

PROPOSED NEW INDUSTRIAL UNITS

**LAND TO THE NORTH-WEST OF ASHBROOK OFFICE PARK,
LONGSTONE ROAD, HEALD GREEN, MANCHESTER**

HIGHWAYS TECHNICAL NOTE 01

Prepared on behalf of:

Pochin Quorum Ventures Limited



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1.0 INTRODUCTION

1.1 Purpose of This Report

1.1.1 Axis have been appointed by Pochin Quorum Ventures Limited to provide highways and transport advice in relation to a full planning application for the proposed construction and operation of 4 light industrial units on land located to the north-west of Ashbrook Office Park, Longstone Road, Heald Green, Manchester.

1.1.2 This Highways Technical Note 01 (HTN01) has been prepared to accompany the planning application for the proposed scheme. It seeks to inform Manchester City Council (MCC) which is the Local Planning Authority (LPA) and Local Highway Authority (LHA), of the nature of the proposals and to provide an assessment of the highway-related implications associated with the scheme.

1.2 Report Structure

1.2.1 The structure of this HTN is as follows:

- **Chapter 2** sets out the existing conditions on and around the site, including the site location, the site planning history, the local highway network, and a review of the accident record on the local highway network;
- **Chapter 3** provides a high-level review of the accessibility of the site by sustainable, non-car modes of travel;
- **Chapter 4** describes the development proposals and the proposed highway-related conditions around the site, including the access strategy, servicing arrangements and proposed parking arrangements;
- **Chapter 5** provides an assessment of the trip-generating potential of the proposed scheme; and
- **Chapter 6** summarises and concludes the report.

2.0 EXISTING CONDITIONS

2.1 Site Location

- 2.1.1 The application site is located on land situated to the north-west of Ashbrook Office Park, Longstone Road, Heald Green, Manchester.
- 2.1.2 The site is bound by residential properties off Irvin Drive to the west, Heald Green Beefeater and Premier Inn to the north-east and 'Train Heald Green' gym to the south-east. To the south-west, the site is bound by a footpath which runs in a general east-west alignment between Heald Green Railway Station to the east and Irvin Drive to the west.
- 2.1.3 The location of the site is shown on **Plan 2.1** in the context of the local highway network.

Plan 2.1 – Site Location



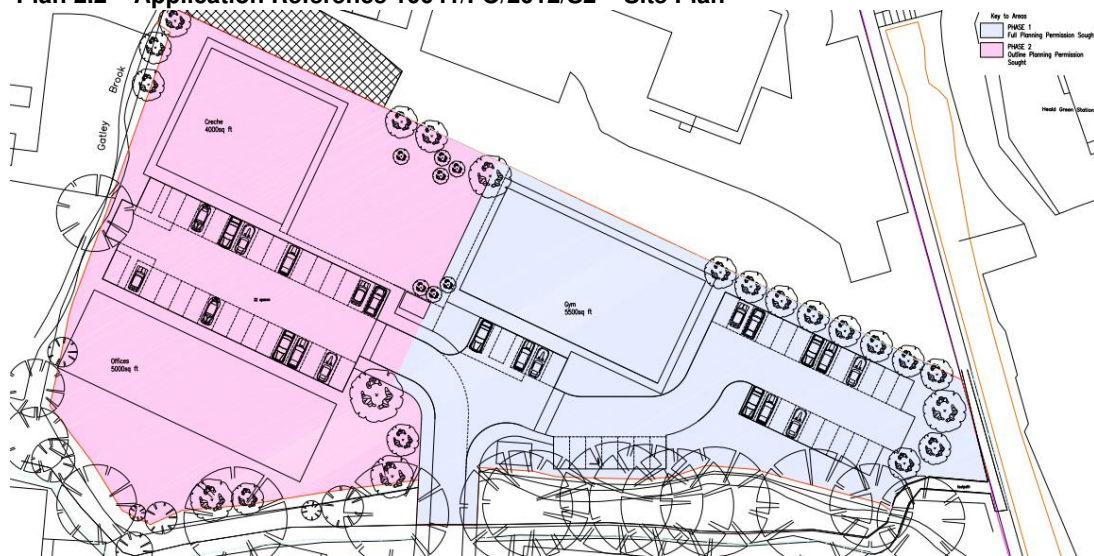
2.2 Existing Site

- 2.2.1 The application site currently exists as an area of unoccupied scrubland which can be accessed via Longstone Road, to the south-east of the site.

2.3 Site Planning History

- 2.3.1 A hybrid planning application was submitted to MCC (ref. 100414/FO/2012/S2) for a mixed-use development on land in the northern part of Ashbrook Park. The planning application sought full planning permission for the erection of a gym facility (Phase 1) and outline permission for a crèche (with outdoor play area) and an office building (Phase 2).
- 2.3.2 The site plan submitted alongside planning application ref. 100414/ FO/2012/S2 is shown on **Plan 2.2** below, where Phase 1 is highlighted in blue and Phase 2 is highlighted in pink.

Plan 2.2 – Application Reference 10041/FO/2012/S2 – Site Plan



- 2.3.3 The full planning application for Phase 1 was granted planning permission by MCC on 30th January 2013, and outline planning permission was granted for Phase 2 on the same date.
- 2.3.4 The gym and associated car park / landscaping associated with Phase 1 has since been completed however, no reserved matters planning applications were submitted for Phase 2, and the outline permission for this phase has now lapsed.
- 2.3.5 With regards to the above, this planning application will therefore replace the previous outline planning permission for the site.

2.4 Local Highway Network

Longstone Road

- 2.4.1 Longstone Road provides the current means of access to the site and also serves as the primary means of access to the Flying Horse Public House, Sheen Gardens, Ashbrook Office Park and Train Heald Green.
- 2.4.2 Longstone Road is a cul-de-sac which routes in a general north-east direction from the Longstone Road / B5166 Styal Road / Manchester Airport Car Park Access left-right staggered crossroads junction, which is located approximately 300m to the south-west of the application site.
- 2.4.3 Within the vicinity of the site, Longstone Road has a carriageway width of circa 5m with a single lane running in each direction, and 2m wide footways on both sides.
- 2.4.4 Longstone Road is subject to a 30mph speed limit along its full length, and a Traffic Regulation Order (TRO) regime in the form of double and single yellow lines between Styal Road and Sheen Gardens.

B5166 Styal Road

- 2.4.5 The B5166 Styal Road is located to the west of the application site, and provides access to Longstone Road to the south-west of the application site.
- 2.4.6 Styal Road runs in a general north / south alignment between its signalised crossroads junction with the Manchester Airport Relief Road to the south and Gatley Town Centre to the north, terminating at the Styal Road / Park Road / Stonepail Road priority-controlled junction.
- 2.4.7 Within the vicinity of the site, Styal Road comprises a single-lane in both directions, and provides a number of right-turning pockets to adjacent access roads to the east and west. It is subject to a 40mph speed limit and is well lit with street lighting.
- 2.4.8 On the eastern side of the carriageway, there is a 2m wide footway and on the western side there is a shared foot/cycleway, namely the 'Manchester Airport Orbital Cycleway', both of which are offset from the carriageway by a wide grass verge.

- 2.4.9 Approximately 350m to the north of Longstone Road, Styal Road forms a signalised crossroads junction with Simonsway to the west and Finney Lane to the east. This junction provides advanced stop lines for cyclists, and dropped kerbs, tactile paving and crossing facilities for pedestrians.

Finney Lane

- 2.4.10 Finney Lane routes in an eastward direction from its signalised crossroads junction with Styal Road and Simonsway, towards Heald Green Local Centre.
- 2.4.11 Finney Lane is subject to a 30mph speed limit, has 2m wide footways on both sides of the carriageway and forms part of the No. 368 bus route which runs between Stockport and Wythenshawe Hospital / Manchester Airport.
- 2.4.12 A puffin crossing is located along Finney Lane, directly adjacent to Heald Green Railway Station.

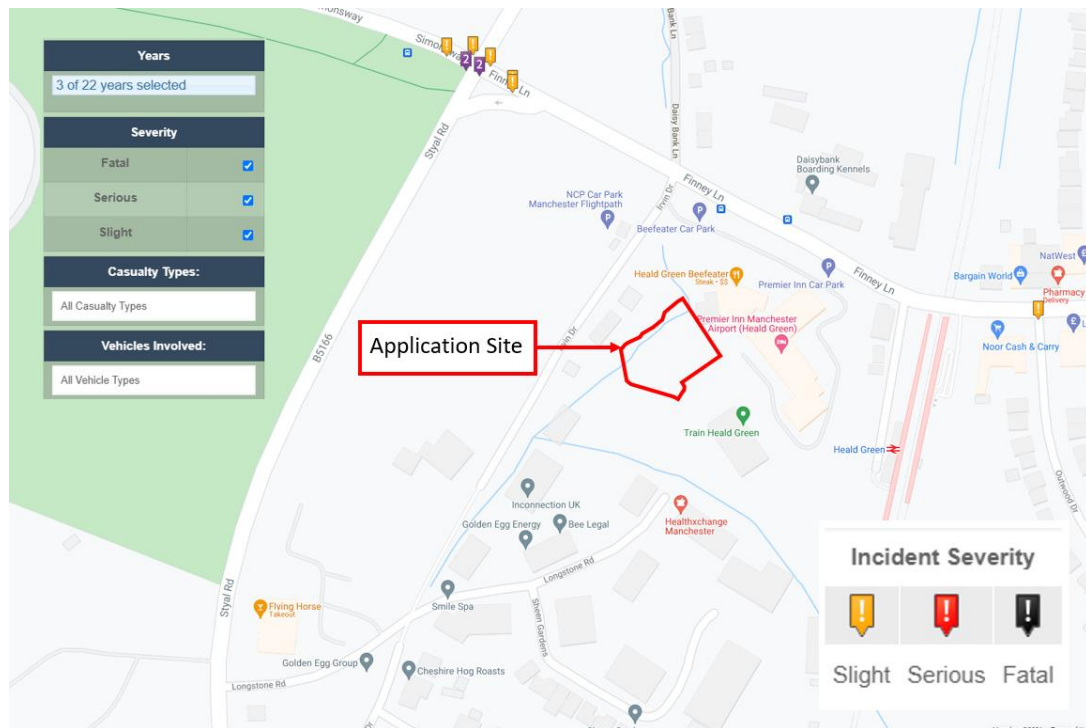
Simonsway

- 2.4.13 From its signalised junction with Styal Road and Finney Lane, Simonsway routes in a westwards direction towards Junction 4 of the M56 North Cheshire Motorway.
- 2.4.14 Simonsway has a single lane running in each direction and is subject to a 30mph speed limit. A circa 2m wide footway is provided along its northern side and a shared foot/cycleway is located along its southern side, which connects to / from the shared foot/cycleway along Styal Road.

2.5 Highway Safety

- 2.5.1 Personal Injury Accident (PIA) data for the highway network adjacent to the site has been obtained from the online Crashmap resource (www.crashmap.co.uk) for the most recently available complete 3-year period (2017-2019 inclusive). The Crashmap extract is shown on **Plan 2.3**.

Plan 2.3 – Crashmap Extract (2017-2019 inclusive)



2.5.1 **Plan 2.3** shows that no accidents have been recorded within the immediate vicinity of the application site. Within the general vicinity of the site, the following accidents have been recorded between 2017 and 2019 (inclusive):

- 9 'slight' severity accidents at the Styal Road / Finney Road / Simonsway signalised crossroads junction.

2.5.2 A total of 9 accidents have therefore been recorded within the general vicinity of the site within the most recently available three-year period (2017-2019 inclusive). This equates to three accidents per year, on average. All of the accidents were classified as 'slight' in severity.

2.5.3 It is expected that accidents will be concentrated at junctions such as this where traffic streams make conflicting movements. The pattern of accidents is typical of an urban road network and is not considered to present a material concern in the context of the proposed development.

3.0 ACCESSIBILITY OF THE SITE BY SUSTAINABLE MODES OF TRAVEL

3.1 Introduction

3.1.1 A key element of national and local policy is to ensure that new developments are located in areas where alternative modes of travel to the car are available. It is important to ensure that developments are not isolated but are located close to complementary land uses. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use.

3.1.2 The accessibility of the proposed development is considered in this context for the following modes of travel:

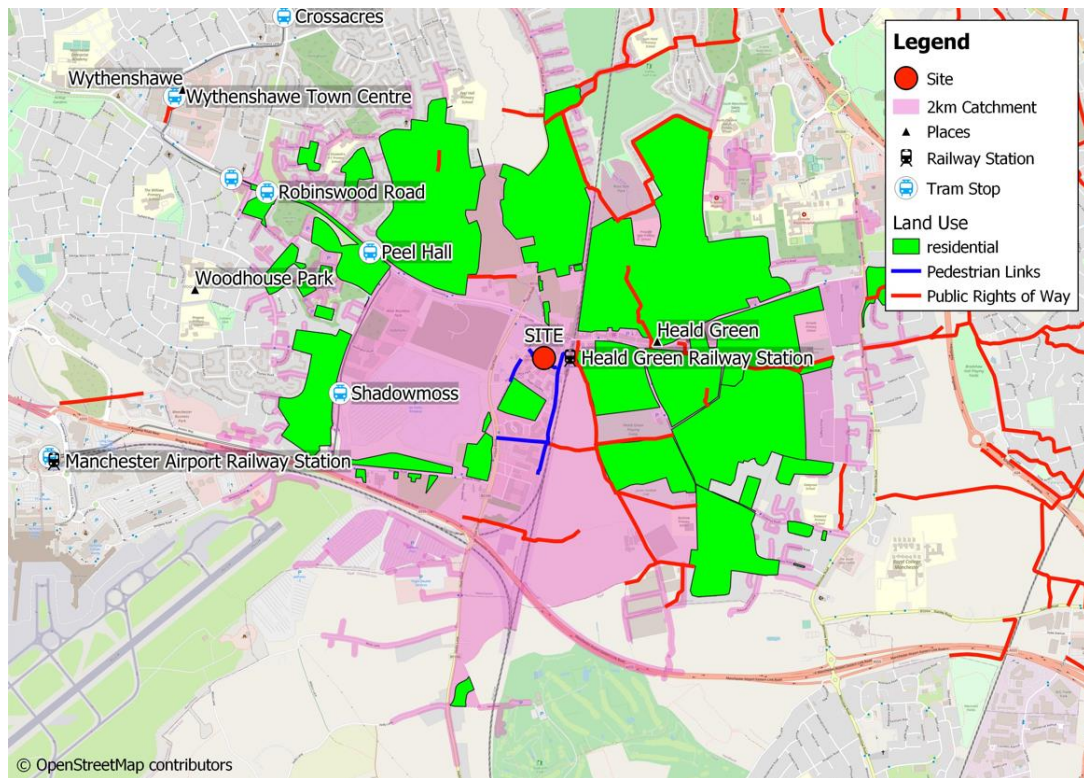
- Accessibility on foot;
- Accessibility by cycle; and,
- Accessibility by public transport.

3.2 Pedestrian Accessibility

3.2.1 The Chartered Institution of Highways and Transportation (CIHT, formerly IHT) in their document, '*Providing for Journeys on Foot*', recognise that although acceptable walking distances will vary between individuals and circumstances, for commuting, school and sight-seeing trips, it is generally accepted that walking has the greatest potential to reduce short car trips, particularly those under 2km.

3.2.2 **Plan 3.1** shows a 2km walking catchment measured from the centre of the proposal site, providing an indication of the areas which can be reached within a 24-minute walk, assuming a walk speed of 1.4m/s.

Plan 3.1 – 2km Walking Catchment



- 3.2.3 The site is very well located to encourage staff trips to be made to the site on foot. **Plan 3.1** illustrates that the 2km catchment incorporates a large part of the residential area surrounding Heald Green and other surrounding suburbs.
- 3.2.4 The boundary of Heald Green Local Centre is located within approximately 300m of the site. Heald Green Local Centre comprises a number of amenities including (not exclusively) a newsagent, pharmacy, banks, fast-food take-aways and two small supermarkets (Co-op and Tesco Express), all of which provide facilities for prospective staff to utilise at lunchtime or before / after work.
- 3.2.5 **Plan 3.1** also illustrates (in red) the Public Rights of Way that are located within the vicinity of the site. The closest Public Right of Way to the site is that which routes in a southerly direction from Finney Lane, on the eastern side of the railway line, and provides a route to the residential development which is served from Outwood Road.
- 3.2.6 Furthermore, there are a series of footpaths which provide pedestrians a direct route through Ashbrook Office Park. Located directly to the south of the application site is a footpath which provides a direct route between Irvin Drive to the west and Heald Green Railway Station to the east.

3.2.7 It should also be noted that the local highway network provides a safe and realistic opportunity to reach the areas contained within the 2km walking catchment via the high-quality pedestrian infrastructure on the local highway network in the form of footways, street lighting and pedestrian crossing points equipped with dropped kerbs and tactile paving at the key junctions surrounding the site.

3.2.8 Accordingly, it is considered that the site is highly accessible by foot.

3.3 Accessibility by Cycle

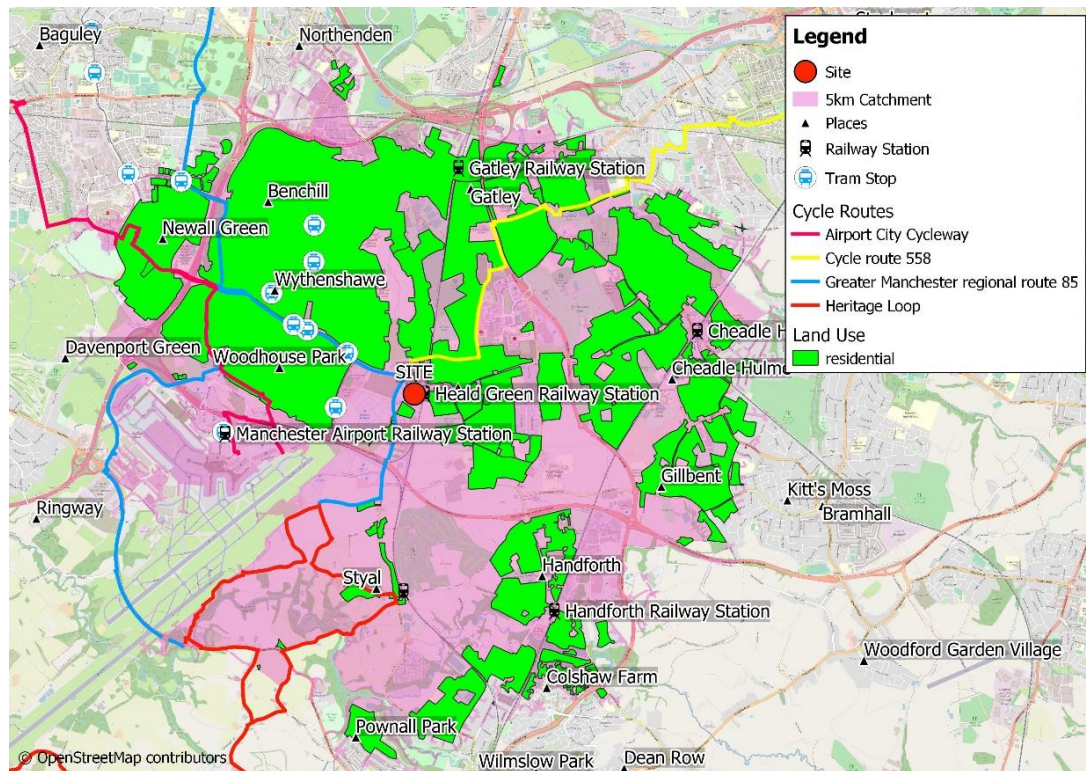
3.3.1 The Greater Manchester Cycling Strategy has been introduced to set out a regional approach to prioritise future investment in cycling and associated infrastructure so as to improve connectivity between key destinations within Greater Manchester.

3.3.2 Greater Manchester's vision is of a city "fit for the future: a healthy, safe, sustainable city where people want to live, work and visit, and where a well-established cycling culture is integral to the region's health and prosperity".

3.3.3 It is generally accepted that that cycling provides a realistic and healthy alternative to the private car for journeys up to 5km as a whole journey, or as part of a longer journey by public transport.

3.3.4 In order to assist in assessing the accessibility of the site by cycle, Plan 3.2 shows a 5km cycle catchment measured from the centre of the site.

Plan 3.2 – 5km Cycle Catchment



- 3.3.5 As shown on **Plan 3.2**, several suburbs, including Wythenshawe, Gattley, Manchester Airport, Benchill, Cheadle Hulme, Gillbent and Newall Green, amongst others, can be accessed within a reasonable cycle distance to/from the site.
- 3.3.6 The 5km catchment also incorporates Greater Manchester's 'Beeway' Network which has been introduced by TfGM to encourage active travel. **Plan 3.3** shows (in blue) that the 'Beeway' Network provides extensive cycling connections between the site and the surrounding areas of Greater Manchester.

3.4.2 The nearest bus stops are located to the north of the site along Finney Lane, adjacent to the Heald Green Beefeater and Premier Inn. These bus stops can be accessed within a circa 300m walk distance from the site, utilising the footpath which routes along the southern border of the application site, from Longstone Lane to Irvin Street, and are therefore within CIHT's walking distance thresholds.

3.4.3 **Table 3.1** details the bus services that serve the nearest stops to the application site and their typical frequencies.

Table 3.1 – Bus Timetable

Bus Stop	Service / Route Description	Typical Frequency Circa 7am- 9pm		
		Weekday	Saturday	Sunday / Bank Holiday
Heald Green Hotel Stop A	368 Stockport Bus Station – Manchester Airport	Every 10-20 minutes	Every 10-20 minutes	Every 30 minutes
Heald Green Hotel Stop B	368 – Manchester Airport – Stockport Bus Station	Every 10-20 minutes	Every 10-20 minutes	Every 30 minutes

3.4.4 As shown in **Table 3.1**, the bus stops nearest to the site are served by Service No. 368 which provides frequent services to a number of destinations between Manchester Airport and Stockport, including Egeley, Adswood, Cheadle Hulme, Peel Hall, Wythenshawe, NewallGreen and Moss Nook, amongst others.

Accessibility by Rail

3.4.5 Heald Green Railway Station is located approximately 200m from the application site when utilising the footpath through Ashbrook Park.

3.4.6 There are approximately 6 trains per hour from Heald Green Railway Station which provide services to Manchester Piccadilly, Manchester Airport, Crewe, Blackpool North, Liverpool Lime Street and Barrow-in-Furness. The majority of the services that route via Heald Green also call at Gatley, Wilmslow, Alderley Edge, Holmes Chapel and Sandbach, amongst others.

3.4.7 Having regard to the above, the site is therefore considered to be accessible by rail.

Metrolink / Tram Accessibility

- 3.4.8 Peel Hall Tram stop is the closest Metrolink Stop to the site, and is located within a circa 1.1km walk distance to / from the site.
- 3.4.9 Peel Hall Tram stop is located on the Manchester Airport line, and provides frequent services (every circa 12 minutes) to Manchester Airport and Cornbrook. Cornbrook is an interchange station which allows passengers to transfer between other Metrolink services.
- 3.4.10 With regards to the above, the site is therefore considered to be accessible by tram.

3.5 Accessibility Summary

- 3.5.1 With regards to the above, the site is well located to facilitate journeys to / from the site to be made by sustainable modes of transport. The surrounding area is well equipped with pedestrian and cycle infrastructure and the site is located within walking distance to a range of public transport infrastructure.
- 3.5.2 As such, the site is therefore compliant with local and national policies that relate to the promotion of development with good access to sustainable travel modes.

4.0 DEVELOPMENT PROPOSALS

4.1 Overview

4.1.1 This planning application proposes to construct four new light industrial units, with a total combined gross internal area (GIA) of 1,438m². The units will be used for light industrial purposes and offices, and will therefore fall under Class E (formerly Class B1c). The proposed development will also feature associated access and parking infrastructure.

4.1.2 The proposed site layout plans are contained in **Appendix 1**, to the rear of this report.

4.2 Proposed Site Access Arrangements

4.2.1 Vehicular access to the site will be served off Longstone Road, an existing road that leads to the site's south-eastern boundary.

4.2.2 The site access will lead into the proposed car park, and will feature a circa 6m wide carriageway and a 2m wide footway on the western side, linking to the existing footway infrastructure along Longstone Road.

4.3 Servicing Arrangements

4.3.1 As shown on the proposed site layout plan in **Appendix 1**, the bin stores will be located to the south-west of the application site, one of which will be accessible from the car park, and one of which will be accessed directly from Longstone Road.

4.3.2 **Drawing Number 3068-01-ATR01 (Appendix 2)** shows the ability of a refuse collection vehicle to safely and satisfactorily access, manoeuvre and egress the site in a forward gear for the purpose of servicing the site.

4.4 Proposed Car Parking Arrangements

4.4.1 Appendix B of MCC's Core Strategy (2012-2027) outlines the appropriate maximum car parking standards for new developments.

- 4.4.2 For B1 Business Parks located within areas not within City Centre or District Centres, the maximum parking standards are 1 space per 35m². Set against the context of the proposed development (1,428m²), this equates to a total maximum parking demand of 41 car parking spaces.
- 4.4.3 The proposed site layout plan (**Appendix 1**) shows that the proposed development would provide 40 car parking spaces.
- 4.4.4 The proposed level of parking provision is therefore within MCC's maximum parking standards.
- 4.4.5 **Drawing Number 3068-01-ATR02** in **Appendix 3** shows the ability of a large car to safely and satisfactorily access all car parking spaces located within the application site without encroaching onto nearby bays. This therefore demonstrates that all spaces will be accessible at any one time.

4.5 Proposed Cycle Parking Arrangements

- 4.5.1 Appendix B of MCC's Core Strategy contains the minimum cycle parking standards for new development.
- 4.5.2 For B1 Business Parks located within areas not within City Centre or District Centres, the minimum cycle parking standard is 1 space per 200m² (minimum of 2 spaces). When applied to the proposed development (1,438m²), this equates to a minimum cycle parking requirement of 7 spaces.
- 4.5.3 The proposed site layout plan (**Appendix 1**) shows that there will be a cycle store located within the car park, which will be sufficient to accommodate 7 cycle parking spaces. Additional cycle parking will also be accommodated within each individual unit.
- 4.5.4 The proposed development is therefore compliant with MCC's minimum cycle parking standards.

5.0 TRAFFIC GENERATION FORECASTS

5.1 Introduction

5.1.1 This chapter of the report forecasts the traffic-generating potential of the proposed development, with reference to the industry standard TRICS Database.

5.2 Forecast Trip Generation

5.2.1 The level of trips that could be generated by the proposed development has been estimated through reference to average weekday peak hour trip rates obtained from surveys of schemes of a similar size and nature contained within the TRICS Database (version 7.8.2).

5.2.2 Average weekday vehicle trip rates have been derived for the TRICS land use category, "Employment: Business Park", using the following selection criteria:

- Site's in Greater London and Ireland are excluded;
- Weekday surveys only;
- Only sites in 'Edge of Town' and 'Suburban Area' locations have been selected; and
- Selection by GFA.

5.2.3 The full TRICS outputs are contained in **Appendix 3**.

5.2.4 **Table 4.1** shows the weekday peak hour vehicle trip rates and the resultant traffic generation forecasts when these trip rates are applied to the proposed floorspace (1,438sqm).

Table 4.1 – Forecast Weekday Vehicle Trip Rates and Trip Generation

	Trip Rate (per 100sqm)			Trip Generation (1,438sqm)		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
AM Peak Hour (08:00-09:00)	1.604	0.235	1.839	23	3	26
PM Peak Hour (17:00-18:00)	0.158	1.303	1.461	2	19	21

- 5.2.5 **Table 4.1** shows that the proposed development is forecast to generate 26 two-way vehicle trips in the AM peak hour and 21 two-way trips in the PM peak hour. Volumetrically, this equates to an additional movement every 2-3 minutes, on average, during the busiest hours.
- 5.2.6 With regards to the above, this level of increase in traffic is not anticipated to create any material impacts on the local highway network from a highway safety or operational perspective.

6.0 SUMMARY AND CONCLUSIONS

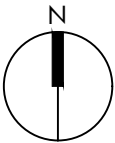
- 6.1.1 Axis have been appointed by Pochin Quorum Ventures Limited to provide highways and transport advice in relation to a full planning application for the construction and operation of 4 light industrial units and associated infrastructure located off Longstone Road, Heald Green, Manchester.
- 6.1.2 The proposed development will comprise a total GIA of 1,439m² and will be located on an area of unoccupied scrubland, as situated to the north-west of Ashbrook Office Park, Longstone Road.
- 6.1.3 This planning application will replace a previously approved outline planning application for a creche and office building on the site, which has now lapsed (application ref. 100414/ FO/2012/S2).
- 6.1.4 A high-level review of accidents on the local highway network within the most recently available three-year period (2017-2019 inclusive) has been carried out. The analysis does not indicate that there are any existing highway safety issues that could be worsened by the proposed development.
- 6.1.5 The sustainability of the site has been assessed in terms of its accessibility by walking, cycling and public transport modes of transport. Accessibility by these modes has been found to be high, with very good pedestrian and cycle friendly infrastructure and public transport provision in the area. Overall, the site is considered to be very accessible to sustainable travel modes.
- 6.1.6 Vehicular access to the proposed development will be provided off Longstone Road.
- 6.1.7 The proposed level of parking provision (40 car parking spaces) has been provided in accordance with the maximum car parking standards set out in Appendix B of MCC's Core Strategy (2012-2027).
- 6.1.8 The proposed development also comprises cycle parking in accordance with MCC's minimum cycle parking standards.
- 6.1.9 This HTN01 has demonstrated that it will be possible for a refuse collection vehicle to safely and satisfactorily access, manoeuvre and egress the site in a forward gear for the purpose of servicing the site.

- 6.1.10 The proposed development would result in an increase of 26 two-way vehicle movements in the AM peak hour and a net increase of 21 two-way trips in the PM peak hour. Volumetrically, this equates to an additional movement every 2-3 minutes, on average, during the busiest hours.
- 6.1.11 The proposed development is therefore considered to be acceptable from a trip generation perspective and would not give rise to any unacceptable impact on the local highway network.

6.2 Conclusion

- 6.2.1 Based on the evidence presented in this report, it is concluded that there are no highway or transport-related reasons why planning permission for the proposed scheme should not be granted.

APPENDIX 1 – PROPOSED SITE LAYOUT PLANS



NOTE: DO NOT SCALE FROM THIS DRAWING

REV	DESCRIPTION	DATE	DRAWN
A	CLIENT COMMENTS	22.06.21	BS
B	UPDATED FLOOR PLANS	29.06.21	BS
C	UPDATED FLOOR PLANS	08.07.21	BS
D	ENLARGED UNIT 4	20.07.21	BS
E	TREE SURVEY ADDED	27.07.21	BS
F	ROOFLIGHTS AND BIN STORE	28.07.21	BS
G	ADJUSTMENTS TO PARKING	05.08.21	CP

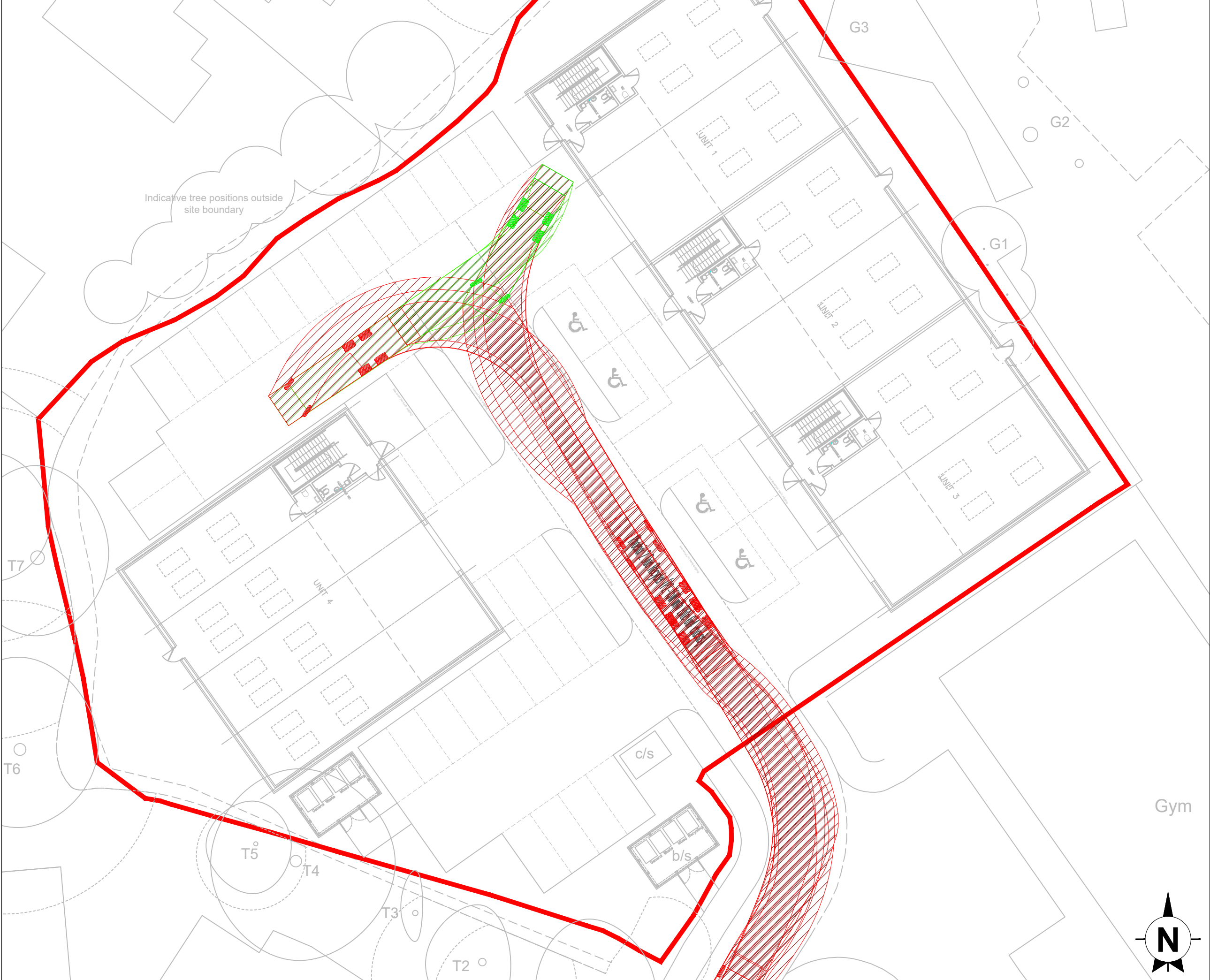


CHESHIRE	SURREY	SHEFFIELD	MANCHESTER	LIVERPOOL
Market Court 20-24 Church St Altrincham WA14 4DW 0161 929 7622	100 High St Esher Surrey KT10 9QJ 01372 203 335	Electric Works 3 Concourse Way Sheffield S1 2BJ 0114 250 7983	All Work and Social XYZ Building 2 Hardman Boulevard M3 3AQ 0161 929 7622	AvenueHQ 17 Mann Island Liverpool L3 1BP 0151 662 0122

ASHBROOK, HEALD GREEN
QUORUM

PROPOSED SITE PLAN
DWG: 21044 (PL) 020 G
DATE: 18.06.21
SCALE: 1:500 @ A3
DRAWN: BS

APPENDIX 2 – DRAWING NUMBERS 3068-01-ATR01 AND 3068-01-ATR02



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• Revision History	• Date

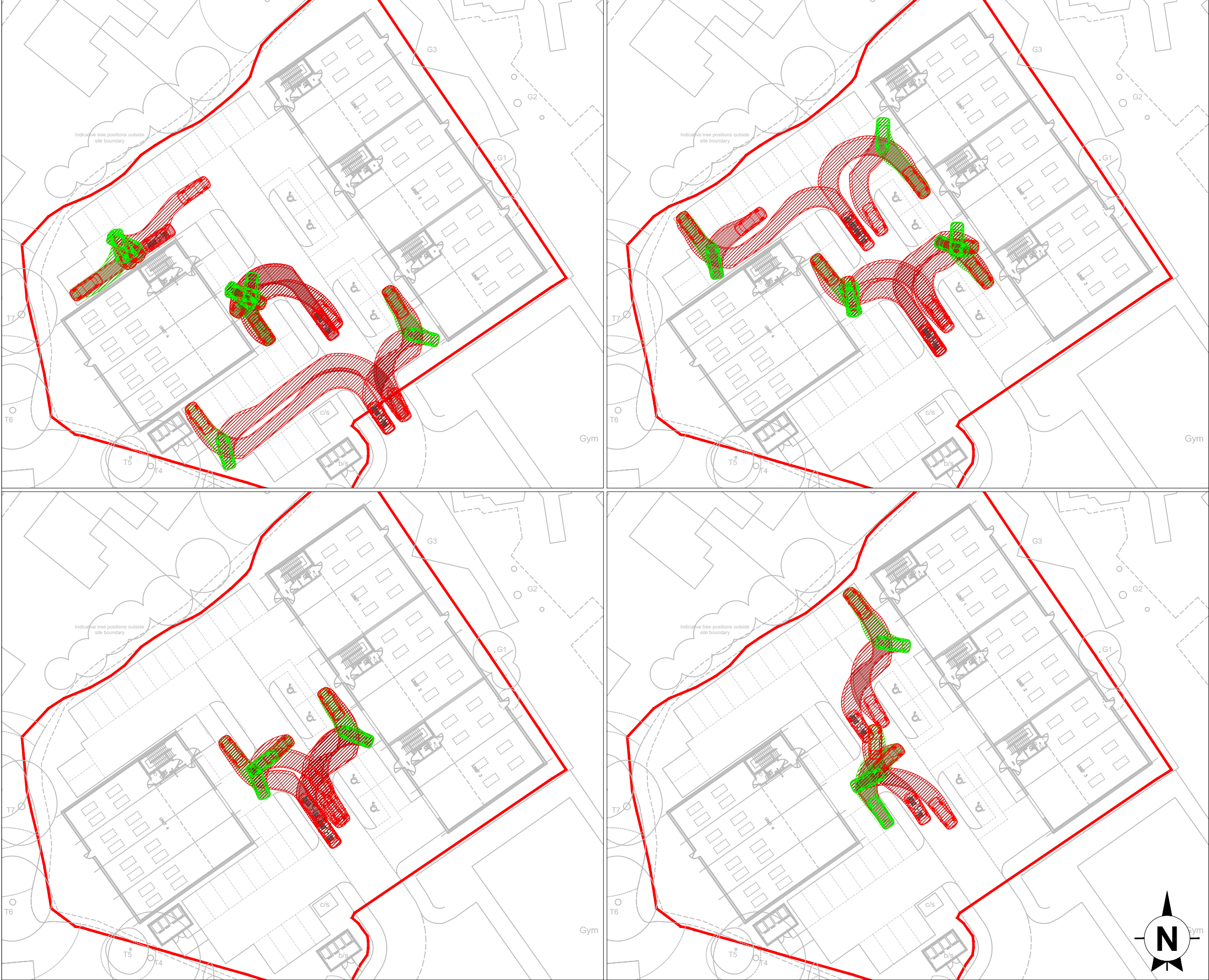
APPLICATION BOUNDARY

VEHICLE USED IN TRACKING

Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)

Overall Length	11.520m
Overall Width	2.500m
Overall Body Height	0.500m
Min Body Ground Clearance	0.250m
Track Width	2.000m
Lock to lock time	2.00s
Kerb to Kerb Turning Radius	11.550m

Chester Office: Well House Barns Bretton Chester CH4 9DH South Manchester Office: Canella House 76 Water Lane Wilmslow SK9 5BB	axis	
0844 8700 007 - www.axisped.co.uk		
client: POCHIN QUORUM VENTURES LIMITED		
project: PROPOSED NEW INDUSTRIAL UNITS, LONGSTONE ROAD, HEALD GREEN		
drawing title: SWEPT PATH ANALYSIS - REFUSE COLLECTION VEHICLE		
date: AUGUST 2021	drawn by: AB	checked: --
drawing number: 3068-01-ATRO1	status: --	
scale(s): 1:250@A3	rev: --	
planning environment design		



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Revision History	Date

APPLICATION BOUNDARY

VEHICLE USED IN TRACKING



Jaguar S-Type
Overall Length 4.93m
Overall Width 1.87m
Overall Body Height 1.57m
Min Body Ground Clearance 0.25m
Max Track Width 1.54m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 6.00m

Chester Office: Well House Barns Chester CH4 9DH		South Manchester Office: Canella House 76 Water Lane Wilmslow SK9 5BB	axis
0844 8700 007		www.axisped.co.uk	
client: POCHIN QUORUM VENTURES LIMITED			
project: PROPOSED NEW INDUSTRIAL UNITS, LONGSTONE ROAD, HEALD GREEN			
drawing title: SWEEP PATH ANALYSIS - PROPOSED CAR PARKING ARRANGEMENTS			
date: AUGUST 2021		drawn by: AB	checked: --
drawing number: 3068-01-ATRO2		status: --	
scale(s): 1:500@A3		rev: --	
planning environment design			

APPENDIX 3 – TRICS OUTPUTS

Axis 76 Water Lane Wilmslow

Licence No: 339901

Calculation Reference: AUDIT-339901-210805-0808

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : B - BUSINESS PARK

TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	EX ESSEX	1 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NO NORTH LINCOLNSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
	LC LANCASHIRE	1 days
10	WALES	
	CF CARDIFF	2 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: Gross floor area
 Actual Range: 1050 to 2741 (units: sqm)
 Range Selected by User: 975 to 2876 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 18/05/18

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	3 days
Tuesday	2 days
Wednesday	2 days
Thursday	3 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)	4
Edge of Town	8

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:

Industrial Zone	2
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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.

Secondary Filtering selection:

Use Class:

Not Known 12 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	3 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:

50,001 to 75,000	2 days
75,001 to 100,000	1 days
100,001 to 125,000	2 days
125,001 to 250,000	4 days
250,001 to 500,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	6 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:

No 12 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.

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LIST OF SITES relevant to selection parameters

1	CF-02-B-02	BUSINESS/TECH. UNITS	CARDIFF
	CRICKHOWELL ROAD		
	CARDIFF		
	ST MELLONS		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Gross floor area:	2587 sqm	
	Survey date: FRIDAY	20/10/06	Survey Type: MANUAL
2	CF-02-B-06	BUSINESS PARK	CARDIFF
	MALHOUSE AVENUE		
	CARDIFF		
	PONTPRENNAU		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	1642 sqm	
	Survey date: MONDAY	12/03/18	Survey Type: MANUAL
3	CH-02-B-01	BUSINESS PARK	CHESHIRE
	WINTERTON WAY		
	MACCLESFIELD		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	2395 sqm	
	Survey date: MONDAY	19/09/16	Survey Type: MANUAL
4	DC-02-B-01	BUSINESS PARK	DORSET
	COMMERCIAL ROAD		
	POOLE		
	Suburban Area (PPS6 Out of Centre)		
	Built-Up Zone		
	Total Gross floor area:	1570 sqm	
	Survey date: THURSDAY	17/07/08	Survey Type: MANUAL
5	DV-02-B-01	BUSINESS PARK	DEVON
	MANATON CLOSE		
	EXETER		
	MATFORD BUSINESS PARK		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	1500 sqm	
	Survey date: WEDNESDAY	05/07/17	Survey Type: MANUAL
6	EX-02-B-01	BUSINESS PARK	ESSEX
	BRUNEL COURT		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2900 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
7	LC-02-B-03	BUSINESS PARK	LANCASHIRE
	NAVIGATION WAY		
	PRESTON		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	3450 sqm	
	Survey date: TUESDAY	18/10/11	Survey Type: MANUAL
8	NO-02-B-02	BUSINESS PARK	NORTH LINCOLNSHIRE
	DONCASTER ROAD		
	SCUNTHORPE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	1574 sqm	
	Survey date: THURSDAY	22/09/05	Survey Type: MANUAL

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LIST OF SITES relevant to selection parameters (Cont.)

9	NT-02-B-01	BUSINESS PARK	NOTTINGHAMSHIRE
	PARK LANE		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Gross floor area:	2321 sqm	
	Survey date: THURSDAY	17/05/07	Survey Type: MANUAL
10	SF-02-B-01	BUSINESS PK	SUFFOLK
	KEMPSON WAY		
	BURY ST EDMUNDS		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2480 sqm	
	Survey date: WEDNESDAY	10/05/06	Survey Type: MANUAL
11	SH-02-B-03	BUSINESS CENTRE	SHROPSHIRE
	CASTLE STREET		
	TELFORD		
	HADLEY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Gross floor area:	1300 sqm	
	Survey date: TUESDAY	16/06/09	Survey Type: MANUAL
12	WL-02-B-01	BUSINESS PK	WILTSHIRE
	HIGH STREET		
	WOOTTON BASSETT		
	COPEHALL		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	2600 sqm	
	Survey date: MONDAY	02/10/06	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.

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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2053	0.556	12	2053	0.110	12	2053	0.666
08:00 - 09:00	12	2053	1.604	12	2053	0.235	12	2053	1.839
09:00 - 10:00	12	2053	1.031	12	2053	0.357	12	2053	1.388
10:00 - 11:00	12	2053	0.552	12	2053	0.459	12	2053	1.011
11:00 - 12:00	12	2053	0.508	12	2053	0.568	12	2053	1.076
12:00 - 13:00	12	2053	0.512	12	2053	0.755	12	2053	1.267
13:00 - 14:00	12	2053	0.711	12	2053	0.544	12	2053	1.255
14:00 - 15:00	12	2053	0.443	12	2053	0.528	12	2053	0.971
15:00 - 16:00	12	2053	0.451	12	2053	0.605	12	2053	1.056
16:00 - 17:00	12	2053	0.309	12	2053	1.048	12	2053	1.357
17:00 - 18:00	12	2053	0.158	12	2053	1.303	12	2053	1.461
18:00 - 19:00	12	2053	0.073	12	2053	0.361	12	2053	0.434
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.908			6.873			13.781

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:	1050 - 2741 (units: sqm)
Survey date range:	01/01/05 - 18/05/18
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.

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Licence No: 339901

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

OGVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2053	0.008	12	2053	0.004	12	2053	0.012
08:00 - 09:00	12	2053	0.020	12	2053	0.016	12	2053	0.036
09:00 - 10:00	12	2053	0.020	12	2053	0.008	12	2053	0.028
10:00 - 11:00	12	2053	0.016	12	2053	0.028	12	2053	0.044
11:00 - 12:00	12	2053	0.024	12	2053	0.024	12	2053	0.048
12:00 - 13:00	12	2053	0.024	12	2053	0.032	12	2053	0.056
13:00 - 14:00	12	2053	0.016	12	2053	0.016	12	2053	0.032
14:00 - 15:00	12	2053	0.016	12	2053	0.008	12	2053	0.024
15:00 - 16:00	12	2053	0.028	12	2053	0.024	12	2053	0.052
16:00 - 17:00	12	2053	0.028	12	2053	0.037	12	2053	0.065
17:00 - 18:00	12	2053	0.000	12	2053	0.008	12	2053	0.008
18:00 - 19:00	12	2053	0.000	12	2053	0.000	12	2053	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.200			0.205			0.405

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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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

CYCLISTS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2053	0.016	12	2053	0.004	12	2053	0.020
08:00 - 09:00	12	2053	0.053	12	2053	0.000	12	2053	0.053
09:00 - 10:00	12	2053	0.028	12	2053	0.004	12	2053	0.032
10:00 - 11:00	12	2053	0.008	12	2053	0.000	12	2053	0.008
11:00 - 12:00	12	2053	0.004	12	2053	0.012	12	2053	0.016
12:00 - 13:00	12	2053	0.012	12	2053	0.012	12	2053	0.024
13:00 - 14:00	12	2053	0.012	12	2053	0.008	12	2053	0.020
14:00 - 15:00	12	2053	0.004	12	2053	0.028	12	2053	0.032
15:00 - 16:00	12	2053	0.008	12	2053	0.032	12	2053	0.040
16:00 - 17:00	12	2053	0.012	12	2053	0.008	12	2053	0.020
17:00 - 18:00	12	2053	0.000	12	2053	0.045	12	2053	0.045
18:00 - 19:00	12	2053	0.004	12	2053	0.008	12	2053	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.161			0.161			0.322

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.