Government Property Agency

AtkinsRéalis



MANCHESTER DIGITAL CAMPUS

Environmental Statement

Volume 2 - Chapter 18: Transport

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Contents

18. Transport 6

18.1. Introduction 6

18.2. Competent expert evidence 6

18.3. Relevant legislation and guidance 6

18.4. Assessment Methodology 13

18.5. Baseline Conditions 19

18.6. Potential Impacts 32

18.7. Assessment of Effects 33

18.8. Additional mitigation and enhancement measures 58

18.9. Residual Effects 58

18.10. Cumulative effects 59

18.11. Summary and Conclusions 62

18.12. Glossary and Acronyms 67

Tables

Table 18-1 - Legislation and guidance for Traffic and Transport 6

Table 18-2 - Technical standard and guidance for Traffic and Transport 13

Table 18.3 - Sensitivity of Traffic Receptors 16

Table 18.4 - Magnitude of Impact 17

Table 18.5 - Significance of Effect 18

Table 18.6 - Direct Metro Links 22

Table 18.7 - Existing Sensitivity of Receptors 25

Table 18.8 - Existing Two-way Traffic Flows (2024 AM and PM Peak Periods) 28

Table 18.9 - Existing (2024) 18hr AAWT and 24hr AADT flows 30

Table 18.10 - Type of Collisions 31

Table 18.11 - Increase in Existing Traffic Volumes required to exceed Threshold for Assessment 34

Table 18.12 - Peak Hours Traffic Volumes 37

Table 18.13 - Average Daily Traffic Volumes 40

Table 18.14 - Significance of Effect (Driver Delay and Pedestrian / Cyclist Delay) 44

Table 18.15 - Pedestrian and Cyclist Amenity – Significance of Effect 51

Table 18.16 - Fear and Intimidation – Significance of Effect 55

Table 18.17 - Summary Table - Traffic and Transport 63

Table 18-18 – Glossary and acronyms 67

Figures

Figure 18.1 - Study Area 14

Figure 18.2 - Vehicle access points 20

Figure 18.3 - Public Transport Stops and Stations 21

Figure 18.4 - National Cycle Network 23

Figure 18.5 - Local Places of Interest / Potential Receptors 25

Figure 18.6 - Link Schematic for Study Area (northern section) 27

Figure 18.7 - Link Schematic for Study Area (southern section) 28

Figure 18.8 - Collision Data (2018 - 2022) 31

Executive Summary

Traffic and transport considerations are essential for a development because they ensure accessibility and connectivity for users, enhance safety and health through improved road safety and active travel options, assess infrastructure capacity to prevent congestion, improve transport links, and plan for future needs. These factors collectively ensure a development can mitigate environmental impacts and is safe and beneficial for both users and the wider community.

The Traffic and Transport chapter assesses the effects of the Proposed Development on the local transport network, including highway safety, disruption, and access for pedestrians, cyclists, and other road users. This chapter should be read in conjunction with the technical appendices, which include the Transport Assessment (TA), the Framework Travel Plan (FTP), and the Construction Traffic Management Plan (CTMP).

The chapter considers the effects of the Proposed Development during both construction and operation phases. It has been prepared in accordance with best practice guidance provided by the Institute of Environmental Management and Assessment (IEMA) 2023 Guidelines. The assessment methodology applies both qualitative and quantitative approaches to determine the magnitude of impacts, sensitivity of receptors, and overall significance. The chapter assessed: driver delay, pedestrian and cyclist delay, pedestrian and cyclist amenity, fear and intimidation, accidents and safety, and severance.

Existing and proposed traffic conditions were established using the Transport for Greater Manchester (TfGM) Highways Forecasting and Analytical Services (HFAS) traffic modelling and Trip Rate Information Computer System (TRICS) Database, to provide a baseline existing condition in the year 2024, and proposed conditions once the Proposed Development is operational in the year 2030.

The Site layout, access arrangements, and cycle and car parking provisions were designed having consideration for the existing traffic and transport context, to minimise the effect of the Proposed Development. The implementation of a Construction and Environmental Management Plan (CEMP), a CTMP during construction, and a FTP during the developments operation, would assist with managing and mitigating transport-related effects.

The assessment concludes that during construction, there would be a temporary adverse effect, but the magnitude of this effect is considered to be negligible and therefore not significant. Once operational, there would be a permanent adverse effect, but again, the significance of this effect is considered to be negligible and therefore not significant.

Overall, the Proposed Development has been designed with a strong focus on accessibility, safety and sustainability. By ensuring minimal disruption during construction and negligible long-term impacts once operational, the development promises to enhance connectivity and provide measures to effectively mitigate any transport and traffic impacts and improve active travel options.

18. Transport

18.1. Introduction

18.1.1. This chapter of the Environmental Statement (ES) assesses the likely effects of the Proposed Development with respect to transport and traffic. It outlines the assessment methodology, describes the existing baseline conditions, identifies potential impacts and provides an assessment of effects. The chapter also details the mitigation measures necessary to prevent, reduce, or offset any significant adverse effects, and discusses the likely residual effects after these measures have been implemented.

18.1.2. This chapter reports on two different types of cumulative effects: intra-project cumulative effects, which are the combined effects of individual topic impacts on a particular sensitive receptor; and inter-project cumulative effects, which consider the way in which the Proposed Development may give rise to impacts in combination with other developments the study area, termed Reasonably Foreseeable Future Projects (RFFPs). The outlined cumulative effects are then used to inform the overall assessment of cross-topic cumulative effects, which is reported in ES (Volume 2) Chapter 22: Cumulative Effects.

18.1.3. This chapter is supported by and has been informed by technical appendices contained within ES Volume 4 Appendix 18, which includes the following:

- ES (Volume 4) Appendix 18.1 – Transport Assessment (TA);
- ES (Volume 4) Appendix 18.2 – Framework Travel Plan (FTP); and
- ES (Volume 4) Appendix 18.3 – Construction Traffic Management Plan (CTMP).

18.2. Competent expert evidence

18.2.1. This Chapter has been undertaken by:

- A Chartered Member of the Institute of Logistics and Transport who has 18 years professional experience; and
- A Managing Consultant with over 30 years' transport planning professional experience as a Chartered Member of the Institute of Logistics and Transport.

18.2.2. The above listed individuals have used their knowledge and professional judgement to undertake this assessment.

18.3. Relevant legislation and guidance

18.3.1. Table 18-1 below summaries the legislation and regulations applicable to Traffic and Transport.

Table 18-1 - Legislation and guidance for Traffic and Transport

Legislation / regulation	Summary of requirements
National	
National Planning Policy Framework (NPPF)	The NPPF was first published in March 2012, updated in February 2019 and July 2021, and most recently revised in December 2023. It sets out the government's planning policies for England

Legislation / regulation	Summary of requirements
	and how these are expected to be applied. The NPPF aims to make the planning system more accessible, and to promote sustainable growth. The NPPF states that significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be considered in both plan-making and decision-making (Paragraph 109 of Section 9). The NPPF states that planning policies should: ▪ Be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned (Paragraph 110.b of Section 9); ▪ Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development (Paragraph 110.c of Section 9); ▪ Provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans) (Paragraph 110.d of Section 9); and ▪ Provide for any large-scale transport facilities that need to be in the area, and the infrastructure and wider development required to support their operation, expansion, and contribution to the wider economy (Paragraph 110.e of Section 9). The NPPF states that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that: ▪ Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location (Paragraph 114.a of Section 9); and ▪ Safe and suitable access to the site can be achieved for all users (Paragraph 114.b of Section 9). The NPPF also states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe (Paragraph 115 of Section 9). Within this context, applications for development should: ▪ Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second–so far as possible–to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use (Paragraph 116.a of Section 9); ▪ Address the needs of people with disabilities and reduced mobility in relation to all modes of transport (Paragraph 116.b of Section 9); ▪ Allow for the efficient delivery of goods, and access by service and emergency vehicles (Paragraph 116.d of Section 9); and ▪ Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations (Paragraph 116.e of Section 9).

Legislation / regulation	Summary of requirements
	All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed (Paragraph 117 of Section 9).
Regional and Local	
Places for Everyone (2024)	Places for Everyone (March 2024) is a Joint Development Plan Document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan Councils. It acknowledges that the pandemic has brought challenging times, in which the need for bold ambitious plans for good quality employment is critical. This includes the need to continue to invest in our city and town centres to drive our recovery. There is also a preference for proposed developments to be situated on brownfield sites and limit the need extent of Green Belt release. This Plan sets out proposals to support the Greater Manchester ambition to be a carbon neutral city region by 2038. A key element of this is to require all new development to be net zero carbon by 2028 at the latest. The vision for 2040 is for half of all daily trips in Greater Manchester to be made by public transport, cycling and walking. This will mean a million more trips each day using sustainable and active modes of travel which will help in achieving economic growth. The Plan includes ten Strategic Objectives to help deliver the Vision of the Plan. There are three objectives particularly pertinent to transport. ▪ Objective 6 – Promote the sustainable movement of people, goods and information. The Plan will achieve this through: ▫ Enhancing the existing transport network; ▫ Focus new development within 800m of sustainable transport hubs; ▫ Ensure new development is designed to encourage and enable active and sustainable travel; ▫ Expand the transport network to facilitate new areas of sustainable and inclusive growth; and ▫ Capitalise on national and regional investment in transport infrastructure. ▪ Objective 7 – Playing our part in ensuring that Greater Manchester is a more resilient and carbon neutral city-region. The plan will achieve this through: ▫ Promote carbon neutrality of new development by 2028; ▫ Promote sustainable patterns of development that minimise the need to travel and contribute to cleaner air; ▫ Locate and design development to reduce car dependency; and ▫ Facilitate the provision of infrastructure for cleaner vehicles. ▪ Objective 10 – Promote the health and wellbeing of communities through: ▫ Reducing the health impacts of air pollution by increasing the accessibility of sustainable travel such as public transport, cycling and walking. The Plan will seek a creation of a much larger, integrated, rapid transit network within Greater Manchester which incorporates bus, Metrolink tram, tram / train and rail services. This will be supported by policies that focus new development in locations close to existing and proposed public transport connections. New development will have a significant role in delivering the future sustainable and integrated transport network in order to reduce car dependency and increase levels of walking, cycling and public transport. Although the focus of the Plan is on increasing walking, cycling and public transport, it must be recognised that there is a need to accommodate other forms of transport.

Legislation / regulation	Summary of requirements
Greater Manchester Transport Strategy 2040	First published in February 2017 and updated in January 2021 with a view to refresh the Strategy on a regular basis, the vision of the Greater Manchester Transport Strategy 2040 is to have 'world class connections that support long-term sustainable economic growth and access to opportunity for all'. There are four key elements of the Vision which represent the goals of the Greater Manchester Transport Strategy 2040: ▪ Supporting sustainable economic growth; ▪ Protecting the environment; ▪ Improving quality of life for all; and ▪ Developing an innovative city region. Meeting the transport needs of residents, businesses and visitors is at the heart of the Strategy. It has seven mutually reinforcing principles which will be applied consistently as Greater Manchester's transport system is improved to ensure it meets the needs of all customers. Alongside each of the seven principles there is an ambition for Greater Manchester set out below. ▪ Integration – to enable people to move seamlessly between services on a single, high quality, easy-to-use network; providing choice and supporting low-car lifestyles, made possible by integrated land use and transport planning. ▪ The Strategy will stop viewing different modes of transport as separate networks and instead plan a single, highly connected transport system. Integration of information, fares and ticketing will improve customer information offering. A digital first approach will allow tools to be tailored to the needs of individual customers including journey planning tools, and information to encourage travel behaviour change and mode shift (Policy 3). ▪ Transport for Greater Manchester (TfGM) and local planning authorities will continue to work with developers to better integrate transport and new development in accordance with the principles of: ▫ Reducing the need to travel; ▫ Reducing the need to travel by car, and the distance travelled; ▫ Maximising accessibility by sustainable modes; ▫ Making the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes; ▫ Maximising opportunity to provide additional public transport; and ▫ Designing to encourage active travel. This will ensure that new developments are accessible by sustainable modes and reduce transport emissions and impacts on the highway network. ▪ Inclusive – to develop a fully inclusive and affordable sustainable transport system for all. ▫ TfGM will work with public transport operators and Network Rail to ensure that all transport infrastructure, vehicles and information are accessible, regardless of customers' age and mobility (Policy 5); ▫ TfGM will work with partners to better integrate accessible travel services across Greater Manchester, to increase availability and convenience for customers (Policy 6). ▪ Healthy – to develop a transport system that supports people in leading active healthy lives. ▫ TfGM will work with partners to deliver transport interventions that improve the health of Greater Manchester's residents including reducing pollution from motor vehicles (Policy 8).

Legislation / regulation	Summary of requirements
	▪ Environmentally Responsible – for Greater Manchester to be known for the quality of its urban areas, natural environments with transport emissions reduced to near zero, and new transport schemes delivering environmental enhancements whenever possible. ▫ TfGM will work with partners and key stakeholders to bring nitrogen dioxide levels on local roads within legal limits, and to reduce levels of particulate matter (Policy 9). ▫ TfGM will work with partners to reduce transport carbon emissions to support Greater Manchester's ambition to be net zero carbon by 2038, and to implement measures to ensure the transport system is resilient to climate change (Policy 10). ▪ Reliable – to develop a transport network that offers reliable journey times and gives people the confidence to use public transport. ▫ Reliable transport networks are essential to allow the economy to function and grow. Journey times by road need to be predictable, particularly when journeys are time critical. Public transport needs to be regular and dependable for passenger confidence and cycle networks need to be well maintained. ▪ Safe and Secure – to reduce deaths on Greater Manchester roads as close as possible to zero and ensure that poor perceptions of personal security are no longer a significant barrier to people using public transport or walking and cycling. ▫ TfGM will work with operators and partners to improve safety and tackle crime and anti-social behaviour on the transport network (Policy 14). ▫ TfGM will work with partners, including through the Safer Roads Partnership to deliver initiatives to improve the highway network safety, with a focus on walking and cycling (Policy 15). ▪ Well Maintained and Resilient – to bring the transport network into a good state of repair, maintain it in that state and ensure that it can withstand unexpected events, exceptional demand and severe weather. ▫ The economic performance of a city-region depends on a functioning transport network. Transport networks need to continue to provide a service even when planned or unplanned events intervene. The Greater Manchester Transport Strategy 2040 focuses principally on creating an integrated, well-co-ordinated transport system which supports a wide range of different travel needs. This includes modal principles such as 'Streets for All', Travel Demand Management, bus priority measures, and developing a comprehensive walking and cycling network (Bee Network).
Manchester City Council Local Plan: Core Strategy	The Core Strategy describes Manchester as a city today and outlines the Council's vision for Manchester in 2027 along with the planning policies which will be used to deliver that vision. Objective 5 of the Core Strategy is to improve the physical connectivity of the City, through sustainable transport networks, to enhance its functioning and competitiveness and provide access to jobs, education, services, retail, leisure and recreation. It highlights that an efficient and sustainable transport system is an essential to attract a growing, stable population to support existing and new businesses within the City, and thereby, to help contribute to sustainable economic growth ensure good access to employment. Transport is a major source of pollution particularly in the form of emissions into the air. Encouraging a modal shift away from private cars will contribute to halting climate change and reduce the negative impact on health.

Legislation / regulation	Summary of requirements
	The Local Plan states that through Policy T1 (Sustainable Transport) the Council will support proposals, such as the GPA site, that: ▪ Improve choice by developing alternatives to the car; ▪ Promote regeneration and economic vitality by relieving traffic congestion and improving access to jobs and services; ▪ Improve pedestrian routes and the pedestrian environment; ▪ Improve and develop further Manchester's cycle network; ▪ Contribute to improvements to the extent and reliability of the public transport network through safe and attractive waiting and interchange facilities, improved services and information provision; ▪ Facilitate modes of transport that reduce carbon emissions such as incorporating charging points for electric vehicles, subject to their appropriate design and location; and ▪ Take account the needs of roads users according to a broad hierarchy, in order of priority: ▫ Pedestrians and disabled people; ▫ Cyclists, public transport; ▫ Commercial access; ▫ General off peak traffic; and ▫ General peak time traffic. Policy T2 (Accessible areas of opportunity and need) outlines how all new development should provide appropriate car parking facilities taking into consideration the accessibility of the location and the potential for nearby uses to share facilities. All development proposals should also have regard to the need for disabled and cycle parking. Whilst Appendix B of the Manchester City Council Local Plan presents parking standards for cars, disabled parking, and cycling for different land use, the car parking standards do not apply to Manchester city centre, this is due to the city centre whilst being the most accessible location in Greater Manchester, it also accommodates a complex variety of development. Therefore, parking standards within Manchester city centre are on a case-by-case basis.
Manchester City Council Local Plan: Unitary Development Plan	The Manchester City Council Local Plan, Unitary Development Plan (UDP) was adopted by the Council on 21 July 1995 and has been mostly replaced by the Manchester 's Core Strategy that was adopted on 11 July 2012, outlined above, but some policies are extant (remain). This includes 'Part 1: Transport' with the overall objective to improve all forms of public transport so that it make a much greater contribution to meeting the City's travel needs and achieves a better balance between public and private transport.
City Centre Transport Strategy to 2040: Getting from A to Bee	This document was published in March 2021 and outlines the vision for Manchester city centre to be a well-connected zero-carbon city centre at the heart of the North, offering residents, employees and visitors a great place to work, live and visit. There is a target for 90% of morning peak trips into the city centre to be made on foot, by cycle or public transport before 2040. The ambitious target for Greater Manchester to be net-zero carbon by 2038 highlights the need for urgent action over the next five years, and any forthcoming developments should promote sustainable travel. Northern Powerhouse Rail (NPR) is expected to significantly contribute to an increasing number of job opportunities in Manchester city centre. This, and other, investments will also unlock further major redevelopment opportunities in the heart of the city centre, therefore it is important that transport networks are able to support the predicted growth. The document outlines seven ambitions to deliver the City Centre Transport Strategy vision: ▪ Walking as the main way of getting around the city centre;

Legislation / regulation	Summary of requirements
	▪ A city centre which is cleaner, greener and less congested. Traffic levels and pollution in the city will be reduced, through the removal of non-essential and polluting vehicles travelling into and across the city centre; ▪ More people choose to cycle to destinations within the city centre. An attractive, safe, protected and efficient cycling network into and through the city centre will help achieve this ambition; ▪ Enhancing public transport connections within the city centre, particularly surrounding public transport operating hours and service patterns to support travel needs at evenings and weekends, particularly for leisure and commuting trips; ▪ Parking in the city centre is smarter and integrated with other modes. The strategy proposes to reduce car parking within the city centre and where car parking remains in the city centre it is located appropriately and remains available to those with specific mobility needs that rely upon accessible parking provision; ▪ Goods are moved and delivered sustainably and efficiently into and within the city centre. It is proposed to shift towards cleaner, more efficient vehicles and operating processes; and ▪ Innovation is embraced where it benefits the city centre and its users in order to create a better travel experience within Manchester city centre using new technologies and emerging methods of travel.
Greater Manchester: Electric Vehicle Charging Infrastructure Strategy	The Greater Manchester Electric Vehicle Charging Infrastructure (EVCI) Strategy is a sub-strategy of the Greater Manchester Transport Strategy 2040. The Greater Manchester EVCI Strategy sets out the vision-led adaptive planning approach to the provision of charging infrastructure, to be adopted to support a rapid transition towards a carbon neutral transport system. The transition to electric vehicles (EVs) and provision of EVCI are co-dependent. Availability of and access to charging infrastructure is a critical barrier to the adoption of EVs. Having an available public charging network that people have confidence in, is an important factor in enabling the switch to an EV. To ensure that adequate provision of EV charging infrastructure is provided in new developments a number of factors need to be considered including: ▪ The development type; ▪ EV user profiles, vehicle dwell times and charging behaviour; ▪ Potential for EV Car Club requirements; ▪ Future management, operation and maintenance requirements; and ▪ Passive and Active charge point provision. New developments within Greater Manchester should make adequate provision of EVCI to meet demand and encourage and accelerate the transition to EVs. To achieve this, new developments should be required to provide a minimum number of active EV charge points and offer enough passive provision to enable efficient expansion as demand increases. The Greater Manchester EVCI Strategy recommends that for Office Developments active provision equates for 10% of total car parking spaces, and passive provision 20% of spaces.

18.3.2. Table 18-2 below summaries the Technical Standards and Guidance applicable to Transport assessments:

Table 18-2 - Technical standard and guidance for Traffic and Transport

Technical standards / guidance	Summary of requirements
Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement	Guidelines for the assessment of traffic and movement associated with all development projects subject to EIA and non-statutory environmental assessment, concentrated on impacts resulting from changes to the highway network to all modes of transport. These Guidelines are intended to complement professional judgement and the experience of trained and competent assessors. As the environmental impact of traffic and movement will vary on a case-by-case basis, the experience and expertise of the assessor will remain of primary importance, along with adequate consultation.
Guidance - Travel Plans, Transport Assessments and Statements	Provides advice on when these reports are required and what they should contain, as laid down by the Ministry of Housing, Communities and Local Government, and the Department of Levelling-Up, Housing and Communities, March 2014

18.4. Assessment Methodology

Study Area

18.4.1. The study area has been based on the likely junctions and routes that could potentially experience significant effects as a result of traffic associated with the construction and operation of the Proposed Development. This has been identified through:

- The Transport Assessment (ES (Volume 4) Appendix 18.1);
- Discussions with Manchester City Council;
- Discussions with Transport for Greater Manchester (TfGM) Highways Forecasting and Analytical Services (HFAS);
- Review of proposed traffic diversion routes; and
- Review of traffic flow data from HFAS.

18.4.2. One key meeting between the Applicant and Manchester City Council was held on 4th July 2023 where forecast traffic flows associated with the Proposed Development were discussed with the Local Planning Authority.

18.4.3. The indicative study area (blue areas) considered from an operational stand point is presented in Figure 18.1.

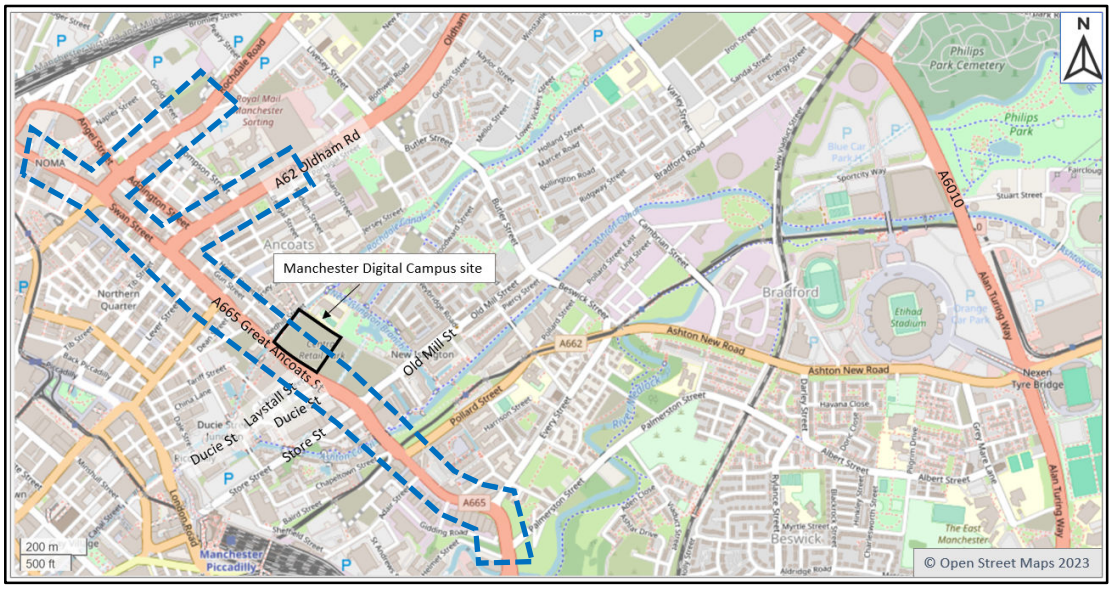


Figure 18.1 - Study Area

Scope of Assessment

18.4.4. Prior to the preparation of the Environmental Statement (ES), AtkinsRéalis prepared, discussed and submitted details of the traffic generation to Manchester City Council (MCC) which set out the forecast level of traffic associated with the Proposed Development.

18.4.5. This ES chapter considers both the construction and operational phases of the Proposed Development. Further details of these assessments are provided as part of a separate Transport Assessment (TA), see ES (Volume 4) Appendix 18.1. It is anticipated that the Proposed Development will likely be constructed over two periods, 6 months of enabling works plus 42 months of main build. Therefore, the likely number of HGV movements at any given time will be low, hence a high level and qualitative consideration of construction impacts has been made.

18.4.6. The assessment itself has been undertaken in accordance with guidance given in the Institute of Environmental Management and Assessment (IEMA) 2023 Guidelines[1] 'Environmental Assessment of Traffic and Movement' (updating and replacing the Institute of Environmental Assessment 'Guidelines for Environmental Assessment of Road Traffic' (IEMA, 1993)).

18.4.7. Consideration has been given to the potential for significant effects relating to the following issues, with reference to the standard criteria outlined in the IEMA guidelines[1]:

- Local transport network conditions pre- and post-development;
- Construction and operational vehicular trip generation;
- Construction and operational vehicles access and routeings; and
- Safety.

18.4.8. This assessment will address the following issues as relevant and available for the construction and operational phases of the Proposed Development:

[1] IEMA Guidelines: Environmental Assessment of Traffic and Movement: https://www.iema.net/media/5mrmquib/iema-report-environmental-assessment-of-traffic-and-movement-rev07-july-2023.pdf

- Impact of Proposed Development on:
  - Fear and intimidation
  - Severance
  - Accidents and Safety
  - Dust and dirt (this item is addressed in detail in the ES (Volume 2) Chapter 7: Air Quality)
  - Pedestrian and cyclist facilities
- Disruption to pedestrians, cyclists and road users due to the proposals;
- Generation of Heavy Goods Vehicle trips; and
- Impact on access.

18.4.9. Criteria used to assess the magnitude of impacts, sensitivity of receptors and overall significance is contained below. A description of the potential transport effects during the construction and operations of the Proposed Development is provided in Section 18.6. This includes the temporary effects of construction traffic on the local road network and any diversions that are required, as well as the permanent effect of development traffic on the local highway network and travel patterns.

18.4.10. All modes of transport (as relevant) are considered, including vehicles, pedestrians, cyclists, equestrians and public transport users.

Significance Methodology

18.4.11. A qualitative and quantitative approach has been undertaken in determining the significance criteria in accordance with the standard guidance for preparing EIAs contained within the IEMA guidelines[1].

18.4.12. A Transport Assessment (TA) ES (Volume 4) Appendix 18.1 has been prepared for the Proposed Development and considers the impact of the Proposed Development on transport infrastructure surrounding the Site. Whilst the TA is used as source material, it predominately identifies the compliance of the Proposed Development with local and regional transport policy as well as quantifying the transport and highway impact of the development proposal; the environmental impact of traffic generated by the Proposed Development is considered within this chapter as it requires assessment against different criteria.

18.4.13. The environmental effects of changes in road traffic resulting from the Proposed Development are assessed upon the identified roads (i.e. construction and operational phase). This is conducted in accordance with the above guidelines and includes all links upon which a significant impact could potentially occur.

18.4.14. The significance of the effect reflects the combination of the sensitivity (or importance) of the receptors affected and magnitude (or scale) of the change on the receptors.

18.4.15. In order to define the scale and extent of an assessment, the IEMA guidelines[1] recommend a screening process. The guidelines recommend two thresholds that would normally apply before the environmental effects of increases in traffic need to be looked at in more detail on a specific link.

- Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of Heavy Goods Vehicles (HGVs) will increase by more than 30%); and
- Rule 2: Include any other specifically sensitive areas where traffic flows will increase by 10% or more.

Receptor Sensitivity

18.4.16. For the transport-related effects, categories of receptor sensitivity have been defined from the principles set out in the IEMA guidelines[1], as summarised in Table 18.3.

Table 18.3 - Sensitivity of Traffic Receptors

Sensitivity	Receptors
Low	Open space Tourist / visitor attraction Historical buildings Churches
Medium	Hospitals, surgeries and clinics Parks and recreation areas Shopping areas Roads used by pedestrians with narrow footways
High	Educational institutions Retirement / care homes Roads used by pedestrians with no footways Road safety "black spots"

18.4.17. In addition, although not specifically identified within the guidelines as being sensitive, it has been assumed that individual residential and employment areas have medium sensitivity.

18.4.18. Each link in the study area will be analysed and summarised within this chapter based on receptors to demonstrate whether it is negligible, minor, moderate or major in sensitivity. Where a link is considered to be of a **high receptor sensitivity** (based on receptor types), the 'specifically sensitive' IEMA Rule 2 threshold will apply[1] as outlined below.

18.4.19. '***Rule 2*** *- The competent traffic and movement expert should include any other link or location where it is felt specific environmental or population sensitivities may occur. If these updated and replacement Guidelines have been followed, the competent traffic and movement expert would already have compiled a list of potentially affected groups and special interests and this would be the starting point (see paragraph 1.30). Normally, it would not be appropriate to consider links where traffic flows have changed by less than 10%, unless there are significant changes in the composition of traffic, e.g. a large increase in the number of HGVs*'.

Magnitude of Change/Impact

18.4.20. The magnitude of impact depends upon the category of effect being assessed, namely:

- **Driver delay** – such delays *"… are only likely to be significant when the traffic on the identified network is already at, or close to, the capacity of the system*" (IEMA guidelines[1]).
- **Pedestrian delay** – changes in the volume, composition or speed of traffic may affect the ability of people to cross roads. The guidance suggests that assessors use their judgement to determine whether pedestrian delay is a significant impact. For the purposes of this assessment, the pedestrian severance threshold levels will be applied to pedestrian delay.
- **Pedestrian and cyclist amenity** – broadly defined as the relative pleasantness of a journey, whereby it may be affected by traffic flow, traffic composition and footway width/separation from traffic. The guidance suggests a tentative threshold for judging the significance of changes in pedestrian amenity of where traffic flow (or its HGV component) is halved or doubled.

- **Fear and intimidation** – the impact of this is dependent on the volume of traffic, its HGV composition and speed, and its proximity to people or the lack or protection caused by such factors such as narrow footway widths. The guidance states that there are no commonly agreed thresholds for estimating this from known traffic and physical conditions, but it does suggest some thresholds which could be used. The criteria relating to pedestrian amenity will therefore be applied.
- **Accidents and safety** – the likelihood of accidents increasing or decreasing. The guidance suggests that professional judgement will be needed to assess the implications of local circumstances, or factors, which may elevate or lessen risks of accidents.
- **Severance** – defined as the perceived division or separation that can occur within a community due to a road and its associated traffic. Thus, an increase or decrease in traffic can have an effect in terms of severance.

18.4.21. The magnitude of the impacts is assessed in line with IEMA guidelines[1], summarised in Table 18.4.

Table 18.4 - Magnitude of Impact

Impact	Magnitude of Impact				
	Criteria	**Neutral/ Nominal**	**Slight**	**Modest**	**Substantial**
Driver delay	Peak Hours - Change in journey time* Daily – Change in Total Traffic Flows or HGV Flows	< 30%	30-60%	60-90%	> 90%
Pedestrian and cyclist delay	Change in Total Traffic Flow or HGV Flows **	< 30%	30-60%	60-90%	> 90%
Pedestrian and cyclist amenity	Change in Total Traffic Flow or HGV Flows ***	< 50%	50-60%	60-90%	> 90%
Fear & intimidation	Average 18hr Traffic flow Levels	Average Traffic <600 HGVS <1000	Average Traffic 600-1200 HGVS 1000-2000	Average Traffic 1200-1800 HGVS 2000-3000	Average Traffic >1800 HGVS >3000
Accidents & safety	Change in Total Traffic Flow or HGV Flows ****	< 30%	30-60%	60-90%	> 90%
Severance	“New Severance” – AADT	< 8000 AADT (and less than 30% change in Traffic Flow or 10% in sensitive areas)*****	< 8000 AADT	8000-16000 AADT	> 16000 AADT

**Based on guidance, driver delay is only likely to be significant when the traffic on the identified network is already at, or close to, the capacity of the system. Therefore, consideration will be given to the network capacity assessments undertaken within the TA and thresholds applied to change in traffic volumes will be applied to changes in journey times.*

*** Consideration will also be given to potential change in Pedestrian Delay "Mean pedestrian delays associated with different road crossing situations"*

**** Guidance suggests tentative threshold for judging the significance of changes in pedestrian amenity of where traffic flow (or its HGV component) is halved or doubled. Therefore, changes of less than 50% are considered negligible and for changes of more than 50%, for minor/ moderate/ substantial, the scales (changes in traffic) for other impacts have been used as a guide*

*****In lieu of specific assessment thresholds change in traffic volumes thresholds have been used.*

****** Severance thresholds are broken down as Slight, moderate and Severe, and therefore, to determine Negligible effects, it is considered reasonable that roads with AADT of less than 8000 Vehicles and changes in total traffic flow of less than 30% (IEMA Rule 1) could be considered as negligible.*

Significance Evaluation

18.4.22. In order to determine the significance of the effect, the interaction of the sensitivity of the receptor (Table 18.3) and the magnitude of the impact (Table 18.4) has been taken into account as summarised in Table 18.5. Where an effect is described as 'negligible' this means there is either no effect or that the level of any effect is so small as to be of no significance. 'Moderate' and 'Major' effects are considered to be significant in terms of EIA guidance and apply to both beneficial and adverse effects.

18.4.23. Each impact has also been identified whether it is:

- Positive (beneficial) or negative (adverse);
- Temporary or permanent; and
- Short, medium or long term.

Table 18.5 - Significance of Effect

Receptor Sensitivity	**Magnitude of Impact**			
	Neutral or Nominal	**Slight**	**Modest**	**Substantial**
High	Negligible	Minor	Moderate	Major
Medium	Negligible	Minor	Moderate	Moderate
Low	Negligible	Minor	Minor	Moderate

18.4.24. Where significant impacts have been identified, mitigation measures have been proposed where possible. The residual impact following mitigation has then been determined.

Consultation

18.4.25. As part of the scoping opinion response, MCC Highways provided a response to the scoping report providing requests and recommendations for inclusions into the ES chapter, as outlined in ES (Volume 4) Appendix 4.2. These have been considered and included within this chapter and associated appendices.

18.4.26. Trip generation estimates and supporting documentation was supplied to Manchester City Council during 2023 with agreement secured on 8th February to the approach on trip rates and mode share

secured on 8th February 2024. These predicted levels of traffic have been reviewed as the source (the TRICS database) is often updated.

18.4.27. Consultation continued with TfGM's traffic modelling team (HFAS, Highway Forecasting and Analytical Services) starting in May 2023 and concluding in September 2024 as updates were provided on mode share.

18.4.28. Following consultation with Manchester Council on 29th May 2024 a Taxi Strategy was introduced into the Transport Assessment to control the location of drop-offs and pick-ups away from residential roads where there are already parking restrictions, and instead ensure these occur in the layby provided on Great Ancoats Street, immediately outside the Site.

18.5. Baseline Conditions

Sources of Information

18.5.1. Various datasets have been used in the assessment presented in this chapter and these include:

- Transport for Greater Manchester (TfGM) Highways Forecasting and Analytical Services (HFAS) traffic flow modelling outputs;
- Site specific construction flows (Proposed Construction Phase); and
- Trip Rate Information Computer System (TRICS) Database (Proposed Operation).

Existing and Proposed Traffic Conditions

18.5.2. Baseline and proposed traffic data was taken from the HFAS traffic modelling for 22 locations within the study area. Annual Average Daily Traffic (AADT) and Annual Average Weekday Traffic (AAWT) for the year 2024 was utilised as the baseline, and the year 2030 was utilised for the year the Proposed Development opens and becomes operational.

TRICS Database

18.5.3. The traffic generated by the Proposed Development has been established by reference to the latest version of the TRICS database and the accompanying "TRICS Good Practice Guide – 2024"[2]. In summary, TRICS is a national database of traffic surveys at different land use sites across the UK and Ireland which can be combined for sites of the same use and similar size and location to predict a trip rate that can be applied to the size of a proposed development to forecast the number of associated new trips by different transport modes. It was developed in the 1980s and is regularly updated with newer traffic data, with older data being retired, and it is widely used and recognised throughout the transport planning industry.

Vehicular Access

18.5.4. The Site is bounded to the southwest by A665 Great Ancoats Street which is a main arterial route to the north of Manchester city centre. It takes a southeast/ northwest trajectory. It is largely two lanes in each direction with a 30mph speed limit and provides access further to the east, to the A57(M) to the south and the A62 Oldham Road and other roads to the north and further west. It is part of a ring road around

[2] TRICS Good Practice Guide – 2024: TRICS Good Practice Guide 2024

the city centre. Old Mill Street runs along the southeastern boundary of the Site. Old Mill Street is subject to 20mph restrictions and allows access from A665 Great Ancoats Street to A6010 Alan Turing Way to the east.

18.5.5. The existing vehicle access points to the Site are shown in Figure 18.2. The main access point to the former use on A665 Great Ancoats Street remains, still receiving a traffic signal, although physically blocked off. Similarly, the access point off Old Mill Street next to the pharmacy and school access also remains in place and blocked-off; it is not intended that this would form access to the Proposed Manchester Digital Campus Site. Also worthy of a mention is the adjacent Hugh Oldham Way used for access to parking for the pharmacy on Old Mill Street and access to the school. This will also not be used for access to the Proposed Development other than for inbound emergency vehicles.

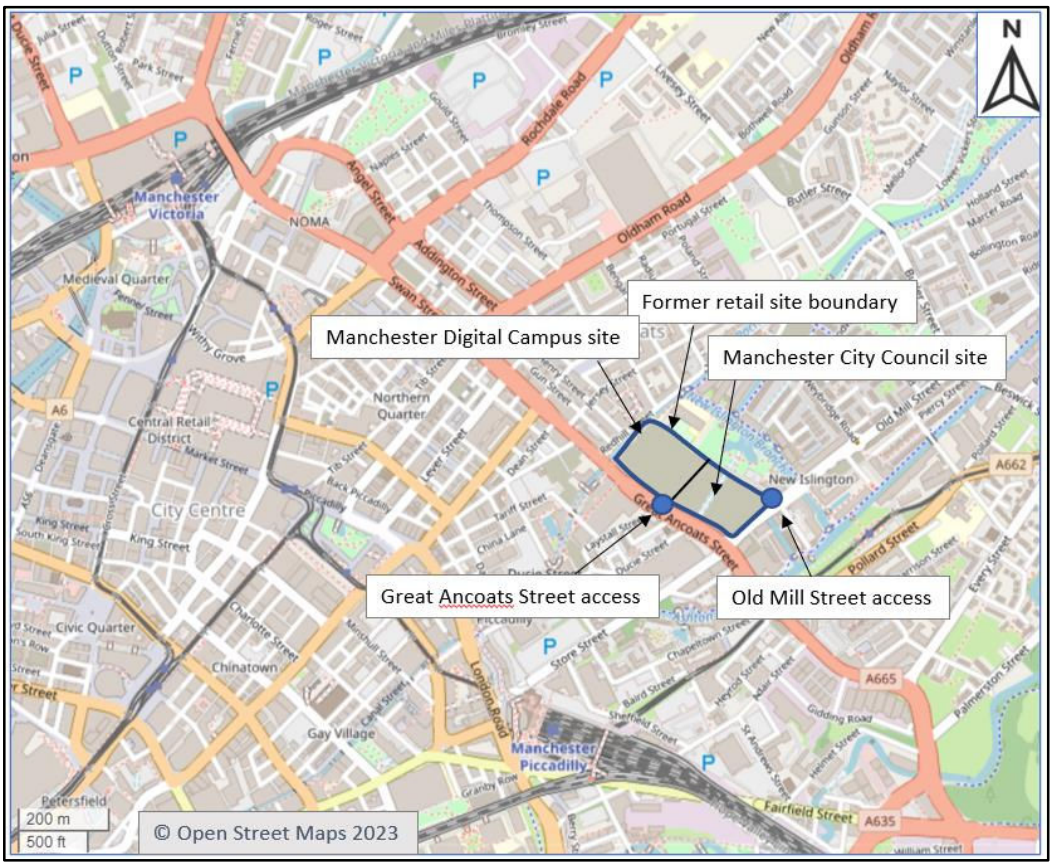


Figure 18.2 - Vehicle access points

Public Transport Opportunities – General

18.5.6. There are ample public transport opportunities in the vicinity of the Site. The nearest bus, metro / tram stop and train stations are shown in Figure 18.3. The metro is a tram service marketed as Metrolink.

18.5.7. Shudehill Interchange and Piccadilly Gardens are also major bus hubs.

18.5.8. The closest tram stop is New Islington on the Ashton-under-Lyne line; however, other tram stops are also within reasonable walking distance which are considered in more detail below.

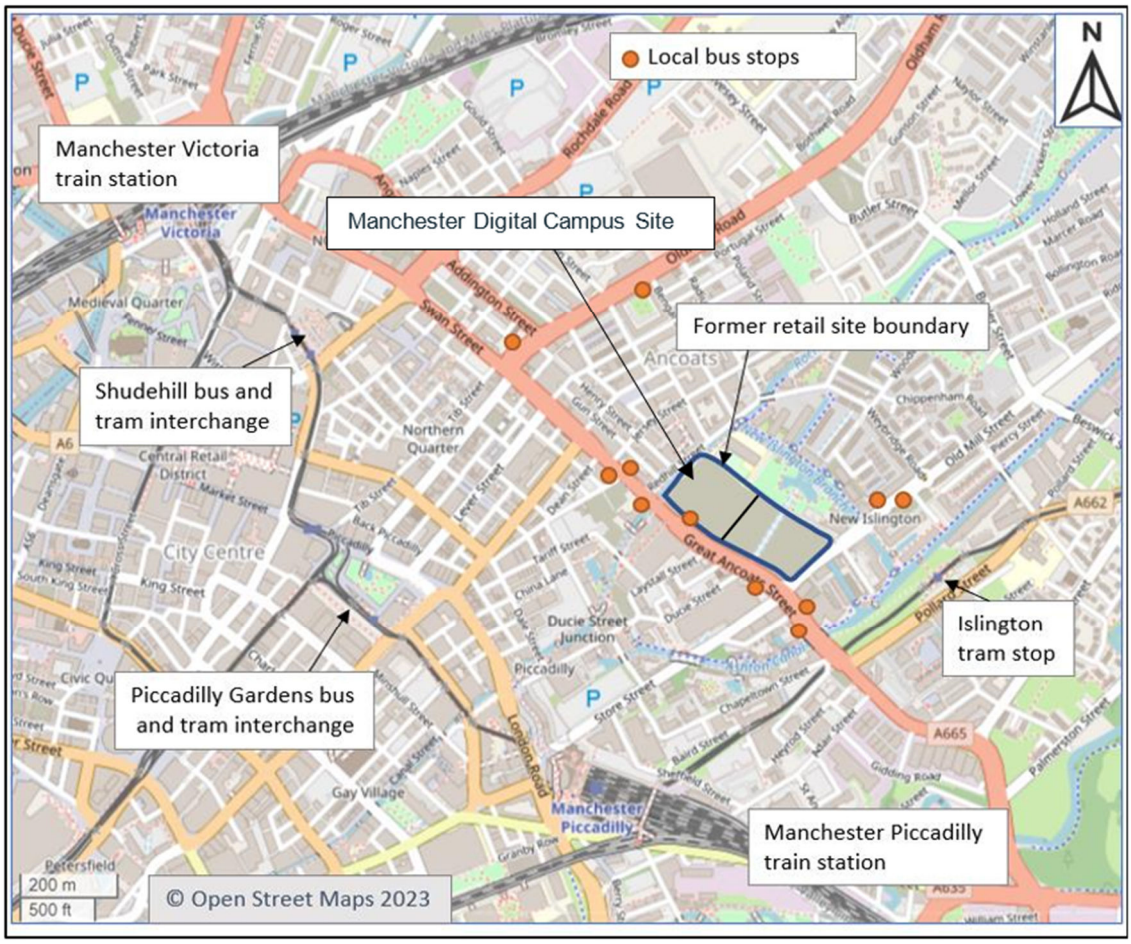


Figure 18.3 - Public Transport Stops and Stations

Public Transport Opportunities – Bus

18.5.9. Within a 400m walking distance of the Site, there are 11 peak hour buses coming into Manchester and departing in the evening, passing the Site and using the bus stops on Great Ancoats Street.

18.5.10. Further afield, Piccadilly Gardens Bus Station at a walking distance of around 900m (12 minutes) provides 70-100 buses in each peak hour. Similarly, the Shudehill Interchange at a walking distance of around 1.1km (15 minutes) provides approximately 50-60 buses per peak hour.

18.5.11. The area is well served by the local bus network covering a wider range of destinations within Greater Manchester. Whilst there is moderate coverage on Great Ancoats Street passing the Site, the services provided within walking distance at the Shudehill Interchange and at Piccadilly Gardens demonstrate that the Site is very well served by bus services.

Public Transport Opportunities – Train

18.5.12. The nearest train station to the Site is Manchester Piccadilly, which is located to the east of Manchester city centre and a 12-minute walk from the Site. Managed by Network Rail, Piccadilly is the busiest train station in Manchester with over 30 million passenger entries and exits between April 2019 and March 2020. As of March 2020, it is the third busiest station in the United Kingdom outside of London.

18.5.13. There are six train operating companies across the 14 platforms at Piccadilly operating regular services: Cross-country, East Midlands Railway, Northern, TransPennine Express, Transport for Wales and Avanti West Coast. These allow for long distance and cross-country services including to London, Birmingham, Nottingham, Edinburgh, Bristol, Cardiff, Plymouth and Southampton. Regional services provide access to cities such as Liverpool, Leeds, Sheffield, Newcastle and York. There are also local commuter services available from the station to destinations around Greater Manchester.

18.5.14. The train station is accessible for disabled users. Wheelchairs are available at the station and ramp access can be provided to the trains. There is step-free coverage across the station and staff are available to provide assistance.

18.5.15. Car parking facilities are also available at Piccadilly. Long stay parking (including 856 spaces) is available 24 hours a day, 7 days a week and is chargeable. In addition, there is a short stay car park, drop-off area, and a taxi rank which is located at the Fairfield Street exit of the station.

18.5.16. Manchester Victoria is also a busy train station, tram stop, and location of some bus stops, located 1.5 km / 20 minutes walking distance from the Site, forming a major interchange for the Metrolink system. It offers regional and local services to a range of destinations across northern England.

18.5.17. Other train stations in Manchester city centre include Oxford Road and Deansgate, however these are located over a 20 minute walk away.

Public Transport Opportunities – Tram / Metro

18.5.18. New Islington is the closest tram stop to the Site, located a 7 minute walk away on Pollard Street. Other tram stops within walking distance include the Metrolink at Piccadilly station and the hub at Piccadilly Garden, both located a 12 minute walk away.

18.5.19. The typical frequency of the trams on all lines is every 12 minutes. Stops serviced by more than one line, most of these being in the city centre, will have trams arriving more frequently. For New Islington, Piccadilly, Piccadilly Gardens and Shudehill tram stops, the direct connections to line ends are listed in Table 18.6. It is worth noting that as well as these end points, these four tram stops also afford access via connecting trams in the city centre to all the places listed in the table as well as East Didsbury, Trafford Centre and Rochdale (via Oldham).

Table 18.6 - Direct Metro Links

	Local Metro station			
	New Islington	Piccadilly	Piccadilly Gardens	Shudehill
Direct line ends	Ashton-under-Lyne (incl. Etihad Campus)	Ashton-under-Lyne (incl. Etihad Campus)	Ashton-under-Lyne (incl. Etihad Campus)	Manchester Airport (incl. Wythenshawe)
	Eccles (incl. Salford Quays)	Eccles (incl. Salford Quays)	Eccles (incl. Salford Quays)	Altrincham (incl.Sale)
	MediaCityUK	MediaCityUK	MediaCityUK	Bury
		Altrincham (incl.Sale)	Altrincham (incl.Sale)	
		Bury	Bury	

18.5.20. Not all trams travel the full distance to the line ends as listed. The last tram times are around midnight, depending on destination.

Access for Pedestrians and Cyclists

18.5.21. Pedestrians can approach the Site along the A665 Great Ancoats Street, Old Mill Street frontage or via the bridge over Rochdale Canal from Redhill Street, but currently the Site is secured and no site access is allowed. Access on the northeast side to and from Cotton Field Park is restricted by a retaining wall. Ultimately pedestrian access desire lines will be determined by the proposed building locations and new public realm within the proposals.

18.5.22. In the immediate vicinity of the Site there is access provision for both pedestrians and cyclists. There are wide footpaths on both sides of the carriageway along A665 Great Ancoats Street and Old Mill Street. At the signalised junction on Great Ancoats Street previously used as the main access to the retail park, dropped kerbs are provided on all arms of the junction and central island reserves are provided due to the width of the main carriageway, Great Ancoats Street having a kerbed central reservation here. On the Laystall Street arm of the junction, tactile paving is also provided to allow safe crossing for pedestrians.

18.5.23. At the A665 Great Ancoats Street / Old Mill Street signalised junction, dropped kerbs and tactile paving are also provided to assist pedestrian access to the Site. Additionally, a controlled pedestrian crossing is located to the north of the former main access junction on A665 Great Ancoats Street. This junction also has advanced stop lines on the eastern, southern and western arms of the junction to aid cyclists. Furthermore, the National Cycle Network (NCN) on-road Route 66 runs east / west at this junction along Old Mill Street towards Failsworth and along Store Street to Piccadilly station. This can be seen in Figure 18.4 below. It crosses NCN route 60 which affords cycle access across west Manchester.

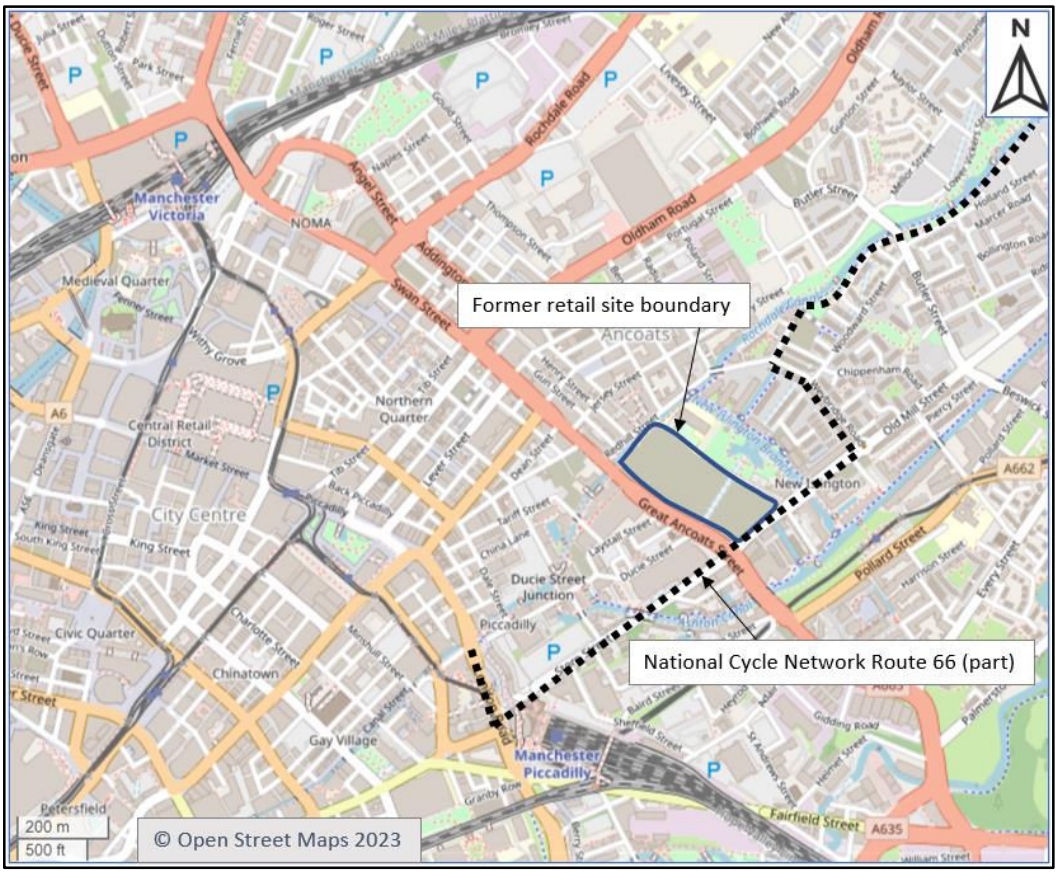


Figure 18.4 - National Cycle Network

18.5.24. It is likely that most of the pedestrian trips to the Site will come from Piccadilly Station, Piccadilly Gardens and New Islington.

18.5.25. From Piccadilly Station, the most direct route to the Site is a 12-minute walk along Ducie Street and Laystall Street. There is however an alternative walking route from Piccadilly to the Site along Store Street (which is the route proposed for rail passengers to and from Manchester Piccadilly). Store Street is wider and is surrounded by employment, residential and leisure use buildings as well as car parks and small green areas. This is therefore considered to present a safer environment for pedestrians routeing to the Site from Piccadilly. However, it is noted that the route involves passing through a tunnel under Piccadilly Station. This can be rather damp and dark, particularly at night which can cause safety concerns for pedestrians, although it is a popular route between Piccadilly and New Islington following new residential areas that continue to be developed around Piccadilly Basin.

18.5.26. From Shudehill Interchange, the walk to the Site is along busy, city centre streets, including Shudehill and the A665 Ring Road / Swan Street and Great Ancoats Street. The route is considered relatively safe.

18.5.27. From Piccadilly Gardens, the most direct route to the Site is along a mix of Newton Street and Port Street. Alternative routes in the area are available, but similar to the route from Piccadilly, these streets are narrow and sparsely used which can cause concerns to personal security. A secondary route has been identified to the Site from Piccadilly Gardens. This route continues along Newton Street and onto A665 Great Ancoats Street. These streets are wider and more pedestrian friendly as they are generally busier, well-lit and include residential and commercial buildings.

18.5.28. The pedestrian route from New Islington, which includes crossing the Ashton Canal does not raise concerns regarding pedestrian safety as the route along Old Mill Street is wide and open, faces residential buildings and provides street furniture and planting to create the feel of a safer environment. There are also a series of minor deviations over the Ashton Canal. There is a slightly longer alternative route using the pavement alongside the A665 Great Ancoats Street carriageway and Pollard Street.

Existing Receptors

18.5.29. As part of this assessment, it is necessary to understand the types of receptors and their categorised sensitivity as set out in Table 18.3. Figure 18.5 illustrates some of the key receptors within the study area and within a 500m walk.

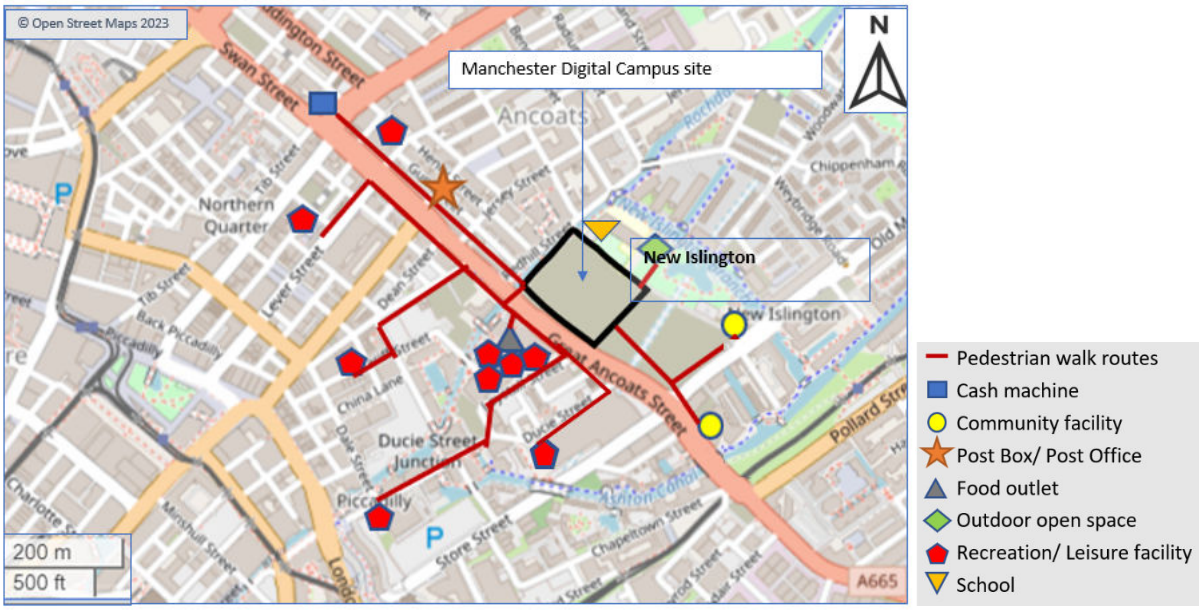


Figure 18.5 - Local Places of Interest / Potential Receptors

18.5.30. Although Figure 18.5 is not an exhaustive list of the receptors within the study area, it provides a satisfactory indication of the main receptors surrounding the Proposed Development. Table 18.7 therefore presents the various receptors along each of the main roads within the study area and the associated sensitivity of each receptor.

Table 18.7 - Existing Sensitivity of Receptors

Link ID	Road	Local Receptors (see Table 18.3)	Overall Sensitivity of Road
		Medium	
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	Shopping areas	Medium
2	Corporation Street (south of Ring Road)	Shopping areas	Medium
3	Rochdale Road (south of Ring Road) ('Shudehill')	Shopping areas	Medium
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	Shopping areas	Medium
5	A664 Rochdale Road (north of Angel Street)	Shopping areas	Medium
6	A665 Swan Street westbound only (between Oldham Rd and Rochdale Road)	Shopping areas	Medium
7	A62 Oldham Road (north of Adlington Street)	Shopping areas	Medium
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	Shopping areas	Medium
9	Lever Street northbound only	Shopping areas	Medium
10	George Leigh Street northbound only	Shopping areas	Medium

Link ID	Road	Local Receptors (see Table 18.3)	Overall Sensitivity of Road
		Medium	
11	A665 Great Ancoats Street (between Lever Street and Newton Street)	Shopping areas	Medium
12	Newton Street	Shopping areas	Medium
13	Blossom Street southbound only	Shopping areas	Medium
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	Shopping areas	Medium
15	Laystall Street northbound only	Shopping areas	Medium
16	A665 Great Ancoats Street (between Laystall Street and Ducie Street)	Shopping areas	Medium
17	A665 Great Ancoats Street (between Ducie Street and Store Street)	Shopping areas	Medium
18	Old Mill Street	Shopping areas	Medium
19	Pollard Street	Shopping areas	Medium
20	A665 Great Ancoats Street (between Pollard Street and Adair Street)	Shopping areas	Medium
21	Adair Street	Shopping areas	Medium
22	A665 Great Ancoats Street (east of Adair Street)	Shopping areas	Medium

18.5.31. Based on the criteria set out in Table 18.3, Table 18.7 demonstrates that:

- As all of the receptors are within the area of Great Ancoats Street, they can be classed as 'Shopping areas' which are of Medium Sensitivity;
- There are also many residential and office buildings within the study area but these are not included in the criteria; and
- There are no locations of High Sensitivity.

Existing Traffic Conditions

Peak Hour Traffic Volumes

18.5.32. Based on the 2024 traffic flow data provided by HFAS as discussed in Section 18.5 the weekday AM and PM peak traffic periods are:

- AM Peak is between 08:30 and 09:30; and
- PM Peak is between 17:00 and 18:00.

18.5.33. The volume of traffic and HGVs along each link within the study area is presented in Table 18.8 and Table 18.9. Figure 18.6 and Figure 18.7 presents a link schematic for the study area.

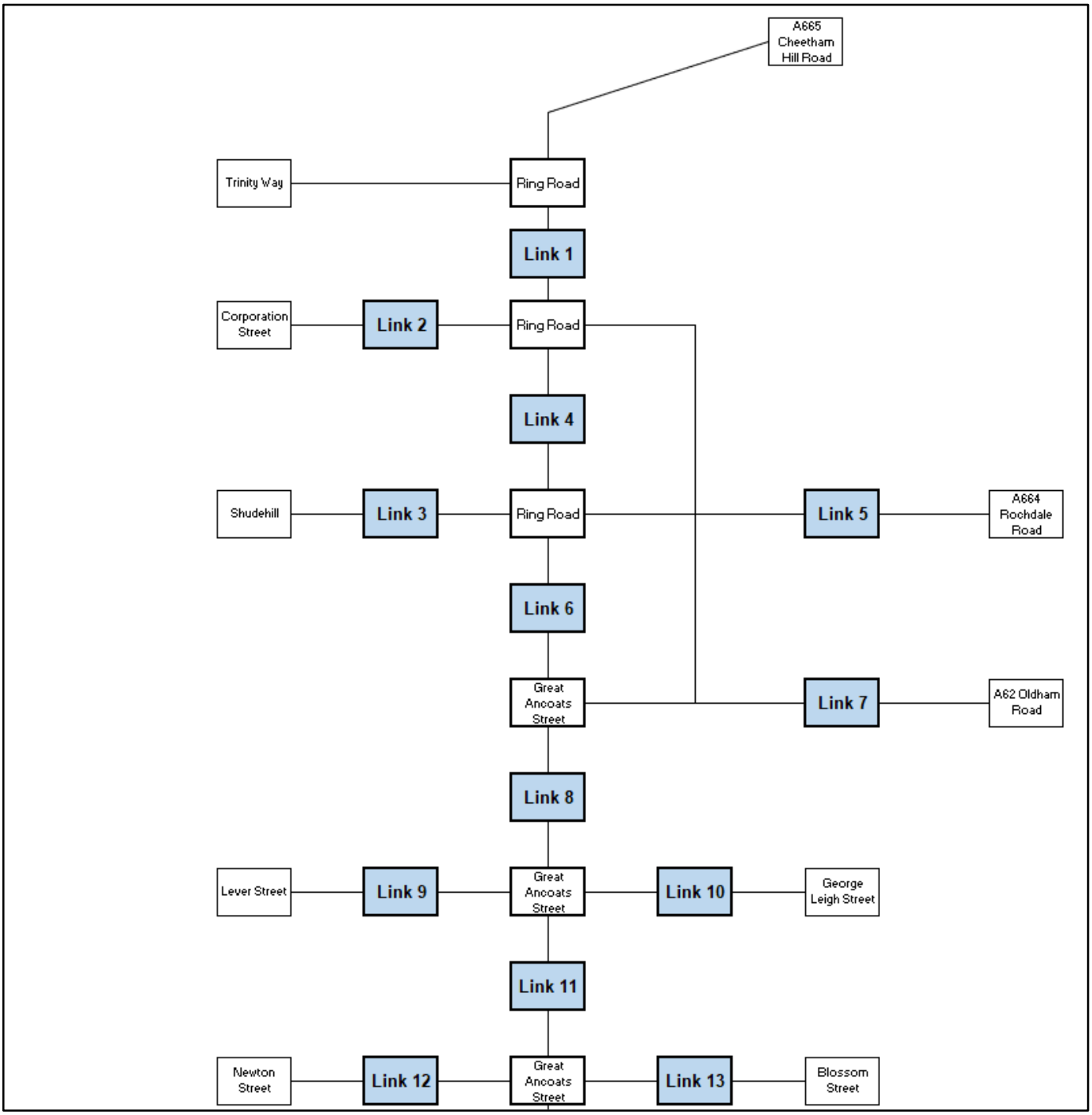


Figure 18.6 - Link Schematic for Study Area (northern section)

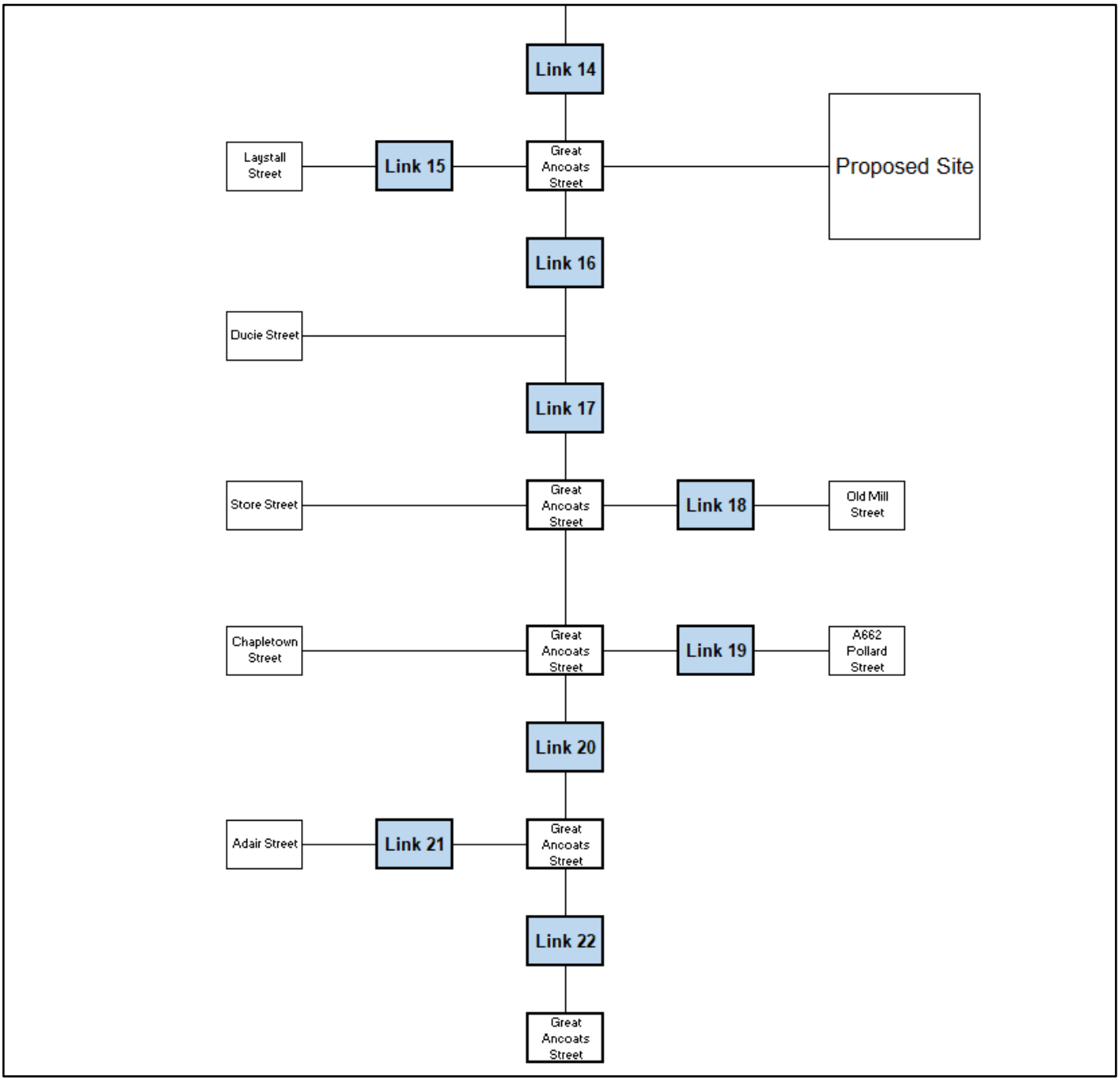


Figure 18.7 - Link Schematic for Study Area (southern section)

18.5.34. A review of the traffic volumes along each link are provided in Table 18.8.

Table 18.8 - Existing Two-way Traffic Flows (2024 AM and PM Peak Periods)

Link ID	Link Description	AM Peak (Existing)			PM Peak (Existing)		
		Veh Flow	HGV	HGV %	Veh Flow	HGV	HGV %
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	1932	99	5%	2644	135	5%
2	Corporation Street (south of Ring Road)	448	23	5%	443	23	5%

Link ID	Link Description	AM Peak (Existing)			PM Peak (Existing)		
		Veh Flow	HGV	HGV %	Veh Flow	HGV	HGV %
3	Rochdale Road (south of Ring Road) ('Shudehill')	651	33	5%	844	43	5%
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	1130	58	5%	1214	62	5%
5	A664 Rochdale Road (north of Angel Street)	867	44	5%	938	48	5%
6	A665 Swan Street westbound only (between Oldham Rd and Rochdale Road)	987	50	5%	1122	57	5%
7	A62 Oldham Road (north of Adlington Street)	1376	70	5%	1486	76	5%
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	1773	90	5%	2120	108	5%
9	Lever Street northbound only	191	5	3%	335	9	3%
10	George Leigh Street northbound only	33	1	3%	24	1	3%
11	A665 Great Ancoats Street (between Lever Street and Newton Street)	1730	88	5%	1860	95	5%
12	Newton Street	448	13	3%	472	13	3%
13	Blossom Street southbound only	97	3	3%	82	2	3%
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	2114	108	5%	2095	107	5%
15	Laystall Street northbound only	145	4	3%	382	11	3%
16	A665 Great Ancoats Street (between Laystall Street and Ducie Street)	2449	125	5%	2509	128	5%
17	A665 Great Ancoats Street (between Ducie Street and Store Street)	1912	98	5%	1534	78	5%
18	Old Mill Street	309	9	3%	480	13	3%
19	Pollard Street	723	37	5%	182	9	5%
20	A665 Great Ancoats Street (between Pollard Street and Adair Street)	1943	99	5%	1248	64	5%
21	Adair Street	543	15	3%	499	14	3%
22	A665 Great Ancoats Street (east of Adair Street)	1799	92	5%	2214	113	5%

Daily Traffic Volumes

18.5.35. Given that the assessment criteria for the majority of effects set out in Table 18.4 is based on changes in 24hr AADT and 18hr AAWT flows, a review of the 18 / 24hr flows along the various links of the study area has been undertaken.

18.5.36. Table 18.9 presents the 18hr AAWT and 24hr AADT flows for each of the numbered links in Figure 18.6.

Table 18.9 - Existing (2024) 18hr AAWT and 24hr AADT flows

Link ID	Link Description	Link Flows		HGV %	
		18hr	24hr	18hr	24hr
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	28530	27357	5%	5%
2	Corporation Street (south of Ring Road)	5554	5326	5%	5%
3	Rochdale Road (south of Ring Road) ('Shudehill')	9282	9308	5%	5%
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	14825	14536	5%	5%
5	A664 Rochdale Road (north of Angel Street)	11236	11266	5%	5%
6	A665 Swan Street westbound only (between Oldham Rd and Rochdale Road)	12897	13557	5%	5%
7	A62 Oldham Road (north of Adlington Street)	17812	17080	5%	5%
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	24043	26480	5%	5%
9	Lever Street northbound only	3248	3577	3%	3%
10	George Leigh Street northbound only	560	616	3%	3%
11	A665 Great Ancoats Street (between Lever Street and Newton Street)	22254	24510	5%	5%
12	Newton Street	5730	6310	3%	3%
13	Blossom Street southbound only	1115	1228	3%	3%
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	24237	24284	5%	5%
15	Laystall Street northbound only	3245	3050	3%	3%
16	A665 Great Ancoats Street (between Laystall Street and Ducie Street)	30882	29021	5%	5%
17	A665 Great Ancoats Street (between Ducie Street and Store Street)	21544	23728	5%	5%
18	Old Mill Street	4889	5384	3%	3%
19	Pollard Street	5735	6317	5%	5%
20	A665 Great Ancoats Street (between Pollard Street and Adair Street)	25272	27834	5%	5%
21	Adair Street	6501	7160	3%	3%

Link ID	Link Description	Link Flows		HGV %	
		18hr	24hr	18hr	24hr
22	A665 Great Ancoats Street (east of Adair Street)	24935	27462	5%	5%

Road Safety Information

18.5.37. This section provides a review of current road safety conditions in the vicinity of the Proposed Development. Due to the limited information available, this is restricted to a review of the collision history of the local road network.

18.5.38. Collision data was obtained from crashmap.co.uk[3] for the area surrounding the Proposed Development. The data obtained covers the five-year period from 2018 to 2022. Figure 18.8 shows the location of the collisions recorded within the vicinity of the Proposed Development.

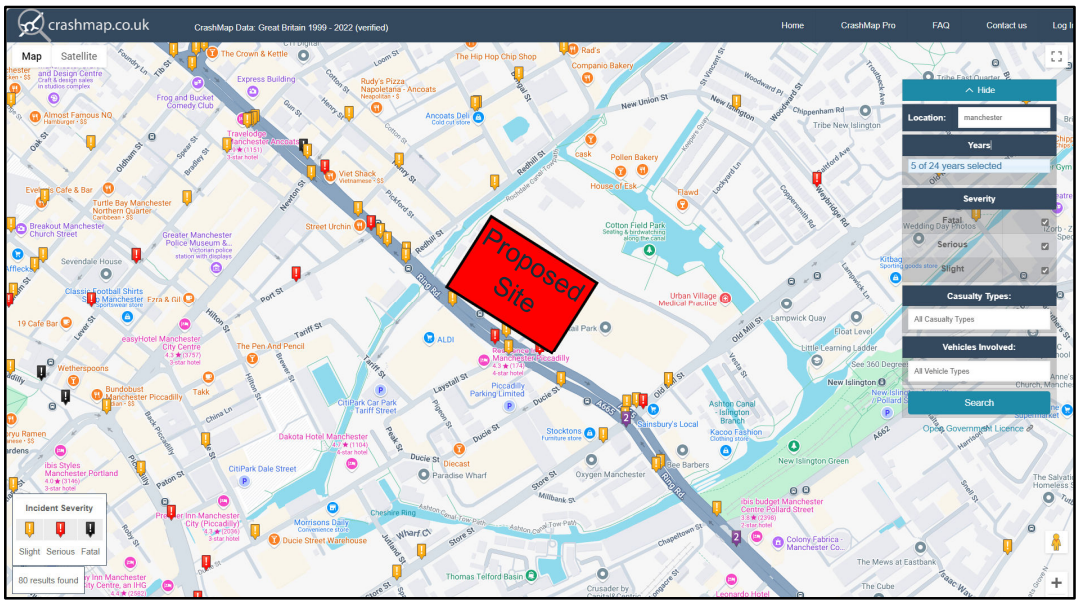


Figure 18.8 - Collision Data (2018 - 2022)

18.5.39. The type of collisions ranked by severity have been summarised in Table 18.10.

Table 18.10 - Type of Collisions

Slight	Serious	Fatal
64	13	3

18.5.40. Figure 18.8 and Table 18.10 show that three fatal and thirteen serious collisions have occurred in the vicinity of the Proposed Development. There have also been sixty four slight collisions recorded over the five-year period.

[3] Crashmap: CrashMap - UK Road Safety Map

18.5.41. No information has been provided on the nature of the incidents and therefore AtkinsRéalis is unable to determine the causality.

18.5.42. The Proposed Development will endeavour to limit the potential impacts on road safety by ensuring that:

- Sustainable travel modes are encouraged in preference to use of the private car;
- The development is designed to the necessary design standards, including servicing areas and access / circulation roads; and
- Access is of sufficient size and specification to enable all sizes of vehicle likely to visit the Site to enter and leave in a safe manner.
- Construction road safety measures are also considered as part of the CTMP and CEMP, outlined within section 18.7.

Data Gaps

18.5.43. At the time of carrying out this assessment the exact details of the construction phases and its associated stages could not be confirmed. Nonetheless, robust assumptions have been adopted following best practice.

18.6. Potential Impacts

Construction phase

18.6.1. It is anticipated that the Proposed Development will likely be constructed over a period of four years (6 months of enabling works and 42 months of main works).

18.6.2. Given the nature of the development, it is considered that the level of daily construction traffic associated with the Proposed Development will be low and impacts will be negligible to slight.

18.6.3. Nevertheless, a high-level assessment of construction traffic and its associated effects has been undertaken based on the levels of traffic increase required to trigger and assess the potentially significant environmental effects associated with traffic and transport, in accordance with IEMA guidelines[1] Rule 1 and Rule 2 previously outlined.

18.6.4. Potential impacts include:

- Changes in traffic volumes and flow levels (i.e. level of construction traffic) including HGVs;
- Changes to driver journey times; and
- Changes in mean pedestrian delay.

18.6.5. Any construction-related impacts would be temporary and short term.

Operation phase

18.6.6. A further assessment of traffic and transport impacts are presented within the TA submitted in support of the planning application. This includes assessments of the Site's accessibility in terms sustainable travel modes (walk, cycle and public transport), trip generations and traffic distribution through the study area at peak times without and within development for base and future year assessments.

18.6.7. For this assessment, a worst-case scenario is considered which includes existing traffic (opening year 2030) plus all traffic associated with the Proposed Development. The development's operation and effects during peak times and on a daily basis have also been assessed.

18.6.8. Potential impacts associated with the operational phase include:

- Driver Delay;
- Pedestrian and Cycling Delay;
- Pedestrian and Cyclist Amenity;
- Fear and Intimidation;
- Accidents and Safety; and
- Severance.

18.7. Assessment of Effects

Construction Phase

Embedded Mitigation

18.7.1. Disruption caused by construction traffic on the local highway will be kept to a minimum by the Outline Construction Environmental Management Plan (OCEMP) that will then be updated by the contractor to a full Construction Environmental Management Plan (CEMP). This will include the implementation of measures to ensure that construction traffic travels on the strategic road network whenever possible, and also travels outside of the AM and PM peak traffic hours, in addition to general construction practices.

18.7.2. A Construction Traffic Management Plan (CTMP) has been prepared in addition to a OCEMP which sets out a framework to be taken forward by the construction contractor to mitigate any potential impacts. This CTMP will consider construction traffic volumes, movements and timing, and their management including how best to accommodate construction staff traffic from a sustainable movement point of view.

18.7.3. The construction of the Proposed Development may require the transportation of hazardous material, such as asphalt waste containing coal tar. If this scenario occurs, this will be carried out using specialised transportation firms that fully accord with the relevant transportation guidance that would apply. This will include routing agreements to ensure that abnormal loads travel outside the peak hour and are routed appropriately.

18.7.4. The only potential source of dust and dirt arising directly from the Proposed Development would be during the construction phase. Standard management practices, such as washing down of wheels, would be included within the CEMP to minimise any potential impacts.

18.7.5. A construction site compound will be set up within the Proposed Development construction site to allow construction vehicles to park on site and off the local highway network. It will also facilitate safe access and egress of construction vehicles which will be able to access / egress the site in forward gear. The construction site will be accessed from Great Ancoats Street close to the Laystall Street junction using only left-in and left-out manoeuvres. If that access is unavailable a secondary access at the Old Mill Street/ former retail service access junction (adjacent to Hugh Oldham Way) is proposed to be used; but construction traffic will only use the short length of Old Mill Street between this access point and Great Ancoats Street.

Construction Effects

18.7.6. Table 18.11 sets out a theoretical test whereby base traffic flows have been increased by 30% (10% on links considered to be of high sensitivity) to identify the changes in traffic volumes (i.e. level of construction traffic) required to trigger a detailed assessment of the impact of construction traffic.

Table 18.11 - Increase in Existing Traffic Volumes required to exceed Threshold for Assessment

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	24hr AADT Flows					
			2024 Existing Traffic		2024 Existing Traffic + 30% Increase		Increase in Traffic	
			Veh	HGV	Veh	HGV	Veh	HGV
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	Medium	27357	1395	35565	1814	8207	419
2	Corporation Street (south of Ring Road)	Medium	5326	272	6924	353	1598	81
3	Rochdale Road (south of Ring Road) ('Shudehill')	Medium	9308	475	12100	617	2792	142
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	Medium	14536	741	18897	964	4361	222
5	A664 Rochdale Road (north of Angel Street)	Medium	11266	575	14646	747	3380	172
6	A665 Swan Street westbound only (between Oldham Rd and Rochdale Road)	Medium	13557	691	17624	899	4067	207
7	A62 Oldham Road (north of Adlington Street)	Medium	17080	871	22205	1132	5124	261
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	Medium	26480	1350	34424	1756	7944	405
9	Lever Street northbound only	Medium	3577	100	4650	130	1073	30
10	George Leigh Street northbound only	Medium	616	17	801	22	185	5
11	A665 Great Ancoats Street (between Lever Street and Newton Street)	Medium	24510	1250	31863	1625	7353	375
12	Newton Street	Medium	6310	177	8203	230	1893	53
13	Blossom Street southbound only	Medium	1228	34	1596	45	368	10
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	Medium	24284	1238	31569	1610	7285	372
15	Laystall Street northbound only	Medium	3050	85	3965	111	915	26

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	24hr AADT Flows					
			2024 Existing Traffic		2024 Existing Traffic + 30% Increase		Increase in Traffic	
			Veh	HGV	Veh	HGV	Veh	HGV
16	A665 Great Ancoats Street (between Laystall Street and Ducie Street)	Medium	29021	1480	37727	1924	8706	444
17	A665 Great Ancoats Street (between Ducie Street and Store Street)	Medium	23728	1210	30847	1573	7118	363
18	Old Mill Street	Medium	5384	151	7000	196	1615	45
19	Pollard Street	Medium	6317	322	8212	419	1895	97
20	A665 Great Ancoats Street (between Pollard Street and Adair Street)	Medium	27834	1420	36184	1845	8350	426
21	Adair Street	Medium	7160	200	9308	261	2148	60
22	A665 Great Ancoats Street (east of Adair Street)	Medium	27462	1401	35701	1821	8239	420

18.7.7. Table 18.11 demonstrates that due to the high volumes of baseline traffic on the highway network / study area, a large increase in construction traffic associated with the Site would be required to exceed the IEMA thresholds for a detailed assessment. It is unlikely that the anticipated volume of construction traffic would have a material impact on the existing traffic flows.

18.7.8. The HGV construction traffic will be prohibited from using the minor roads (Links 9, 10, 12, 13, 15, 18 and 21). The A665 Great Ancoats Street will carry most of the HGV traffic which means 363 HGV movements (at link 17 between Ducie Street and Store Street) would be required in a day to trigger the IEMA guidelines threshold for further assessment.

18.7.9. It is estimated that the level of daily HGV movements, at its peak, is very unlikely to exceed 363 movements per day which in terms of HGV movements and IEMA guidelines threshold, would mean no links are at risk of requiring further assessment.

18.7.10. In terms of the minimum number of total construction vehicles required per day to exceed IEMA guidelines (discounting the prohibited Links 9, 10, 12, 13, 15, 18 and 21), 1,598 two-way daily flows are required on Link 2 Corporation Street. Given that as a worst case scenario, 81 HGV two-way daily movements could occur on Corporation Street during peak construction times, 1,598 two-way daily construction vehicle movements associated with staff, deliveries, ad hoc work etc (excluding HGVs) would be required. As previously mentioned, the construction of the development will likely be over a period of 48 months, and it is unlikely that the level of two-way daily construction vehicle movements will exceed 1,598 on Corporation Street. A more realistic figure would be between 200-300 two-way daily construction vehicle movements. This would follow a well-defined construction traffic route along Great Ancoats Street and therefore have no impact on Corporation Street or any of the other less trafficked streets within the study area.

18.7.11. Given the above, it is reasonable to assume that the construction traffic will have a negligible impact on all links within the study area as the 30% threshold is not likely to be breached. Therefore, based on the magnitude of criteria in Table 18.4, construction traffic is likely to result in a negligible impact.

18.7.12. The effect from construction traffic will be temporary / adverse and the significance of effect is considered to be Negligible and therefore not significant.

Operation Phase

Embedded Mitigation

18.7.13. In discussions with HFAS and their own discussions with Manchester City Council it has been agreed that the additional traffic should not be mitigated by highway improvements given recent upgrades and the potential offered by the public transport network.

18.7.14. The Proposed Development will be supported by a Framework Travel Plan (FTP), ES (Volume 4) Appendix 18.4 which will seek to reduce the number of trips by single occupant private cars by encouraging and promoting travel by sustainable travel modes (walking, cycling and public transport). The FTP will manage and mitigate the long-term transport demands arising from the Proposed Development and will be submitted as part of the planning application supporting this chapter.

18.7.15. As part of the Proposed Development there is to be 320 cycle spaces provided on site, with 50 accessible parking spaces provided plus 5 spaces associated with facilities management and operations with 15 electric vehicle (EV) charging points. Sustainable travel models and measures to increase the Site connectivity are included within the FTP.

Operation Effects

Peak Operation

18.7.16. Table 18.12 presents the forecast traffic generation predicted during the 2030 opening year and the Proposed Development traffic for both the AM and PM Peak periods as identified in Paragraph 18.5.32. It also presents the percentage change in total vehicle flows and HGV flows as a result of the Proposed Development (Forecast vs Forecast + Development traffic Flows).

Daily Operation

18.7.17. Table 18.13 presents the forecast traffic generation predicted during the 2030 opening year and the Proposed Development traffic for both an average 18hr AAWT and 24hr AADT. It also presents the percentage change in total vehicle flows and HGV flows as a result of the Proposed Development (Forecast vs Forecast + Development traffic flows).

Table 18.12 - Peak Hours Traffic Volumes

Link ID	Link Description	AM Peak Traffic Flows (2030 Opening Year)						PM Peak Traffic Flows (2030 Opening Year)					
		Base		Development		Change %		Base		Development		Change %	
		Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	1932	99	41	0	2.1%	0.0%	2644	135	38	0	1.4%	0.0%
2	Corporation Street (south of Ring Road)	448	23	11	0	2.5%	0.0%	443	23	30	0	6.8%	0.0%
3	Rochdale Road (south of Ring Road) ('Shudehill')	651	33	0	0	0.0%	0.0%	844	43	4	0	0.5%	0.0%
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	1130	58	3	0	0.3%	0.0%	1214	62	33	0	2.7%	0.0%
5	A664 Rochdale Road (north of Angel Street)	867	44	22	0	2.5%	0.0%	938	48	15	0	1.6%	0.0%
6	A665 Swan Street westbound only (between Oldham Rd and Rochdale Road)	987	50	4	0	0.4%	0.0%	1122	57	43	0	3.8%	0.0%
7	A62 Oldham Road (north of Adlington Street)	1376	70	26	0	1.9%	0.0%	1486	76	40	0	2.7%	0.0%

Link ID	Link Description	AM Peak Traffic Flows (2030 Opening Year)						PM Peak Traffic Flows (2030 Opening Year)					
		Base		Development		Change %		Base		Development		Change %	
		Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	1773	90	66	0	3.7%	0.0%	2120	108	42	0	2.0%	0.0%
9	Lever Street northbound only	191	5	0	0	0.0%	0.0%	335	9	0	0	0.0%	0.0%
10	George Leigh Street northbound only	33	1	23	0	69.8%	0.0%	24	1	1	0	4.2%	0.0%
11	A665 Great Ancoats Street (between Lever Street and Newton Street)	1730	88	79	0	4.6%	0.0%	1860	95	43	0	2.3%	0.0%
12	Newton Street	448	13	32	0	7.1%	0.0%	472	13	10	0	2.1%	0.0%
13	Blossom Street southbound only	97	3	2	0	2.1%	0.0%	82	2	25	0	30.6%	0.0%
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	2114	108	85	0	4.0%	0.0%	2095	107	43	0	2.1%	0.0%
15	Laystall Street northbound only	145	4	5	0	3.4%	0.0%	382	11	28	0	7.3%	0.0%
16	A665 Great Ancoats Street (between Laystall Street and Ducie Street)	2449	125	69	0	2.8%	0.0%	2509	128	116	0	4.6%	0.0%

Link ID	Link Description	AM Peak Traffic Flows (2030 Opening Year)						PM Peak Traffic Flows (2030 Opening Year)					
		Base		Development		Change %		Base		Development		Change %	
		Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV
17	A665 Great Ancoats Street (between Ducie Street and Store Street)	1912	98	99	0	5.2%	0.0%	1534	78	117	0	7.6%	0.0%
18	Old Mill Street	309	9	3	0	1.0%	0.0%	480	13	17	0	3.5%	0.0%
19	Pollard Street	723	37	4	0	0.6%	0.0%	182	9	5	0	2.7%	0.0%
20	A665 Great Ancoats Street (between Pollard Street and Adair Street)	1943	99	133	0	6.8%	0.0%	1248	64	130	0	10.4%	0.0%
21	Adair Street	543	15	84	0	15.5%	0.0%	499	14	81	0	16.2%	0.0%
22	A665 Great Ancoats Street (east of Adair Street)	1799	92	215	0	12.0%	0.0%	2214	113	209	0	9.4%	0.0%

Table 18.13 - Average Daily Traffic Volumes

Link ID	Link Description	18hr AAWT Flow (2030 Opening Year)						24hr AADT Flow (2030 Opening Year)					
		Base		Development		Change %		Base		Development		Change %	
		Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	28530	1455	157	2	0.6%	0.1%	27357	1395	157	2	0.6%	0.1%
2	Corporation Street (south of Ring Road)	5554	283	74	0	1.3%	0.0%	5326	272	74	0	1.4%	0.0%
3	Rochdale Road (south of Ring Road) ('Shudehill')	9282	473	7	0	0.1%	0.0%	9308	475	7	0	0.1%	0.0%
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	14825	756	65	0	0.4%	0.0%	14536	741	65	0	0.5%	0.0%
5	A664 Rochdale Road (north of Angel Street)	11236	573	83	1	0.7%	0.2%	11266	575	83	1	0.7%	0.2%
6	A665 Swan Street westbound only (between Oldham Rd and Rochdale Road)	12897	658	70	0	0.5%	0.0%	13557	691	70	0	0.5%	0.0%
7	A62 Oldham Road (north of Adlington Street)	17812	908	196	9	1.1%	1.0%	17080	871	196	9	1.2%	1.0%

Link ID	Link Description	18hr AAWT Flow (2030 Opening Year)						24hr AADT Flow (2030 Opening Year)					
		Base		Development		Change %		Base		Development		Change %	
		Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	24043	1226	298	12	1.2%	1.0%	26480	1350	298127	12	1.1%	0.9%
9	Lever Street northbound only	3248	91	0	0	0.0%	0.0%	3577	100	0	0	0.0%	0.0%
10	George Leigh Street northbound only	560	16	42	0	7.5%	0.0%	616	17	42	0	6.8%	0.0%
11	A665 Great Ancoats Street (between Lever Street and Newton Street)	22254	1135	321	12	1.4%	1.1%	24510	1250	321	12	1.3%	1.0%
12	Newton Street	5730	160	74	0	1.3%	0.0%	6310	177	74	0	1.2%	0.0%
13	Blossom Street southbound only	1115	31	49	0	4.4%	0.0%	1228	34	49	0	4.0%	0.0%
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	24237	1236	384	12	1.6%	1.0%	24284	1238	384	12	1.6%	1.0%
15	Laystall Street northbound only	3245	91	60	0	1.8%	0.0%	3050	85	60	0	2.0%	0.0%
16	A665 Great Ancoats Street (between Laystall Street and Ducie Street)	30882	1575	437	12	1.4%	0.8%	29021	1480	437	12	1.5%	0.8%

Link ID	Link Description	18hr AAWT Flow (2030 Opening Year)						24hr AADT Flow (2030 Opening Year)					
		Base		Development		Change %		Base		Development		Change %	
		Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV	Veh	HGV
17	A665 Great Ancoats Street (between Ducie Street and Store Street)	21544	1099	492	12	2.3%	1.1%	23728	1210	492	12	2.1%	1.0%
18	Old Mill Street	4889	137	36	0	0.7%	0.0%	5384	151	36	0	0.7%	0.0%
19	Pollard Street	5735	292	19	0	0.3%	0.1%	6317	322	19	0	0.3%	0.1%
20	A665 Great Ancoats Street (between Pollard Street and Adair Street)	25272	1289	572	12	2.3%	0.9%	27834	1420	572	12	2.1%	0.8%
21	Adair Street	6501	182	294	0	4.5%	0.0%	7160	200	294	0	4.1%	0.0%
22	A665 Great Ancoats Street (east of Adair Street)	24935	1272	859	12	3.4%	0.9%	27462	1401	859	12	3.1%	0.8%

Operation at other key time periods

18.7.18. As previously highlighted, the TA assessed the development's most onerous impacts during the AM and PM peak hours and given the type of development (office) it is expected that the vast majority of trips generated by the development will occur between 7am and 7pm (TRICS Database). TRICS would also suggest that the trip generations between 7am and 7pm are consistent with marginal increases in traffic during the AM and PM peak periods.

18.7.19. Given that the development is likely to generate traffic between 7am and 7pm and that background traffic levels are typically stable during this time, it is considered that the peak hour assessments provide a good indication in terms of the development's hourly impacts.

Driver delay

18.7.20. As previously outlined, the criteria for driver delay includes:

- Change in journey time for peak hour traffic and;
- Change in Total Traffic Flows or HGVs in all other scenarios.

18.7.21. Given that the supporting TA focuses on the Proposed Development's net impact (impact as a result of the additional traffic flows associated with Proposed Development), journey time information is not available for a base + development scenario.

18.7.22. Therefore, 'Potential Effect' in terms of driver delay during base + development traffic scenario has been reviewed using changes in Total Traffic Flows or HGV Flows. Given that the Proposed Development will not result in perceptible changes in HGV traffic flows, Table 18.14 only considers changes in Total Traffic Flows.

Table 18.14 - Significance of Effect (Driver Delay and Pedestrian / Cyclist Delay)

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)		Daily (Opening Year)			
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.13)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	Medium	2.12%	Neutral	Negligible	1.44%	Neutral	Negligible	0.58%	Neutral	Negligible
2	Corporation Street (south of Ring Road)	Medium	2.46%	Neutral	Negligible	6.77%	Neutral	Negligible	1.38%	Neutral	Negligible
3	Rochdale Road (south of Ring Road) ('Shudehill')	Medium	0.00%	Neutral	Negligible	0.47%	Neutral	Negligible	0.08%	Neutral	Negligible
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	Medium	0.27%	Neutral	Negligible	2.72%	Neutral	Negligible	0.45%	Neutral	Negligible
5	A664 Rochdale Road (north of Angel Street)	Medium	2.54%	Neutral	Negligible	1.60%	Neutral	Negligible	0.74%	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)		Daily (Opening Year)			
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.13)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)
6	A665 Swan Street westbound only (between Oldham Rd and Rochdale Road)	Medium	0.41%	Neutral	Negligible	3.83%	Neutral	Negligible	0.51%	Neutral	Negligible
7	A62 Oldham Road (north of Adlington Street)	Medium	1.89%	Neutral	Negligible	2.69%	Neutral	Negligible	1.15%	Neutral	Negligible
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	Medium	3.72%	Neutral	Negligible	1.98%	Neutral	Negligible	1.12%	Neutral	Negligible
9	Lever Street northbound only	Medium	0.00%	Neutral	Negligible	0.00%	Neutral	Negligible	0.00%	Neutral	Negligible
10	George Leigh Street northbound only	Medium	69.80%	Modest	Moderate	4.21%	Neutral	Negligible	6.82%	Neutral	Negligible
11	A665 Great Ancoats Street	Medium	4.57%	Neutral	Negligible	2.31%	Neutral	Negligible	1.31%	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)		Daily (Opening Year)			
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.13)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)
	(between Lever Street and Newton Street)										
12	Newton Street	Medium	7.14%	Neutral	Negligible	2.12%	Neutral	Negligible	1.17%	Neutral	Negligible
13	Blossom Street southbound only	Medium	2.07%	Neutral	Negligible	30.63%	Slight	Minor	3.99%	Neutral	Negligible
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	Medium	4.02%	Neutral	Negligible	2.05%	Neutral	Negligible	1.58%	Neutral	Negligible
15	Laystall Street northbound only	Medium	3.44%	Neutral	Negligible	7.32%	Neutral	Negligible	1.96%	Neutral	Negligible
16	A665 Great Ancoats Street (between Laystall Street and Ducie Street)	Medium	2.82%	Neutral	Negligible	4.62%	Neutral	Negligible	1.51%	Neutral	Negligible
17	A665 Great Ancoats Street (between Ducie	Medium	5.18%	Neutral	Negligible	7.63%	Neutral	Negligible	2.07%	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)		Daily (Opening Year)			
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.13)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)
	Street and Store Street)										
18	**Old Mill Street**	Medium	0.97%	Neutral	Negligible	3.54%	Neutral	Negligible	0.67%	Neutral	Negligible
19	**Pollard Street**	Medium	0.55%	Neutral	Negligible	2.74%	Neutral	Negligible	0.30%	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)		Daily (Opening Year)			
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.13)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)
20	**A665 Great Ancoats Street (between Pollard Street and Adair Street)**	Medium	6.84%	Neutral	Negligible	10.41%	Neutral	Negligible	2.05%	Neutral	Negligible
21	**Adair Street**	Medium	15.47%	Neutral	Negligible	16.23%	Neutral	Negligible	4.11%	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)		Daily (Opening Year)			
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.13)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)
22	**A665 Great Ancoats Street (east of Adair Street)**	Medium	11.95%	Neutral	Negligible	9.44%	Neutral	Negligible	3.13%	Neutral	Negligible

18.7.23. Table 18.14 shows that the magnitude of impact is predicted to be Neutral (< 30% change) on most links apart from Link 10 in the AM peak (which is caused by an increase of 23 vehicles) where there is a Moderate peak hour impact of Moderate significance and on Link 13 in the PM peak (which is caused by an increase of 25 vehicles) where there is a Slight peak hour impact of Minor significance. These represent relatively large increases in low traffic flows. Overall, as these absolute increases in traffic flows are only 23 and 25 vehicles in separate peak hours and they can are unlikely to cause congestion, based on the sensitivity of the various receptors within the study area and the predicted magnitudes of impact, the daily significance of effect is still predicted to be Negligible on all links.

18.7.24. Therefore, the development's impact on Driver Delay will be permanent / adverse and the overall significance of effect is predicted to be Negligible (not significant).

Pedestrian and Cyclist Delay

18.7.25. Table 18.14 presents a detailed analysis on the significance of effect in terms of Pedestrian and Cyclist Delay.

18.7.26. Noting the changes in total traffic flows, the magnitude of impact is predicted to be Neutral on most links apart from Link 10 in the AM peak (which is caused by an increase of 23 vehicles) where these is a Moderate peak hour impact of Moderate significance and on Link 13 in the PM peak (which is caused by an increase of 25 vehicles) where there is a Slight peak hour impact of Minor significance. These represent relatively large increases in low traffic flows. These low absolute increases are not considered to material impact pedestrian and cycle delays. Overall, based on the sensitivity of the various receptors within the study area and the predicted magnitudes of impact, the daily significance of effect is still predicted to be Negligible on all links.

18.7.27. Therefore, the development's impact on Pedestrian and Cyclist Delay will be permanent / adverse and the overall significance of effect is considered to be Negligible (not significant).

Pedestrian and Cyclist Amenity

18.7.28. Table 18.15 provides an analysis on the significance of effect during operation on pedestrian and cyclist amenity.

Table 18.15 - Pedestrian and Cyclist Amenity – Significance of Effect

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)			Daily (Opening Year)		
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Magnitude of Impact (See Table 18.4)	Total Change in Dev Traffic (See Table 18.13)
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	Medium	2.12%	Neutral	Negligible	1.44%	Neutral	Negligible	0.58	Neutral	Negligible
2	Corporation Street (south of Ring Road)	Medium	2.46%	Neutral	Negligible	6.77%	Neutral	Negligible	1.38%	Neutral	Negligible
3	Rochdale Road (south of Ring Road) ('Shudehill')	Medium	0.00%	Neutral	Negligible	0.47%	Neutral	Negligible	0.08%	Neutral	Negligible
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	Medium	0.27%	Neutral	Negligible	2.72%	Neutral	Negligible	0.45%	Neutral	Negligible
5	A664 Rochdale Road (north of Angel Street)	Medium	2.54%	Neutral	Negligible	1.60%	Neutral	Negligible	0.74%	Neutral	Negligible
6	A665 Swan Street westbound only	Medium	0.41%	Neutral	Negligible	3.83%	Neutral	Negligible	0.51%	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)			Daily (Opening Year)		
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Magnitude of Impact (See Table 18.4)	Total Change in Dev Traffic (See Table 18.13)
	(between Oldham Rd and Rochdale Road)										
7	A62 Oldham Road (north of Adlington Street)	Medium	1.89%	Neutral	Negligible	2.69%	Neutral	Negligible	1.15%	Neutral	Negligible
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	Medium	3.72%	Neutral	Negligible	1.98%	Neutral	Negligible	1.12%	Neutral	Negligible
9	Lever Street northbound only	Medium	0.00%	Neutral	Negligible	0.00%	Neutral	Negligible	0.00%	Neutral	Negligible
10	George Leigh Street northbound only	Medium	69.80%	Modest	Moderate	4.21%	Neutral	Negligible	6.82%	Neutral	Negligible
11	A665 Great Ancoats Street (between Lever Street and Newton Street)	Medium	4.57%	Neutral	Negligible	2.31%	Neutral	Negligible	1.31%	Neutral	Negligible
12	Newton Street	Medium	7.14%	Neutral	Negligible	2.12%	Neutral	Negligible	1.17%	Neutral	Negligible
13	Blossom Street southbound only	Medium	2.07%	Neutral	Negligible	30.63%	Slight	Minor	3.99%	Neutral	Negligible
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	Medium	4.02%	Neutral	Negligible	2.05%	Neutral	Negligible	1.58%	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	AM Peak (Opening Year)			PM Peak (Opening Year)			Daily (Opening Year)		
			Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Total Change in Dev Traffic (See Table 18.13)	Total Change in Dev Traffic (See Table 18.13)	Magnitude of Impact (See Table 18.4)	Significance of Effect (See Table 18.5)	Magnitude of Impact (See Table 18.4)	Total Change in Dev Traffic (See Table 18.13)
15	**Laystall Street northbound only**	Medium	3.44%	Neutral	Negligible	7.32%	Neutral	Negligible	1.96%	Neutral	Negligible
16	**A665 Great Ancoats Street (between Laystall Street and Ducie Street)**	Medium	2.82%	Neutral	Negligible	4.62%	Neutral	Negligible	1.51%	Neutral	Negligible
17	**A665 Great Ancoats Street (between Ducie Street and Store Street)**	Medium	5.18%	Neutral	Negligible	7.63%	Neutral	Negligible	2.07%	Neutral	Negligible
18	**Old Mill Street**	Medium	0.97%	Neutral	Negligible	3.54%	Neutral	Negligible	0.67%	Neutral	Negligible
19	**Pollard Street**	Medium	0.55%	Neutral	Negligible	2.74%	Neutral	Negligible	0.30%	Neutral	Negligible
20	**A665 Great Ancoats Street (between Pollard Street and Adair Street)**	Medium	6.84%	Neutral	Negligible	10.41%	Neutral	Negligible	2.05%	Neutral	Negligible
21	**Adair Street**	Medium	15.47%	Neutral	Negligible	16.23%	Neutral	Negligible	4.11%	Neutral	Negligible
22	**A665 Great Ancoats Street (east of Adair Street)**	Medium	11.95%	Neutral	Negligible	9.44%	Neutral	Negligible	3.13%	Neutral	Negligible

18.7.29. Given the changes in total traffic flows, Table 18.15 shows that the development's magnitude of impact on Pedestrian / Cyclist Amenity is predicted to be negligible (<50% change) on most links apart from Link 10 in the AM peak (which is caused by an increase of 23 vehicles) where these is a Moderate peak hour impact of Moderate significance where there is a large increase in a relatively low flow. However, based on the sensitivity of the various receptors within the study area and the predicted magnitudes of impact, the daily significance of effect is still predicted to be Negligible on all links.

18.7.30. It is therefore considered that the development's impact on Pedestrian and Cyclist Amenity will be permanent / adverse and the overall significance of effect within the study area is Negligible (not significant).

Fear and Intimidation

18.7.31. When assessing Fear and Intimidation, consideration should also be given to IEMA Rule 1 (links where traffic flows or HGVs will increase by more than 30% and Rule 2 (sensitive areas where traffic flows increase by 10%). On this basis, no link is required to be considered for further assessment. Given that all links have medium sensitivity and will experience negligible magnitude of impacts, the significance of effect is considered to be slight on these links.

18.7.32. Table 18.16 therefore presents a review of all links based on the changes in total traffic flow and the resulting changes in mean pedestrian delay.

Table 18.16 - Fear and Intimidation – Significance of Effect

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	Average traffic flow over 18hr day (vehicle/ hour)			Total 18hr HGV Flows			Magnitude of Impact (See Table 18.4)		Significance of Effect (See Table 18.5)
			2024 Base	Dev	Base + Dev	2024 Base)	Dev	Base + Dev	Average flow per hour	Total 18hr HGV Flows	
1	A665 Cheetham Hill Road (between Trinity Way and Corporation Rd)	Medium	1585	9	1594	1455	2	1457	Neutral	Neutral	Negligible
2	Corporation Street (south of Ring Road)	Medium	309	4	313	283	0	283	Neutral	Neutral	Negligible
3	Rochdale Road (south of Ring Road) ('Shudehill')	Medium	516	0	516	473	0	473	Neutral	Neutral	Negligible
4	A665 Miller Street westbound only (between Rochdale Rd and Corporation St)	Medium	824	4	827	756	0	756	Neutral	Neutral	Negligible
5	A664 Rochdale Road (north of Angel Street)	Medium	624	5	629	573	1	574	Neutral	Neutral	Negligible
6	A665 Swan Street westbound only (between Oldham Rd and Rochdale Road)	Medium	716	4	720	658	0	658	Neutral	Neutral	Negligible
7	A62 Oldham Road (north of Adlington Street)	Medium	990	11	1000	908	9	917	Neutral	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	Average traffic flow over 18hr day (vehicle/ hour)			Total 18hr HGV Flows			Magnitude of Impact (See Table 18.4)		Significance of Effect (See Table 18.5)
			2024 Base	Dev	Base + Dev	2024 Base)	Dev	Base + Dev	Average flow per hour	Total 18hr HGV Flows	
8	A665 Great Ancoats Street (between Oldham Road and Lever Street)	Medium	1336	17	1352	1226	12	1238	Neutral	Neutral	Negligible
9	Lever Street northbound only	Medium	180	0	180	91	0	91	Neutral	Neutral	Negligible
10	George Leigh Street northbound only	Medium	31	2	33	16	0	16	Neutral	Neutral	Negligible
11	A665 Great Ancoats Street (between Lever Street and Newton Street)	Medium	1236	18	1254	1135	12	1147	Neutral	Neutral	Negligible
12	Newton Street	Medium	318	04	322	160	0	160	Neutral	Neutral	Negligible
13	Blossom Street southbound only	Medium	62	3	65	31	0	31	Neutral	Neutral	Negligible
14	A665 Great Ancoats Street (between Newton Street and Laystall Street)	Medium	1346	21	1368	1236	12	1248	Neutral	Neutral	Negligible
15	Laystall Street northbound only	Medium	180	3	184	91	0	91	Neutral	Neutral	Negligible
16	A665 Great Ancoats Street (between Laystall Street and Ducie Street)	Medium	1716	24	1740	1575	12	1587	Neutral	Neutral	Negligible

Link ID	Link Description	Sensitivity of Receptor (See Table 18.3)	Average traffic flow over 18hr day (vehicle/ hour)			Total 18hr HGV Flows			Magnitude of Impact (See Table 18.4)		Significance of Effect (See Table 18.5)
			2024 Base	Dev	Base + Dev	2024 Base)	Dev	Base + Dev	Average flow per hour	Total 18hr HGV Flows	
17	A665 Great Ancoats Street (between Ducie Street and Store Street)	Medium	1197	27	1224	1099	12	1111	Neutral	Negligible	Negligible
18	Old Mill Street	Medium	272	2	274	137	0	137	Neutral	Neutral	Negligible
19	Pollard Street	Medium	319	1	320	292	0	293	Neutral	Neutral	Negligible
20	A665 Great Ancoats Street (between Pollard Street and Adair Street)	Medium	1404	32	1436	1289	12	1301	Neutral	Neutral	Negligible
21	Adair Street	Medium	361	16	378	182	0	182	Neutral	Neutral	Negligible
22	A665 Great Ancoats Street (east of Adair Street)	Medium	1385	48	1433	1272	12	1283	Neutral	Neutral	Negligible

18.7.33. Based on the sensitivity of the various receptors within the study area and the predicted magnitudes of impact, the significance of effect is predicted to be **Negligible** on all links.

18.7.34. It is therefore considered that the development's impact on Fear and Intimidation will be permanent / adverse and the overall significance of effect within the study area is predicted to be Negligible (not significant).

Accidents and Safety

18.7.35. As previously discussed (Table 18.14), all links experience daily traffic increases of less than 30%. In terms of the criteria for assessing the significance of effect in relation to Accidents and Safety, all links will experience a negligible effect.

18.7.36. Therefore, the development's impact on Accidents and Safety will be permanent / adverse and the development's overall significance of effect in terms of Accidents and Safety is Negligible (not significant).

Severance

18.7.37. When assessing Severance, consideration should also be given to IEMA Rule 1 (links where traffic flows or HGVs will increase by more than 30%) and Rule 2 (sensitive areas where traffic flows increase by 10%). However, no links meet either of these rules.

18.7.38. All links have an impact of less than 8,000 AADT and have a medium sensitivity. Therefore, the magnitude of impact is considered to be neutral / nominal resulting in a significance of effect of Negligible.

18.7.39. On the basis that all links within the study area are predicted to have a Negligible effect, it is considered reasonable that the overall significance of effect on Severance is **Negligible** and will be permanent / adverse (not significant).

18.8. Additional mitigation and enhancement measures

18.8.1. There will be no additional mitigation measures introduced during the construction and operational stages which relate to transport and traffic impacts given no significant effects have been identified.

18.8.2. Embedded mitigation for the adverse impacts during the construction and operation phase, have been outlined in Section 18.7.

18.9. Residual Effects

18.9.1. Residual effects are those that remain after the mitigation measures have been implemented and these are discussed in the remainder of this section.

Construction

18.9.2. Although the CEMP will help reduce the construction impacts on the highway network and receptors, it is expected that the magnitude of impacts and significance of effect will remain unchanged. Therefore, the residual effects will remain as adverse / temporary and Negligible (not significant).

Operation

18.9.3. Although the FTP will help reduce the operational impacts on the highway network and receptors by encouraging travel by sustainable modes, it is expected that the magnitude of impacts and significance of effect will remain unchanged. Therefore, the residual effects will remain as adverse / permanent and **Negligible** (not significant).

18.10. Cumulative effects

18.10.1. This section considers the cumulative effects of the Proposed Development (intra-project cumulative effects) and the Proposed Development interacting with other RFFPs (inter-project cumulative effects) from the perspective of impacts within the scope of the Traffic and Transport topic.

Cumulative effects assessment

18.10.2. The further consideration of cross-topic intra-project and inter-project cumulative effects is reported in Chapter 22: Cumulative Effects.

Intra-project in-combination cumulative effects assessment (single project impacts) within topic

18.10.3. The focus of intra-project CEA is understanding how receptors may experience a number of different types of impacts from the Proposed Development at the same time. Within this topic assessment, singular impacts are considered for the following issues;

- Local transport network conditions pre- and post-development;
- Construction and operational vehicular trip generation;
- Construction and operational vehicles access and routeings;
- Safety;
- Fear and intimidation;
- Severance;
- Accidents and Safety;
- Dust and dirt;
- Pedestrian and cyclist facilities;
- Disruption to pedestrians, cyclists and road users due to the proposals;
- Generation of Heavy Goods Vehicle trips; and
- Impact on access.

18.10.4. To assess intra-project effects, this section will consider which receptors experience multiple issues and provide and assessment of the significance of these effects.

18.10.5. There are two receptors which experience multiple impacts greater than negligible. These are Link 10 (George Leigh Street northbound only) and Link 13 (Blossom Street southbound only).

18.10.6. On these two receptors the multiple impacts occur for the following issues:

- Driver Delay;
- Pedestrian / Cyclist Delay; and
- Pedestrian and Cyclist Amenity.

18.10.7. Link 10 experiences a Moderate peak hour impact of Moderate significance in the AM peak (which is caused by an increase of 23 vehicles). While Link 13 experiences a Slight peak hour impact of Minor

significance in the PM peak (which is caused by an increase of 25 vehicles). These represent relatively large increases in low traffic flows. Overall, based on the sensitivity of the various receptors within the study area and the predicted magnitudes of impact, the daily significance of effect is still predicted to be Negligible on all links.

18.10.8. Therefore, the development's intra-project effects will be permanent / adverse and the overall significance of effect is considered to be Negligible.

Inter-project cumulative effects assessment (different project impacts) within topic

18.10.9. It would be normal practice to undertake a cumulative assessment of the traffic impacts. In traffic terms this assessment considers the traffic impact of the Proposed Development taking account of traffic associated with committed development that had not opened by the time of any traffic data collection exercise or would be open by any of the MDC's assessment years.

18.10.10. The traffic modelling exercise was unable to assess the committed traffic as the traffic data associated with other developments could not be fully quantified from those individual planning applications and so a cumulative assessment has not been undertaken. The traffic modellers agreed this approach with officers of Manchester City Council.

18.10.11. However, a high-level review has been completed with reference to the shortlist list of RFFPs that has been developed for the Proposed Development. The list is based on a review of all developments known to the planning system using the methodology described in Chapter 22: Cumulative Effects in a bid to ascertain any potential issues to be aware of and/or be mitigated if necessary. The location of these RFFPs is illustrated in ES (Volume 5) Figure 22.1.

18.10.12. The RFFP short list has been screened to identify projects that are considered to have a realistic prospect of interacting with the Proposed Development from the perspective of Traffic and Transport. The sift from the short-list to identify RFFPs that should be scoped into the inter-project CEA for the traffic and transport assessment took into consideration;

- the scale of the RFFP;
- the distance of the RFFP from the Proposed Development; and
- the likely traffic expected to be generated.

18.10.13. This process identified potential for inter-project impacts as a result of the Proposed Development in combination with eight RFFPs. These RFFPs are;

- 128191/FO/2020 - Development comprising of five office buildings with flexible ground floor use at land between Ashton Canal and Pollard Street.132574/FO/2021 - Development comprising 4 townhouses at Paradise Wharf.
- 126608/FO/2020 - Development of 66 residential units between Store Street and Ashton Canal.135662/FO/2022 - Development of 154 Bedroom Hotel with ancillary café / bar / restaurant and gym adjacent to Great Ancoats Street and south of Laystall Street.
- 135675/FO/2022 - Development of two apartment buildings comprising 267 dwellings at Tariff Street.137346/FO/2023 - Mixed use development comprising commercial floorspace and 256 residential units adjacent to Poland Street and between Naval Street and Jersey Street.
- 122598/FO/2019 - Mixed use development comprising 94 residential units consisting of townhouses and apartments as well as commercial floorspace at New Islington Marina.
- 128911/FO/2020 - Mixed use development consisting of office space and 89 residential units at Laystall Street.

Potential inter-project impacts

Construction

18.10.14. Cumulative intra-project impacts on traffic and transport could occur in conjunction with the RFFPs identified as relevant to the Proposed Development. The following inter-project cumulative effects with the RFFPs may arise during construction of the Proposed Development:

Construction vehicle trips

18.10.15. Cumulative effects on traffic and transport could also occur where changes in traffic flows during construction from separate projects occur at the same time. This could be as a result of temporary traffic management measures that change the location and frequency of queuing vehicles and/or additional vehicles travelling to and from the construction Site transporting materials, plant and labour.

18.10.16. The potential for cumulative effect from construction vehicles for the duration of the construction project should be considered further within the Construction Environmental Management Plan (CEMP) once more detailed information on vehicle movements are available from the contractor. However, any cumulative effect on the number of construction traffic vehicle trips will in any case be temporary and is not considered likely to be significant.

18.10.17. Cumulative construction vehicle trip impacts are expected to be negligible during construction and 'Not Significant'.

Operation

18.10.18. Cumulative inter-project effects on traffic and transport could occur in conjunction with the RFFPs identified as relevant to the Proposed Development. The following inter-project cumulative effects with the RFFPs may arise during operation of the Proposed Development to varying degrees:

Operational vehicle trips

18.10.19. Cumulative effects on traffic and transport could also occur where changes in traffic flows during operation from separate projects occur at the same time. This could be as a result of changes in traffic patterns to/from other developments when they become operational. However, any cumulative effect on the number of operational traffic vehicle trips is not considered likely to be significant.

18.10.20. Cumulative operational vehicle trip impacts are expected to be negligible during operation and 'Not Significant'.

Mitigation Measures

18.10.21. In the event of one or more of the above RFFPs undergoing construction during the construction of MDC then the site manager for each site will need to co-ordinate a plan to mitigate any cumulative impacts of the sites. This may include for example, the requirement for one site to alter its construction traffic route to reduce the impact at a certain location.

18.10.22. To ensure that no significant construction inter-project effects occur, cumulative effects from construction vehicles for the duration of the construction project should be considered further within the CEMP.

18.11. Summary and Conclusions

18.11.1. The traffic modelling that has led to the information held in this chapter was developed in liaison with officers of both Manchester City Council and Transport for Greater Manchester's traffic modelling team (HFAS, Highway Forecasting and Analytical Services). Whilst AtkinsRéalis developed the trip numbers using standard industry recognised practices and software packages (primarily the TRICS database), HFAS supplied information to help with model splits. These were compared with those that were derived from national data sources and with other Government offices and although public transport use may vary due to different office locations, car use across all the sites was broadly similar. This provided strong confidence in the traffic numbers predicted for this commission.

18.11.2. The use of HFAS for traffic modelling was to use their expertise and local understanding of how traffic behaves and use the best data available. Trip generation data was provided to HFAS by AtkinsRéalis.

18.11.3. HFAS used a mix of 2023 and 2024 traffic data and newly collected 2024 car park data to predict the location and volume of trip ends at the local car parks, given the limited car parking at the Proposed Development.

18.11.4. The addition of the MDC traffic showed that many junctions would witness traffic flow increases of more than 30 two-way trips in the peak hours. This would historically lead to junction assessments at the affected junctions, followed by mitigation measures if acceptable capacity thresholds are breached by the additional traffic. However, it was agreed with HFAS following their own discussions with MCC that there would be no requirement for junction assessments promoting a mix of expansion and revised traffic signal timings. Instead focus would be placed on a stretching set of targets to encourage MDC staff to travel by modes other than single-occupancy cars given the high level of public transport available both within reasonable walking distances and some a little beyond this threshold but general accepted as suitable in a city with a large regional reach.

18.11.5. However, even without such an encouragement to use more sustainable modes of travel, the overall impact of the additional traffic has been shown to be Negligible, given a mix of how the traffic distributes itself across the network to access different car parks, and given the very high level of public transport accessibility provided by the bus, train and tram networks. Of particular note are access to buses at Piccadilly Gardens, Shudehill the Oldham Street corridor and passing the Proposed Development on Great Ancoats Street, access to trains at Manchester Piccadilly and Manchester Victoria and access to trams at New Islington, Manchester Piccadilly, Piccadilly Gardens and Shudehill and Manchester Victoria. In addition, the level of cycle parking plays its part in maximising the amount of sustainable transport use. Table 18.17 presents a summary of the effects.

Table 18.17 - Summary Table - Traffic and Transport

Resource / Receptor / affected group	Sensitivity of receptor	Activity or impact	Embedded design mitigation	Effect Magnitude Type Spatial extent Duration Likelihood	Significance of effect (taking into account embedded mitigation)	Additional mitigation	Residual effect
Construction							
Driver Delay	Medium	Changes in Traffic Volumes and HGVs, changes to driver journey times, changes in mean pedestrian delay and Total traffic flow levels	OCEMP CTMP	Adverse Negligible Direct Local Temporary Certain	Not Significant	N/A	Not Significant
Pedestrian and Cyclist Delay	Medium	Changes in Traffic Volumes and HGVs, changes to driver journey times, changes in mean pedestrian delay and Total traffic flow levels	OCEMP CTMP	Adverse Negligible Direct Local Temporary Certain	Not Significant	N/A	Not Significant
Pedestrian and Cyclist Amenity	Medium	Changes in Traffic Volumes and HGVs, changes to driver journey times, changes in mean pedestrian delay and Total traffic flow levels	OCEMP CTMP	Adverse Negligible Direct Local Temporary Certain	Not Significant	N/A	Not Significant
				Adverse	Not Significant	N/A	

Resource / Receptor / affected group	Sensitivity of receptor	Activity or impact	Embedded design mitigation	Effect Magnitude Type Spatial extent Duration Likelihood	Significance of effect (taking into account embedded mitigation)	Additional mitigation	Residual effect
Fear and Intimidation	Medium	Changes in Traffic Volumes and HGVs, changes to driver journey times, changes in mean pedestrian delay and Total traffic flow levels	OCEMP CTMP	Negligible Direct Local Temporary Certain			Not Significant
Accidents and Safety	Medium	Changes in Traffic Volumes and HGVs, changes to driver journey times, changes in mean pedestrian delay and Total traffic flow levels	OCEMP CTMP	Adverse Negligible Direct Local Temporary Certain	Not Significant	N/A	Not Significant
Severance	Medium	Changes in Traffic Volumes and HGVs, changes to driver journey times, changes in mean pedestrian delay and Total traffic flow levels	OCEMP CTMP	Adverse Negligible Direct Local Temporary Certain	Not Significant	N/A	Not Significant
Operation							
Driver Delay	Medium	Changes in Traffic Volumes and HGVs,	Framework Travel Plan	Adverse Negligible Direct	Not Significant	N/A	Not Significant

Resource / Receptor / affected group	Sensitivity of receptor	Activity or impact	Embedded design mitigation	Effect Magnitude Type Spatial extent Duration Likelihood	Significance of effect (taking into account embedded mitigation)	Additional mitigation	Residual effect
		changes driver journey times		Local Permanent Certain			
Pedestrian and Cyclist Delay	Medium	Changes in Traffic Volumes and HGVs, changes in mean pedestrian delay	Framework Travel Plan	Adverse Negligible Direct Local Permanent Certain	Not Significant	N/A	Not Significant
Pedestrian and Cyclist Amenity	Medium	Changes in Traffic Volumes and HGVs	Framework Travel Plan	Adverse Negligible Direct Local Permanent Certain	Not Significant	N/A	Not Significant
Fear and Intimidation	Medium	Changes in Traffic Volumes and HGVs and Total Traffic Flow Levels	Framework Travel Plan	Adverse Negligible Direct Local Permanent Certain	Not Significant	N/A	Not Significant

Resource / Receptor / affected group	Sensitivity of receptor	Activity or impact	Embedded design mitigation	Effect Magnitude Type Spatial extent Duration Likelihood	Significance of effect (taking into account embedded mitigation)	Additional mitigation	Residual effect
Accidents and Safety	Medium	Changes in Traffic Volumes and HGVs	Framework Travel Plan	Adverse	Not Significant	N/A	Not Significant
				Negligible			
				Direct			
				Local			
				Permanent			
				Certain			
Severance	Medium	Changes in Traffic Volumes and HGVs, changes to driver journey times, changes in mean pedestrian delay and Total traffic flow levels	Framework Travel Plan	Adverse	Not Significant	N/A	Not Significant
				Negligible			
				Direct			
				Local			
				Permanent			
				Certain			

18.12. Glossary and Acronyms

Table 18-18 – Glossary and acronyms

Term	Definition
AADT	Annual Average Daily Traffic
AAWT	Annual Average Weekday Traffic
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
EIA	Environmental Impact Assessment
ES	Environmental Statement
EV	Electric Vehicle
EVCI	Electric Vehicle Charging Infrastructure
FTP	Framework Travel Plan
GMCA	Greater Manchester Combined Authority
GPA	Government Property Agency
HFAS	Highways Forecasting and Analytical Services
HGV	Heavy Goods Vehicles
IEMA	Institute of Environmental Management and Assessment
MCC	Manchester City Council
NCN	National Cycle Network
NPPF	National Planning Policy Framework
NPR	Northern Powerhouse Rail
OCEMP	Outline Construction Environmental Management Plan
RFFP	Reasonably Foreseeable Future Project
TA	Transport Assessment
TfGM	Transport for Greater Manchester
TRICS	Trip Rate Information Computer System
UK	United Kingdom

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