# East Tyndall Street, Cardiff



## Transport Statement

Cardiff Community Housing Association

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## 1 Introduction

#### 1.1 Background

- 1.1.1 Lime Transport has been commissioned by Cardiff Community Housing Association (CCHA) to prepare a Transport Statement in support of a planning application for the development of 62 residential units on the former Magnet site at East Tyndal Street, Cardiff.
- 1.1.2 It is anticipated that the housing mix on-site will be as follows:
  - Block A 52 no. flats in part 4 storey/part 5 storey building
  - Block B four no. 3-bed semi-detached houses
  - Block C six no. 1-bed flats in a 3-storey building.
- 1.1.3 The development also includes four on-site parking spaces for the four semi-detached houses, together with cycle parking and bin-stores in accordance with the adopted standards.
- 1.1.4 The site is located within a mixed residential/commercial area to the east of Cardiff Centre, as shown in **Figure 1.1** below.

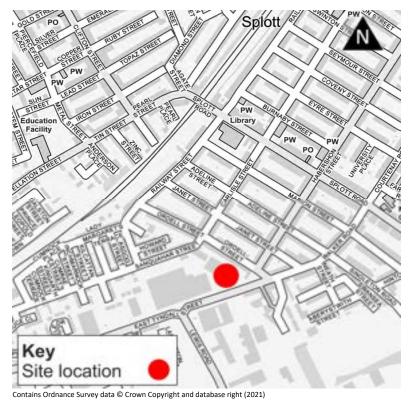


Figure 1.1 Site location



### 1.2 Purpose and scope of the report

- 1.2.1 The purpose of this Transport Statement is to assess the transport characteristics of the proposed development, consider the likely impact of the proposals on the surrounding transport network, and identify any potential mitigation measures, should any be required.
- 1.2.2 The scope of this Transport Statement is summarised below:
  - Assess the accessibility of the site by walking, cycling and public transport and provide a Census data summary;
  - Estimate the likely person trip generation (by mode) for the existing and proposed development, based on a review of the TRICS 7.11.4 trip generation database;
  - Review five years' personal injury accident data within the area immediately surrounding the site;
  - Assess car and cycle parking requirements, based on the Cardiff Council's adopted maximum parking standards and car ownership data (based on the 2011 census);
  - Review arrangements for deliveries and servicing;
  - Comment on the likely impact of the proposals on the surrounding highway network.
- 1.2.3 This Transport Statement also outlines the results of daytime and night-time parking surveys undertaken in support of the proposed development.

#### 1.3 Structure of the report

- 1.3.1 Following this introductory section, the report is structured as follows:
  - Section 2 describes the existing transport conditions surrounding the site, including accessibility by all modes of transport together with a review of personal injury accident data within the study area;
  - Section 3 describes the development proposals including the site accesses, cycle parking and refuse storage and collection;
  - Section 4 details the car parking provision and the results of the daytime and nighttime parking surveys;
  - Section 5 estimates the travel demand associated with the proposed development, and identifies the likely impact of the proposals on the surrounding transport network; and,
  - Section 6 summarises the findings of the report.



## 2 Existing situation

### 2.1 Site location

- 2.1.1 As outlined above, the development site is situated within Splott, approximately 2.2km south-east of Cardiff City Centre. The site is bounded by:
  - East Moors Youth Centre to the north;
  - Residential properties fronting Ordell Street to the east;
  - Industrial and employment uses fronting East Tyndall Street to the west; and,
  - East Tyndall Street to the south.
- 2.1.2 The location of the development site together with the local highway network is shown in **Figure 2.1** below.

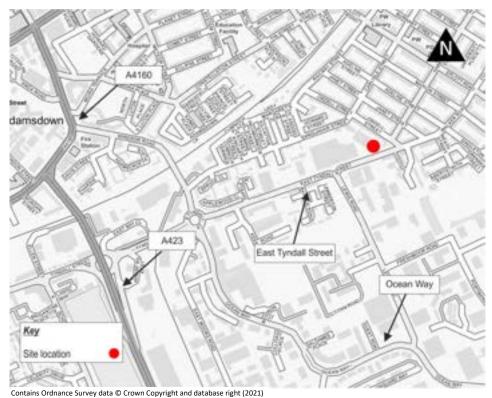


Figure 2.1 Local highway network

## 2.2 Travel characteristics

2.2.1 2011 Census data has been reviewed, to establish the travel characteristics of the existing population surrounding the site, including travel to work and car ownership data.



#### Travel to work

- 2.2.1 Travel to Work data from the 2011 Census has been used to establish the mode of travel to work for existing residents in the area. Lower super output areas are geographical areas built from contiguous output areas, which are consistent in population size. Between four to six output areas make up Lower Super Output Areas (LSOA), and between four to six LSOA areas make up Middle Super Output Areas (MSOA).
- 2.2.2 It should be noted that whilst 2021 Census 'Method of Travel to Work' data is available, the Office for National Statistics (ONS) has issued a warning that care should be taken when interpreting the results. This is because the 2021 Census was undertaken during the Covid-19 pandemic, when a large proportion of population worked from home and people were discouraged from using public transport. Therefore, 2011 Census data has been used for the purposes of this assessment.
- 2.2.3 **Table 2.1** below shows the travel to work mode split for the Lower Super Output Area (LSOA 038C) in which the site is located, the Middle Super Output Area (MSOA 038), and Cardiff County as a whole. This data excludes those that work from home and those not in employment.

Mode	Mode share (%)		
Mode	LSOA 038C	MSOA 038	Cardiff County
Train	2	2	3
Bus, minibus or coach	14	13	11
Car or van (as driver)	48	48	59
Passenger in car or van	6	6	5
Cycle	5	5	4
Walk	23	23	16
Other	2	3	2
Total		1	.00%

Table 2.1 Mode split for journey to work based on 2011 Census data

- 2.2.4 It should be noted that, Census Travel to Work data differs from the trip generation data, as the TRICS data includes all journey purposes, not just journeys to work.
- 2.2.5 It can be seen from the table above that 48% of existing residents that live within the lower super output area in which the site is located, travel to work by car (as driver), with a further 6% travelling as a passenger. In Cardiff as a whole, the overall figure for those travelling to work (as a driver) is higher at 59%, however the number of passengers is lower at 5%. In the LSOA, 16% travel by public transport and 28% walk or cycle to work.

#### Car ownership

2.2.6 **Table 2.2** over the page outlines the car or van availability from the 2021 Census, which has been used to establish local car ownership rates for existing residents.



	Table 2.2	Car or van	availability	(2021 Census)
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Area	2021
Car ownership for all dwelling types	
LSOA	0.78
MSOA	0.79
Cardiff (as a whole)	1.12
Car ownership for flats	
LSOA	0.44
MSOA	0.40
Cardiff (as a whole)	0.60

- 2.2.7 It can be seen from the table above that car or van availability for all dwelling types/tenures within the Lower Super Output Area (LSOA) in which the site is located is 0.78 cars or vans per household, which is marginally lower than the Middle Layer Super Output Area (MSOA) at 0.79, and significantly lower than Cardiff as a whole (1.12).
- 2.2.8 Flats in the LSOA tend to have a lower car ownership, at around 0.44 cars or vans per household, which is slightly higher than the MSOA at 0.40, but lower than Cardiff as a whole (0.60).
- 2.2.9 The level of car ownership and mode splits for journeys to work, reflect the relative sustainability of the site, and the local demographic.

#### 2.3 Connectivity

#### Walking

- 2.3.1 The majority of the roads within the vicinity of the site have footways on both sides of the carriageway that provide links between the site and the surrounding facilities. In addition, residential roads in the vicinity of the site are generally provided with dropped kerbs across the majority of side road junctions.
- 2.3.2 The closest formal crossing to the site is a zebra crossing across East Tyndall Street, located approximately 150m west of the site, immediately east of Lewis Road.
- 2.3.3 The Chartered Institution of Highways and Transportation (CIHT) 'Providing for Journeys on Foot' indicates that the desirable walking distance for commuting and school journeys is 500m, the acceptable walking distance is 1km, and 2km is the preferred maximum.
- 2.3.4 The CIHT guidelines also indicate that the desirable walking distance for 'elsewhere', including local amenities is 400m, the acceptable walking distance is 800m and 1.2km is the preferred maximum.



- 2.3.5 There is a wide variety of local amenities within walking distance of the site, including:
  - Supermarket
  - Primary school
  - Healthcare/pharmacies
  - Leisure and recreation facilities
- Convenience store Nursery

Post Office

- store Community centre
  - Places of worship
  - Pubs/restaurants
- 2.3.6 The majority of facilities can be accessed within an easy 20min cycle journey from the site, with many facilities 300m west of the site in Splott local centre. In addition, Cardiff City Centre is within a 20-minute cycle of the site, offering various retail, education, shopping, leisure, cultural and health facilities, as well as Cardiff Bay Business Centre to the south of the site, offering employment opportunities. The 20min cycle isochrone is included in **Figure 2.2**.

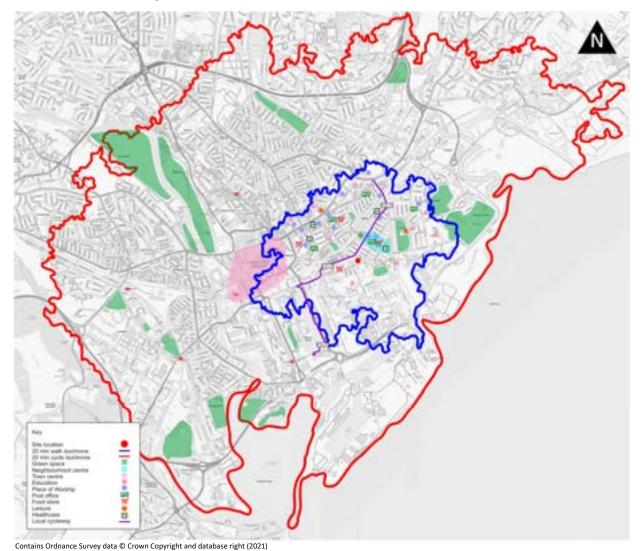


Figure 2.2 Amenities within a 20-minute walk and cycle journey of the site



2.3.7 It can be seen from the figure above that the development is located in a sustainable location and is within a 20-minute cycle distance to a number of local facilities, including Cardiff City Centre, education and shopping facilities. Splott neighbourhood centre is also within a 20-minute walking distance, which provides numerous cafes, restaurants, as well as key services such as a post office, barbers, food store and chemist.

#### Cycling

- 2.3.8 The closest cycle route to the site is the Enfys 34 Cycle Route, 300m to the north of the site. This cycle route connects Cardiff Bay to Newport Road in Adamsdown. This cycle route connects to the National Cycle Route 8 (Lon Las Cymru) in Cardiff Bay, which is a 400km cycle route staring in Cardiff Bay, and finishing in Holyhead.
  - <image>

2.3.9 These routes are shown in **Figure 2.3** below.

Figure 2.3 Local cycle routes within the vicinity of the site



#### Bus services

- 2.3.10 The site is well connected by public transport, providing connections throughout Cardiff. The nearest bus stop is located on Ordell Street (Ruperra Square bus stop), approximately 150m to the east of the site. The routes provide access to areas around Cardiff including Cardiff Bay and the City Centre.
- 2.3.11 The location of bus stops together with any routes that call at these stops are shown in Figure 2.4 below, and the frequency of services that call at these stops is detailed in Table 2.3 below.



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Figure 2.4	Bus stops and bus routes within the vicinity of the site.
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	10010 210		
Route no.	Nearest bus stop (m)	Route	Frequency per hour
Ruperra Square			
1 City Centre	150	Canal Street to Canal Street via Cardiff Bay Station, Bus Depot and Roath Court Place	1
1A	150	Wentloog Business Park to Canal Street via Ocean Way Business Park	1
Janet Street			
2 City Centre	200	Canal Street to Canal Street via Heath Hospital	1
2A	200	Canal Street to Pwll-Mawr Wentloog Corporate Park	1

Table 2.3	Summary of	bus services
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#### Rail services

- 2.3.12 The closest railway stations are Cardiff Queen Street (approximately 1.5km northwest of the site) and Cardiff Central Station (approximately 1.7km west of the site). Both stations are run by Transport for Wales, with Queen Street station providing routes to Caerphilly (2 every hour), Pontypridd (2 every hour), Penarth (4 every hour) and Barry Island (2 every hour). Cardiff Central station provides routes to London Paddington (2 every hour), Carmarthen (2 every hour) and Manchester Picadilly (2 every hour), as well as numerous services throughout the day on the Valley Line.
- 2.3.13 Cardiff Queen Street station has 36 cycle storage spaces available, whilst Cardiff Central Station has 156 cycle spaces. Both train stations also have step-free access available for all platforms.

#### 2.4 Local highway network

2.4.1 A description of the local highway network is outlined in **Table 2.4** below.

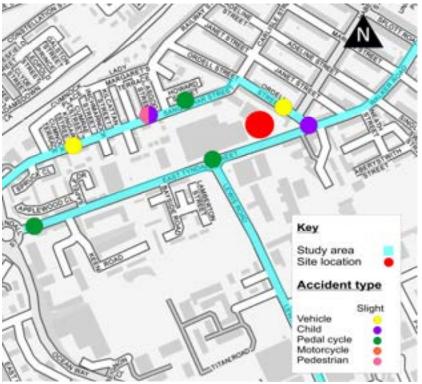
Table 2.4	Local highway network	
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	Description
East Tyndall Street	
Description	A single carriageway local access road. Footways are provided along both sides of the carriageway.
Width	Approximately 8m wide.
Speed limit	20mph
Street lighting	Yes, along the length of the carriageway
Crossing facilities	Yes. Dropped kerbs with tactile paving are provided, as well as a zebra crossing.
Bus route	Yes
Character	A single carriageway, mostly fronting residential properties.
On-street parking	A mixture of no parking restrictions and double yellow lines.
Walker Road	
Description	A single carriageway, local access road. Footways are provided along both sides of the carriageway.
Width	Approximately 8m.
Speed limit	20 mph
Street lighting	Yes
Crossing facilities	Yes, zebra crossings and dropped kerbs with tactile paving provided.
Bus route	Yes
Character	A single carriageway, mostly fronting residential properties.
On-street parking	A mixture of no parking restrictions and double yellow lines.

#### 2.5 Collision analysis

2.5.1 Collision data has been obtained for the most recent five-year period (2019 to 2023) for the area immediately adjacent to the site. This study area and the location and severity of collisions that occurred within it are shown in **Figure 2.5** over the page.





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Figure 2.5 Personal injury collision data

- 2.5.2 It can be seen that within the study area, there have been a total of seven collisions, and all resulted in slight injuries being sustained. It can also be seen that five of these collisions involved vulnerable users, including:
  - Two collisions involved child casualties, one of which was a pedestrian and the other was a passenger in a vehicle; and,
  - Three collisions involved cyclist casualties.
- 2.5.3 This collision rate appears typical for the environment and volume of traffic, and it is concluded that there is no particular highway safety problem on the local highway network that will be exacerbated by the proposals.

## 2.6 Existing on-street parking demand

- 2.6.1 In order to determine the existing (on-street) parking demand, and hence the potential to accommodate an overspill parking generated by the proposed development, the following parking surveys have been undertaken:
  - Daytime parking beat surveys, undertaken on Wednesday 4<sup>th</sup> June 2025, at 8am, 10am, 12pm, 2pm, 4pm and 6pm; and,
  - Night-time parking surveys, undertaken between midnight and 5am, on the 10<sup>th</sup> and 11<sup>th</sup> June 2025.



2.6.2 These surveys followed the principles set out in the London Borough of Lambeth's *'Residential Parking Survey Methodology'*.

#### Daytime on-street parking surveys

- 2.6.3 Parking beat surveys were undertaken on Wednesday 4<sup>th</sup> June 2025, at 8am, 10am, 12pm, 2pm, 4pm and 6pm. The surveys covered a two-minute walk from the site and covered all streets within 200m. This is considered a reasonable distance that a resident is prepared to leave their vehicle and walk to their home. In accordance with Lambeth's methodology, surveys were carried to the end of the street (or a suitable location along a road even where this is beyond 200m walk distance).
- 2.6.4 The highest observed number of vehicles parking during the five surveyed times was at 2pm, with a total of 108 vehicles parked in the survey area. A summary of the parking survey is set out below in **Table 2.5**, and the results are presented in full in **Appendix A**.

Street	Total no. of parking spaces available	Total number of vehicles parked	Parking stress %	No. of spaces available before 85% capacity is reached
East Tyndall Street	0	0	0	0
Walker Road	37	16	43	15
Janet Street	21	16	76	1
Habershon Street	13	6	46	5
Ordell Street	46	27	59	12
Portmanmoor Road	44	43	98	0
Total	161	108	67	33

#### Table 2.5Summary of daytime parking beat surveys – Wednesday 4th June

- 2.6.5 At 2pm during the daytime survey, there was a total of 108 vehicles legally parked (out of 161 spaces). This equates to a parking stress of 67%, which is below the generally accepted level of parking stress (typically 85% of available capacity). At the time, there were 53 spaces available on-street, with 33 spaces available on-street before practical capacity is reached.
- 2.6.6 In addition, the following vehicles were not included into the overall parking capacity:
  - Ordell Street Two vehicles were parked blocking garage access
  - Janet Street One vehicle was parked blocking a garage access
  - Portmanmoor Road Four vehicles were parked in private parking spaces



#### Night-time on-street parking surveys

- 2.6.7 The night-time surveys were carried out on two consecutive weekday nights (between midnight and 5am). This is to ensure that the maximum demand for residential parking was captured. The surveys covered a two-minute walk from the site and covered all streets within 200m. This is considered a reasonable distance that a resident is prepared to leave their vehicle and walk to their home. In accordance with Lambeth's methodology, surveys were carried to the end of the street (or a suitable location along a road even where this is beyond 200m walk distance).
- 2.6.8 The results from the parking surveys were recorded per street, per night and by type of parking location. On the busiest night of the surveys (Wednesday 11<sup>th</sup> June 2025) a total of 111 vehicles were parked within the study area. A summary of the parking survey for is set out below in **Table 2.6**, and the results are presented in full in **Appendix B**.

Street	Total no. of parking spaces available	Total number of vehicles parked	Parking stress %	No. of spaces available before 85% capacity is reached
East Tyndall Street	0	0	0	0
Walker Road	37	21	57	10
Janet Street	21	16	76	1
Habershon Street	13	7	54	4
Ordell Street	46	40	87	0
Portmanmoor Road	44	27	61	10
Total	161	111	69	25

#### Table 2.6Summary of night-time parking beat surveys – Wednesday 11th June

- 2.6.9 Between midnight 5am on Wednesday 11<sup>th</sup> June, there was a total of 111 vehicles legally parked (out of 161) spaces. This equates to a parking stress of 69%, which is below the generally accepted level of parking stress (typically 85% of available capacity). At the time, there were 50 spaces available on-street, with 25 spaces available on-street before practical capacity is reached.
- 2.6.10 It can be seen from both survey results that the parking demand within a 200m walkdistance of the site peaked at 69% (between midnight and 5am on Wednesday 11<sup>th</sup> June 2025), with capacity for a further 25 cars before 85% capacity is reached.



## 3 Development proposals

## 3.1 Introduction

- 3.1.1 As part of the development, it is proposed to construct 62 residential dwellings, together with rationalised car parking, cycle parking provision for residents, as set out below:
  - Block A 52 no. flats in part 4 storey/part 5 storey building
  - Block B four no. 3-bed semi-detached houses
  - Block C six no. 1-bed flats in a 3-storey building.
  - Four resident car parking spaces on-site, with one parking space for each 3-bed house;
  - Secure cycle storage facilities; and,
  - Landscaping and associated works.

#### 3.1.2 The development proposals are outlined in **Figure 3.1** below.



*Figure 3.1 Development proposals* 



#### 3.2 Vehicle Access

- 3.2.1 There is an existing (vehicular) access to the site from East Tyndall Street (along the southern boundary of the site) that will be retained/amended to provide access to the proposed residential cul-de-sac. This access will be used by pedestrians, cyclists and vehicles accessing the site.
- 3.2.2 The access/on-site roadway will have the following characteristics:
  - Junction bell-mouth 18m at the give-way line, narrowing to 5.5m;
  - 6m radii on either side of the junction bell-mouth;
  - 2.8m footway on the western side of the access, narrowing to 1.5m at the entrance to Block A;
  - 1.8m footway on the eastern side of the access, leading to Block C;
  - Turning-head (at the northern end of the access road) measuring approximately 25m in length and 5.7m in width this has been designed to accommodate the swept-path of an 11.2m refuse collection vehicle.
- 3.2.3 A swept-path analysis of the range of vehicles likely to access the site (including fire tender, refuse vehicle and large car) has been undertaken and is presented in **Appendix C**.

#### 3.3 Cycle parking

- 3.3.1 To complement the development, generous cycle parking will be provided for residents and visitors to the site.
- 3.3.2 **Table 3.1** below the page outlines the required number of cycle parking spaces in accordance with Cardiff Council's adopted parking standards 'Managing Transportation Impacts (Incorporating Parking Standards) Supplementary Planning Guidance, July 2018'.

			Cycle parking	<sup> </sup>	
Land use	No. of units	No. of bedrooms			Provision
Residential uses – C3					
1-bedroom flats	45	45	1	45	46
2-bedroom flats	13	26	1	26	26
3-bedroom houses	4	12	1	12	12

 Table 3.1
 Cycle parking provision

3.3.3 It can be seen from the table above that the level of cycle parking proposed is in accordance with the adopted parking standards.



### 3.4 Car parking

- 3.4.1 In accordance with Cardiff Council's adopted parking standards 'Managing Transportation Impacts (Incorporating Parking Standards) Supplementary Planning Guidance (SPG), July 2018'. The **maximum** parking standards in non-central areas of Cardiff are as follows:
  - 1-bedroom dwelling maximum of one space per dwelling; and,
  - 2-bedroom + dwellings maximum of two spaces per dwelling
- 3.4.2 Based on the parking standards and the mix of dwellings on site (i.e. 45 no. 1-bed flats, 13 no. 2-bed flats and 4 no. 3-bed houses), the maximum number of parking spaces allowed is 79 spaces.
- 3.4.3 However, as set out above, it is only proposed to provide a total of four car parking spaces on-site (for the four semi-detached houses).

#### Likely parking demand

- 3.4.4 Based on the car ownership of existing residents in the LSOA (within which the site is located), it is anticipated that the proposed residents could own up to 29 cars, which is calculated as follows:
  - 52 no. flats (0.44 cars/vans per household) 26 cars
  - Four no. houses (0.78 cars/vans per household) 3 cars
- 3.4.5 The results of the parking surveys (outlined in Section 2.6 above) indicate that there is capacity for an additional 25 cars on-street, before practical capacity is reached (i.e. 85% of overall capacity). It is therefore considered that there is sufficient capacity on-street to accommodate any overspill parking generated by the proposed development.

#### Summary

- 3.4.6 It is considered that the proposed car parking provision is appropriate considering:
  - The sustainability of the site's location, with access to a range of local facilities and amenities, and access to a range of transport infrastructure;
  - The proximity of the site to Cardiff City Centre;
  - The likely parking demand generated by the proposed development and the available spare capacity (on-street) within 200m of the proposed development

#### 3.5 Refuse, emergency, deliveries and servicing,

#### Refuse

3.5.1 It is anticipated that refuse for the development will be collected on-site. Refuse vehicles will enter the site via East Tyndall Street to the south and will turn on-site. Refuse will be collected by the Council, as part of the existing residential waste collection.



- 3.5.2 It is estimated that the proposed development could generate up to a maximum of three trips per week, with one refuse collection for general waste collections (bi-weekly) and one for recycling (weekly) and one for food waste (weekly).
- 3.5.3 A swept-path analysis of a refuse vehicle (based on Cardiff Council's Waste Collections and Storage Facilities SPG) is included in **Appendix D.** The analysis also includes the swept path of a larger 11m refuse vehicle which, we are advised, the Council will introduce in the future.

#### Deliveries and servicing

- 3.5.4 It is anticipated that all other servicing and deliveries will be undertaken on-site, as they will gain access via the south of the site along East Tyndall Street and will use the turning head to the north of the site to manoeuvre out.
- 3.5.5 It is estimated that the proposed development could generate up to six servicing trips per day (6 days/week).
- 3.5.6 The maximum size of vehicle that would be reasonably expected to deliver is a 10m rigid vehicle. In practice, it is more likely that the maximum size of vehicle will be an 8m rigid vehicle, with transit sized vehicles being much more commonly used. Based on the surveys outlined in Section 5.3 below, it is anticipated that the majority of deliveries will be undertaken outside the typical morning (0700-1000) and evening (1600-1800) peak hours.
- 3.5.7 It should also be noted that small deliveries are increasingly being undertaken by cars or motorbikes/scooters (e.g. Deliveroo or Uber), which take up less space.



## 4 Transport characteristics

#### 4.1 Introduction

- 4.1.1 In order to assess the impact of the proposed development on the existing transport network, it is necessary to estimate the number of person trips (by mode) generated by the proposed development.
- 4.1.2 This section therefore outlines the methodology used to predict the person trip generation (by mode) vehicle trip generation.

#### 4.2 Trip generation - affordable houses (four dwellings)

- 4.2.1 The number of person trips (by mode) for the four affordable houses has been based on a review of the TRICS 7.11.4 trip generation database. Sites have been selected on the basis of the following criteria:
  - Land use: Residential; affordable/local authority houses
  - Survey type: multi-modal;
  - Survey days: Monday-Friday;
  - Number of units: 15 54 dwellings
  - Location of selected sites: Suburban and edge of town.
  - Geographical areas: UK (excluding Greater London, South East and Ireland).
- 4.2.2 A total of three sites have been selected. The AM, PM and daily number of trips generated is summarised in **Table 4.1** below, and presented in full in **Appendix E**. It should be noted that there are insufficient sites within the TRICS database with similar characteristics to the proposed development to obtain 85<sup>th</sup> percentile trip rates and, therefore, average trip rates have been used.

Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total no. of trips
Total person	S					
8am-9am	0.323	1	1.020	4	1.343	5
5pm-6pm	0.667	3	0.394	2	1.061	4
7am-7pm	4.980	20	5.171	21	10.151	41

Table 4.1 Weekday person trip rates – four houses



Pedestrians						
8am-9am	0.081	0	0.45	2	0.536	2
5pm-6pm	0.364	1	0.253	1	0.617	2
7am-7pm	2.182	9	2.245	9	4.427	18
Cyclists						
8am-9am	0.010	0	0.030	0	0.040	0
5pm-6pm	0.010	0	0	0	0.010	0
7am-7pm	0.070	0	0.060	0	0.130	1
Public transpo	ort users					
8am-9am	0	0	0.081	0	0.081	0
5pm-6pm	0.051	0	0	0	0.051	0
7am-7pm	0.162	1	0.141	1	0.303	1
Vehicles						
8am-9am	0.162	1	0.313	1	0.475	2
5pm-6pm	0.192	1	0.131	1	0.323	1
7am-7pm	1.850	7	1.909	8	3.759	15

4.2.3 It can be seen from the table above that the four houses could generate up to two vehicle movements in the AM peak, one vehicle movement in the PM peak, and up to 15 vehicle movements throughout the day (7am – 7pm).

4.2.4 Walking is likely to be the most popular mode of travel, representing 44% of total trips, closely followed by driving, representing 37% of trips.

## 4.3 Trip generation - affordable flats

- 4.3.1 As outlined above, it is not proposed to provide any parking for the 58 flats. It is also noted that access to a car is a consideration in deciding whether to drive to work or use another mode of transport. Therefore, the trips (by mode) generated for the 58 affordable flats has been calculated by:
  - Estimating the total person trips (from the TRICS trip generation database); and
  - Factoring the total trips using the mode splits for journey to work based on 2011 Census data (adjusted to reflect the car-free nature of the flats).

#### Total person trips

- 4.3.2 The total person trips generated by the 58 affordable flats has been estimated based on a review TRICS trip generation database. Sites have been selected on the basis of the following criteria:
  - Land use: Residential; affordable/local authority flats
  - Survey type: multi-modal;
  - Survey days: Monday-Friday;



- Number of units: 10 40
- Location of selected sites: Suburban and edge of town.
- Geographical areas: UK (excluding Greater London, South East and Ireland).
- 4.3.3 A total of six sites have been selected. The AM, PM and daily number of trips generated is summarised in **Table 4.2** below, and presented in full in **Appendix F**. It should be noted that there are insufficient sites within the TRICS database with similar characteristics to the proposed development to obtain 85<sup>th</sup> percentile trip rates and therefore, average trip rates have been used.

Table 4.2 Weekday person trip rates – 58 flats

Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total no. of trips
Total persons	5					
8am-9am	0.139	8	0.417	24	0.556	32
5pm-6pm	0.285	17	0.219	13	0.504	29
7am-7pm	2.856	166	2.941	171	5.797	336

#### Adjusted mode splits for journeys to work

4.3.4 In the LSOA, within which the site is located, approximately 48% of residents drive to work. Therefore the non-car modes from the Census 'Journey to work' data have been adjusted by distributing the car mode share across the non-car modes, proportionally, as outlined in **Table 4.3** below.

Table 4.3 A	Adjusted mode share for journeys to	work
-------------	-------------------------------------	------

	Mode share (%)		
Mode	2011 Census data	Adjusted mode share	
Train	2	4	
Bus, minibus or coach	14	29	
Car or van	48	0	
Passenger in a car or van	6	6	
Cycle	5	10	
Walk	23	47	
Other	2	4	
Total	100	100	

4.3.5 Table 4.4 below sets out the likely trip generation (by mode) for the 58 flats, which has been calculated by applying the adjusted modes share (outlined in Table 4.3) to the total person trips (outlined in Table 4.2).



Table 4.4 P	erson trips	by mode –	58 flats
Time period	No. of arrivals	No. of departs	Total no. of trips
Pedestrians			
8am-9am	4	11	15
5pm-6pm	8	6	14
7am-7pm	78	80	158
Cyclists			
8am-9am	1	2	3
5pm-6pm	2	1	3
7am-7pm	17	17	34
Public trans	port users		
8am-9am	3	8	11
5pm-6pm	5	4	10
7am-7pm	55	56	111
Vehicles			
8am-9am	0	0	0
5pm-6pm	0	0	0
7am-7pm	0	0	0

#### Table 4.4 Person trips by mode – 58 flats

#### Total trips generated by the proposed development

4.3.6 **Table 4.5** below outlines the total person trips (by mode) generated by the proposed development, which has been calculated by combining the person trips outlined in Tables 4.1 (affordable houses) and Tables 4.4 (affordable flats).

Table 4.5 Total person trips (by mode) generated by the proposed development

			ie ie of general
Time period	No. of arrivals	No. of departs	Total no. of trips
Total persor	าร		
8am-9am	9	28	38
5pm-6pm	19	14	33
7am-7pm	186	191	377
Pedestrians			
8am-9am	4	13	17
5pm-6pm	9	7	16
7am-7pm	87	89	176



Cyclists			
8am-9am	1	3	3
5pm-6pm	2	1	3
7am-7pm	17	17	34
Public transp	ort users		
8am-9am	3	8	11
5pm-6pm	6	4	10
7am-7pm	55	57	112
Vehicles			
8am-9am	1	1	2
5pm-6pm	1	1	1
7am-7pm	7	8	15

## 4.4 Servicing trip generation

4.4.1 There is a limited number of sites available on TRICS database which detail the likely servicing associated with residential use. Given the increase in home deliveries in recent months, there is also a lack of up-to-date data. Therefore, the frequency of delivery and service trips has been estimated using an independent survey carried out at a residential development on 2<sup>nd</sup> July 2020. The survey was undertaken between 7am and 10pm and includes deliveries (by LGVs, HGVs, motorbikes and cars) as well as maintenance and security vehicles. The survey results are set out in **Table 5.4** over the page, and these have been applied to the total of 62 residential dwellings.

Time period	Total trip rate	Total no. of trips
LGVs		
8am–9am	0	0
5pm-6pm	0.003	0
7am-10pm	0.0737	4
OGVs		
8am–9am	0	0
5pm-6pm	0.003	0
7am-10pm	0.017	1
Motorbikes		
8am–9am	0	0
5pm-6pm	0	0
7am-10pm	0.007	0

 Table 5.4 Predicted delivery and servicing trips for the development - residential



Cars		
8am–9am	0	0
5pm-6pm	0	0
7am-10pm	0.01	1
Total		
8am–9am	0	0
5pm-6pm	0.006	0
7am-10pm	0.1077	6

- 4.4.2 Light goods vehicles (LGVs) are defined as cars and small vans under 3.5T and with 2axles, and ordinary goods vehicles (OGVs) are defined as over 3.5T with 2-axles or more.
- 4.4.3 Based on the survey results, of the 142 vehicle movements, it is likely that the overall development 62 dwellings will generate six servicing/delivery vehicle trips per weekday, equivalent to 12 movements. There are very few trips observed during the AM or PM peak periods, with the busiest hour of the day being between 10am and 11am. The majority of trips occurred between 10am and 2pm.
- 4.4.4 It is anticipated that the maximum size of vehicle that would be reasonably expected to deliver to any residential development will be a 10m rigid vehicle. In practice, it is more likely that the maximum size of vehicle will be an 8m rigid vehicle, with transit sized vehicles being much more commonly used.
- 4.4.5 It is considered that all deliveries and servicing will be undertaken on-site, with vehicles accessing the site via East Tyndall Street to the south.

#### Refuse collection

4.4.6 Of the 12 daily movements (six trips), it is anticipated one once a week there may be a maximum of three refuse collections per day including one for general waste (biweekly), one for recycling and one for food waste.

## 4.5 Potential impact

4.5.1 Based on the volume of trips (by mode) identified in the table above, it is considered that the proposed development will have a minimal impact on the surrounding transport network, and that the proposed development can be accommodated within the existing highway and public transport networks without increasing queues and delays for existing users.

#### Walking

4.5.2 The development is likely to generate 176 daily pedestrian movements. In addition, a further 112 daily public transport trips are likely to walk to reach public transport facilities. The majority of walking trips will be spread across a number of local roads, and it is anticipated that there will be no adverse impact to the pedestrian network.



#### Cycling

4.5.3 It is estimated that the proposed development could generate up to 34 daily cycle movements, which will be spread across a number of local roads. It is therefore anticipated that there will be no adverse impact to the cycle network.

#### Public transport

4.5.4 The development is likely to generate 112 public transport trips per day. These are likely to be mainly undertaken by bus and some by rail and it is considered that this level of additional passengers will not have a material impact on the public transport network.

#### Vehicles

4.5.5 As the proposed development is designated as car-free/car-lite, with limited car parking on-site, it is estimated that the proposed development is only likely to generate up to 15 car movements throughout the day, with a further six service vehicle movements across the day. This is unlikely to have a significant impact on the operation of the surrounding highway network.

#### 4.6 Design solutions and mitigation measures

- 4.6.1 This Transport Statement has demonstrated that the development will not have a significant impact on the surrounding streets and the following measures are proposed to reduce any impact further.
- 4.6.2 A range of measures are embedded within the scheme design including:
  - High quality cycle parking provided in secure, easily accessible internal storage for residents of the development.
  - Improved permeability around the site with improved pedestrian and cyclist facilities and connections to the surrounding area, achieved by provision of generous footways.
  - New landscaping and public realm improvements with enhanced lighting, passive surveillance planting, overlooked streets and public spaces that feel safe.
  - A design for prioritising people over parking and other urban features.



## 5 Summary and conclusions

### 5.1 Background

- 5.1.1 Lime Transport has been commissioned by CCHA to prepare a Transport Statement in support of a planning application for the development of 62 residential units on the former Magnet Site at East Tyndal Street, Splott, Cardiff. The development also includes a Plant Room on the ground floor, four car parking spaces, and cycle and bin storage on the ground floor.
- 5.1.2 It is anticipated that the housing on-site will be as follows:
  - Block A 52 no. flats in part 4 storey/part 5 storey building
  - Block B four no. 3-bed semi-detached houses
  - Block C six no. 1-bed flats in a 3-storey building.
  - Four resident car parking spaces on-site, with one parking space for each 3-bed house;
  - Secure cycle storage facilities; and,
  - Landscaping and associated works.

#### Access

5.1.3 Vehicles will enter the site via the south of the site, along East Tyndall Street. Pedestrians and cyclists will also be able to access the site via East Tyndall Street.

#### Refuse and servicing

- 5.1.4 It is anticipated that refuse for the development will be collected on-site, as part of the existing refuse collection.
- 5.1.5 Deliveries will also be undertaken on-site, with vehicles able to turn in the turning head at the north of the site and drive out of the site onto East Tyndall Street.
- 5.1.6 It is considered that a development of 62 dwellings (four town houses and 58 flats), is likely to generate six (6 days/week).

#### Car and cycle parking provision

5.1.7 Car and cycle parking will be provided in accordance with the adopted parking standards, reflecting the accessibility of the site and the travel characteristics/car ownership within the surrounding areas.

#### Likely travel characteristics

5.1.8 As the proposed development is designated as car-free/car-lite, with limited car parking on-site, it is estimated that the proposed development is only likely to generate a small number of vehicle trips across the day.



5.1.9 Walking is likely to be the most popular mode of transport, representing approximately 47% of all trips, followed by public transport (representing approximately 30% of all trips.

#### 5.2 Conclusions

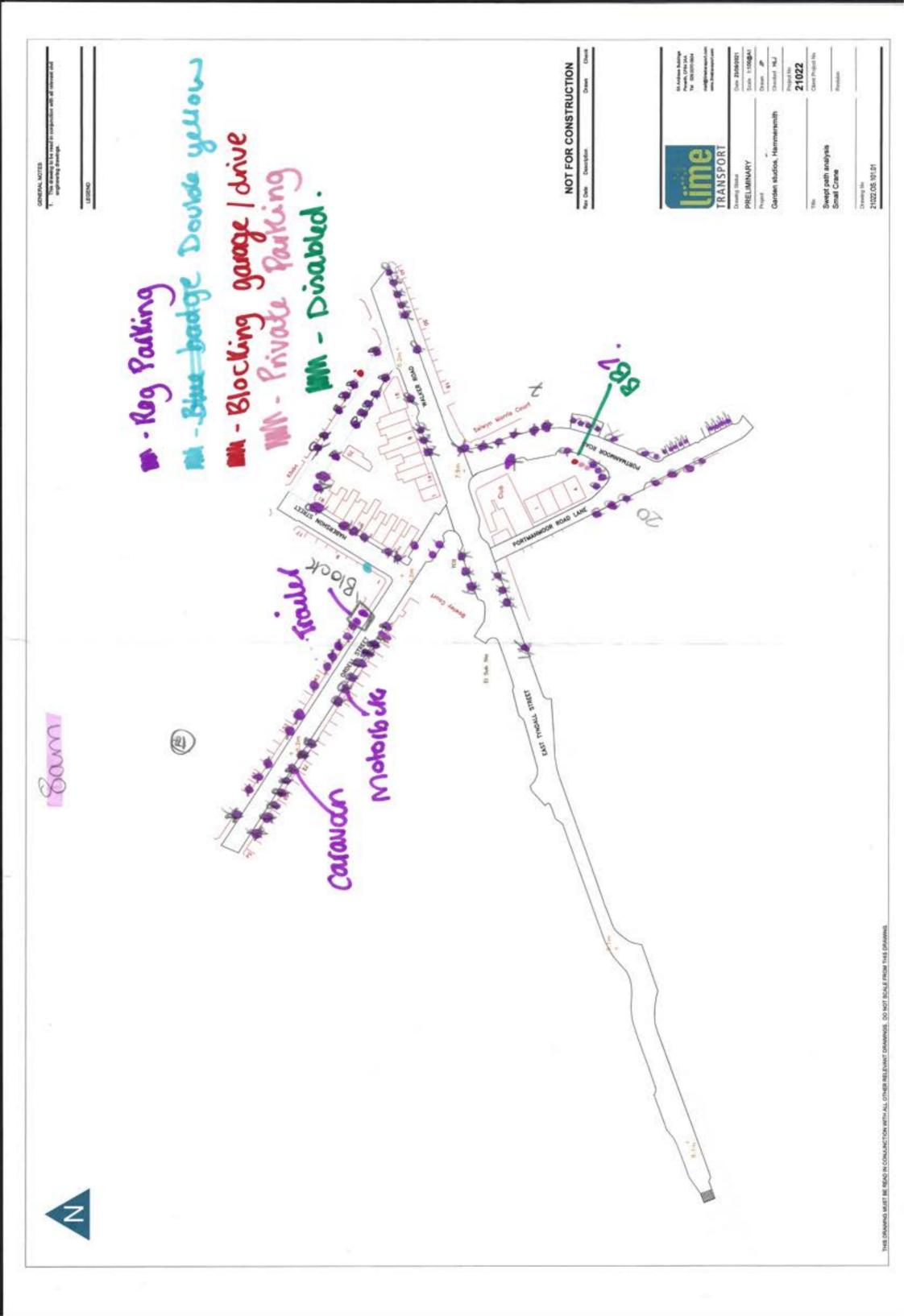
- 5.2.1 The site is situated in a reasonably sustainable location that would maximise the use of existing sustainable transport infrastructure and promote the use of sustainable modes, including walking, cycling and public transport. Furthermore, the site is located within walking/cycling distance of a significant range of local facilities and amenities.
- 5.2.2 The site has also been designed to maximise the use of sustainable transport modes, with reduced levels of parking on site (in accordance with the adopted parking standards) together with generous cycling parking provision in secure and conveniently located.
- 5.2.3 Overall, it is considered that the proposed development will have a minimal impact on the surrounding transport network.

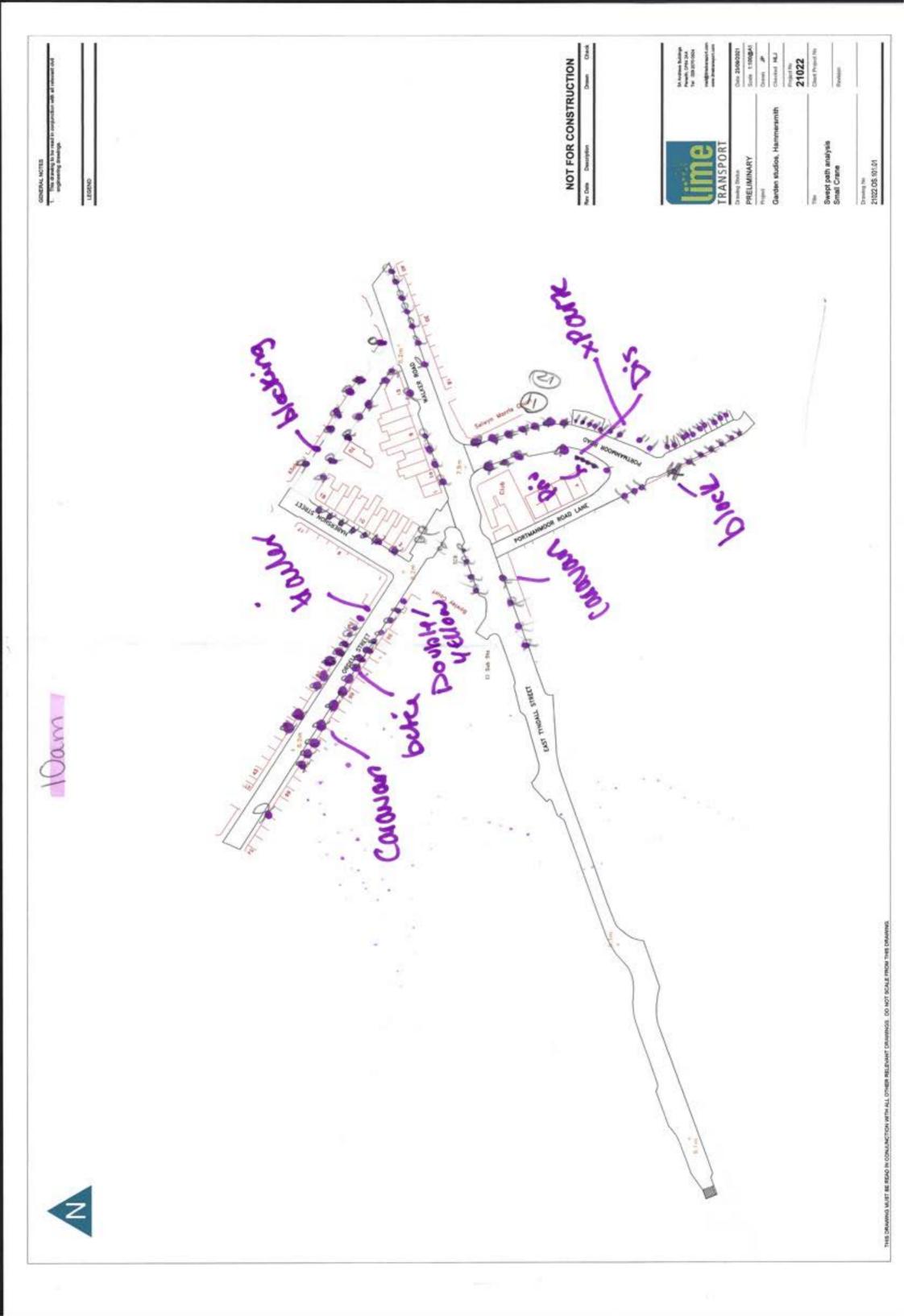


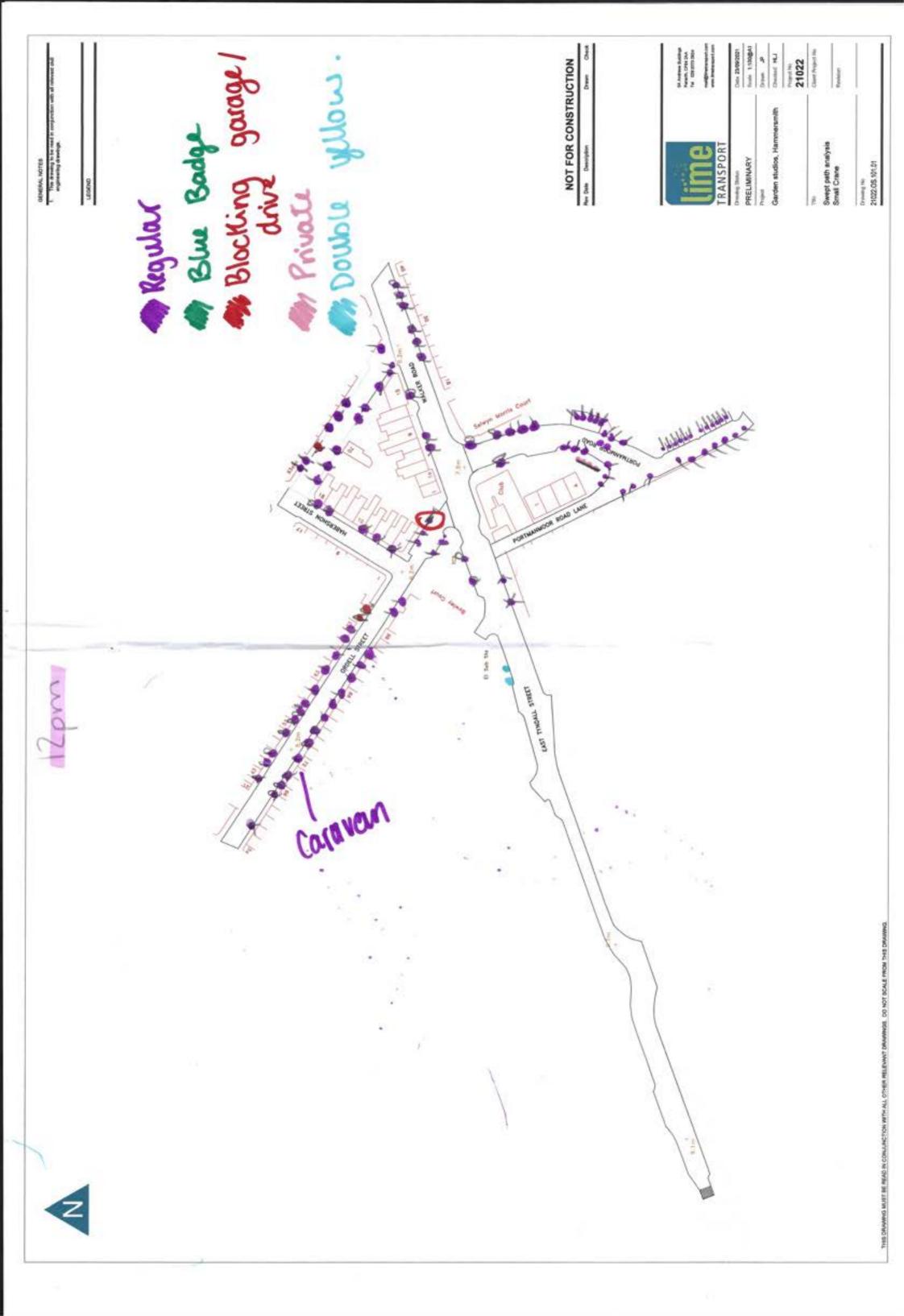
## Appendices

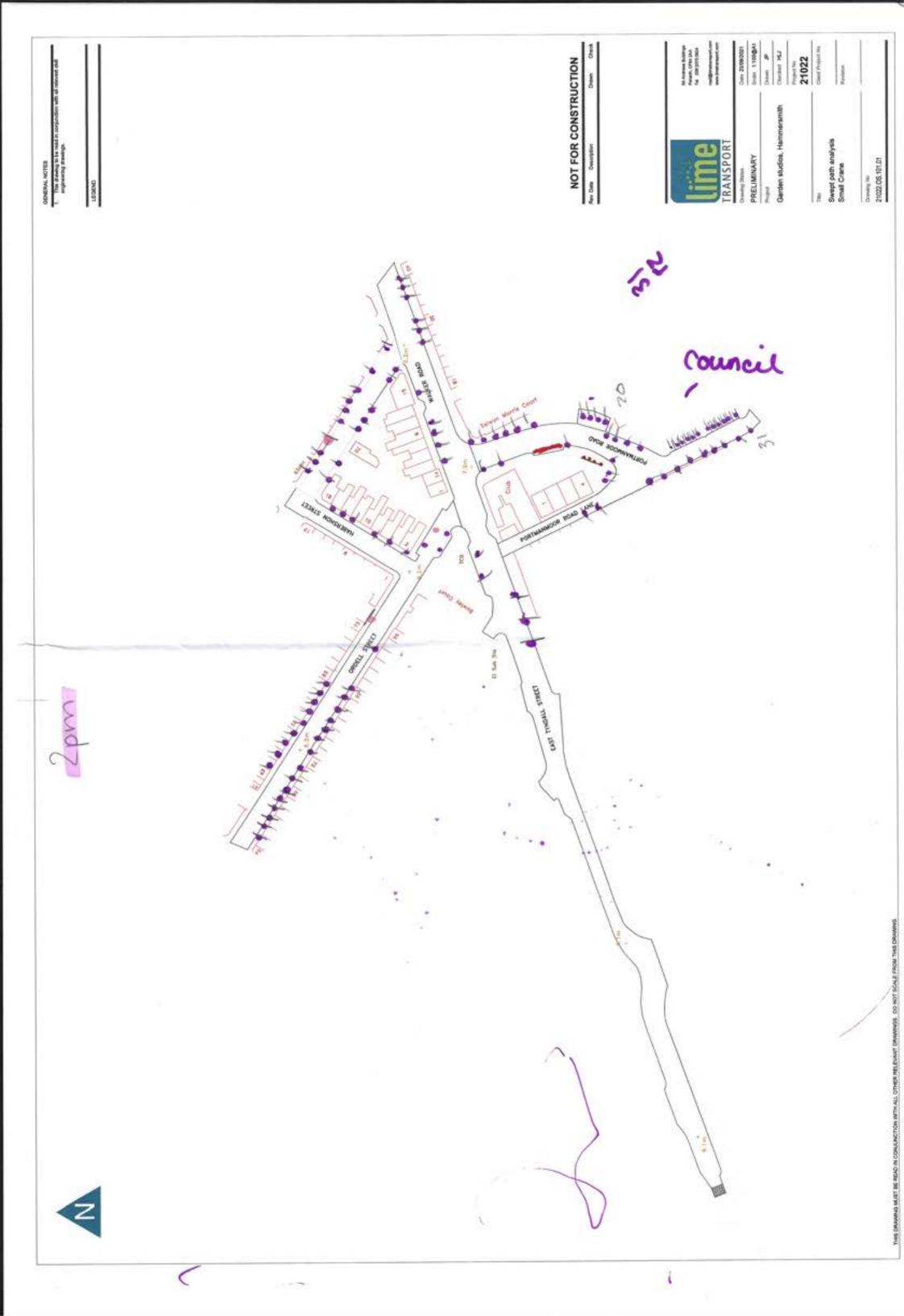


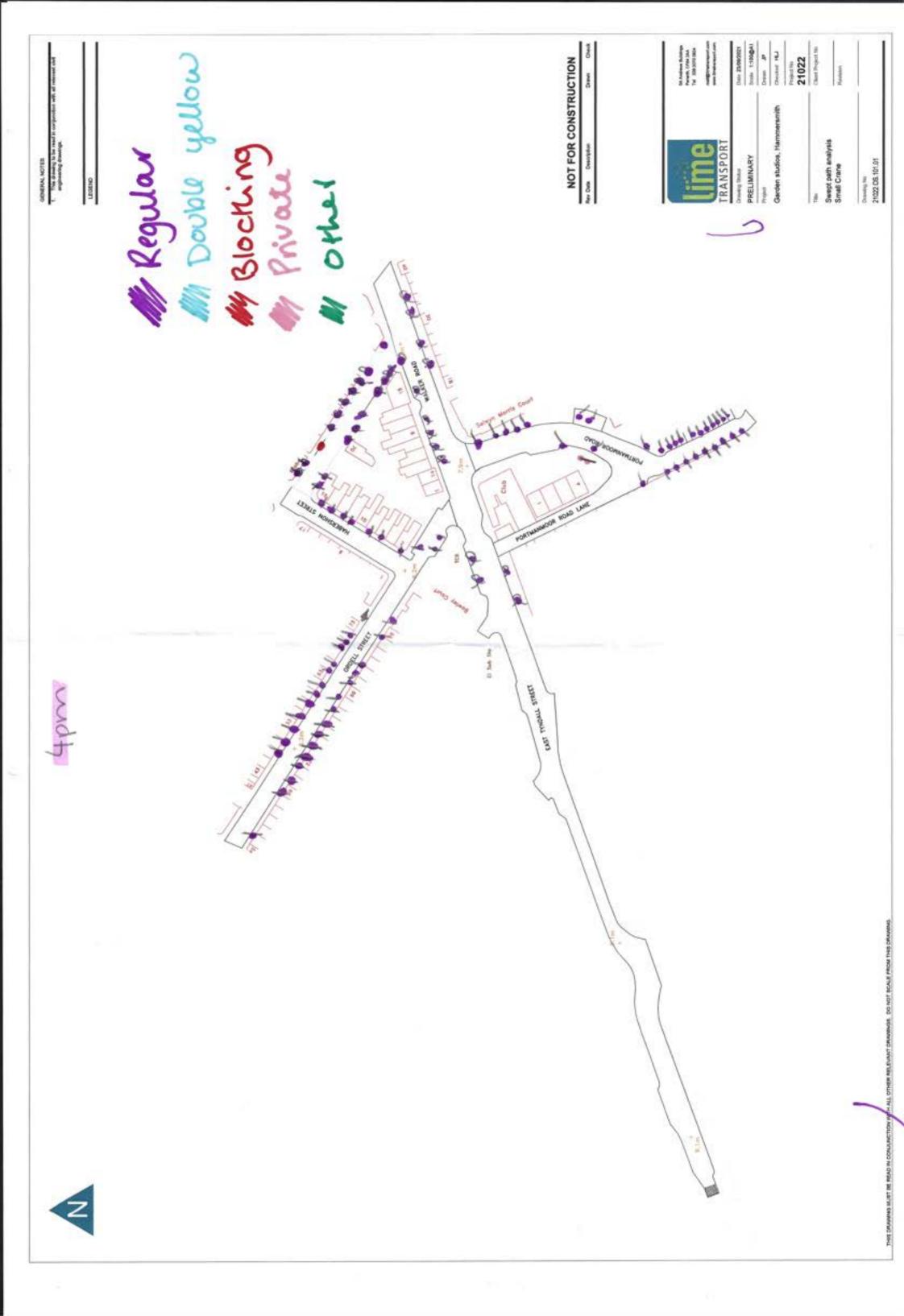
## Appendix A

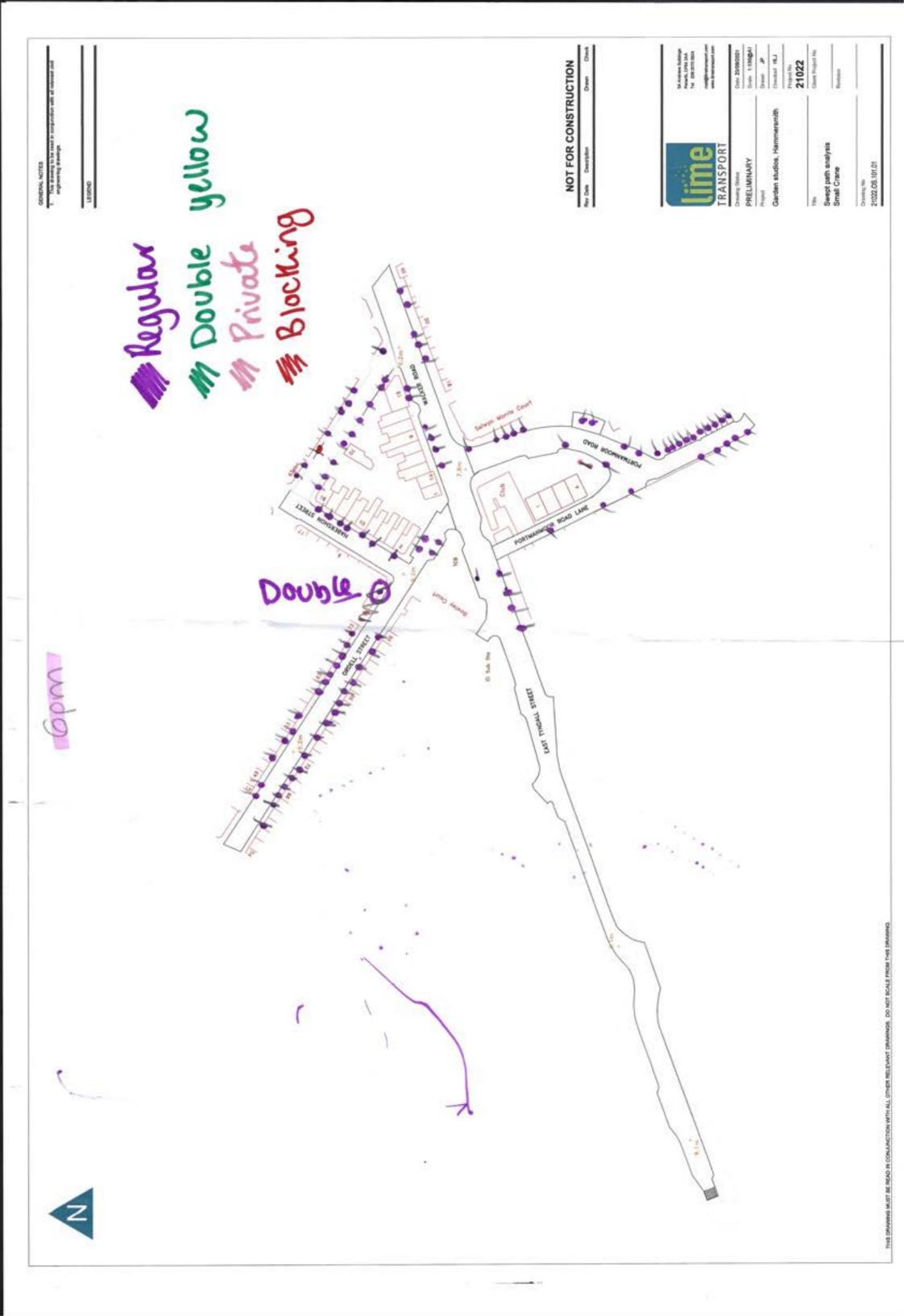






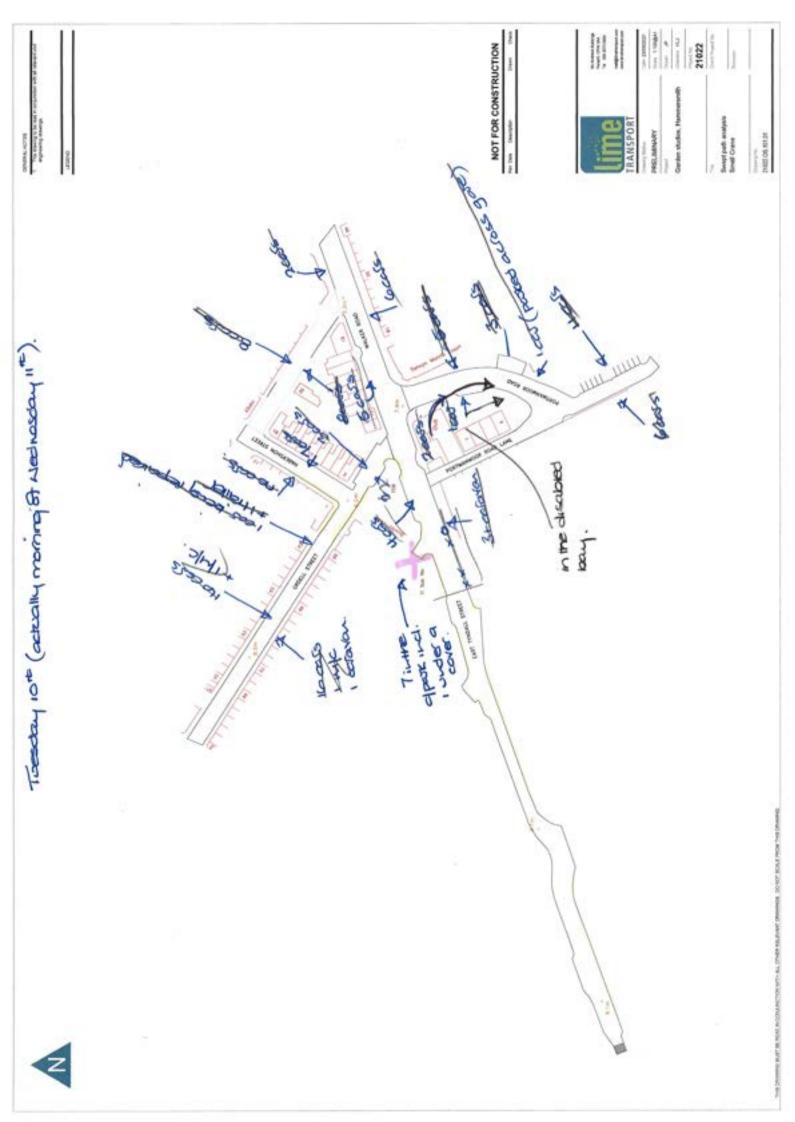


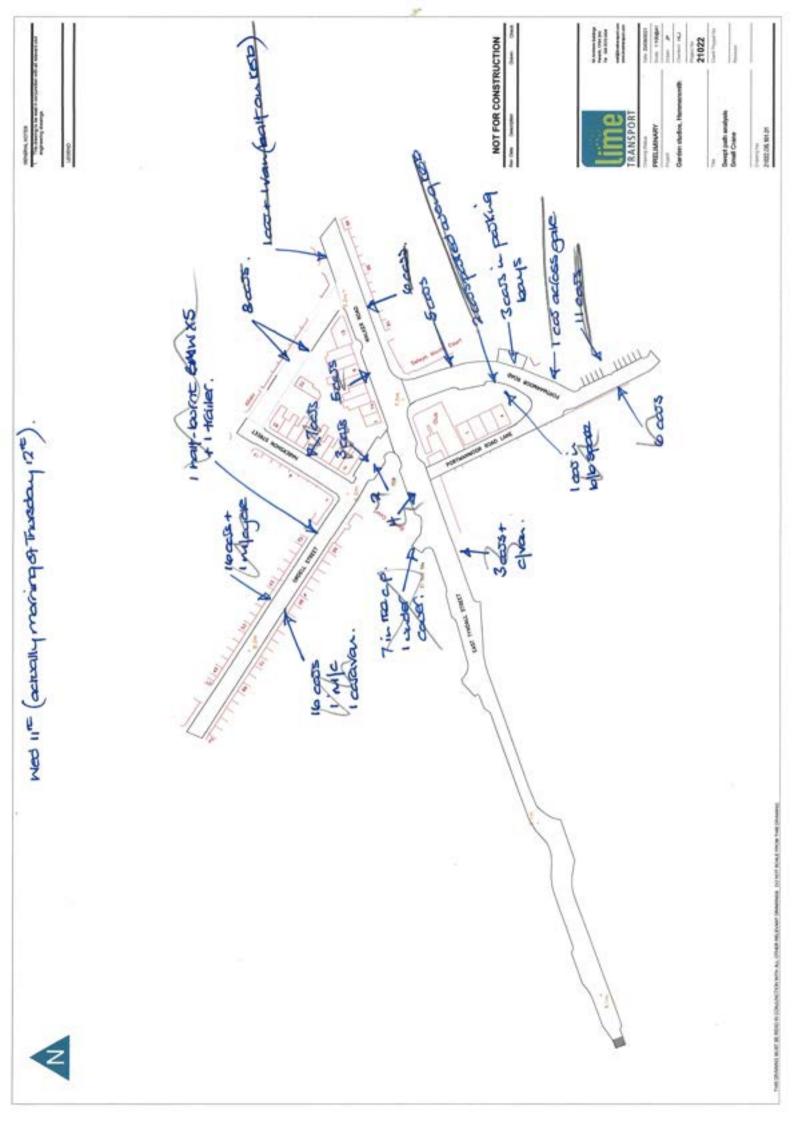






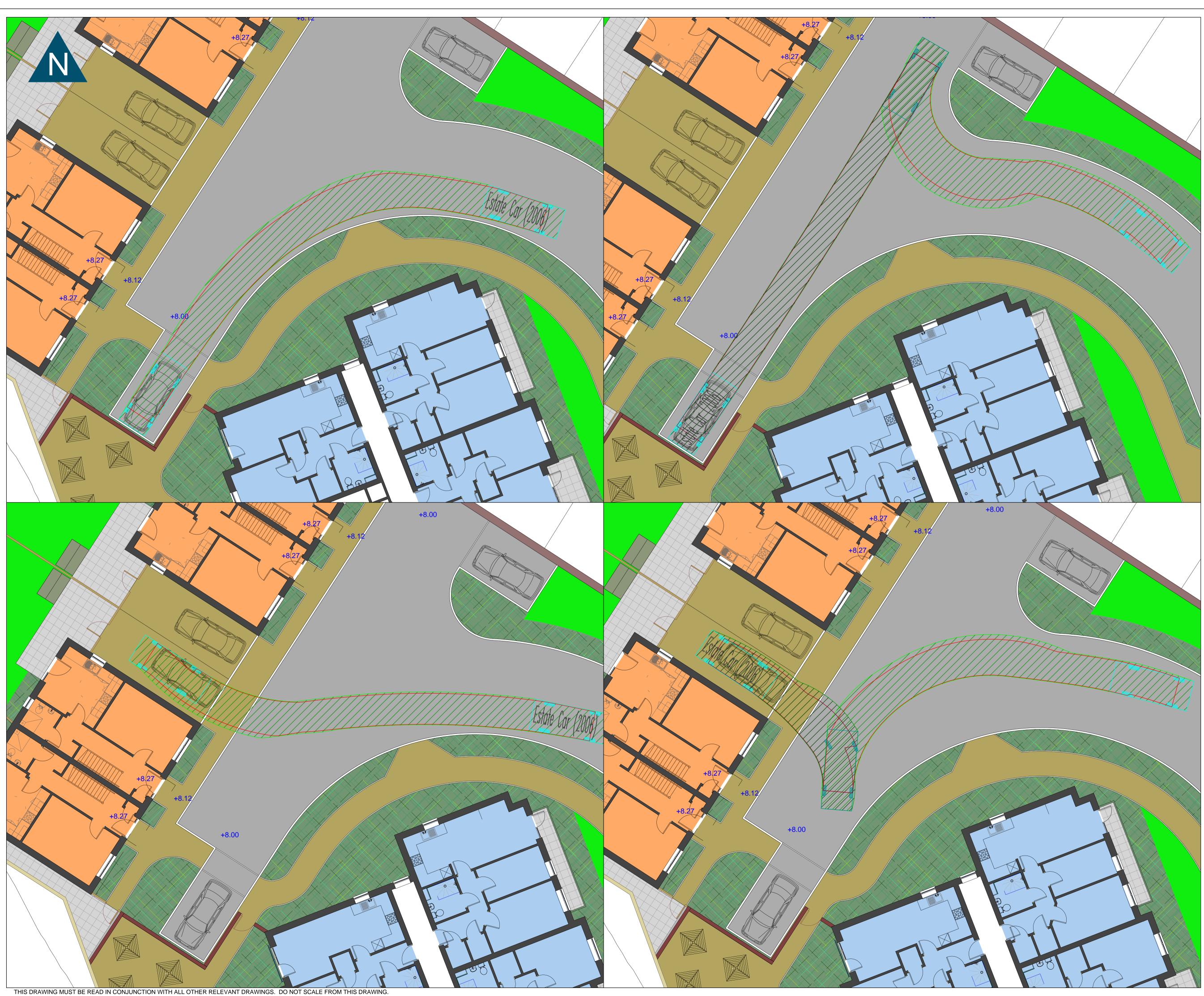
# Appendix B







# Appendix C



# GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

2.755

Estate Car (2006) Overall Length Overall Width Overall Body Height Min Body Ground Clearance Max Track Width Lock to Lock Time Kerb to Kerb Turning Radius



# NOT FOR CONSTRUCTION

Rev Date Description

Drawn Check



Drawing Status
PRELIMINARY
Project

East Tyndall Street, Cardiff

# Title

Swept path analysis Estate car

Drawing No 25035.OS.103.01 Avon House, Penarth, CF64 2EZ Tel 029 2070 0924

mail@limetransport.com www.limetransport.com

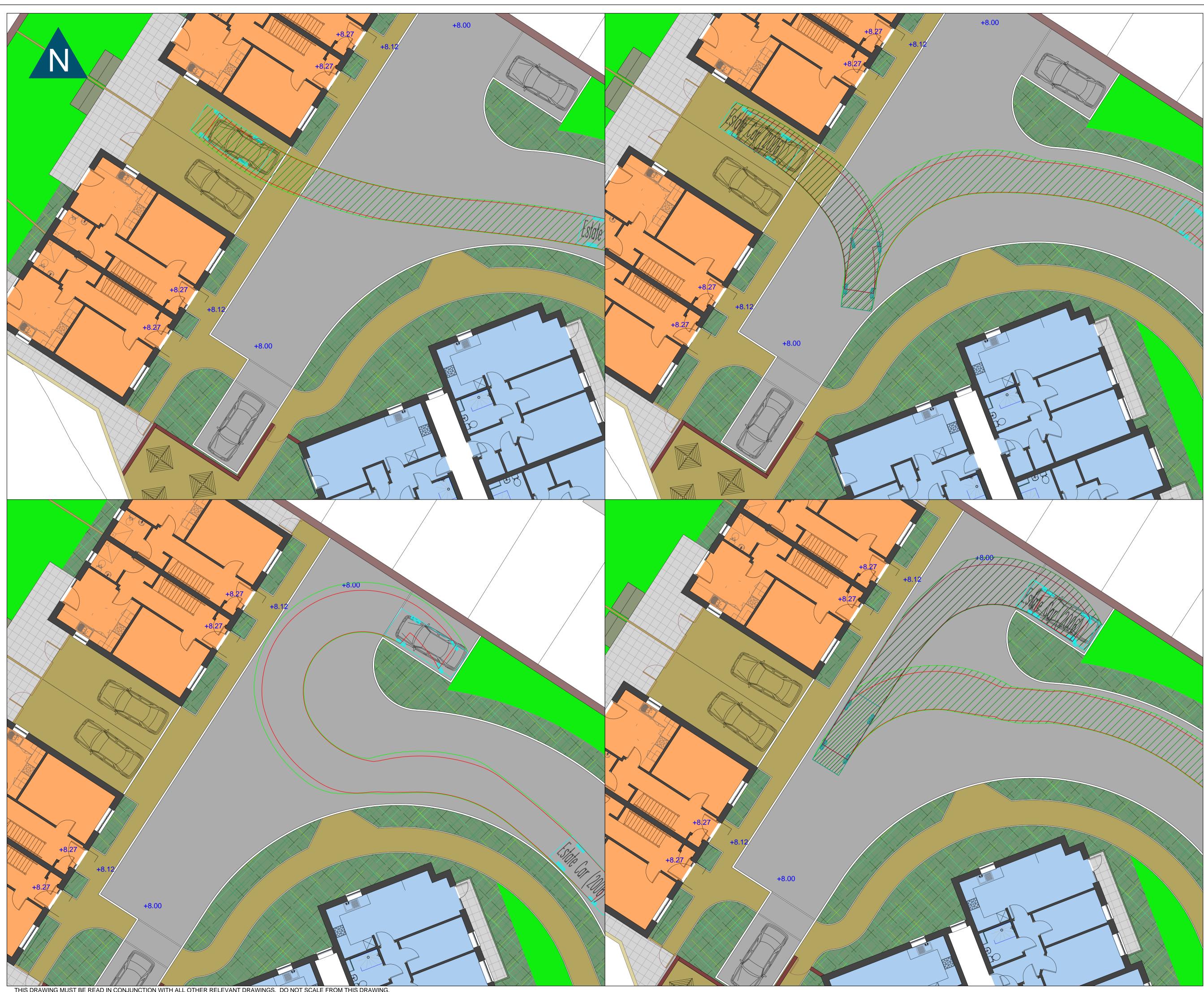
Scale 1:100@A1 Drawn AL

Checked HLJ

Project No **25035** 

Client Project No

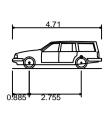
Revision



THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS. DO NOT SCALE FROM THIS DRAWING.

GE	NERAL NOTES
1.	This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND



Estate Car (2006) Overall Length Overall Width Overall Body Height Min Body Ground Clearance Max Track Width Lock to Lock Time Kerb to Kerb Turning Radius



# NOT FOR CONSTRUCTION

Rev Date Description

Drawn Check



Drawing Status PRELIMINARY Project

East Tyndall Street, Cardiff

# Title

\_\_\_\_\_

Swept path analysis Estate car

Drawing No 25035.OS.103.02

Avon House, Penarth, CF64 2EZ Tel 029 2070 0924

mail@limetransport.com www.limetransport.com

Date 16/06/2025
-----------------

Scale 1:100@A1 Drawn AL

Checked HLJ

\_\_\_\_\_

Project No 25035

Client Project No

Revision







# Appendix D







# Appendix E

Calculation Reference: AUDIT-258601-250617-0612

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

07	YOR	KSHIRE & NORTH LINCOLNSHIRE	
	KS	KIRKLEES	1 days
	LS	LEEDS	1 days
80	NOR	TH WEST	5
	MS	MERSEYSIDE	1 days

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

Licence No: 258601

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: Actual Range:	No of Dwellings 16 to 54 (units: )
Range Selected by User:	15 to 280 (units: )
Parking Spaces Range:	All Surveys Included
Parking Spaces per Dwellin	ng Range: All Surveys Included
Bedrooms per Dwelling Ra	ange: All Surveys Included
Percentage of dwellings pr	rivately owned: All Surveys Included
Public Transport Provision: Selection by:	Include all surveys
Date Range: 01/01	1/10 to 22/10/21
This data displays the rang included in the trip rate ca	ge of survey dates selected. Only surveys that were conducted within this date range are alculation.
<u>Selected survey days:</u> Tuesday	2 days
Thursday	1 days
This data displays the nur	mber of selected surveys by day of the week.
<u>Selected survey types:</u>	
Manual count Directional ATC Count	3 days O days
	mber of manual classified surveys and the number of unclassified ATC surveys, the total adding of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys cchines.
<u>Selected Locations:</u> Suburban Area (PPS6 Out	of Centre) 1
Edge of Town	2
	mber of surveys per main location category within the selected set. The main location categories Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and
<u>Selected Location Sub Cat</u> Residential Zone	
Built-Up Zone	2 1
	nber of surveys per location sub-category within the selected set. The location sub-categories ne, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, and No Sub Category.
Inclusion of Servicing Veh	
Servicing vehicles Included Servicing vehicles Exclude	

Secondary Filtering selection:

*<u>Use Class:</u>* C3

3 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®.

<u>Population within 500m Range:</u> All Surveys Included

Secondary Filtering selection (Cont.):

1 days
1 days
1 days

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

Population within 5 miles:	
5,001 to 25,000	1 days
75,001 to 100,000	2 days

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

Cal	r ownership	within 5 miles:
0.6	to 1.0	

3 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.

<u>Travel Plan:</u> No

3 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.

<u>PTAL Rating:</u> No PTAL Present

3 days

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

TRICS 7.11.4 16	0625 B22.185862	25168 Database right o	f TRICS Consortium Ltd,	2025. All rights reserved	Tuesday	17/06/25
						Page 4
Lime Transport Lir	nited Stanwell	Road Penarth			Licence	No: 258601
LIST OF S	TTES relevant to s	selection parameters				
WH HUE DEI	TEACRE STREET DERSFIELD GHTON	MI XED HOUSES		KIRKLEES		
Res Tota 2 LS-	COLN GREEN ROA	<i>TUESDAY</i> TERRACED HOUSES	54 1 <i>7/09/13</i>	<i>Survey Type: MANUAL</i> LEEDS		
Buil Tota 3 MS- TAR LIVI SPE Edg	BOCK ROAD ERPOOL KE e of Town	:	29 1 <i>9/09/13</i>	<i>Survey Type: MANUAL</i> MERSEYSIDE		
	dential Zone I No of Dwellings <i>Survey date:</i>		16 <i>18/06/13</i>	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.

# Licence No: 258601

# TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES MULTI - MODAL TOTAL VEHICLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 2.70

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	33	0.081	3	33	0.091	3	33	0.172
08:00 - 09:00	3	33	0.162	3	33	0.313	3	33	0.475
09:00 - 10:00	3	33	0.263	3	33	0.283	3	33	0.546
10:00 - 11:00	3	33	0.162	3	33	0.172	3	33	0.334
11:00 - 12:00	3	33	0.121	3	33	0.111	3	33	0.232
12:00 - 13:00	3	33	0.131	3	33	0.131	3	33	0.262
13:00 - 14:00	3	33	0.101	3	33	0.101	3	33	0.202
14:00 - 15:00	3	33	0.182	3	33	0.131	3	33	0.313
15:00 - 16:00	3	33	0.182	3	33	0.192	3	33	0.374
16:00 - 17:00	3	33	0.101	3	33	0.172	3	33	0.273
17:00 - 18:00	3	33	0.192	3	33	0.131	3	33	0.323
18:00 - 19:00	3	33	0.172	3	33	0.081	3	33	0.253
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.850			1.909			3.759

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:	16 - 54 (units: )
Survey date date range:	01/01/10 - 22/10/21
Number of weekdays (Monday-Friday):	3
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

#### Licence No: 258601

## TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES MULTI-MODAL CYCLISTS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	33	0.000	3	33	0.000	3	33	0.000	
08:00 - 09:00	3	33	0.010	3	33	0.030	3	33	0.040	
09:00 - 10:00	3	33	0.010	3	33	0.010	3	33	0.020	
10:00 - 11:00	3	33	0.010	3	33	0.000	3	33	0.010	
11:00 - 12:00	3	33	0.000	3	33	0.000	3	33	0.000	
12:00 - 13:00	3	33	0.000	3	33	0.000	3	33	0.000	
13:00 - 14:00	3	33	0.000	3	33	0.000	3	33	0.000	
14:00 - 15:00	3	33	0.000	3	33	0.000	3	33	0.000	
15:00 - 16:00	3	33	0.030	3	33	0.010	3	33	0.040	
16:00 - 17:00	3	33	0.000	3	33	0.010	3	33	0.010	
17:00 - 18:00	3	33	0.010	3	33	0.000	3	33	0.010	
18:00 - 19:00	3	33	0.000	3	33	0.000	3	33	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.070			0.060			0.130	

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.

# Licence No: 258601

# TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES MULTI - MODAL VEHICLE OCCUPANTS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			I	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	33	0.081	3	33	0.121	3	33	0.202
08:00 - 09:00	3	33	0.232	3	33	0.455	3	33	0.687
09:00 - 10:00	3	33	0.364	3	33	0.394	3	33	0.758
10:00 - 11:00	3	33	0.222	3	33	0.283	3	33	0.505
11:00 - 12:00	3	33	0.152	3	33	0.141	3	33	0.293
12:00 - 13:00	3	33	0.172	3	33	0.182	3	33	0.354
13:00 - 14:00	3	33	0.121	3	33	0.141	3	33	0.262
14:00 - 15:00	3	33	0.283	3	33	0.182	3	33	0.465
15:00 - 16:00	3	33	0.283	3	33	0.293	3	33	0.576
16:00 - 17:00	3	33	0.162	3	33	0.273	3	33	0.435
17:00 - 18:00	3	33	0.242	3	33	0.141	3	33	0.383
18:00 - 19:00	3	33	0.253	3	33	0.121	3	33	0.374
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.567			2.727			5.294

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.

# Licence No: 258601

## TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES MULTI-MODAL PEDESTRIANS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	33	0.040	3	33	0.091	3	33	0.131
08:00 - 09:00	3	33	0.081	3	33	0.455	3	33	0.536
09:00 - 10:00	3	33	0.152	3	33	0.162	3	33	0.314
10:00 - 11:00	3	33	0.162	3	33	0.202	3	33	0.364
11:00 - 12:00	3	33	0.121	3	33	0.192	3	33	0.313
12:00 - 13:00	3	33	0.222	3	33	0.111	3	33	0.333
13:00 - 14:00	3	33	0.091	3	33	0.091	3	33	0.182
14:00 - 15:00	3	33	0.182	3	33	0.172	3	33	0.354
15:00 - 16:00	3	33	0.424	3	33	0.182	3	33	0.606
16:00 - 17:00	3	33	0.141	3	33	0.152	3	33	0.293
17:00 - 18:00	3	33	0.364	3	33	0.253	3	33	0.617
18:00 - 19:00	3	33	0.202	3	33	0.182	3	33	0.384
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.182			2.245			4.427

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.

# Licence No: 258601

## TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES MULTI - MODAL PUBLIC TRANSPORT USERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			I	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	33	0.000	3	33	0.010	3	33	0.010
08:00 - 09:00	3	33	0.000	3	33	0.081	3	33	0.081
09:00 - 10:00	3	33	0.010	3	33	0.020	3	33	0.030
10:00 - 11:00	3	33	0.000	3	33	0.000	3	33	0.000
11:00 - 12:00	3	33	0.000	3	33	0.000	3	33	0.000
12:00 - 13:00	3	33	0.000	3	33	0.000	3	33	0.000
13:00 - 14:00	3	33	0.020	3	33	0.000	3	33	0.020
14:00 - 15:00	3	33	0.010	3	33	0.010	3	33	0.020
15:00 - 16:00	3	33	0.061	3	33	0.010	3	33	0.071
16:00 - 17:00	3	33	0.000	3	33	0.010	3	33	0.010
17:00 - 18:00	3	33	0.051	3	33	0.000	3	33	0.051
18:00 - 19:00	3	33	0.010	3	33	0.000	3	33	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.162			0.141			0.303

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.

### TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES MULTI-MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 2.70

	ARRIVALS			[	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	33	0.121	3	33	0.222	3	33	0.343
08:00 - 09:00	3	33	0.323	3	33	1.020	3	33	1.343
09:00 - 10:00	3	33	0.535	3	33	0.586	3	33	1.121
10:00 - 11:00	3	33	0.394	3	33	0.485	3	33	0.879
11:00 - 12:00	3	33	0.273	3	33	0.333	3	33	0.606
12:00 - 13:00	3	33	0.394	3	33	0.293	3	33	0.687
13:00 - 14:00	3	33	0.232	3	33	0.232	3	33	0.464
14:00 - 15:00	3	33	0.475	3	33	0.364	3	33	0.839
15:00 - 16:00	3	33	0.798	3	33	0.495	3	33	1.293
16:00 - 17:00	3	33	0.303	3	33	0.444	3	33	0.747
17:00 - 18:00	3	33	0.667	3	33	0.394	3	33	1.061
18:00 - 19:00	3	33	0.465	3	33	0.303	3	33	0.768
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.980			5.171			10.151

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.



# Appendix F

Land Use	:	03 - RESIDENTIAL
Category	:	D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-M	C	DAL TOTAL VEHICLES

Selea	ted regions and areas:	
03	SOUTH WEST	
	GS GLOUCESTERSHIRE	2 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NG NOTTINGHAM	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	SE SHEFFIELD	1 days
80	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days

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

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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: Actual Range: Range Selected by User:	No of Dwellings 10 to 40 (units: ) 10 to 120 (units: )	
Parking Spaces Range:	All Surveys Include	d
Parking Spaces per Dwelli	ng Range: All Survey	s Included
Bedrooms per Dwelling Ra	inge: All Survey	s Included
Percentage of dwellings pr	ivately owned:	All Surveys Included
Public Transport Provision Selection by:	<u>.</u>	Include all surveys
Date Range: 01/07	1/10 to 21/06/23	
This data displays the ran included in the trip rate ca		elected. Only surveys that were conducted within this date range are
<u>Selected survey days:</u> Tuesday Wednesday Thursday		1 days 2 days 3 days
This data displays the nur	mber of selected surv	eys by day of the week.
<u>Selected survey types:</u> Manual count Directional ATC Count		6 days O days
	of surveys in the sele	ified surveys and the number of unclassified ATC surveys, the total adding octed set. Manual surveys are undertaken using staff, whilst ATC surveys
<u>Selected Locations:</u> Suburban Area (PPS6 Out	of Centre)	6
		nain location category within the selected set. The main location categories ban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and
<u>Selected Location Sub Cat</u> Residential Zone	t <u>egoríes:</u>	6
, 5	ne, Industrial Zone, L	ocation sub-category within the selected set. The location sub-categories Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, V.
Inclusion of Servicing Vehi Servicing vehicles Include Servicing vehicles Exclude	d	3 days - Selected 3 days - Selected
Secondary Filtering sele	ection:	
<u>Use Class:</u> C3		6 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@.

<u>Population within 500m Range:</u> All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:	
5,001 to 10,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	4 days

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

Population within 5 miles:		
100,001 to 125,000	1 (	days
125,001 to 250,000	3 (	days
250,001 to 500,000	2 0	days

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

<u>Car ownership within 5 miles:</u>	
0.6 to 1.0	2 days
1.1 to 1.5	4 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.

<u>*Travel Plan:*</u> No

6 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.

<u>PTAL Rating:</u> No PTAL Present

6 days

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

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Transpo	ort Limited Stanwell Road Per	narth		Licence No: 25860
<u>LIST</u>	OF SITES relevant to selection pa	arameters		
1	AC-03-D-01 BLOCK OF HEATH LANE CHESTER BOUGHTON HEATH Suburban Area (PPS6 Out of Cer		CHESHIRE WEST & CHES	STER
2	Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i> GS-03-D-01 BLOCKS C SAINT STEPHEN'S ROAD CHELTENHAM SPA		<i>Survey Type: MANUAL</i> GLOUCESTERSHIRE	
3	Suburban Area (PPS6 Out of Cer Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i> GS-03-D-02 BLOCKS C PRINCESS ELIZABETH WAY CHELTENHAM SPA	40 <i>04/05/23</i>	<i>Survey Type: MANUAL</i> GLOUCESTERSHI RE	
4	Suburban Area (PPS6 Out of Cer Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i> LN-03-D-02 FLATS ADDISON DRIVE LINCOLN	27	<i>Survey Type: MANUAL</i> LINCOLNSHIRE	
5	Suburban Area (PPS6 Out of Cer Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDA</i> NG-03-D-01 BLOCK OF WATCOMBE ROAD NOTTINGHAM CARRINGTON	22 AY 01/07/15	<i>Survey Type: MANUAL</i> NOTTI NGHAM	
6	Suburban Area (PPS6 Out of Cer Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i> SE-03-D-01 BLOCK OF SAINT LAWRENCE ROAD SHEFFIELD	22 <i>23/06/15</i>	<i>Survey Type: MANUAL</i> SHEFFIELD	
	Suburban Area (PPS6 Out of Cer Residential Zone	ntre)		

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.

Survey Type: MANUAL

10 *21/06/23* 

Total No of Dwellings:

Survey date: WEDNESDAY

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### TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL TOTAL VEHICLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 2.16

	ARRIVALS				DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	6	25	0.073	6	25	0.113	6	25	0.186
08:00 - 09:00	6	25	0.066	6	25	0.113	6	25	0.179
09:00 - 10:00	6	25	0.146	6	25	0.139	6	25	0.285
10:00 - 11:00	6	25	0.106	6	25	0.166	6	25	0.272
11:00 - 12:00	6	25	0.119	6	25	0.106	6	25	0.225
12:00 - 13:00	6	25	0.079	6	25	0.093	6	25	0.172
13:00 - 14:00	6	25	0.113	6	25	0.126	6	25	0.239
14:00 - 15:00	6	25	0.132	6	25	0.106	6	25	0.238
15:00 - 16:00	6	25	0.132	6	25	0.126	6	25	0.258
16:00 - 17:00	6	25	0.159	6	25	0.086	6	25	0.245
17:00 - 18:00	6	25	0.139	6	25	0.106	6	25	0.245
18:00 - 19:00	6	25	0.079	6	25	0.066	6	25	0.145
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.343			1.346			2.689

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:	10 - 40 (units: )
Survey date date range:	01/01/10 - 21/06/23
Number of weekdays (Monday-Friday):	6
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 show. 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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### TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL CYCLISTS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	6	25	0.000	6	25	0.013	6	25	0.013	
08:00 - 09:00	6	25	0.007	6	25	0.033	6	25	0.040	
09:00 - 10:00	6	25	0.007	6	25	0.007	6	25	0.014	
10:00 - 11:00	6	25	0.007	6	25	0.013	6	25	0.020	
11:00 - 12:00	6	25	0.000	6	25	0.000	6	25	0.000	
12:00 - 13:00	6	25	0.007	6	25	0.000	6	25	0.007	
13:00 - 14:00	6	25	0.000	6	25	0.000	6	25	0.000	
14:00 - 15:00	6	25	0.000	6	25	0.007	6	25	0.007	
15:00 - 16:00	6	25	0.013	6	25	0.013	6	25	0.026	
16:00 - 17:00	6	25	0.007	6	25	0.007	6	25	0.014	
17:00 - 18:00	6	25	0.013	6	25	0.000	6	25	0.013	
18:00 - 19:00	6	25	0.026	6	25	0.000	6	25	0.026	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.087			0.093			0.180	

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.

## Licence No: 258601

# TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL VEHICLE OCCUPANTS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	6	25	0.093	6	25	0.152	6	25	0.245	
08:00 - 09:00	6	25	0.086	6	25	0.166	6	25	0.252	
09:00 - 10:00	6	25	0.146	6	25	0.172	6	25	0.318	
10:00 - 11:00	6	25	0.139	6	25	0.205	6	25	0.344	
11:00 - 12:00	6	25	0.139	6	25	0.126	6	25	0.265	
12:00 - 13:00	6	25	0.119	6	25	0.106	6	25	0.225	
13:00 - 14:00	6	25	0.132	6	25	0.146	6	25	0.278	
14:00 - 15:00	6	25	0.185	6	25	0.146	6	25	0.331	
15:00 - 16:00	6	25	0.199	6	25	0.172	6	25	0.371	
16:00 - 17:00	6	25	0.225	6	25	0.099	6	25	0.324	
17:00 - 18:00	6	25	0.159	6	25	0.152	6	25	0.311	
18:00 - 19:00	6	25	0.093	6	25	0.093	6	25	0.186	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			1.715			1.735			3.450	

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.

### Licence No: 258601

## TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL PEDESTRIANS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	6	25	0.007	6	25	0.040	6	25	0.047	
08:00 - 09:00	6	25	0.046	6	25	0.159	6	25	0.205	
09:00 - 10:00	6	25	0.060	6	25	0.079	6	25	0.139	
10:00 - 11:00	6	25	0.060	6	25	0.007	6	25	0.067	
11:00 - 12:00	6	25	0.053	6	25	0.066	6	25	0.119	
12:00 - 13:00	6	25	0.132	6	25	0.099	6	25	0.231	
13:00 - 14:00	6	25	0.046	6	25	0.093	6	25	0.139	
14:00 - 15:00	6	25	0.132	6	25	0.126	6	25	0.258	
15:00 - 16:00	6	25	0.152	6	25	0.132	6	25	0.284	
16:00 - 17:00	6	25	0.046	6	25	0.020	6	25	0.066	
17:00 - 18:00	6	25	0.086	6	25	0.066	6	25	0.152	
18:00 - 19:00	6	25	0.060	6	25	0.060	6	25	0.120	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.880			0.947			1.827	

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.

# Licence No: 258601

#### TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI - MODAL PUBLIC TRANSPORT USERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	6	25	0.000	6	25	0.026	6	25	0.026
08:00 - 09:00	6	25	0.000	6	25	0.060	6	25	0.060
09:00 - 10:00	6	25	0.007	6	25	0.013	6	25	0.020
10:00 - 11:00	6	25	0.007	6	25	0.020	6	25	0.027
11:00 - 12:00	6	25	0.013	6	25	0.007	6	25	0.020
12:00 - 13:00	6	25	0.013	6	25	0.033	6	25	0.046
13:00 - 14:00	6	25	0.020	6	25	0.000	6	25	0.020
14:00 - 15:00	6	25	0.007	6	25	0.007	6	25	0.014
15:00 - 16:00	6	25	0.007	6	25	0.000	6	25	0.007
16:00 - 17:00	6	25	0.060	6	25	0.000	6	25	0.060
17:00 - 18:00	6	25	0.026	6	25	0.000	6	25	0.026
18:00 - 19:00	6	25	0.013	6	25	0.000	6	25	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.173			0.166			0.339

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.

### TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI - MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 2.16

	ARRIVALS				DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00				2			2		
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	6	25	0.099	6	25	0.232	6	25	0.331
08:00 - 09:00	6	25	0.139	6	25	0.417	6	25	0.556
09:00 - 10:00	6	25	0.219	6	25	0.272	6	25	0.491
10:00 - 11:00	6	25	0.212	6	25	0.245	6	25	0.457
11:00 - 12:00	6	25	0.205	6	25	0.199	6	25	0.404
12:00 - 13:00	6	25	0.272	6	25	0.238	6	25	0.510
13:00 - 14:00	6	25	0.199	6	25	0.238	6	25	0.437
14:00 - 15:00	6	25	0.325	6	25	0.285	6	25	0.610
15:00 - 16:00	6	25	0.371	6	25	0.318	6	25	0.689
16:00 - 17:00	6	25	0.338	6	25	0.126	6	25	0.464
17:00 - 18:00	6	25	0.285	6	25	0.219	6	25	0.504
18:00 - 19:00	6	25	0.192	6	25	0.152	6	25	0.344
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.856			2.941			5.797

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.