

**REDBY STREET, MANCHESTER –
PROPOSED NURSERY AND SCHOOL**

TRANSPORT ASSESSMENT



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REDBY STREET, MANCHESTER – PROPOSED NURSERY AND SCHOOL

TRANSPORT ASSESSMENT

1.0 Introduction and Background

- 1.1 This Transport Assessment has been produced to support a planning application for the creation of a nursery, primary school and secondary school on land at Redby Street, Manchester.
- 1.2 The development will comprise :
- The creation of a new building with 27 classrooms, a nursery and car parking.
- 1.3 A Highway Scoping Note was prepared and submitted to the Highways Authority as part of the pre-application process. The comments of the Highway Authority and Transport for Greater Manchester (TfGM) are provided in **Appendix A**.
- 1.4 The Applicant has arranged for a Travel Plan to be produced and to accompany the Transport Assessment.

2.0 Site Location and Description

- 2.1 The proposed site is on the southerly side of A635 Ashton Old Road at Redby Street. The site is located in Bradford Ward in the easterly part of Manchester City Council's area. The site is bounded by A635 at the northerly edge and Whitworth Street at its southerly edge. An existing site layout is located in **Appendix B**.
- 2.2 The site location is shown in the Figure below.

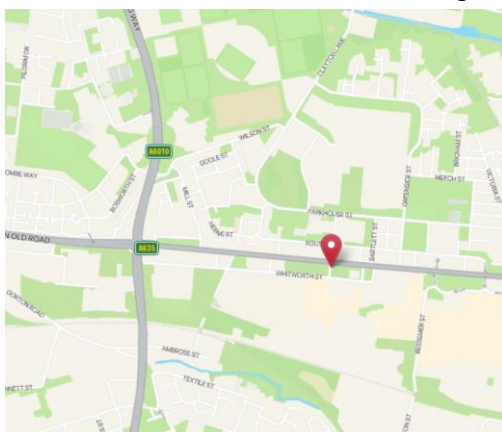


Figure 1 – Site Location

3.0 Existing Characteristics

- 3.1 Existing Highway Layout

- 3.2 The site is located between A635 Ashton Old Road and Whitworth Street and includes the land either side of, and including, Redby Street in east Manchester. A635 Ashton Old Road has two lanes in each direction in the vicinity of the site. Whitworth Street is a road with a single lane in each direction. Redby Street appears to have been stopped up from a recent site visit. The site is undeveloped land but was subject to a planning approval for a drive thru coffee shop and retail shops in 2017.
- 3.3 A635 Ashton Old Road is a road that links Manchester with Tameside. The road has two lanes in each direction in the vicinity of Redby Street and is subject to a speed limit of 30mph. There are footways and a system of street lighting provided along the road. There is a controlled crossing facility on the A635 and located just to the west of the junction with Redby Street. Crossing facilities of the A635 are provided within the traffic signal junction with Welcomb Street. The traffic signal junction at A635 / Welcomb Street has two traffic lanes in each direction and Welcomb Street has one traffic lane. There is a controlled crossing located on the A635 to the east of Clayton Lane South.
- 3.4 The A635 Ashton Old Road is subject to no waiting at anytime along both sides of the road and no loading between the hours of 7am-10am and 4pm to 7pm Monday to Saturday. There are bus stops located on A635 close to Redby Street on either side of the road.
- 3.5 The junction of A635 Ashton Old Road with A6010 Alan Turing Way has a number of approach lanes along the A635 for travel into Manchester. There are pedestrian crossing facilities included within the traffic signal junction at A625 / Alan Turing Way. The eastbound approach along the A635 has three traffic lanes. The A6010 southbound is configured with two ahead lanes, a left turn lane and a right turn lane. The A6010 northbound has two ahead traffic lanes and a left turn facility. The junction has advanced stop lines for cyclists.
- 3.6 Whitworth Street, Odell Street, and Welcomb Street are all subject to a 20 miles an hour speed limit. Whitworth Street is generally covered by no waiting at anytime restrictions on both sides of the street but there are some areas where parking is permitted. A similar approach in Odell Street applies with no waiting at anytime along the westerly side but parking is permitted on most of the easterly side of the road. Welcomb Street has no waiting at anytime and no loading at anytime along the full length of the street and on both sides of it.
- 3.7 **Baseline Conditions**
- 3.8 The Transport Assessment will discuss in Sections 7 and 8 the existing highway conditions including reporting on traffic data collected at :-
- A635 Ashton Old Road / A6010 Alan Turing Way
 - A635 Ashton Old Road / Welcomb Street
 - A635 Ashton Old Road near Redby Street

- A635 Ashton Old Road / Odell Street

3.9 Road Safety Record

3.10 A review of the historical road traffic accident record will be undertaken over a five-year period. The accident study area is identified below.

- A635 Ashton Old Road between (and including the junction with A6010 Alan Turing Way and Welcomb Street); and
- Whitworth Street and sides roads onto / off the A635.

3.11 The crashmap database (www.crashmap.co.uk) has been interrogated to assess the road safety record for A635 Ashton Old Road, Whitworth Street and the adjacent road network, including the junction with A635 Ashton Old Road and the A6010. The analysis did not highlight any accidents having occurred on Whitworth Street or any of the minor roads south of the A635 Ashton Old Road in the vicinity of the site. The analysis did reveal a number of slight and serious injury accidents on the A635 Ashton Old Road located close to the site, and a number of accidents at the junction of A635 with A6010. The accident record does not indicate any child casualties within the analysis period. The output from the accident interrogation is shown in the Figures below, and summarised in the tables below.

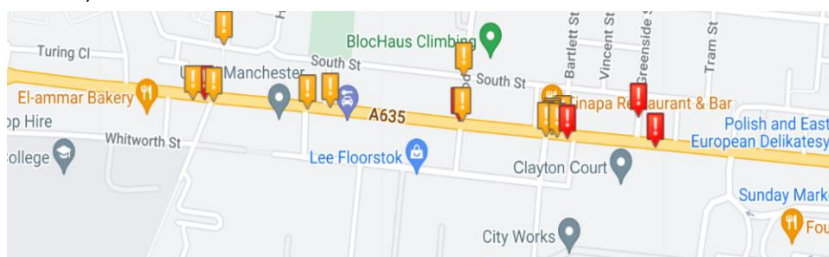


Figure 2 – Road Safety Record Ashton Old Road near the site (www.crashmap.co.uk)

Table 1 – Road Safety Record Summary Along Ashton Old Road

Road Traffic incidents on Ashton Old Road in the vicinity of the site			
Date of Incident	Incident Severity	Vehicles Involved	Casualties Involved
14/06/2017	Slight	2	1
08/03/2019	Slight	3	1
10/12/2018	Slight	2	1
08/03/2018	Serious	2	4
22/11/2019	Slight	2	1
24/04/2018	Slight	1	1
20/06/2021	Slight	2	2
31/12/2020	Slight	2	2
24/03/2019	Serious	1	2
16/09/2019	Slight	2	2
20/01/2021	Slight	2	2
28/06/2017	Slight	2	1
16/01/2022	Serious	1	1
07/06/2018	Serious	1	1

*12/09/2020	Serious	2	1
*08/05/2018	Slight	2	1
*21/08/2018	Slight	1	1

(* side roads north off Ashton Old Road)

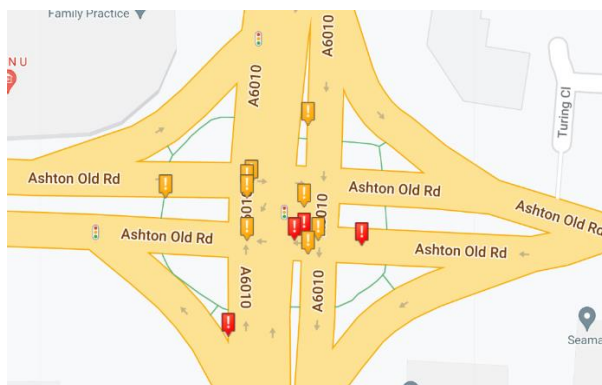


Figure 3 – Road Safety Record at Ashton Old Road / A6010(www.crashmap.co.uk)

Table 2 – Road Safety Record Summary at A635 / A6010

Road Traffic incidents on Ashton Old Road / A6010			
Date of Incident	Incident Severity	Vehicles Involved	Casualties Involved
14/10/2020	Slight	2	1
9/03/2017	Slight	3	4
18/09/2018	Slight	2	2
27/10/2019	Slight	2	4
09/02/2017	Slight	2	2
25/02/2018	Slight	2	1
12/12/2020	Slight	2	2
14/11/2017	Serious	2	1
14/02/2018	Serious	2	2
17/06/2019	Slight	2	3
10/03/2021	Slight	2	2
06/04/2018	Serious	1	2
11/04/2019	Serious	1	1

- 3.12 Whilst it is regrettable when there are injury accidents in the road network, the recent accident history suggests that the proposed educational development should not result in any worsening of the road safety record. The road safety record for the location should not represent a material concern in the context of the proposed development.

4.0 Policy and Guidance

- 4.1 This part of the TA will review and interpret national and local policies relevant to the proposed development.

4.2 National Policy

4.3 National Planning Policy Framework (NPPF) (2021)

- 4.4 The NPPF sets out the Government's economic, environmental and social planning policies for England. The NPPF introduces a set of core land-use planning principles which should underpin both plan-making and decision-taking.
- 4.5 Section 9 of the NPPF covers 'Promoting sustainable transport'. Relevant elements of this section are summarised as follows.
- 4.6 Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:
- a) the potential impacts of development on transport networks can be addressed;
 - b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
 - c) opportunities to promote walking, cycling and public transport use are identified and pursued;
 - d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
 - e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.
- 4.7 Paragraph 105 indicates that the planning system should actively manage patterns of growth in support of the above objectives.
- 4.8 If setting local parking standards for residential and non-residential development, policies should take into account:
- a) the accessibility of the development;
 - b) the type, mix and use of development;
 - c) the availability of and opportunities for public transport;
 - d) local car ownership levels; and
 - e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.
- 4.9 Paragraph 108 states that maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network.
- 4.10 Considering development proposals
Paragraph 110 indicates that appropriate opportunities should be given to promote sustainable transport, safe access can be provided for all modes of transport and any significant impacts from the developments are mitigated to an acceptable degree.
- 4.11 Paragraph 111 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.

- 4.12 Paragraph 112 indicates that developments should :
- a) Give priority to pedestrians and cyclists;
 - b) Address the needs of people with disability and reduced mobility;
 - c) Create places that are safe, secure and attractive;
 - d) Allow for the efficient delivery of goods, and access by emergency and service vehicles.
 - e) Be designed to enable plug-in and ultra-low charging points.
- 4.13 Paragraph 113 is concerned with travel plans and transport statements / assessments being required for developments that will generate significant levels of movement.
- 4.14 [Travel plans, transport assessments and statements in decision-taking \(DfT March 2014\)](#)
- 4.15 This policy update was issued as guidance by the DfT in March 2014 and supersedes the 2007 Guidance on Transport Assessment policy guidance documentation.
- 4.16 This updated guidance states that “the need for, scale, scope and level of detail required of a Transport Assessment or Statement should be established as early in the development management process as possible as this may therefore positively influence the overall nature or the detailed design of the development”.
- 4.17 [Local Policy](#)
- 4.18 [Manchester City Council Core Strategy](#)
- 4.1 Policy T 1 Sustainable Transport
- 4.2 To deliver a sustainable, high quality, integrated transport system to encourage modal shift away from car travel to public transport, cycling and walking, to support the needs of residents and businesses and to prepare for carbon free modes of transport, the Council will support proposals 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, particularly for those most in need and for those without a car.
 - Improve access to transport services and facilities in order to enable disabled people and people with mobility impairments to participate fully in public life.
 - Improve pedestrian routes and the pedestrian environment.
 - Improve and develop further Manchester’s cycle network (for example the Manchester Cycleway and the Trans Pennine Trail).
 - Facilitate modes of transport that reduce carbon emissions e.g by incorporating charging points for electric vehicles, subject to their appropriate design and location.

4.3 Policy T2 Accessible areas of opportunity and need

The Council will actively manage the pattern of development to ensure that new development:

- Is located to ensure good access to the City's main economic drivers, including the Regional Centre, the Oxford Road Universities and Hospitals and the Airport and to ensure good national and international connections
- Is easily accessible by walking, cycling and public transport; connecting residents to jobs, centres, health, leisure, open space and educational opportunities. Particular priority will be given to providing all residents access to strategic employment sites including:

- Links between North Manchester residents and key employment locations, including the City Centre, Central Park, Salford Quays and Chadderton Industrial Estate and Trafford Park.
- Links within East Manchester to employment locations, Central Park and Eastlands in particular.
- Links within Central Area between residents and employment, the Corridor in particular and east/west connectivity for residents in Central Area to employment areas in Trafford and East Manchester.
- Maintaining strong links between residential areas in the South and the Regional Centre and improving connectivity with the Airport.
- Ensuring good links between Wythenshawe residents and the Airport and further employment opportunities in Stockport, Trafford and the Regional Centre.

Within the City Centre, provides a level of car parking which reflects the highly accessible nature of the location, as well as the realistic requirements of the users of the development. Elsewhere, all new development should provide appropriate car parking facilities, taking account of the guidance in appendix B, which reflects policy in the Regional Strategy (RS). In all parts of the City proposals should have regard to the need for disabled and cycle parking, in line with appendix B. If the RS is revoked the Council will continue to use these standards when applying this policy. Standards are set for two different area types:

- District Centres
- Areas not within the City Centre or District Centres

The car parking standards are maximums and the cycle and disabled car parking standards are minimums. However the Council will take the circumstances of each proposal into account to establish what level of parking is appropriate. Includes proportionate Traffic Impact Assessments and Travel Plans for all major applications and for any proposals where there are likely to be access or transport issues.

4.4 TfGM Transport Strategy 2040

Developing A Comprehensive Walking and Cycling Network

Policy 23: We will work with partners to improve walking and cycling facilities across Greater Manchester, including through the development of a strategic walking and cycling network (the 'Bee Network'), wayfinding and cycle parking, and supporting 'Streets for All' design guidance to ensure consistently high quality standards across the network.

The TfGM Transport Strategy 2040 indicates that school journeys can usually be undertaken by walking and cycling and encouraging more active travel is important to improving children's health.

Connected Neighbourhoods

The TfGM Transport Strategy 2040 recognises the importance of active lifestyles to improve health outcomes which includes day-to-day activities such as walking and cycling to school.

Access to Local Facilities

The TfGM Transport Strategy 2040 comments that the school journey by car can have a significant impact on local traffic and school car journeys can contribute to reduced levels of fitness and increasing obesity. The Strategy recognises that for primary schools a switch to walking and cycling journeys can reduce traffic impacts. For secondary schools, the Strategy indicates that journeys are generally longer but many journeys could be made by walking and cycling if safer routes and cycling parking are provided.

4.5 **Manual for Streets**

4.6 Manual for Streets 1 and Manual for Streets 2 provides guidance on a range of highway and transport topics and it focuses on the lightly trafficked residential streets including the geometry and layout of those streets. The principles within it can be applied to other situations such as high streets and lightly trafficked lanes in rural areas.

4.7 **Design Manual for Roads and Bridges**

4.8 This provides a suite of guidance for application generally on high speed roads managed by Highways England. The principles and approaches though are applied by some local highway authorities on some of its road network.

5.0 **Site Accessibility**

5.1 This part of the TA will assess the development proposals in relation to accessibility. The site accessibility assessment will consider the following modes :-

- Walking
- Cycling
- Public transport

5.2 The accessibility to the site will consider 2km and 5km maximum isochrones for journeys to be made by walking and cycling respectively.

- 5.3 Accessibility analysis has been undertaken using the GM mapping tool [GM Open Data Infrastructure Map | MappingGM](#). The analysis shows that the site in Redby Street is located in an area that exhibits fairly high levels of transport accessibility.

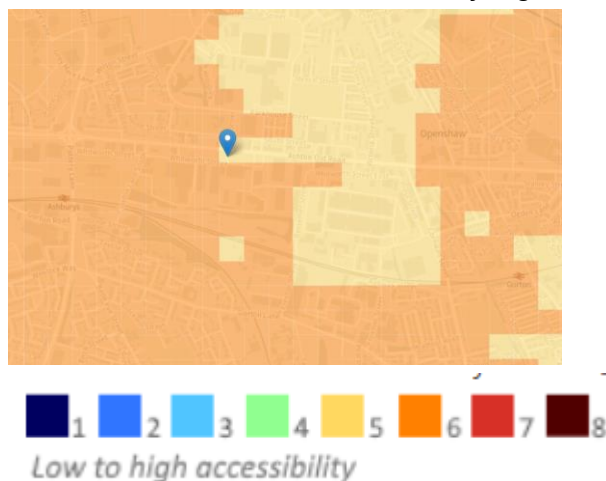


Figure 4 – Site Accessibility (GM Mapping Tool)

5.4 Public Transport

- 5.5 The site is served by public transport. Bus service 219 operates along Ashton Old Road in the vicinity of the site. The bus stop for the westbound service is approximately 80 metres east of the site and the bus stop for the eastbound service is approximately 60 metres west of the site, a walk of around a minute or 2.

- 5.6 As indicated in the tables below bus service 219 offers frequent connections to the surrounding areas of Stalybridge, Ashton-Under-Lyne, Guide Bridge and Manchester City Centre. There are 10 services per hour during the day including during the am and pm peak times, servicing the site during its hours of operation.

Table 3 – Bus Services along A635 Ashton Road (eastbound)

Service	Route	AM Peak	Off-Peak	PM Peak
219	Manchester-Openshaw-Ashton-Under-Lyne-Stalybridge	5	5	5
	Total	5	5	5

Table 4 – Bus Services along A635 Ashton Road (westbound)

Service	Route	AM Peak	Off-Peak	PM Peak
219	Stalybridge-Ashton-Under-Lyne-Openshaw-Manchester	5	5	5
	Total	5	5	5

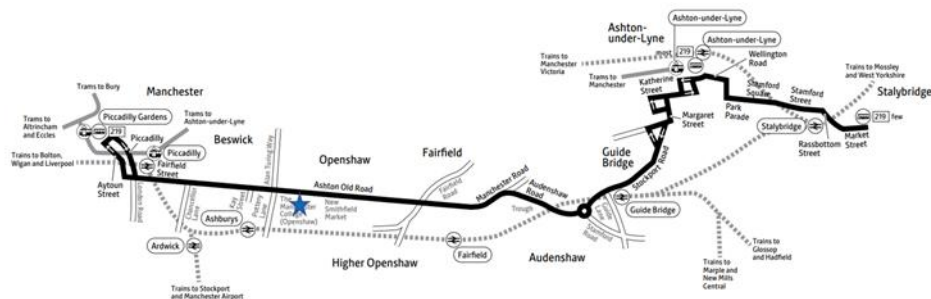


Figure 5 – Map of Bus Service Route 219

- 5.7 As indicated in the tables above bus service 219 offers frequent connections to the surrounding areas of Stalybridge, Ashton-Under-Lyne, Guide Bridge and Manchester City Centre. There are 10 services per hour during the day including during the am and pm peak times, servicing the site during its hours of operation.

5.8 Rail Access

- 5.9 The nearest rail station to the site is Ashbury rail station, it is located approximately 900 metres south west of the site, a walk of around 12 minutes. There are frequent services during the am and pm peak periods and during the rest of the day. Rail stations with direct connections from Ashburys rail station include Manchester Piccadilly, New Mills Central, Rose Hill Maple and Hadfield.

5.10 Cycle Access

- 5.11 In relation to cycling, it is widely recognised that cycling can be a substitute for car trips particularly for journeys under 5km. An assessment has been made of the locations that can be accessed within a 5km cycle ride from the proposed development. The analysis is illustrated in the Figure below.



Figure 6 – Cycle Access to the Site (www.app.traveltimeplatform.com)

- 5.12 A map of the local routes is shown in the Figure below. The map below indicates the local cycle routes in the vicinity of the proposed development.

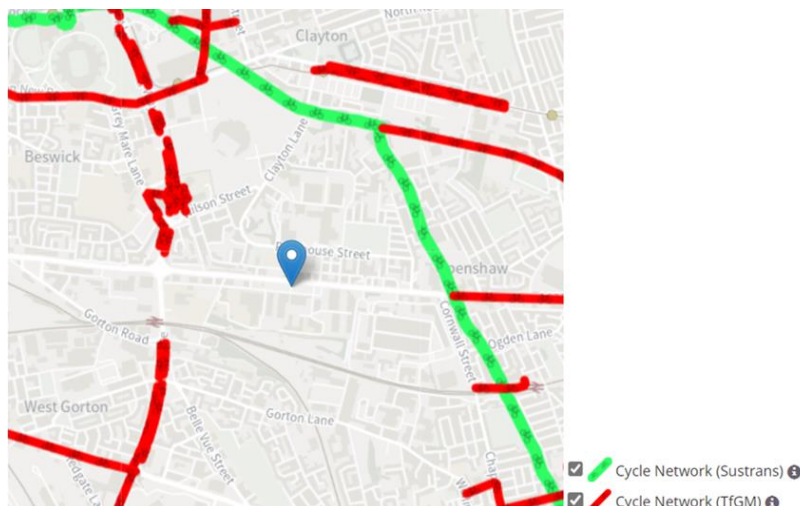


Figure 7 – Cycle Map (TfGM)

- 5.13 The figure below illustrates that cycle route 60 of the National Cycle Network can be accessed approximately 900 metres east of the site, a cycle journey of approximately 2 minutes and runs between north and east Manchester.

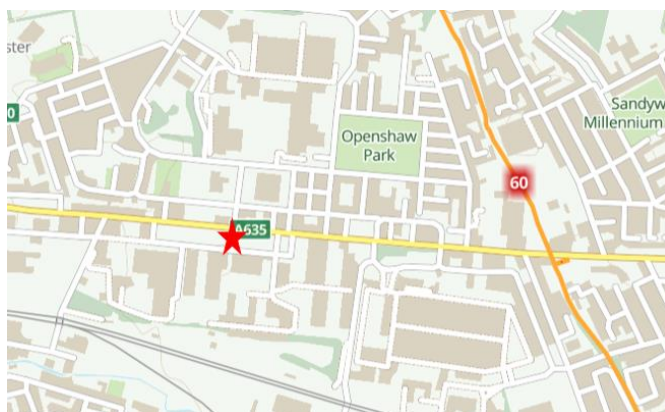


Figure 8 – Map illustrating the location of National Cycle Network Route 60

5.14 Walking Access

- 5.15 The National Travel Survey 2019 indicates that in the last 5 years, people in England made 14% more walking trips, and spent 12% longer walking, per year. The Chartered Institution of Highways and Transportation (CIHT) produced their 'Guidelines for Journeys on Foot' in 2000 which suggests a 'preferred maximum' walking distance of 2km.
- 5.16 An assessment has been made of the locations that can be accessed within a 2km walk from the site. This analysis is depicted in the Figure below.



Figure – Walking Access to the Site (www.app.traveltimeplatform.com)

- 5.17 There are footways along either side of Ashton Old Road and Whitworth Street and a network of footpaths with street lighting on the roads surrounding the site. There are pedestrian crossing facilities with dropped kerbs on Ashton Old Road one at the site boundary and one well within 100 metres to the east of the site, both can be accessed with in approximately 1 minute of walking.
- 5.18 The walking distance to existing bus stops is also clearly important in determining the accessibility of a site. As described above, the nearest bus stops are located on Ashton Old Road and are positioned well within 100 metres of the proposed site. The walking distances to access bus services are short, taking approximately a minute or 2 and the site is considered to be excellently located for bus services.
- 5.19 **Services Located Near the Development Site**
- 5.20 Lime Square retail park is located approximately 1.4 km east of the site, a walk of around 16 minutes or a cycle journey of around 4 minutes and offers a variety of retail, coffee shops and take away food and an ATM. Closer to the site are take aways within 100 metres of the site and several take aways and restaurants within 450 metres of the site.
- 5.21 **Site Linkages to Sustainable Transport**
- 5.22 TfGM requested that the site's linkages be shown to bus stops, cycle routes and nearby crossings. The figure below, taken from the GM Mapping Tool, shows the bus stops, crossings and cycle routes near the site. The site will have an access onto Ashton Road and an access onto Whitworth Street.

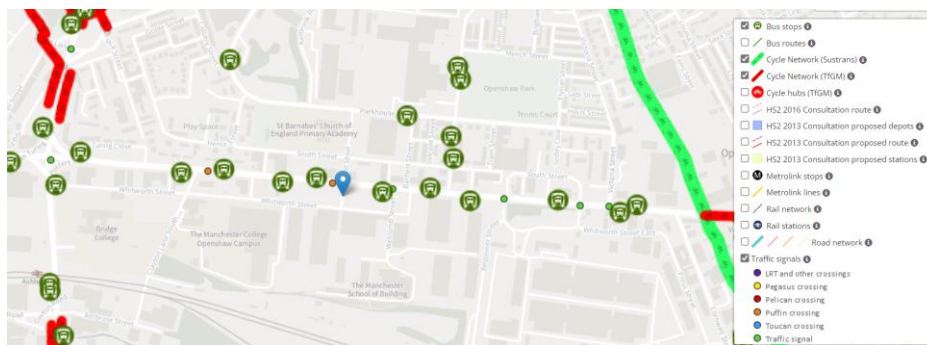


Figure 9 – Site Accessibility to Bus Stops, Crossing and Cycle Routes

- 5.23 TfGM suggested that a pedestrian survey is carried out in the vicinity of the site using Living Streets guidance. This item can be considered later in an update of the Travel Plan.

6.0 Sustainable Travel Strategy

- 6.1 This part of the TA discusses sustainable modes of travel for travel to and from the proposed education development.

- 6.2 The Applicant understands that a Travel Plan will be required for the proposed education development and this has been produced to accompany the TA.

- 6.3 The proposed Interim Travel Plan :
- describes the existing infrastructure in the vicinity of the site;
 - the objectives and indicators for the Travel Plan;
 - discusses the proposed sustainable transport measures; and
 - explains the proposed implementation programme and the proposed monitoring.

7.0 Development Proposals

- 7.1 The proposed development is for a new private education building which will provide a nursery, primary school and secondary school.

- 7.2 The Ground Floor will provide :
- classrooms between 30sq.m to 33sq.m in size
 - A nursery 124sq.m
 - A library
 - A dinning hall and sports hall that can be partitioned to suit the requirements of the school
 - A kitchen
 - Offices, toilet facilities,

- 7.3 The first floor will provide

- 10 classrooms between 31sq.m to 33 sq.m
- Head Teacher's Office
- Staff Room
- 3 x Labs
- A library
- Toilet facilities

7.4 The second floor will provide :

- 10 classrooms between 31sq.m to 33 sq.m
- Head Office
- Staff Room
- 3 x Labs
- A library
- Toilet facilities

7.5 The figure below shows the proposed site layout. **Appendix C** contains the proposed site layout drawings.

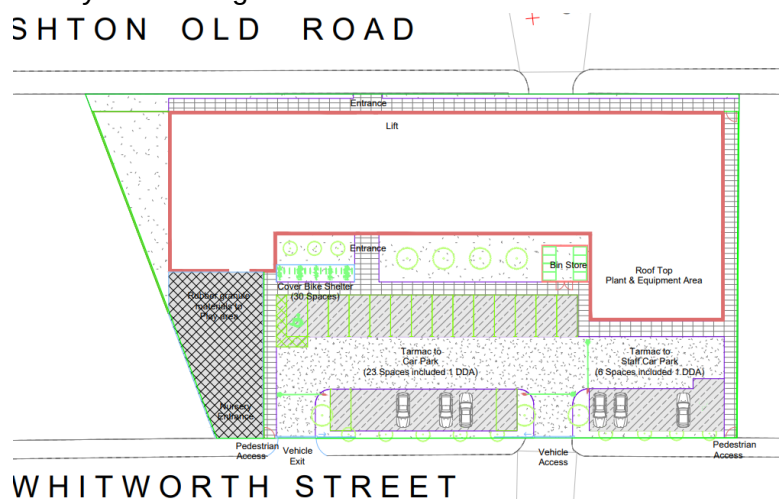


Figure 10 – Proposed Site Layout

7.6 School Intake

7.7 The Applicant has confirmed that the building will be a private school and pupil numbers will be limited to 13 per classroom. The Table below shows the pupil numbers by class year.

Table 5 – Pupil Numbers

School Year	Numbers
Nursey	50
Reception - Year 6	204
Year 7 - 11	146
Total	400

7.8 The nursery proposes to have one intake in the morning and one intake of 25 pupils in the afternoon, at total of 50 pupils per day.

7.9 Proposed School Times

- 7.10 The nursery, primary school and secondary school start and finish times are shown in the Table below.

Table 6 – Start and Finish Times

School Year	Start and Finish Times
Nursey	08:45-15:00
Reception - Year 6	08:45-15:15
Year 7 - 11	8:25-14:50

7.11 Site Access

- 7.12 The proposed education development proposes to create two accesses – one for inbound vehicle movements and the other access will cater for existing movements onto Whitworth Street. The inbound access is proposed to be located at the easterly side of the site and the outbound access will be located in the westerly part of the site. The inbound access will provide access into the car parking area. This inbound access will provide access to the staff parking area located in the eastern side of the parking area and to the visitor parking / drop-off / pick-up parking spaces located to the west of the inbound access. The two access points will facilitate circulation in the site in a westerly direction only and will simplify the manoeuvres within the car parking area. Pedestrian access will be via the entrance on A635 Ashton Old Road. There is a further pedestrian entrance onto Whitworth Street proposed.
- 7.13 A number of gates are proposed within the site layout. The gates at the car park entrance and the exit onto Whitworth Street will remain open during school and nursery drop-off and pick-up times. Outside of the drop-off / pick-up times, the gates will be closed and controlled by an intercom system. The gates to the staff car parking area will be controlled by the intercom system at all times. When the school is closed, the gates onto Whitworth Street will be closed.
- 7.14 An earlier planning application for the site consisted of a mixed use proposal and proposed to close Redby Street. From a site visit it appears that Redby Street has already been closed-off although the pre-application comments received from the Highway Authority advise that the closure process was not completed legally.
- ## 7.15 Access Strategy
- 7.16 The proposed vehicle access strategy is to turn right from A635 Ashton Old Road into Odell Street then travel along Whitworth Street to drop-off children then travel out through the traffic signals at A635 Ashton Old Road / Welcomb Street. The City Council requested a School Keep Clear Marking be provided on Whitworth Street. The City Council and TfGM requested a review of the traffic regulation orders in the area be undertaken. The Applicant is agreeable to this and presumes this will be achieved via a planning condition and / or a S278 Agreement of the Highways Act 1980.

- 7.17 The City Council asked for information on the anticipated number of mini-buses / buses to the site and where they will park. The Applicant advises that the origins of nursery attendees and school pupils is not yet known and would ask that this matter be considered when the origins are known and discussed within the update to the Travel Plan.
- 7.18 **Visibility Splays**
- 7.19 There is a speed limit of 20mph in place along Whitworth Street. This speed limit and the Manual for Streets formula has been used to produce the visibility splays for the site exist. Visibility splays of 2.4 x 25m have been plotted for the site exit onto Whitworth Street. The visibility splay drawing is provided in **Appendix D**.
- 7.20 **Swept Path Analysis**
- 7.21 Swept path analysis has been undertaken on the proposed site accesses and the proposed internal site layout to demonstrate how servicing can be performed by a refuse vehicle. The Applicant proposes refuse collection to be undertaken by a private company and an appropriately sized refuse vehicle has been used in the swept path analysis. The swept path analysis demonstrates that the refuse vehicle tested can enter and leave the site in forward gear. The swept path analysis is contained in **Appendix E**.
- 7.22 **Servicing Management Strategy**
- 7.23 The City Council has requested that a Servicing Management Strategy is in place for the nursery and school development. As indicated above, refuse collection will be undertaken by a private company using a smaller refuse vehicle. Refuse collection and other deliveries will be planned to be undertaken outside of the morning and evening network traffic peak periods.
- 7.24 TfGM requested information on the likely traffic / environmental impacts of heavy goods vehicles during the construction phase of the project. It is expected that this could be addressed post determination and the information included within a Construction Management Plan, which has been requested by the City Council.
- 7.25 **Parking**
- 7.26 The Transport Assessment will now consider the proposed parking provision for cars, disabled parking and cycles. The parking provision will be considered against Appendix B of the Core Strategy. Appendix B has the following parking standard for higher and further education.

Table 7 – Parking Standard for Higher & Further Education

Land Use	Maximum number of car parking spaces		Minimum number of spaces required for:		
	District Centres	Areas not within the City Centre or District Centres	Disabled people's parking as percentage of total (Citywide)		Cycles (Citywide)
			Up to 200 in total	Over 200 in total	
Higher and Further Education	1 space per 2 staff (includes parking for students)		Case by case basis	Case by case basis	1 space per 5 staff plus 1 space per 3 students

7.27 Manchester City Council does not have specific parking standards for nursery, primary school or secondary school development. The parking standard for higher and further education allows for students that can drive. The proposed educational development at Redby Street will cater for pupils upto and including 16 years of age, therefore, none of the pupils will be eligible to drive.

7.28 Since there is no defined parking standard for the nursery, primary school and secondary school then analysis has been undertaken to assess whether the proposed parking would be sufficient and be compliant with Policy T2 which indicates *'Elsewhere, all new development should provide appropriate car parking facilities, taking account of the guidance in appendix B'*.

7.29 TRICS Parking Assessment Analysis

7.30 The samples obtained from the TRICS database for the nursey, primary school and secondary school has been interrogated further to assess each site, the number of pupils, the size of the school and the number of parking spaces available. The data was analysed to produce a ratio between the level of parking on the site and pupil numbers. This analysis then used the ratio calculated between pupils and parking to forecast the level of parking required at the proposed site. The analysis calculated a parking provision of 20 spaces. The analysis for the nursery, primary school and secondary school sites is set out below in the Table.

Table 8 – Parking Analysis Using TRICS Site Samples

From TRICS Database	Pupil : Parking Ratio	Proposed Scheme	
		Pupils	Parking by Pupil Number
Primary Average	49.3	204	4
Secondary Average	11	146	13
Nursery Average	8	25	3
20			

7.31 Secondary School in Manchester Parking Analysis

7.32 Further analysis was undertaken on a particular school application within Manchester. The proposed number of pupils and proposed parking numbers were examined. This analysis produced a ratio between pupil numbers and parking numbers which was then used to calculate the proposed parking level at the site in Redby Street. The

analysis calculated a parking provision of 25 spaces. The analysis is contained in the Table below.

Table 9 – Parking Analysis Using Approved School Site in Manchester

Type	Proposed Pupils	Parking Spaces by Pupil Ratio
Secondary School	146	11
Total Site	325	25

7.33 The Applicant originally proposed to provide 14 car parking spaces which included 1 disabled parking space. The extent of parking has been reviewed following feedback from the Highway Authority and the proposed site layout has been revised including additional parking facilities. The scheme now proposes to provide 29 car parking spaces including 2 disabled car parking spaces. The analysis set out in the Tables above on TRICS Parking Analysis and Secondary School Parking Analysis produced broadly similar results as the proposed level of car parking. The proposed level of car parking is considered adequate to cater for the proposed teachers, nursery staff, visitors and parent pick-up and drop-off events and to address the comments of the Highway Authority that the site should provide drop-off/pick-up parking spaces within the school site.

7.34 **Parking Management Plan**

7.35 As indicated above the gates into the school visitor parking / drop-off / pick-up area will remain open during the morning and afternoon start / finish times. The pick-up and drop-off will be monitored by senior management. The school will also notify parents in advance of the intake on the arrangements for parking / drop-off / pick-up at the site so that parents know what to expect. The start / finish times have some stagger to them for some of the uses on the site which will enable the school to provide clear direction to parents on a time window when drop-off / pick-up for each use is permitted.

7.36 **Data Collection**

7.37 Traffic surveys have been undertaken at the following locations :-

- A635 Ashton Old Road / A610 Alan Turing Way – Turning Count
- A635 Ashton Old Road / Welcomb Street – Turning Count
- A635 Ashton Old Road west of Redby Street - Automatic Traffic Count
- A peak hour turning count has been undertaken at A635 Ashton Old Road / Odell Street.

7.38 **Appendix F** contains the traffic survey data.

8.0 **Trip Generation & Traffic Generation Methodology**

8.1 This part of the TA will describe the traffic generation methodology for the proposed nursery and school.

8.2 The TRICS database has been interrogated and trip rates obtained for the following uses :

- 04-A Primary School
- 04-B Secondary School
- 04-C Nursery

8.3 **Appendix G** contains the outputs from the TRICS database.

8.4 Traffic Generation

8.5 Traffic generation analysis has been undertaken using the trip rates derived from the TRICS database and the children numbers planned to be on-site. The traffic generation is shown below in the table.

Table 10 – Traffic Generation

Education Type		Trip Rates						Traffic Generation					
		AM Peak (8.00-9.00)			PM Peak (15.00-16.00)			AM Peak (8.00-9.00)			PM Peak (15.00-16.00)		
	Units	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Nursery	25	0.14	0.103	0.243	0.018	0.013	0.031	4	3	6	0	0	1
Primary	204	0.377	0.208	0.585	0.250	0.285	0.535	77	42	119	51	58	109
Secondary	146	0.150	0.135	0.285	0.055	0.078	0.133	22	20	42	8	11	19
Total Traffic Generation								102	65	167	59	70	129

8.6 Traffic Generation Methodology

8.7 The traffic generation for the proposed nursery, primary school and secondary school has used the following trip rate split :

- 30% new trips
- 20% passby trips
- 50% diverted trips

8.8 The above trip split was put forward by the Highway Authority and TfGM in the response to the Highway Scoping Note.

8.9 The traffic generation is based on the total numbers at the site and based on a new use of the site. A previous application has been approved for a drive thru coffee shop and retail units and the Applicant believes this should be taken into consideration in the development of the net traffic generation.

8.10 Approved Scheme Trip Generation from Earlier Application

8.11 The Transport Statement for the drive thru coffee shop and retail units included the following for traffic generation, as shown in the table below. The Transport Statement did indicate that the overwhelming majority of the traffic would be existing road users (ie passby trips).

Table 11 – Traffic Generation Earlier Application

	Drive Thru			A1/A3 Units			Total		
	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Morning Peak	66	63	129	6	15	11	72	68	140
Lunchtime Peak	36	41	77	12	13	25	49	54	103
Evening Peak	21	22	43	10	10	21	31	32	64
New Trips AM Peak	20	19	39	2	5	3	22	20	42
New Trips Lunchtime	0	0	0	0	0	0	0	0	0
New Trips PM Peak	11	12	23	4	4	8	15	16	31

- 8.12 Whilst this scheme was not implemented it does demonstrate that the traffic associated with the scheme could be accommodated within the highway network without any concern. No adjustment has been made to the trip generation methodology but the Applicant does feel that the impact of the proposed nursery and school should be considered in the context of the flows approved in this earlier scheme for the site at Redby Street (development traffic from the school / nursery development minus the traffic from the drive thru / retail scheme in 2017).

8.13 Daily Absence Levels

- 8.14 Whilst regrettable, there is inevitably a certain level of absence each school day. In 2018/19 the national average for absence was 4.7%. For the proposed school with 350 pupils, there is likely to be 16 pupils absent daily. Whilst it would seem reasonable to include the daily absence level in the net traffic generation this has not been included. **Appendix H** contains a factsheet on absence levels in 2018/19.

8.15 Net Traffic Generation

- 8.16 The net traffic generation is shown below in the Table and has been calculated using the trip split provided by the Highway Authority and TfGM.

Table 12 – Net Traffic Generation

Education Type	No	Trip Rates						Traffic Generation					
		AM Peak (8.00-9.00)			PM Peak (15.00-16.00)			AM Peak (8.00-9.00)			PM Peak (15.00-16.00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Nursery	25	0.14	0.103	0.243	0.018	0.013	0.031	4	3	6	0	0	1
Primary	204	0.377	0.208	0.585	0.250	0.285	0.535	77	42	119	51	58	109
Secondary	146	0.150	0.135	0.285	0.055	0.078	0.133	22	20	42	8	11	19
Total Traffic Generation								102	65	167	59	70	129
New Trips 30%								31	19	50	18	21	39
Passby Trips 20%								20	13	33	12	14	26
Diverted Trips 50%								51	32	84	30	35	65
Total Traffic Generation								102	65	167	59	70	129

8.17 Assessment Periods

- 8.18 Analysis is proposed on the following assessment periods to coincide with start and finish times :
- Weekday am (8.00-9.00am)

- Weekday pm (14.30-15.30)

8.19 The traffic survey data commissioned by the Applicant shows that the network peaks at the junctions occur at different times than the peak periods for the proposed nursery, primary school and secondary school. The peak periods at the nearby junctions occur at :

Table 13 – Network Peak Periods and Development Peak Periods

	School Peak Period	Alan Turing Way Junction	Welcomb Street Junction
Time	8.00am-9.00am	7.45am-8.45am	7.30am-8.30am
	2.30pm-3.30pm	3.30pm-4.30pm	3.30pm-4.30pm

8.20 From the table above the afternoon peak periods for the development and the highway network do not coincide. There is some overlap between the development peak traffic period in the morning and the highway network morning peak period. However, it is clear from the table above that there is some variation between when the development peak period, Alan Turing Way junction peak period and Welcomb Street junction peak period occur.

8.21 Assessment Years

8.22 The proposed assessments in the TA are as follows :-

- Base Year 2022
- Opening Year 2023
- Future Year 2030

8.23 The education facility will have a primary school and secondary school so will host school years from reception to Y11. The education site will have the initial intake for reception, the nursery and the first year of the secondary school. The school building will not have classrooms fully utilised until 7 years after opening as pupils move through the school years.

8.24 Committed Development

8.25 The Council's planning portal has been examined to assess whether there were any committed development that needed to be included in the analysis. Schemes that have received planning approval but have not yet been implemented have been included as committed development within the TA, as follows :

- Bertha Street (application 128112/FO/2020 refers);
- Gorton Lane (application 129876/FO/2021 refers); and
- Mayton Street (application 125474/FO/2019 refers)

8.26 For each of the above schemes, traffic has been distributed equally at the site access (ie 50% turn left out; 50 turn right out; 50% turn left in and 50% turn right in). At the

next junction traffic has then generally been distributed evenly against all of the outbound and inbound routes.

8.27 Traffic Growth

8.28 TEMPRO 7.2 has been used to forecast growth factors to create the future year scenarios.

Table 14 – TEMPRO Growth Figures

Time Period	AM	PM
2022-2023	1.0137	1.0134
2022-2030	1.0990	1.0962

8.29 Traffic Scenarios

8.30 The following traffic scenarios have been used in the analysis within the TA :-

- 2022 Base Year
- 2023 Opening Year
- 2023 Opening Year + Committed Development
- 2023 Opening Year + Committed Development + Development Traffic
- 2030 Future Year
- 2030 Future Year + Committed Development
- 2030 Future Year + Committed Development + Development Traffic

8.31 A series of analysis sheets have been produced showing the base traffic, opening year traffic, development traffic and the committed development for the various scenarios. Analysis sheets have also been produced showing the new traffic, passby traffic and diverted traffic in the proportions identified by the Highway Authority and TfGM.

8.32 In the Opening Year (2023), the primary and secondary school will only intake in the first year for each of the schools. In the Opening Year, 20% of the pupils will be in attendance at the primary school and 20% of pupils will be in attendance at the secondary school. With the 20% of pupils in the school and 100% of children in the nursery analysis illustrated that the development flows will be negligible for the 2023 Scenarios, as shown in the Table below. Therefore the various 2023 Scenarios have not been produced.

Table 15 – Traffic Generation in Opening Year

Education Type	Trip Rates							Traffic Generation					
	No	AM Peak (8.00-9.00)			PM Peak (15.00-16.00)			AM Peak (8.00-9.00)			PM Peak (15.00-16.00)		
	No	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Nursery	25	0.14	0.103	0.243	0.018	0.013	0.031	4	3	6	0	0	1
Primary	204	0.377	0.208	0.585	0.250	0.285	0.535	15	8	24	10	12	22
Secondary	146	0.150	0.135	0.285	0.055	0.078	0.133	6	6	12	2	3	5
Total Traffic Generation								25	17	42	13	15	28
New Trips 30%								8	5	12	4	5	8
Passby Trips 20%								5	3	8	3	3	6
Diverted Trips 50%								13	8	21	6	8	14
Total Traffic Generation								25	17	42	13	15	28

8.33 Traffic Assignment and Distribution

8.34 The Applicant has indicated that nursery attendees and school pupils will come from the Manchester area. As the origin points are unknown for nursery attendees and school pupils, a gravity model has been constructed to assess the proportion of school children by Ward in Manchester and the distance between the origin and the school site. Analysis was then undertaken to assess the potential travel route using the shortest route to the school from the Ward. Census data (KS102EW Age Structure) was used to determine school aged children per Ward and then the distribution model created. This distribution is shown in **Appendix I**.

8.35 Nursery attendees and school pupils will travel from other parts of Manchester to the site, located in the easterly part of Manchester. The distribution analysis has considered the distribution of traffic through the following junction :

- A635 Ashton Old Road / A6010 Alan Turing Way

8.36 The distribution analysis resulted in the following distribution :-

Table 16 – Traffic Distribution Proportions

Distribution	Within the Immediate Area	Left at ATW	Ahead at ATW	Right at Alan Turing Way
Percentage	19%	43%	14%	24%

8.37 The following table shows the distribution of net traffic through the A635 Ashton Old Road / A6010 Alan Turing Way junction.

Table 17 – Traffic Distribution

Time Period & Movement	Total	Within the Immediate Area	Left at ATW	Ahead at ATW	Right at Alan Turing Way
Distribution	100%	19%	43%	14%	24%
AM IN	31	6	13	4	7
OUT	19	4	8	3	5
PM IN	18	3	8	3	4
PM OUT	21	4	9	3	5

8.38 Highway Assessment Network

8.39 The extent of the proposed highway assessment for the proposed development is as follows :-

- From A635 Ashton Old Road / Welcomb Street Traffic Signals
- To A635 Ashton Old Road / A6010 Alan Turing Way

8.40 A series of analysis sheets showing the various base flows, development flows and committed development flows for the scenarios identified earlier in this Section. These analysis sheets are contained in **Appendix J**.

8.41 Traffic Modelling

8.42 Section 9 of this TA discusses the junction analysis and modelling undertaken.

9.0 Junction Assessments

9.1 This part of the TA describes the junction assessments undertaken for the proposed nursery and school development. The junction below has been modelled using the scenarios set out earlier in this TA in section 8.

- A635 Ashton Old Road / Odell Street

9.2 A635 Ashton Old Road / Odell Road

9.3 As explained in section 8, only the 2030 scenarios have been modelled. The junction was modelled using Junctions 9 software. The analysis of the junction revealed that base plus committed development and the with development performed adequately for the scenarios without any capacity issues identified. A summary of the analysis output is contained below in Table 18.

Table 18 – Capacity Analysis Output A635 / Odell Street in 2030

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
	2030 B+C													
Stream B-AC	D7	0.1	13.95	0.12	B	0.63	31 % [Stream B-AC]	D8	0.1	9.28	0.09	A	0.42	41 % [Stream C-AB]
Stream C-AB		1.0	4.58	0.24	A				0.5	3.73	0.16	A		
	2030 B+C+D													
Stream B-AC	D9	0.2	26.90	0.20	D	4.42	4 % [Stream B-AC]	D10	0.1	9.69	0.09	A	1.17	19 % [Stream C-AB]
Stream C-AB		8.3	18.21	0.78	C				2.4	5.33	0.45	A		

9.4 **Appendix K** contains the output of the junction modelling exercise at A635 Ashton Old Road / Odell Street.

9.5 A635 Ashton Old Road / Alan Turing Way

9.6 The base traffic flows and development flows have been analysed against the busiest peak hours for the junction. The table below shows that the busiest morning peak hour operating at the junction currently provides similar levels of traffic as the existing traffic

flows and the development flows in the 8-9am school peak period. In the afternoon, the school flows and the existing flows between 2.30pm-3.30pm are lower than the busiest peak flow in the afternoon, which occurs between 3.30pm-4.30pm. The results of the comparison of the highest peak hour flows with the development flows and existing flows in the development flow peak period show that there is no difference in the morning peak and are much lower in the afternoon peak period. The results show that the development traffic flows will not have a material impact on the performance of the junction and capacity analysis with junction modelling should not be required.

Table 19 – Analysis of Development on A635 / Alan Turing Way Junction

Trip Type / Time AM Peak	Total
Passby	-20
Diverted	54
New	40
Total	74
Busiest AM Peak Hour 7.45-8.45am	4598
Development Peak Hour 8-9am	4522
Difference between Busiest AM Peak Hour Compared to 8-9am Peak + Development	-2
Trip Type / Time PM Peak	Total
Passby	2
Diverted	50
New	21
Total	73
Busiest PM Peak Hour 3.30-4.30pm	4251
Development PM Peak Hour 2.30-3.30pm	4068
Difference between Busiest PM Peak Hour Compared to 2.30-3.30pm Peak + Development	110

9.7 A635 Ashton Old Road /Welcomb Street

9.8 The same exercise has been undertaken to compare the busiest peak hour with the development traffic peak period. Analysis set out in the table below shows that for both of the development peak periods plus the existing flows in that corresponding period are lower than the highest peak flows in the morning and afternoon peak periods. This analysis demonstrates that the junction is already operating at higher levels of traffic than would result from the development flows combined with the development peak period existing traffic levels. The analysis shows that the development traffic flows should not have a material impact on the performance of the junction and modelling of this junction should not be required.

Table 20 – Analysis of Development Flows on A635 / Welcomb Street Junction

Trip Type / Time AM Peak	Total
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Passby	-7
Diverted	58
New	19
Total	70
Busiest AM Peak Hour 7.30-8.30am	2122
Development Peak Hour 8-9am	2086
Difference between Busiest AM Peak Hour Compared to 8-9am Peak + Development	35
Trip Type / Time PM Peak	Total
Passby	2
Diverted	50
New	21
Total	73
Busiest PM Peak Hour 3.30-4.30pm	1849
Development PM Peak Hour 2.30-3.30pm	1745
Difference between Busiest PM Peak Hour Compared to 2.30-3.30pm Peak + Development	31

10.0 Summary and Conclusions

- 10.1 This Transport Assessment has been prepared to support a planning application for a proposed nursery, primary school and secondary school on land situated south of the A635 Ashton Old Road.
- 10.2 A pre-application enquiry was undertaken with the City Council and TfGM on the highway matters for the proposed development. This Transport Assessment has been produced and takes account of the comments received from the City Council and TfGM.
- 10.3 The Transport Assessment has undertaken a review of the road safety record and acknowledged that there are a number of accidents along the A635 Ashton Old Road. Whilst there are a number of road safety accidents along the A635 and at the one of the junctions, the road safety record should not be a material concern for the proposed development.
- 10.4 The Transport Assessment has undertaken a robust analysis of the anticipated traffic generation from the proposed development and it has been concluded that the traffic generation can be accommodated within the highway network capacity.
- 10.5 The scheme now proposes an increase in car parking following comments received during the pre-application stage and this parking provision now includes spaces for parent drop-off and pick-up. The scheme includes a covered cycle shelter for 30

bicycles and 2 mobility parking spaces and is considered to comply with the Council's parking standards.

- 10.6 A Travel Plan has been produced for the development.
- 10.7 The Transport Assessment has demonstrated the traffic impact of the proposed development will have negligible effect on the operation or capacity of the local highway network and, it is therefore hoped that the scheme will be supported for approval by the Highway Authority and TfGM.