



Newbridge Academy, Rochdale

Transport Assessment

For Tilbury Douglas

Date 26 June 2023

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Contents

1.	Introduction	1
1.1	Overview	1
1.2	Scoping	1
1.3	Site Location	1
1.4	Structure of Report	2
2.	Existing Conditions	3
2.1	Local Highway Network	3
2.2	West Starkey Street	3
2.3	A58 Bridge Street	4
2.4	Bamford Road	5
2.5	Network Traffic Flows	5
2.6	Accident Analysis	6
3.	Transport Policy Context	8
3.1	Preamble	8
3.2	National Planning Policy Framework	8
3.3	Planning Practice Guidance: Travel Plans, Transport Assessments and Statements in Decision-Making 8	
3.4	Manual for Streets [MfS]	9
3.5	Guidelines for Providing for Journeys on Foot	9
3.6	Regional Plan - Greater Manchester Transport Strategy - Places For Everyone Joint Development Plan Document	10
3.7	Greater Manchester Transport Strategy (2040)	11
3.8	Rochdale Borough Council [RBC] Adopted Core Strategy (October 2016)	11
3.9	Rochdale Borough Council Parking Standards	12
3.10	Summary	12
4.	Sustainable Accessibility	13
4.1	Introduction	13
4.2	Accessibility by Foot	13
4.3	Accessibility by Cycle	14
4.4	Access by Bus	16
4.5	Access by Rail	17
4.6	Accessibility by Public Transport	18
4.7	Conclusions	18
5.	Development Proposals	19
5.1	Introduction	19
5.2	Site Vehicular Access Arrangement	20

5.3	<i>Pedestrian and Cycle Access</i>	21
5.4	<i>Parking</i>	21
5.5	<i>Servicing</i>	21
6.	Trip Generation, Distribution and Assignment	22
6.1	<i>Introduction</i>	22
6.2	<i>TRICS - F1(a) Provision of Education Trip Rates</i>	22
6.3	<i>Proposed Development Trip Generation</i>	22
6.4	<i>First Principles Approach</i>	23
6.5	<i>Development Traffic Distribution and Assignment</i>	23
6.6	<i>Conclusion</i>	23
7.	Future Growth and Committed Developments	24
7.1	<i>Introduction</i>	24
7.2	<i>Assessment Methodology</i>	24
7.3	<i>Committed Developments</i>	24
8.	Capacity Analysis	25
8.1	<i>Introduction</i>	25
8.2	<i>Proposed Site Access Junction / West Starkey Street</i>	25
8.3	<i>Conclusion</i>	26
9.	Summary and Conclusion	27
9.1	<i>Summary</i>	27
9.2	<i>Conclusion</i>	27

Tables

Table 2.1: Study Area Accident Record Summary	7
Table 3.1: User Hierarchy (taken from Table 3.2 of MfS, March 2007)	9
Table 3.2: Acceptable Walking Distances	10
Table 3.3: RBC Parking Standards	12
Table 3.4: RBC Disabled Parking Standards	12
Table 4.1: Bus Timetable Summary	17
Table 6.1: F1 (a)- Provision of Education Trip Rates	22
Table 6.2: F1 (a)- Provision of Education Trip Generation	22
Table 7.1: TEMPro Growth Factors	24
Table 8.1: Proposed Site Access- Junctions 9 Capacity Results	25

Figures

Figure 1.1: Site Location	2
Figure 2.1: Local Highway Network	3
Figure 2.2: Local Highway Network - West Starkey Street	4
Figure 2.3: Local Highway Network - A58 Bridge Street	4
Figure 2.4: Local Highway Network - Bamford Road	5

Figure 2.5: Site Area Accident Record.....	6
Figure 4.1: 2km Walking Catchment	14
Figure 4.2: TfGM Local Cycle Routes.....	15
Figure 4.3: 5km Cycling Catchment.....	15
Figure 4.4: Nearest Bus Stops.....	16
Figure 4.5: 60-minute Public Transport Catchment	18
Figure 5.1: Proposed Site Masterplan.....	20

Appendices

Appendix A	Scoping Discussions
Appendix B	Network Traffic Flows
Appendix C	Accessibility Figures
Appendix D	Proposed Site Layout
Appendix E	Swept Path Analysis - Large Car, Mini-bus, 7.5t Box Van
Appendix F	Swept Path Analysis - Servicing
Appendix G	TRICS Output
Appendix H	Junctions 9

1. Introduction

1.1 Overview

- 1.1.1 Hydrock has been instructed by Tilbury Douglas to prepare a Transport Assessment [TA] relating to a proposed Special Education Needs and Disabilities [SEND] school in Rochdale. This report has been prepared in support of the planning application.
- 1.1.2 The proposed development is for the erection of a two storey SEND school, along with the provision of car parking, a minibus drop-off zone, refuse and cycle store and outdoor recreation facilities including a sports playing field, a MUGA, a forest school and a habitat area. The Gross Floor Area [GFA] is circa 12,049sqm.
- 1.1.3 The school is specifically designed to cater for up to 76 students, aged 11- 19 (Key stage 3, years 7, 8 and 9, Key Stage 4, Years 10 and 11 and Key Stage 5, years 12, 13 and 14) who have an Education, Health and Care plan [EHCP] and a diagnosis of Autistic spectrum conditions [ASC] and may also have other needs such as communication and/or sensory processing needs.
- 1.1.4 A detailed breakdown of the associated learning facilities and parking provision is outlined in Section 5. Since there is no existing planning permission associated with the site, it is considered a new site and will require a full assessment.
- 1.1.5 This TA will consider the impact of the proposed development on the local highway network.

1.2 Scoping

- 1.2.1 Hydrock undertook pre-application scoping discussions via email in November 2021 and a subsequent design team meeting on 25th November 2021 with Rochdale Borough Council [RBC] with follow-up discussions in December 2021. It was confirmed during these discussions that the scope of assessment for this TA is acceptable and the following junction within the local highway network should be considered as part of the study area within the TA:
 - » Proposed Site Access/ West Starkey Street.
- 1.2.2 The application was not progressed in 2021 but has since been revisited. Due to the gap in time Hydrock re-engaged with RBC in June 2023 to establish that the existing scope is still valid.
- 1.2.3 The scoping discussions with RBC are presented in **Appendix A**.

1.3 Site Location

- 1.3.1 The development site is situated approximately 5.4km south west of Rochdale Centre, 5km east of Bury Centre and 1.6km north of Heywood Industrial Estate. The proposed site access is to be located off West Starkey Street. The site is bounded by Cedar Avenue to the west, Claybank Street to the north, and the Heywood Sports Centre/Bamford Road adjacent to the east.
- 1.3.2 The site location is illustrated in **Figure 1.1**.

Figure 1.1: Site Location



Source: GoogleEarth©

1.4 Structure of Report

- 1.4.1 This TA has been developed in accordance with the now superseded DfT document "Guidance on Transport Assessment" [GoTA] (2007) and gives due regard to the NPPG "Transport Evidence in Plan Making" document. It sets out the transport matters relating to the development site and provides details of the development proposals, including an assessment of the predicted traffic flows, the corresponding impact on the surrounding highway network and matters associated with accessibility and connectivity.
- 1.4.2 The report seeks to conclude that the proposed development can be accommodated without detriment to the operational capacity or safety of the local highway network and that it can be suitably accessed on foot, by cycle and by local public transport services.
- 1.4.3 This report comprises nine sections, including this introduction:
- » Section 2 offers a site description and review of existing conditions;
 - » Section 3 considers the national and local transport policy;
 - » Section 4 assesses the sustainable accessibility of the site;
 - » Section 5 outlines the development proposals;
 - » Section 6 considers the future growth in traffic;
 - » Section 7 presents the traffic impact of the development;
 - » Section 8 summarises the results of the junction capacity analysis; and,
 - » Section 9 sets out the summary and conclusions.

2. Existing Conditions

2.1 Local Highway Network

- 2.1.1 The development site is located off West Starkey Street approximately 5.4km south west of Rochdale Centre, 5km east of Bury Centre and 1.6km north of Heywood Industrial Estate. The proposed site access is to be located off West Starkey Street.
- 2.1.2 The site is bounded by Cedar Avenue to the west, Claybank Street to the north, and the Heywood Sports Centre/Bamford Road adjacent to the east.
- 2.1.3 The local highway network is illustrated in **Figure 2.1** below.

Figure 2.1: Local Highway Network



Source: GoogleEarth©

2.2 West Starkey Street

- 2.2.1 West Starkey Street is a single carriageway road connecting Bamford Street in the east to George Street/Bank Top Street in the west. The proposed site access road is to be situated along West Starkey Street. The road aids pedestrian movements through a 2m wide pedestrian footway on both sides of the carriageway within the vicinity of the site. There are also dropped kerbs and regularly spaced street lighting with tactile paving at the major intersections.
- 2.2.2 The road is subject to a 30mph speed limit and is governed by no waiting at any time traffic regulation orders [TROs] in the form of double yellow lines.
- 2.2.3 **Figure 2.2** below illustrates West Starkey Road from a westerly direction.

Figure 2.2: Local Highway Network - West Starkey Street



Source: Google Maps ©

2.3 A58 Bridge Street

- 2.3.1 The A58 Bridge Street is a single carriageway road which connects the M56 in the west (at Junction 2) with Rochdale town centre to the east. The road is situated to the south of West Starkey Street. The road is governed by a 30mph speed limit within the vicinity of the site and aids pedestrian movements through 2m wide pedestrian footways on both sides of the carriageway, dropped kerbs, tactile paving and pedestrian refuge islands. Figure 2.3 below illustrates A58 Bridge Street in a westerly direction.

Figure 2.3: Local Highway Network - A58 Bridge Street



Source: Google Maps ©

2.4 Bamford Road

- 2.4.1 Bamford Road is a single carriageway road which connects the A58 Bridge Street in the south with the B6222 Bury and Rochdale Old Road in the north. The road is governed by a 30mph speed limit. The road is situated to the east of the Heywood Sports Village.
- 2.4.2 The road aids pedestrian movements through a circa 1.5m wide footways on both sides of the carriageway and dropped kerbs at intersections. Figure 2.4 below shows Bamford Road from a southbound approach.

Figure 2.4: Local Highway Network - Bamford Road



Source: Google Maps ©

2.5 Network Traffic Flows

- 2.5.1 To ascertain the current traffic conditions on the local highway network, traffic surveys were commissioned in December 2021. The Automated Traffic Count survey was carried out in fine and overcast weather conditions with no incidents likely to affect the output were identified.
- 2.5.2 A copy of the raw traffic survey data is provided in **Appendix B** for the following junctions:
- » Proposed Site Access/ West Starkey Street
- 2.5.3 A review of the traffic survey data identified the following network peak hours:
- » Morning Peak Hour = 08:45-09:45
 - » Evening Peak Hour = 16:00-17:00
- 2.5.4 Notwithstanding the peak hours identified above, due to the nature of the development proposals, as a robust scenario, the school peak hours have been utilised for the purposes of the assessment. The peak hours are as follows:
- » Morning Peak Hour = 08:00-09:00
 - » Evening Peak Hour = 15:00-16:00

2.5.5 Traffic Figure 1 within the Traffic Figures section provides an overview of the 2021 base flows for the morning and evening peak hours in total PCUs.

2.6 Accident Analysis

2.6.1 The DfT document "Guidance on Transport Assessment" states that:

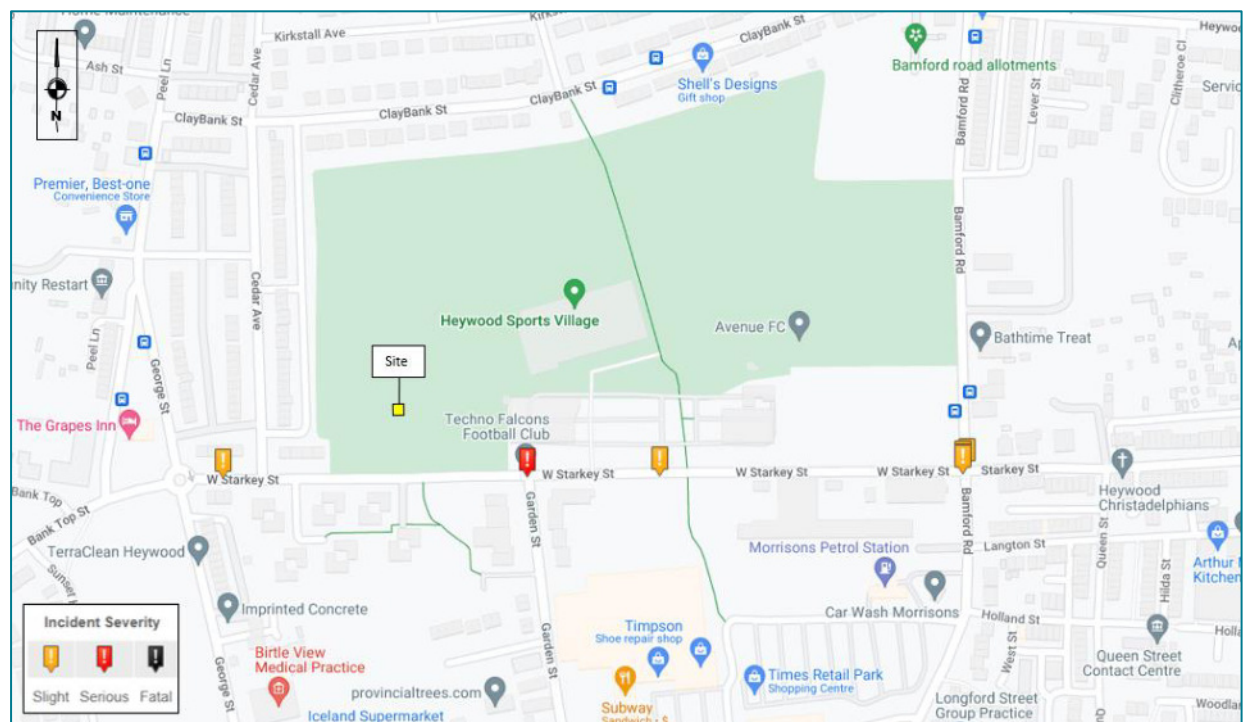
2.6.2 "Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems".

2.6.3 A review of the Personal-Injury Accidents (PIAs) recorded within the study area (along West Starkey Road) has been undertaken using the most recently available five-year data (1st January 2017 - 31st December 2021) available from the DfT and included the following junctions:

- » Proposed Site Access/ West Starkey Road;
- » George Street/Bank Top Street/ West Starkey Street;
- » Bamford Road/ West Starkey Street.

2.6.4 **Figure 2.5** below illustrates the recorded findings.

Figure 2.5: Site Area Accident Record



Source: CrashMap©

2.6.5 **Table 2.1** summarises the accident record and severity over 2017 - 2021 in more detail.

Table 2.1: Study Area Accident Record Summary

Year/Severity	Slight	Serious	Fatal	Total
2017	2	-	-	2
2018	1	1	-	2
2019	1	-	-	1
2020	1	-	-	1
2021	1	-	-	1
Total	6	1	-	7

- 2.6.6 **Figure 2.5** and **Table 2.1** demonstrates that no Fatal accidents occurred at any of the junctions within the study area between 2017-2021. One serious accident has occurred at the West Starkey Street / Garden Street T-Junction. There have been six other slight accidents that have occurred during the 5-year period within the study area. The accident frequency and severity does not indicate any specific highway issues.
- 2.6.7 Although all accidents are regrettable, it is clear from the analysis that the recorded accidents are not a result of the existing highway layout. Therefore, no evidence has been established to indicate any specific problems with the operation of the existing junctions surrounding the site. Therefore, the road safety record is not considered to be a material concern in the context of the proposed development.

3. Transport Policy Context

3.1 Preamble

- 3.1.1 In order to assess the proposals and develop a transport access strategy for the proposed development, it is necessary to review both local and national transport planning guidance.
- 3.1.2 The following sections outline the relevant policy and guidance documents in respect of the proposed development.

3.2 National Planning Policy Framework

- 3.2.1 The NPPF sets out the Government's policies for delivering sustainable development through the planning system. Local authorities are required to take these policies into account when formulating local development plans and when determining planning applications.
- 3.2.2 The most recent NPPF report was published in July 2021 and sets out the Government's planning policies for England and how these are expected to be applied at a local level. The NPPF is a significant material consideration in plan making and decision taking.
- 3.2.3 Paragraph 104 seeks to encourage opportunities to promote walking, cycling and public transport use. This is supplemented by paragraph 105 which states that development should be focused in sustainable locations and offer a genuine choice of transport modes.
- 3.2.4 Development proposals should also give priority to pedestrian and cycle movements and facilitate access to high quality public transport. The needs of people with disabilities and reduced mobility should also be addressed (paragraph 112).
- 3.2.5 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.
- 3.2.6 Priority should be given to walking, cycling and public transport movements; conflicts between vehicles and vulnerable road users should be minimised through effective layout design.
- 3.2.7 Having regard to the above objectives, the proposed site access strategy includes measures to connect the site with the adjacent communities and sustainable travel network, including existing public transport services. This TA considers the accessibility of the site by all modes and proposes a layout and access strategy that seeks to maximise the use of sustainable modes.

3.3 Planning Practice Guidance: Travel Plans, Transport Assessments and Statements in Decision-Making

- 3.3.1 In March 2014, the Department for Communities and Local Government [DCLG] in conjunction with the Department for Transport [DfT], released advice on when transport assessments and transport statements are required and what they should contain, which is intended to assist stakeholders in determining whether an assessment may be required. If an assessment is required, the level and scope of that assessment is then outlined within the document.

3.3.2 The advice reflects current Government policy, promoting a shift from the 'predict and provide' approach to transport planning to one more focused on sustainability. The document focuses on encouraging environmental sustainability, managing the existing network and mitigating the residual impacts of traffic from the development proposals.

3.4 Manual for Streets [MfS]

3.4.1 Manual for Streets (March 2007 and Sept 2010) supersedes Places Streets & Movement and Design Bulletin 32. Manual for Streets should now be used where 85th percentile monitored traffic speeds are less than 37mph.

3.4.2 The Manual deals with first principles in respect of what a street is for. It outlines five principle functions, namely:

- » Place;
- » Movement;
- » Access;
- » Parking; and
- » Drainage and utilities.

3.4.3 A sense of place encompasses a number of characteristics, namely, local distinctiveness, visual quality and human interaction. Of the five functions, place and movement are the most important in determining the character of streets and should be considered together, as opposed to in isolation.

3.4.4 In new developments, Manual for Streets highlights those locations with a relatively high place function would be those where people are likely to gather and interact with each other, such as the town centre.

3.4.5 In section 3 of Mfs – the design process highlights that the design of a scheme should follow the user hierarchy shown in **Table 3.1**:

Table 3.1: User Hierarchy (taken from Table 3.2 of MfS, March 2007)

Consider First	Pedestrians
	Cyclists
	Public Transport Users
	Specialist service vehicles (e.g. emergency services, waste etc.)
Consider Last	Other motor vehicles

Source: MfS (2007)

3.5 Guidelines for Providing for Journeys on Foot

3.5.1 Various walking distances are quoted in the Chartered Institution of Highways and Transportation's (CIHT's) "Guidelines for Providing for Journeys on Foot". **Table 3.2** (taken from Table 3.2 of the document) sets out the acceptable walking distances in various contexts:

Table 3.2: Acceptable Walking Distances

Criteria	Town Centre (m)	School/Commuters (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

3.6 Regional Plan - Greater Manchester Transport Strategy - Places For Everyone Joint Development Plan Document

- 3.6.1 The Places for Everyone (PfE) plan of nine Greater Manchester local authorities (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan) is a long-term plan for jobs, new homes and sustainable growth. It replaces the previous versions of the Transport for Greater Manchester Spatial Framework following Stockport Councils decision to withdraw from this plan.
- 3.6.2 The nine Councils in Greater Manchester have now submitted the PfE plan to the Secretary of State for Levelling Up, Housing and Communities. Once adopted, the PfE plan will become part of the statutory development plan for each of the nine Greater Manchester authorities, including Salford. However, the Plan will not cover everything and Salford City Council has produced a Local Plan.
- 3.6.3 By producing the PfE plan, it is envisaged that the nine district Councils will be able to continue to;
- » Progress the strategic policies in the Greater Manchester Spatial Framework, for example net zero carbon development, affordable housing and space and accessibility standards for new housing;
 - » Maximise the use of sustainable urban/brownfield land and limit the need for Green Belt to accommodate the development needs of the nine Boroughs; and,
 - » Align with wider Greater Manchester strategies for transport and other infrastructure investment.
- 3.6.4 The PfE sets out the nine's plan for sustainable growth by setting out how they should develop up to the year 2037; identifies the amount of new development that will come forward for different land uses; identifies the important environmental assets which will be protected and enhanced; allocates sites for employment and housing; supports the delivery of key infrastructure and defines a new Green Belt boundary.
- 3.6.5 The PfE plan supports the presumption in favour of sustainable development set out within the NPPF which is reflected in the overall strategy of the plan, the proposed scale and location of development and the individual policies and allocations outlined within the strategy. It includes protecting and enhancing key environmental resources, combating and adapting to climate change, reducing carbon emissions, and delivering sustainable patterns of development which minimise the need to travel and reliance on the car.

3.7 Greater Manchester Transport Strategy (2040)

- 3.7.1 The Greater Manchester Transport Strategy 2040, published in February 2017, sets out TfGM's sustainable mobility plan for the future and forms Greater Manchester's 4th Local Transport Plan (GMLTP4). Building on its own 2040 Vision, the Strategy provides detail on the priority interventions needed to deliver that Vision. The document highlights several key objectives relevant to the application site:
- » Reducing the need to travel by car, and the distance travelled.
 - » Making the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes.
 - » Increasing the use of sustainable transport to reduce the negative impacts of car use. The design of new development needs to make it easier for people to use sustainable modes e.g the availability of safe and direct walk/cycle routes, the provision of secure cycle parking or the availability of EV charging points.
 - » Establish cycling as a recognised and attractive component of the future integrated transport offer. 'Aim to double and double again' the proportion of trips made by bicycle by 2025, with the aspiration that 10% of all trips should be made by bike.
- 3.7.2 The proposed development corresponds with the Greater Manchester Local Transport Plan by providing a high-density residential development within proximity to the city core and associated public transport infrastructure.

3.8 Rochdale Borough Council [RBC] Adopted Core Strategy (October 2016)

- 3.8.1 The Rochdale Core Strategy Document sets out the long-term spatial strategy for future development of Rochdale Borough. Rochdale has big aspirations, and this Core Strategy seeks to address the community's key priorities set out in the Sustainable Community Strategy. Its vision shows what kind of place we want Rochdale Borough to be in 2028. The spatial vision for the Rochdale Borough in 2028 is as follows:
- 3.8.2 "To become a prosperous borough: to grow our economy and develop our place through cooperation and partnership, improving the lives of local people"
- 3.8.3 Improving accessibility and delivering sustainable transport (SO5) - T1 Delivery Sustainable Transport state that Rochdale borough Council policies seek to:
- » deliver transport improvements at a strategic, borough-wide and local level to support development proposals;
 - » ensure that development is in the most appropriate and accessible locations;
 - » minimise trips, especially single occupancy car journeys, and trip length;
 - » promote wider travel choice and increase trips made by sustainable forms of travel, including public transport, cycling and walking;
 - » support measures that enhance safety and access for people with impaired mobility, protect traffic-sensitive town centres and residential communities; and
 - » reduce emissions from traffic (particularly NOx gases, PM10 particulates and CO2 levels) contributing to Greater Manchester Local Transport Plan (GMLTP) and national targets by encouraging more sustainable travel choices and forms of travel, more active and healthier travel behaviour and take advantage of technological innovations.

3.9 Rochdale Borough Council Parking Standards

- 3.9.1 The RBC Parking standards can be found within Appendix 5 of the Rochdale Core Strategy 2016 and are shown for School Land-Use in **Table 3.3** and **Table 3.4** below.

Table 3.3: RBC Parking Standards

Development Type - Non-Residential Institutions	Maximum Standards for Car Parking Provision	Minimum Standards for Cycle Space Provision	Minimum Standards for Powered Two Wheeled Vehicle Parking Provision
Schools (Primary and Secondary)	1.5 spaces per classroom	1 space per 10FT Equivalent Staff + 1 space per 10 pupils	1 space per 40 FT Equivalent staff (min 2 spaces)

Table 3.4: RBC Disabled Parking Standards

Total Number of General Parking Spaces Provided	Minimum Standard of Disabled Car Parking Provision to be Provided. (in addition to the general car parking provision)
Below 12 spaces	10% of total capacity
12-200 spaces	3 bays or 6% of total capacity (whichever is the greater)
Over 200 spaces	4 bays plus 4% of total capacity

3.10 Summary

- 3.10.1 The above policy review summarises both local and national transport policies relevant to the proposed development site. As such it sets out the context in which the proposed development needs to be compliant.
- 3.10.2 The proposed development will be designed to satisfy the key objectives within NPPF by being able to promote more sustainable transport choices and reduce reliance on travel by private car. Access on foot, cycle and public transport is discussed in the following section of this report.

4. Sustainable Accessibility

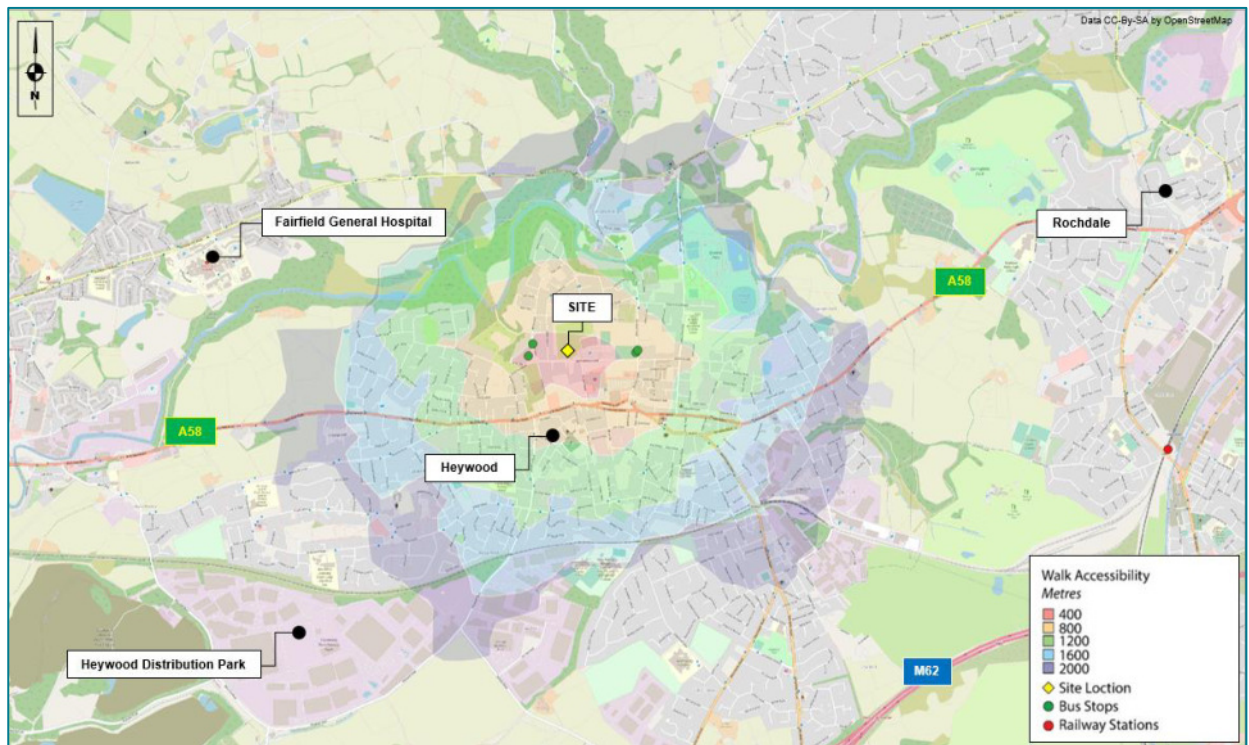
4.1 Introduction

- 4.1.1 Due to the specialised nature of this development, travel patterns of pupils are distinct in that most pupils will arrive to the site via private taxi or minibus which will drop pupils individually and collectively to and from the site at hours conducive to the school day.
- 4.1.2 The proposed development is conducive to support the arrival of taxis and minibuses through the allocated drop-off zones. With the above noted, the sustainable accessibility chapter will focus on encouraging sustainable travel for the staff and visitors.

4.2 Accessibility by Foot

- 4.2.1 Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under 2km. The guidance on the preferred maximum walking distances to amenities is given in the Chartered Institution of Highways and Transportation [CIHT] document "Providing for Journeys on Foot" (2000).
- 4.2.2 In terms of commuting journeys by foot, the desirable distance is 500m, the acceptable distance is 1km and the preferred maximum is 2km. However, the distance that people are prepared to walk depends upon many factors; there are obvious physical factors such as age, health and disabilities, along with factors concerning the quality of the route and the environment.
- 4.2.3 Manual for Streets [MfS] emphasises this advice, stating that "walkable neighbourhoods" should have a range of facilities available within 800m. However, this distance is not regarded as the upper limit for walking journeys, and MfS uses the principle that walking offers the greatest potential to replace short car trips, particularly those under 2km in length.
- 4.2.4 The location of development is within reach of the public transport network and is important in terms of encouraging travel by this mode and supporting the viability of public transport services.
- 4.2.5 The local highway network provides circa 2m wide footways on both sides of West Starkey Street. The site is also conveniently positioned to make use of dropped kerbs, tactile paving and regularly spaced street lighting within the vicinity of the site.
- 4.2.6 **Figure 4.1** shows the 2km catchment from the site, which illustrates the areas which lie within a reasonable walking distance. A copy of the walking isochrone is provided in **Appendix C**.

Figure 4.1: 2km Walking Catchment



Source: CC-BY-SA by OpenStreetMap

4.2.7 As can be seen from **Figure 4.1** the site benefits from bus stops located within 800m, which is within the preferred maximum distance for commuters. The proximity of the site to the local bus network provides significant opportunities to travel further afield using linked trips. This enables access to be gained to a variety of local destinations.

4.2.8 In summary, the site is accessible on foot, which will reduce the requirement for staff and visitors to make short car journeys.

4.3 Accessibility by Cycle

4.3.1 It is widely recognised that cycling can act as a substitute for short car journeys, particularly those up to 5km in length. This is consistent with the statement in LTN 1/20 Cycle Infrastructure Design (paragraph 2.2.2) that states:

"two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking."

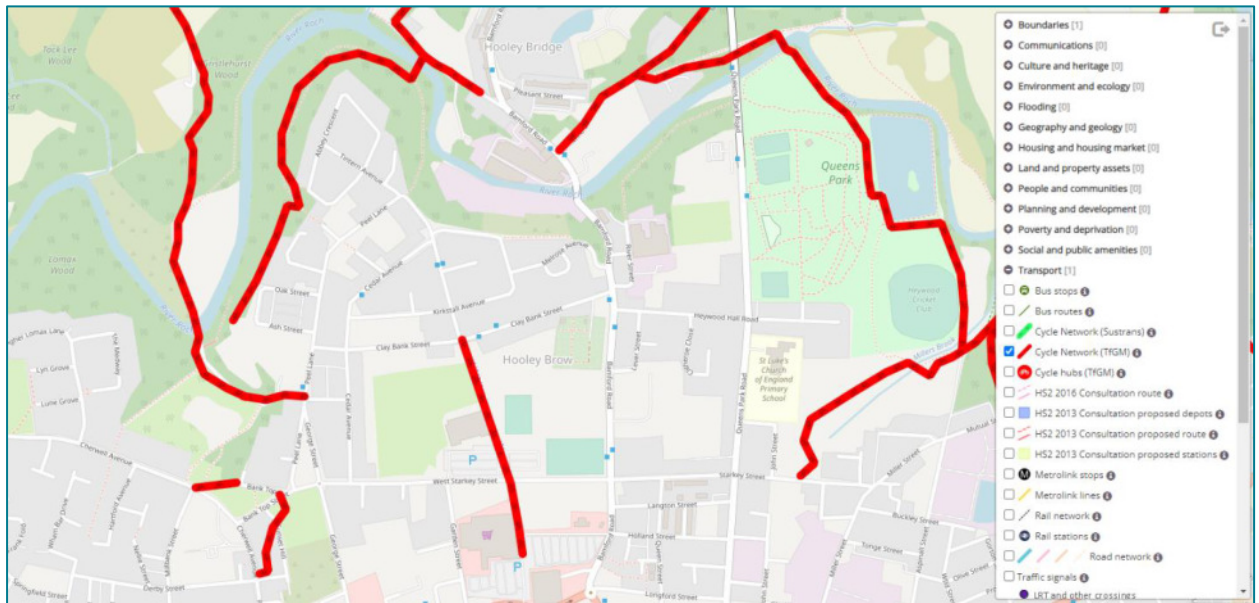
4.3.2 A round trip on a waymarked leisure route could easily involve distances of 20 to 30 miles. Experienced cyclists will often be prepared to cycle longer distances for whatever journey purpose.

4.3.3 The general topography of Heywood is reasonably flat which should assist in encouraging staff and visitors of the proposed development to travel by cycle. The site additionally benefits from covered cycle parking provision.

4.3.4 An extract from the Transport for Greater Manchester interactive "MappingGM" accessibility map shown below in **Figure 4.2**, highlights that there are several traffic-free cycle routes available within close proximity to the site.

- 4.3.5 Given the relatively wide carriageways, the local highway network is also generally conducive to encouraging cycling. This provides access for cyclists to connect the development site to the wider area.

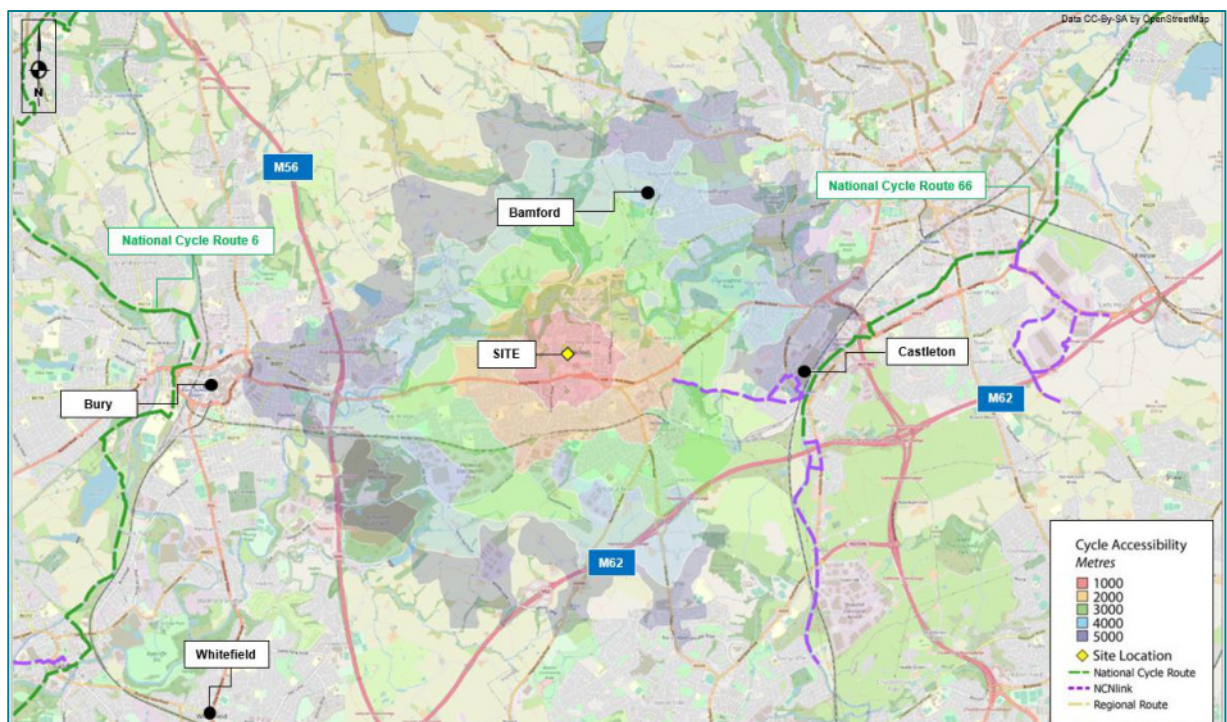
Figure 4.2: TfGM Local Cycle Routes



Source: TfGM

- 4.3.6 **Figure 4.3** presents an extract of the 5km cycling catchment from the site. A copy of the cycling catchment is provided in **Appendix C**. 5km is equivalent to a typical cycle time of 15-20 minutes, making it an achievable distance for most people.

Figure 4.3: 5km Cycling Catchment



Source: CC-BY-SA by OpenStreetMap

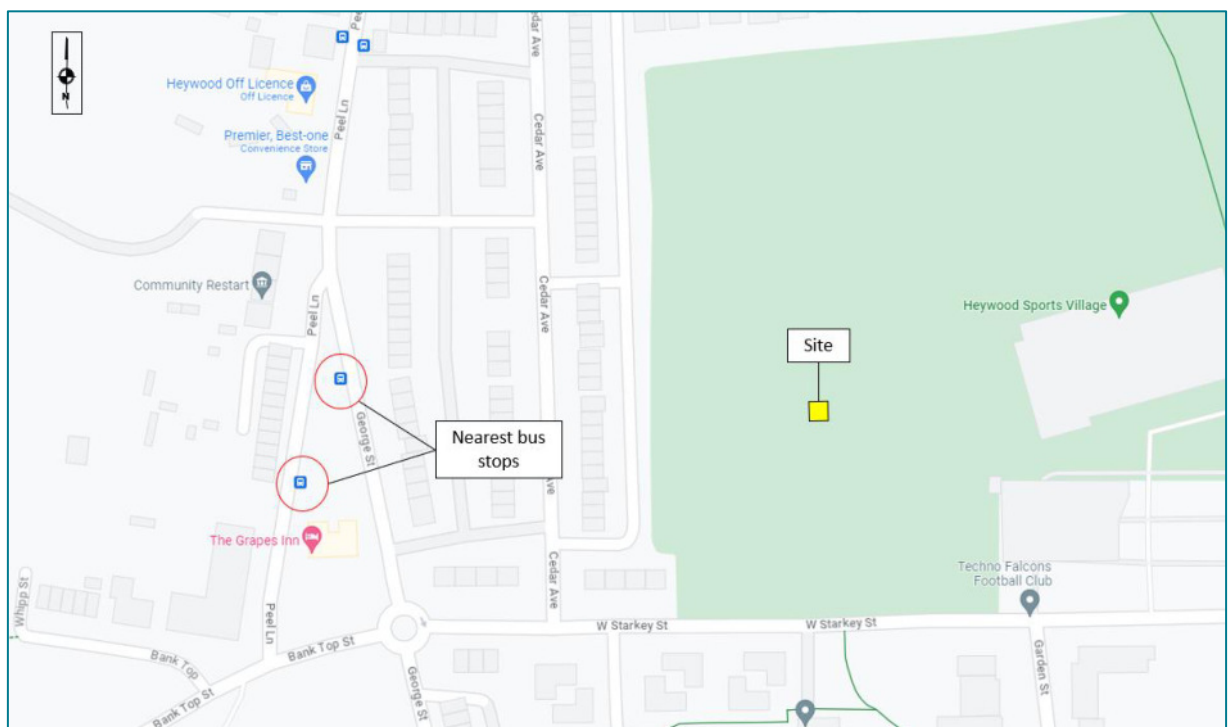
4.3.7 From the figure it is evident that a number of local residential areas including are accessible within a 5km cycle. Cycle is a viable mode of transport for staff and visitors commuting to the school from these locations.

4.4 Access by Bus

4.4.1 This site is accessible by bus, with the nearest bus stops to the site located on George Street and Peel Lane, circa 250m from the proposed site. These stops can be seen in **Figure 4.4** and serve the R2 Rochdale Runner which extends from Bury to Rochdale, and the B4 Bury Bolts which provides an additional service to Bury. Both services run on an hourly basis.

4.4.2 There are also bus stops located on Bamford Road which are circa 450m to the east of the site and serves the B3 Bury Bolts which provides an additional service to Bury. Along the A58, approximately 350m south from the site via Garden Street, services 163, 471 and 781 are also available.

Figure 4.4: Nearest Bus Stops



4.4.3 **Table 4.1** lists the services accessible from these stops and provides a summary of their routes and frequencies. For simplicity and to avoid double counting, the frequencies are taken at the nearest available stop for each service. The AM and PM peak for the Weekday are 08:00-09:00 and 15:00-16:00.

Table 4.1: Bus Timetable Summary

Service Number	Route	Monday – Friday				
		First	AM Peak	PM Peak	Last	Per Day
R2	Rochdale Runner - Bury to Rochdale	09:42	-	1	17:48	9
	Rochdale Runner - Cutgate to Bury	07:26	1	1	17:00	10
B4 Bury Bolts	Bury to Heywood	09:20	-	-	15:20	7
	Heywood to Bury	08:44	1	-	15:44	7
163	Manchester City Centre - Bury	05:56	4	3	23:36	65
	Bury - Manchester City Centre	04:50	4	3	23:43	65
471	Bolton - Rochdale	04:59	5	5	23:39	76
	Rochdale - Bolton	00:16	5	5	23:46	76
781	Stanycliffe - Spotland	15:19	-	1	15:19	1
	Heywood - Stanycliffe	07:19	-	-	07:19	1
Totals		-	20	19	-	317

Source: TFGM

4.4.4 **Table 4.1** demonstrates that the site is accessible by bus, with 317 buses passing close to the site on weekdays providing convenient access to Bury, Rochdale and Manchester. The availability of early start and later finish times are conducive to staff and visitors.

4.4.5 It is therefore concluded that the site benefits from good access by bus, offering an attractive mode of transport. Given the frequency of the services available and the proximity of bus stops (within 2km), this has the potential to provide a significant alternative to single occupancy car journeys.

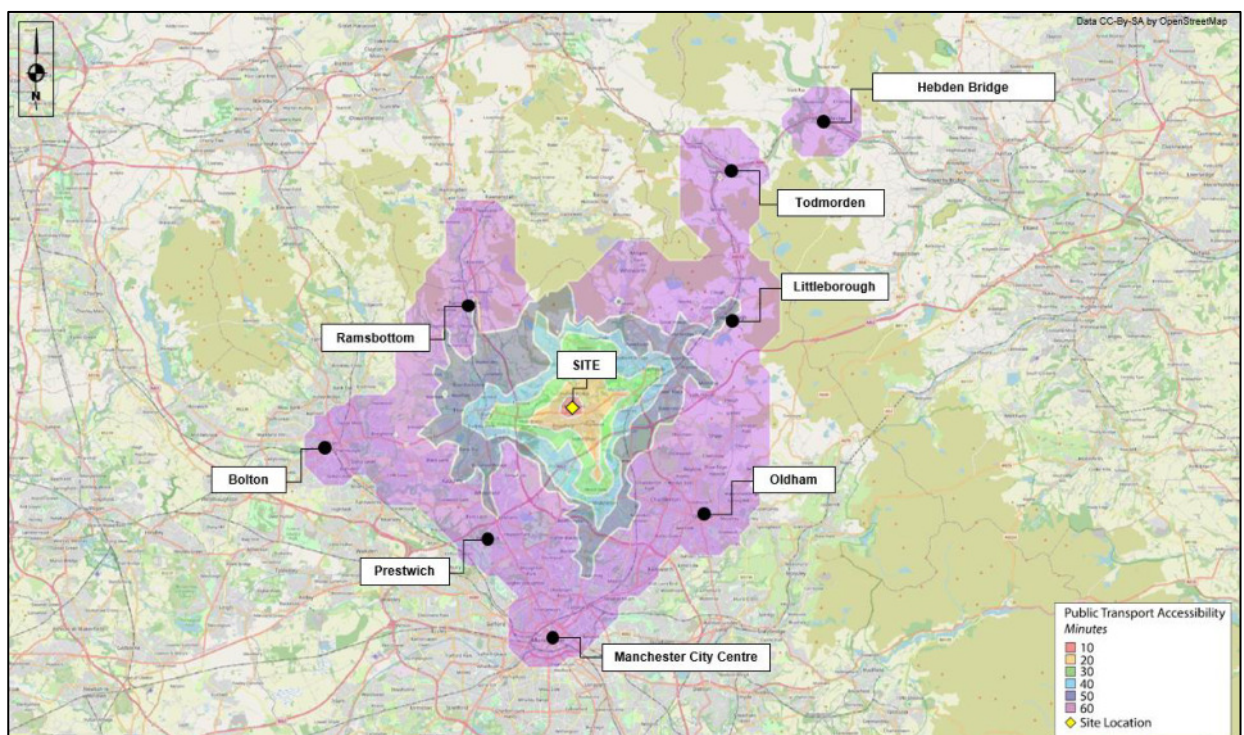
4.5 Access by Rail

4.5.1 The nearest railway station to the proposed development is Castleton Railway Station located circa 5.3km from the development site. The station is operated by Northern Rail and comprises 2 platforms. Services travel to Rochdale and Manchester Victoria. The service frequency is one train every 30 minutes on weekdays and one train every hour on Sundays.

4.6 Accessibility by Public Transport

- 4.6.1 A calculation has been undertaken, using GIS software - Basemap's Visography (TRACC) program, to illustrate the distance that can be travelled within 60 minutes by public transport to and from the proposed development site. The time includes the walk to the bus stops or railway station and demonstrates that key areas such as Oldham, Bolton, Prestwich, Ramsbottom and Manchester City Centre are all within a 60-minute public transport journey.
- 4.6.2 **Figure 4.5** below provides an extract of the public transport 60-minute catchment area. A copy of the full plan is provided within **Appendix C**.

Figure 4.5: 60-minute Public Transport Catchment



Source: CC-BY-SA by OpenStreetMap

4.7 Conclusions

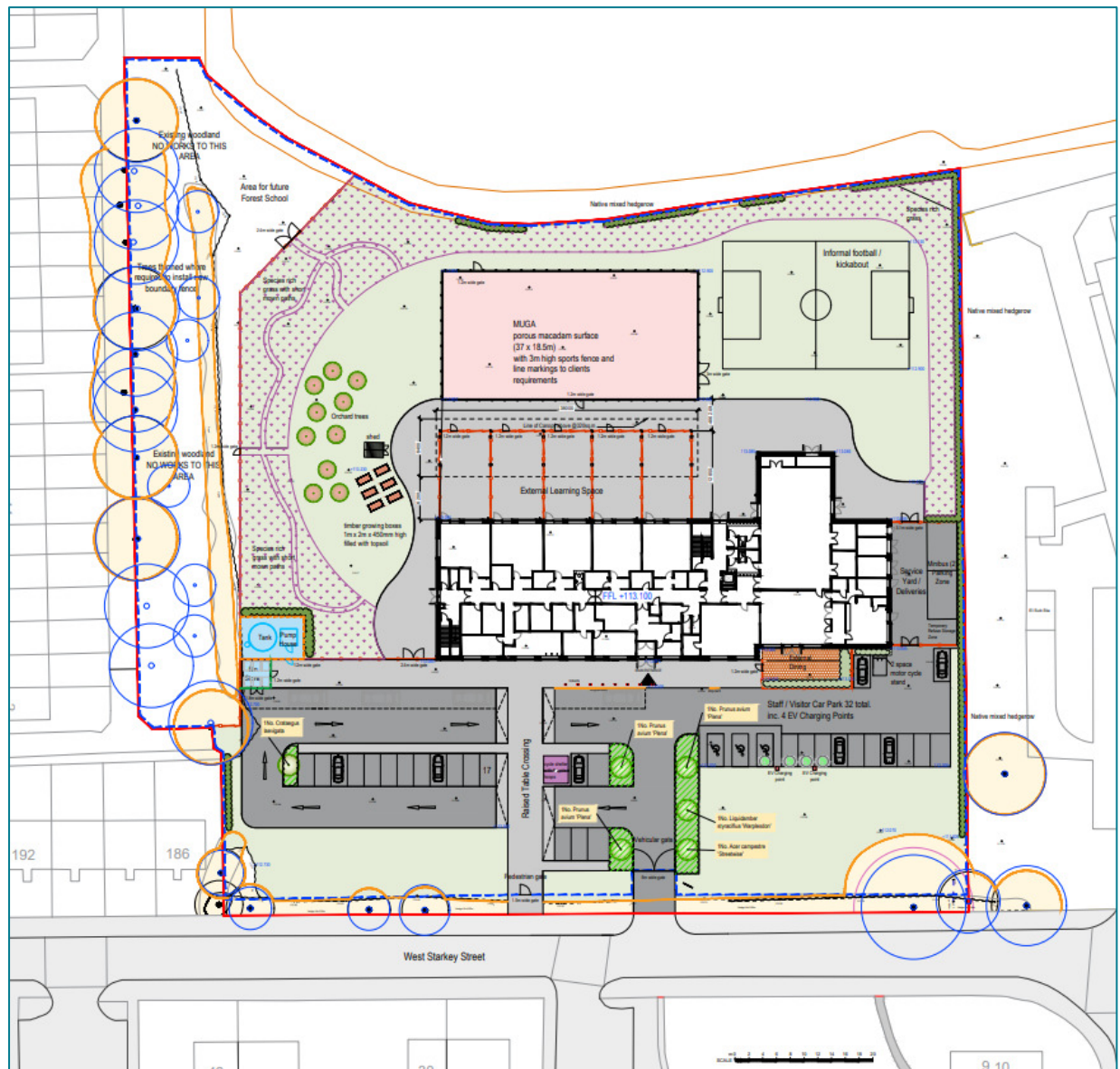
- 4.7.1 In summary, Section 4 has presented that the proposed development site is located in an accessible area of Heywood to make use of the existing public transport links.
- 4.7.2 There are a number of local amenities within a 5km radius. As such, this proposed development complies with both the local and national policies summarised in Section 3.

5. Development Proposals

5.1 Introduction

- 5.1.1 The proposed development relates to the erection of a two storey SEND school, along with the provision of car parking, a minibus drop-off zone, refuse and cycle store and outdoor recreation facilities including a sports playing field, a MUGA, a forest school and a habitat area. The Gross Floor Area [GFA] is circa 12,049sqm.
- 5.1.2 The school is specifically designed to cater for up to 76 students, aged 11- 19 (Key stage 3, years 7, 8 and 9, Key Stage 4, Years 10 and 11 and Key Stage 5, years 12, 13 and 14) who have an Education, Health and Care plan [EHCP] and a diagnosis of Autistic spectrum conditions [ASC] and may also have other needs such as communication and/or sensory processing needs.
- 5.1.3 As previously stated, due to the specialised nature of this development, travel behaviour of pupils is distinct in that most pupils will arrive to the site via private taxi or minibus which will drop pupils collectively to and from the site at hours conducive to the school day.
- 5.1.4 An indicative site masterplan has been prepared and is illustrated in **Figure 5.1** below with a copy of the full plan provided in **Appendix D**.

Figure 5.1: Proposed Site Masterplan



Source: EllisWilliams

5.2 Site Vehicular Access Arrangement

- 5.2.1 The proposed site access is to be taken off West Starkey Street via a T-Junction comprising 6.0m wide carriageway and 3.0m wide radius to the west and east. All vehicular access is to be taken through this same route.
- 5.2.2 Due to the nature of the proposed development, there are requirements for a suitably sized car park with a mini-bus drop off zone.
- 5.2.3 A swept path analysis has been undertaken with a minibus, a 7.5t box van and a large car to demonstrate that the proposed arrangement is suitable and turning manoeuvres can be performed safely. A copy of the swept path analysis drawings is contained in **Appendix E**.

5.3 Pedestrian and Cycle Access

- 5.3.1 Pedestrian and cycle access are to be taken from a segregated pedestrian entrance located circa 20m from the vehicular access off West Starkey Street. A raised pedestrian table crossing is then proposed across the car parking area to allow access to the main entrance points of the building.

5.4 Parking

- 5.4.1 It is proposed that the site will have a minibus drop-off zone within close proximity of the school entrance. There will also be disabled provision, staff/ visitor spaces and motorcycle spaces. A breakdown is summarised below:

5.4.1.1 Vehicle

- » Motorcycle Spaces = 2
- » Total Staff/Visitor Spaces = 32
 - » Disabled Spaces = 3
 - » 4 EV charging Spaces
- » Minibus Drop-Off Zone;
 - » 2 Minibus Parking spaces

5.4.1.2 Cycle

- » 16 Cycle Spaces in a dedicated covered cycle shelter

- 5.4.2 It is Hydrock's view that this level of vehicle parking is compliant with the council's guidelines and sufficient for this scale of development. The maximum standards are previously referred to in section 3 is 1.5 vehicular spaces per classroom and the development adheres to this standard.
- 5.4.3 Also, given the nature of the specialist school, it is important to note that the drop off zone is a vital part of the parking criteria, with a large proportion of pupils arriving via private taxi or minibus.

5.5 Servicing

- 5.5.1 The servicing requirements of the development have been considered to ensure that the site can successfully be serviced by refuse vehicles. Despite the scale of development, the frequency of a refuse vehicles utilising the site is expected to be modest and taking place outside the busiest peak periods.
- 5.5.2 A swept path manoeuvre of a large 4-axle refuse vehicle has been undertaken to demonstrate that the refuse vehicle can safely enter the site, manoeuvre within, and exit the site in forward a gear. The drawing is presented in **Appendix F**.

6. Trip Generation, Distribution and Assignment

6.1 Introduction

- 6.1.1 This section of the report considers the trip generation levels associated with the proposed development and the impact it will have on the local highway network. The site is not associated with any extant planning permission and as such, the F1(a) generated traffic will be considered in full.
- 6.1.2 Under the proposed application, the site comprises associated learning building, play areas and sports facilities, with associated landscaping and parking facilities.
- 6.1.3 To determine the number of trips generated by the proposed use at the site, a trip generation exercise has been undertaken.

6.2 TRICS - F1(a) Provision of Education Trip Rates

- 6.2.1 The Trip Rate Information Computer System [TRICS] version 7.10.1 has been used to derive the predicted total vehicle trip generation for the proposed educational land use. The TRICS database is an industry accepted tool for predicting the likely number of trips from a proposed development by comparing the site with existing developments of a similar size and characteristics within the UK. The database was interrogated to determine the trip rates for the weekday morning and evening peaks.
- 6.2.2 In order to obtain appropriate trip rates, sites within Greater London and the Republic of Ireland have been omitted from the calculation. The results of this TRICS interrogation are shown within **Table 6.1**, whilst the TRICS outputs for the educational land use are presented in **Appendix G**.
- 6.2.3 In the following table the trip rates are given per 1 pupil.

Table 6.1: F1 (a)- Provision of Education Trip Rates

Trip Rate per Pupil	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (15:00-16:00)	
	Arrivals	Departures	Arrivals	Departures
Vehicles	0.115	0.089	0.054	0.079

6.3 Proposed Development Trip Generation

- 6.3.1 The above trip rates in **Table 6.1** have been applied to the anticipated number of pupils expected at the site (76 pupils) to determine the total traffic generation associated with the development. The resultant total trip generation is shown in **Table 6.2**.

Table 6.2: F1 (a)- Provision of Education Trip Generation

76 Pupils	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (15:00-16:00)	
	Arrivals	Departures	Arrivals	Departures
Vehicle Trips	9	7	4	6

**Note: Results subject to rounding*

6.3.2 It can be seen from the above table that proposed development with 76 pupils is expected to generate the following two-way trips:

- » 16 in the morning peak; and
- » 10 in the evening peak;

6.4 First Principles Approach

6.4.1 The client has confirmed that that due to the specialised nature of this development, travel behaviour of pupils is distinct in that most pupils will arrive to the site via private taxi which would equate to a total of 152 vehicular trips (76 arrivals and 76 departures).

6.4.2 Therefore, to be robust, the maximum anticipated number of trips has been utilised within the traffic impact assessments, as follows:

- » 152 in the morning peak; and
- » 152 in the evening peak;

6.5 Development Traffic Distribution and Assignment

6.5.1 The resultant development trips as described in the sensitivity test above have been assigned onto the local highway network using a distribution profile based on the observed flow movements. Traffic Figure 4, 5 and 6 illustrates the distribution profile and assigned development trips respectively within the Traffic Figures section.

6.6 Conclusion

6.6.1 From the above it is clear that the volume of new trips, would be negligible upon the existing local highway network.

7. Future Growth and Committed Developments

7.1 Introduction

7.1.1 This chapter describes the future baseline traffic conditions on the local highway network in relation to traffic growth.

7.2 Assessment Methodology

7.2.1 The following traffic growth assessment years have been used to assess future baseline traffic conditions on the local highway network:

- » A base / previous application year scenario (2021); and
- » A 2021 - 2023 current application year scenario;
- » Future year 2028 (+5 years from application year);
- » Future year 2028 + Proposed Development (First Principles Approach).

7.2.2 The TEMPro database version 7.2, in conjunction with the A15 NTM Dataset, has been applied to the 2021 surveyed traffic data to ascertain the 2023 Base and 2028 future year traffic flows using the following parameters:

- » Rochdale (O18);
- » Trip End by time period for origin/ destination; and
- » NTM all road types.

7.2.3 A (previous) Base 2021 - (current) Base 2023 growth factor has been calculated to confirm the new Base 2023 for the current application. .

7.2.4 The growth factors that have been obtained from TEMPro are summarised in **Table 7.1** below.

Table 7.1: TEMPro Growth Factors

Period	AM Peak	PM Peak
2021 to 2023	1.0177	1.0172
2023 to 2028	1.0441	1.0429

7.2.5 To obtain the current base 2023, the above 2021 to 2023 growth factors were applied to the previously surveyed AM and PM peak hour 2021 base traffic flows (shown in Traffic Figure 1 of the Traffic Figures section). The base 2023 factored up traffic flows can be seen in Figure 2. These were then factored up for the future growth 2028 surveyed traffic flows, as shown in Traffic Figure 3.

7.3 Committed Developments

7.3.1 RBC did not identify any committed developments to be considered as part of the traffic impact assessment during pre-application discussions.

8. Capacity Analysis

8.1 Introduction

- 8.1.1 This section concerns the operational assessment of the local highway network with the aim of establishing whether the development traffic has a detrimental impact on the traffic operation on the existing local highway network. To confirm the level of operational performance for the site access junction, the industry standard junction modelling package Junctions 9 has been used.
- 8.1.2 The subsequent sections will consider the assessment of the above junctions in detail and will consider the capacity of the junction at the application year (2023) +5 years equating to a future year assessment of 2028. An hourly flow profile has been applied for the selected AM, PM peaks and the modelling results presented in terms of ratio of flow to capacity [RFC] and vehicle queue lengths.
- 8.1.3 RFC values between 0.00 and 0.85 are generally accepted as representing stable and acceptable operating conditions. Values between 0.85 and 1.0 represent variable operation (i.e. possible queues building up at the junction during the period under consideration and increases in vehicular delay moving through the junction). RFC values in excess of 1.0 represent overloaded conditions (i.e. congestion). The junctions have been modelled for the following scenario:
- » Base 2028 + Proposed Development.
- 8.1.4 One capacity assessment has been undertaken in relation to the proposed development site access located on West Starkey Street. The modelling has been undertaken on a First Principles approach whereby all pupils arrive and depart in the peak hour by car. This is considered to be a robust approach.

8.2 Proposed Site Access Junction / West Starkey Street

- 8.2.1 The full Junctions 9 PICADY outputs are presented in **Appendix H** and **Table 8.1** below presents the PICADY results summary of the baseline future conditions (Base 2028 + Proposed Development) for the proposed site access junction.

Table 8.1: Proposed Site Access- Junctions 9 Capacity Results

ARM	WKDAY AM PEAK (08:00-09:00)		WKDAY PM PEAK (15:00-16:00)	
	RFC	Queue Length (PCUs)	RFC	Queue Length (PCUs)
Base 2028 + Proposed Development				
Proposed Site Access	0.15	0	0.16	0
West Starkey Street	0.07	0	0.08	0

8.2.2 **Table 8.1** above illustrates that the proposed site access junction operates well within capacity across all arms in all scenarios. The impact of the development traffic is shown to be negligible, resulting in a maximum RFC of 0.15 in the Weekday AM peak and 0.16 in the Weekday PM peak 2028 Base + Proposed Development scenario across the proposed site access to West Starkey Street (East and West) arm. No significant level of queuing is predicted and the junction remains well within capacity, even in the most robust scenario.

8.3 Conclusion

8.3.1 The proposed site access junction is well within capacity based on the proposed number of pupils anticipated to utilise the site. The traffic impact assessment shows that the proposed development would result in a negligible increase in traffic along the local highway network and would therefore not have a "severe" impact on the local highway network and safety record even in the most robust scenario.

9. Summary and Conclusion

9.1 Summary

- 9.1.1 Hydrock has been instructed by Tilbury Douglas to prepare a TA relating to proposals for a Special Education Needs and Disabilities [SEND] school in Rochdale. This report has been prepared in support of the planning application.
- 9.1.2 The proposed development relates to the erection of a two storey SEND school, along with the provision of car parking, a minibus drop-off zone, refuse and cycle store and outdoor recreation facilities including a sports playing field, a MUGA, a forest school and a habitat area. The Gross Floor Area [GFA] is circa 12,049sqm.
- 9.1.3 The proposed site access will be located off West Starkey Road and all vehicular access is to be taken through this route. The site access road features a 6.0m wide carriageway and a segregated pedestrian entrance point. Due to the nature of the proposed development, there are requirements for a suitably sized car park with a mini-bus drop off zone.
- 9.1.4 The sustainability assessment shows that the site is accessible by non-car modes. The ability to readily access wider destinations by walking, cycling, bus or rail provides a key advantage in providing a real alternative to car travel (e.g. for journeys to work) and as such promotes the aim of reducing car travel for staff and visitors.
- 9.1.5 Detailed capacity assessments have been undertaken at the following junction:
- » Proposed Site Access - West Starkey Street
- 9.1.6 The analysis indicates that the development impact can be suitably accommodated by the existing infrastructure.
- 9.1.7 NPPF (July 2021 - 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."*
- 9.1.8 The traffic impact assessment shows that the proposed development would result in a negligible increase in traffic along the local highway network and would therefore not have a "severe" impact on the local highway network and safety record.

9.2 Conclusion

- 9.2.1 Having undertaken a comprehensive analysis of the development site and after reviewing planning policies, it has been demonstrated by this TA that the proposed development accords with highway access design recommendations and sustainable values and hence there is no basis for highway and transportation objections to the proposals. The impacts of the proposed development are not severe and therefore the presumption in favour of the development contained in the NPPF is not outweighed by any highways or traffic related issues.

Appendix A Scoping Discussions

Chris Peachey

From: John Gillighan WN <john.gillighan@rochdale.gov.uk>
Sent: 26 June 2023 09:31
To: Chris Peachey; Sam Denby
Cc: Hugo Tran
Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

CAUTION: This email originated from outside of Hydrock. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Chris,

Please proceed as previously agreed,

Many thanks,

John Gillighan WN
Senior Engineer (Highways)
Network Improvement/Development/Flooding



☎ 01706 924607
✉ john.gillighan@rochdale.gov.uk

Rochdale Borough Council
Floor 2, Number One Riverside
Smith Street, Rochdale, OL16 1XU

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For news, events and social media updates go to www.rochdale.gov.uk/newsandevents

Please consider the environment before printing this email.

From: Chris Peachey <ChrisPeachey@hydrock.com>
Sent: 20 June 2023 15:42
To: John Gillighan WN <john.gillighan@rochdale.gov.uk>; Sam Denby <SamDenby@hydrock.com>
Cc: Hugo Tran <HugoTran@hydrock.com>
Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

Hi John,

Hope you are well.

I am just following up on the below email trail. The initial intention was to submit a planning application for a new SEND school in late 2021/ early 2022 however the scheme was placed on hold. A new planning application will be submitted in the coming weeks.

Prior to doing so I wanted to take the opportunity to understand if the agreed scope below would still be valid. Are there any committed developments within the area that have come forward within the past 18 months that you would like us to consider?

Feel free to give me a call if you would like to discuss further.

Thank you,

Chris.

Christopher Peachey BA (Hons)

Principal Consultant | Transportation

Make flexibility work: Hydrock promotes flexible working; if you get an email from me outside normal hours it is because I am sending it at a time convenient to me. I do not expect you to read or reply until normal office hours.

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From: John Gillighan WN <john.gillighan@rochdale.gov.uk>

Sent: 07 December 2021 12:44

To: Sam Denby <SamDenby@hydrock.com>

Cc: Sophie Gittins <SophieGittins@hydrock.com>

Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

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Sam,

I have stated the scope was fine as is the count locations.

Thank you

John Gillighan WN

Senior Engineer (Highways)

Network Improvement/Development/Flooding



ROCHDALE
BOROUGH COUNCIL

☎ 01706 924607

✉ john.gillighan@rochdale.gov.uk

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Smith Street, Rochdale, OL16 1XU

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For news and social media updates go to www.rochdale.gov.uk/news

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From: Sam Denby <SamDenby@hydrock.com>

Sent: 07 December 2021 10:41

To: Claire Smallman <Claire.Smallman@tfgm.com>; John Gilligan WN <john.gilligan@rochdale.gov.uk>

Cc: Sophie Gittins <SophieGittins@hydrock.com>

Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

Importance: High

Hi Claire,

No problem and understood.

[@John Gilligan](#) can you please confirm if our scope is acceptable and that we can undertake a traffic count this week?

To recap the proposed survey location is set out below. This will be used to confirm the capacity of the site access.



The count would be undertaken on a neutral weekday (Thursday this week) for the following times:

- 0700-1000 and
- 1500 - 1900

Many thanks

Kind regards

Sam Denby BA (Hons) MSc CMILT

Technical Director | Transportation

Hydrock

Northern Assurance Buildings, 9-21 Princess St, Albert Square, Manchester M2 4DN

Tel: (0161) 804 5550 Internal Ext: 5014
Mobile: 07584 081 586
Email: SamDenby@hydrock.com

From: Claire Smallman <Claire.Smallman@tfgm.com>
Sent: 07 December 2021 10:35
To: Sam Denby <SamDenby@hydrock.com>
Cc: John Gilligan WN <john.gilligan@rochdale.gov.uk>
Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

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Good Morning Sam

I've just picked up your emails today as I've been off work since the 23rd November, so apologies for the delay in responding.

We are a non-statutory consultee and are therefore unable to confirm acceptability on scoping / pre-applications / planning applications, this lies with the LA. Our role is to provide advice to the LA as and when requested.

Therefore, in response to your queries, these need to be directed to the LA. If any information is required from TfGM, this needs to be requested via the LA to avoid any confusion and abortive work.

Kind regards

Claire Smallman
Infrastructure Development Officer
Transport for Greater Manchester

2 Piccadilly Place, Manchester M1 3BG
Direct line 0161 244 1733, Extension 701733
E-mail claire.smallman@tfgm.com
www.tfgm.com

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From: Sam Denby <SamDenby@hydrock.com>
Sent: 06 December 2021 09:52
To: Claire Smallman <Claire.Smallman@tfgm.com>
Cc: Sophie Gittins <SophieGittins@hydrock.com>; 'John Gilligan WN' <john.gilligan@rochdale.gov.uk>
Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping
Importance: High

Morning Claire,

Sorry to chase but can you confirm your thoughts to my email sent on the 24th of November please.

Re the traffic count given the location is not near a retail park can you confirm if we can still get this surveyed this week?

Many thanks

Kind regards

Sam Denby BA (Hons) MSc CMILT

Technical Director | Transportation

Hydrock

Northern Assurance Buildings, 9-21 Princess St, Albert Square, Manchester M2 4DN

Tel: (0161) 804 5550 Internal Ext: 5014

Mobile: 07584 081 586

Email: SamDenby@hydrock.com

From: Sam Denby

Sent: 01 December 2021 14:13

To: 'Claire Smallman' <Claire.Smallman@tfgm.com>

Cc: Sophie Gittins <SophieGittins@hydrock.com>; 'John Gilligan WN' <john.gilligan@rochdale.gov.uk>

Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

Hi Claire,

I hope you are well.

Are you able to advise on my query set out below?

Thanks

Kind regards

Sam Denby BA (Hons) MSc CMILT

Technical Director | Transportation

Hydrock

Northern Assurance Buildings, 9-21 Princess St, Albert Square, Manchester M2 4DN

Tel: (0161) 804 5550 Internal Ext: 5014

Mobile: 07584 081 586

Email: SamDenby@hydrock.com

From: Sam Denby

Sent: 25 November 2021 12:37

To: 'Claire Smallman' <Claire.Smallman@tfgm.com>

Cc: Sophie Gittins <SophieGittins@hydrock.com>; 'John Gilligan WN' <john.gilligan@rochdale.gov.uk>

Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

Hi Claire,

Sorry to chase but are you able to advise on my query sent in my email sent on the 24th?

Happy to discuss on the phone if needed.

Many thanks

Kind regards

Hydrock

Northern Assurance Buildings, 9-21 Princess St, Albert Square, Manchester M2 4DN

Tel: (0161) 804 5550 Internal Ext: 5014

Mobile: 07584 081 586

Email: SamDenby@hydrock.com

Following government advice, I am currently working from home. If we need to speak, drop me a line and I'll get straight back to you. For wider information on working with Hydrock during COVID-19 visit hydrock.com/coronavirus.

From: Riccardo Boncinelli <Riccardo.Boncinelli@tfgm.com>

Sent: 24 November 2021 11:33

To: Sam Denby <SamDenby@hydrock.com>

Cc: Sophie Gittins <SophieGittins@hydrock.com>; 'John Gilligan WN' <john.gilligan@rochdale.gov.uk>

Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

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Hello Sam,

I have passed your queries onto Claire Smallman who is the infrastructure development officer who acts as liaison between the district / consultants and TfGM.

Regards,

Riccardo Boncinelli

From: Sam Denby <SamDenby@hydrock.com>

Sent: 24 November 2021 10:53

To: Riccardo Boncinelli <Riccardo.Boncinelli@tfgm.com>

Cc: Sophie Gittins <SophieGittins@hydrock.com>; 'John Gilligan WN' <john.gilligan@rochdale.gov.uk>

Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

Hi Riccardo,

I hope you are well.

You will see from the email below we have received a response from John Gilligan on our scoping request.

Unfortunately the response doesn't answer the questions we have asked in our email dated the 16th of November.

Specifically we need confirmation that the scope is acceptable along with the following queries:

- Pupils trip rates are acceptable (please note for TRICS we can't just add in staff as the land use category is for pupils only);
- Any committed developments which need to be included; and
- The junction assessment proposed is acceptable.

Many thanks for your assistance and if anything is unclear please feel free to give me a call.

Thanks

Kind regards

Sam Denby BA (Hons) MSc CMILT

Technical Director | Transportation

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Mobile: 07584 081 586

Email: SamDenby@hydrock.com

Following government advice, I am currently working from home. If we need to speak, drop me a line and I'll get straight back to you. For wider information on working with Hydrock during COVID-19 visit hydrock.com/coronavirus.

From: John Gillighan WN <john.gillighan@rochdale.gov.uk>

Sent: 24 November 2021 10:03

To: Sam Denby <SamDenby@hydrock.com>

Cc: Sophie Gittins <SophieGittins@hydrock.com>

Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

CAUTION: This email originated from outside of Hydrock. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Sam,

I have received the feedback from TFGM.

The Traffic Counts for Pupils have been deemed acceptable. You do however need to include Traffic Counts for the Staff also.

Many thanks,

John Gillighan WN

Senior Engineer (Highways)

Network Improvement/Development/Flooding



ROCHDALE
BOROUGH COUNCIL

 01706 924607

 john.gillighan@rochdale.gov.uk

Rochdale Borough Council
Floor 2, Number One Riverside
Smith Street, Rochdale, OL16 1XU

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For news and social media updates go to www.rochdale.gov.uk/news

Please consider the environment before printing this email.

From: Sam Denby <SamDenby@hydrock.com>

Sent: 22 November 2021 19:56

To: John Gillighan WN <john.gillighan@rochdale.gov.uk>

Cc: Sophie Gittins <SophieGittins@hydrock.com>

Subject: RE: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways

Scoping

Importance: High

:CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Evening John,

I hope you are well.

Further to Sophie's email below are you able to confirm our proposed scope is acceptable?

We are particularly keen to agree the operational assessment given the requirement for a traffic count.

Many thanks

Kind regards

Sam Denby BA (Hons) MSc CMLT

Technical Director | Transportation

Hydrock

Northern Assurance Buildings, 9-21 Princess St, Albert Square, Manchester M2 4DN

Tel: (0161) 804 5550 Internal Ext: 5014

Mobile: 07584 081 586

Email: SamDenby@hydrock.com

Following government advice, I am currently working from home. If we need to speak, drop me a line and I'll get straight back to you. For wider information on working with Hydrock during COVID-19 visit hydrock.com/coronavirus.

From: Sophie Gittins <SophieGittins@hydrock.com>

Sent: 16 November 2021 16:31

To: john.gillighan@rochdale.gov.uk

Cc: Sam Denby <SamDenby@hydrock.com>

Subject: [Hydrock: 19522-TMBI] Land adjacent to the Heywood Sports Village, West Pre-Application Highways Scoping

Good Afternoon John,

I am hoping you will be able to assist with the below query.

Hydrock are looking to engage in pre-application highways scoping advice regarding the preparation of a Transport Assessment [TA] and Framework Travel Plan [FTP] relating to proposals for an educational development at Newbridge Academy, Rochdale. **This email is looking to confirm the highways scope of assessment.**

The development is located on a parcel of 1ha of overgrown brownfield land, approximately 5.4km south west of Rochdale Centre, 5km east of Bury Centre and 1.6km north of Heywood Industrial Estate. The site is primarily surrounded by residential and retail land uses, please see **Figure 1** below for the site location reference:

Figure 1: Site location



Development Proposals

The proposed development comprises the erection of a two storey SEND school, along with the provision of car parking, a minibus drop off zone, refuse and cycle store and outdoor recreation facilities including a sports playing field, a MUGA, a forest school and a habitat area. The proposed site access is to be located off West Starkey Street, please see indicative WIP layout attached for reference.

The school is SEND facility, specifically designed to cater for children aged 11- 19, providing places for up to 76 students.

The proposed development includes provision for the following:

- 41 staff/visitor parking in total bays 9 (inc. 3 minibus in service yard and 3 disabled bays);
- 16 cycle shelter spaces;
- 2 motorcycle parking spaces;
- Segregated Pedestrian Access; and
- Raised table crossing;

As previously stated, the proposed site access is to be located off West Starkey Street. The site is bounded by Cedar Avenue to the west, Claybank Street to the north, and the Heywood Sports Centre/Bamford Road adjacent to the east. There are existing bus stops located on Bamford Road which serve the R2 Rochdale Runner service between Bury and Rochdale which allows for the site to integrate well into the local highway network.

Assessments

This email is looking to confirm the scope of assessment required to satisfy highways related matters. Based on the information given above, we anticipate the following documents to be required to support the planning application.

Transport Assessment [TA]

- Comment on the background / history of the site;
- Provide a description of the existing conditions;

- Consider the national and local transport-related policy documentation;
- Consider any committed developments in the area - **Can you please confirm any committed developments we need to include?;**
- Review the parking provision against the latest standards;
- Undertake accident analysis of the local highway network;
- Undertake an assessment of the accessibility of the site by sustainable modes, to include an assessment of the pedestrian, cycling, bus and rail facilities surrounding the site;

Trip Rates and Trip Generation

- Provide details of the development proposals and undertake a trip generation analysis. Based on the previous site uses and any extant / lawfully permitted and proposed land use (s), we will derive the trip generations associated with the site during the weekday morning / evening peak hours. The peak hours we are anticipating are as follows:
 - 08:00-09:00;
 - 15:00-16:00.
- The following trip rates shown in **Table 1** are proposed to be utilised as part of the traffic impact assessment. These trip rates have been applied to the total anticipated number of pupils (79) anticipated at the educational facility and the resultant trip generation is illustrated in **Table 2**. **Can you please confirm that the below trip rates in Table 1 and resultant trip generation in Table 2 are acceptable in principle and approach will be accepted by the LHA?**

Table 1: Trip Rates – Proposed Educational Land Use

	AM (08:00 – 09:00) Trip Rates			PM (15:00 – 16:00) Trip Rates		
	Arrivals	Departures	2-Way	Arrivals	Departures	2-Way
Trip Rates	0.144	0.102	0.246	0.054	0.089	0.143

Table 2: Trip Generation Proposed Educational Land Use

	AM Trip Generation			PM Trip Generation		
	Arrivals	Departures	2-Way	Arrivals	Departures	2-Way
Trip Generation	11	8	19	4	7	11

Junction Capacity Assessments

- Based on our preliminary review and the proposed trip generation above, we anticipate that the following junctions are likely to be required to be assessed:
 - Proposed Site Access and West Starkey Street.
- **Can you please confirm whether the above is acceptable and whether you require any additional junctions to be assessed?**
- Develop any site access drawings (including internal access) to illustrate the design of the access junction(s), including undertaking swept paths of service vehicles and visibility splays;
- Produce a comprehensive Transport Assessment report detailing the findings of the above.

Framework Travel Plan [FTP]

- Consider the national and local transport-related policy documentation;
- Undertake an assessment of the accessibility of the site by sustainable modes, to include an assessment of bus, cycling and pedestrian facilities surrounding the site, along with a PTAL assessment;
- Provide details of the development proposals;
- Identify a range of initiatives for inclusion within the travel plan, to encourage travel by more sustainable modes including car sharing, by public transport, bicycle and on foot, and to reduce the need to travel;

- Provide details of how the travel plan will be managed, outlining the role of the Travel Plan Coordinator, steering group and stakeholders;
- Outline the aim, objectives and targets for the travel plan;
- Provide an action plan and marketing strategy to support the implementation of the travel plan at the site; and
- Summarise all of the above in a FTP.

Many thanks for your assistance in this matter and should you wish to discuss please do not hesitate to contact myself directly.

Kind regards

Sophie Gittins BSc (Hons)

Consultant | Transportation



Hydrock

Northern Assurance Buildings, 9-21 Princess St, Albert Square, Manchester M2 4DN

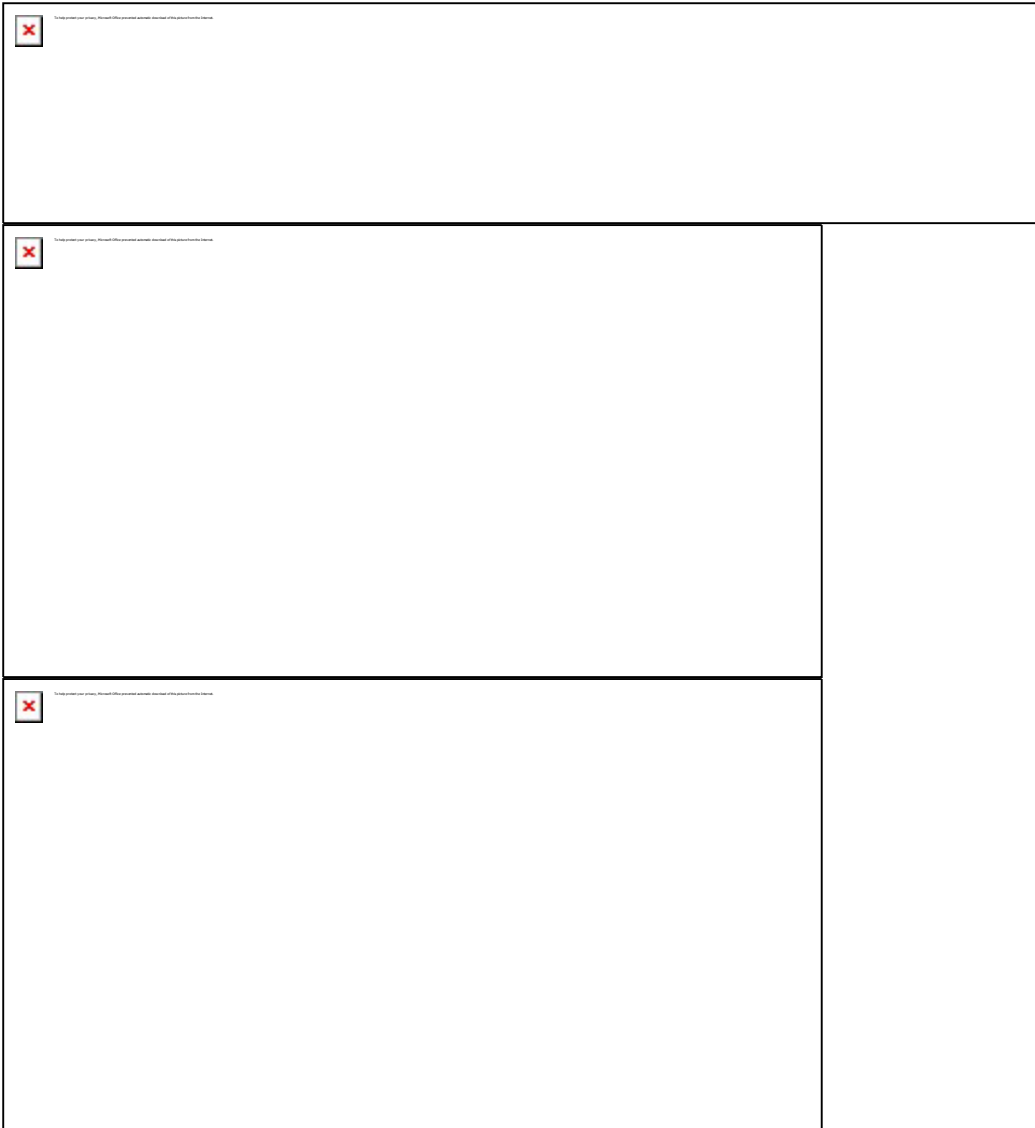
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Appendix B Network Traffic Flows

SITE

PM	AM	
		↑
123	151	→

PM		
AM		
	←	→

West Starkey Street (West)

West Starkey Street (East)

	AM	PM
↑		
←	128	163



Peak Hours	
AM	08:00-09:00
PM	15:00-16:00



AM & PM Peak Hour - Base Flows - 2021 (PCUs)

22/06/2023

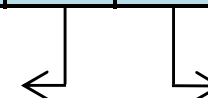
Job Number -
C19522

Proposed Development, Rochdale SEND School

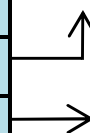
Figure 1

SITE

PM		
AM		



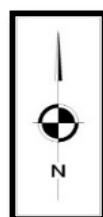
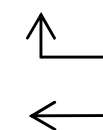
PM	AM
125	154



West Starkey Street (West)

West Starkey Street (East)

	AM	PM
	131	166



TEMPro Factors

AM	1.0177
PM	1.0172



AM & PM Peak Hour - Base Flows - 2023 (PCUs)

22/06/2023

Job Number -
C19522

Proposed Development, Rochdale SEND School

Figure 2

SITE

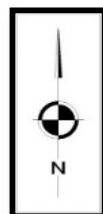
PM		
AM		

PM	AM
131	160

	AM	PM
	136	173

West Starkey Street (West)

West Starkey Street (East)



TEMPro Factors

AM	1.0441
PM	1.0429



AM & PM Peak Hour - Base Flows - 2028 (PCUs)

22/06/2023

Job Number -
C19522

Proposed Development, Rochdale SEND School

Figure 3

SITE

PM		
AM		

PM	AM
43%	54%

West Starkey Street (West)

West Starkey Street (East)

	AM	PM
	46%	57%



Trip Distribution

	AM	PM
Total	284	291
% West	46%	57%
% East	54%	43%



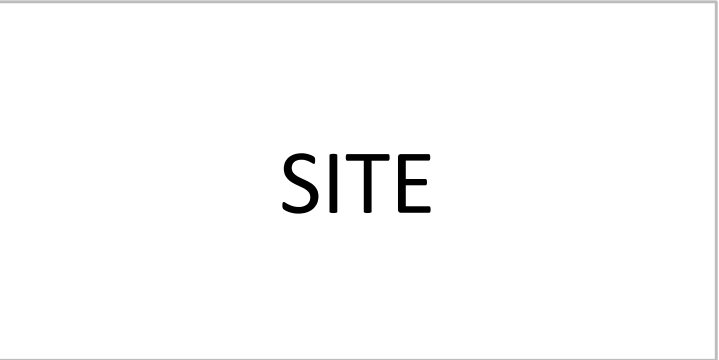
AM & PM Peak Hour - % Trip Distribution (PCUs)

22/06/2023

Job Number -
C19522

Proposed Development, Rochdale SEND School

Figure 4



PM	AM
33	41

PM	43	33
AM	35	41

AM	PM
35	43



Arrivals Departures		
AM	76	76
PM	76	76



AM & PM Peak Hour - Trip Generation - First Principles

22/06/2023

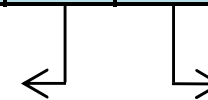
Job Number -
C19522

Proposed Development, Rochdale SEND School

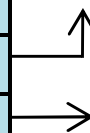
Figure 5

SITE

PM	43	33
AM	35	41



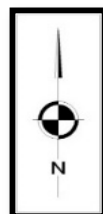
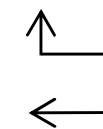
PM	AM
33	41
131	160



West Starkey Street (West)

West Starkey Street (East)

AM	PM
35	43
136	173



AM & PM Peak Hour - Base Flows - 2028 + Proposed
Development(PCUs)

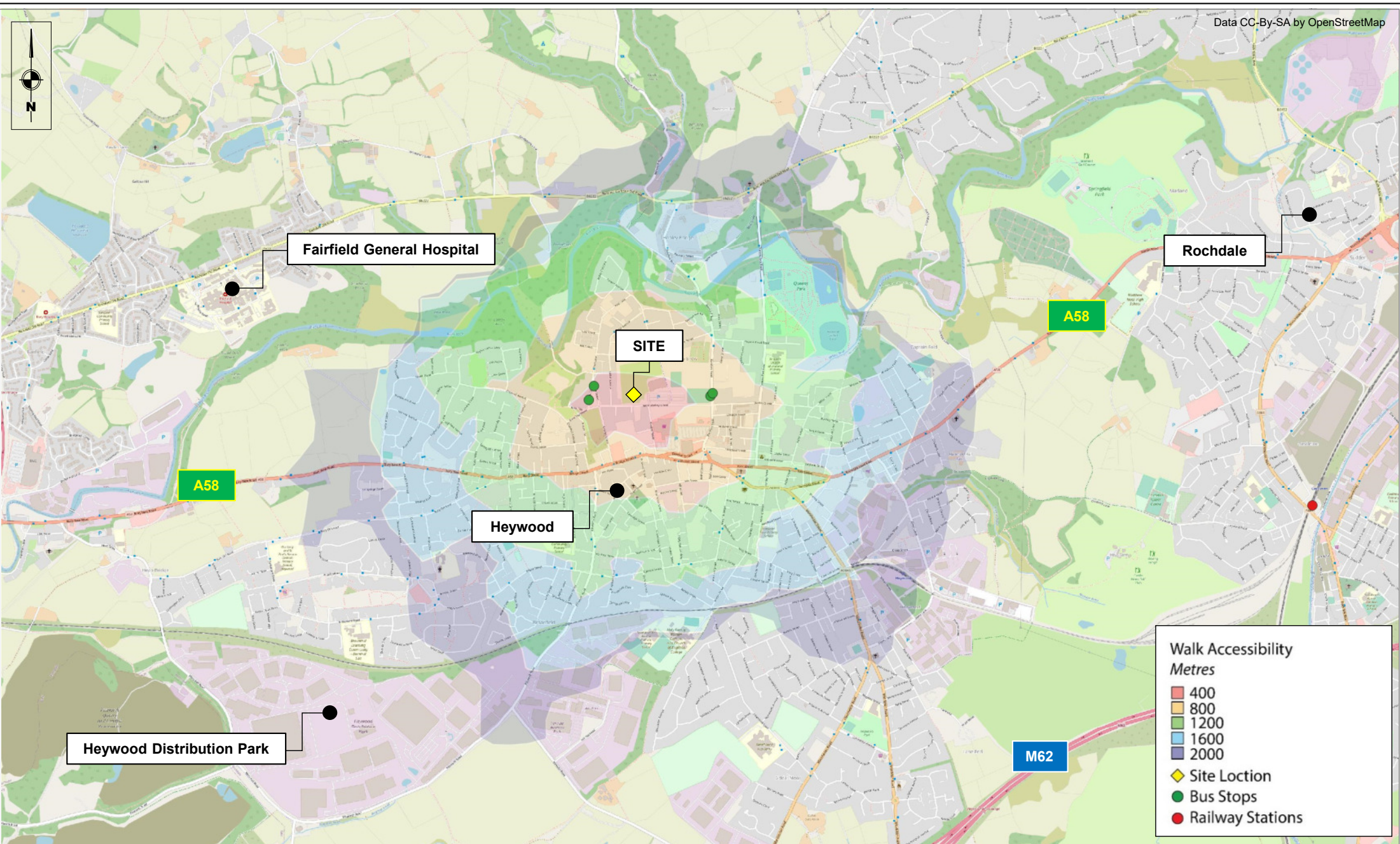
22/06/2023

Job Number -
C19522

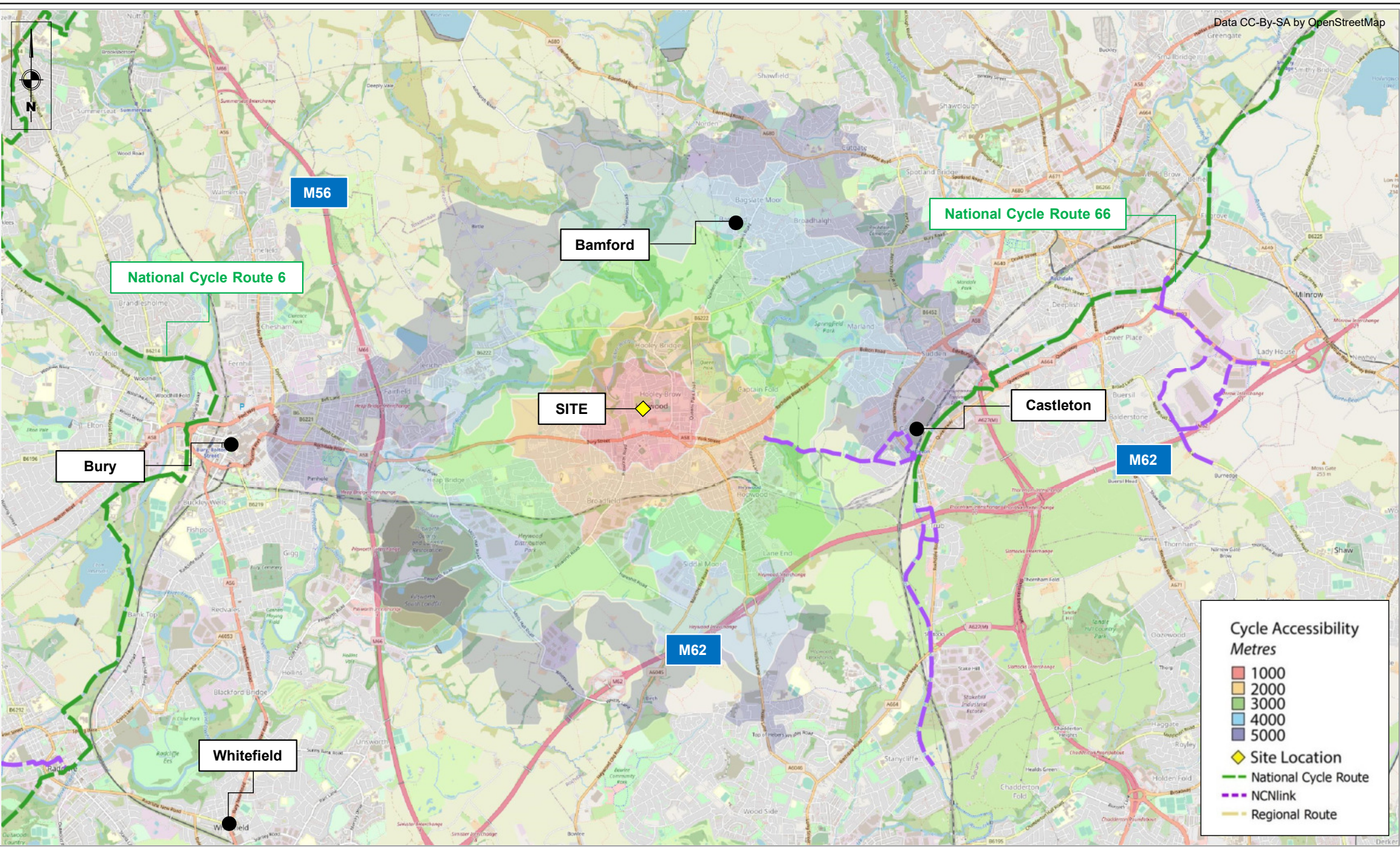
Proposed Development, Rochdale SEND School

Figure 6

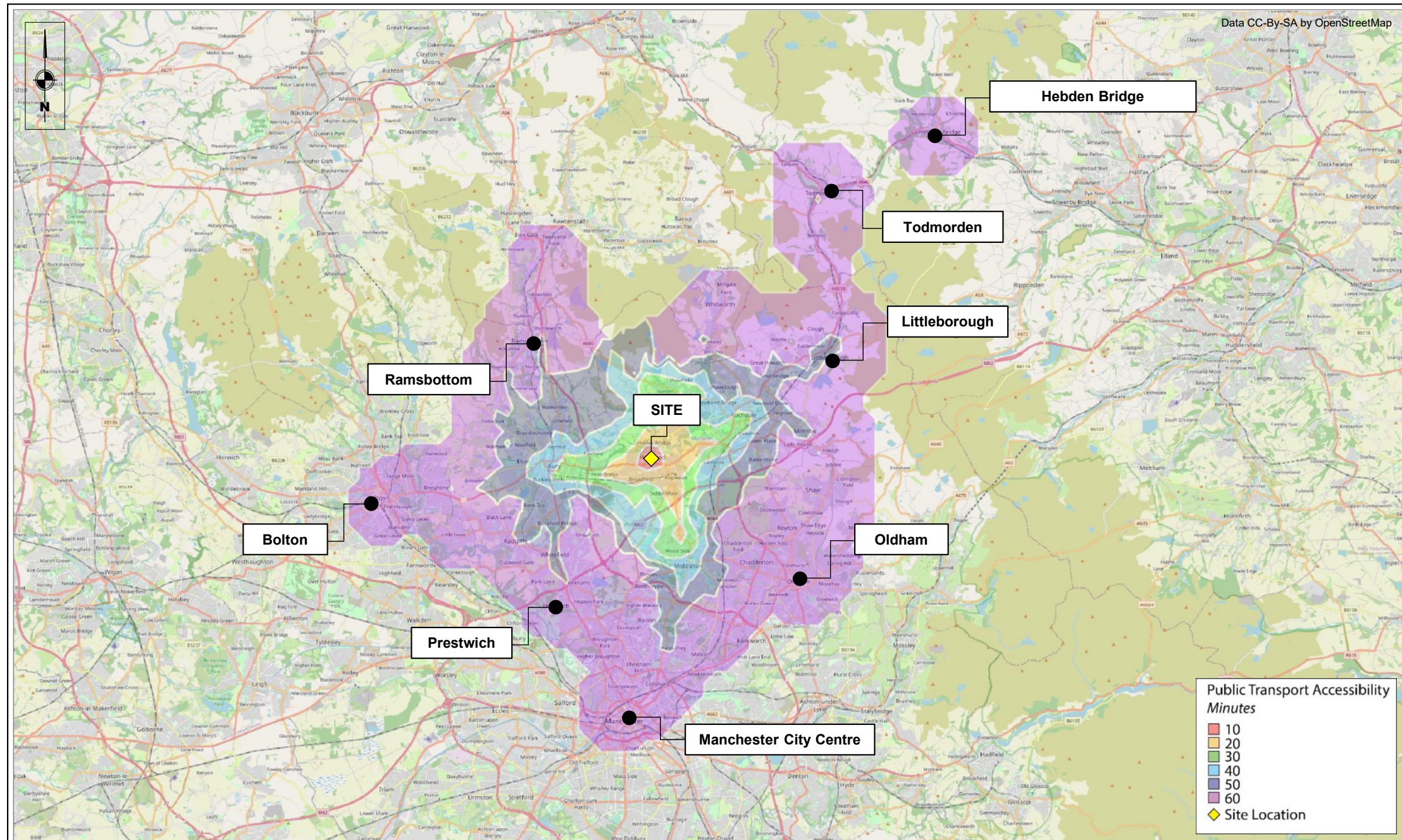
Appendix C Accessibility Figures



	Project Title	Drawing Title	Job Number	By	Rev	Description	Date	By	Drawing No.
	Newbridge Academy, Rochdale	Accessibility: 2km Walking Catchment	19522	HT	-	-	-	-	APPENDIX C
			Date	Checked	-	-	-	-	
			Scale	Status	-	-	-	-	
			NTS	-	-	-	-	-	Figure 1

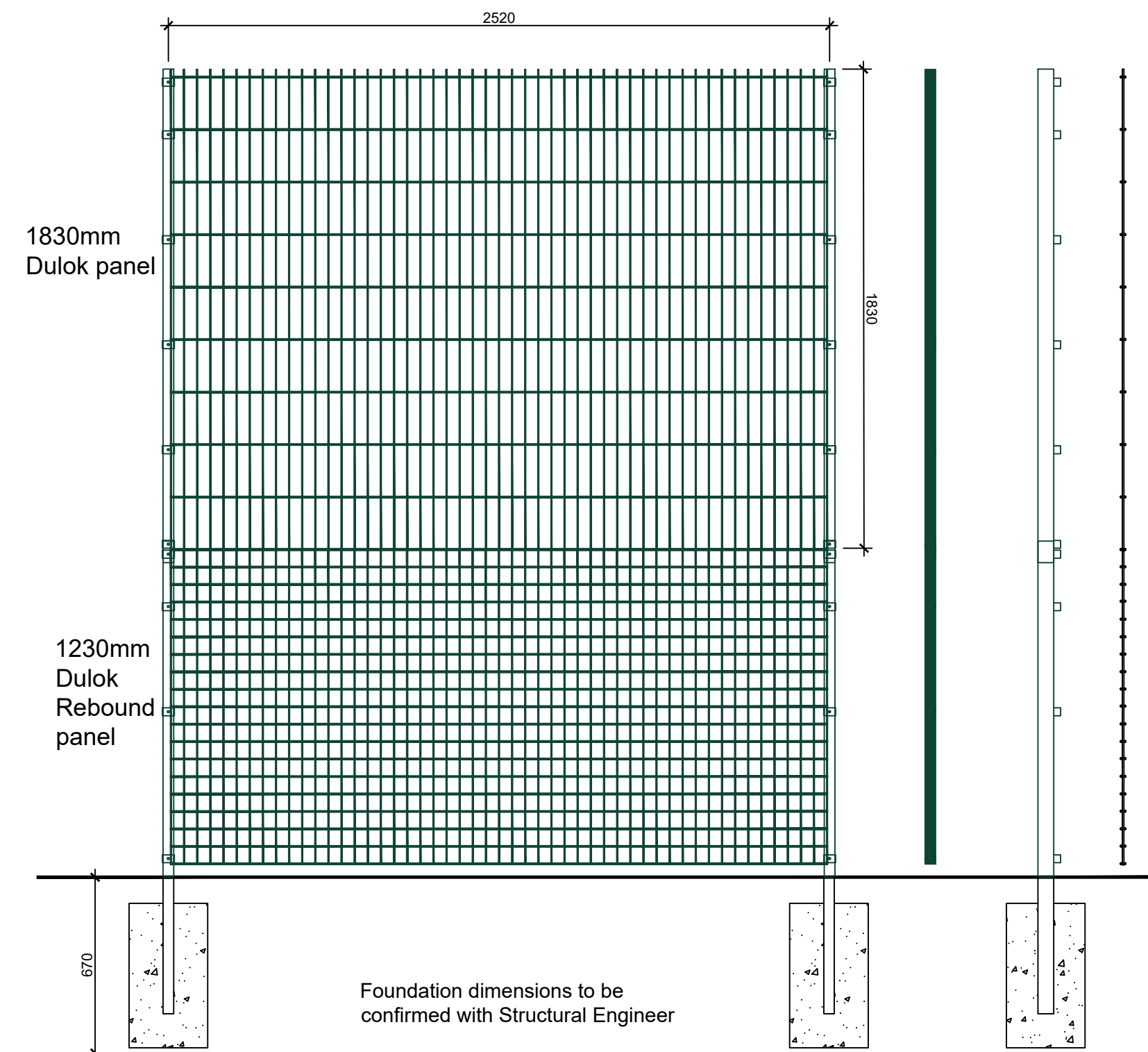


	Project Title	Drawing Title	Job Number	By	Rev	Description	Date	By	Drawing No.
	Newbridge Academy, Rochdale	Accessibility: 5km Cycling Catchment	19522	HT	-	-	-	-	APPENDIX C
			21.06.2023	CP	-	-	-	-	
			NTS	Status	-	-	-	-	Figure 2



Appendix D Proposed Site Layout

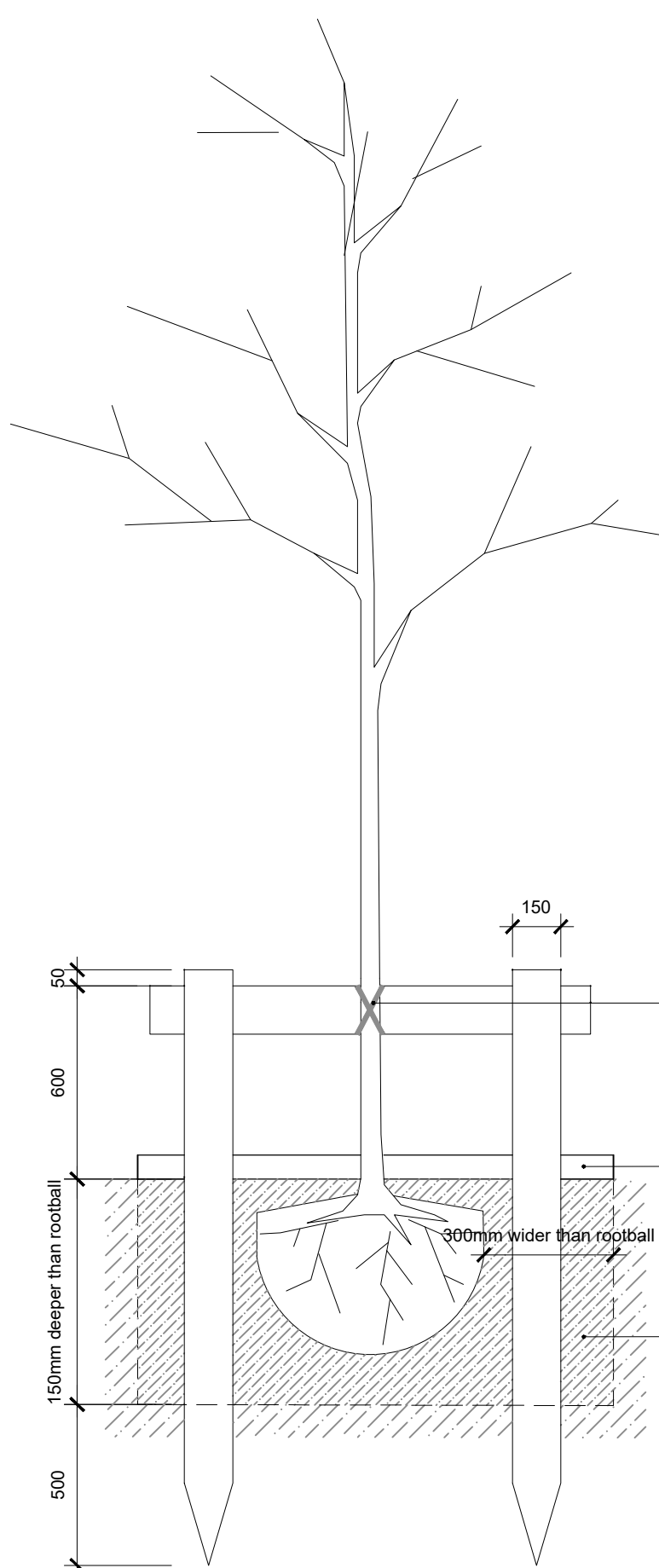
DETAIL A - MUGA Court Fencing
scale 1:20



Product Reference: CLD **Dulok Sports™ Double Wire Sports Fencing** overall height 3m, with Dulok Rebound to 1230mm height or equal & approved

1. **System performance:** Sports fencing performance.
2. **Posts:** Rectangular hollow section (RHS), hot dip galvanized and polyester powder coated with 40 x 5 mm flat clamp bars (finished to match post).
3. **Panels:** Carbon steel welded mesh panels.
4. **Height:** 1830mm for Dulok sports & 1230mm for Dulok Rebound
5. **Width:** 2506 mm.
6. **Fasteners:** M8 x 40 pin hex dome-head security screws.
7. **Colour/ Finish:** Galvanized and powder coated RAL Colour 6005
8. **Gates:** Pedestrian and vehicular gates to match fence type. 3m wide double gate, 1.2m wide single gate. Locking mechanism to be agreed with client.

DETAIL B - 14 - 16cm Girth TREE PLANTING
scale 1:20



TREE PIT SPECIFICATION NOTES - 14 - 16cm girth trees

Tree pit to be excavated to allow adequate clearance between the perimeter of the root-ball and the side of the pit. The depth of the pit to be a minimum of 700mm and at least 75mm greater than the depth of the root-ball.

Stakes and rail to be half-round 150mm diameter sweet chestnut or peeled larch poles, pointed at one end, preserved to resist rot for their intended lifespan, and strong enough to take nails without splitting. Stakes driven in to be a minimum of 500mm below the bottom of the pit and 600mm above ground level.

Rail secured to the stakes with 2No. galvanised nails per stake.

14 - 16cm Girth



NOTES

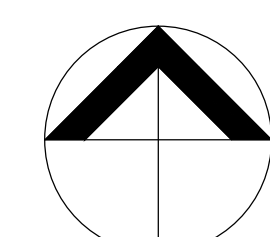
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Dimensions are in millimetres unless specified.

Rev	Date	Notes	By	Chk
P0	Sept 21	First Issue	NR	AS
P1	05-10-21	Developed Plan	NR	AS
P2	08-10-21	Developed Plan	NR	AS
P3	13-10-21	PCGA	NR	AS
P4	14-10-21	Planning Caras & 10 Comments incorporated	HTP	AS
P5	10-12-21	PLANNING	HTP	AS
P6	17-07-22	Planning fee collected	NR	AS
P7	08-08-22	Caras position amended EV charging point added	2P	AS
		Drawing number amended in line with new EV requirements	NR	AS
P8	25-10-22	25% of Carasly added	NR	AS
P9	06-06-23	External seating space fence line amended	2P	AS
P10	12-06-23	Stage 2 Issue	NR	AS

KEY

- | | |
|--|---|
| | Vehicular grade Asphalt concrete
to Engineers spec with 125mm bed road nuts |
| | Pedestrian grade Asphalt concrete
to Engineers spec with 50mm pot hole knots laid flush |
| | Multi Use Games Area grade Asphalt
concrete to Engineers spec with 50mm pot
hole knots laid flush |
| | In situ concrete surfacing to Engineers
specification |
| | Concrete block paving |
| | Existing trees retained and protected during
construction in accordance with Tree Protection
Plan & Arboricultural Method Statement |
| | Tree Root Protection Areas retained and
protected during construction in accordance
with Tree Protection Plan & Arboricultural
Method Statement |
| | c/c New trees, 14 - 16cm girth - see Detail B |
| | 10 Orchard Trees

2No. Red Windsor Apple Trees grown on M25 rootstock,
2No. Saler Apple Trees grown on M25 rootstock,
2No. Lindegat Apple Trees grown on M25 rootstock,
2No. Greenreaves Apple Trees grown on M25
rootstock. |
| | 2No. Victoria Plum Trees grown on St Julian Roadstock -
Vigilantia |
| | Supplied pot grown tree in 1.2m diameter croke or
metal at total B stake. Stake trees as required.
Available from Chris Dowers and Sons
Whispering Trees Nurseries
Wimborneham
Norfolk, PE34 3EB |
| | Amenity grass over 150mm depth
topsoil |
| | Eco Species Rich Grassland "Common WLFM 2" |
| | Ornamental shrub/perennial planting into 350mm depth
insitu h/c. Approx. 40% shrubs per m ² x 3 free pots.
Shrubs laid back much spaced on completion of planting
Species to include:
Buxus sempervirens
Cornus stolonifera
Corylus avellana
Crataegus punctata
Fuchsia Tom Thumbs
Helleborus
Philadelphus
Pieris litoralis
Syringa vulgaris
Cornus 'Ludlow' Series
Magnolia
Nandina
Salix caprea
Saxifraga oppositifolia
Eucryphia lucida
Luxurum fortunei
Lavender
Hydrangea
Rosa rugosa
Prunella
Parthenociss vitacea
Persea
Pinus sylvestris
Sorbus domestica |
| | Ornamental shrub/perennial planting into 350mm depth
insitu h/c compacted over 300mm depth subsoil to ensure
tree no growth. Approx. 40% shrubs per m ² in 3 free
pots.
70mm depth back much spaced on completion of planting
Species as above |
| | Existing hedge/woodland retained and
protected during construction works |
| | Native species hedge walled planting into 400mm depth
insitu h/c compact. Approx. 40% shrubs per m ² x 3 free pots.
Shrubs laid back much spaced on completion of planting
Hardwearing, field maple, holly, crab apple, rose, wild cherry,
hawthorn & guelder rose. Planted in double staggered rows. |
| | 2m High Washmesh Fencing |
| | 2m High Washmesh Fencing |
| | 3m high steel welded mesh sports fencing &
gates as Detail A adjacent |
| | 1.5m high timber/composite hit
and miss vertical pale fencing. |
| | Exposed levels |
| | + 111.76
Proposed levels |
| | Rad line site boundary |
| | Designed Planning for
Electric Vehicle Charging (40kW) |
| | EV charging point to Engineers
specification
(2No. units, each with 2No. charges) |
| | Door handles |



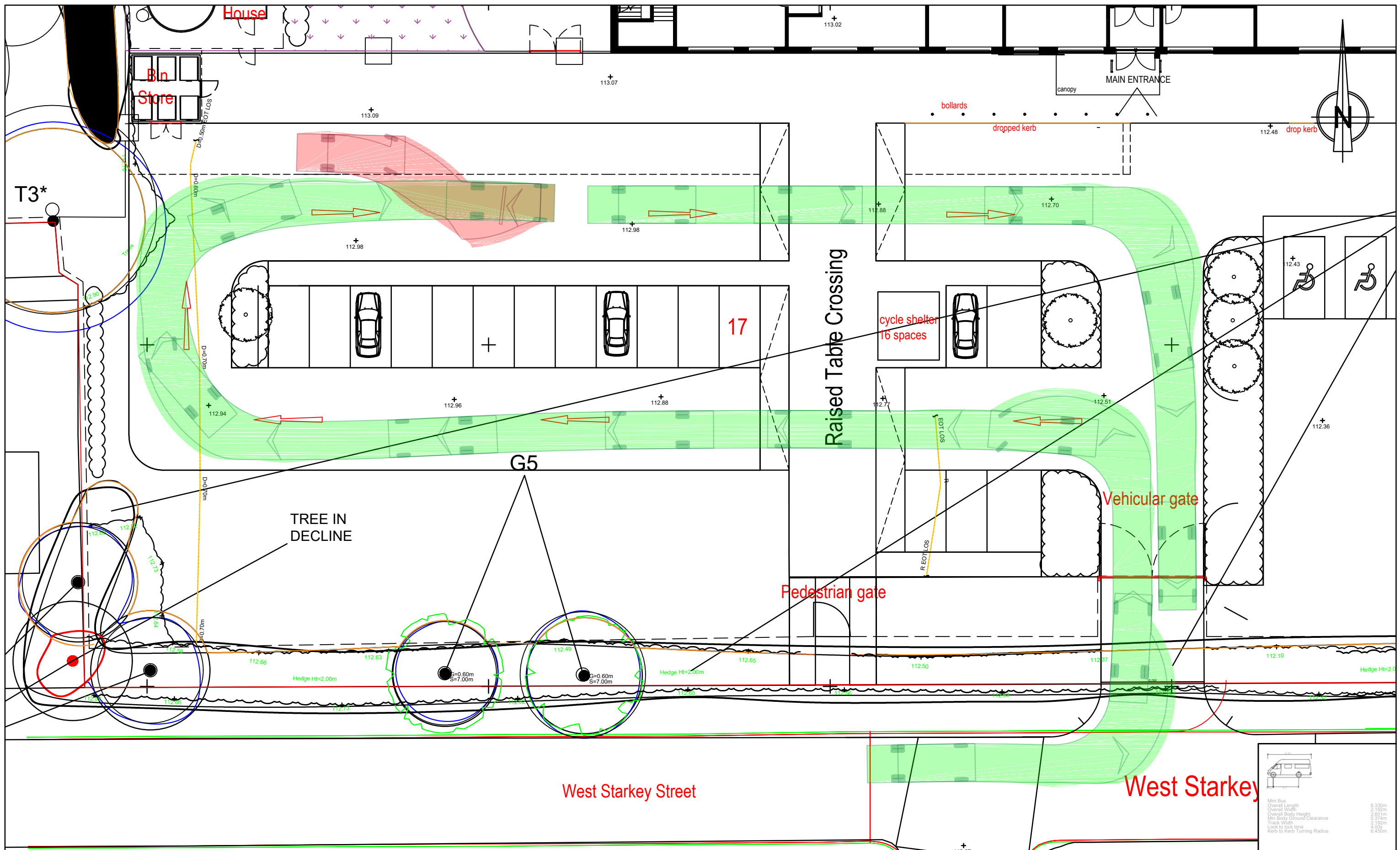
elliswilliams

Project Number: 2718
Project Name: FS0911 Rochdale SEND

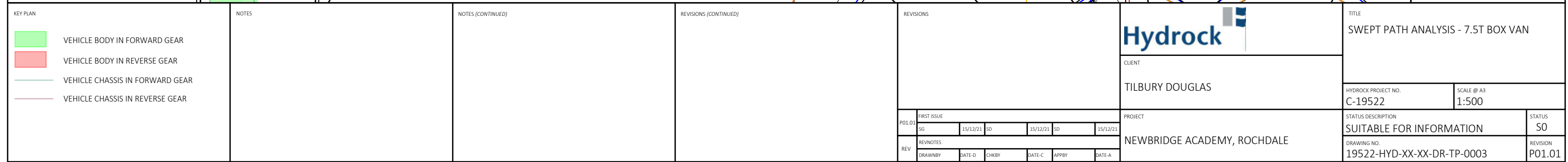
Drawing Status: STAGE 3
Drawing Number: **FS0911-EWA-ZZ-ZZ-D-A-9001**
Drawing Name: Proposed Site Plan
Date: 10.10.21
Drawn By: NH
Rev: P10
Scale: 1:200 @ A0

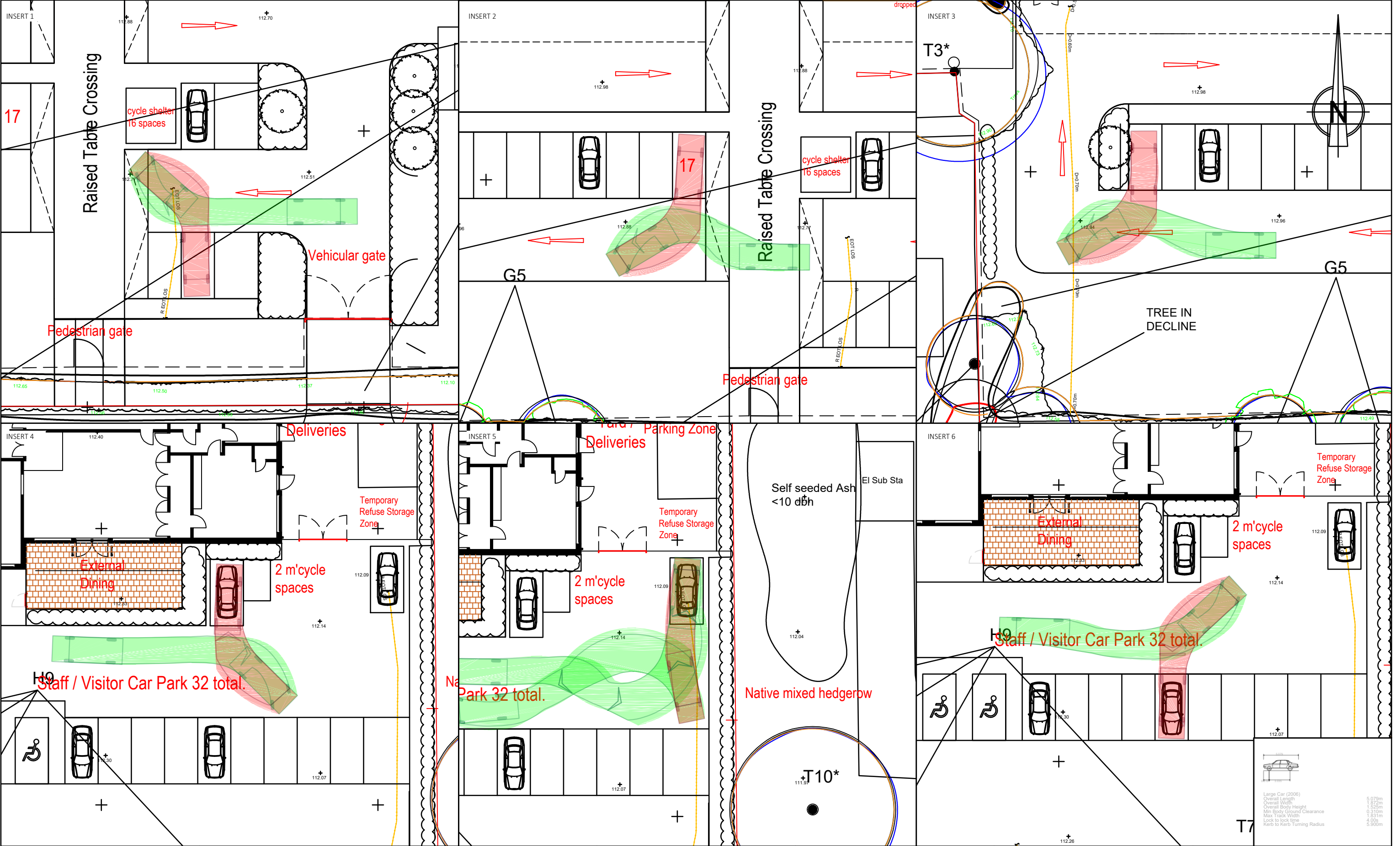
Wellfield Chester Road Preston Brook WA7 3BA
T: 01928 752200 E: info@ewa.co.uk W: ewa.co.uk

Appendix E Swept Path Analysis - Large Car, Mini-bus, 7.5t Box Van



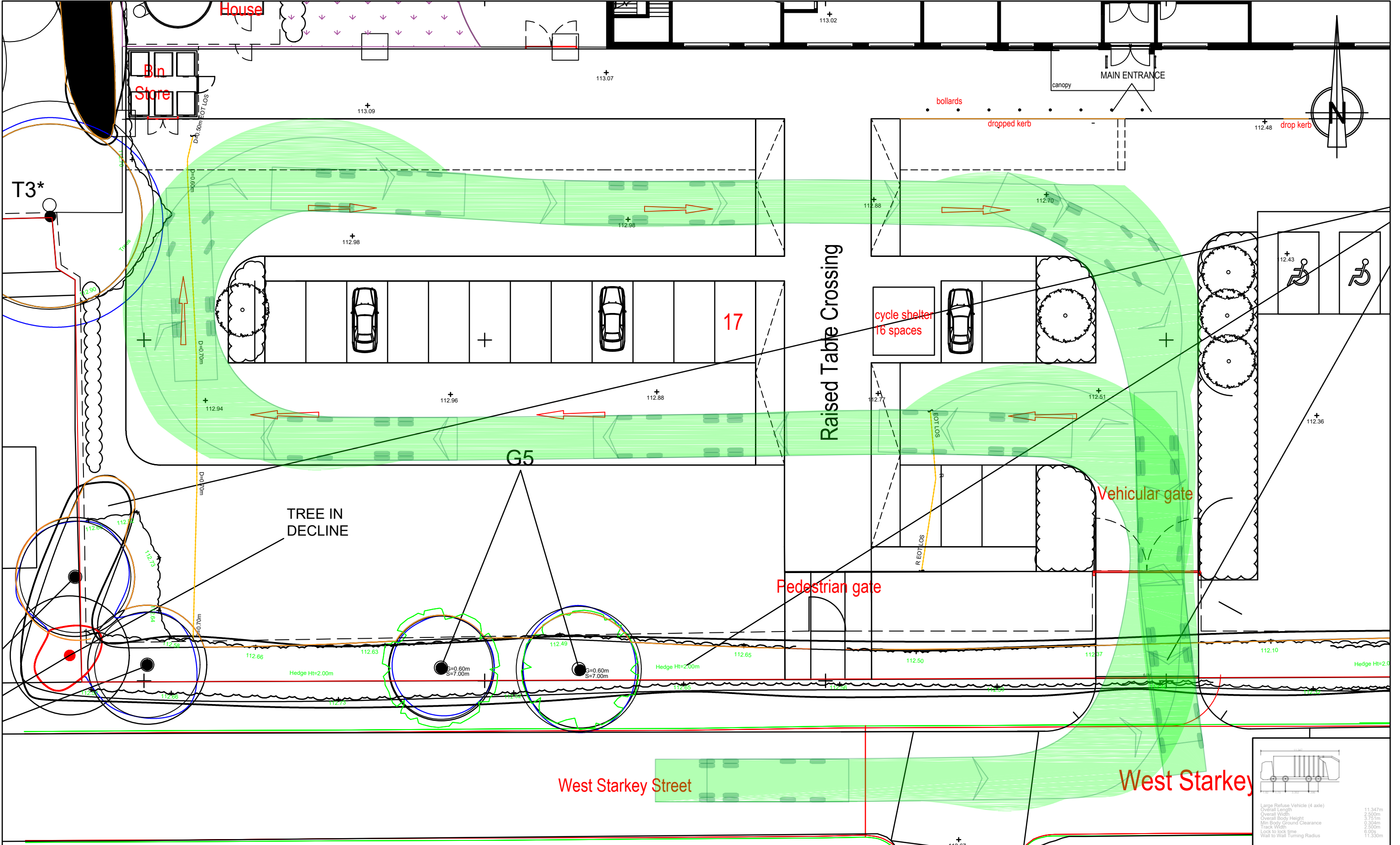
KEY PLAN VEHICLE BODY IN FORWARD GEAR VEHICLE BODY IN REVERSE GEAR VEHICLE CHASSIS IN FORWARD GEAR VEHICLE CHASSIS IN REVERSE GEAR	NOTES	NOTES (CONTINUED)	REVISIONS (CONTINUED)	REVISIONS	Hydrock		TITLE	
					CLIENT		SWEEP PATH ANALYSIS - MINI-BUS	
					TILBURY DOUGLAS		HYDROCK PROJECT NO.	SCALE @ A3
							C-19522	1:500
					PROJECT		STATUS DESCRIPTION	
P01.01	FIRST ISSUE	NEWBRIDGE ACADEMY, ROCHDALE		SUITABLE FOR INFORMATION		SO		
REV	REVNOTES			DRAWING NO.		REVISION		
	DRAWNBY	DATE-D	CHKBY	DATE-C	APPBY	DATE-A	19522-HYD-XX-XX-DR-TP-0002	P01.01





KEY PLAN VEHICLE BODY IN FORWARD GEAR VEHICLE BODY IN REVERSE GEAR VEHICLE CHASSIS IN FORWARD GEAR VEHICLE CHASSIS IN REVERSE GEAR	NOTES	NOTES (CONTINUED)	REVISIONS (CONTINUED)	REVISIONS	Hydrock	TITLE	
					SWEPT PATH ANALYSIS - LARGE CAR		
					HYDROCK PROJECT NO. C-19522	SCALE @ A3 1:500	
P01.01	FIRST ISSUE SG 15/12/21 SD 15/12/21 SD 15/12/21	PROJECT		STATUS DESCRIPTION		STATUS	
REV	REVNOTES DRAWNBY DATE-D CHKBY DATE-C APPBY DATE-A	NEWBRIDGE ACADEMY, ROCHDALE		SUITABLE FOR INFORMATION		S0	
					DRAWING NO. 19522-HYD-XX-XX-DR-TP-0004	REVISION P01.01	

Appendix F Swept Path Analysis - Servicing



KEY PLAN VEHICLE BODY IN FORWARD GEAR VEHICLE BODY IN REVERSE GEAR VEHICLE CHASSIS IN FORWARD GEAR VEHICLE CHASSIS IN REVERSE GEAR	NOTES	NOTES (CONTINUED)	REVISIONS (CONTINUED)	REVISIONS	Hydrock CLIENT TILBURY DOUGLAS PROJECT NEWBRIDGE ACADEMY, ROCHDALE	TITLE SWEPT PATH ANALYSIS - LARGE 4-AXLE REFUSE VEHICLE HYDROCK PROJECT NO. C-19522 SCALE @ A3 1:500 STATUS DESCRIPTION SUITABLE FOR INFORMATION DRAWING NO. 19522-HYD-XX-XX-DR-TP-0001 STATUS SO REVISION P01.01
P01.01 FIRST ISSUE SG 15/12/21 SD 15/12/21 SD 15/12/21	REV REVNOTES DRAWNBY DATE-D CHKBY DATE-C APPLY DATE-A				Large Refuse Vehicle (4 axle) Overall Length 2.500m Overall Width 3.751m Overall Body Height 0.504m Min Body Ground Clearance 2.500m Track Width 6.000m Lock to lock time 11.530m Wait to Wait Turning Radius 11.530m	

Appendix G TRICS Output

Calculation Reference: AUDIT-540501-230621-0651

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : B - SECONDARY
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BH BRIGHTON & HOVE	1 days
03	SOUTH WEST	
	DV DEVON	1 days
	TB TORBAY	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	PB PETERBOROUGH	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
	LC LANCASHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of pupils
Actual Range: 350 to 1596 (units:)
Range Selected by User: 247 to 1800 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 28/09/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	4 days
Thursday	2 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	12 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	12
------------------------------------	----

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	11
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	10 days - Selected

Secondary Filtering selection:

Use Class:

F1(a)	12 days
-------	---------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
20,001 to 25,000	3 days
25,001 to 50,000	7 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	1 days
125,001 to 250,000	5 days
250,001 to 500,000	4 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	6 days
1.1 to 1.5	5 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	11 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	12 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BH-04-B-01 NEVILL AVENUE BRIGHTON HOVE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 1596 Survey date: WEDNESDAY 27/09/17	SECONDARY SCHOOL	BRIGHTON & HOVE	Survey Type: MANUAL
2	DV-04-B-04 EARL RICHARD' SRD SOUTH EXETER Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 835 Survey date: TUESDAY 02/04/19	SECONDARY ACADEMY	DEVON	Survey Type: MANUAL
3	GM-04-B-02 FALINGE ROAD ROCHDALE SHAWCLOUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 1350 Survey date: WEDNESDAY 21/10/15	SECONDARY SCHOOL	GREATER MANCHESTER	Survey Type: MANUAL
4	LC-04-B-02 TODD LANE NORTH LOSTOCK HALL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 560 Survey date: TUESDAY 06/11/18	SECONDARY ACADEMY	LANCASHIRE	Survey Type: MANUAL
5	LN-04-B-02 RISEHOLME ROAD LINCOLN ERMINE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 852 Survey date: WEDNESDAY 04/10/17	SECONDARY SCHOOL	LINCOLNSHIRE	Survey Type: MANUAL
6	NF-04-B-01 SAINT CLEMENTS HILL NORWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 481 Survey date: FRIDAY 08/11/19	SECONDARY ACADEMY	NORFOLK	Survey Type: MANUAL
7	NT-04-B-01 THE BANKS NEAR NOTTINGHAM BINGHAM Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 1561 Survey date: THURSDAY 23/03/17	SECONDARY SCHOOL	NOTTINGHAMSHIRE	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	NY-04-B-03 GARGRAVE ROAD SKIPTON	GIRLS' HIGH SCHOOL	NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 800 Survey date: FRIDAY 08/03/19 Survey Type: MANUAL		
9	PB-04-B-01 REEVES WAY PETERBOROUGH	SECONDARY ACADEMY	PETERBOROUGH
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 900 Survey date: WEDNESDAY 28/09/22 Survey Type: MANUAL		
10	TB-04-B-01 CRICKETFIELD ROAD TORQUAY	SECONDARY ACADEMY	TORBAY
	Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of pupils: 1309 Survey date: MONDAY 01/04/19 Survey Type: MANUAL		
11	TW-04-B-03 GRETN A ROAD NEWCASTLE UPON TYNE	CATHOLIC HIGH SCHOOL	TYNE & WEAR
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 1178 Survey date: THURSDAY 18/10/18 Survey Type: MANUAL		
12	WY-04-B-03 WOODHOUSE CLIFF LEEDS	SECONDARY SCHOOL	WEST YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of pupils: 350 Survey date: MONDAY 19/10/15 Survey Type: MANUAL		

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY

TOTAL VEHICLES

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	981	0.060	12	981	0.019	12	981	0.079
08:00 - 09:00	12	981	0.115	12	981	0.089	12	981	0.204
09:00 - 10:00	12	981	0.017	12	981	0.015	12	981	0.032
10:00 - 11:00	12	981	0.011	12	981	0.010	12	981	0.021
11:00 - 12:00	12	981	0.010	12	981	0.009	12	981	0.019
12:00 - 13:00	12	981	0.010	12	981	0.012	12	981	0.022
13:00 - 14:00	12	981	0.012	12	981	0.016	12	981	0.028
14:00 - 15:00	12	981	0.030	12	981	0.025	12	981	0.055
15:00 - 16:00	12	981	0.054	12	981	0.079	12	981	0.133
16:00 - 17:00	12	981	0.035	12	981	0.068	12	981	0.103
17:00 - 18:00	12	981	0.018	12	981	0.027	12	981	0.045
18:00 - 19:00	12	981	0.015	12	981	0.015	12	981	0.030
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.387			0.384			0.771

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 350 - 1596 (units:)
Survey date range: 01/01/15 - 28/09/22
Number of weekdays (Monday-Friday): 12
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix H Junctions 9

Junctions 9				
PICADY 9 - Priority Intersection Module				
Version: 9.5.0.6896				
© Copyright TRL Limited, 2018				
For sales and distribution information, program advice and maintenance, contact TRL:				
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Filename: PICADY_Rochdale SEN School_West Starkey Street - 2023.j9

Path: P:\Transportation\19522-TMBI Rochdale SEND Passivhaus School\01_WIP\CA_Calculation\Junctions 9

Report generation date: 22/06/2023 11:30:06

»Base 2028 + Development, AM

»Base 2028 + Development, PM

Summary of junction performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
Base 2028 + Development				
Stream B-AC	0.2	0.15	0.2	0.16
Stream C-AB	0.1	0.07	0.1	0.08

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	PICADY_Rochdale SEN School
Location	Rochdale
Site number	
Date	13/12/2021
Version	
Status	Proposed
Identifier	
Client	
Jobnumber	19522
Enumerator	HYDROCK\sophiegettins
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2028 + Development	AM	ONE HOUR	07:45	09:15	15
D2	Base 2028 + Development	PM	ONE HOUR	14:45	16:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2028 + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Site Access/West Starkey Street	T-Junction	Two-way		1.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	West Starkey Street (West)		Major
B	Proposed Site Access		Minor
C	West Starkey Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - West Starkey Street (East)	6.20			100.0	✓	1.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Proposed Site Access	One lane	3.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	561	0.101	0.256	0.161	0.366
1	B-C	687	0.104	0.264	-	-
1	C-B	632	0.243	0.243	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2028 + Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - West Starkey Street (West)		✓	201	100.000
B - Proposed Site Access		✓	76	100.000
C - West Starkey Street (East)		✓	171	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - West Starkey Street (West)	B - Proposed Site Access	C - West Starkey Street (East)
From				
	A - West Starkey Street (West)	0	41	160
	B - Proposed Site Access	35	0	41
	C - West Starkey Street (East)	136	35	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - West Starkey Street (West)	B - Proposed Site Access	C - West Starkey Street (East)
From				
	A - West Starkey Street (West)	0	0	0
	B - Proposed Site Access	0	0	0
	C - West Starkey Street (East)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.15	7.74	0.2	A
C-AB	0.07	6.56	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	572	0.100	57	0.1	6.977	A
C-AB	27	600	0.044	26	0.0	6.278	A
C-A	102			102			
A-B	31			31			
A-C	120			120			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	68	562	0.121	68	0.1	7.282	A
C-AB	32	595	0.054	32	0.1	6.396	A
C-A	122			122			
A-B	37			37			
A-C	144			144			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	549	0.153	84	0.2	7.737	A
C-AB	39	588	0.067	39	0.1	6.557	A
C-A	149			149			
A-B	45			45			
A-C	176			176			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	549	0.153	84	0.2	7.742	A
C-AB	39	588	0.067	39	0.1	6.559	A
C-A	149			149			
A-B	45			45			
A-C	176			176			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	68	562	0.121	68	0.1	7.290	A
C-AB	32	595	0.054	32	0.1	6.400	A
C-A	122			122			
A-B	37			37			
A-C	144			144			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	572	0.100	57	0.1	6.992	A
C-AB	27	600	0.044	27	0.0	6.281	A
C-A	102			102			
A-B	31			31			
A-C	120			120			

Base 2028 + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Site Access/West Starkey Street	T-Junction	Two-way		1.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2028 + Development	PM	ONE HOUR	14:45	16:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - West Starkey Street (West)		✓	164	100.000
B - Proposed Site Access		✓	76	100.000
C - West Starkey Street (East)		✓	216	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - West Starkey Street (West)	B - Proposed Site Access	C - West Starkey Street (East)
From	A - West Starkey Street (West)	0	33	131
	B - Proposed Site Access	43	0	33
	C - West Starkey Street (East)	173	43	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - West Starkey Street (West)	B - Proposed Site Access	C - West Starkey Street (East)
From	A - West Starkey Street (West)	0	0	0
	B - Proposed Site Access	0	0	0
	C - West Starkey Street (East)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.16	7.99	0.2	A
C-AB	0.08	6.49	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	558	0.102	57	0.1	7.170	A
C-AB	33	609	0.054	33	0.1	6.246	A
C-A	130			130			
A-B	25			25			
A-C	99			99			

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	68	548	0.125	68	0.1	7.496	A
C-AB	39	606	0.065	39	0.1	6.349	A
C-A	155			155			
A-B	30			30			
A-C	118			118			

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	534	0.157	84	0.2	7.986	A
C-AB	49	603	0.081	49	0.1	6.487	A
C-A	189			189			
A-B	36			36			
A-C	144			144			

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	534	0.157	84	0.2	7.989	A
C-AB	49	603	0.081	49	0.1	6.488	A
C-A	189			189			
A-B	36			36			
A-C	144			144			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	68	548	0.125	68	0.1	7.507	A
C-AB	39	606	0.065	39	0.1	6.351	A
C-A	155			155			
A-B	30			30			
A-C	118			118			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	558	0.102	57	0.1	7.188	A
C-AB	33	609	0.054	33	0.1	6.248	A
C-A	130			130			
A-B	25			25			
A-C	99			99			