

Environmental Statement – Volume 3

No.1 Castlefield

July 2026

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1. Introduction

1.1. This Environmental Statement ('ES') accompanies an application for Full Planning Permission for the redevelopment of No.1 Castlefield, Ellesmere Street, Manchester ('the Site') to deliver a residential-led development ('the Proposed Development'). The Applicant is Kirindolam 8 Limited.

1.2. The Site comprises approximately 0.715 hectares of previously developed land located close to Manchester city centre, within the Castlefield / St George's area. It is bounded by Trentham Street, Ellesmere Street, Castlefield Locks, the elevated railway and Metrolink line, and a small area of the Bridgewater Canal. The Site is located adjacent to the A57 Chester Road, one of the main vehicular routes into Manchester, and is approximately 1.1 miles from the centre of the city.

1.3. The Site is currently vacant and underutilised. It was previously occupied by industrial and office uses, which have since been demolished following an earlier planning permission secured in 2018. Since demolition, the Site has remained a mix of hardstanding, made ground and materials piles, with limited areas of low-quality scrub around its perimeter. In its current condition, the Site makes a limited contribution to the local environment and street scene.

1.4. The application for Full Planning Permission includes the redevelopment of the Site for a residential-led scheme comprising 592 new homes across two buildings:

- Block A: a 46-storey residential tower;
- Block B: a 9-storey residential building;
- supporting residential amenity space, landscaping, public realm and associated works.

1.5. The Proposed Development would also provide 40 car parking spaces, 388 cycle parking spaces, approximately 150 sq. m of commercial floorspace, approximately 500 sq. m of private amenity space, landscaping and associated infrastructure.

"Redevelopment of No.1 Castlefield, Ellesmere Street, Manchester for a residential-led development comprising 592 new homes across two buildings, supporting amenity space, commercial floorspace, car and cycle parking, landscaping, public realm and associated works."

1.6. The Proposed Development is described in detail in Chapter 4 of the ES and is referred to throughout this Non-Technical Summary as the 'Proposed Development'.

1.7. This Non-Technical Summary ('NTS') sets out, in plain language, the findings of the Environmental Impact Assessment carried out in respect of the Proposed Development.

1.8. It provides a summary of the likely significant environmental effects identified within the ES, the measures proposed to avoid or reduce adverse effects, and the likely effects that would remain once those measures are taken into account.

1.9. The NTS is intended to be read as a standalone document and is designed to be accessible to a non-specialist reader.

Purpose of the Environmental Impact Assessment and Non-Technical Summary

1.10. The purpose of an EIA is to help decision-makers understand the likely significant environmental effects of a proposed development before deciding whether planning permission should be granted. It does this by comparing the existing conditions at and around the Site with the likely conditions during construction and once the Proposed Development is complete and occupied.

1.11. In simple terms, an EIA is an information-gathering and assessment process. It identifies where a development could affect people, buildings, townscape, views, climate, heritage assets, local services and other environmental receptors. It also considers whether measures are needed to avoid, prevent, reduce or, where possible, offset any significant adverse effects.

1.12. The EIA process leads to the production of an Environmental Statement. The ES for the Proposed Development comprises Volume 1: Main ES text and figures; Volume 2: Technical appendices; and Volume 3: this Non-Technical Summary.

1.13. This NTS is designed to be accessible to a non-specialist reader. It explains the key findings of the ES and signposts where more detailed information can be found.

Environmental Impact Assessment Process

1.14. The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 require an EIA to be undertaken where certain types of development are likely to have significant effects on the environment. The Proposed Development falls within the category of 'Urban development projects' because it would provide more than 150 dwellings.

1.15. An EIA Screening and Scoping Report was submitted to Manchester City Council on 8 July 2026. The purpose of scoping was to identify which environmental topics should be assessed in detail within the ES and which topics were unlikely to give rise to significant environmental effects.

1.16. Following the scoping exercise, the topics assessed in the ES are Climate Change, Daylight, Sunlight and Overshadowing, Solar Glare, Townscape and Visual Impact, Wind Microclimate, Human Health, Socio-Economic and Heritage.

Assessment Methodology

Scoping

1.17. A number of topics were scoped out of the ES because they were not considered likely to give rise to significant environmental effects. These included agricultural circumstances, aviation, archaeology, ground conditions, water resources, electronic interference, ecology, air quality, noise and vibration, and traffic and transport.

Approach to Technical Studies

1.18. Although these topics were scoped out of the ES, several are still considered through separate planning application documents where relevant, such as the Transport Statement, Travel Plan, Flood Risk Assessment and Drainage Strategy, Phase 1 Ground Conditions Report, Ecology Phase 1 Desk Survey and Biodiversity Net Gain Assessment, and other supporting technical reports.

1.19. Technical studies were undertaken by suitably qualified and experienced consultants. These studies helped to understand the existing conditions at and around the Site and to identify where the Proposed Development could give rise to environmental effects.

1.20. The design of the Proposed Development has evolved through an iterative process, informed by environmental constraints, design testing, pre-application engagement with Manchester City Council, technical consultation and public consultation.

1.21. This process has helped to refine the height, massing, layout, architectural treatment, public realm and mitigation measures.

1.22. The ES generally considers the following scenarios:

1. the existing baseline conditions;
2. the baseline conditions with the Proposed Development in place; and
3. the baseline conditions with the Proposed Development and relevant cumulative developments in place.

Who has been involved in the EIA process?

1.23. The EIA process has involved the Applicant, Deloitte LLP, Manchester City Council, statutory and non-statutory consultees, the design team, technical consultants and the public.

1.24. The technical project team includes Deloitte LLP for EIA coordination and planning; Denton Corker Marshall for architecture and design; re-form landscape architecture for townscape and visual impact; Civic Heritage for heritage; Proximity for daylight, sunlight, overshadowing and solar glare; Architectural Aerodynamics

Limited for wind microclimate; Crookes Walker Consulting for climate change; Enfusion for human health; and GC Insight for socio-economics.

What were the results of the EIA?

1.25. The following sections of this NTS summarise the environmental topics assessed in the ES and the main findings of those assessments.

1.26. For each topic, the NTS explains what has been assessed, the existing baseline conditions, the likely effects during construction and operation, mitigation measures, cumulative effects and likely residual effects following mitigation.

1.27. The ES identifies a number of beneficial effects, including the delivery of new homes, regeneration of a vacant brownfield site, economic benefits, public realm improvements and improvements to the quality of the local townscape.

1.28. The ES also identifies some adverse environmental effects, particularly in relation to daylight and sunlight impacts on certain neighbouring residential receptors and wind conditions before mitigation. These are explained in the relevant sections of this NTS.

Significance of Effects

1.29. The EIA assesses the significance of environmental effects by considering both the sensitivity of the receptor affected and the magnitude of the change caused by the Proposed Development.

1.30. Effects can be beneficial, adverse or neutral. They can also be temporary or permanent, direct or indirect, and short, medium or long term.

1.31. For the purposes of the ES, effects described as ‘moderate’ or ‘major’ are generally considered significant in EIA terms. Effects described as ‘minor’ or ‘negligible’ are generally considered not significant, unless a topic-specific methodology explains otherwise.

2. Description of the Proposed Development

Where is the Site?

2.1. The Site is located at No.1 Castlefield, Ellesmere Street, Manchester. It lies within the Castlefield / St George's area, close to Manchester city centre, and is positioned next to one of the main vehicular routes into Manchester, the A57 Chester Road.

2.2. The Site is approximately 0.715 hectares in size. It is bounded by Trentham Street, Ellesmere Street, Castlefield Locks, the elevated railway and Metrolink line, and a small area of the Bridgewater Canal. The wider area includes a mix of residential buildings, transport infrastructure, the Bridgewater Canal, former industrial and commercial buildings, contemporary development and heritage assets.

2.3. The Site is in a highly accessible location. Cornbrook Metrolink Station is approximately five minutes' walk to the south-west of the Site and provides regular tram services across Greater Manchester. Bus stops are located on Chester Road, approximately 100 metres from the Site. The Bridgewater Canal provides a pedestrian route towards the city centre, with the city centre accessible in approximately 15 minutes on foot. Deansgate-Castlefield Station is approximately 1.1 miles from the Site.

2.4. The Site is also well connected to the local highway network. It is located close to Chester Road, which provides connections into Manchester city centre and towards the wider motorway network.

What is located on the Site at the moment?

2.5. The Site is currently vacant and underutilised. It was formerly occupied by industrial and office uses. These buildings have now been demolished following an earlier planning permission secured in 2018.

2.6. Since demolition, the Site has remained a mix of hardstanding, made ground and materials piles. There are limited areas of low-quality scrubland around the perimeter of the Site. The Site is accessible to vehicles from Ellesmere Street and Thorncross Close.

2.7. In its existing condition, the Site makes a limited contribution to the local environment. Although it is a brownfield site in a sustainable and well-connected location, it does not currently provide housing, employment, public realm, active frontages or meaningful green infrastructure. It also does not make a positive contribution to the street scene.

What are the relevant environmental and planning considerations?

2.8. The Site is not located within a conservation area. However, it lies approximately 100 metres west of the Castlefield Conservation Area. There are several listed buildings and heritage assets within 500 metres of the Site, including the Former Turville Public House, Railway Bridge over the Canal, Former Albert Mill, Hulme Barracks, Brindley's Weir, Hulme Lock Branch Canal, Churchyard Walls at the Church of St George, the Church of St George and the Former Canal Flour Mills.

2.9. The Site is located within Flood Zone 1, which means it has a low probability of flooding from rivers and the sea. It is also within the Conurbation Core Critical Drainage Area, and drainage has therefore been considered carefully through the planning application.

2.10. The Site is located within the Greater Manchester Air Quality Management Area. Air quality has been considered through the wider planning submission, although it was scoped out of the ES because significant environmental effects were not expected.

2.11. The Site is previously developed land. Redeveloping the Site would make efficient use of brownfield land in a sustainable city centre location, reducing the need for development on greenfield land.

What is being proposed?

2.12. The Proposed Development is a residential-led redevelopment of the Site. It comprises 592 new homes across two buildings: Block A, a 46-storey residential tower; and Block B, a 9-storey residential building.

"Redevelopment of No.1 Castlefield, Ellesmere Street, Manchester for a residential-led development comprising 592 new homes across two buildings, supporting amenity space, commercial floorspace, car and cycle parking, landscaping, public realm and associated works."

2.13. The Proposed Development would also provide approximately 150 sq. m of commercial floorspace, supporting residential amenity space, approximately 500 sq. m of private amenity space, 40 car parking spaces, 388 cycle parking spaces, landscaping and public realm, servicing and access arrangements, and associated infrastructure and works.

2.14. The Proposed Development would provide a high-density residential scheme in a sustainable and well-connected location. It would bring a vacant brownfield site back into active use, provide new homes, improve the appearance of the Site and contribute to the continuing regeneration of the Castlefield / St George's area.

2.15. The Proposed Development would introduce a new residential community, improved landscaping and public realm, cycle parking and limited car parking, supporting sustainable urban living close to public transport, employment opportunities and local amenities.

2.16. The ES sets out the findings of the EIA carried out in respect of the Proposed Development.

Why is this development coming forward?

2.17. The Site is one of the remaining underutilised plots within this part of Castlefield / St George's. It currently makes a limited contribution to the surrounding area and does not make efficient use of its highly accessible city centre fringe location.

2.18. The Proposed Development is intended to deliver a high-quality residential-led scheme that responds to the Site's strategic location and the established need for new homes in Manchester. It would provide 592 new homes, support local economic activity, improve the public realm and introduce new landscaping and green infrastructure.

2.19. The Site is appropriate for high-density residential development because it is previously developed brownfield land, close to Manchester city centre, well served by public transport, within walking and cycling distance of local services, employment and amenities, adjacent to established residential communities, and capable of accommodating a landmark building in a location that is not within a conservation area.

2.20. The Proposed Development is also intended to act as a positive conclusion to the wider regeneration of the St George's area. Its design has been developed to respond to nearby buildings, transport infrastructure, heritage assets, daylight and sunlight considerations, wind conditions and townscape views.

Who has been consulted?

2.21. The Proposed Development has been developed through pre-application engagement with Manchester City Council and relevant technical consultees. Consultation has also taken place through the EIA scoping process.

2.22. The consultees involved in the planning and EIA process include Manchester City Council Planning Authority, Manchester City Council Highways, Transport for Greater Manchester, Greater Manchester Archaeological Advisory Service, Manchester City Council Environmental Health Officers, Environment Agency, Greater Manchester Ecology Unit, Historic England, National Air Traffic Control and Manchester Airport.

2.23. Public consultation has also been undertaken. Further details are provided in the Statement of Community Consultation submitted with the planning application. The comments received through consultation have helped inform the design process and the environmental assessment.

What will the redevelopment process involve?

2.24. The Proposed Development would be constructed as a single development, with both Blocks A and B progressing concurrently through the main construction phase. Block B would complete first, with Block A

continuing through to final overall completion. The current ES programme identifies a pre-construction period from July 2026 to December 2027, main construction works commencing in January 2028, Block B practical completion in April 2031 and Block A practical completion / overall project completion in March 2032.

- site establishment and hoarding;
- enabling works;
- substructure and piling works;
- construction of the concrete frame;
- façade installation;
- internal fit-out;
- landscaping and public realm works;
- drainage and infrastructure works; and
- commissioning and completion.

2.25. The substructure is expected to use piled foundations, likely to be continuous flight auger piling, with pile caps, ground beams and core bases. The superstructure of both Block A and Block B is expected to be concrete framed. Block A would include a concrete transfer structure and a unitised glazed façade, while Block B would have a brick cladding façade.

2.26. The precise construction methods would be confirmed by the appointed contractor at the detailed design and pre-construction stage.

How long will construction take?

2.27. The current ES programme identifies an overall programme period of approximately five years and eight months from the initial pre-construction period to final completion, with the main construction phase extending for approximately four years and two months.

2.28. Key assumptions include a pre-construction period from July 2026 to December 2027; planning consent anticipated in early 2027; design, contractor procurement and Building Safety Act Gateway 2 processes during 2027; main construction works commencing in January 2028; Block B construction from January 2028 to April 2031; Block A construction from January 2028 to March 2032; Block B practical completion in April 2031; and Block A practical completion / overall project completion in March 2032.

2.29. Normal working hours would generally be Monday to Friday 08:00 to 18:00 and Saturday 08:00 to 14:00, with no noisy works generally planned on Sundays or Bank Holidays. Access to the Site may be permitted up to 30 minutes before the start of the working day to allow operatives to access welfare facilities and prepare for work, with noise kept to a minimum during this period. Any exceptional out-of-hours works, such as tower crane erection or dismantling, would be agreed in advance with Manchester City Council where required.

3. Alternative Options

Introduction

3.1. Regulation 18(3) and Paragraph 2 of Schedule 4 of the EIA Regulations requires the Applicant to provide an outline of the main alternatives studied and an indication of the main reasons for the choice made, considering the environmental effects.

3.2. The EIA Regulations require an ES to include an outline of the reasonable alternatives studied by the Applicant and the main reasons for selecting the chosen option, taking into account the environmental effects.

3.3. For the Proposed Development, alternatives have been considered as part of an iterative design process. This process has involved the Applicant, the design team, technical consultants and Manchester City Council. It has also been informed by the Site's context, the planning history, the need for regeneration, changes in building regulations, market conditions, townscape and heritage considerations, neighbouring residential amenity, daylight and sunlight, wind microclimate and the need to deliver a viable and high-quality scheme.

3.4. The alternatives considered include:

- the 'do nothing' scenario;
- alternative locations;
- alternative technologies and approaches to building design; and
- alternative scale, massing and design options.

The 'do nothing' alternative

3.5. The 'do nothing' alternative means leaving the Site in its current vacant and underutilised condition. This option has been considered but discounted.

3.6. The Site is a strategically important brownfield site close to Manchester city centre. It is currently vacant, screened by hoardings and makes a limited contribution to the street scene. It does not provide homes, employment, active uses, public realm or meaningful green infrastructure. Leaving the Site in its current condition would fail to make efficient use of previously developed land in a highly accessible location.

3.7. The 'do nothing' option would also fail to respond to the established need for regeneration in this part of the city and the strong demand for new homes in Manchester. It would leave one of the remaining underutilised plots in the Castlefield / St George's area undeveloped and would not deliver the public benefits associated with the Proposed Development.

3.8. For these reasons, the 'do nothing' scenario has been discounted.

Alternative locations

3.9. The Site is considered suitable for the Proposed Development because it is previously developed brownfield land in a highly accessible city centre fringe location. It is well served by public transport, close to Manchester city centre, adjacent to existing residential communities and capable of accommodating high-density residential development.

3.10. The Proposed Development would make efficient use of the Applicant's landholding and would deliver new homes, investment, public realm improvements and green infrastructure in a location where these benefits can be achieved sustainably.

3.11. Alternative locations were not considered to offer the same combination of characteristics or benefits. Other city centre and city centre fringe sites are either already developed, subject to their own emerging development proposals, constrained by other land ownerships, or identified for other strategic purposes. The Site at No.1 Castlefield is therefore considered to provide an appropriate and deliverable opportunity for a residential-led development of this scale.

3.12. The Site is also not located within a conservation area, although it is close to the Castlefield Conservation Area and nearby listed buildings. This means that the design of the Proposed Development has needed to be sensitive to heritage and townscape considerations, while still making effective use of the Site's sustainable location.

Alternative technologies and building design approaches

3.13. The design process has also considered how the Proposed Development should respond to changes in building regulations, sustainable design requirements and the Applicant's ambition to deliver a high-quality, low carbon development.

3.14. The previously consented 2018 scheme became difficult to deliver because of changes in market conditions, viability and regulatory requirements. In particular, new building safety requirements for taller residential buildings mean that residential buildings over 18 metres or seven storeys must include additional design features, such as a second stair core, additional lifts and related fire safety measures. These requirements could not be accommodated within the previous scheme without fundamentally changing its design and viability.

3.15. The Proposed Development has therefore been designed to comply with current building safety requirements and to deliver a viable residential-led scheme. It has also incorporated sustainable design principles, including:

- a fabric-first approach to reducing energy demand;
- the use of air source heat pumps;
- low carbon heating;
- energy-efficient building services;
- consideration of embodied carbon;
- water-efficient fittings;
- sustainable drainage; and
- measures to reduce overheating risk.

3.16. The Proposed Development has been assessed through a Whole Life Carbon Assessment, a Low Carbon Heat Appraisal, an Environmental Standards Statement and a Climate Change Resilience Risk Assessment. These studies demonstrate that the Proposed Development has been designed to respond to climate change, reduce carbon emissions where practicable and remain resilient to projected future climate conditions.

Alternative scale and massing

3.17. The scale and massing of the Proposed Development has been developed through a detailed and iterative design process. This process has considered how best to redevelop the Site while responding to nearby residential buildings, the Bridgewater Canal, the elevated railway and Metrolink line, the Castlefield Conservation Area, listed buildings, townscape views, daylight and sunlight effects, wind conditions and public realm opportunities.

Previous proposals

3.18. A previous scheme for the Site was granted planning permission in 2018. That scheme proposed a mixed-use development with residential and commercial uses across several blocks. The buildings ranged in height, with the tallest element reaching 16 storeys, and the scheme included 419 apartments and 144 parking spaces.

3.19. The previous scheme sought to respond to the existing and historic building heights along Ellesmere Street, stepping down towards the listed Insitu architectural salvage building and rising towards the railway line to the north. It also included a central courtyard and a mix of brick and lighter cladding materials.

3.20. However, the previous scheme is no longer considered appropriate or deliverable. Key issues included:

- changes to building safety requirements, including the need for a second stair core;
- viability challenges;

- a dense arrangement of blocks with limited breathing space;
- limited amenity provision;
- potential effects on neighbouring residents at Castlefield Locks;
- the completion of the Vox development immediately to the south-west, which introduced a new neighbouring residential receptor; and
- the need to reconsider the design in light of updated policy, market demand and surrounding development.

Design development

3.21. The current Proposed Development has evolved through a series of design options.

Option 1

3.22. The first option broadly reflected the approach of the previous planning permission in terms of building footprint, height and massing, while seeking to increase the number of homes.

3.23. Feedback on this option highlighted the need to improve the relationship between the proposed buildings and Ellesmere Street. It also identified the importance of considering the relationship with the Vox development and reducing the height of the building closest to Vox. Feedback also suggested that commercial uses should not dominate the ground floor and that activation should be more closely linked to the residential nature of the scheme.

Option 2

3.24. The second option responded to this feedback by reducing the height of the block closest to Vox and moving some of the residential floorspace into a taller tower at the western corner of the Site. The blocks fronting Ellesmere Street were consolidated into a more cohesive form and pulled further away from Castlefield Locks to improve separation distances.

3.25. The material approach was also refined. The lower and mid-rise elements continued to respond to the local brickwork character, while the tower was treated as a potential landmark building with greater design flexibility and higher-quality materials.

Option 3

3.26. The third option focused on reducing the overall footprint of the scheme and improving the tower's relationship with neighbouring buildings and the wider townscape. The tower was increased to 45 storeys and repositioned along the northern boundary, parallel to the railway and Metrolink line.

3.27. This approach helped to maximise separation distances from neighbouring buildings and improve viewing angles. It also allowed one of the mid-rise blocks next to Castlefield Locks to be removed, creating more space and reducing potential effects on neighbouring amenity.

3.28. The design team considered that this option created a more elegant and prominent tower in a location where it would have fewer impacts on daylight, sunlight and overshadowing, while also delivering positive townscape effects as a gateway marker into Manchester.

Option 4

3.29. The fourth option refined the architectural appearance of the tower. Earlier façade proposals were considered overly complex, and the design was simplified to create a more elegant vertical form. The façade was streamlined, with a focus on clean lines, high-quality materials and refined detailing.

3.30. This approach sought to create a distinctive but sensitive landmark building. The final design is intended to be architecturally distinguished, while responding to its context and avoiding unnecessary complexity.

Summary

3.31. The Proposed Development has been shaped by an iterative design process. The selected scheme is considered to provide the most appropriate balance between:

- delivering much-needed new homes;
- making efficient use of a brownfield site;
- responding to updated building safety requirements;
- protecting neighbouring amenity where practicable;
- improving public realm and landscaping;
- delivering a viable and deliverable scheme;
- responding to heritage and townscape considerations; and
- creating a high-quality landmark building in a sustainable location.

3.32. The design has therefore evolved from earlier proposals into a more focused residential-led scheme comprising a 46-storey tower and a 9-storey building, with supporting amenity space, landscaping, parking, cycle parking, public realm and associated works.

3.33. The Proposed Development has been influenced by pre-application consultation with key stakeholders including local landowners, residents, businesses, statutory consultees, as well as with MCC. On this basis, Regulation 18(3) and Paragraph 2 of Schedule 4 of the EIA Regulations has been considered.

4. Construction Management and Phasing

4.1. The ES includes a chapter describing the anticipated construction methodology and programme for the Proposed Development. This information has been used by the technical specialists to assess the likely environmental effects that could arise during construction.

4.2. The construction chapter explains how the Site would be established, how works would be managed, how vehicles would access the Site, how construction activities would be controlled, and what measures would be used to manage potential environmental effects.

4.3. A detailed Construction Management Plan would be prepared by the appointed contractor before construction begins. This would reflect the final construction methodology, any planning conditions, and any further comments from Manchester City Council and relevant consultees.

4.4. The Construction Management Plan would be a key document for managing the relationship between the contractor, Manchester City Council, neighbours, local residents, businesses and other stakeholders during the construction period.

What will construction involve?

4.5. Construction of the Proposed Development is expected to include:

- site establishment and hoarding;
- enabling works;
- substructure and piling works;
- construction of the concrete frame;
- façade installation;
- internal fit-out;
- installation of building services;
- landscaping and public realm works;
- drainage and infrastructure works; and
- commissioning and completion.

4.6. The Site would be secured by hoarding around its boundary. Site offices, welfare facilities, meeting areas, training space, canteen facilities, storage areas and waste segregation areas would be provided as part of the site compound.

4.7. The substructure is expected to use piled foundations, likely to be continuous flight auger piling, with pile caps, ground beams and core bases. The superstructure of both Block A and Block B is expected to be concrete framed. Block A would include a concrete transfer structure and a unitised glazed façade, while Block B would have a brick cladding façade.

4.8. The precise construction methods would be confirmed by the appointed contractor at the detailed design and pre-construction stage.

What is the anticipated programme?

4.9. The current programme anticipates the following key dates:

- Pre-construction period: July 2026 to December 2027;

- Planning consent: anticipated early 2027;
- Design, contractor procurement and Building Safety Act Gateway 2 processes: 2027;
- Main contractor tender negotiation and appointment: late 2027;
- Main construction works commencement: January 2028;
- Block B construction: January 2028 to April 2031;
- Block A construction: January 2028 to March 2032, with Block B practical completion in April 2031 and Block A practical completion / overall project completion in March 2032.

4.10. The Proposed Development would be constructed concurrently as a single development. Block B would complete first, with Block A continuing through to final overall completion.

What working hours are proposed?

4.11. Construction working hours would follow Manchester City Council's standard construction working hours:

- Monday to Friday: 08:00 to 18:00;
- Saturday: 08:00 to 14:00; and
- Sundays and Bank Holidays: no noisy works generally planned, unless otherwise agreed.

4.12. To help reduce impacts on public transport and the surrounding road network, workforce arrivals may take place shortly before the permitted working hours for site set-up. However, construction works would not begin outside the permitted hours unless agreed in advance with Manchester City Council.

How will construction traffic be managed?

4.13. Construction vehicles accessing the Site from outside Manchester city centre would generally use the motorway network and the M60, before moving onto main A-road routes where required. The appointed contractor would develop suitable delivery routes to reduce impacts on the surrounding highway network.

4.14. Deliveries would be managed to minimise disruption. Where practicable:

- deliveries would be scheduled outside peak traffic periods;
- off-site construction and just-in-time deliveries would be promoted;
- no off-site stacking of delivery vehicles would be permitted;
- deliveries and waste removal would be managed by the contractor;
- materials and components would be locally sourced where practicable;
- vehicles would be loaded and unloaded within the Site boundary;
- wheel washing and road sweeping would be used where needed; and
- trained banksmen would be present at vehicular access points.

4.15. A detailed traffic management plan would be prepared as part of the Construction Management Plan.

How will worker travel be managed?

4.16. The contractor would prepare and maintain a Construction Travel Plan for construction workers. This would promote public transport, walking and cycling to reduce the number of construction workers travelling to the Site by car.

4.17. Contractor and subcontractor parking would be managed to avoid unnecessary pressure on surrounding streets. The Site's accessible location close to Metrolink, bus routes and walking and cycling connections would support sustainable travel by construction workers.

How will environmental effects be managed during construction?

4.18. Construction activities would be controlled through a Construction Management Plan and associated method statements. These would include measures to manage:

- dust and airborne pollutants;
- noise and vibration;
- site lighting;
- construction traffic;
- wheel washing and road cleanliness;
- drainage and water quality;
- waste and recycling;
- fuel and oil storage;
- pollution prevention;
- health and safety;
- communication with neighbours; and
- protection of the Bridgewater Canal.

4.19. The contractor would maintain good housekeeping on Site. This would include regular waste removal, segregation of materials, road sweeping where necessary, prevention of mud tracking onto the highway, and the control of materials so that they do not leave the Site or enter drainage systems or water bodies.

How will dust, noise and vibration be controlled?

4.20. Construction works would follow best practicable means to reduce dust, noise and vibration. Measures would include:

- use of appropriate construction methods and plant;
- regular maintenance of plant and equipment;
- controls on working hours;
- site hoarding;
- dust suppression where required;
- road sweeping and wheel washing;
- sheeting of vehicles carrying loose materials;
- monitoring and management where required; and
- training for operatives.

4.21. Construction activities would follow relevant good practice guidance, including the principles set out in BS5228 for the control of noise and vibration on construction sites.

How will waste be managed?

4.22. Before construction begins, the contractor would prepare a Construction Waste Management Plan. This would identify the main waste streams expected to arise, the likely quantities of waste, and the approach to avoiding, reusing, reducing, recycling and disposing of waste.

4.23. Waste would be segregated on Site where practicable and removed at regular intervals. Off-site modular construction would be promoted where practicable to reduce the amount of waste generated on Site.

4.24. All waste would be managed in accordance with relevant legislation and good practice.

How will water quality and drainage be protected?

4.25. The Site is located close to the Bridgewater Canal. Measures would therefore be put in place to prevent pollutants, sediment or construction materials entering drainage systems or the canal.

4.26. These measures would include:

- temporary drainage controls;
- pollution prevention measures;
- designated refuelling areas;
- spill kits and emergency response procedures;
- storage of fuels and oils in accordance with relevant regulations;
- prevention of concrete washout entering watercourses or drains;
- protection of existing drainage infrastructure; and
- briefings for operatives on water protection measures.

4.27. A pollution control and contingency plan would be prepared and implemented during construction.

How will the local community be kept informed?

4.28. The contractor would maintain communication with Manchester City Council, local residents, local businesses and other affected parties. The Construction Management Plan would define the procedures for internal and external communication.

4.29. Before works begin, a consultation letter would be issued to adjoining properties. A pre-start meeting or workshop may also be held with local businesses and residents. The development would be registered with the Considerate Constructors Scheme, and a site information board would be displayed with key contact details.

4.30. The contractor's project manager would maintain regular contact with local residents, affected parties and the Council throughout the construction period.

What are the likely construction effects?

4.31. The ES technical chapters have used the construction methodology and programme to assess potential construction effects. In most cases, construction effects would be temporary, short term and controlled through standard construction management measures.

4.32. The ES identifies that construction impacts would be managed through a Construction Management Plan, Construction Travel Plan, Construction Waste Management Plan, pollution prevention measures and other controls. Where relevant, these measures would be secured through planning conditions.

4.33. Overall, construction effects are expected to be manageable and temporary, provided that the agreed mitigation measures and good practice controls are implemented.

5. Climate Change

What is Climate Change and Greenhouse Gas (GHG) emissions?

5.1. Climate change refers to long-term changes in temperature, rainfall, weather patterns and the frequency of extreme weather events. For new development, climate change is relevant in two main ways.

5.2. First, development can contribute to climate change through greenhouse gas emissions. These emissions can arise from the production and transport of construction materials, construction activities, the energy used by buildings during operation, maintenance and repair, and eventual end-of-life activities.

5.3. Second, development needs to be resilient to future climate conditions. This means that buildings, drainage systems, external spaces and infrastructure should be designed to respond to hotter summers, wetter winters, more intense rainfall events, heatwaves and other extreme weather conditions.

5.4. The Climate Change chapter of the ES assesses the likely significant effects of the Proposed Development in respect of climate change resilience and greenhouse gas emissions. The assessment has been prepared by Crookes Walker Consulting and is supported by the following technical documents:

- Climate Change Resilience Risk Assessment;
- Whole Life Carbon Assessment;
- Low Carbon Heat Appraisal; and
- Environmental Standards Statement.

What has been assessed?

5.5. The assessment considers both the construction and operational phases of the Proposed Development.

5.6. For greenhouse gas emissions, the assessment considers emissions associated with the whole life of the Proposed Development, including:

- material extraction, processing and manufacture;
- transport of materials to the Site;
- construction and installation;
- maintenance, repair, replacement and refurbishment during the life of the buildings;
- operational energy use;
- operational water use; and
- end-of-life activities.

5.7. For climate change resilience, the assessment considers how the Proposed Development would respond to projected future climate conditions. This includes consideration of:

- overheating risk in homes;
- more intense rainfall and surface water flood risk;
- drainage capacity and exceedance routes;
- water availability during dry periods;
- high winds and extreme weather; and
- the resilience of building systems and occupants.

5.8. The assessment uses UK Climate Projections 2018 for the Greater Manchester area. A high-emissions climate change scenario has been used as the main basis for assessment so that the design is tested against a robust future climate scenario.

What are the existing conditions?

5.9. The Site is currently vacant and largely hardstanding. It does not contain active residential uses or sensitive internal receptors that could be affected by overheating. In its existing condition, the Site has limited vulnerability to climate change effects.

5.10. The Greater Manchester area is expected to experience:

- warmer, wetter winters;
- hotter, drier summers;
- more frequent and intense heatwaves;
- more intense short-duration rainfall events;
- longer dry spells; and
- a greater likelihood of extreme weather events.

5.11. Once the Proposed Development is complete, new residents, habitable rooms, building services, drainage systems and landscaped areas would become receptors that need to be resilient to these future conditions.

What is the effect of the Proposed Development on climate change?

Construction effects

5.12. During construction, greenhouse gas emissions would arise from the production and transport of materials, construction activities and energy use on Site. These emissions have been assessed in the Whole Life Carbon Assessment.

5.13. The assessment concludes that embodied carbon emissions associated with construction are in line with recognised industry benchmarks for residential development. The Proposed Development is therefore considered to be consistent with the UK's trajectory towards net zero and the construction-stage greenhouse gas effect is assessed as not significant.

5.14. Climate change could also affect the construction phase through extreme weather, such as high winds, heavy rainfall, heatwaves or cold snaps. These events could disrupt construction activities or increase surface water run-off from the Site. However, these risks would be temporary and managed through standard construction controls, including weather monitoring, temporary drainage, safe working practices and measures set out in the Construction Management Plan.

5.15. The construction-phase resilience effect is therefore assessed as not significant.

Operational effects

5.16. During operation, the Proposed Development would use energy and water and would therefore generate operational greenhouse gas emissions. These have been assessed through the Whole Life Carbon Assessment, Low Carbon Heat Appraisal and Environmental Standards Statement.

5.17. The Proposed Development includes a number of measures to reduce operational energy demand and carbon emissions, including:

- a fabric-first approach to building design;
- improved airtightness and solar control glazing;
- energy-efficient mechanical and electrical systems;
- high-efficiency motors and LED lighting;
- use of air source heat pumps;
- a low carbon heating strategy;
- provision of at least 10% of predicted energy needs from low carbon sources; and
- energy performance in the EPC A–C band.

5.18. The Whole Life Carbon Assessment concludes that the Proposed Development is consistent with the UK's trajectory towards net zero by 2050 and performs in line with recognised residential benchmarks. The operational greenhouse gas effect is therefore assessed as not significant.

Overheating

5.19. The projected increase in summer temperatures and heatwaves is one of the most important climate resilience issues for new residential development. The Proposed Development has therefore been assessed against Approved Document Part O and relevant overheating guidance.

5.20. The design includes measures to reduce overheating risk, such as building fabric improvements and solar control glazing. The assessment concludes that, with these measures in place, overheating effects on future residents would be not significant.

Surface water flooding and drainage

5.21. Climate change is expected to increase the intensity of rainfall events. The Proposed Development's drainage strategy has therefore been designed to respond to future rainfall conditions.

5.22. The drainage strategy includes sustainable drainage systems and climate change allowances. It has been designed to accommodate the 1 in 100 year storm event, including a 45% allowance for climate change. Flows above the design event would be managed through safe overland exceedance routes away from habitable areas.

5.23. With these measures in place, the effect relating to surface water flooding and drainage is assessed as not significant.

Water availability and other climate hazards

5.24. The Proposed Development would incorporate water-efficient fittings to reduce water demand during longer dry periods. Other climate hazards, such as ground stability and high winds, have been considered either within the climate change assessment or the relevant technical chapters of the ES.

5.25. The assessment concludes that these effects would be not significant.

What mitigation is proposed?

5.26. Many of the climate change measures are embedded into the design of the Proposed Development. These include:

- use of previously developed brownfield land;
- high-density development in a sustainable location;
- fabric-first building design;
- energy-efficient building services;
- air source heat pumps;
- low carbon heating;
- solar control glazing;
- compliance with Approved Document Part O;
- sustainable drainage systems;
- drainage climate change allowances;
- water-efficient fittings;
- low carbon materials where practicable; and
- sustainable procurement.

5.27. Construction-phase measures would be secured through the Construction Management Plan and would include weather monitoring, temporary drainage, good site management and measures to reduce energy use and waste.

5.28. No additional mitigation beyond these embedded measures is considered necessary.

What are the residual effects?

5.29. After taking account of embedded mitigation, the ES concludes that climate change effects would be not significant.

5.30. The residual effects are:

- construction-stage extreme weather and surface water run-off: negligible / not significant and temporary;
- construction-stage embodied carbon: minor adverse / not significant and permanent;
- overheating of homes during operation: minor / not significant and permanent;
- surface water flooding and drainage exceedance: minor / not significant and permanent;
- reduced water availability: negligible / not significant and permanent; and
- operational greenhouse gas emissions: minor adverse / not significant and permanent.

Are there cumulative effects?

5.31. Greenhouse gas emissions are cumulative by their nature because all emissions contribute to global climate change. The Whole Life Carbon Assessment therefore considers the Proposed Development's contribution in the context of relevant carbon budgets and net zero trajectories.

5.32. The ES concludes that a project-by-project cumulative assessment of neighbouring schemes would not be meaningful for greenhouse gas emissions because climate change is a global effect. Instead, the Proposed Development has been assessed against national and local carbon policy and recognised benchmarks.

5.33. The cumulative climate change effect is assessed as not significant.

What monitoring is proposed?

5.34. No specific climate change monitoring is required beyond normal building commissioning, verification of as-built performance and operation of building services. Where a Building Management System is provided, it would support the ongoing management of building performance.

6. Daylight, Sunlight and Overshadowing

What is Daylight, Sunlight and Overshadowing?

6.1. Daylight is the natural light that enters a building from the sky. Sunlight is the direct sunlight that enters a room or reaches an outdoor space. Overshadowing refers to the shadow cast by buildings onto outdoor amenity areas, such as gardens, yards, terraces, courtyards and public open spaces.

6.2. Daylight, sunlight and overshadowing are important because they affect the quality of homes and outdoor spaces. They can influence how bright a room feels, whether rooms receive direct sunlight and how usable external amenity spaces are.

6.3. The ES assesses how the Proposed Development could affect the daylight and sunlight received by neighbouring residential buildings and how it could affect sunlight to nearby external amenity areas.

What has been assessed?

6.4. The assessment has been prepared by Proximity and follows the Building Research Establishment guidance, "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice" (2022).

6.5. The assessment considers the likely effects of the Proposed Development on neighbouring residential buildings within the study area. These include:

- Castlefield Locks, Ellesmere Street;
- The Trilogy Apartments, Ellesmere Street;
- Vox, Trentham Street;
- 33 Ellesmere Street / 252 Chester Road;
- Pomona Wharf, Waterways Avenue;
- Excelsior Works, Hulme Hall Road;
- No.1 Cornbrook;
- Nos. 303–309 Chester Road; and
- 5 Kelso Place.

6.6. The assessment considers the following technical tests:

- Vertical Sky Component, which measures the amount of sky visible from a window;
- No Sky Line, which measures the distribution of daylight within a room;
- Annual Probable Sunlight Hours, which measures annual sunlight availability;
- Winter Probable Sunlight Hours, which measures winter sunlight availability; and
- sunlight to external amenity spaces.

6.7. The assessment has used computer modelling of the Site and surrounding buildings to compare the existing baseline condition with the Proposed Development in place. A cumulative scenario has also been assessed where relevant.

What are the existing conditions?

6.8. The Site is currently an open parcel of land. This means that neighbouring buildings, particularly those with windows facing directly towards the Site, currently receive daylight and sunlight across the vacant Site.

6.9. The buildings most directly overlooking the Site are Vox to the west and Castlefield Locks to the east. These buildings currently receive elevated levels of daylight because there is no substantial built form on the Site.

6.10. Other neighbouring buildings, including Excelsior Works, The Trilogy, No.1 Cornbrook and Nos. 303–309 Chester Road, also receive daylight and sunlight over or near the Site, although in some cases existing buildings already limit access to light.

6.11. This existing condition is important because the redevelopment of a vacant city centre brownfield site will inevitably introduce new built form where there is currently none. As a result, some reductions in daylight and sunlight are expected.

What are the effects during construction?

6.12. During construction, daylight and sunlight effects would gradually change as the buildings are constructed. The completed Proposed Development represents the worst-case position because it would introduce the full built form of the scheme.

6.13. For this reason, the construction phase has not been assessed separately in detail. Instead, the operational assessment of the completed Proposed Development provides the worst-case assessment of daylight, sunlight and overshadowing effects.

What are the effects once the Proposed Development is complete?

Daylight effects

6.14. The assessment identifies that the Proposed Development would have no significant daylight effects on several neighbouring receptors, including:

- Pomona Wharf;
- No.1 Cornbrook;
- 5 Kelso Place;
- Excelsior Works;
- The Trilogy Apartments; and
- Nos. 303–309 Chester Road.

6.15. For these buildings, the effects are assessed as negligible, negligible to minor adverse or minor adverse, and therefore not significant.

6.16. More notable daylight effects are identified at:

- Castlefield Locks;
- Vox; and
- 33 Ellesmere Street / 252 Chester Road.

Castlefield Locks

6.17. Castlefield Locks is located immediately east of the Site and has a number of windows and rooms that face towards the Site. The assessment identifies that the Proposed Development would result in moderate to major adverse daylight effects on Castlefield Locks, which are significant.

6.18. However, the assessment also explains that these effects need to be understood in context. Castlefield Locks currently benefits from the Site being vacant and open. Its own building design, including recessed elevations, already limits daylight to some rooms in the baseline condition. The previously consented 2018 scheme would also have had daylight effects on Castlefield Locks, and the current Proposed Development performs better than the previously consented scheme for many of the windows assessed.

Vox

6.19. Vox is located to the west of the Site and currently benefits from a largely unobstructed outlook across the vacant Site. The assessment identifies that the Proposed Development would result in a moderate adverse daylight effect on Vox, which is significant.

6.20. The assessment explains that these effects are concentrated in a minority of rooms, mainly within the front block of Vox facing the Site. It also notes that the effects are influenced by the fact that Vox currently benefits from an open site next door, which increases the measured level of change when the Site is redeveloped.

6.21. The assessment also considers that if a mirror-image of the Vox building were placed on the Site, the daylight effects on Vox would be greater than those caused by the Proposed Development. This provides important context for understanding the assessed effects.

33 Ellesmere Street / 252 Chester Road

6.22. The assessment identifies significant daylight effects on the second-floor residential rooms at 33 Ellesmere Street / 252 Chester Road. The lower floors are understood to be commercial and are not assessed as sensitive residential receptors. The daylight effect on the residential rooms is assessed as moderate to major adverse and significant.

Sunlight effects

6.23. The assessment identifies that sunlight effects would generally be not significant for most neighbouring buildings, including:

- 33 Ellesmere Street / 252 Chester Road;
- No.1 Cornbrook;
- Vox;
- Pomona Wharf;
- 5 Kelso Place;
- The Trilogy Apartments;
- Nos. 303–309 Chester Road; and
- Excelsior Works.

6.24. The principal significant sunlight effect relates to Castlefield Locks.

Castlefield Locks

6.25. The assessment identifies that some rooms within Castlefield Locks would experience reductions in sunlight. The effect on rooms is assessed as moderate adverse and significant for a minority of living/kitchen/dining rooms.

6.26. The assessment also identifies significant effects on some external amenity spaces associated with Castlefield Locks. Ground floor yards would experience significant adverse effects in relation to sunlight. Upper-floor terraces would experience reductions in sunlight, but these effects would generally be negligible to minor adverse and not significant.

Overshadowing effects

6.27. The assessment focuses on sunlight to relevant external amenity spaces. The main relevant external amenity areas are the ground floor yards and upper terraces associated with Castlefield Locks.

6.28. The assessment identifies that ground floor external amenity spaces at Castlefield Locks would experience significant adverse effects, while upper floor terraces would experience not significant effects.

What mitigation is proposed?

6.29. No additional mitigation is proposed for daylight, sunlight and overshadowing effects.

6.30. The design of the Proposed Development has already evolved to reduce effects where practicable. This includes reducing the footprint of the scheme, moving the taller tower towards the northern boundary, increasing separation distances where possible and omitting a mid-rise block that had previously been considered next to Castlefield Locks.

6.31. Because the remaining effects arise from the introduction of built form on a currently vacant city centre brownfield site, further mitigation is not considered practicable without fundamentally changing the nature and deliverability of the Proposed Development.

What are the residual effects?

6.32. The residual effects are the same as the operational effects, because no additional mitigation is proposed.

6.33. The ES identifies the following significant residual effects:

- moderate to major adverse daylight effect on Castlefield Locks;
- moderate adverse daylight effect on Vox;
- moderate to major adverse daylight effect on 33 Ellesmere Street / 252 Chester Road;
- moderate adverse sunlight effect on rooms at Castlefield Locks; and
- major adverse sunlight effect on some external amenity spaces at Castlefield Locks.

6.34. The following effects are assessed as not significant:

- daylight effects on The Trilogy Apartments, Pomona Wharf, Excelsior Works, No.1 Cornbrook, Nos. 303–309 Chester Road and 5 Kelso Place;
- sunlight effects on The Trilogy Apartments, Vox, 33 Ellesmere Street / 252 Chester Road, Pomona Wharf, Excelsior Works, No.1 Cornbrook, Nos. 303–309 Chester Road and 5 Kelso Place; and
- sunlight effects on upper-floor terraces at Castlefield Locks.

Are there cumulative effects?

6.35. The cumulative assessment considered the Waterways Avenue development in Old Trafford, which is the only committed development close enough to be relevant to the daylight and sunlight assessment.

6.36. The assessment concludes that the cumulative scenario does not change the overall significance of effects. Any localised effects at Pomona Wharf would be caused by the Waterways Avenue development itself rather than by the Proposed Development in combination with it.

What monitoring is proposed?

6.37. No monitoring is recommended for daylight, sunlight and overshadowing.

7. Solar Glare

What is solar glare?

7.1. Solar glare occurs when sunlight reflects from a surface, such as glass or metal, and causes discomfort, distraction or reduced visibility for people nearby. In an urban environment, solar glare is most relevant where reflections could affect road users, tram drivers, train drivers, signal visibility or other sensitive receptors.

7.2. The Solar Glare assessment considers whether the façades of the Proposed Development could reflect sunlight in a way that may affect safety or comfort for nearby receptors.

What has been assessed?

7.3. The Solar Glare assessment has been prepared by Proximity. It considers the potential for reflected sunlight from the Proposed Development to affect nearby sensitive receptors, including:

- road users at nearby junctions;
- tram drivers;
- train drivers; and
- signal locations associated with tram and rail infrastructure.

7.4. The assessment takes into account the location, orientation, height and façade design of the Proposed Development, together with the movement of the sun throughout the year.

7.5. The assessment focuses on whether reflected sunlight could be experienced by drivers or operators in a way that could cause distraction or visibility issues.

What are the existing conditions?

7.6. The Site is currently vacant and does not contain substantial reflective built form. The surrounding area includes residential buildings, transport infrastructure, the elevated railway and Metrolink line, roads, the Bridgewater Canal and nearby commercial and residential development.

7.7. The Site's northern boundary is close to the railway and Metrolink infrastructure, while Chester Road and other local roads provide vehicular routes near the Site. These transport receptors have therefore been considered within the solar glare assessment.

What are the effects during construction?

7.8. Solar glare effects relate to the completed built form and façade materials of the Proposed Development. Construction-stage effects are therefore not expected to give rise to significant solar glare issues.

7.9. Temporary construction materials, plant or hoarding would be managed through standard construction controls and would not create a permanent reflective façade condition. The construction-phase effect is therefore assessed as not significant.

What are the effects once the Proposed Development is complete?

7.10. The completed Proposed Development would introduce new façades that could reflect sunlight. The assessment considers whether these reflections could affect nearby highway, rail and Metrolink receptors.

7.11. The Solar Glare assessment identifies the potential for reflected sunlight to occur at defined receptor positions and the times of day and year when this could arise. The assessment does not measure the intensity of reflected sunlight; instead, it considers where glare would appear within a driver's or operator's field of vision and the duration of any occurrence.

7.12. Where reflections are identified, the assessment considers whether they would fall within central, near-peripheral or peripheral vision, and whether the duration and timing of the glare event could give rise to a material safety concern.

7.13. The ES identifies pre-mitigation solar glare effects ranging from no effect to major adverse at individual receptor positions. A detailed glare assessment of proposed façade materials and finishes is recommended at the detailed façade design stage, with the aim of reducing the more notable effects. Following this design mitigation, residual effects are assessed as moderate adverse at Position 9, minor adverse at Positions 1, 2, 3, 5, 6, 10 and 11, negligible adverse at Positions 7 and 12, and no effect at Positions 4 and 8.

What mitigation is proposed?

7.14. A detailed glare assessment of the proposed façade materials and finishes should be undertaken during the detailed façade design stage. This would refine the worst-case assessment, which assumes mirror-like reflective surfaces, and would inform the selection and arrangement of façade materials, finishes and vent panels to reduce the more notable glare effects where necessary.

What are the residual effects?

7.15. Taking account of façade-design mitigation, residual solar glare effects are assessed as moderate adverse at Position 9; minor adverse at Positions 1, 2, 3, 5, 6, 10 and 11; negligible adverse at Positions 7 and 12; and no effect at Positions 4 and 8.

7.16. The greatest residual effect relates to Position 9 on the rail line, where mitigation is expected to reduce the pre-mitigation major adverse effect to a moderate adverse permanent residual effect. Other receptor positions would experience minor adverse, negligible adverse or no residual effects.

7.17. Overall, the ES records residual solar glare effects at defined rail, Metrolink and highway receptor positions as set out above, with the more notable effects addressed through detailed façade design and material selection.

Are there cumulative effects?

7.18. The ES identifies Vivere Residence and Apart Hotel, to the south of the Site, as the only cumulative massing in the vicinity with potential to cause glare.

7.19. The assessment concludes that Vivere Residence and Apart Hotel is unlikely to present a cumulative glare impact because of its orientation and the limited potential for its elevations to affect the receptors assessed. No significant cumulative solar glare effects are expected.

What monitoring is proposed?

7.20. No monitoring is recommended for solar glare.

8. Townscape and Visual Impact

What is Townscape and Visual Impact

8.1. Townscape refers to the character and appearance of an urban area. It includes buildings, streets, open spaces, public realm, landscape features, historic features, transport infrastructure and the way these elements combine to create a sense of place.

8.2. Visual impact refers to how a development changes views experienced by people. This includes pedestrians, residents, cyclists, public transport users, drivers, recreational users and visitors to heritage or public spaces.

8.3. The Townscape and Visual Impact Assessment considers how the Proposed Development would affect the character of the surrounding townscape and views towards and across the Site.

What has been assessed?

8.4. The Townscape and Visual Impact Assessment has been prepared by re-form landscape architecture. It considers the likely effects of the Proposed Development during construction and once complete.

8.5. The assessment has been undertaken in accordance with recognised guidance, including the Guidelines for Landscape and Visual Impact Assessment and Landscape Institute guidance on townscape and visual assessment.

8.6. The study area extends approximately 750 metres from the Site. This reflects the likely area within which the Proposed Development could influence townscape character and views.

8.7. The assessment considers:

- the Site and its immediate surroundings;
- the Castlefield Conservation Area;
- the Bridgewater Canal corridor;
- the wider Castlefield and St George's area;
- neighbouring areas of Manchester city centre and Salford;
- the relationship with existing and emerging tall buildings;
- the role of the Site as a western gateway into Manchester;
- the effect on representative viewpoints; and
- cumulative effects with other committed developments.

8.8. Thirteen townscape character areas have been identified within the study area. These include Castlefield, St John's, Water Street, Great Jackson Street, First Street, Petersfield, Spinningfields, Salford University and Cathedral, Salford Mixed Use, Ordsall Riverside, Trafford Park, Hulme and Salford Central / Greengate.

8.9. Fourteen representative viewpoints have been assessed. These include views from locations such as the Church of St George, Chester Road / Ellesmere Street, Castlefield Basin, the Bridgewater Canal, Ordsall Hall, Hulme Park, Chester Road Roundabout and Cornbrook Tram Stop.

What are the existing conditions?

8.10. The Site is a previously developed brownfield parcel of land at Ellesmere Street, Castlefield. It currently makes a limited positive contribution to local townscape character and represents an opportunity for regeneration.

8.11. The surrounding area contains a varied mix of historic industrial buildings, canals, railway and Metrolink infrastructure, contemporary residential development, commercial uses and open spaces. The Site sits at a

transition between the historic townscape of Castlefield and the wider pattern of regeneration on the western edge of Manchester city centre.

8.12. Castlefield is the most sensitive townscape character area because of its conservation area designation, concentration of heritage assets and distinctive industrial character. Other areas within the study area vary in sensitivity depending on their townscape quality, heritage value, urban character and capacity to accommodate change.

8.13. The Manchester skyline has changed significantly over recent years, with tall buildings and high-density development now forming an established part of the city centre and its edge. The Proposed Development would be seen within this changing urban context.

What are the effects during construction?

8.14. During construction, the Site and immediate surrounding area would be affected by temporary activities such as site clearance, excavation, substructure works, construction of the building frame, façade installation, internal fit-out, cranes, scaffolding, construction plant, hoarding and construction traffic.

8.15. These activities would temporarily change the character and appearance of the Site and would be most noticeable from locations close to the Site, including Chester Road, Ellesmere Street and Cornbrook Tram Stop. Construction cranes may also be visible in wider views.

8.16. However, construction activity is a common feature of Manchester city centre and would be temporary and reversible. The effects would be managed through standard construction controls, including site hoarding, good site management and measures set out in the Construction Management Plan.

8.17. No significant residual construction-phase townscape or visual effects are predicted.

What are the effects once the Proposed Development is complete?

8.18. Once complete, the Proposed Development would permanently regenerate an underutilised brownfield site. It would introduce a landmark residential tower and a lower residential building, together with new landscaping, public realm, street tree planting, green infrastructure and active ground floor uses.

8.19. The most notable townscape effects would occur in the Castlefield character area because the Site is within or close to this sensitive townscape. The Proposed Development would introduce a substantial new built form at the western edge of Manchester city centre. The assessment identifies a major neutral townscape effect within Castlefield.

8.20. The assessment concludes that the Proposed Development would not materially alter the defining characteristics of the wider townscape beyond the immediate surroundings of the Site. Instead, it would form part of the existing and emerging pattern of city centre regeneration and contribute to the evolving Manchester skyline.

8.21. Outside Castlefield, townscape effects would generally be minor or negligible. In some areas, such as Great Jackson Street and Salford Mixed Use, the effect is assessed as beneficial because the Proposed Development would contribute positively to the wider regeneration context.

What are the visual effects?

8.22. The greatest visual effects would be experienced from viewpoints close to the Site and from locations associated with the Castlefield Conservation Area, the Bridgewater Canal corridor and Ordsall Hall.

8.23. The Proposed Development would be a prominent new feature in some views, particularly from:

- the Church of St George / Castlefield Chapel area;
- Chester Road / Ellesmere Street;
- Castlefield Basin;
- the Bridgewater Canal corridor;
- Ordsall Hall; and
- Cornbrook Tram Stop.

8.24. From these locations, the Proposed Development would change the composition of views and the skyline. The effects are generally assessed as neutral, reflecting that the Proposed Development would be prominent but would not necessarily be harmful to the overall character of the view.

8.25. At Cornbrook Tram Stop, the effect is assessed as beneficial because the redevelopment would replace an underutilised brownfield site with a high-quality contemporary development and improved public realm.

8.26. From more distant viewpoints, the Proposed Development would be seen as part of the wider Manchester skyline and would not dominate views. The assessment also identifies some viewpoints where the Proposed Development would not be visible because it would be screened by existing buildings, landform or vegetation.

What mitigation is proposed?

8.27. Mitigation has been embedded into the design of the Proposed Development. This includes:

- careful consideration of height and massing;
- positioning of the tower to respond to the railway / Metrolink corridor and surrounding buildings;
- high-quality architecture;
- an elegant and simplified tower form;
- façade articulation and high-quality materials;
- improved public realm;
- street tree planting;
- integrated green infrastructure;
- active ground floor frontages; and
- high-quality hard and soft landscape materials.

8.28. During construction, temporary effects would be managed through the Construction Management Plan, including site hoarding, control of construction lighting, management of compounds and plant, dust suppression and maintenance of pedestrian routes.

8.29. No additional operational mitigation is considered necessary beyond the embedded design measures.

What are the residual effects?

8.30. The residual townscape and visual effects are primarily localised to the Site and its immediate surroundings.

8.31. The main residual townscape effect is a major neutral effect within the Castlefield townscape character area. Elsewhere, residual townscape effects are generally minor, minor to moderate, negligible to minor, or negligible.

8.32. The main residual visual effects occur from viewpoints closest to the Site and from sensitive locations in the Castlefield Conservation Area and Bridgewater Canal corridor. Effects range from moderate-major to minor and are generally neutral, with one moderate beneficial effect at Cornbrook Tram Stop.

8.33. The assessment concludes that, following embedded mitigation, the residual effects are acceptable within the context of the Site's urban location, the established pattern of regeneration and the benefits of redeveloping a vacant brownfield site.

Are there cumulative effects?

8.34. The cumulative assessment considers the Proposed Development alongside other committed developments in the area.

8.35. The assessment concludes that the Proposed Development would be perceived as part of the established and emerging cluster of taller buildings in Manchester rather than as an isolated feature. It would reinforce the pattern of regeneration and urban intensification already evident in the area.

8.36. No significant cumulative townscape or visual effects are predicted.

What monitoring is proposed?

8.37. During construction, mitigation measures would be monitored through the Construction Management Plan.

8.38. After completion, landscape establishment and long-term management of the public realm would be secured through an appropriate Landscape Management and Maintenance Plan. No additional operational townscape or visual monitoring is considered necessary.

9. Wind Microclimate

What is Wind Microclimate?

9.1. Wind microclimate refers to the wind conditions experienced by people in and around buildings, streets and open spaces. Tall buildings and changes in building layout can affect how wind moves at ground level and around elevated terraces or podiums. This can influence whether spaces are comfortable and safe for activities such as walking, standing, sitting or using outdoor amenity areas.

9.2. The Wind Microclimate assessment considers whether the Proposed Development would create wind conditions that are suitable for pedestrians, residents, visitors and other users of the Site and surrounding area.

What has been assessed?

9.3. The Wind Microclimate assessment has been prepared by Architectural Aerodynamics Limited. It uses wind tunnel testing, supported by earlier modelling and professional judgement, to assess wind conditions around the Proposed Development.

9.4. The assessment considers:

- the existing baseline condition;
- the Proposed Development within existing surroundings;
- the Proposed Development within cumulative surroundings;
- the Proposed Development with mitigation in cumulative surroundings; and
- the Proposed Development with mitigation in existing surroundings.

9.5. The study area includes the Site and surrounding buildings within a 435 metre radius. This is considered sufficient to capture the relevant wind effects.

9.6. Wind conditions have been assessed against the Lawson comfort criteria, which are widely used in the UK. These criteria identify whether wind conditions are suitable for different activities, including:

- long-term sitting;
- short-term sitting or standing;
- strolling;
- walking; and
- pedestrian safety.

9.7. The assessment considers both comfort and safety. Safety is particularly important because very strong wind conditions can affect elderly people, cyclists, children and less able pedestrians.

What are the existing conditions?

9.8. The Site is bounded by the railway to the north, Castlefield Locks to the east, Ellesmere Street to the south and the Vox Apartments to the west.

9.9. In the existing baseline condition, wind conditions within and around the Site satisfy the criteria for pedestrian safety.

9.10. Wind conditions within the Site and immediate surrounding area are generally suitable for existing uses. Some pre-existing localised windier conditions are present off-site, including at Dinton Street, near Vox, on thoroughfares south of the Site and at the entrance to Pomona Wharf. These are considered part of the baseline condition and are not caused by the Proposed Development.

What are the effects during construction?

9.11. During construction, there may be temporary changes in wind conditions as parts of the Site are opened up and new structures are built. Any temporarily elevated wind conditions would mainly be experienced by construction workers and would be managed through health and safety procedures.

9.12. Construction workers are trained and equipped to work in managed site conditions. Appropriate controls would be included in the Construction Management Plan and the contractor's health and safety procedures.

9.13. Construction-phase wind effects are assessed as negligible and not significant.

What are the effects once the Proposed Development is complete?

Proposed Development within existing surroundings

9.14. Before mitigation, most locations within the Site and surrounding area would satisfy the wind safety criteria. However, safety exceedances are identified at:

- the pathway near Block A;
- the parking area to the east of the Site;
- the north-west corner of the Block B rooftop terrace; and
- the southern corner of Vox Apartments.

9.15. These represent major adverse effects before mitigation and are significant.

9.16. For pedestrian comfort, most thoroughfares within the Site would be suitable for their intended use. However, some areas would be windier than suitable, including:

- areas to the south-west of Block A;
- some entrances to Block A and Block B;
- the courtyard between Blocks A and B;
- the Block A level 1 podium;
- the Block B level 7 terrace;
- outdoor seating areas near Block A; and
- thoroughfares to the east of Vox.

9.17. These pre-mitigation effects are assessed as moderate adverse and significant where comfort criteria would not be met.

Proposed Development within cumulative surroundings

9.18. The cumulative assessment includes the No.1 Cornbrook development. In the cumulative scenario, some pre-mitigation safety exceedances remain and additional exceedances are identified, including along the thoroughfare between Block B and Vox and near No.1 Cornbrook.

9.19. The assessment found that some exceedances around No.1 Cornbrook were already present without the Proposed Development in place and are therefore considered pre-existing rather than caused by the Proposed Development.

9.20. Nevertheless, the wind conditions within the Site were found to deteriorate in the cumulative scenario, and mitigation was therefore developed with cumulative surroundings in place.

What mitigation is proposed?

9.21. Wind mitigation has been developed and tested through wind tunnel assessment. The mitigation includes a combination of landscaping, screens and canopy amendments.

9.22. Ground-level mitigation measures include:

- evergreen trees between 4 and 6 metres high, replacing deciduous trees of the same height in some locations;
- an amended canopy at the south-west entrance to Block A;
- an additional 50% solid screen extending to the roof of the canopy at the northern end;
- an additional 6 metre tall deciduous tree near the south-west entrance to Block A;
- porous screens at the south-west entrance to Block A;
- porous screens in the courtyard;
- a porous screen along the western façade of Block B; and
- planter extensions.

9.23. Elevated-level mitigation measures include:

- an additional porous screen towards the eastern end of the pergola at the Block A level 1 podium; and
- porous screens on the Block B level 7 terrace.

9.24. These measures are intended to reduce wind speeds, remove safety exceedances and make outdoor spaces more comfortable for their intended use.

What are the residual effects?

9.25. Following mitigation, the safety criteria are met throughout the study area. This means there are no significant residual safety effects.

9.26. Most comfort conditions within the Site also improve and are largely suitable for their intended uses. Some minor exceedances remain at:

- parts of the Block B courtyard;
- outdoor seating areas near Block A;
- Block B entrances;
- the Block B terrace; and
- thoroughfares near Vox.

9.27. These remaining effects are minor adverse and not significant.

9.28. Several off-site exceedances are considered pre-existing and therefore represent negligible effects of the Proposed Development.

9.29. Overall, with mitigation in place, wind microclimate effects are assessed as not significant.

Are there cumulative effects?

9.30. The cumulative assessment includes No.1 Cornbrook and considers how wind conditions would change with both developments in place. Some windier conditions are identified in the cumulative scenario, but the mitigation developed for the Proposed Development addresses relevant safety and comfort effects within the Site and immediate surroundings.

9.31. Following mitigation, cumulative wind effects are assessed as not significant.

What monitoring is proposed?

9.32. No operational wind monitoring is recommended.

10. Human Health

What is a Human Health Assessment?

10.1. The Human Health assessment considers how the Proposed Development could affect the health and wellbeing of people. This includes existing residents, future residents, workers, visitors and users of nearby spaces and services.

10.2. Health is influenced by a wide range of factors, including housing quality, access to open space, active travel, air quality, noise, access to healthcare, access to education, employment opportunities, community safety, climate change resilience and social inclusion.

10.3. The Human Health chapter of the ES considers these issues in the context of the Proposed Development and identifies whether any likely significant health effects could arise.

What has been assessed?

10.4. The Human Health assessment considers health determinants relevant to the Proposed Development. These include:

- housing design and quality;
- access to healthcare and social infrastructure;
- access to open space and nature;
- air quality, noise and neighbourhood amenity;
- accessibility and active travel;
- crime reduction and community safety;
- access to healthy food;
- access to work and training;
- social cohesion and inclusive design;
- minimising the use of resources; and
- climate change.

10.5. The assessment considers potential effects during construction and operation. It draws on the findings of other ES chapters, including climate change, daylight and sunlight, wind microclimate, socio-economics and construction management.

What are the existing conditions?

10.6. The Site is currently vacant and does not provide housing, employment, active uses, public realm, open space or community facilities. The surrounding area includes established residential communities, transport infrastructure, local services, green spaces and healthcare and education facilities.

10.7. The Site is in a sustainable and accessible location, close to public transport and within walking and cycling distance of Manchester city centre. It is also close to the Bridgewater Canal corridor and several parks and green spaces within the wider area.

10.8. Existing local healthcare and education provision has been considered in the socio-economic assessment. GP services within the local area are operating close to benchmark levels, and there is some capacity in local primary and secondary schools, although this varies by school and age group.

What are the effects during construction?

10.9. During construction, potential health effects could arise from temporary dust, noise, vibration, construction traffic, changes to pedestrian routes, visual disturbance and general disruption.

10.10. These effects would be temporary and managed through construction controls, including the Construction Management Plan. The plan would include measures to control dust, noise, vibration, lighting, traffic, site cleanliness, working hours, communication and health and safety.

10.11. Construction workers would also be protected through the contractor's health and safety procedures, risk assessments and method statements.

10.12. With these controls in place, construction effects on human health are expected to be neutral or not significant.

What are the effects once the Proposed Development is complete?

Housing design and quality

10.13. The Proposed Development would provide 592 new homes in a sustainable location close to Manchester city centre. This would make a positive contribution to local housing supply and provide new residential accommodation on a vacant brownfield site.

10.14. The homes would be supported by amenity space, cycle parking, landscaping and public realm improvements. The Proposed Development would also include commercial floorspace that could help activate the ground floor and provide local services or facilities.

10.15. The delivery of new homes is considered a positive health determinant because access to good quality housing is important for health and wellbeing.

Access to healthcare and social infrastructure

10.16. The Proposed Development would increase the local population and therefore increase demand for healthcare, education and other services.

10.17. The socio-economic assessment estimates that the Proposed Development could accommodate around 1,600 residents on a worst-case basis. This could increase demand for GP services, early years provision and school places. The assessment concludes that these effects would be minor adverse and not significant.

10.18. The Applicant would continue to engage with Manchester City Council where required in relation to local infrastructure and service capacity.

Access to open space and nature

10.19. The Proposed Development includes supporting amenity space, landscaping and public realm works. It would also be within walking distance of existing parks and green spaces, including Hulme Park, Castlefield Urban Heritage Park, Hullard Park, Seymour Park, Merlin's Park, Ordsall Park and St John's Gardens.

10.20. The Bridgewater Canal also provides a nearby pedestrian route and recreational corridor.

10.21. The provision of landscaping and access to nearby open spaces would support health and wellbeing by encouraging outdoor activity, social interaction and access to nature.

Air quality, noise and neighbourhood amenity

10.22. Air quality, noise and vibration were scoped out of the ES because significant environmental effects were not expected. However, these matters are considered through the wider planning application and through construction controls.

10.23. During construction, dust, noise and vibration would be managed through best practicable means and the Construction Management Plan.

10.24. During operation, the Proposed Development is in a highly accessible location and includes limited car parking, which supports sustainable travel and helps to reduce reliance on private vehicles.

Accessibility and active travel

10.25. The Site is well located for walking, cycling and public transport. It is close to Cornbrook Metrolink Station, bus stops on Chester Road and pedestrian routes along the Bridgewater Canal. The city centre is within walking distance.

10.26. The Proposed Development includes 388 cycle parking spaces and limited car parking. This supports active travel and reduces reliance on private car use.

10.27. Improved public realm and landscaping would also improve the pedestrian environment around the Site.

Crime reduction and community safety

10.28. The Proposed Development would bring a vacant and underutilised site back into active use. New homes, ground floor activity, improved lighting, public realm and natural surveillance would help to improve perceptions of safety and community activity.

10.29. Detailed design measures would be developed with regard to community safety and appropriate security principles.

Access to work and training

10.30. The Proposed Development would support employment during construction and operation. The construction phase is expected to support around 240 full-time equivalent jobs per year over the construction period. Operational employment would also be supported through residential management, maintenance, security, cleaning and commercial floorspace.

10.31. A local labour agreement is expected to be secured through planning condition, which would provide a mechanism to prioritise local residents for job opportunities during construction and operation.

Social cohesion and inclusive design

10.32. The Proposed Development would introduce a new residential community into a currently vacant site. It would provide new public realm and landscaping, and would support connections between the Site and surrounding neighbourhoods.

10.33. The design and management of shared spaces, entrances, amenity areas and public realm would be important in supporting social interaction and inclusive use.

Climate change and resource use

10.34. The Proposed Development includes measures to reduce energy demand, manage overheating risk, reduce carbon emissions and improve resilience to future climate conditions. These measures are relevant to health because climate change can affect comfort, safety, heat stress and access to resources.

10.35. The design includes a fabric-first approach, energy-efficient systems, low carbon heating, sustainable drainage and water-efficient fittings.

What mitigation is proposed?

10.36. Mitigation relevant to human health includes:

- Construction Management Plan controls for dust, noise, vibration, lighting, traffic, site cleanliness and communication;
- health and safety procedures during construction;
- high-quality housing design;
- provision of residential amenity space;
- landscaping and public realm improvements;
- cycle parking and support for active travel;
- limited car parking;
- engagement with Manchester City Council regarding local services where required;

- design measures to support safety and natural surveillance;
- climate change resilience measures; and
- local employment and training opportunities.

What are the residual effects?

10.37. The Human Health assessment identifies a balance of beneficial and adverse health-related effects. The principal significant beneficial operational effect relates to housing provision. The main significant adverse health-related effects are the localised daylight and sunlight amenity effects reported in the Daylight, Sunlight and Overshadowing assessment, together with identified solar glare effects at rail and Metrolink receptor positions:

- temporary construction effects that would be managed through standard construction mitigation, with employment and economic activity during construction identified as beneficial in the Human Health assessment;
- a significant beneficial operational effect associated with the delivery of new housing;
- minor beneficial or not significant effects associated with employment, local authority revenue, crime / community safety, access to open space, active travel and improved public realm;
- localised significant adverse amenity effects relating to daylight at Castlefield Locks, Vox and 33 Ellesmere Street / 252 Chester Road, sunlight to external spaces at Castlefield Locks, and identified solar glare effects at rail and Metrolink receptor positions.

Are there cumulative effects?

10.38. Cumulative health effects have been considered through the ES and the Type 1 cumulative effects assessment. The Proposed Development may contribute, together with other developments, to increased demand for local services. However, it would also contribute to housing supply, public realm improvements, economic activity and regeneration.

10.39. Overall, cumulative health effects are not expected to be significant.

What monitoring is proposed?

10.40. No specific human health monitoring is recommended. Construction effects would be managed and monitored through the Construction Management Plan and standard contractor procedures.

11. Socio-Economic

What is socio-economics?

11.1. Socio-economics considers how a development may affect people, communities, services, jobs, housing and the local economy. It looks at both the benefits and pressures that could arise from a development.

11.2. For the Proposed Development, the socio-economic assessment considers the likely effects of the new homes, construction jobs, operational jobs, household spending, local authority revenue, demand for healthcare, demand for education and demand for open space and play space.

What has been assessed?

11.3. The socio-economic assessment has been prepared by GC Insight. It considers both the construction and operational phases of the Proposed Development.

11.4. The assessment considers the following effects:

- temporary employment during construction;
- provision of new housing;
- direct operational employment;
- contribution to the local economy through jobs, household spending and Gross Value Added;
- contribution to local authority revenue through council tax and business rates;
- demand for early years, primary and secondary school places;
- demand for healthcare services, including GP services and dentists; and
- demand for open space and play space.

11.5. The assessment considers different study areas depending on the effect being assessed. For example:

- construction employment is considered across Greater Manchester;
- housing supply is considered across Manchester;
- operational employment and local economic effects are considered across Manchester;
- healthcare and open space are considered within a local walking catchment; and
- education is considered within relevant walking distances for primary and secondary schools.

11.6. The assessment uses publicly available data, including Office for National Statistics data, Census data, Department for Education data, NHS data, Manchester City Council information and other relevant sources.

What are the existing conditions?

Population and labour market

11.7. The Site is located within Hulme ward. The ward has a population of approximately 23,300 people. The working age population is high compared with Manchester, Greater Manchester and England.

11.8. The claimant rate in Hulme is lower than Manchester and Greater Manchester, but higher than the North West and England. Construction employment is considered across Greater Manchester, where the construction sector supports a substantial number of jobs.

Housing

11.9. Manchester has experienced strong population growth and sustained demand for new homes. The adopted Places for Everyone Plan sets a housing delivery target for Manchester of 60,061 homes between 2022 and 2039, equivalent to 3,533 homes per year.

11.10. Manchester's Housing Strategy also identifies a need for new homes, including homes on brownfield sites close to public transport. The Proposed Development would contribute to these housing objectives by providing 592 new homes on a vacant brownfield site in a sustainable location.

Employment and economy

11.11. Manchester is a major economic centre within Greater Manchester and the North West. The city has experienced strong economic growth, with high levels of employment and Gross Value Added.

11.12. The Site is currently vacant and does not support any on-site employment. The Proposed Development would therefore generate new employment during construction and operation.

Local authority revenue

11.13. Local authority revenue is important because it helps fund local services. The Proposed Development would generate council tax from new homes and business rates from commercial floorspace.

Healthcare

11.14. There are four GP practices within approximately one mile walking distance of the Site. These practices are operating at an average patient-to-GP ratio close to benchmark levels. There are no dental practices within one mile walking distance, although there are several dental practices within two miles.

Education

11.15. There are 10 primary schools within approximately one mile walking distance of the Site. The latest data identifies a surplus of primary school places across these schools.

11.16. There are seven secondary schools within approximately two miles walking distance of the Site. These schools are operating with a smaller surplus, broadly in line with the margin used to support operational flexibility and parental choice.

11.17. There is also nursery and early years provision within the local area. The latest childcare sufficiency information indicates that Hulme has sufficient childcare provision.

Open space and play space

11.18. There are several parks and green spaces within approximately one mile walking distance of the Site, including Hulme Park, Castlefield Urban Heritage Park, Hullard Park, Seymour Park, Merlin's Park, Ordsall Park and St John's Gardens. These spaces provide a range of recreational opportunities, including children's play areas, sports facilities, outdoor gyms and informal open space.

11.19. The Proposed Development would also provide on-site amenity space and landscaping.

What are the construction effects?

11.20. The construction of the Proposed Development would support employment in the construction sector. Based on the estimated construction activity and programme, the construction phase is expected to support around 240 full-time equivalent jobs per year over the construction period.

11.21. Construction jobs may include both skilled and lower-skilled roles, such as site management, surveying, engineering, labouring, logistics and supply chain roles. Some workers may be drawn from Manchester and Greater Manchester, while others may come from the wider region depending on contractor requirements and specialist skills.

11.22. A local labour agreement is expected to be secured through planning condition. This would provide a mechanism to prioritise Manchester residents for job opportunities during construction and operation.

11.23. The scale of construction employment is assessed as a negligible effect at the Greater Manchester level because it represents a small proportion of total construction employment. The effect is therefore not significant.

What are the operational effects?

Housing

11.24. The Proposed Development would provide 592 new homes. The indicative mix includes:

- 33% one-bedroom homes;
- 61% two-bedroom homes;
- 5% three-bedroom homes; and
- 2% four-bedroom homes.

11.25. The delivery of 592 homes represents around 17% of Manchester's annual housing delivery target in the Places for Everyone Plan. It would make a meaningful contribution to housing supply in Manchester and help meet demand for new homes in sustainable, well-connected locations.

11.26. The effect on housing supply is assessed as a moderate beneficial effect and is significant.

Operational employment

11.27. The Proposed Development would support operational jobs through residential management, security, maintenance, cleaning and the commercial floorspace.

11.28. The residential element is expected to support approximately 19 to 20 full-time equivalent jobs. The commercial floorspace is expected to support around five full-time equivalent jobs. In addition, resident spending would support jobs in local shops, services and businesses.

11.29. Overall, the Proposed Development could support approximately 52 to 63 full-time equivalent jobs. This is a positive contribution but represents a negligible change in the context of total employment across Manchester. The effect is therefore not significant.

Local economy and spending

11.30. New residents would spend money locally on goods and services. The assessment estimates that household spending associated with the Proposed Development could be around £9.2 million per year, with around £4.5 million retained within Manchester.

11.31. This local spending would support retail, leisure, food and beverage, services and other local businesses. The assessment estimates that this spending, together with on-site employment, could support approximately £4.0 million in Gross Value Added per year.

11.32. The effect on the local economy is assessed as negligible and not significant in EIA terms, although it would still represent a positive economic contribution.

Local authority revenue

11.33. The Proposed Development would generate council tax revenue from the new homes. Based on the weighted average council tax charge, the assessment estimates that the Proposed Development could generate approximately £1.1 million per year in council tax revenue.

11.34. This represents a minor beneficial effect and is not significant in EIA terms, but it would provide a positive contribution to local authority income.

Healthcare

11.35. The Proposed Development is expected to accommodate around 1,600 residents on a worst-case basis. If all residents were new to the local area and registered with local GPs, the patient-to-GP ratio within the local catchment would increase from approximately 1,827 patients per full-time equivalent GP to approximately 1,876.

11.36. This is a worst-case assessment because some residents may already live locally and be registered with existing GP practices. The effect on healthcare services is assessed as minor adverse and not significant.

Early years and primary education

11.37. Using worst-case pupil yield assumptions, the Proposed Development could generate demand for early years and primary school places. The assessment recognises that using district-wide benchmarks is likely to overestimate pupil demand because the Proposed Development is apartment-led and mostly comprises one- and two-bedroom homes.

11.38. Even on a worst-case basis, the local primary school catchment would retain surplus capacity. The effect on early years and primary education is therefore assessed as minor adverse and not significant.

Secondary education

11.39. Using a worst-case assessment, the Proposed Development could generate demand for secondary school places. The local secondary school catchment would retain some surplus capacity, although this would reduce the margin of flexibility.

11.40. The effect on secondary education is assessed as minor adverse and not significant.

Open space and play space

11.41. The Proposed Development would increase the local population and therefore increase demand for open space and play space. However, the Site is within walking distance of several parks and green spaces, and the Proposed Development includes amenity space and landscaping.

11.42. Manchester City Council is also progressing wider green and blue infrastructure initiatives, including the emerging Green and Blue Infrastructure Strategy and CyanLines initiative.

11.43. The effect on open space and play space is assessed as negligible and not significant.

What mitigation is proposed?

11.44. No significant adverse socio-economic effects are identified, and no specific mitigation is required.

11.45. The following measures would nevertheless help to support positive outcomes:

- delivery of 592 new homes;
- local labour agreement secured through planning condition;
- on-site amenity space and landscaping;
- commercial floorspace supporting local services and employment;
- cycle parking and sustainable travel measures;
- engagement with Manchester City Council where required in relation to local services; and
- contribution to local authority revenue through council tax and business rates.

What are the residual effects?

11.46. The residual effects are:

- temporary construction employment: negligible, not significant;
- housing provision: moderate beneficial, significant;
- operational employment: negligible, not significant;
- local economy and Gross Value Added: negligible, not significant;
- local authority revenue: minor beneficial, not significant;
- healthcare demand: minor adverse, not significant;
- early years and primary education demand: minor adverse, not significant;

- secondary education demand: minor adverse, not significant; and
- open space and play space demand: negligible, not significant.

Are there cumulative effects?

11.47. The cumulative assessment considers the Proposed Development alongside other committed developments in the surrounding area. Collectively, these developments could deliver around 5,600 new homes, 360 hotel rooms, 118,700 sq. m of office floorspace and 35,200 sq. m of flexible commercial floorspace.

11.48. Cumulative construction activity could create a moderate beneficial and significant effect by supporting construction employment across Greater Manchester.

11.49. Cumulative operational effects include:

- minor beneficial, not significant effects on employment and the local economy;
- moderate beneficial, significant effects on local authority revenue;
- minor adverse, not significant effects on primary healthcare;
- negligible effects on early years, primary and secondary education, assuming each development mitigates its own impacts where required; and
- negligible effects on open space and play space, assuming each development provides appropriate amenity space and public realm.

What monitoring is proposed?

11.50. No socio-economic monitoring is recommended during construction or operation.

12. Heritage

What is Heritage?

12.1. Heritage refers to buildings, places, structures and areas that are valued because of their historic, architectural, archaeological or cultural interest. Heritage assets can be formally designated, such as listed buildings and conservation areas, or non-designated, where they have local heritage value.

12.2. The Heritage assessment considers whether the Proposed Development would affect the significance of nearby heritage assets. This includes direct physical effects and indirect effects on the setting of heritage assets.

12.3. For the Proposed Development, the main issue is setting. The Site does not contain any listed buildings and is not located within a conservation area. However, it is close to the Castlefield Conservation Area and several listed buildings and heritage assets.

What has been assessed?

12.4. The Heritage assessment has been prepared by Civic Heritage. It considers the potential effects of the Proposed Development on nearby heritage assets during construction and operation.

12.5. The Site lies approximately 100 metres west of the Castlefield Conservation Area. There are nine listed buildings or heritage assets within approximately 500 metres of the Site. These include:

- Former Turville Public House, Grade II;
- Railway Bridge over the Canal, Grade II;
- Former Albert Mill, Grade II;
- Hulme Barracks, Grade II;
- Brindley's Weir, Grade II;
- Hulme Lock Branch Canal, Grade II;
- Churchyard Walls at the Church of St George, Grade II;
- Church of St George, Grade II*; and
- Former Canal Flour Mills, Grade II.

12.6. The assessment considers whether the Proposed Development would change the setting of these assets, and whether any change would affect their heritage significance.

12.7. The Heritage assessment also considers the relationship between the Proposed Development, the Castlefield Conservation Area, the Bridgewater Canal, railway infrastructure and the wider historic industrial character of Castlefield.

What are the existing conditions?

12.8. The Site is currently vacant and previously developed. It is located outside the Castlefield Conservation Area but close enough for development on the Site to be visible in some views associated with heritage assets.

12.9. The surrounding area includes a mix of historic industrial buildings, canal structures, railway infrastructure and more recent residential and commercial development. The significance of nearby heritage assets is largely derived from their historic, architectural and townscape value, including their relationship with the industrial development of Manchester, the canals and the railway network.

12.10. The Site itself does not make a strong positive contribution to heritage significance in its current condition. It is a vacant brownfield site and has a limited relationship with the historic built form of Castlefield.

What are the effects during construction?

12.11. Construction activity could temporarily affect the setting of nearby heritage assets through the presence of hoarding, construction plant, cranes, scaffolding, lighting, temporary compounds and construction traffic. The ES identifies temporary minor adverse effects for the assessed heritage receptors during construction, which are not significant in EIA terms.

12.12. These effects would be temporary and reversible. They would be most noticeable from heritage assets and historic townscape locations close to the Site.

12.13. Construction effects would be managed through the Construction Management Plan. This would include measures relating to site hoarding, dust, noise, traffic, lighting and general site management.

12.14. The Heritage assessment concludes that construction effects would generally be negligible to minor adverse and temporary. These effects would not be significant in EIA terms.

What are the effects once the Proposed Development is complete?

12.15. Once complete, the Proposed Development would introduce a tall residential tower and a lower residential building into the setting of nearby heritage assets.

12.16. The Proposed Development would be visible in some views from and towards the Castlefield Conservation Area and nearby listed buildings. It would therefore change the wider setting of some heritage assets.

12.17. The assessment concludes that the Proposed Development would not cause direct physical harm to any listed building or conservation area. The effects relate to setting and the way the Proposed Development would be experienced in views.

12.18. The design has been developed to respond to its context through:

- positioning of the taller element towards the railway / Metrolink corridor;
- reducing the overall footprint of the scheme compared with earlier design options;
- improving separation from neighbouring buildings where practicable;
- using a refined and simplified tower form;
- incorporating high-quality materials and façade detailing;
- improving the public realm and landscaping; and
- regenerating a vacant brownfield site.

12.19. The Heritage assessment concludes that operational residual effects would be minor adverse and permanent for most assessed heritage receptors, including the Railway Bridge over Canal, Former Turville Public House, Former Albert Mill, Church of St George, Churchyard Walls, Talbot Mill, Castlefield Conservation Area and Empress Conservation Area. The effect on Cornbrook Bridge would be negligible and permanent. These effects are not significant in EIA terms.

What mitigation is proposed?

12.20. Mitigation has been embedded into the design of the Proposed Development. This includes:

- careful positioning of the tower;
- refinement of height, massing and footprint;
- high-quality architectural design;
- a simplified and elegant tower form;
- appropriate material selection and façade detailing;
- public realm improvements;
- landscaping and green infrastructure; and
- regeneration of a vacant brownfield site.

12.21. During construction, mitigation would be secured through the Construction Management Plan.

12.22. No additional heritage-specific mitigation is proposed beyond the embedded design measures and construction controls.

What are the residual effects?

12.23. Residual construction effects would be temporary and generally negligible to minor adverse. These effects would cease once construction is complete.

12.24. Residual construction effects would be temporary and not significant. Residual operational effects would be minor adverse and permanent for most assessed heritage receptors, with a negligible permanent effect on Cornbrook Bridge. The assessment does not identify significant residual heritage effects.

12.25. The overall conclusion is that, while the Proposed Development would be visible in the setting of some heritage assets, it would not significantly detract from their significance or the ability to appreciate them.

Are there cumulative effects?

12.26. The Heritage assessment considers the potential for cumulative effects with other committed developments in the area. It concludes that the Proposed Development would not give rise to significant cumulative heritage effects.

What monitoring is proposed?

12.27. No specific heritage monitoring is proposed. During construction, relevant controls would be monitored through the Construction Management Plan.

13. Residual Effects

What are Residual Effects

13.1. Residual effects are the effects that remain after mitigation measures have been taken into account. They can be beneficial, adverse or neutral. They can also be temporary or permanent, and significant or not significant in EIA terms.

13.2. This section summarises the main residual effects identified in the ES for the Proposed Development.

Climate Change

13.3. The Climate Change assessment concludes that residual effects would be not significant.

13.4. During construction, extreme weather risks and surface water run-off would be managed through standard construction controls, including the Construction Management Plan. The residual effect is negligible / not significant and temporary.

13.5. Construction-stage embodied carbon would result in a minor adverse residual effect. This effect is permanent but not significant in EIA terms.

13.6. During operation, the Proposed Development would incorporate a fabric-first design, low carbon heating, air source heat pumps, energy-efficient services, sustainable drainage, water-efficient fittings and measures to reduce overheating risk. Operational greenhouse gas emissions are assessed as minor adverse and not significant. Overheating, drainage exceedance and reduced water availability effects are also assessed as not significant.

Daylight, Sunlight and Overshadowing

13.7. The assessment identifies several significant residual effects relating to daylight and sunlight.

13.8. Significant residual effects are identified for:

- daylight at Castlefield Locks, where the effect is assessed as moderate to major adverse and permanent;
- daylight at Vox, where the effect is assessed as moderate adverse and permanent;
- daylight at 33 Ellesmere Street / 252 Chester Road, where the effect is assessed as moderate to major adverse and permanent;
- sunlight to rooms at Castlefield Locks, where the effect is assessed as moderate adverse and permanent; and
- sunlight to some external amenity spaces at Castlefield Locks, where the effect is assessed as major adverse and permanent.

13.9. Effects on other neighbouring receptors, including The Trilogy Apartments, Pomona Wharf, Excelsior Works, No.1 Cornbrook, Nos. 303–309 Chester Road and 5 Kelso Place, are assessed as not significant.

13.10. No further mitigation is proposed because the design has already evolved to reduce effects where practicable, and the remaining effects arise from the redevelopment of a currently vacant city centre brownfield site.

Solar Glare

13.11. The Solar Glare assessment identifies residual effects ranging from no effect to moderate adverse at individual highway, rail and Metrolink receptor positions following façade-design mitigation.

13.12. Residual effects comprise one moderate adverse effect at Position 9, minor adverse effects at Positions 1, 2, 3, 5, 6, 10 and 11, negligible adverse effects at Positions 7 and 12, and no effect at Positions 4 and 8.

13.13. The detailed façade design process would refine the worst-case glare assessment and inform the selection and arrangement of façade materials and finishes to reduce the more notable glare effects where necessary.

Townscape and Visual Impact

13.14. The Townscape and Visual Impact Assessment concludes that residual effects would be localised and acceptable within the context of the Site's highly urban location and the continuing regeneration of western Manchester city centre.

13.15. During construction, effects would be temporary, localised and reversible. They would be managed through the Construction Management Plan. No significant residual construction-phase townscape or visual effects are predicted.

13.16. During operation, the main townscape effect would be within the Castlefield townscape character area, where a major neutral residual effect is identified. Elsewhere, residual townscape effects are generally minor, minor to moderate, negligible to minor or negligible.

13.17. Residual visual effects would be greatest from viewpoints close to the Site and from sensitive locations associated with the Castlefield Conservation Area and Bridgewater Canal corridor. Effects range from moderate-major to minor and are generally neutral. A moderate beneficial effect is identified at Cornbrook Tram Stop because the Proposed Development would replace an underutilised brownfield site with a high-quality development and improved public realm.

Wind Microclimate

13.18. Before mitigation, the Wind Microclimate assessment identifies significant safety and comfort effects in some locations. These include safety exceedances near Block A, the parking area east of the Site, the Block B rooftop terrace and near Vox.

13.19. Wind mitigation has therefore been incorporated into the design, including evergreen trees, porous screens, canopy amendments, planter extensions and screens at elevated amenity areas.

13.20. Following mitigation, the safety criteria are met throughout the study area. Remaining comfort exceedances are minor adverse and not significant.

13.21. Residual wind effects are therefore assessed as not significant.

Human Health

13.22. The Human Health assessment identifies a balance of significant beneficial effects and localised significant adverse health-related amenity effects.

13.23. Construction effects would generally be temporary and controlled through the Construction Management Plan. The Human Health assessment identifies construction employment and economic activity as a beneficial effect.

13.24. During operation, the Proposed Development would have significant beneficial health-related effects through the delivery of new homes, alongside wider benefits associated with regeneration of a vacant brownfield site, improved public realm, landscaping, active travel support, access to nearby open spaces and employment opportunities.

13.25. The main significant adverse health-related residual effects relate to daylight at Castlefield Locks, Vox and 33 Ellesmere Street / 252 Chester Road, sunlight to external amenity spaces at Castlefield Locks, and identified solar glare effects at rail and Metrolink receptor positions. Increased demand for healthcare and education services is assessed as minor adverse and not significant.

Socio-Economic

13.26. The Socio-Economic assessment identifies a significant beneficial residual effect in relation to housing provision. The Proposed Development would deliver 592 new homes, representing around 17% of Manchester's annual housing delivery target under Places for Everyone. This is assessed as a moderate beneficial and significant effect.

13.27. Construction employment is assessed as negligible and not significant at the Greater Manchester level, although it would provide temporary employment opportunities. Operational employment, local economic output, local authority revenue, healthcare demand, education demand and open space demand are all assessed as not significant.

13.28. The Proposed Development would nevertheless provide positive socio-economic benefits through new homes, resident spending, employment, council tax revenue and the regeneration of a vacant brownfield site.

Heritage

13.29. The Heritage assessment concludes that residual effects would be not significant.

13.30. Construction effects would be temporary and not significant. Operational residual effects would be minor adverse and permanent for the Railway Bridge over Canal, Former Turville Public House, Former Albert Mill, Church of St George, Churchyard Walls, Talbot Mill, Castlefield Conservation Area and Empress Conservation Area, and negligible and permanent for Cornbrook Bridge. These effects are not significant in EIA terms.

13.31. The Proposed Development would be visible in the setting of some heritage assets, including assets associated with the Castlefield Conservation Area and nearby listed buildings. However, the assessment concludes that it would not significantly detract from their significance or the ability to appreciate them.

Overall summary

13.32. The ES identifies a mix of beneficial, neutral and adverse residual effects.

13.33. The main significant beneficial residual effect is the delivery of new homes, which would make a meaningful contribution to Manchester's housing supply. The Proposed Development would also regenerate a vacant brownfield site, improve public realm, provide landscaping and green infrastructure, support local economic activity and contribute to the continuing regeneration of the Castlefield / St George's area.

13.34. The main significant adverse residual effects relate to daylight and sunlight impacts on a limited number of neighbouring receptors, particularly Castlefield Locks, Vox and 33 Ellesmere Street / 252 Chester Road. These effects have been assessed in detail and are contextualised by the Site's current vacant condition, the city centre location and the design evolution undertaken to reduce impacts where practicable.

13.35. Wind effects are not significant following mitigation. Climate change, solar glare, human health, socio-economic effects other than housing, and heritage effects are not significant after mitigation or embedded design measures.

14. Type 1 Cumulative Effects

What are Type 1 Cumulative Effects?

14.1. Cumulative effects are combined effects that may arise when different environmental impacts are considered together.

14.2. For the ES, two types of cumulative effects are considered:

- Type 1 cumulative effects, which are the combined effects of different environmental topics from the Proposed Development on the same receptor or receptor group; and
- Type 2 cumulative effects, which are the combined effects of the Proposed Development with other committed or reasonably foreseeable developments.

14.3. Type 2 cumulative effects are considered within the individual technical chapters of the ES. This section summarises the Type 1 cumulative effects, which consider whether different effects from the Proposed Development could combine to create a greater overall effect on particular groups of receptors.

How have Type 1 cumulative effects been assessed?

14.4. The Type 1 cumulative effects assessment draws on the residual effects identified in the technical chapters of the ES. It focuses on effects that are minor, moderate or major because negligible or neutral effects are generally too small to combine into a noticeable cumulative effect.

14.5. The assessment uses professional judgement to consider whether residual effects from different technical topics could interact. It considers both construction and operational effects and both adverse and beneficial effects.

14.6. The main receptor groups considered are:

- local population and Site users;
- local businesses;
- built environment;
- natural environment; and
- infrastructure and utilities.

Local population and Site users

14.7. Local residents, future residents, pedestrians, cyclists, visitors and other users of the Site and surrounding area could experience a combination of effects from different environmental topics.

14.8. During construction, potential effects could include temporary disruption from construction activities, construction traffic, visual disturbance, dust, noise, vibration and changes to pedestrian movement. These effects would be managed through the Construction Management Plan and are generally assessed as temporary and not significant.

14.9. During operation, the local population and Site users could experience:

- adverse daylight and sunlight effects at some neighbouring residential receptors;
- minor adverse but not significant effects associated with healthcare and education demand;
- improved public realm and landscaping;
- improved active travel opportunities;
- new housing provision;
- new local spending and economic activity;

- improved use of a vacant brownfield site; and
- wind conditions that are suitable following mitigation.

14.10. The main significant adverse effects relate to daylight and sunlight impacts on Castlefield Locks, Vox and 33 Ellesmere Street / 252 Chester Road. These would be experienced by particular neighbouring receptors rather than the wider local population.

14.11. Overall, the combined Type 1 cumulative effect on the local population and Site users is assessed as minor adverse to neutral, with beneficial effects associated with new homes, public realm, access to services and regeneration balancing some localised adverse effects.

Local businesses

14.12. Local businesses could experience temporary disruption during construction, including changes in traffic, deliveries, access and general construction activity. These effects would be managed through the Construction Management Plan.

14.13. During operation, local businesses are likely to benefit from increased resident spending, new footfall, new commercial floorspace and the regeneration of a vacant Site. The socio-economic assessment identifies that residents of the Proposed Development could generate around £9.2 million of annual household spending, with a proportion retained within Manchester.

14.14. The combined Type 1 cumulative effect on local businesses is assessed as minor beneficial and not significant, with positive effects associated with local spending and regeneration.

Built environment

14.15. The built environment includes townscape, views, heritage assets, neighbouring buildings and the wider urban fabric.

14.16. During construction, temporary effects on the built environment would arise from hoarding, cranes, plant, scaffolding, construction traffic and visual disturbance. These effects would be temporary and managed through the Construction Management Plan.

14.17. During operation, the Proposed Development would introduce a substantial new building into the local townscape and would affect views from some locations. It would also be visible within the setting of nearby heritage assets.

14.18. The Townscape and Visual Impact Assessment identifies localised townscape and visual effects, including a major neutral effect within the Castlefield townscape character area and generally neutral effects from several viewpoints. A beneficial effect is identified at Cornbrook Tram Stop due to the regeneration of the Site and public realm improvements.

14.19. The Heritage assessment identifies no significant adverse residual effects. Heritage effects are generally neutral, negligible adverse, negligible to minor adverse or minor adverse.

14.20. On balance, the Proposed Development is expected to result in a minor beneficial to neutral Type 1 cumulative effect on the built environment. This reflects the regeneration of a vacant brownfield site, improvements to public realm and townscape quality, and the delivery of a high-quality contemporary building, balanced against localised visual and heritage setting changes.

Natural environment

14.21. The natural environment includes climate, drainage, green infrastructure, planting, biodiversity and the wider environmental performance of the Site.

14.22. During construction, minor adverse greenhouse gas effects would arise from embodied carbon and construction activities. Construction works would also need to be managed to prevent pollution, manage drainage and avoid environmental harm.

14.23. During operation, the Proposed Development would include landscaping, green infrastructure, sustainable drainage, water-efficient fittings and climate change resilience measures. The Climate Change assessment identifies minor adverse but not significant effects on greenhouse gas emissions, while the drainage and resilience measures would help manage future climate conditions.

14.24. Ecology was scoped out of the ES because significant ecological effects were not expected, but the wider planning application includes an Ecology Phase 1 Desk Survey and Biodiversity Net Gain Assessment. The Proposed Development would also introduce landscaping and planting.

14.25. On balance, the Type 1 cumulative effect on the natural environment is assessed as neutral to minor adverse. This reflects minor adverse greenhouse gas effects balanced against brownfield regeneration, sustainable drainage, landscaping and green infrastructure.

Infrastructure and utilities

14.26. Infrastructure and utilities include drainage, water supply, foul water drainage, transport infrastructure, local services and social infrastructure.

14.27. During construction, temporary effects on infrastructure and utilities would be managed through the Construction Management Plan. This would include measures to manage drainage, prevent pollution, coordinate utilities and manage construction traffic.

14.28. During operation, the Proposed Development would increase demand for potable water, foul drainage, healthcare, education and open space. These effects are assessed as not significant in the relevant ES chapters.

14.29. The Proposed Development would include sustainable drainage and water-efficient fittings. It would also provide cycle parking, limited car parking and support sustainable travel.

14.30. The Type 1 cumulative effect on infrastructure and utilities is assessed as neutral. Any additional demand would be managed through design measures, planning controls and existing infrastructure planning processes.

Overall Type 1 cumulative effects conclusion

14.31. The Type 1 cumulative effects assessment concludes that the Proposed Development would not give rise to significant adverse combined effects across receptor groups.

14.32. The main localised adverse combined effects relate to neighbouring residential amenity, particularly daylight and sunlight effects at Castlefield Locks, Vox and 33 Ellesmere Street / 252 Chester Road.

14.33. These effects are balanced against the wider benefits of the Proposed Development, including:

- delivery of 592 new homes;
- regeneration of a vacant brownfield site;
- improved public realm and landscaping;
- improved townscape quality;
- contribution to housing supply;
- construction and operational employment;
- local spending;
- council tax revenue; and
- support for sustainable urban living in a highly accessible location.

14.34. Overall, the Proposed Development is expected to result in a balanced pattern of effects, with localised adverse effects in some areas but wider beneficial effects associated with regeneration, housing delivery, public realm and economic activity.

Availability of Environmental Statement

The ES will be available for public viewing on Manchester City Council's Public Access website once the planning application has been submitted and validated.

The Public Access website is: http://pa.manchester.gov.uk/online-applications/

The ES may be purchased in volumes, the costs for which are set out below:

- Volume 1: ES Main Text and Figures - £150
- Volume 2: ES Appendices - £150
- Volume 3: Non-Technical Summary (NTS) - £15
- Full Copy (Volumes 1 and 2, and NTS) of the ES on CD - £15

For copies of any of the above, please contact the Manchester Planning Team at Deloitte:

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