

Archway Way, Caversham

Transport Statement

784-B030240-00001

Issue for Planning

**NatWest Trustee and Depositary Services as Trustee of Federated Hermes
Property Unit Trust**

December 2021

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1 INTRODUCTION

BRIEF

- 1.1 Tetra Tech has been commissioned by NatWest Trustee and Depositary Services as Trustee of Federated Hermes Property Unit Trust to prepare a Transport Statement in support of an Application for Prior Approval for change of use of building from offices and chiropractor (Use Class E) to form 4 residential apartments (Use Class C3).
- 1.2 This Transport Statement provides an audit of the existing transport conditions near the site, including a description of the local highway network and accessibility. It sets out the anticipated level of trip generation and the impact of the development on the local highway network.

REPORT STRUCTURE

- 1.3 The structure of this report is summarised below:
- Chapter 2 summarises National and Local Authority Policy with regards to transport and highways;
 - Chapter 3 provides a description of the site location and the local highway network;
 - Chapter 4 details the accessibility of the site by sustainable modes of transport;
 - Chapter 5 outlines the development proposal;
 - Chapter 6 considers the trip rates, trip generation and traffic assignment on the local highway network; and,
 - Chapter 7 summarises and concludes the report.

2 POLICY REVIEW

INTRODUCTION

- 2.1 This chapter of the Transport Statement reviews and analyses the relevant current and emerging integrated land use and transport planning policy and policy guidance in the context of the site and the proposals on a national and local level.

NATIONAL POLICY

National Planning Policy Framework

- 2.2 This document sets out the Government's planning policies for England and how these should be applied, providing a framework within which locally prepared plans for housing and other development can be produced. The update of NPPF was formally updated July 2021.
- 2.3 In regard to transport, NPPF promotes developments that promotes development where safe and suitable access to the site can be achieved for all users, where appropriate opportunities to promote sustainable transport modes have been considered within the masterplanning process.
- 2.4 Development should create places that are safe, secure and attractive and that minimise the scope for conflicts between pedestrians, cyclists, and vehicles. Furthermore, development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

National Planning Practice Guidance

- 2.5 The Government's National Planning Practice Guidance (NPPG) was launched on 6th March 2014 by the Department for Communities and Local Government, and updated July 2018.
- 2.6 NPPG provides 'Travel Plans, Transport Assessments and Statements in Decisions-Taking' guidance, advising on when transport assessments and transport statements are required, what they are and what they should contain.
- 2.7 Paragraph 6 sets the importance of the Travel Plans, Transport Assessments and Transport Statements saying that they can positively contribute to:
- Encouraging sustainable travel;
 - Lessening traffic generation and its detrimental impacts;
 - Reducing carbon emissions and climate impacts;
 - Creating accessible, connected, inclusive communities;
 - Improving health outcomes and quality of life;
 - Improving road safety; and

- Reducing the need for new development to increase existing road capacity or provide new roads.

LOCAL POLICY

Reading Borough Local Plan (2019)

- 2.8 Reading Borough Council's Local Plan sets out the policies for how Reading will develop, identifying the amount of development that will take places, the areas and sites where development is expected and where it will be restricted, as well as how planning applications will be decided. The plan covers the period up to 2036 and was adopted in November 2019.
- 2.9 Policy CC6 of the Local Plan relates to the accessibility and intensity of new developments, stating that any new development must be at a scale, density and intensity appropriate to that level of accessibility by walking, cycling and public transport to a range of services and facilities.
- 2.10 Policy TR1 focuses on achieving the transport strategy for Reading with new developments required to provide a commitment to implementing measures to promote and improve sustainable transport facilities, such as through provision to encourage walking, cycling and public transport, through agreed Travel Plans and safe routes to local facilities and services and other similar measures.
- 2.11 Policy TR3 states the access, traffic and highway-related requirements for new developments to be permitted. This includes the following;
- Any access and highway works should comply with the adopted standards of the Transport Authority;
 - The development should not have a material detrimental impact on the functioning of the transport network
 - The proposals should not be detrimental to the safety of users of the transport network including pedestrians and cyclists; and
 - The proposal would not generate regular movement of HGVs on unsuitable roads, or on roads without easy access to the Classified Highway Network.
- 2.12 Policy TR5 refers to car, cycle and electric vehicle charging for new developments. Car and cycle parking is required to be provided as appropriate to the accessibility of the locations within the Borough to sustainable transport facilities, particularly public transport. Policy TR5 also provides parking standards for electric vehicle charging points at new developments stating the following;
- All new houses with dedicated off-street parking should provide charging points;
 - Within communal car parks for residential or non-residential developments of at least 10 spaces, 10% of spaces should provide an active charging point.
- 2.13 Section 8.2 of the Local Plan provides a Strategy for Caversham and Emmer Green setting key principles to achieve in the area over the plan period. The transport focused key principles include enhanced pedestrian

and cycle links between central Caversham and Reading Town Centre, new developments to provide or contribute to infrastructure to adequately support the development and Park and Ride capacities to be sought on the A4155, A4074 and B481 corridors.

Reading Borough Local Development Framework: Revised Parking Standards and Design (2011)

- 2.14 Reading Borough Council's Revised Parking Standards and Design Document sets out the parking standards for new developments within the borough of Reading. The document was adopted in October 2011.
- 2.15 The parking standards for the borough of Reading operate on a four-zone system, given the principle that developments located close to public transport links and local centres will require less parking than equivalent development in less sustainable areas of the borough. The development site is located within Zone 2 as a Primary Core Area.
- 2.16 **Table 2.1** summarises the relevant parking standards for new residential developments within Zone 2 in the borough of Reading.

Table 2.1 Reading Borough Residential Parking Standards

Land Use	Required Car Parking Standards	Minimum Cycle Parking Standards	Motorcycle / Moped Parking Standards
C3 Dwelling – Flat 1-2 bed	1 space per unit	0.5 space per unit	Motorcycle parking will be required and will be considered on a case-by-case basis
C3 Dwelling – Flat 3+ bed	1.5 spaces per unit	1 space per unit	
Visitor Parking	1 space per 10 dwellings	-	

3 EXISTING CONDITIONS

INTRODUCTION

- 3.1 This chapter describes the site location and the local travel characteristics of the local highway network.

SITE LOCATION

- 3.2 The application site is located with the local centre of Caversham, a suburb of the town of Reading and to the immediate east of the St Martin's Centre, which is permitted for a mixed-use redevelopment under Application 140997.
- 3.3 The site is located on Archway Road, which connects to a double mini-roundabout to the north-east of the site with Gosbrook Road, South Street, A4155 Prospect Street and A4155 Church Street. The site's location within Caversham is shown at **Figure 3.1**.

Figure 3.1 Site Location and Local Highway Network



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LOCAL HIGHWAY NETWORK

- 3.4 The site is located adjacent Archway Road, which passes under an archway created by the building connecting to the St Martin's Centre car park.
- 3.5 Archway Road connects to Gosbrook Road and South Street to the north of the site via a mini roundabout. The mini roundabout forms part of a wider double-mini roundabout with the A4155 Church Street and the A4155 Prospect Street, located to the north-west of the site. Archway Road, Gosbrook Road and the double mini-roundabout are subject to a 30mph speed limit.
- 3.6 The A4155 Church Street and A4155 Prospect Street provide the primary route through the Local Centre of Caversham and are subject to a 30mph speed limit, ensuring low vehicle speeds throughout the Local Centre.
- 3.7 The A4155 Church Street continues west and south of the site, becoming the A4155 Bridge Street via a signalised junction and passes south over the River Thames into Reading Town Centre. The A4155 Prospect Street continues north out of Caversham providing a connection north-east towards Henley on Thames.
- 3.8 Within Reading, the A4155 connects south to the A329 Caversham Road accommodating vehicle trips to and from Reading Town Centre and the wider areas of Reading. The A329 continues further south, connecting to the A33 and onward connection to the M4 Motorway.

HIGHWAY SAFETY AUDIT

- 3.9 Personal Injury Accident (PIA) data has been obtained from 'Crashmap' for a five-year period from 2016 to 2020, comprising the most recent data freely released by the Department for Transport (DfT). 'Crashmap' uses data collected by the police regarding the occurrence of Personal Injury Accidents. This data is approved by the National Statistics Authority and report on by the DfT each year.
- 3.10 The severity of incidents has been classified as either 'slight,' 'serious' or 'fatal'. **Table 3.1** provides a summary of the 4 incidents recorded in the five-year period within the study area.

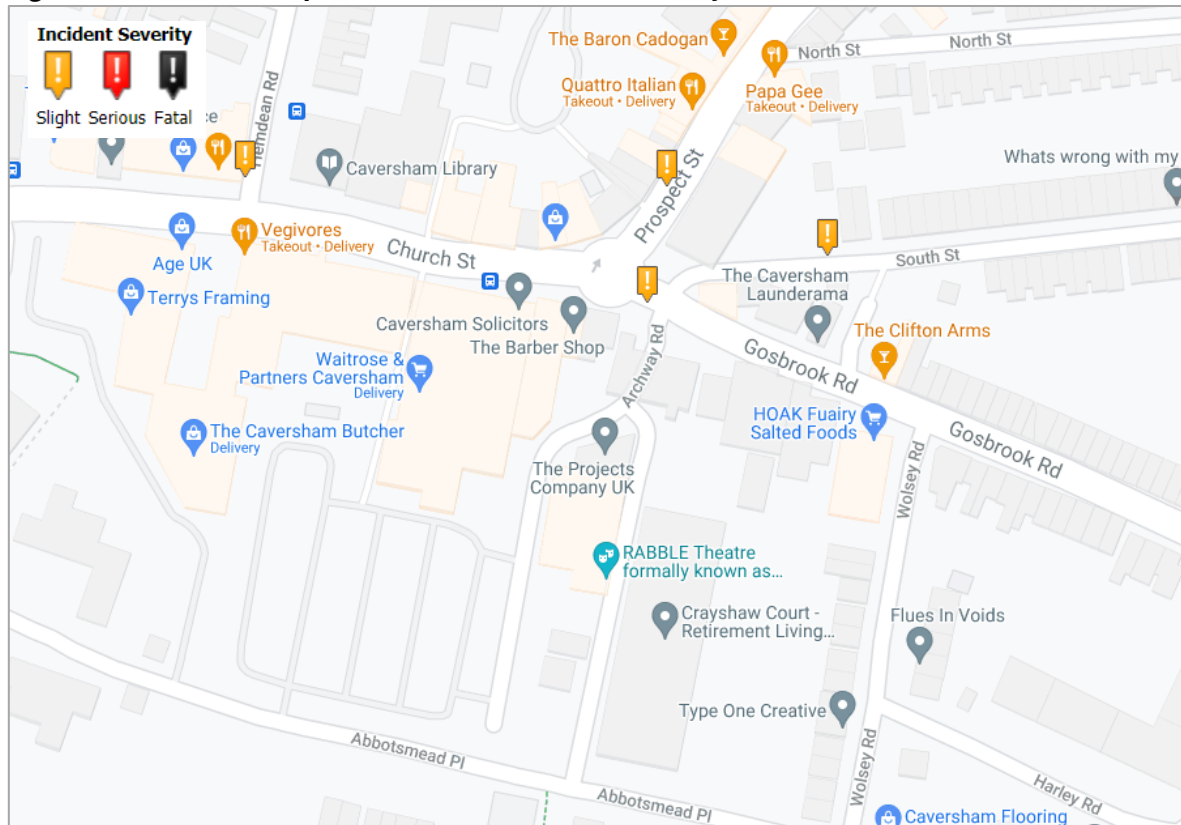
Table 3.1 Personal Injury Accident Data Summary

Severity	2016	2017	2018	2019	2020	Total
All Incidents						
Slight	1	1	0	2	0	4
Serious	0	0	0	0	0	0
Fatal	0	0	0	0	0	0
Total	1	1	0	2	0	4

- 3.11 **Table 3.1** shows that 4 incidents were classified as 'slight' and none classified as 'serious' or 'fatal'. The study area recorded an average of less than 1 incident per year, over the assessment period.

- 3.12 An extract from Crashmap is provided at **Figure 3.2**, to illustrate incident history over the past 5 years within the study area.

Figure 3.2 Crashmap Extract: Five Year Incident History



Source: Crashmap (2021)

- 3.13 No incidents were recorded on Archway Road, with isolated 'slight' incidents recorded in the wider study area. One 'slight' incident was recorded on the Archway Road / Gosbrook Road / South Street / A4155 Church Street / A4155 Prospect Street double mini-roundabout, with another incident recorded north of the roundabout in A4155 Prospect Street. No notable clusters have been identified.
- 3.14 Given the volume of traffic operating on the local highway network, the incidents recorded over a five year period do not indicate any inherent highway design fault that will be exacerbated by this development and cannot be attributed to the layout or geometry of the highway network.
- 3.15 On this basis, it is considered that there are no apparent issues with the highway network (located within the study area), which would need to be addressed or will be exacerbated by the proposed development.

4 SUSTAINABLE TRAVEL AUDIT

ACCESSIBILITY GUIDANCE

- 4.1 When considering the sustainability audit within the Transport Assessment, Tetra Tech reviewed the nationally available accessibility guidance prepared by central government and professional transport institutions for both walking and cycling.
- 4.2 The 2019 National Travel Survey (NTS) (published August 2020) identifies that walking is a favourable option for short trips, with the average person walking for an average time of 17 minutes. Given the IHT guidance that pedestrians travel at a speed of 1.4m/s, pedestrians are therefore likely to walk to areas within approximately 1.4km of their origin. The 2019 NTS (NTS0308 dataset) also identifies that 80% of all trips under 1.6km are made on foot, as are 31% of trips that are 1.6 to 3.2km.
- 4.3 The Institution of Highways and Transport (IHT) guidance document 'Planning for Walking' (April 2015) states that 80% of journeys shorter than 1.6km are made wholly on foot with 20% for journeys that are 1.6km to 3.2km long also being undertaken on foot.
- 4.4 Although the exact percentages reported by both bodies differ, both the National Travel Survey and IHT guidance come to a similar conclusion in that walking offers the opportunity to provide for shorter distance trips of up to 1.6km with up to a third of people prepared to walk up to a maximum of 3.2km. These walking distances have been used as a measure for what is an acceptable distance to access local facilities.
- 4.5 The 2019 National Travel Survey also covers cycling and identifies that an average person is willing to cycle for an average time of 23 minutes (6.1km) with 82% of all cycle trips taken up to 8km in distance and 94% trips that are up to 16km.
- 4.6 The Department for Transport; Local Transport Note 1/20 'Cycle Infrastructure Design' (2020) states that urban cycling speeds average between 10 and 15 mph (16 - 24kph) when on a flat route. It is therefore considered that 16kph is an appropriate average travel speed, given the time spent negotiating the urban realm (e.g., manoeuvring through junctions).
- 4.7 On this basis taking the journey time for the NTS and DfT cycling speeds, the average person is willing to cycle 23 minutes equating to 6.2km. In terms of 82% of trips being up to 8km, this would equate to a cycling time of 30 minutes.
- 4.8 The Institution of Highways and Transport (IHT) guidance document 'Planning for Cycling' (October 2015) states most cycling trips are for short distances, with 80% being less than 8km and with 40% being less than 3.2km. However, most trips by all modes are also short distances (67% are less than 8km, and 38% are less than 3.2km). The bicycle is therefore a potential mode for many of these trips.
- 4.9 Both the National Travel Survey and IHT guidance come to a similar conclusion in that cycling provides the opportunity to provide for shorter distance trips of up to 8km with many of the population prepared to

cycle 3.2km. These cycling distances have been used as a measure for what is an acceptable distance to access local facilities.

- 4.10 It should be noted that the Chartered Institution of Highways and Transport (IHT) guidance document ‘Buses in Urban Developments’ (January 2018) recommends a maximum walking distance to bus stops of 500 metres when accessing a core bus corridor with two or more high frequency services. The National Travel Survey (NTS) 2014 (September 2015), recorded that pedestrians will walk on average 624m to bus stops, when using a local bus as the main part of a local trip

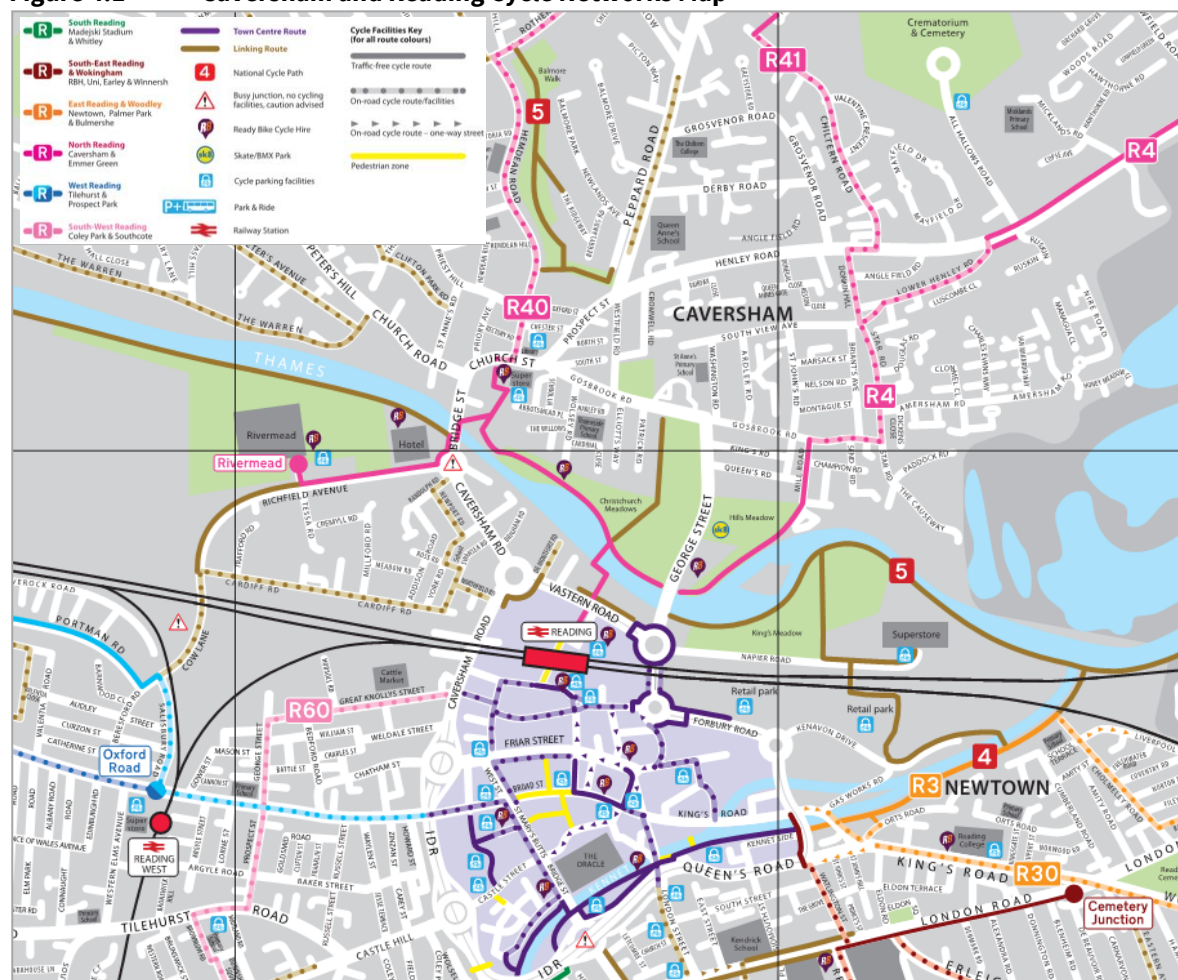
ACCESS BY WALKING

- 4.11 The site will benefit from a direct connection to the existing pedestrian network on Archway Road, where street-lit footways are provided on both sides of the carriageway. A dropped kerb crossing is provided across Archway Road. Gosbrook Road leads west into the Local Centre of Caversham, providing a number of local facilities and employment locations for future sites resident within a short walk of the site.
- 4.12 Pedestrian access is available to Reading Town Centre within an approximate 23 minute (1.8km) walk of the site, with pedestrian footways and shared use paths provided on the Caversham, Christchurch and Reading Bridges for access south into Reading.
- 4.13 Given the location of the site within the Local Centre of Caversham, a good level of pedestrian access is provided throughout with near continuous footways, crossings and pedestrianised areas offering a good level of pedestrian accessibility. The footways, footpaths, shared use paths, footbridge, and crossings form part of the pedestrian infrastructure network for Caversham and Reading, accommodating the safe and suitable movement of pedestrians throughout the area.
- 4.14 The site is well suited to encouraging future site residents to use walking as a primary mode when travelling to/from the site to local facilities, employment locations and leisure uses.

ACCESS BY CYCLING

- 4.15 Cycle access to the site will be gained from Archway Road, providing on-road cycle connections to the site access. Archway Road is subject to a 30mph speed limit, ensuring lower vehicle speeds which are generally favoured by cyclists as safer cycle environments are created.
- 4.16 The site is within proximity of the Caversham and Reading Cycle Networks, which provides a series of cycleways and crossing points that facilitate safe cycle movements. A map of the Caversham and Reading Cycle Networks provided at **Appendix A**.
- 4.17 A extract from the Caversham and Reading Cycle Network map is shown at **Figure 4.1**.

Figure 4.1 Caversham and Reading Cycle Networks Map



Source: Reading Borough Council

- 4.18 **Figure 4.1** shows that the local area benefits from extensive cycle infrastructure, that is conducive towards the safe and suitable movements of cyclists.
- 4.19 The entirety of Reading is accessible within a 30-minute cycle ride of the site, making cycling an attractive form of transport for future site users requiring access to key day to day facilities and employment opportunities.
- 4.20 The site is well suited to encouraging future site residents to use cycling when travelling to / from local facilities, employment locations and leisure uses.

ACCESS BY BUS

- 4.21 The nearest bus stops to the site are located on A4155 Church Street, A4155 Bridge Street and Hemdean Road within Caversham Local Centre. All stops can be accessed within a 5-minute walk (400m) of the site.
- 4.22 The A4155 Bridge Street and Hemdean Road stops are identified by a shelter with seating, timetable information and dedicated stopping spaces. The stops on A4155 Church Street are identified by a flag and pole with timetable information.
- 4.23 **Table 4.1** provides a summary of bus services within proximity of the site.

Table 4.1 Local Bus Services

Service	Route	Average Frequency		
		Day of Operation	First / Last Bus	Average Frequency
22	Caversham Heights – Caversham – Reading Town Centre	Mon - Fri	0552 / 2102	30 mins
		Sat	0622 / 2102	Hourly
	Reading Town Centre – Caversham – Caversham Heights	Mon - Fri	0534 / 2046	30 mins
		Sat	0606 / 2046	Hourly
23	Reading Town Centre – Caversham – Emmer Green – Reading Town Centre	Mon - Fri	0552 / 2352	30 mins
		Sat	0659 / 2352	Hourly
		Sun	0859 / 2252	
24	Reading Town Centre – Caversham – Emmer Green – Reading Town Centre	Mon - Fri	0516 / 2318	30 mins
		Sat	0606 / 2318	Hourly
		Sun	0849 / 1849	
27	Lower Caversham – Caversham – Reading Town Centre	Mon - Fri	0959 / 2314	Hourly
		Sat	1005 / 2314	
X39	Reading – Wallingford – Oxford	Mon - Fri	0614 / 1729	Hourly
		Sat	0619 / 1725	
	Oxford – Wallingford – Reading	Mon - Fri	0747 / 1750	
		Sat	0832 / 2018	
X40	Reading – Woodcote – Wallingford – Oxford	Mon - Fri	0624 / 2320	Hourly
		Sat	0724 / 2320	
		Sun	0905 / 2310	
	Oxford – Wallingford – Woodcote – Reading	Mon - Fri	0603 / 2235	
		Sat	0705 / 2235	
		Sun	0846 / 2245	
82	Caversham Road – Caversham – Sonning Common	Mon-Fri	0756	1 per day
	Sonning Common – Caversham – Caversham Road	Mon-Fri	1546	1 per day
145C	Woodcote – Caversham Heights – Henley on Thames	Mon-Fri	0734	1 per day
	Henley on Thames – Caversham Heights – Woodcote	Mon, Thu Fri	1525 1425	1 per day
146	Reading – Crays Pond	Tues	0951 / 1226	3 per day
	Crays Pond – Reading	Tues	0929 / 1131	3 per day
800	High Wycombe – Marlow – Henley – Shiplake – Reading	Mon - Fri	0816 / 1915	Hourly
		Sat	0816 / 1915	
		Sun	0905 / 1921	
	Reading – Shiplake – Henley – Marlow – High Wycombe	Mon - Fri	0816 / 1915	
		Sat	0816 / 1915	
		Sun	0905 / 1921	

4.24 **Table 4.1** demonstrates several services with a good level of frequency are available, with Reading Town Centre accessible within 10 minutes using a number of services available from these stops. The site is well connected by public transport to surrounding areas, such as Emmer Green, Lower Caversham, Henley on Thames, High Wycombe, Oxford, Reading.

4.25 Given the low walk time from the site to the bus stops (up to 5 mins / 400m), the frequency of services enables flexibility in the journey planning of future residents, to encourage use of public transport for all trip purposes.

ACCESS BY RAIL

- 4.26 Reading Railway Station is located 1.5km south of the site and accessible within a 19-minute walk, a 6-minute cycle and via the Number 25/X39/X40/800 bus services. Reading Railway Station benefits from services provided by Great Western Railway, CrossCountry, TfL Rail and South Western Railway.
- 4.27 Reading Station offers a high frequency of service to many destinations, with an average of 8 services per hour to London Paddington, 4 per hour to Newbury and 3 per hour to Didcot and Oxford. An average of 2 services per hour are also available Bristol, Plymouth, Basingstoke, London Waterloo and Redhill. Hourly services are provided to Gatwick Airport, Swansea, Cardiff, Penzance, Worcester and Manchester.
- 4.28 Reading Railway Station benefits from:
- 344 cycle parking spaces;
 - 1,275 car parking spaces with accessible spaces available;
 - Ticket office and ticket machines; and
 - Step free access to all platforms.
- 4.29 **Table 4.2** provides a summary of the rail services from Reading.

Table 4.2 Reading Rail Service Summary

Destination	Average Travel Time (minutes)	Average Frequency
Didcot	14	3 per hour
Newbury	23	4 per hour
Oxford	24	3 per hour
London Paddington	25	8 per hour
Basingstoke	27	2 per hour
Bristol	70	2 per hour
Redhill	71	2 per hour
London Waterloo	83	2 per hour
Gatwick Airport	84	1 per hour

- 4.30 The rail services available from Reading Railway Station provide a number of opportunities for future residents to commute to local and national employment hubs, with services also available for leisure trips without the use of private car.

SUMMARY

- 4.31 The site is in a highly accessible, sustainable location, offering numerous opportunities to access key services, facilities, and employment opportunities by walking, cycling and public transport. This has been evidenced by a review of site accessibility with the provision of local infrastructure.

5 PROPOSED DEVELOPMENT

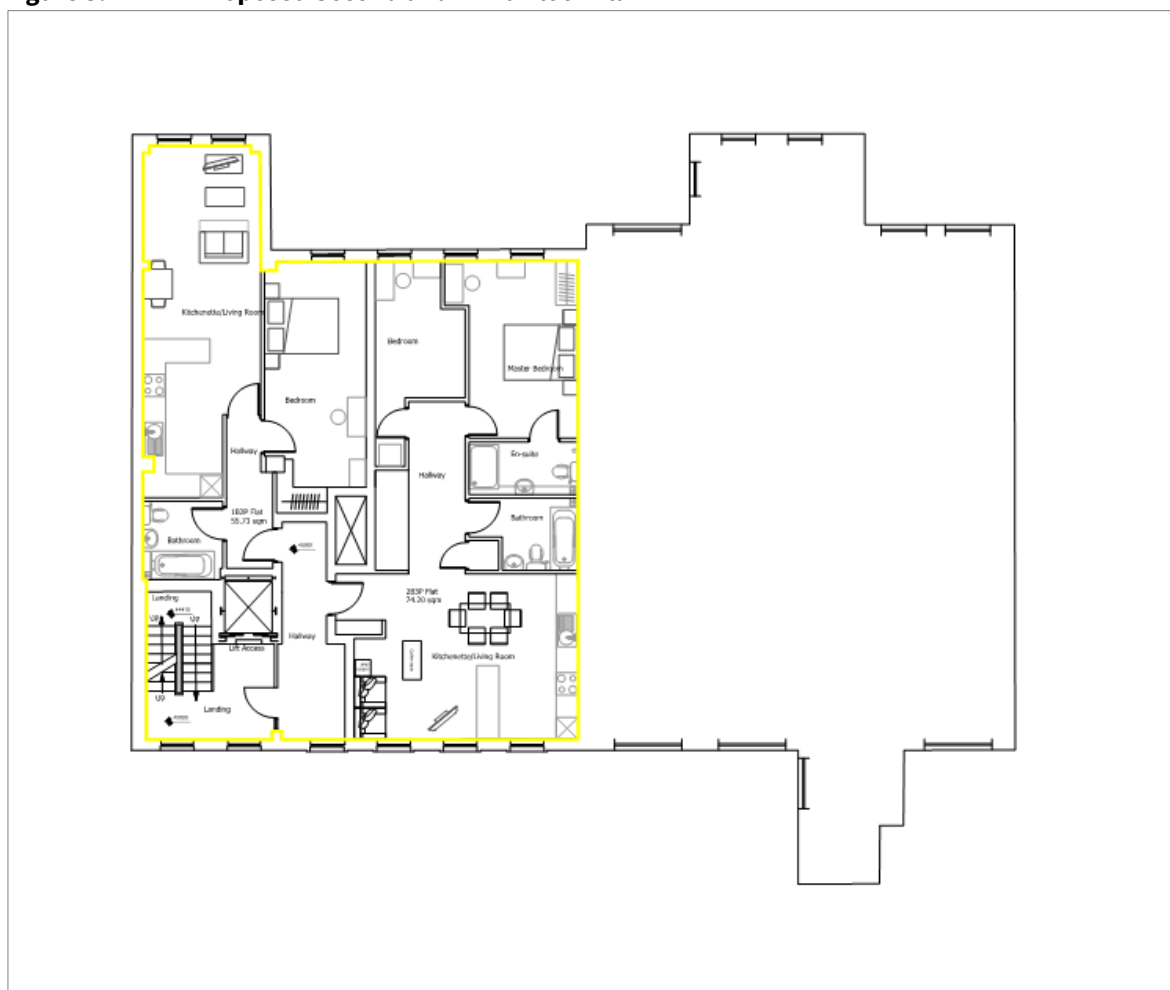
INTRODUCTION

- 5.1 This section of the Transport Statement introduces and outlines the development proposals for the site. It includes a description of the land use, proposed access arrangements and servicing strategy.

PROPOSED DEVELOPMENT

- 5.2 The proposed development will provide a change of use of building from offices and chiropractor (Use Class E) to form 4 residential apartments (Use Class C3) at Archway House in Caversham. The proposed second and third floor plan are shown in **Figure 5.1**, with the site proposals provided in full in **Appendix B**.

Figure 5.1 Proposed Second and Third Floor Plan



ACCESS STRATEGY

- 5.3 This Transport Statement has demonstrated high levels of accessibility to the site by sustainable non-car modes including walking, cycling and public transport.

- 5.4 Caversham Local Centre and the area surrounding the site is conducive to pedestrians and cyclists, with a permeable network allowing immediate access to the local pedestrian and cycle networks accessible via Archway Road. It is therefore acceptable that the site will operate as car-free and is in line with national and local policy on car-free developments.
- 5.5 Pedestrian access will be gained from Archway Road, with pedestrian footways lining either side of the carriageway and a dropped kerb crossings provided across Archway Road. Pedestrian infrastructure facilitates public transport trips, with pedestrians using the pedestrian network to access the bus stops along A4155 Church Street, A4155 Bridge Street and Hemdean Road. These stops are all within a 5 minute walk of the site.
- 5.6 The local pedestrian network provides access to car club spaces located along Rectory Road, approximately 240m (3 minute walk) from Archway House and operated by Co-Wheels. This will facilitate any irregular car trips that residents may require.
- 5.7 Cyclists will be accommodated on the Archway Road carriageway, which is considered conducive towards cycle movements given its 30mph speed limit. Its urbanised street character will also encourage low vehicular speeds, safe and considerate driving, providing opportunities for cyclist to connect into the local cycle network.
- 5.8 The location of the proposed pedestrian and cycle access is shown at **Appendix B**, cyclists will be permitted to walk with their bicycle within the site building to access the on-site cycle parking.

SERVICING AND DELIVERY STRATEGY

- 5.9 The service and delivery strategy will operate under the principles of the existing residential development immediately adjacent to the site, within land under the client's ownership. This permits vehicular access by service and delivery vehicles to the site travelling from the public highway to designated areas.

PARKING STRATEGY

- 5.10 The site will operate as car-free and that no allocated parking will be provided for residents, in accordance with national and local policy for car-free developments. All residents will be required to sign a legal obligation to not apply for any parking permits in connections with their occupation/lease.

Cycle Parking

- 5.11 Secure and covered will be provided on the first floor of the site, as shown in **Appendix B** and will be provided in accordance with the local parking standards.

6 TRIP RATE AND GENERATION

INTRODUCTION

- 6.1 This section of the report provides a review of the traffic forecast to be generated by the proposed development onto the local highway network.

TOTAL PERSON TRIP RATE AND GENERATION

- 6.2 The TRICS database has been interrogated to calculate peak hour trip generation. To provide a robust assessment of the potential impacts of the development traffic. The traditional peak hours of 08:00-09:00 in the morning period and 17:00-18:00 in the evening period will be used to calculate the peak hour trip generation for the development.
- 6.3 Total person trip rates for the development of the residential land use have been derived from the TRICS (v7.8.2) database using average values. The development proposals comprise change of use to provide 4 new residential dwellings at Archway House.
- 6.4 Total person trip rates have been obtained from the TRICS database against the following criteria:
- 03 Residential – C Flats Privately Owned;
 - London, Ireland and Northern Ireland removed;
 - Only weekday surveys; and
 - Only 'Town Centre' and 'Edge of Town Centre' surveys.
- 6.5 Survey sites have been identified and selected which share similar characteristics to the site in terms of size of the respective land uses, location and accessibility. The total person trips rates outputted by TRICS are provided **Appendix C** and summarised at **Table 6.1**.

Table 6.1 TRICS Total Person Trip Rates and Generation – 4 dwellings*

	AM Peak			PM Peak		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
Trip Rate (per 1 dwelling)	0.168	0.771	0.939	0.573	0.351	0.924
Trip Gen (4 dwellings)	1	3	4	2	1	4

*Subject to rounding

- 6.6 **Table 6.1** demonstrates that a development would generate 4 two-way person trips in the AM peak with 1 arriving and 3 departing and 4 in the PM peak would be generated with 2 arriving and 1 departing.
- 6.7 The proposed development is forecast to generate 4 additional two-way person trips in both the AM and PM peak periods.

- 6.8 Given the car-free operation of the site, trips generated will be undertaken on the sustainable transport network. The addition of 4 trips to the network will have an immaterial impact on local pedestrian, cycle and public transport movements, generating a negligible impact to their operational capacity.
- 6.9 Furthermore, assessments within this chapter do not consider the net impact of the development proposal. This is residential trips replacing movements associated with the consented Class E land use. The operation of the site will be immaterial, as it will be replacing trips already on the transport network.
- 6.10 There are no significant transport impacts associated with the proposed development of the site, with the residual cumulative impacts of the development not severe. The site is well located to accommodate a car free development, with safe and suitable sustainable transport infrastructure provided to accommodate future transport users.

7 SUMMARY AND CONCLUSION

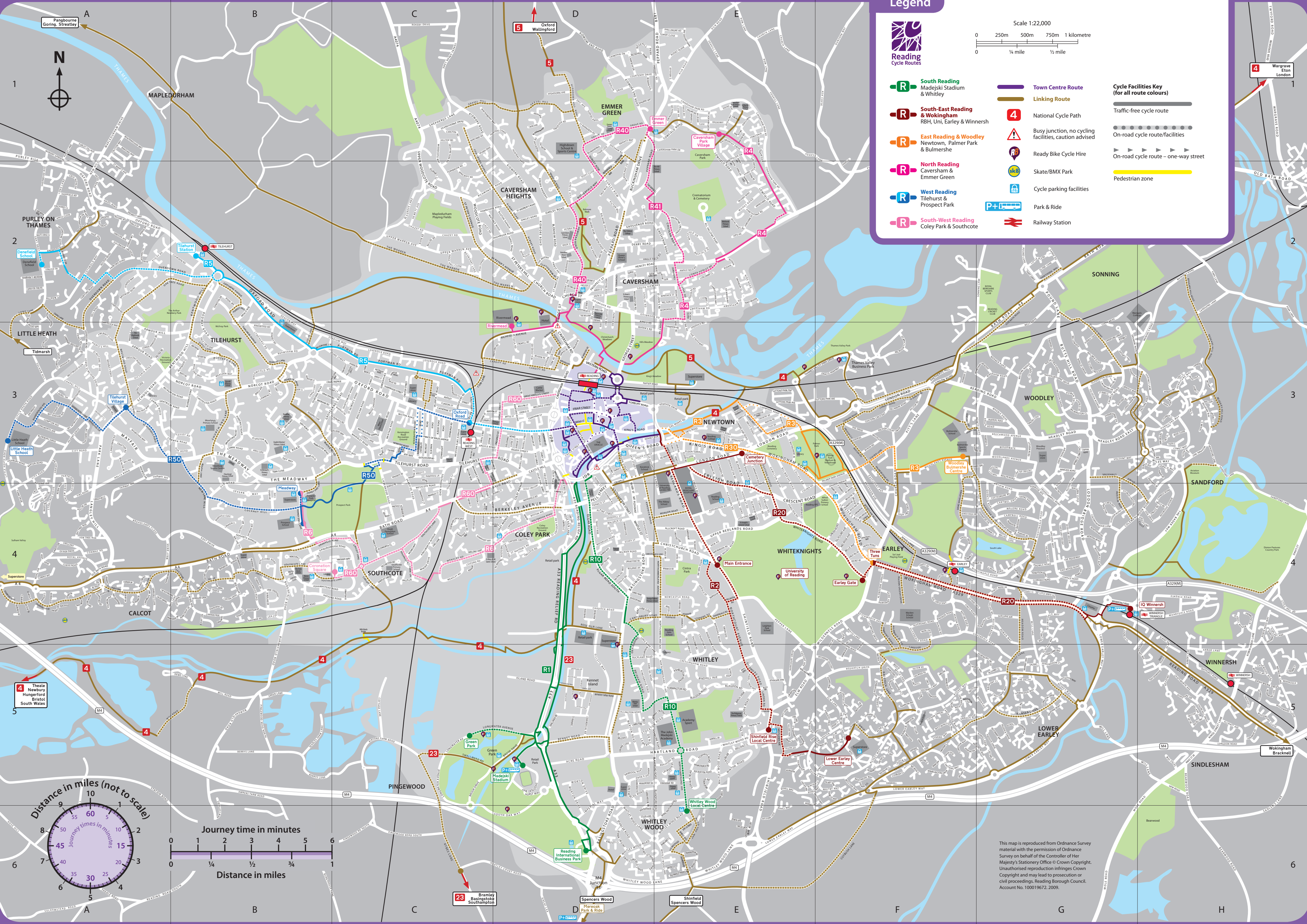
SUMMARY

- 7.1 Tetra Tech has been commissioned by NatWest Trustee and Depositary Services as Trustee of Federated Hermes Property Unit Trust to prepare a Transport Statement in support of an Application for Prior Approval for change of use of building from offices and chiropractor (Use Class E) to form 4 residential apartments (Use Class C3).
- 7.2 The application site is located within Caversham, a suburb of the town of Reading and to the immediate east of the St Martin's Centre, which is permitted for a mixed-use redevelopment under Application 140997.
- 7.3 An audit of personal injury accident data has been undertaken and has found no cause for concern that the arrangement of the local highway network is not seen as a contributing factor to the recorded accidents.
- 7.4 The site is located within a sustainable location in respect to the services and facilities located within the local centre of Caversham and in respect to the good level of accessibility to public transport. The site offers the potential for the majority of trips generated by the site to be made by sustainable, non-car modes.
- 7.5 The proposed development is forecast to generate 4 additional two-way person trips in both the AM and PM peak periods. Given the car-free operation of the site, trips generated will be undertaken on the sustainable transport network. The addition of 4 trips to the network will have an immaterial impact on local pedestrian, cycle or public transport movements, generating a negligible impact to its operational capacity. Trips generated will also replace trips generated by the site's extant Class E land use, with this proposal not generating a severe impact to local network operation, in terms of transport movements or safety.

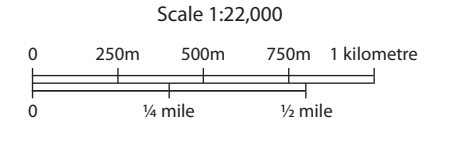
CONCLUSION

- 7.6 Evidence presented in this Transport Statement demonstrates that there are no significant transport impacts associated with the proposed development of the site. The residual cumulative impacts of the development are not severe, with safe and suitable provision provided to accommodate future transport users.
- 7.7 As a result, there is no transport or highways reasons why this application should not be approved in line with National Policy.

APPENDIX A – CAVERSHAM AND READING CYCLE NETWORKS MAP



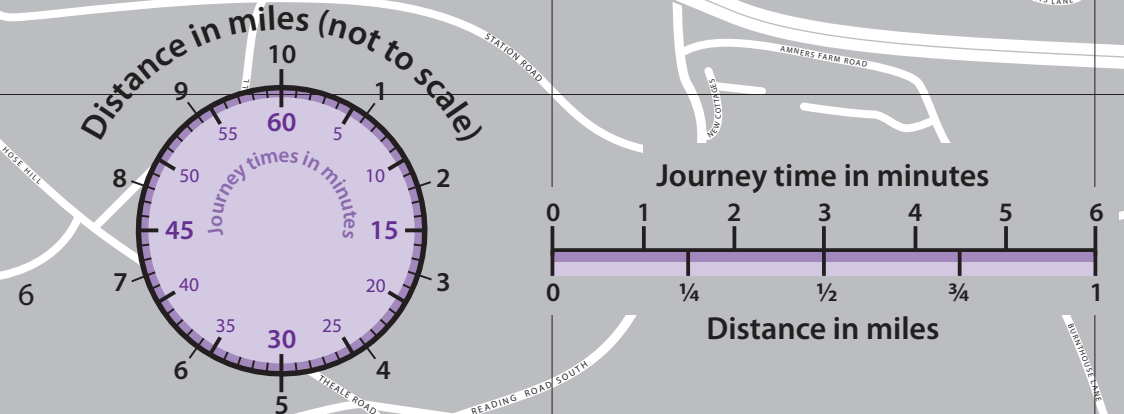
Legend



- South Reading**
Madejski Stadium & Whitley
- South-East Reading & Wokingham**
RBH, Uni, Earley & Winnersh
- East Reading & Woodley**
Newtown, Palmer Park & Bulmershe
- North Reading**
Caversham & Emmer Green
- West Reading**
Tilehurst & Prospect Park
- South-West Reading**
Coley Park & Southcote

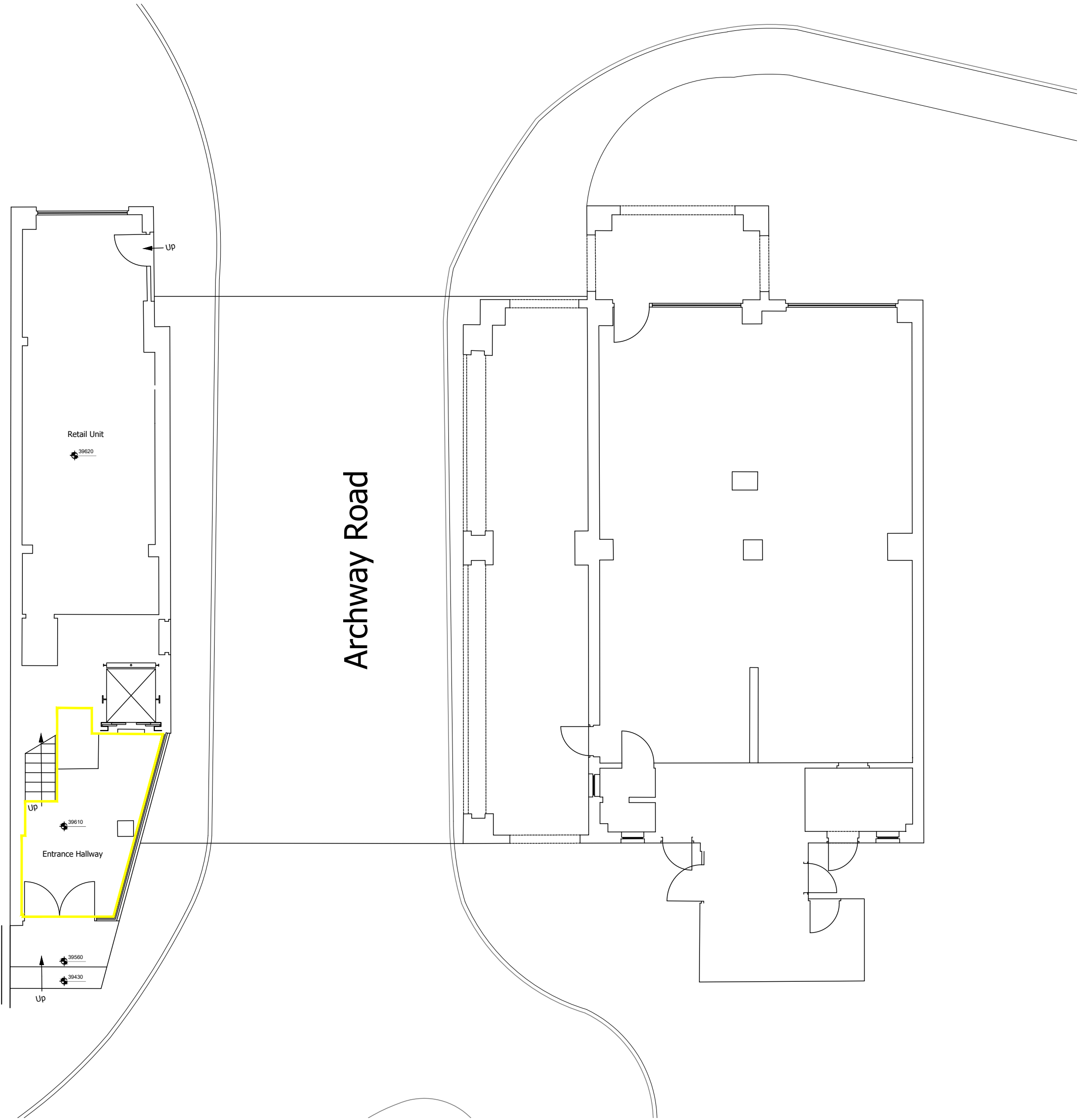
- Town Centre Route**
- Linking Route**
- 4** National Cycle Path
- Busy junction, no cycling facilities, caution advised
- Ready Bike Cycle Hire
- Skate/BMX Park
- Cycle parking facilities
- Park & Ride
- Railway Station

- Cycle Facilities Key (for all route colours)**
- Traffic-free cycle route
 - On-road cycle route/facilities
 - On-road cycle route – one-way street
 - Pedestrian zone



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APPENDIX B – PROPOSED SITE PLANS



GIA: 13.4sqm

PLANNING

Project			
St. Martin's Centre			
Caversham			
Drawing Title			
Archway House -			
Proposed Ground Floor Plan			
Date	Scale	Drawn by	Check by
Oct 21	1:100@A2	ROR	PN
Project No	Drawing No	Revision	
26985	11010	-	

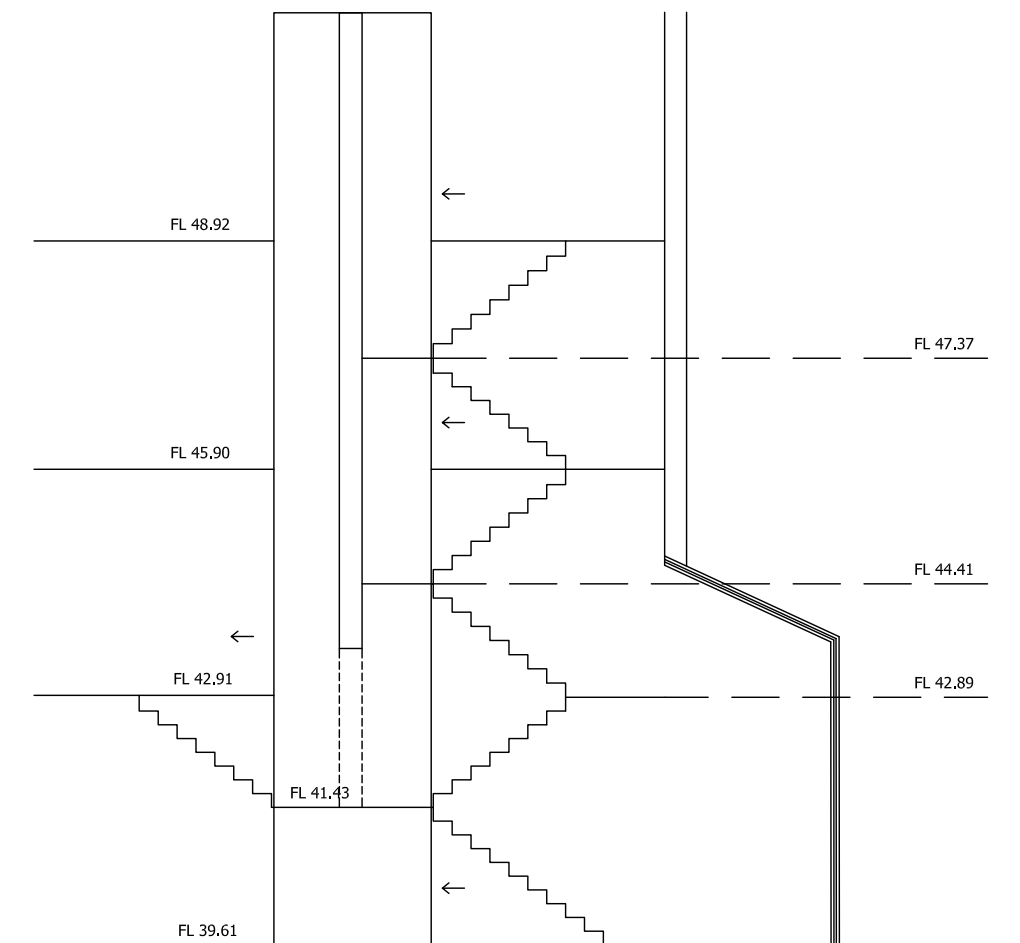
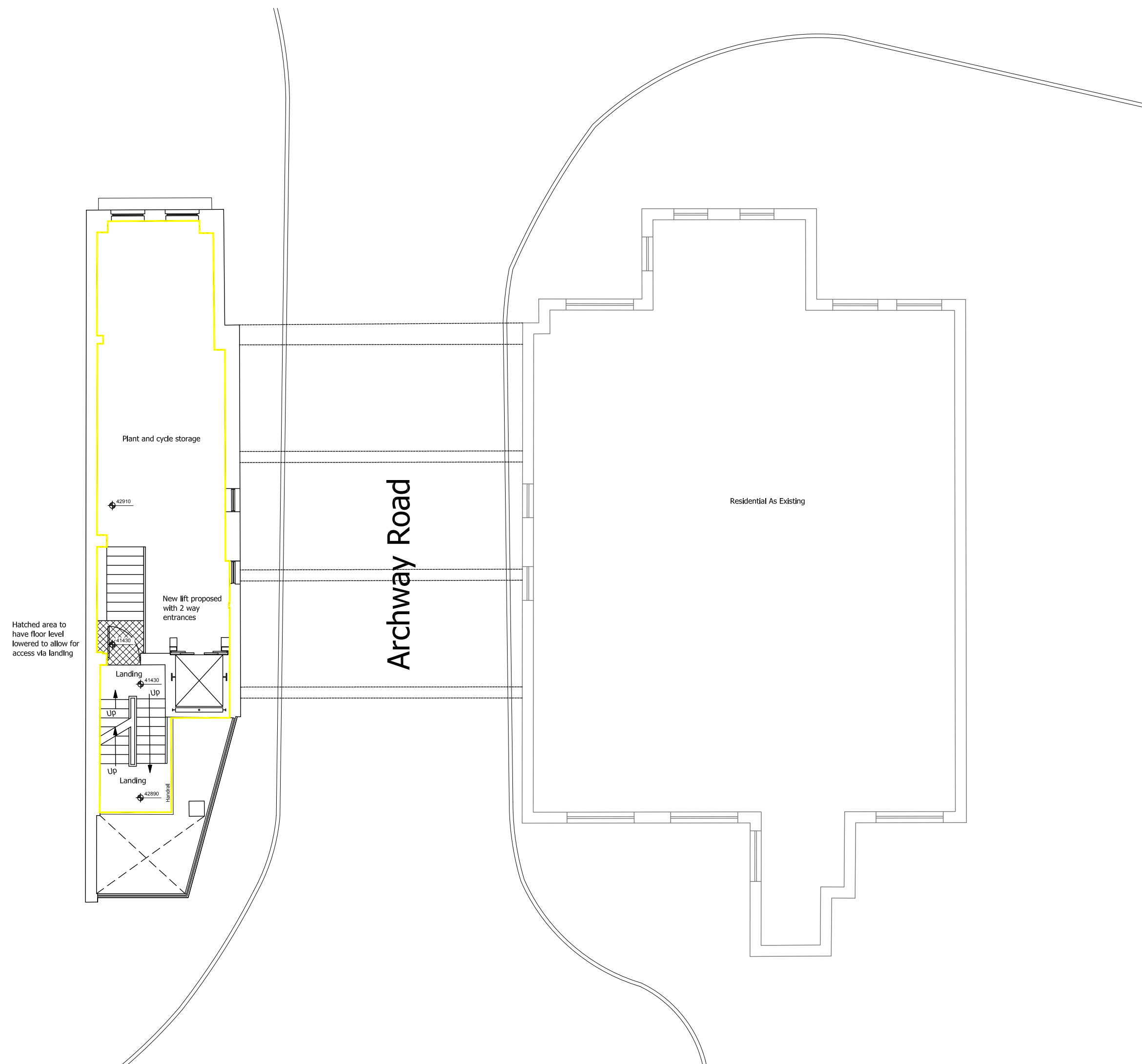


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Glasgow Leeds London Manchester Newcastle Reading Southampton



Outline section indicating floor levels

GIA: 50.6sqm

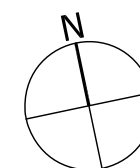
PLANNING

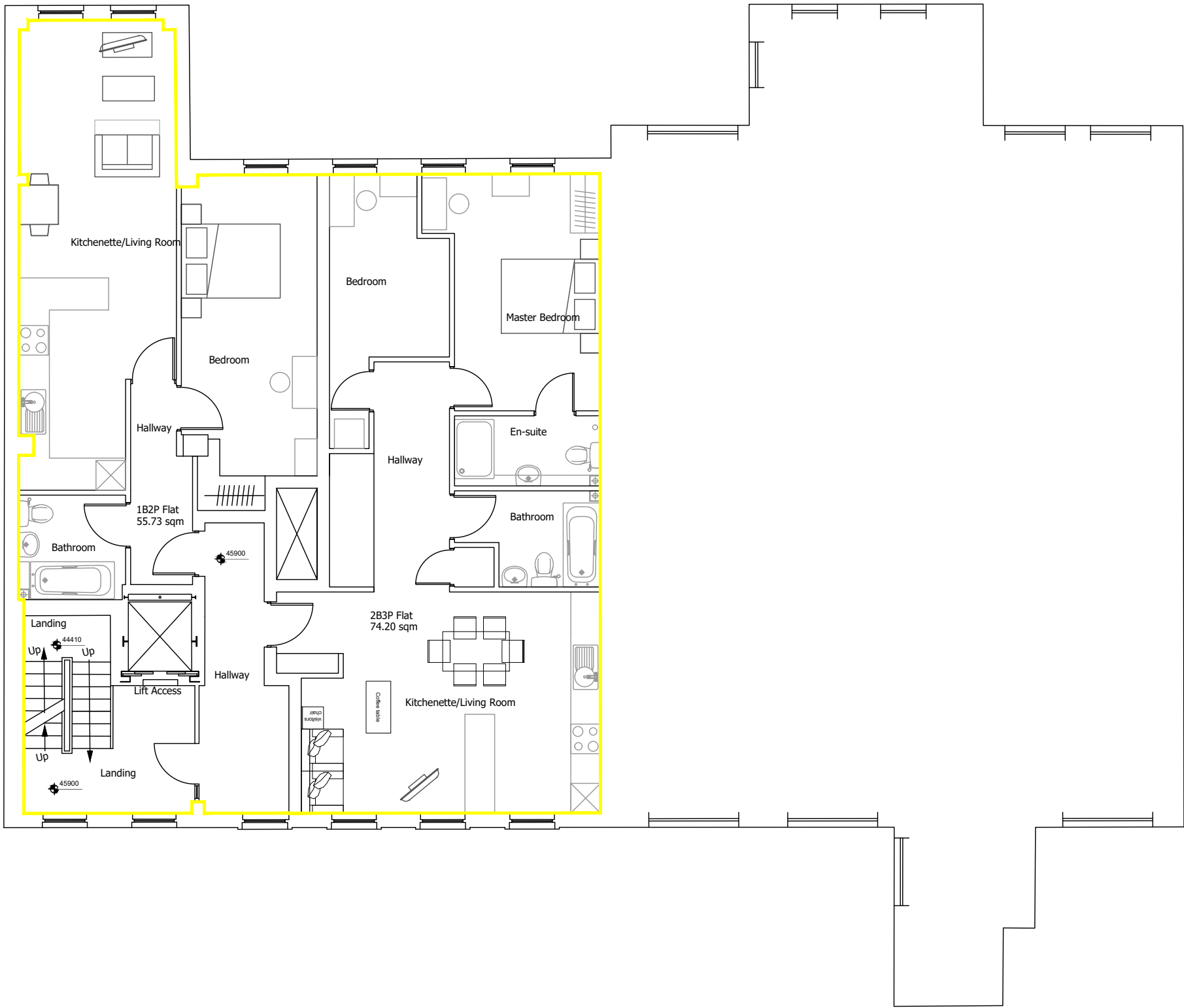
Project
St. Martin's Centre
Caversham

Drawing Title

Archway House -
Proposed First Floor Plan

Date	Scale	Drawn by	Check by
Oct 21	1:100@A2	ROR	PN
Project No	Drawing No	Revision	
26985	11011	-	





GIA: 161.1sqm

PLANNING

Project			
St. Martin's Centre			
Caversham			
Drawing Title			
Archway House -			
Proposed Second Floor Plan			
Date	Scale	Drawn by	Check by
Oct 21	1:100@A2	ROR	PN
Project No	Drawing No	Revision	
26985	11012	-	

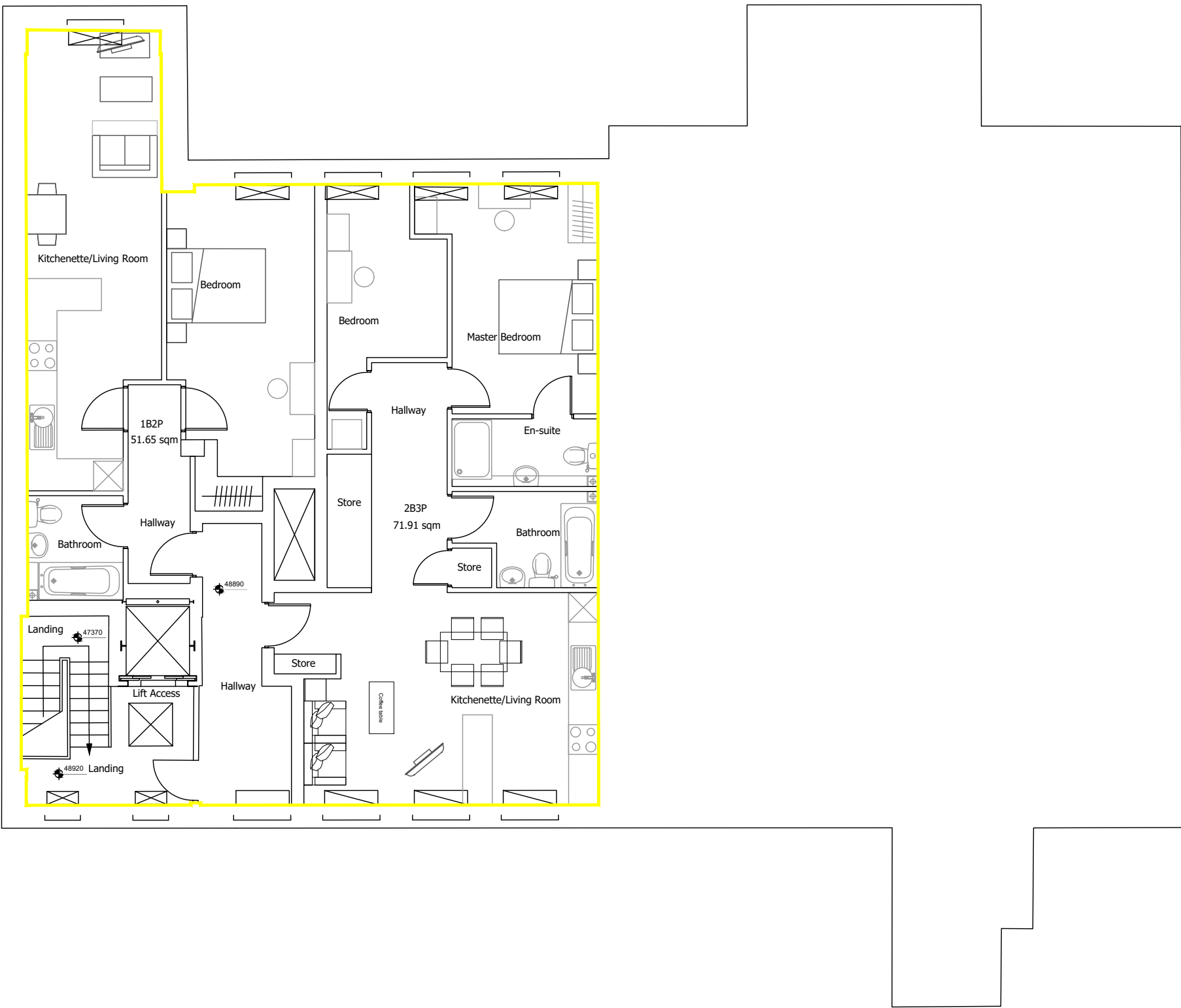
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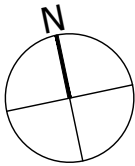
Offices at Birmingham Bristol Cambridge Cardiff Ebbsfleet Edinburgh
Glasgow Leeds London Manchester Newcastle Reading Southampton



GIA: 153.9.sqm

PLANNING

Project			
St. Martin's Centre			
Caversham			
Drawing Title			
Archway House -			
Proposed Third Floor Plan			
Date	Scale	Drawn by	Check by
Oct 21	1:100@A2	ROR	PN
Project No	Drawing No	Revision	
26985	11013	-	



APPENDIX C – TRICS OUTPUT

Calculation Reference: AUDIT-705103-210928-0929

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	EX ESSEX	1 days
09	NORTH	
	CB CUMBRIA	1 days
10	WALES	
	CO CONWY	1 days
11	SCOTLAND	
	SR STIRLING	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 6 to 48 (units:)
Range Selected by User: 6 to 50 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 25/09/19

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	1 days
Tuesday	1 days
Wednesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	4 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:

Town Centre	1
Edge of Town Centre	3

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

Selected Location Sub Categories:

Residential Zone	2
Built-Up Zone	2

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:

C3 4 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®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000 1 days

15,001 to 20,000 1 days

25,001 to 50,000 2 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 1 days

75,001 to 100,000 2 days

125,001 to 250,000 1 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 1 days

1.1 to 1.5 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.

Travel Plan:

No 4 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 4 days

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

LIST OF SITES relevant to selection parameters

1	CB-03-C-01 KING STREET CARLISLE	BLOCK OF FLATS		CUMBRIA
	Town Centre Built-Up Zone Total No of Dwellings:		40	
	Survey date: THURSDAY		12/06/14	Survey Type: MANUAL
2	CO-03-C-01 MOSTYN BROADWAY LLANDUDNO	BLOCKS OF FLATS		CONWY
	Edge of Town Centre Built-Up Zone Total No of Dwellings:		37	
	Survey date: MONDAY		26/03/18	Survey Type: MANUAL
3	EX-03-C-01 WESTCLIFF PARADE SOUTHEND-ON-SEA WESTCLIFF	FLATS		ESSEX
	Edge of Town Centre Residential Zone Total No of Dwellings:		6	
	Survey date: TUESDAY		22/10/13	Survey Type: MANUAL
4	SR-03-C-02 ROSEBERRY TERRACE STIRLING	FLATS		STIRLING
	Edge of Town Centre Residential Zone Total No of Dwellings:		48	
	Survey date: WEDNESDAY		18/06/14	Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.053	4	33	0.130	4	33	0.183
08:00 - 09:00	4	33	0.069	4	33	0.237	4	33	0.306
09:00 - 10:00	4	33	0.107	4	33	0.107	4	33	0.214
10:00 - 11:00	4	33	0.069	4	33	0.084	4	33	0.153
11:00 - 12:00	4	33	0.115	4	33	0.122	4	33	0.237
12:00 - 13:00	4	33	0.130	4	33	0.122	4	33	0.252
13:00 - 14:00	4	33	0.099	4	33	0.137	4	33	0.236
14:00 - 15:00	4	33	0.053	4	33	0.130	4	33	0.183
15:00 - 16:00	4	33	0.168	4	33	0.076	4	33	0.244
16:00 - 17:00	4	33	0.221	4	33	0.115	4	33	0.336
17:00 - 18:00	4	33	0.137	4	33	0.145	4	33	0.282
18:00 - 19:00	4	33	0.176	4	33	0.130	4	33	0.306
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.397			1.535			2.932

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: 6 - 48 (units:)
 Survey date range: 01/01/13 - 25/09/19
 Number of weekdays (Monday-Friday): 4
 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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.015	4	33	0.015	4	33	0.030
08:00 - 09:00	4	33	0.000	4	33	0.008	4	33	0.008
09:00 - 10:00	4	33	0.000	4	33	0.000	4	33	0.000
10:00 - 11:00	4	33	0.000	4	33	0.000	4	33	0.000
11:00 - 12:00	4	33	0.038	4	33	0.038	4	33	0.076
12:00 - 13:00	4	33	0.015	4	33	0.015	4	33	0.030
13:00 - 14:00	4	33	0.015	4	33	0.015	4	33	0.030
14:00 - 15:00	4	33	0.000	4	33	0.000	4	33	0.000
15:00 - 16:00	4	33	0.015	4	33	0.015	4	33	0.030
16:00 - 17:00	4	33	0.008	4	33	0.000	4	33	0.008
17:00 - 18:00	4	33	0.008	4	33	0.000	4	33	0.008
18:00 - 19:00	4	33	0.023	4	33	0.031	4	33	0.054
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.137			0.137			0.274

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.000	4	33	0.000	4	33	0.000
08:00 - 09:00	4	33	0.000	4	33	0.000	4	33	0.000
09:00 - 10:00	4	33	0.008	4	33	0.008	4	33	0.016
10:00 - 11:00	4	33	0.000	4	33	0.000	4	33	0.000
11:00 - 12:00	4	33	0.000	4	33	0.000	4	33	0.000
12:00 - 13:00	4	33	0.000	4	33	0.000	4	33	0.000
13:00 - 14:00	4	33	0.000	4	33	0.000	4	33	0.000
14:00 - 15:00	4	33	0.000	4	33	0.000	4	33	0.000
15:00 - 16:00	4	33	0.000	4	33	0.000	4	33	0.000
16:00 - 17:00	4	33	0.000	4	33	0.000	4	33	0.000
17:00 - 18:00	4	33	0.000	4	33	0.000	4	33	0.000
18:00 - 19:00	4	33	0.000	4	33	0.000	4	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:			0.008			0.008			0.016

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.008	4	33	0.008	4	33	0.016
08:00 - 09:00	4	33	0.008	4	33	0.031	4	33	0.039
09:00 - 10:00	4	33	0.008	4	33	0.023	4	33	0.031
10:00 - 11:00	4	33	0.000	4	33	0.031	4	33	0.031
11:00 - 12:00	4	33	0.000	4	33	0.008	4	33	0.008
12:00 - 13:00	4	33	0.000	4	33	0.000	4	33	0.000
13:00 - 14:00	4	33	0.008	4	33	0.000	4	33	0.008
14:00 - 15:00	4	33	0.008	4	33	0.000	4	33	0.008
15:00 - 16:00	4	33	0.015	4	33	0.023	4	33	0.038
16:00 - 17:00	4	33	0.015	4	33	0.000	4	33	0.015
17:00 - 18:00	4	33	0.008	4	33	0.008	4	33	0.016
18:00 - 19:00	4	33	0.008	4	33	0.008	4	33	0.016
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.086			0.140			0.226

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.046	4	33	0.176	4	33	0.222
08:00 - 09:00	4	33	0.107	4	33	0.344	4	33	0.451
09:00 - 10:00	4	33	0.130	4	33	0.137	4	33	0.267
10:00 - 11:00	4	33	0.099	4	33	0.115	4	33	0.214
11:00 - 12:00	4	33	0.145	4	33	0.206	4	33	0.351
12:00 - 13:00	4	33	0.168	4	33	0.183	4	33	0.351
13:00 - 14:00	4	33	0.130	4	33	0.160	4	33	0.290
14:00 - 15:00	4	33	0.061	4	33	0.160	4	33	0.221
15:00 - 16:00	4	33	0.282	4	33	0.107	4	33	0.389
16:00 - 17:00	4	33	0.298	4	33	0.145	4	33	0.443
17:00 - 18:00	4	33	0.168	4	33	0.206	4	33	0.374
18:00 - 19:00	4	33	0.244	4	33	0.176	4	33	0.420
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.878			2.115			3.993

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.008	4	33	0.076	4	33	0.084
08:00 - 09:00	4	33	0.053	4	33	0.290	4	33	0.343
09:00 - 10:00	4	33	0.092	4	33	0.107	4	33	0.199
10:00 - 11:00	4	33	0.099	4	33	0.153	4	33	0.252
11:00 - 12:00	4	33	0.122	4	33	0.153	4	33	0.275
12:00 - 13:00	4	33	0.107	4	33	0.107	4	33	0.214
13:00 - 14:00	4	33	0.107	4	33	0.160	4	33	0.267
14:00 - 15:00	4	33	0.153	4	33	0.107	4	33	0.260
15:00 - 16:00	4	33	0.176	4	33	0.168	4	33	0.344
16:00 - 17:00	4	33	0.160	4	33	0.130	4	33	0.290
17:00 - 18:00	4	33	0.244	4	33	0.107	4	33	0.351
18:00 - 19:00	4	33	0.160	4	33	0.122	4	33	0.282
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.481			1.680			3.161

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.000	4	33	0.015	4	33	0.015
08:00 - 09:00	4	33	0.000	4	33	0.061	4	33	0.061
09:00 - 10:00	4	33	0.031	4	33	0.053	4	33	0.084
10:00 - 11:00	4	33	0.046	4	33	0.031	4	33	0.077
11:00 - 12:00	4	33	0.046	4	33	0.023	4	33	0.069
12:00 - 13:00	4	33	0.076	4	33	0.069	4	33	0.145
13:00 - 14:00	4	33	0.031	4	33	0.046	4	33	0.077
14:00 - 15:00	4	33	0.038	4	33	0.031	4	33	0.069
15:00 - 16:00	4	33	0.038	4	33	0.031	4	33	0.069
16:00 - 17:00	4	33	0.061	4	33	0.023	4	33	0.084
17:00 - 18:00	4	33	0.099	4	33	0.031	4	33	0.130
18:00 - 19:00	4	33	0.046	4	33	0.008	4	33	0.054
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.512			0.422			0.934

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.000	4	33	0.038	4	33	0.038
08:00 - 09:00	4	33	0.000	4	33	0.046	4	33	0.046
09:00 - 10:00	4	33	0.000	4	33	0.008	4	33	0.008
10:00 - 11:00	4	33	0.015	4	33	0.023	4	33	0.038
11:00 - 12:00	4	33	0.000	4	33	0.015	4	33	0.015
12:00 - 13:00	4	33	0.023	4	33	0.008	4	33	0.031
13:00 - 14:00	4	33	0.000	4	33	0.000	4	33	0.000
14:00 - 15:00	4	33	0.015	4	33	0.000	4	33	0.015
15:00 - 16:00	4	33	0.008	4	33	0.008	4	33	0.016
16:00 - 17:00	4	33	0.015	4	33	0.008	4	33	0.023
17:00 - 18:00	4	33	0.053	4	33	0.000	4	33	0.053
18:00 - 19:00	4	33	0.015	4	33	0.000	4	33	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.144			0.154			0.298

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.000	4	33	0.053	4	33	0.053
08:00 - 09:00	4	33	0.000	4	33	0.107	4	33	0.107
09:00 - 10:00	4	33	0.031	4	33	0.061	4	33	0.092
10:00 - 11:00	4	33	0.061	4	33	0.053	4	33	0.114
11:00 - 12:00	4	33	0.046	4	33	0.038	4	33	0.084
12:00 - 13:00	4	33	0.099	4	33	0.076	4	33	0.175
13:00 - 14:00	4	33	0.031	4	33	0.046	4	33	0.077
14:00 - 15:00	4	33	0.046	4	33	0.031	4	33	0.077
15:00 - 16:00	4	33	0.046	4	33	0.038	4	33	0.084
16:00 - 17:00	4	33	0.076	4	33	0.031	4	33	0.107
17:00 - 18:00	4	33	0.153	4	33	0.031	4	33	0.184
18:00 - 19:00	4	33	0.061	4	33	0.008	4	33	0.069
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.650			0.573			1.223

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.061	4	33	0.313	4	33	0.374
08:00 - 09:00	4	33	0.168	4	33	0.771	4	33	0.939
09:00 - 10:00	4	33	0.260	4	33	0.328	4	33	0.588
10:00 - 11:00	4	33	0.260	4	33	0.351	4	33	0.611
11:00 - 12:00	4	33	0.313	4	33	0.405	4	33	0.718
12:00 - 13:00	4	33	0.374	4	33	0.366	4	33	0.740
13:00 - 14:00	4	33	0.275	4	33	0.366	4	33	0.641
14:00 - 15:00	4	33	0.267	4	33	0.298	4	33	0.565
15:00 - 16:00	4	33	0.519	4	33	0.336	4	33	0.855
16:00 - 17:00	4	33	0.550	4	33	0.305	4	33	0.855
17:00 - 18:00	4	33	0.573	4	33	0.351	4	33	0.924
18:00 - 19:00	4	33	0.473	4	33	0.313	4	33	0.786
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.093			4.503			8.596

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.015	4	33	0.076	4	33	0.091
08:00 - 09:00	4	33	0.053	4	33	0.176	4	33	0.229
09:00 - 10:00	4	33	0.076	4	33	0.084	4	33	0.160
10:00 - 11:00	4	33	0.053	4	33	0.046	4	33	0.099
11:00 - 12:00	4	33	0.053	4	33	0.061	4	33	0.114
12:00 - 13:00	4	33	0.107	4	33	0.084	4	33	0.191
13:00 - 14:00	4	33	0.031	4	33	0.069	4	33	0.100
14:00 - 15:00	4	33	0.038	4	33	0.099	4	33	0.137
15:00 - 16:00	4	33	0.122	4	33	0.046	4	33	0.168
16:00 - 17:00	4	33	0.115	4	33	0.084	4	33	0.199
17:00 - 18:00	4	33	0.084	4	33	0.076	4	33	0.160
18:00 - 19:00	4	33	0.092	4	33	0.053	4	33	0.145
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.839			0.954			1.793

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.000	4	33	0.008	4	33	0.008
08:00 - 09:00	4	33	0.000	4	33	0.015	4	33	0.015
09:00 - 10:00	4	33	0.008	4	33	0.000	4	33	0.008
10:00 - 11:00	4	33	0.015	4	33	0.015	4	33	0.030
11:00 - 12:00	4	33	0.000	4	33	0.008	4	33	0.008
12:00 - 13:00	4	33	0.000	4	33	0.008	4	33	0.008
13:00 - 14:00	4	33	0.015	4	33	0.023	4	33	0.038
14:00 - 15:00	4	33	0.000	4	33	0.008	4	33	0.008
15:00 - 16:00	4	33	0.008	4	33	0.000	4	33	0.008
16:00 - 17:00	4	33	0.031	4	33	0.015	4	33	0.046
17:00 - 18:00	4	33	0.000	4	33	0.008	4	33	0.008
18:00 - 19:00	4	33	0.000	4	33	0.000	4	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:			0.077			0.108			0.185

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	33	0.000	4	33	0.000	4	33	0.000
08:00 - 09:00	4	33	0.000	4	33	0.000	4	33	0.000
09:00 - 10:00	4	33	0.000	4	33	0.008	4	33	0.008
10:00 - 11:00	4	33	0.000	4	33	0.008	4	33	0.008
11:00 - 12:00	4	33	0.000	4	33	0.000	4	33	0.000
12:00 - 13:00	4	33	0.000	4	33	0.000	4	33	0.000
13:00 - 14:00	4	33	0.008	4	33	0.000	4	33	0.008
14:00 - 15:00	4	33	0.000	4	33	0.000	4	33	0.000
15:00 - 16:00	4	33	0.008	4	33	0.000	4	33	0.008
16:00 - 17:00	4	33	0.000	4	33	0.000	4	33	0.000
17:00 - 18:00	4	33	0.000	4	33	0.000	4	33	0.000
18:00 - 19:00	4	33	0.000	4	33	0.000	4	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:			0.016			0.016			0.032

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.