.	Scoped out.
Employment and GVA	Increases in direct and indirect employment opportunities and economic output during construction and operation. Changes in employment opportunities available to local population.	Temporary creation of employment and uplift in economic output during construction. Short and long term increases in operational employment.	Scoped out.
Education and Training	Increases in direct and indirect training opportunities during construction.	Temporary creation of training during construction.	Scoped out.
Crime	Impact upon vibrancy, natural surveillance and safety.	Reduce incidences of crime.	Scoped out.

Transport

- 3.88 This screening input has been prepared by Curtins and considers the impact from the Proposed Development on Transport.
- 3.89 The lead author of this chapter is Alex Vogt, BSc (Hons) Geography and Information Technology, MSc Traffic Engineering and Transport Planning, Fellow of the Chartered Institution of Highways and Transportation (FCIHT), and Transport Planning Professional (TPP). Alex is a Board Director at Curtins, and is responsible for all traffic and transport activities across the UK. He has circa 20 years' experience of providing traffic and transport advice to support major private sector development projects, including a number of regionally and nationally significant employment developments. Alex leads on the delivery of Transport Assessments, Travel Plans, EIA transport chapters and has defended these at Public Inquiry.
- 3.90 Curtins was appointed to provide traffic and transport advice to support development at the Site as part of the 2015 Planning Application. This included the preparation of a Transport Assessment and Travel Plan that were ultimately found to be acceptable to MCC Highways. These reports are contained in Appendix 13 and 14.
- 3.91 As the Proposed Development was replacing an existing car park that generated a comparable or higher quantum of traffic, the impact on the highway network was considered to be acceptable, and traffic and transport was scoped out of the 2015 EIA.

- 3.92 In 2019, Curtins was again commissioned to provide traffic and transport advice to support development at the Site as part of the 2019 Planning Application. The Gross Floor Area (GFA) and amount of parking were reduced compared to the earlier application, and MCC Highways again found the development to be acceptable. Traffic and transport was therefore scoped out of the 2019 EIA. The 2019 Transport Statement is contained in Appendix 15 and the 2019 Travel Plan is contained in Appendix 16.
- 3.93 In 2021, Curtins was appointed to provide traffic and transport advice regarding a temporary marketing suite for NOMA (up to 5 years) within the southern portion of Plot N (application reference 129631/FO/2021). The application was granted Planning Permission, and due to the small scale of the development, an EIA was not undertaken. At the time of writing, the Marketing Suite was undergoing construction.

Baseline Conditions

- 3.94 The Site currently comprises two development plots, identified as Plots M & N on the NOMA Masterplan, which are in use as surface car parking, with c.100 spaces (excluding former space for parking within the footprint of the Marketing Suite, as this is currently undergoing construction and the spaces are no longer usable). There is a substantial change in level across the Site, falling away from Angel Street down to Miller Street.
- 3.95 The Site is bound by Angel Street to the north, Angel Square and 1 Angel Square (the Co-operative Group headquarters) to the west, Miller Street to the south, and Moda Living's Angel Gardens residential scheme to the east.
- 3.96 The primary receptors are pedestrians, cyclists, public transport users, and car drivers, with a brief description of the existing situation for each mode given below.
- 3.97 There are well-maintained footways on both sides of the carriageway along Miller Street and Angel Street, which are approximately 3m in width. The roads are well-lit with street lighting at regular intervals.
- 3.98 There are also signalised Toucan crossings complete with dropped kerbs and tactile paving across Angel Street (to the north of its junction with Angel Square) and Miller Street, along with signalised pedestrian crossings at the Ring Road / Corporation Street and Ring Road / Rochdale Road / Shudehill junctions to the west and east of the Site respectively. The former junction leads pedestrians towards Manchester Victoria to further access rail and Metrolink services, whereas the latter junction leads pedestrians towards Shudehill and the Northern Quarter.
- 3.99 There are Traffic Regulation Orders (TROs) in the form of double yellow lines (no waiting at any time) along Miller Street, Angel Square, and Angel Street to prevent on-street parking, with the exception of some pay-and-display parking bays.
- 3.100 There is also an advisory cycle lane along Angel Street, and it can be observed that there are high levels of pedestrian footfall in the area due to the proximity of employment opportunities and transport interchanges.
- 3.101 Miller Street runs along the southern boundary of the Site, comprising a two-lane carriageway, and forms part of the arterial route circling the city centre. Whereas Rochdale Road to the east of the Site extends north-east through Collyhurst, Harpurhey, and Blackley, where it meets the M56 Junction 20 and continues as the A664 Manchester New Road.
- 3.102 Within 500m of the Site lies NOMA and Manchester City Centre which comprises restaurants, offices, bars, a theatre, open space, St Michael's Flags & Angel Meadow Park, Cathedral Gardens, and the Northern Quarter.
- 3.103 Most notably, the Manchester Victoria Rail and Metrolink Station, and the Shudehill Metrolink and bus stations can be accessed within a 500m walk. These public transport interchanges host services to areas within Greater Manchester and beyond.

- 3.104 Within the wider 1,000m – 2,000m catchment, additional leisure, food, retail, employment, high street banks, health clubs, and convenience stores are accessible along Market Street, St Ann's Square, Piccadilly Gardens, Chinatown, The Lowry, and Parsonage Gardens. The vast majority of Manchester City Centre is within a 2,000m walk of the Site.
- 3.105 Existing cycle infrastructure on Corporation Street and Dantzic Street allows cycle access into Manchester City Centre, with direct access to Manchester Victoria Station and the Printworks. All major train and bus stations within Manchester City Centre are within 8km of the Site and are accessible following Sustrans cycle routes. Additionally, low speed limits along the surrounding streets are part of the city's high-quality cycle infrastructure to improve cyclist safety.
- 3.106 Developed by Transport for Greater Manchester (TfGM), Greater Manchester Accessibility Levels (GMAL) are a measure of the accessibility of a point to both the conventional public transport network (i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), considering walk access time, service availability, and average waiting time. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region.
- 3.107 The accessibility index score is categorised into eight levels (1 to 8), where level 8 represents a high level of accessibility (described as 'excellent') and level 1 a low level of accessibility (described as 'very poor'). The Site is located in an area with a GMAL rating of 8 and is considered appropriately situated to take advantage of existing public transport infrastructure within Manchester City Centre.
- 3.108 There are a number of bus stops comfortably within a 400m walk of the Site, with the closest being located at Shudehill Interchange, Rochdale Road, Corporation Street, and the Victoria Station Approach. Buses at these stops depart as frequent as every 10 minutes.
- 3.109 Furthermore, the National Football Museum bus stop and Shudehill Bus Interchange are calling points of the Manchester City Centre free bus. The free bus is a service providing direct access to the Deansgate, Oxford Road, Piccadilly, Victoria and Salford Central railway stations along with key city centre locations.
- 3.110 The closest rail station to the development is Manchester Victoria, which hosts multiple rail services between Manchester City Centre and the North West, with services departing as frequent as every 15 minutes. There is also a Metrolink station at Manchester Victoria which connects the Site to Bury, Rochdale, East Didsbury, Altrincham, and Manchester Airport; along with interchanges at St Peter's Square and Piccadilly Gardens which enable access to further destinations.

Method of Assessment

- 3.111 During construction and operation of the Proposed Development, heavily trafficked roads can lead to severance (i.e. division of communities when it is difficult to cross a road), driver delay, pedestrian delay, changes to pedestrian amenity (i.e. the pleasantness of a journey by foot), and accidents and safety issues.
- 3.112 The placement of hoarding on footways can also narrow the width available to pedestrians and can reduce pedestrian amenity. During construction, HGVs pose a risk to the safety of car occupants, pedestrians, and cyclists, with the latter two being the most vulnerable road users.
- 3.113 HGVs and increased vehicular traffic can also lead to severance and a decline in pedestrian amenity. Pedestrians, cyclists, and car drivers who feel compelled to take an alternative route may also experience a delay relative to if they felt able to travel along Angel Street or Miller Street.
- 3.114 The existing operational car park within the Site has capacity for circa 156 vehicles. It is understood that parking numbers have reduced from circa 50 (in the previously consented application in 2019) to circa 33. As such, the level of construction and operational traffic is

- likely to be significantly lower than this car park would generate, and reasonable limits on the level of construction traffic are likely to be considered to be an acceptable condition.
- 3.115 During construction, it is anticipated that HGV flows on the public highways would be controlled through the implementation of a Construction Environmental Management Plan (CEMP). HGV drivers will be encouraged in the urban environment to be cognisant of their surroundings and vulnerable road users at all times, and of their speed. HGVs, and all other vehicles, will not be allowed to park off-Site.
- 3.116 As part of the Construction Management Plan, the Site entrance will be controlled by a gateman / security guard who will be on Site 24/7 while the Proposed Development is under construction. All persons accessing the Site will be required to sign in and sign out with the gateman who will direct all vehicle drivers along clearly defined, prescribed routes to the relevant area. Barrier fencing will be erected along the routes and relevant signage provided to reinforce the directions provided and establish a 5mph speed restriction.
- 3.117 Where possible, hoarding will not entirely cover the pedestrian footways to maintain pedestrian amenity and prevent severance. However, if this is necessary, then alternative safe walking routes would be provided.
- 3.118 During the operational phase, due to the difference in parking numbers between the existing and proposed scenario, there is likely to be an overall reduction in vehicular traffic at the Site in the peak hours. This can be expected to reduce pedestrian and driver delay, accidents, and severance, and improve pedestrian amenity.
- 3.119 The large areas of public realm will increase the permeability of the Site, and the ground floor amenities within the Proposed Development should mitigate the appeal for office workers to travel far off-Site during break periods.
- 3.120 A high number of secure cycle parking provision – along with lockers, changing rooms, and showers – will be provided to encourage Site users to cycle to and from the Site, and reduce travel by private car.
- 3.121 A Framework Travel Plan will also be implemented, with measures to encourage the use of active travel and public transport, and discourage car travel, particularly single-occupancy trips. Following operation of the Proposed Development, an initial survey will be undertaken to understand travel choices and patterns to and from the Site, after which modal shift targets will be established. Subsequent follow-up surveys will assess progress towards the targets, and whether new or improved measures can be implemented.

Summary of Assessment Scope

- 3.122 On the basis that the parking proposed is less than that of the previously consented application in 2015 and 2019, congestion and safety issues at the Site to other road users are unlikely to be significant, and will not be considered within the EIA or reported in the ES.
- 3.123 Instead, the Transport Statement and Framework Travel Plan that fully considers the highway impact, accessibility, highway safety, access and policy will be submitted as part of the planning application.

Table 3.16: Summary of Assessment Scope - Transport

Receptor	Impact	Potential Effect	Scoped In / Out
Pedestrians, Cyclists, Public Transport Users, Drivers	On the capacity of the road network and highways, pedestrian and cyclist safety.	Congestion and safety issues arising from construction vehicles not expected to be significant.	Scoped out

Receptor	Impact	Potential Effect	Scoped In / Out
Pedestrians, Cyclists, Public Transport Users, Drivers	On the capacity of the road network and highways, pedestrian and cyclist safety.	Congestion and safety issues arising from business and commercial car usage to expected to be significant	Scoped out

TV Reception

- 3.124 This Scoping input has been prepared by Pager Power, a technical consultant specialising in television interference, and considers the impact from the Proposed Development on TV Reception. Pager Power prides itself on providing comprehensive, understandable, and accurate assessments of complex issues in line with national and international standards.
- 3.125 The development proposals comprise the erection of two high quality commercial office buildings of 13 and 14 storeys, alongside public realm, car parking, extensive cycle parking facilities, and associated highways and access arrangements.
- 3.126 The Proposed Development will include a comprehensive public realm scheme with hard and soft landscaping, access and highways, and other associated works.
- 3.127 Any large obstruction has the potential to adversely affect terrestrial television coverage. The Proposed Development has the potential to affect television transmissions from Winter Hill in the surrounding area, particularly for residences to the southeast (the shadow zone).

Baseline Conditions

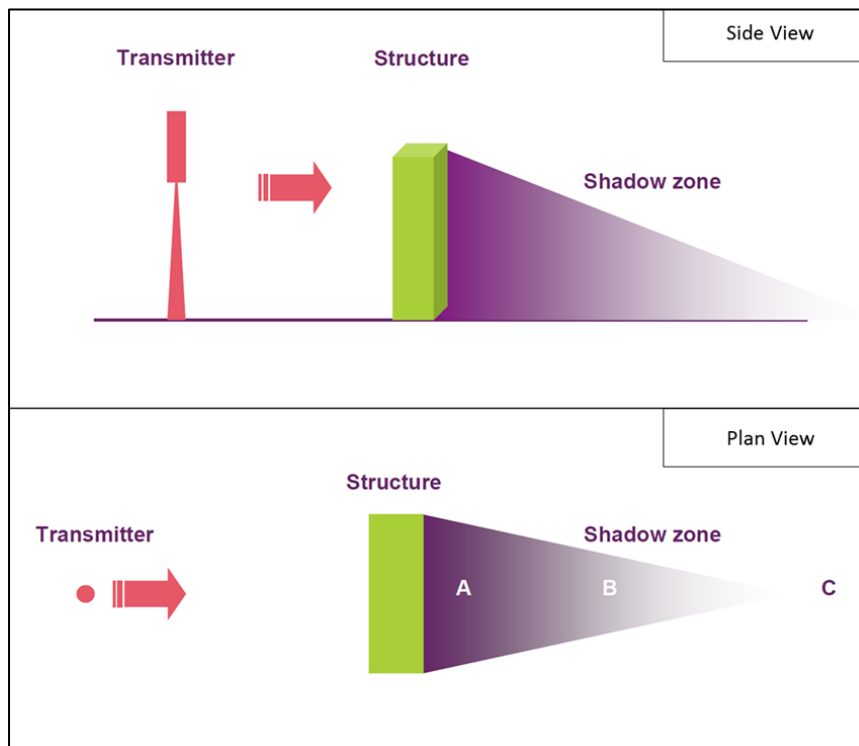
- 3.128 The area surrounding the Proposed Development is a dense and built-up urban area, therefore terrestrial TV reception is likely to be already attenuated from the existing environment.

Method of Assessment

- 3.129 As part of the planning application submission, Pager Power Ltd will be undertaking the terrestrial television interference analysis with respect to the Proposed Development of 2 and 3 Angel Square.
- 3.130 The assessment will record what the baseline reception is currently as part of the works. Terrestrial television signals propagate from transmitters to receiving aerials which in turn are connected to television receiving equipment. The main television transmitter serving the development area is Winter Hill (approximately 26km north-west of the Proposed Development location). This transmitter broadcasts digital terrestrial television services.
- 3.131 When considering interference from a building development, it is appropriate to consider diffraction losses caused by the building development as reflected, or indirect, signals.
- 3.132 Standard receiving aerials are directional meaning that signals from the direction of the transmitter are amplified and signals from other angles are attenuated.
- 3.133 In order to determine the potential effect on terrestrial television reception due to the Proposed Development, the following will be undertaken as part of the planning application:
1. Desk based modelling of the diffraction zone (shadow zone) and the reflection zone for the Proposed Development;
 2. Baseline reception survey in potentially affected areas to:
 - o Measure current reception quality;
 - o Observe the current buildings that may impede the reception quality;
 3. Evaluation of results relative to typical required strength and stability.

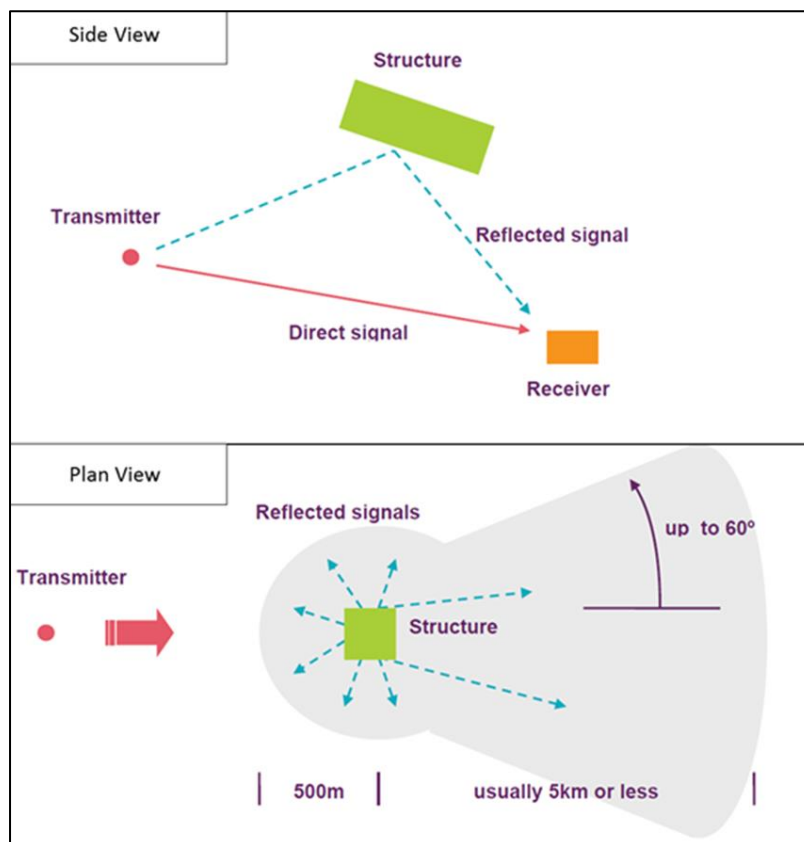
- 3.134 The overall results will be considered to determine whether interference to terrestrial television services is possible due to the presence of the Proposed Development.
- 3.135 The television interference zones will be fully modelled within the desk based report. The interference zones will be modelled relative to the Winter Hill main transmitter which serves the area around the Proposed Development. The Ofcom guidance document titled "Tall Structures and their impact on broadcast and other wireless services", sets out the three most applicable interference zones:
- "Zone A - close behind the structure (typically a few tens of metres) there may be a large reduction in signal level with a possible complete loss of reception
 - Zone B - further away (typically a few hundred metres) the signal reduction is less severe and the shadow will be smaller as diffraction effects partially fill in the shadow. Depending on the size of the structure, some locations could still lose reception completely
 - Zone C - some distance away (1-5km) the shadow will effectively have disappeared."
- 3.136 These zones are illustrated in Figure 3.1 below which is taken from Section 3.2 of the Ofcom paper.

Figure 3.1: Diffraction Loss Zones



- 3.137 For large developments with straight edges, the transmitted signal can be reflected by the building itself. This causes an effect known as 'multipath interference' whereby the signal is received twice by an aerial at staggered times. The direct signal arrives first because it has a shorter distance to travel. Figure 3.2 below taken again from the Section 3.3 of the Ofcom document referenced above, illustrates this effect.

Figure 3.2: Diffraction Loss Zones



- 3.138 In practice, it is considered highly unlikely that reflections will have an effect for receivers in front of the building or on either side when viewed from the location of the transmitter. For digital transmissions in particular, it is unlikely that issues will occur if the angle between the direct signal and the reflected signal is more than 30 degrees. This is understood to be the angle that Arqiva considers when safeguarding its Television Re-Broadcast Links with regard to reflections from wind turbines – whilst wind turbines cause issues that are different to buildings this particular issue is similar for the two.
- 3.139 The reflection zone will be constructed in accordance with the Ofcom approach, however the angle considered is 30 degrees rather than 60 degrees. This is in order to represent a more realistic scenario for digital transmissions. It should be noted that no location can be affected by both diffraction (shadowing) and direct reflections.
- 3.140 In summary, the study area will include a shadow zone and a 'key hole' shape reflection zone (as shown in Figure 3.2) both extending out to 5km south east of the Proposed Development relative to the Winter Hill transmitter. The shadow zone's width will be equal to the width of the Proposed Development relative to the transmitter.
- 3.141 Desk based modelling of the interference zones for the Proposed Development will be completed. This will inform the baseline survey locations.
- 3.142 A Television Baseline Survey will be undertaken between 28 April 2022 – 25 May 2022. The survey locations will be selected in advance of the survey being undertaken.
- 3.143 The aim of the Baseline Survey is to determine the baseline terrestrial television reception conditions in the key interference areas and whether an effect upon terrestrial television signals may be expected. The Baseline Survey will establish the current signal quality in areas where interference issues are possible.
- 3.144 The Baseline Survey readings would take place at the previously selected locations (subject to safety and access) near to the Proposed Development. The baseline measurement will be

captured by extending a terrestrial television aerial, connected to an advanced signal analyser, to 10 metres above ground level. The following measurements would be taken:

- Digital signal strength;
- Subjective assessment of picture/audio quality

Summary of Assessment Scope

- 3.145 An updated Baseline Survey will determine the likelihood of interference occurring for residential dwellings and allow for a 'before and after' comparison in the event of a complaint being received.
- 3.146 A previous Baseline Survey was undertaken in 2015, as contained in Chapter 10 of Appendix 4 and the data within Appendix 19, and in 2019, as contained in Appendix 20 of this Report respectively. The most recent Baseline Survey in 2019 found that in the Proposed Developments shadow zone, at survey locations between 0.2km and 1.7km, the signal strength was low to moderate however overall reception is poor.
- 3.147 Therefore, Interference is most likely to manifest itself at these locations based on conditions observed in 2019. Significant obstructions already exist in the city centre between the aerial and the transmitter. These existing obstructions are likely to be cause signal problems. The Proposed Development may cause further degradation to the signal with locations closest to the Proposed Development.
- 3.148 If adverse effects on television services occurs as a result of the Development, mitigation measures will be required. The most effective form of mitigation is dependent on the specific impact. The impacts will only be identified once the Development is operational via complaints received or by carrying out a post construction survey. The requirement for the implementation of such measures will be addressed on a case-by-case basis dependant on the complaint received or the results of the post construction survey. The most likely mitigation solution is the installation of satellite television at the affected residence. A mitigation strategy can be implemented pursuant to a planning condition.
- 3.149 It is common practice for building developers to assess potential impacts related to a new building development and, where necessary, mitigate them. It is extremely uncommon for building developments to be modified on the basis of television signal issues. This is largely because technical solutions generally exist and are commercially viable. It is Pager Power's recommendation that further to the technical assessment, suitable planning conditions are agreed at a planning stage. Provided this process is followed, it is considered appropriate for television signal impacts to be scoped out of the EIA.

Table 3.17: Summary of Assessment Scope: TV Reception

Receptor	Impact	Potential Effect	Scoped In / Out
Residential dwellings within the shadow zone	Potential reception disruption to be investigated by an updated baseline site survey.	Degradation or total loss of terrestrial television coverage which may require mitigation following validation of reported effects.	Scoped out

Light Spillage and Solar Glare

- 3.150 This screening input has been prepared by Dr Neil Shankland (B.Eng., Ph.D., MCIBSE) at Buro Happold and considers the impact from the Proposed Development on light spillage and solar glare.

- 3.151 The Proposed Development is predominantly office use. Office properties tend to have automatic lighting, which is controlled by sensor at night. All external lighting would be in accordance with the Institute of Lighting Engineers' guidance on reduction of obtrusive light.
- 3.152 Solar glare can occur when low angle sunlight is reflected from large areas of glazed facades or metal cladding towards road users and adjacent buildings. A review of the Proposed Development geometry and materials has shown that large areas of glazing are restricted to ground floor level where potential reflection of direct sunlight will be obstructed by surrounding buildings. Facades of upper storeys comprise typical glazing areas and conventional construction materials, which are consistent with existing adjacent buildings and are not considered to present a risk of solar glare effects and impair motorists vision on local roads.
- 3.153 It is, therefore, concluded that an assessment of solar glare is not required for the proposed development.
- 3.154 This discipline can therefore be scoped out of the EIA.

Table 3.18: Summary of Assessment Scope: Light Spillage and Solar Glare

Receptor	Impact	Potential Effect	Scoped In / Out
Residential dwellings	Light spillage and solar glare.	Potential for light spillage and solar glare.	Scoped Out
Solar glare impacting on highways and Road Users	Safety issues concerning transit through critical intersections and junctions.	Visibility of traffic lights, intersections and pedestrian crossings not anticipated to be obscured by instances of glare, that could potentially result in traffic accidents.	Scoped Out

Noise and Vibration

- 3.155 This screening input has been prepared by Alex Krasnic at Buro Happold (BEng(Hons); Acoustics MSc; Fellowship of the Institute of Acoustics (FIOA); and Corporate Membership of the Institute of Sound, Communications and Visual Engineers) and considers the impact from the Proposed Development on noise and vibration.
- 3.156 The 2015 EIA, as contained in Chapter 10 of Appendix 4, included an assessment of Noise and Vibration by Buro Happold, which included a consideration of noise and vibration during construction, as well as operation, including in respect of mechanical plant and traffic noise. The 2015 Noise Impact Assessment data is contained in Appendix 19.
- 3.157 The 2015 EIA concluded that, with appropriate mitigation (i.e. a Construction Management Plan secured via a planning condition) construction effects would largely be negligible to minor adverse and not significant in EIA terms. Operational phase effects would be negligible.
- 3.158 On this basis and given that the 2020 proposals were considered to represent an improvement on the 2015 Planning Permission in terms of a reduced number of proposed car parking spaces, noise and vibration was scoped out of the EIA for the 2020 planning application.
- 3.159 Changes to the proposed scheme since the last planning submission (2019), has necessitated a 'top-down' review of the noise planning requirements and their application in light of those changes. Notably, whether any changes in the legislative landscape or, any changes to Manchester City Council's (MCC) noise planning requirements have ensued since that time. Potential changes in the planning domain, coupled with changes to the massing and outline

design aspects of the proposed scheme, mean that the noise protection obligations at the planning stage have been reassessed accordingly.

- 3.160 At this time, Buro Happold's noise planning review has determined that there have been no significant changes in either national planning legislation, nor to MCC's own planning requirements, since the last planning submission. Consequently, only changes to the massing and outline design aspects of the scheme have been reassessed to demonstrate continued compliance with the unchanged requirements of both national legislation (NPPF and PPG:Noise) and local planning (MCC Planning conditions and noise control requirements), as well as applicable guidance referenced in the planning domain (e.g. British Standards).
- 3.161 On the basis of this information and given that the Proposed Development is considered to represent an improvement on the 2015 and 2020 Planning Permission in terms of a reduced number of proposed car parking spaces, it is considered that Noise and Vibration can therefore be scoped out of the EIA for this revised planning application.
- 3.162 Buro Happold will prepare a new Noise and Vibration Assessment, which is in accordance with current planning policy and legislation, and which will be submitted as a standalone technical report with the planning application.

Table 3.19: Summary of Assessment Scope: Noise and Vibration

Receptor	Impact	Potential Effect	Scoped In / Out
Existing and proposed nearby residential dwellings	Noise and vibration impact of temporary construction activities.	Temporary effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated or controlled via the construction noise and vibration assessment and Construction Management Plan.	Scoped out
	Noise impact of temporary construction traffic.	Temporary effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated or controlled via the construction noise and vibration assessment and Construction Management Plan.	Scoped out
	Noise impact of new external fixed plant items associated with the development.	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated via the design of new external fixed	Scoped out

Receptor	Impact	Potential Effect	Scoped In / Out
		plant items associated with the development.	
	Noise impact of any amplified music associated with the development.	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Any potential effects will be mitigated via the facade design of any premises with amplified music associated with the development.	Scoped out
	Noise impact of changes in road traffic flows on local roads	Permanent effects on human activity and health (e.g. annoyance, speech communication, sleep disturbance). Future changes to road traffic flows in proximity of the scheme, and the potential for changes to assessed noise impacts at the nearest-affected receptors, has been considered as part of the submitted Planning Report (Noise) issued for the scheme.	Scoped out

Heritage and Visual Impact

- 3.163 This Screening input has been prepared by Sarah Stirling (BA Hons, MA) at Stephen Levrant Heritage Architecture and considers the impact from the Proposed Development on heritage and visual impact upon the site and surrounding area.
- 3.164 The proposals as approved in 2020 sought to erect a 12 storey and 11 storey, mixed use development to the land just north of Miller Street, along with associated lower ground level car parking, hard and soft landscaping and associated works. The Heritage Statement submitted alongside the consented scheme (2020) identified the proposals would result in an overall negligible beneficial impact on the built historic environment (non-significant effect). This 2019 Heritage Statement is contained in Appendix 21 of this Report.
- 3.165 It is understood the current proposal for a Full Planning Application seeks to introduce two office buildings which are of a slightly increased height and with a revised approach to the façade. It is understood the revised proposal is being brought forward to deliver buildings that reflect the further improved ambitions for sustainability at NOMA; building on the legacy of 1 Angel Square to deliver best in class 'next generation' buildings in terms of sustainability and net zero carbon. The changes to the façade approach are understood to align with the requirement to achieve this.

Baseline Conditions

- 3.166 Since the September 2019 Report submitted with the 2020 Planning Application, there has been no further changes to the baseline heritage data. Key sources for understanding the

parameters for assessment include the Historic England's NHLE and Conservation Area appraisals, as published on Manchester City Council's website.

- 3.167 The listed buildings and conservation areas which were originally scoped in for assessment are identified in Section 2 (para.2.10) and within Figure 2.2.
- 3.168 Since the 2020 Planning Application was submitted and consented (Application Reference: 124973/FO/2019), a number of developments within the immediate and wider area have been consented and are currently under construction. The baseline schemes of relevance to the current Full Planning Application for the Site are identified within the Committed Development Schedule in Appendix 2.
- 3.169 In the context of the baseline conditions and committed development context, it is clear that the Proposed Development would not incur any changes to the conclusions on heritage impact.

Method of Assessment

- 3.170 The revised application will be supported by a Heritage Statement, which will include relevant updates to national planning policy and guidance; principally including:
- National Planning Policy Framework (2021); and
 - Historic England Guidance on Producing Statements of Heritage Significance (Oct, 2019).
- 3.171 Additional relevant guidance (unchanged since 2019) is as follows:
- Planning (Listed Buildings & Conservation Areas) Act 1990;
 - Manchester Core Strategy (2012);
 - Historic England guidance: Conservation Principles Policies and Guidance (2008);
 - Historic England's Good Practice Advice Note 2: Managing Significance in Decision-Taking in the Historic Environment (2015); and
 - Historic England's Good Practice Advice Note 3: The Setting of Heritage Assets (2017).
- 3.172 Evaluation of significance has been informed primarily by the designation of the assets at an international, national, regional or local level as well as their ability to contribute to an understanding of the past. This provides a coherent baseline to understand the sensitivity of the heritage asset, i.e. their value and susceptibility to change.
- 3.173 This value rating had also been applied when considering sensitivity of views containing heritage assets and the character of the area as a whole. Indicative definitions for each of these ratings are outlined in Table 3.20 (below):

Table 3.20: Definition of Significance / Relative Value as used in the Heritage Statement report

Significance / Value	Description	Example
Very High / Exceptional	International architectural and historic interest and importance.	• Scheduled Ancient Monuments, • Grade-I listed buildings, • Grade-I historic parks/gardens, • and battlefields, defined by statute,
High	National architectural and historic importance and interest	• Grade II* and grade-II listed buildings, • Grade II* and grade II historic parks/gardens, • battlefields, as defined by statute, • Conservation Areas containing very Important buildings.

Significance / Value	Description	Example
Medium	Regional architectural and historic importance and interest	- Grade-II listed buildings - Grade-II historic parks/gardens and battlefields, - designated Conservation Areas
Low	Local architectural and historic heritage importance and interest	- Locally Listed Buildings - Site's identified as being of historic interest on the Historic Environment Record (HER) - Historic buildings of modest quality in their fabric or historical association.
Negligible	Buildings or fabric components which have been extensively altered, eroding or compromising their architectural and historic interest	- recorded on the HER in record form or as 'Find Sites' - buildings, structures, or designed landscape features, which detract from the architectural design, historic, communal, or townscape interest of the principal heritage asset.
Unknown heritage potential	Buildings/sites where the potential importance interest requires determination	relates to sites which have not been previously recorded or investigated so that their significance is yet to be objectively defined.

3.174 The magnitude of impact is a product of the extent of change which is likely to result from the Proposed Development on the setting of a heritage asset (indirect) or the fabric and character of a heritage asset (direct). Where the proposed changes are considered to enhance the setting or appreciation of a heritage asset, the impact on its significance will be deemed to be beneficial. Conversely, where the Proposed Development is considered to compromise its positive heritage values the impact on the significance will be deemed adverse.

3.175 These terms, and the processes for their use and implementation, follow the recommendations set out in the technical guidance document published by ICOMOS, Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (2011). The impact, therefore, is assessed in terms of change to these qualities brought about by the Proposed Development.

3.176 Indicative definitions for the magnitude of determining impact and significance of effect accord with those outlined in Tables 4.1 and 4.3. A 'significant effect' occurs when the proposals would incur a 'moderate' or 'major' effect upon the built historic environment. Where a development would incur a minor, negligible or neutral effect – this is not considered to be 'significant' in ES terms.

3.177 Due to the existing urban form around the Site, it will be clear the cumulative developments identified within Appendix 2 will have no material impact on the conclusions outlined below.

Summary of Assessment Scope

3.178 The conclusions outlined within the 2019 Heritage Statement identified the Proposed Development would result in an overall negligible beneficial impact upon the built historic environment (not significant).

- 3.179 The baseline assessment of significance has been reassessed in line with the revised guidance outlined above and the revised height of the Proposed Development. When assessed against the latest policy and guidance, it will be clear that whilst the revised approach to the façade may incur some minor impact to the settings of nearby listed buildings, this degree of change is not predicted to result in any significant effects on the built historic environment.
- 3.180 In summary, the minor nature of the changes will not cause any additional significant effects and, as a result, it is considered built heritage should be scoped out for further assessment.

Table 3.21: Summary of Assessment Scope - Heritage

Receptor	Impact	Potential Effect	Scoped In / Out
New Century House (Grade II)	Impact on the significance and setting of the Listed Building.	Negligible-minor	Scoped out
Redfern Building (Grade II)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Co-operative Society Building (Grade II)	Impact on the significance and setting of the Listed Building.	Negligible	Scoped out
Holyoake House (Grade II)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
CIS tower (Grade II)	Impact on the significance and setting of the Listed Building.	Negligible-minor	Scoped out
Cooperative Wholesale Society (Grade II)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Smithfield Market Hall (Grade II)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
29 Swan Street (Grade II)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Former Midland Bank (Grade II)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Crown and Kettle (Grade II)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Daily Express building (Grade II*)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out

Receptor	Impact	Potential Effect	Scoped In / Out
Derros Building (Grade II)	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Shudehill Conservation Area	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Cathedral Conservation Area	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Smithfield Conservation Area	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out
Ancoats Conservation Area.	Impact on the significance and setting of the Listed Building.	Neutral	Scoped out

Summary

3.181 Table 3.22 provides a summary of the scoping exercise undertaken and the disciplines that will be considered within the ES. It also identifies what supplementary technical reports will be prepared and submitted as standalone documents in support of the application.

Table 3.22: Scoping Summary

	ES Chapter	Non-EIA Assessment	Consultant
Archaeology	-	X	Salford Archaeology
Agricultural Circumstances	-	-	n/a
Air Quality	-	X	Buro Happold
Aviation	-	X	Pager Power
Climate Change	-	-	Buro Happold
Ecology	-	X	ERAP
Water Resources	-	X	Buro Happold
Ground Conditions	-	X	Buro Happold
Heritage and Visual Impact	-	X	Stephen Levrant Heritage Architecture
Human Health	-	-	Buro Happold
Light Spillage and Solar Glare	-	-	n/a

	ES Chapter	Non-EIA Assessment	Consultant
Noise and Vibration Impact Assessment	-	X	Buro Happold
Socio-economics	-	-	n/a
Sunlight, Daylight and Overshadowing	X	-	Buro Happold
Transport	-	X	Curtins
TV Reception	-	X	Pager Power
Wind Microclimate	X	-	Buro Happold

Cumulative Effects Assessment

- 3.182 An assessment of the cumulative effect of the Proposed Development with regard to the scope in topics of Wind and Sunlight, Daylight and Overshadowing will be included within the ES. An assessment of committed developments including those with recent planning permissions and those expected to come forward in the near future has been undertaken. There is no agreed / standard threshold for how far the assessment should go, therefore a professional judgement has been taken regarding which schemes to highlight, taking into consideration the high density city centre location.
- 3.183 In addition, the standalone technical reports will also consider the cumulative effect of the Proposed Development with the committed developments as relevant.
- 3.184 Full details of the developments to be included as part of the cumulative assessment are included at Appendix 2.
- 3.185 The Applicant seeks the agreement from the Local Authority to the scope of committed developments and invites guidance on any additional schemes not listed.

Consultation

- 3.186 A process of stakeholder consultation has already commenced with regard to the Proposed Development. Members of the project team have met with senior officers from the Local Planning Authority.
- 3.187 In addition, the project team have consulted and/or will consult the following stakeholders prior to submitting the planning application:
- Manchester City Council – Planning, Environmental Health and Highways – pre-application meetings have taken place with planning officers on 24th May and 11th April 2022;
 - Lead Local Flood Authority – pre-application meeting took place on 5th May 2022;
 - Greater Manchester Police;
 - Transport for Greater Manchester (TfGM);
 - Historic England – briefing email issued and response received 3 May 2022 to confirm there is no need to consult Historic England further prior to submitting the application;

- Greater Manchester Archaeological Advisory Service (GMAAS) – briefing meeting took place on 21 April 2022 which was also attended by Historic England’s archaeology advisor;
- Local Ward Councillors – briefing meeting took place on 9 May 2022 with Councillor Adele Douglas; and
- Local businesses and residents – public consultation website launched 9 May 2022 and will run until 26 May 2022 with a drop-in event taking place on 17th May.

3.188 A Statement of Consultation will be submitted with the planning application and will provide further detail on consultation undertaken.

4 EIA Methodology

- 4.1 The EIA will assess both the construction and operational phases of the Proposed Development.
- 4.2 The ES is anticipated to comprise two volumes, the first of which will set out the findings with respect to each of the environmental disciplines that have been examined as part of the EIA. Volume 2 will include all the supporting documents and technical appendices relating to the chapters. A Non-Technical Summary ('NTS') will be produced and will form a standalone document.
- 4.3 Each ES chapter will follow the headings set out below to ensure the final document is transparent, consistent and accessible:
- Introduction.
 - Legislative and Policy Context.
 - Assessment Methodology and Significance Criteria.
 - Baseline Conditions.
 - Identification and Evaluation of Key Effects.
 - Mitigation Measures.
 - Cumulative Effects.
 - Residual Impacts.
 - Summary.
- 4.4 Each chapter sub-heading is explained in further detail below.

Introduction

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

Legislative and Policy Context

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

Assessment Methodology and Significance Criteria

- 4.7 This section will provide an explanation of methods used in undertaking the technical study with reference to published standards, guidelines and best practice. The application of significance criteria will also be discussed.
- 4.8 It will also outline any difficulties encountered in compiling the required information.

Baseline Conditions

- 4.9 This will include a description of the environment as it is currently and as it is expected to change given the project were not to proceed (i.e. 'do-nothing' scenario). The method used to

obtain this information will be clearly identified. Baseline data will be collected in such a way that the importance of the particular subject area to be affected can be placed in its context and surroundings so that the effects of the proposed changes can be predicted.

- 4.10 Baseline conditions will include implemented planning permissions that are under construction.

Identification and Evaluation of Likely Significant Effects

- 4.11 This section will identify the likely significant effects on the environment resulting from the Proposed Development.
- 4.12 The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the effects can be positive or negative. The criteria to be used in carrying out this process are detailed below.

Prediction of Impact Magnitude

- 4.13 The methodology for determining the scale or magnitude of change caused by the impact is set out below.

Table 4.1: Methodology for Assessing Magnitude of Change

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

Prediction of Receptor Sensitivity

- 4.14 The sensitivity of a receptor is based on the relative importance of the receptor using the scale set out below.

Table 4.2: Methodology for Determining Sensitivity

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

Assessment of Effect Significance

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

Table 4.3: Effect Significance Matrix

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

Mitigation Measures

- 4.16 Adverse effects will be considered for mitigation and specific mitigation measures put forward, where practicable. Mitigation measures considered may include modification of the project, compensation and the provision of alternative solutions as well as pollution control. The extent of the mitigation measures and how these will be effective will be discussed. Where the effectiveness is uncertain or depends upon assumptions about operating procedures, data will be introduced to justify the acceptance of these assumptions.
- 4.17 The approach to mitigation will follow best practice guidance, which suggests a hierarchical approach. The UNEP EIA Training Resource Manual (2002) advises that impacts should ideally be:
1. Avoided; if not
 2. Minimised; and/ or
 3. Compensated.
- 4.18 Three 'types' of mitigation are characterised in IEMA's Special Report – The State of Environmental Impact Assessment Practice in the UK (2011):
- EIA influence at design stage;
 - Standard construction practices for minimising effects; and
 - Follow-up actions for implementation post-consent.
- 4.19 Clear details of when and how the mitigation measures were carried out, or will be carried out, are to be given within the Environmental Statement. When certainty of impact magnitude and/or effectiveness of mitigation over time exists, monitoring programmes will be proposed to enable subsequent adjustment of mitigation measures, as necessary.
- 4.20 The opportunity for enhancement measures will also be considered where appropriate.

Cumulative Effects

- 4.21 Two types of cumulative effect will be assessed:
- Type 1 Cumulative effects: the interactions between effects of the demolition and redevelopment works on a single receptor.
 - Type 2 Cumulative effects: those effects that arise from incremental changes caused by other past, present or reasonably foreseeable actions together with the demolition and redevelopment works.
- 4.22 The cumulative effects of the proposals and the identified committed developments will be assessed.
- 4.23 A list of known committed developments is set out at Appendix 2. The Council are requested to review and comment on this list in their Scoping Opinion.

Residual Effects

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

5 Environmental Statement Chapters

5.1 The list of proposed Environmental Statement Chapters are set out as follows:

1. Introduction
2. EIA Methodology and Significance Criteria
3. Alternatives and Design Evolution
4. Site and Development Description
5. Construction Programme and Methodology
6. Daylight, Sunlight and Overshadowing
7. Wind Microclimate
8. Summary of Residual Impacts
9. Type 1 Cumulative Effects

Construction Management & Phasing

- 5.2 This chapter of the ES describes the proposed construction programme and key activities that will be undertaken.
- 5.3 Detailed consideration of the potential impacts during the construction process and any necessary mitigation measures are provided in each relevant chapter of the ES.
- 5.4 The main aim throughout the construction period is to minimise impact on the surrounding properties as well as on the local highway and public space adjoining the development. Close collaboration with possible adjacent construction projects will be maintained at all times.

Method of Assessment

- 5.5 The chapter will explain the methodology and timescales envisaged at the time of planning application. More in depth proposals will be developed once a main contractor is appointed and prior to commencement on site.
- 5.6 This will include preparation of detailed plans to incorporate Construction Management, Construction Phase Health and Safety, Environmental Management as well as Site Waste Management, Logistics and Traffic Management.

Sunlight, Daylight and Overshadowing

- 5.7 This Scoping input has been prepared by Neil Shankland (B.Eng., Ph.D., MCIBSE) at Buro Happold and assesses the likely significant effects of the Proposed Development on the environment with respect to daylight, sunlight and overshadowing effects, with an emphasis on ascertaining the impact on both nearby outdoor spaces and windows on nearby buildings.
- 5.8 Daylight and sunlight studies will be undertaken to establish the impact of the Proposed Development on the amenity of existing adjacent properties.

- 5.9 The assessment will focus on establishing baseline levels of daylight and sunlight available to the adjacent residential properties and permanent open amenity areas and the impact that the massing of the Proposed Development's design has on the daylight and sunlight amenity in comparison to the baseline condition.
- 5.10 The receptors of the daylight and sunlight assessments will be the windows of habitable rooms where the adjacent occupants have a reasonable expectation of daylight.
- 5.11 Receptors for overshadowing studies will comprise permanent open amenity spaces where pedestrian leisure activities are expected.
- 5.12 The cumulative effect of the Proposed Development in combination with planned developments in the vicinity of the Site is not considered to be necessary as identified future developments are sufficiently distant from the receptors to have a negligible effect with respect to daylight, sunlight and overshadowing.

Baseline Conditions

- 5.13 The existing site condition as of 2022 is a surface level open car park, which offers very little obstruction of light to the existing surrounding buildings. The recently completed Angel Gardens scheme, part of the overall NOMA masterplan, is considered as part of the baseline, located on the southwest side of Rochdale Road, to the southeast of the Site.
- 5.14 The assessment will consider what would more typically be located within this type of site when assessing results from the modelling analysis of changes from the existing conditions to the condition with the Proposed Development in place. While there are a number of open areas which will be developed as part of the NOMA Masterplan there are also some existing taller buildings that provide a more realistic context for this type of city centre development, in particular the Crowne Plaza Hotel on the corner of Miller Street and Rochdale Road, Skyline Central and the CIS Tower on Miller Street and the Proposed Development.
- 5.15 The unusually unobstructed baseline condition will be taken into consideration when reviewing the results from the daylight and sunlight analysis. Understandably this will provide more extreme differences than if the Proposed Development were replacing existing buildings at a density that would be expected of a city centre area.
- 5.16 On reviewing the surrounding buildings to the Proposed Development those impacted lie to the northeast (Linx building) and southeast (Angel Gardens) of the Proposed Development. The nearby receptors that have been identified for assessment within the daylight, sunlight and overshadowing ES chapter comprise windows of habitable rooms of existing adjacent residential buildings, existing adjacent permanent open amenity spaces and new amenity spaces within the Proposed Development.
- 5.17 Existing amenity spaces to be assessed for overshadowing consist of landscaped areas to the south and southeast of 1 Angel Square and the courtyard area within the Angel Gardens scheme. New amenity spaces formed within the Site will also be assessed for overshadowing.
- 5.18 As there is the potential for either one of the buildings to be developed as part of the initial phase, assessments of each building individually will include the other building as part of an alternative baseline.
- 5.19 Should the Proposed Development not go ahead, it is expected that another development of similar scale would proceed instead as the Site falls within the Regional Centre and City Centre Fringe, as identified within the Manchester Core Strategy 2012. In accordance with Policy CC1 Primary Economic Development Focus, City Centre North will be a suitable location for consideration of high-density buildings and commercially led mixed use schemes, with a focus on high density offices. Policy CC6 City Centre High Density Development further encourages the development of high-density development within the city centre, which is a location where land should be used to maximise efficiency. It concludes that the scale, height and massing of development in the city centre will significantly exceed what is appropriate elsewhere in the city.

Method of Assessment

- 5.20 BRE Report 209, entitled 'Site Layout Planning for Daylight and Sunlight – a guide to good practice (2011)' will be used as the method to assess the impacts. The BRE Report 209 recommends a methodology for assessing the effect that the massing of the proposed building will have, if any, on daylight and sunlight enjoyed at existing adjacent properties and within new developments.
- 5.21 The analysis of daylight, sunlight and overshadowing will be undertaken using 3D computational analysis, which will be used to demonstrate the anticipated shadow casting from the Proposed Development and the available daylight and sunlight to spaces between buildings and adjacent sensitive receptors. The 3D model built for the analysis will be based on the most up to date survey information available. Sunpath models for spring and autumn equinox, summer and winter, will be produced to demonstrate that buildings and external spaces benefit from direct sunlight and are not being cast in shadow for prolonged periods of time.
- 5.22 In accordance with the BRE Report 209, an initial test of the obstruction of light to existing residential windows will be undertaken to establish whether further, more detailed testing needs to be undertaken. Where the initial test is not passed, daylight and sunlight amenity will be evaluated by calculation of Vertical Sky Component (VSC) and Annual Probable Sunlight Hours (APSH) values. Where the VSC is reduced by more than the BRE recommendations, Average Daylight Factors (ADF) values will be assessed for habitable rooms served by affected windows for comparison with BRE recommendations for the internal distribution of daylight.
- 5.23 The BRE Report gives recommendations for the assessment of the effect on sunlight enjoyed by individual windows serving certain room uses. When considering sunlight, it should be noted that, in the northern hemisphere, it is only those windows that face within 90 degrees of due south that have an expectation of some degree of sunlight amenity and the BRE Reports limits the extent of assessments required to only these windows. Sunlight amenity is measured in terms of Annual Probable Sunlight Hours (APSH).
- 5.24 The BRE Guidelines specify that the Daylight and Sunlight results should be considered flexibly in the context of the Site. For example, there would be a higher expectation for daylight and sunlight in rural or a suburban environment than in a dense city centre location. The important factor is that the levels of daylight and sunlight are appropriate, taking into account planning policy and regeneration requirements, existing massing and recent planning consents. The analysis will be informed by the City Centre context of the location and adjustments will be made to reflect these considerations.
- 5.25 Where windows to existing surrounding properties fail to meet the target VSC criteria at the face of the window, an assessment of the before and after scenarios will be undertaken to determine whether the reduction in VSC values exceeds the 20% reduction which is considered noticeable to occupants by the BRE.
- 5.26 The overshadowing assessment will be based on that recommended by the BRE guidance and will focus on the extent to which the massing of the Proposed Development creates "permanent" shadow or shade to existing and committed public realm and external amenity areas within or surrounding the Site.

Summary of Assessment Scope

- 5.27 The following analysis will be carried out:
- Assessment of overshadowing of public realm areas both within and outside the Site red line boundary.
 - Assessment of sunlight and daylight impacts on existing and committed residential receptors adjacent to the Site (%VSC and ADF for key areas), including using a phased approach as described in Section 2 of this Report.

Table 5.1: Summary of Assessment Scope: Daylight, Sunlight and Overshadowing

Receptor	Impact	Potential Effect	Scoped In / Out
Windows of habitable rooms of existing adjacent residential buildings	Overshadowing of existing adjacent residential buildings	Loss of daylight and sunlight access to adjacent residential buildings	Scoped in
Existing adjacent permanent open amenity spaces and new amenity spaces within the Proposed Development	Overshadowing of existing and proposed permanent open amenity spaces	Loss of direct sunlight access to existing adjacent permanent open amenity spaces; New amenity spaces not meeting BRE guidance on direct sunlight access	Scoped in

Wind Microclimate

- 5.28 This Chapter has been prepared by Dr Bernardo Vazquez (B.Eng, Meng, PhD) at Buro Happold, who will also be responsible for preparing the Wind ES Chapter.
- 5.29 There are no national codes of practice or legislative policies relating to the assessment of environmental wind flows in the built environment. The impact of environmental wind on pedestrian spaces and the subsequent suitability of these spaces for planned usage are described by the Lawson Comfort Criteria (LCC), which are recognised by Local Planning Authorities as a suitable benchmark for wind assessments. LCC will be applied in the wind assessment of the EIA.

Baseline Conditions

- 5.30 The existing wind microclimate at the Site will be quantified as part of the proposed modelling using a model of the existing buildings on-site and in the surrounding area, as described below.
- 5.31 The baseline assessment will include the following:
- The closest and most suitable wind data provided by the MET Office will be obtained on which Wind Frequency Analysis will be completed. This will be applied as boundary conditions for a Boundary Virtual wind model that will be used to quantify the wind microclimate of the existing site and its surroundings and include:
 - Wind translation from the wind data location to the Proposed Development; and
 - Topographical and building data available for the Site and existing surroundings
 - Quantitative assessment of the agreed baseline conditions of the Site, using available topographical data from local sources. The baseline will be assessed and modelled using computational fluid dynamics
- 5.32 The Site is currently empty. It is assumed to be exposed to wind acceleration from prevailing winds and secondary interactions with surrounding buildings to the south and southwest.

Potential Construction Effects

- 5.33 These are temporal and will change depending on the phase under construction. Due consideration will be given to the temporary hoarding, during the construction phase to reduce wind acceleration on Site.

Potential operational effects

- 5.34 The exposed nature of parts of the Proposed Development will have the potential to generate wind acceleration which can have adverse impacts on sensitive receptors.

- 5.35 A safe and comfortable wind climate is integral to the success of any development. New buildings can generate wind acceleration at ground level which could result in discomfort to pedestrians. An assessment of the wind microclimate created by a proposed development is necessary to identify any potential impacts that the development may have on sensitive receptors adjacent to as well as within that development during both construction and operational phases.

Method of Assessment

- 5.36 The wind assessment can be informed through a Computational Fluids Dynamics (CFD) wind assessment, which will comprise the following steps for CFD study and effect prediction:

CFD assessment

- 5.37 The closest and most suitable wind data provided by the Met Office will be obtained on which Wind Frequency Analysis will be completed. This will be applied to the quantitative assessment of the wind effect likely to occur due to the inclusion of the Proposed Development buildings. The CFD assessment will be used to assess the wind microclimate of the Site and its surroundings and include:

- Topographical and Geometrical data update within the project site for the Proposed Development
- Effect prediction and assessment of effect significance

- 5.38 The evaluation criteria that will be used will be based on the Lawson Comfort Criterion (LCC) to assess the level of comfort for both existing sensitive receptors and new residential uses and public routes and spaces proposed as part of the development from which the following will be identified:

- Potential impacts created by the Proposed Development;
- Cumulative impacts before and after construction of Proposed Development and any residual effects; and
- Assessment of the significance of impact through comparison of the Proposed Development and the comfort Lawson Criterion (including yearly, seasonal and worst season effects), and safety where necessary.

- 5.39 Assessment of the following scenarios will be completed:

- Scenario 1: Existing site in the context of existing surroundings (baseline);
- Scenario 2: Development site 2 Angel Square in the context of existing surroundings;
- Scenario 3: Development site 3 Angel Square in the context of existing surroundings;
- Scenario 4: Development site 2 & 3 Angel Square in the context of existing surroundings;
- Scenario 5: Development site 2 & 3 Angel Square in the context of committed developments;
- Scenario 6: Development site 2 Angel Square in the context of existing surroundings with mitigation;
- Scenario 7: Development site 3 Angel Square in the context of existing surroundings with mitigation;
- Scenario 8: Development site 2 & 3 Angel Square in the context of existing surroundings with mitigation;

- 5.40 The quantitative assessment will compare the existing and proposed receptors and the development as a whole without mitigation, and later the likely effects the proposed landscape strategy may have on the comfort and safety of the pedestrian circulating through the site.

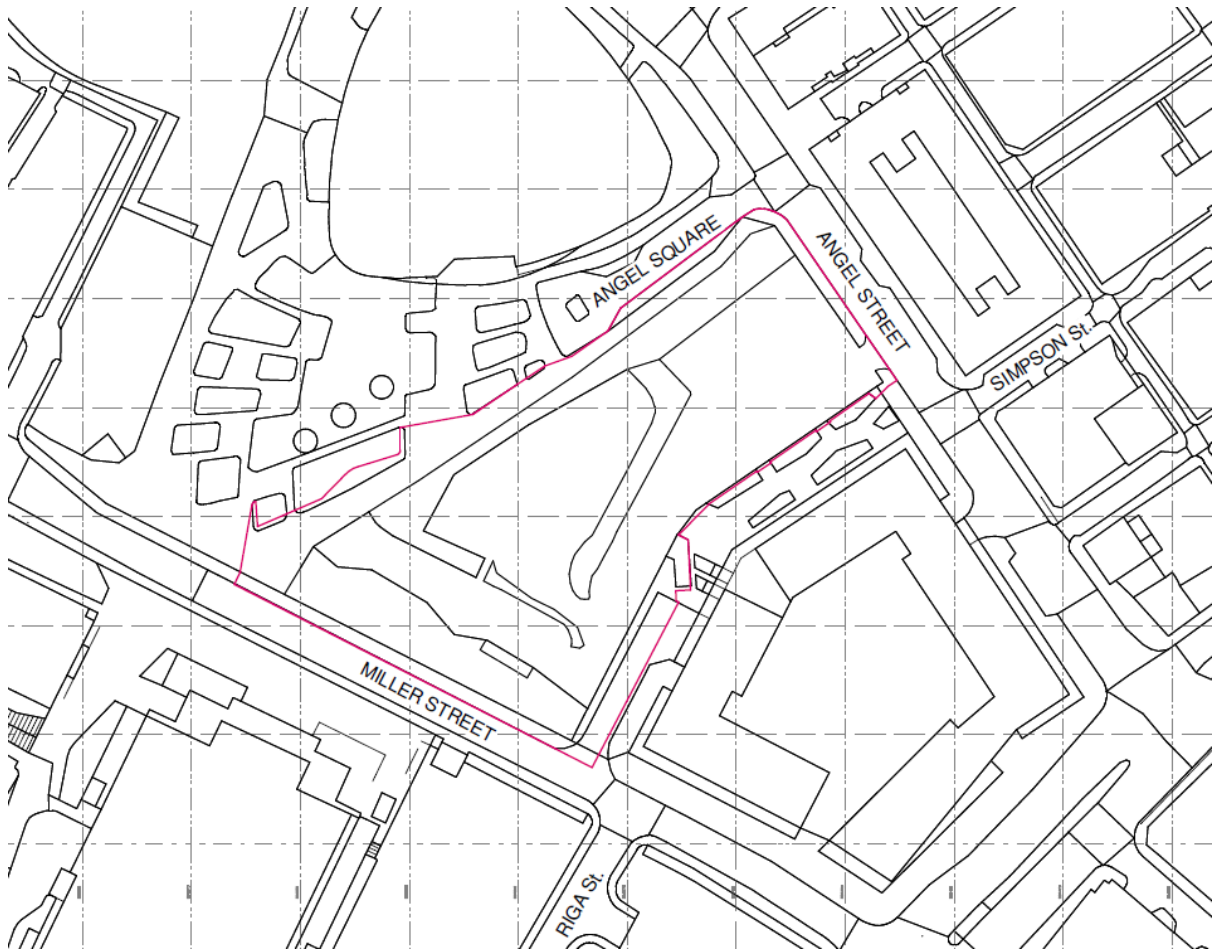
Summary of Assessment Scope

- 5.41 Potential impacts during the construction and operational phases to be addressed in the EIA are as follows:
- Short term temporary effects on local wind conditions and sensitive receptors (pedestrian activities) during construction activities.
 - Residual long term wind effects on local conditions and surrounding areas caused by the Proposed Development. The long term wind effects will be addressed in terms of the safety and comfort of the pedestrian environment.

Table 5.2: Summary of Assessment Scope

Receptor	Impact	Potential Effect	Scoped In / Out
Pedestrians walking in and around the site	Medium	Comfortable, Uncomfortable, safety issues	Scope in
Pedestrian sitting in around the site	High	Comfortable, Uncomfortable, safety issues	Scope in
Pedestrians sitting on balconies and terraces	High	Comfortable, Uncomfortable, safety issues	Scope in
Entrances in and around the site	High	Wind acceleration	Scope in

Appendix 1: Site Location Plan



Appendix 2 – Committed Developments

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
Baseline (Under Construction)					
1.	NOMA Marketing Suite	129631/FO/2021	Erection of a single-storey marketing suite building (Sui Generis), including photovoltaics and related access, landscaping, bicycle parking, plant and servicing and associated works for a temporary period of up to 5 years	0m	BASELINE Under Construction. Scheduled to complete Q3 2022 prior to the commencement of construction of 2&3 Angel Square.
2.	4 Angel Square	123437/FO/2019 Approved July 2019	Demolition of existing buildings to facilitate construction of an 11 storey building with external terrace to form a mixed use development comprising office use (Use Class B1) and ground floor commercial units (Use Classes A1, A2, A3, A4, B1 and D2); creation of a new public square and associated landscaping, undercroft car and cycle parking, provision of plant and servicing and related access and highways' works and associated works.	70m	BASELINE Under construction.
3.	New Victoria Residential	111777/FO/2016/C1 Approved Sept 2016	Erection of two residential buildings of a maximum 21 and 26 storeys to accommodate 520 apartments (178 x 1 bed, 286 x 2 bed and 56 x 3 bed apartments) (Use Class C3). Erection of one office building of maximum eight storeys comprising up to 11,647 sq. m (GIA) of office accommodation. Ground floor commercial space (Use Class A1, A2, A3 and B1), lower ground level car parking, access	150m	BASELINE Residential element under construction.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
			and servicing arrangements, alterations to Corporation Street, new public realm and other associated works.		
4.	Victoria Riverside	126944/FO/2020 Approved Jan 2021	Erection of a residential-led mixed use development comprising 3 no. towers (37, 26 and 18 storeys) and podium levels (6 storey) to form 634 residential apartments and townhouse accommodation (Use Class C3) together with commercial accommodation (1222 sqm) (Use Classes A1,A2,A3,A4,A5,B1, D1 and D2)); with associated residential amenity areas, refuse storage, plant (including substation), car parking, cycle storage, landscaping and new public realm including the re-instatement of Bromley Street and other associated works.	400m	BASELINE Under construction.
5.	Red Bank Remediation and Landscaping	133143/VO/2022 Approved Mar 2022	City Council Development for the creation of development platforms, including remediation and earthworks, and change in site levels, to allow delivery of future residential-led development at the Red Bank Neighbourhood, together with the construction of a new road and priority junction from Red Bank, new drainage infrastructure, utility and services connections and diversions, preparatory tree and shrub clearance, and demolition of certain existing structures, along with the creation of new and improved green	250m	BASELINE Under construction.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
			infrastructure and landscaping including the improvements of St Catherine's Wood to form part of a City River Park, and other associated works.		
6.	76-82 Oldham Street	110074/FO/2015/C2 Approved Aug 2016	Demolition of existing building and site structures and construction of 2no. mixed use buildings (Buildings A and B). Building A - Part 4, part 5, part 6 and part 8 storey building including ground floor and plus basement with ancillary facilities services and commercial use (A1, A3, B1) at ground floor and basement levels, 72 residential apartments (C3) above and 2 green roofs. Building B - Part 3 and part 5 storey building including ground floor and plus basement with 100 cycle parking spaces, building services and commercial space at basement level and 9 car parking spaces, ancillary facilities and services and commercial space (A1, A3, B1) at ground floor level and 28 residential apartments (C3) above and 1 green roof.	400m	BASELINE Under construction
7.	Deluna, 32-38 Oldham Road	119731/FO/2018 Approved Nov 2018	Erection of 7 storey building to form 38 apartments and ground floor retail unit (Class A1) together with associated car and cycle parking following demolition of existing building	400m	BASELINE Under construction.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
8.	Bendix Street	125681/FO/2019 Approved Apr 2021	Erection of a ground plus 12-storey residential building (Use Class C3) comprising 161 residential units, with ground floor commercial use (Use Class A1, A2, A3, B1, and / or D1 (excluding Places of Worship)) (160sqm) or ancillary residents lounge, disabled car parking, with highways, landscaping and other associated works following demolition of existing buildings	350m	BASELINE Under construction.
9.	Oldham Road	125686/FO/2019 Approved Dec 2020	Erection of a 12-storey residential building (Use Class C3) comprising 144 residential units, with ground floor commercial use (Use Class A1, A2, A3, B1, and /or D1 (excluding Places of Worship)) (144 sqm) or ancillary residents lounge, disabled car parking, with highways, landscaping and other associated works following demolition of existing buildings.	300m	BASELINE Under construction.
10.	New Cross Central (Addington Street)	124888/FO/2019 Approved Jan 2020	Erection of a 6-9 storey residential building (Use Class C3) comprising 80 no. dwellings including 9 no. townhouses and 71 no. apartments with residents lounge, refuse, plant, new substation, cycle storage, an internal landscaped courtyard and improvements to the adjacent footways on Marshall Street, Chadderton Street, Addington Street and Cross Keys Street and other associated works following removal of existing car park	250m	BASELINE Under construction.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
11	Peeler's Yard	125678/FO/2019 Approved Dec 2020	Erection of 8-storey residential building (Use Class C3) comprising 73 residential units, with ground floor commercial use (Classes A1, A2, A3, B1 and D1 (excluding Places of Worship)) (205 sqm); alterations to the retained perimeter wall and chimney including the introduction of a light box; disabled car parking, highways, landscaping and other associated works Alterations to the retained perimeter wall and chimney structure, including the introduction of a light box and erection of an 8-storey residential building (Use Class C3) comprising 73 residential units, with flexible ground floor commercial use (Use Class A1, A2, A3, A4, A5, B1 and / or D1), associated landscape and other associated works.	250m	BASELINE Under construction.
12	Swan House	121380/FO/2018 Approved Oct 2019	Erection of a part 31, part 13, part 5 storey building to form 373 residential apartments (Use Class C3a) and 12 serviced apartments (Use Class C1) together with a ground floor commercial unit (408 sqm) (Use Class A1, A2 or A3) with associated car parking, public realm and other associated works following demolition of existing buildings	100m	BASELINE Under construction.
13	Ancoats Gardens, One Thompson St	118120/FO/2017 Approved May 2018	Erection of a part 15, part 9, part 7 storey building to form 155 residential apartments together with ground floor commercial uses (Use Classes A1, A3 and B1) (288 sqm) with associated car parking, access arrangements and other associated works following the demolition of existing buildings and structure and the closure of Hatter Street	200m	BASELINE Under construction.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
14	Meadowside	116366/FO/2017 Approved Aug 2017	Erection of four residential buildings (22 storey building, 17 storey building, 40 storey building and part 12, part 9 storey building) to form 756 residential apartments (Use Class C3a) together with ground floor commercial uses (616 sqm) (Use Classes A1, A2, A3, A4, A5, D1 and B1) with associated car parking, landscaping, amenity areas, creation of new public realm following the closure of Aspin Lane, Mincing Street and Irk Street and other associated works following demolition of existing structures	100m	BASELINE Under construction. Mount Yard has already completed construction.
15	Glassworks	126638/FO/2020 Approved Jun 2020	Erection of part 17 storey (plus roof top plant behind parapet), part 6 storey building and the conversion with single-storey rooftop extension of the existing building at 1 & 3 Back Turner Street to comprise office accommodation (Class B1(a)) with front of house and commercial floorspace at ground floor Class A1 (Shop), A2 (Financial and Professional Services), A3 (Café and Restaurant), A4 (Drinking Establishment) B1 (Office) and D2 (gym and cinema) use with associated landscaping and other works following demolition of existing buildings at 30 & 32 Shudehill and 1 & 3 Nicolas Croft	250m	BASELINE Under construction.
Cumulative					
16	New Victoria Office	111777/FO/2016/C1 Approved Sep 2016	Erection of two residential buildings of a maximum 21 and 26 storeys to accommodate 520 apartments (178 x 1 bed, 286 x 2 bed and 56 x 3 bed apartments) (Use	200m	CUMULATIVE Planning Permission implemented for Residential Phase. Office Phase has

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
			Class C3). Erection of one office building of maximum eight storeys comprising up to 11,647 sq. m (GIA) of office accommodation. Ground floor commercial space (Use Class A1, A2, A3 and B1), lower ground level car parking, access and servicing arrangements, alterations to Corporation Street, new public realm and other associated works.		not yet commenced.
17	Old Bank Building Extension	127464/FO/2020 Approved Oct 2020	Construction of a new 7-storey office extension to the rear of the Old Bank Building to form a mixed use development comprising office use (Use Class B1) and ground floor commercial units (Use Classes A1, A2, A3, A4 and D2); change of use at ground floor of the existing building from B1 office use to (Use Classes A1, A2, A3, A4 and D2), together with cycle storage, showers and bin storage; and external works relating to the reuse, refurbishment and extension of the building, including external alterations to create a new doorway on Hanover Street; alongside new internal substation and installation of external plant and screen at roof level and associated works (associated listed building application reference 127465/LO/2020).	200m	CUMULATIVE Planning Permission not yet implemented.
18	Former Boddingtons Brewery	132416/FO/2021 Approved at Committee in March 2022. Awaiting formal issue of Decision Notice.	Erection of two buildings part 27, 20, 17 storeys and part 11 and 10 storeys to form a mixed use development comprising of 461 residential apartments (Use Class C3a) and ground floor commercial uses (Use Class E) (718 sqm) together with public realm including courtyard pocket park, landscaping,	550m	CUMULATIVE Planning Permission not yet implemented.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
			car parking and other associated works		
19	Old Brewery Gardens	118831/FO/2018 Approved Feb 2019	Erection of two buildings (a part 17, part 12 storey building and a part 26, part 23 storey building) to form 556 residential units (Use Class C3a) together with the creation of 3490 sqm of commercial floor space (Use Classes A1, A2, A3, B1 and D1) with associated landscaping, access and other associated works	500m	CUMULATIVE Planning Permission implemented but residential element yet to be commenced.
20	Manchester Arena Expansion	127901/FO/2020 Approved Apr 2021	Elevational alterations to New Bridge Street elevation to create new entrance/exit into Arena and installation of bollards along pavement edge	400m	CUMULATIVE Planning Permission not yet implemented.
21	Mirabel Street	122280/FO/2019 Approved Feb 2019	Erection of new mixed-use development to comprise of one 10 storey building fronting Mirabel Street to accommodate 45 no. Use Class C3 residential apartments (9 no. 1-bed studios, 27 no. 2-bed 3 person apartments and 9 no. 2-bed 4 person apartments) and 8 no. residential car parking spaces at ground level and one part 10, part 14 storey building fronting Great Ducie Street to accommodate 84 no. Use Class C3 residential apartments (31 no. 1-bed 2 person apartments, 26 no. 2-bed 3 person apartments, 18 no. 2-bed 4 person apartments and 9 no. 3-bed 5 person apartments) and 345 sq. m of commercial floor	500m	CUMULATIVE Planning Permission not yet implemented.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
			space at ground level (flexible use Use Class A1 shop, Use Class A2 financial and professional services and Use Class A3 cafe/restaurant) together with creation of roof terrace amenity space, cycle parking, access, servicing and associated works following demolition of existing building		
22	Rylands Building redevelopment	127881/FO/2020 Approved Jan 2021	Development comprising erection of four storey roof-top extension (for use within Class E (Commercial, Business and Service Uses); for use of floors 1-7 for use within Class E (Commercial, Business and Service Uses) and change of use of the basement and ground floor to permit Use Class E (Commercial, Business and Service Uses) and Drinking Establishments and Hot Food Takeaway (Sui Generis) use, external works associated with the formation of new ground floor entrances, sub-division of the ground floor into 9 units; works to windows including replacements, creation of winter gardens on the 6th floor; creation of external roof top amenity spaces; installation of new rooftop plant; the provision of secure cycle parking (255 spaces) in sub basement and other associated works.	500m	CUMULATIVE Planning Permission not yet implemented.
23	20-36 High Street	121375/FO/2018 Approved Oct 2020	Construction of a 22 storey building comprising 361 residential apartments (122 x 1 bed 2 person, 119 x 2 bed 3 person, 94 x 2 bed 4 person, 21 x 3 bed 5 person and 5 x 3 bed 6 person (34% 1 bed, 59% 2 bed and 7% 3 bed) ground floor commercial floorspace (Use Classes A1 (Shop), A3 (Restaurant and Cafe), A4 (Drinking	450m	CUMULATIVE Planning Permission not yet implemented.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
			Establishment) and A5 (Hot Food Take-away) associated landscaping, including new public realm and pedestrian route, together with servicing, cycle parking, access and other associated works following demolition of buildings at 20-22 and 24-26 High Street and 5 market stalls to Church Street.		
24	40 Swan Street	128997/FO/2020 Approved Sept 2021	Erection of a ground plus 9-storey building to form 118 no. residential apartments (Use Class C3), including amenity areas, ground floor food and beverage/ commercial units (Sui Generis/ Use Class E), public realm and landscaping, with supporting infrastructure and associated works following demolition of existing building.	250m	CUMULATIVE Planning Permission not yet implemented.
25	39 Mason Street	117470/FO/2017 Approved Oct 2018	Erection of 6 storey building comprising restaurant (Class A3) and retail unit (Class A1) at ground floor level and fourteen apartments above, together with basement parking.	250m	CUMULATIVE Planning Permission not yet implemented.
26	25 Rochdale Road	127537/FO/2020 Approved Oct 2020	Erection of a 11 storey 229 bedroom hotel (Use Class C1) with ancillary ground floor bar/restaurant together associated public realm and other associated works	100m	CUMULATIVE Planning Permission not yet implemented.
27	87 Rochdale Road	131708/FO/2021 Approved Feb 2022	Erection of a part 11, part 13 storey building to form residential apartments (Use Class C3a) together with the erection of two blocks of 3 storey duplexes (Use Class C3a) to form 237 residential homes in total with associated commercial floor (Use Class E) (132 sqm), basement car parking,	250m	CUMULATIVE Planning Permission not yet implemented.

ID	Name	LPA Planning Ref.	Description of Development	Distance from Site (approx.)	Status
			landscaping and public realm, and associated engineering and infrastructure works following demolition of existing buildings and structures		
28	CIS Tower Refurbishment	126119/LO/2020 and 126118/FO/2020 Approved 24 Mar 2020	Construction of a 3-storey extension to the Podium for additional office accommodation (Use Class B1) and refurbishment of the CIS Tower (to include the refurbishment of single glazed façade; replacement of solar panels on the service tower; creation of new entrances on Dantzic Street and on the eastern elevation of the building; provision of cycle storage, showers and refuse areas; alongside external plant and plant screen at roof level) and change of use to basement and ground floor from B1 office to Class A1 (Shop) , A3 (Food and Drink) , B8 (Storage and Distribution), D1 (Non Residential Institutions) (flexible events and conference facility or medical centre) and D2 (Assembly and Leisure) (gym or cinema), and the provision of new landscaping and associated works	15m	CUMULATIVE Planning Permission not yet implemented.

Appendix 3: Salford Archaeology Archaeological Evaluation Report October 2021

Appendix 4: 2&3 Angel Square 2015 Environmental Statement

Appendix 5: 2015 Air Quality Assessment

Appendix 6: 2019 Air Quality Assessment

Appendix 7: 2019 Ecology Survey

Appendix 8: 2 Angel Square 2015 Flood Risk Assessment and Drainage Strategy

Appendix 9: 3 Angel Square 2015 Flood Risk Assessment and Drainage Strategy

Appendix 10: NOMA 2&3 Angel Square Flood Risk Assessment 2019

Appendix 11: NOMA 2&3 Angel Square Drainage Strategy 2019

Appendix 12: Ground Condition Reports

Appendix 13: 2015 Transport Statement

Appendix 14 – 2015 Travel Plan

Appendix 15 – 2019 Transport Statement

Appendix 16 – 2019 Travel Plan

Appendix 17 – TV Baseline Survey 2015

Appendix 18 – TV Baseline Survey 2019

Appendix 19 – Noise and Vibration Assessment Data 2015

Appendix 20 – Noise Impact Assessment 2019

Appendix 21 – Heritage Statement 2020



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