ADL TRAFFIC & HIGHWAYS

TRANSPORT ASSESSMENT

PURPOSE-BUILT STUDENT ACCOMMODATION (PBSA)

ROSEMARY STREET, CARDIFF

CNM ESTATES

Client: CNM Estates (East Bay) Ltd

Reference: ADL/AM/6764/08A

Date: December 2025

www.adltraffic.co.uk

REPORT CONTROL

Document:	Transport Assessment	**Client:**	
Project:	Rosemary Street, Cardiff	CNM Estates (East Bay) Ltd 4 First Floor 4 St. Georges Square New Malden KT3 4HG	
ADL Reference:	6764		

Primary Author	Ben Harnett	Initialled:	BH

Contributor	Andy Miles	Initialled:	AM

Review by	Andy Miles	Initialled:	AM

Issue	**Date**	**Status**	**Checked for Issue**
1	10.10.25	Draft (Work-in-Progress)	AM
2	13.11.25	Final	AM
3	08.12.25	Final – PAC submission	AM

CONTENTS

APPENDICES

1.0 SITE LOCATION

1.1 Site Location
1.2 Site and Surrounding Area

2.0 COLLISION DATA

2.1 Search Extent
2.2 Collision Reports

3.0 ACCESSIBILITY

3.1 Walking Isochrone Map
3.2 Local Amenities within 500m
3.3 Cycling Isochrone Map
3.4 City Centre Bus Map
3.5 Railway Station Map

4.0 PROPOSED DEVELOPMENT

4.1 Proposed Site Layout
4.2 Site Access and Visibility Splays

5.0 VEHICLE TRACKING ANALYSIS

5.1 Refuse Vehicle
5.2 Delivery Vehicle
5.3 Fire Tender

6.0 TRICS – STUDENT ACCOMODATION

1.0 INTRODUCTION

1.1 Purpose of Report

1.1.1 ADL Traffic & Highways Engineering Ltd (ADL) have prepared this Transport Assessment (TA) on behalf of the Client, CNM Estates to support an application for the construction of PBSA (purpose-built student accommodation) consisting of 295no. beds, and associated access and landscaping works at vacant land to the east of 'Cardiff Theatrical Services Ltd' off Rosemary Street, Cardiff, CF10 4TT.

1.1.2 This TA has been prepared in accordance with Cardiff Local Development Plan (2016), Planning Policy Wales, Active Wales and Technical Advice Note 18.

1.1.3 This Transport Assessment (TA) reviews the site location, accessibility to sustainable travel modes, development proposals, trip generation (based on TRICS) and parking assessment. The TA demonstrates that the proposed PBSA will not have a significant transport impact on the local highway network.

1.2 Relevant Planning Applications

Surrounding Context

- ***Cardiff Theatrical Services***

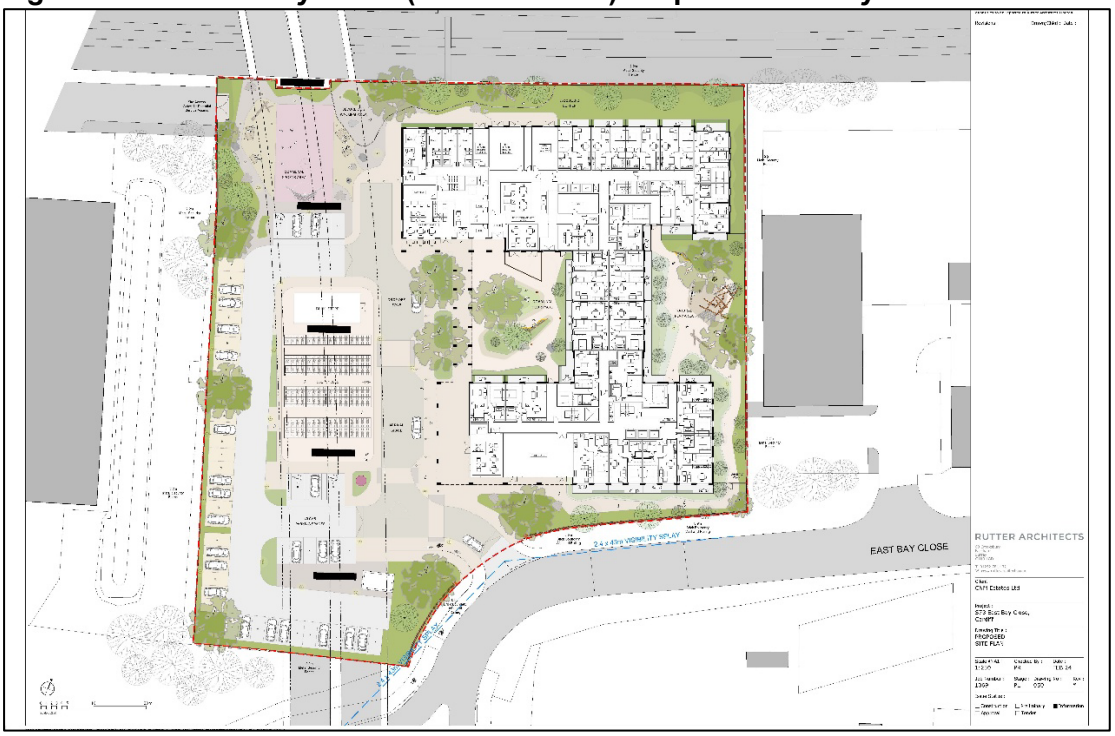
1.2.1 Planning application ref: 02/00722/C for the 'extension to warehouse area' at Cardiff Theatrical Services Ltd, Ellen Street Butetown, Cardiff (situated to the immediate west of the site) was granted on the 10.05.2002.

- ***East Bay Close***

1.2.2 Planning application ref: 22/01404/MJR for the 'Development of 353 dwellings with associated access, landscaping, drainage, parking and other associated works NMA – 24/00564 – Decided 25/04/2024. NMA to change the description to: Residential development with associated access, landscaping, drainage, parking and other associated works' was granted on the 20.06.2023.

1.2.3 Planning application ref: 24/00964/VAR for the 'Variation of Condition 2 (Approved Plans) of 22/01404/MJR to amend the proposed scheme as follows: 1) Reduce private residential units to 319, from the approved 353, and provide 85 serviced residential units' was granted on the 18.12.2024. As a part of this approved proposal, the layout comprised a parking arrangement to the west of the site (extending beyond the underpass) as shown within the following Figure 1A:

Figure 1A East Bay Close (24/00964/VAR) Proposed Site Layout



1.2.4 However, recently planning application ref: 25/02543/VAR for 'Variation of Conditions 2 (Approved Plans) of 24/00964/VAR to amend the approved scheme as follows: 1) Reduce the proposed developable area of the Site' was validated on the 04.11.2025. This has seen the reduction in developable area and additionally the reconfiguration of the car parking area and cycle parking at first floor level above the car parking.

1.2.5 For completeness, the below Figure 1B demonstrates the proposed site layout plan (ref: 25/02543/VAR) and therefore the area that has been reconciled:

Figure 1B Proposed Site Layout

Purpose Built Student Accommodation (PBSA) 'Car Free' Precedents

1.2.6 As previously mentioned, the proposal is for a 295 bed PBSA which will essentially be 'car free; in its nature with the exception of 4no parking spaces which will be occasionally used for visitors and to assist in student moving in and out days.

1.2.7 For completeness, and to understand the nature of other PBSA schemes that are 'car free' ADL have searched the Cardiff Council Planning Portal and found the following precedents:

- ***Vita Student, Bradley Court***

1.2.8 Under original planning application ref: 17/01418/MJR the 'Demolition of Bradley Court retaining 11 park place, redevelopment and change of use to student accommodation (use class sui generis) comprising studios and communal spaces together with ground floor restaurant (use class A3) and associated ancillary works' was approved on the 21.09.2018 at the site of Vita Student, 11 Park Pl, Cathays, Cardiff CF10 3FH.

1.2.9 The proposal was for a 366-bed student accommodation facility with a ground floor publicly accessible restaurant. The proposal was 'car free' due to its accessible location and provided 90no. sheltered long stay cycle parking spaces.

- ***The Wharf, between Schooner Way and Bute East Dock***

1.2.10 Planning application ref: 24/01635/FUL for the 'Erection of building (up to 10-storeys including upper and lower ground floors) for mixed use purposes including commercial space (for A1/A3) uses on upper ground floor level and living accommodation for students (sui generis) with associated accommodation and works' has been granted at committee subject to entering a S106 agreement as of the 12.06.2025. The site is situated between Schooner Way and Bute East Dock.

1.2.11 The proposal was to construct a 153-bed space with communal areas and a commercial unit on ground floor. The proposal included the provision of 2no. parking spaces and 142no. cycle parking spaces. It was stated that the car parking spaces would be '*for visitors / servicing / maintenance purposes which is within this maximum level. The spaces will not be allocated to occupants or staff'.*

- ***Longcross Court, Newport Road***

1.2.12 Planning application ref: 24/01238/FUL for the 'Demolition of existing building and erection of a new Purpose-Built Student Accommodation building (Use Class Sui Generis), ground floor commercial space (Use Classes A1, A2, A3, B1, D1 and D2) and associated works' was granted on the 22.01.2025.

1.2.13 The proposal was to construct 706no. bed spaces, 482sqm commercial / office space and 143sqm café. The proposal was 'car free' with the exception of 3no. disabled parking spaces, 1no. space for office, 1no. space for student, and 1no. space for café use. The proposal also included the provision of 344no. cycle parking spaces for students, 10no. spaces for office and café use.

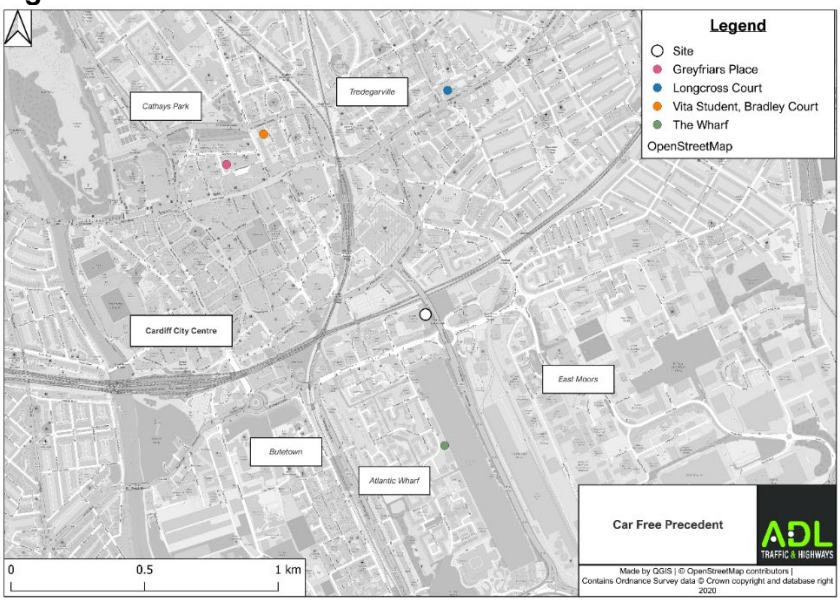
- ***Greyfriars Road, Cathays***

1.2.14 Planning application ref: 23/01174/FUL for the 'Erection of building (up to 28 storeys, including ground) for mixed use purposes, including commercial space (Use Classes A1, A2, A3, B1 and/or D1) (part ground floor) and residential accommodation for students comprised in a combination of cluster flats and studios (Sui Generis) with associated accommodation and works following demolition of existing buildings [AMENDED DESCRIPTION]' was granted on the 24.04.2024.

1.2.15 The proposal comprised 587no. bedspaces and approximately 285sqm commercial use on the ground floor. The proposal was 'car free' in nature with the provision of 202no. cycle parking spaces.

1.2.16 As shown, there have been various applications in the surrounding area for PBSA which are 'car free' in nature that are similar in nature to the proposal. For completeness, Figure 1C shows the location of the site in relation to these applications:

Figure 1C Car Free PBSA Precedents



1.3 Local Policy Context

Cardiff Local Development Plan 2006-2026 (adopted January 2016)

1.3.1 The adopted Cardiff Local Development Plan states the following:

> *"Densities will be maximised to make efficient use of city centre land in a highly accessible location. High-rise, high-density developments at appropriate locations within the site are encouraged and residential densities in excess of 100 dwellings per hectare are not considered unreasonable in principle."*

1.3.2 In terms of sustainable transport, Policy KP8 states the following:

> *"Development in Cardiff will be integrated with transport infrastructure and services in order to:*
>
> *i. Achieve the target of a 50:50 modal split between journeys by car and journeys by walking, cycling and public transport.*
> *ii. Reduce travel demand and dependence on the car;*
> *iii. Enable and maximise use of sustainable and active modes of transport;*
> *iv. Integrate travel modes;*
> *v. Provide for people with particular access and mobility requirements;*
> *vi. Improve safety for all travellers;*
> *vii. Maintain and improve the efficiency and reliability of the transport network;*
> *viii. Support the movement of freight by rail or water; and*
> *ix. Manage freight movements by road and minimise their impacts."*

1.3.3 With respect to managing transport impacts, detailed policy T5 states the following:

> *"Where necessary, safe and convenient provision will be sought in conjunction with development for:*
>
> *i. Pedestrians, including people with prams and/or young children;*
> *ii. Disabled people with mobility impairments and particular access needs;*
> *iii. Cyclists;*

iv. Powered two-wheelers;

v. Public transport;

vi. Vehicular access and traffic management within the site and its vicinity;

vii. Car parking and servicing;

viii. Coach parking; and

ix. Horse-riders."

1.3.4 This has been prepared to demonstrate that the proposals will not generate a significant impact on the local highway network. This will discuss the car free nature of the site and demonstrate that the site is located in a highly sustainable location in the vicinity of the City Centre and is therefore conducive to access by active and sustainable modes of travel.

Cardiff Local Transport Plan 2015-2020

1.3.5 Although the LTP sets out the high-level interventions needed to address transport issues during a 5-Year Programme (2015-2020), there are also medium- and longer-term aspirations up to 2030.

1.3.6 The strategic transport infrastructure delivery up to 2030 focuses on the need for development sites to be properly integrated with the network. The other key aims concentrate on requirements for active travel (walking and cycling), buses / rapid transit, park and ride, the rail network, and the road network.

Active Travel (Wales) Act 2013

1.3.7 There is a requirement for local authorities in Wales to have regard for integrated network maps in preparing transport policies and to secure that there are new and improved active travel routes and related facilities.

Planning Policy Wales (12th Edition)

1.3.8 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. The primary objective of PPW is to ensure that the planning system

contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales.

1.3.9 With respect to sustainable transport, PPW states at paragraph 4.1.8:

> *"The Welsh Government is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Delivering this objective will make an important contribution to decarbonisation, improving air quality, increasing physical activity, improving the health of the nation and realising the goals of the Well-being of Future Generations Act."*

1.3.10 To achieve this objective, it is stated that the planning system has a key role by facilitating developments which:

- *"are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car;*
- *are designed in a way which integrates them with existing land uses and neighbourhoods; and*
- *make it possible for all short journeys within and beyond the development to be easily made by walking and cycling."*

1.3.11 Paragraph 4.1.31 adds:

> *"Planning authorities must support active travel by ensuring new development is fully accessible by walking and cycling. The aim should be to create walkable neighbourhoods, where a range of facilities are within walking distance of most residents, and the streets are safe, comfortable and enjoyable to walk and cycle."*

1.3.12 Paragraph 4.1.34 goes on to state:

> *"In determining planning applications, planning authorities must ensure development proposals, through their design and supporting infrastructure, prioritise provision for access and movement by walking and cycling and, in doing so, maximise their contribution to the objectives of the Active Travel Act."*

Planning Policy Wales Technical Advice Note 18: Transport (TAN18, March 2007)

1.3.13 TAN18 is a material document in determining planning applications. Although the proposal is for PBSA the following regarding residential development, is stated:

> *"Settlement policies and residential allocations in development plans should therefore:*
>
> - *promote housing development at locations with good access by walking and cycling to primary and secondary schools and public transport stops, and by all modes to employment, further and higher education, services, shopping and leisure, or where such access will be provided as part of the scheme or is a firm proposal in the RTP;*
> - *ensure that significant new housing schemes contain ancillary uses including local shops, and services and, where appropriate, local employment;*
> - *include policies and standards on density, and parking to achieve higher residential densities in places with good public transport accessibility and capacity;*
> - *encourage residential layouts that incorporate traffic management proposals such as home zones, calming measures and 20-mph zones and where appropriate, layouts that allow public transport to pass through easily; and*
> - *require layouts and densities, which maximise the opportunity for residents to walk and cycle to local facilities and public transport stops."*

1.3.14 The site is suitably located in an area of excellent accessibility which will be able to support the density of residential units.

1.3.15 As previously mentioned, the proposal is to provide purpose-built student accommodation (PBSA). TAN18 states the following:

> *Some car free housing development may be appropriate in locations with good walking, cycling and public transport links and in areas where parking is controlled. On-site cycle and parking provision for those with disabilities will be required if such on-street parking cannot be provided. Planning obligations will have a role to play in ensuring residents do not own cars in such developments.*

Purpose-built student accommodation is an example where such agreements can be effective. It is essential that, prior to occupation, the future residents should be made aware of the car free status of the development. To ensure this, the role of travel plans, including personal travel planning initiatives such as MODUS20 should be considered by planning authorities.

Future Wales: The National Plan 2040

1.3.15 Future Wales: The National Plan 2040 is the national development framework, setting the direction for development in Wales to 2040. It provides an overarching development plan with a strategy for addressing key national priorities through the planning system. Planning decisions at every level of the planning system in Wales must be taken in accordance with the development plan as a whole.

1.3.16 In relation to transport, it is stated on page 51 that:

"Growth should be shaped around sustainable forms of transport and places that make us and the environment healthier".

1.3.17 Page 55 continues on to state that:

"Development will focus on active travel and public transport, allied with a reduced reliance on private vehicles".

1.3.18 In the supporting text for Policy 2 - Shaping Urban Growth and Regeneration – Strategic Placemaking, it is stated that

"To enable active and healthy lives, people should be able to easily walk to local facilities and public transport."

1.3.19 Policy 12 sets out Regional Connectivity. This states that:

"in urban areas our priorities are improving and integrating active travel and public transport."

1.3.20 In relation to Active Travel and developments it is stated:

> *"Active travel must be an essential and integral component of all new developments, large and small."*

1.3.21 In relation to travelling in Wales, on page 84 it is stated that

> *"The Welsh Government's aim is to reduce the need to travel, particularly by private vehicles, and support a modal shift to walking, cycling and public transport."*

1.3.22 On page 174, supporting Policy 36, it is stated that:

> *"Welsh Government wishes to see development built in sustainable locations that are supported by the active travel and public transport infrastructure and services needed to enable people to live active and healthy lives."*

1.3.23 The overall policy direction within Wales is to support development in sustainable locations conducive to supporting active travel by walking, cycling and public transport near to local facilities and amenities.

1.3.24 The site location is consistent with the policies and aims of Planning Policy Wales, Future Wales and is fully in accordance with the Welsh Government aspirations for where development should be proposed. The sites sustainability credentials and accessibility is reviewed in detail within Section 2.0 and 5.0 of this TS.

1.4 Scope of Study

1.4.1 Chapter 2.0 describes the BREEAM accreditation and how this TA addresses Tra 01.

1.4.2 Chapter 3.0 of this report describes the site and surrounding area, local highway network, and road traffic collision situation.

1.4.3 Chapter 4.0 of the report provides details on the accessibility of the site to non-car (sustainable) modes of transport.

1.4.4 Chapter 5.0 discusses the existing use of the site.

1.4.5 Chapter 6.0 describes the proposed development, including access arrangements, parking provision, and servicing arrangements.

1.4.6 Chapter 7.0 calculates the potential trip generation of the proposed student accommodation.

1.4.7 Chapter 8.0 describes mitigating measures which will help to ensure that the proposed development generates a minimal traffic impact.

1.4.8 Chapter 9.0 provides details on the start and end of term procedure for the proposed students.

1.4.9 Chapter 10.0 summarises and concludes the report.

2.0 BREEAM ASSESSMENT

2.1 BREEAM is the world's leading sustainability assessment method for masterplanning projects, infrastructure, and buildings. It recognises and reflects the value in higher performing assets across the built environment lifecycle, from new construction to in-use and refurbishment.

2.2 In terms of transport, BREEAM comprises *Tra 01 Transport Assessment and Travel Plan* (2 credits) and *Tra 02 Sustainable Transport Measures* (10 credits). The aim of *Tra* 01 and *Tra* 02 is to reward awareness of existing local transport and identify improvements to make it more sustainable.

2.3 The BREEAM Tra 01 'Transport Assessment and Travel Plan' assessment criteria are set out subsequently:

> *1. No later than Concept Design stage, undertake a site-specific transport assessment (or develop a travel statement) and draft travel plan, which can demonstrably be used to influence the site layout and built form.*

2.4 This report has been prepared for BREEAM purposes during the design stage to positively influence the layout from a transport and highways perspective. The aim is to promote sustainable travel to and from the site for all site users, thereby reducing the prevalence of single occupancy car travel.

> *2. The site-specific travel assessment (or statement) shall cover as a minimum:*
>
> *a. If relevant, travel patterns and attitudes of existing building or site users towards cycling, walking, and public transport, to identify relevant constraints and opportunities.*

2.5 As existing the site comprises vacant land with no current or former uses and therefore the trip generation to the site can be assumed as nil.

> *b. Predicted travel patterns and transport impact of future building or site users.*

2.6 Chapter 7.0 analyses the vehicular trip generation associated with the proposed development.

2.7 This TA concludes that the student accommodation would generate minimal vehicular trips.

c. Current local environment for pedestrians and cyclists, accounting for any age-related requirements of occupants and visitors.

2.8 Chapter 4.0 assesses the accessibility of the site by walking, cycling, and public transport. Based on student demographics, there are not considered to be any age-related constraints associated with the site.

d. Reporting of the number and type of existing accessible amenities within 500m of the site.

2.9 Chapter 4.0 provides details on the number, type, and location of BREEAM compliant amenities within 500m of the proposed building entrance (walking distance).

e. Disabled access accounting for varying levels and types of disability, including visual impairment.

2.10 Chapter 4.0 describes the accessibility of the site to those with reduced mobility and visual impairments.

f. Calculation of the existing public transport Accessibility Index (AI), see Methodology.

2.11 As the site is located within the vicinity of Cardiff City Centre, ADL have calculated the public transport accessibility index to be (11.97) and is provided in Appendix 3.6.

g. Current facilities for cyclists.

2.12 Chapter 4.0 describes the existing cycling infrastructure in the vicinity of the site including any National Cycle Network (NCN) routes.

3. Following a transport assessment (in accordance with the requirements set out in criteria 2), develop a site-specific travel plan that provides a long-term management strategy which encourages more sustainable travel. The travel plan includes measures to increase or improve more sustainable modes of transport and movement of people and goods during the building's operation see Methodology.

2.13 This report is accompanied by a BREEAM compliant Travel Plan which provides a range of hard and soft measures to encourage and facilitate non-car modes of transport. The TP has been prepared as per BREEAM *Tra 02* specifications and provides details outlining how the Plan would be implemented, monitored, and reviewed.

4. If the occupier is known, involve them in the development of the travel plan.

2.14 The Developer (CNM Estates) has been involved throughout the TA and TP process.

5. Demonstrate that the travel plan will be implemented and supported by the building's management in operation.

2.15 The Plan would be implemented and supported by the occupier in conjunction with ADL or another consultant. An appointed Travel Plan Coordinator (TPC) would have the responsibility of implementing the Plan.

3.0 SITE AND SURROUNDING AREA

3.1 Site Location

3.1.1 The site is located on vacant land which is situated adjacent to East Bay Close / Tyndall Street and is accessible via Rosemary Street. The site lies to the east of the city centre and to the north of the Cardiff Bay Area within the Butetown ward (W02000423: Cardiff 049). The site is located approximately 1km to the east of Cardiff Central Railway Station. The site location plan is provided as Appendix 1.1.

3.1.2 The site is bounded by Rosemary Street / the railway line to the north, the Central Link (A4234) to the east & East Bay Close approved development (application ref: 22/01404/MJR), East Bay Close / Tyndall Street roundabout to the south, and the 'Cardiff Theatrical Services Ltd' to the west. The site and surrounding area plan is provided as Appendix 1.2.

3.2 Local Highway Network

3.2.1 The site is accessible via Ellen Street which extends from Tyndall Street at a light-controlled crossroads where it becomes Rosemary Street towards the site. Tyndall Street extends to the northeast where it meets the East Bay Close roundabout and to the southwest extends as Herbert Street towards Callaghan Square / Tresillian Way (A4160) roundabout.

3.2.2 East Bay Close forms a northern approach to the Tyndall Street/East Tyndall Street roundabout and provides a cul-de-sac type access to the adjacent approved development, industrial units, a builder's merchant warehouse and an electricity substation.

3.2.3 Tyndall Street/East Tyndall Street roundabout is a grade separated roundabout junction. Tyndall Street forms the western arm, East Bay Close forms the northern arm, and East Tyndall Street forms the eastern arm and A4234 Central Link Road (on and off slips) form the southern arm of the roundabout.

3.2.4 Tyndall Street is a two-way local distributor road which runs in an east – west direction linking Herbert Street and Bute Street in the west to Tyndall Street/East Tyndall Street roundabout. Bute Street connects Cardiff City Centre to the north with Cardiff Bay to the south.

3.2.5 The A4234 Central Link Road runs from north – south connecting the A4160 Adam Street in the north to the Cardiff Bay area in the south.

3.2.6 East Tyndall Street connects the Tyndall Street/East Tyndall Street roundabout to East Tyndall Street/Ocean Way roundabout (also known as the Magic Roundabout) to the east. This roundabout provides access to Splott to the east, Cardiff City Centre to the north and Cardiff Docks to the south.

3.3 Accident Analysis

3.3.1 ADL have obtained accident data from https://www.crashmap.co.uk for the road network in the vicinity of the site during the latest available 5-year period, i.e. 2020 – 2024 inclusive. The Crashmap search extent is provided as Appendix 2.1.

3.3.2 Appendix 3.1 shows there have been two slight severity collisions near to the site on Tyndall Street. No accidents are reported during the study period occurring on Ellen Street or Rosemary Street. The Crashmap reports are provided as Appendix 2.2, and the collisions are summarised in Table 2A.

Table 2A Summary of Collisions

Ref	Date, Time	Severity	Conditions	Summary
ADL ref 1	10.06.24 08:00	Slight	Fine, Dry, Light	Car in act of turning right collides front with offside of cyclist.
ADL ref 2	07.05.23 23:50	Slight	Fine, Dry, Darkness	Car collides front with rear of taxi which is slowing down or coming to stop.
ADL ref 3	25.05.23 14:22	Slight	Fine, Dry, Light	Van moving off collides front with front of pedal cyclist who is moving off.

3.3.3 Table 2A shows that there have only been 2 accidents. As shown above, the collisions can be attributed to driver error rather than an underlying highway safety issue which would require mitigation. There are no trends or clusters of accidents suggestive of a road safety issue near to the site.

4.0 ACCESSIBILITY BY NON-CAR MODES OF TRANSPORT

4.1 Walking

Distance

4.1.1 According to Manual for Streets (MfS, 2007) walking offers the greatest potential to replace short car trips, particularly those under two kilometres. A walking isochrone map showing this extent is provided as Appendix 3.1.

4.1.2 Appendix 4.1 shows that Cardiff City Centre is within suitable walking distance of the site. This includes Cardiff Central Railway Station, Cardiff Bay, Cardiff Queen Street and surrounding local amenities.

Pedestrian Infrastructure

4.1.3 Ellen Street benefits from footways on both sides before continuing on only the southern side Rosemary Street towards the site. Ellen Street western side footway provides access to Smart Way pedestrian connection providing access to Smart Bridge towards Adam Street (A4160) and Cardiff City Centre. This bridge is provided with ramps to enable access for the disabled and cyclists. Pedestrians can use this route to walk to Cardiff City Centre.

4.1.4 Tyndall Street and East Tyndall Street have continuous footways on both sides measuring two to three metres wide. The junction of Tyndall Street with Ellen Street is provided with demand-controlled pedestrian crossing with dropped kerbs with tactile paving.

4.1.5 There is a staggered pedestrian crossing across Tyndall Street, east of the Ellen Street Junction, which is also demand controlled, with dropped kerbs and tactile paving across both sides of the carriageway, and on the pedestrian island.

4.1.6 There are dropped kerbs across Schooner Way at the junction with Tyndall Street, with pedestrian refuge islands on the Schooner Way approach.

4.1.7 There is a segregated cycleway/footway path on the north side of East Tyndall Street. Approximately 60 metres east of East Bay Close, there is a staggered toucan crossing across East Tyndall Street, with dropped kerbs and tactile paving.

4.1.8 The cycleway/footway on the north side of East Tyndall Street is continuous with that on the west side of Windsor Road. Approximately 50 metres north of the roundabout on Windsor Road, there is a raised table with parallel zebra crossing. This provides step-free access across Windsor Road.

4.1.9 There are dropped kerbs and tactile paving across East Tyndall Street, east of the roundabout. There is also a pedestrian refuge island. There are dropped kerbs, with pedestrian refuge island across Ocean Way, which is the southern arm of the roundabout.

4.1.10 The footways on Tyndall Street (fronting Capital Quarter) have two pedestrian crossings with dropped kerbs, tactile paving and central islands where pedestrians can wait to cross the other side. One of these pedestrian crossings is demand-controlled staggered crossing.

Accessibility to Local Amenities

4.1.11 According to Manual for Streets (MfS, 2007) walking offers the greatest potential to replace short car trips, particularly those under two kilometres. This is shown within the walking isochrone map included as Appendix 3.1.

4.1.12 Appendix 3.1 demonstrates that the area that is within desirable (500 metres), acceptable (one kilometre) and maximum walking distance (two kilometres). This would be considered the catchment in which residents / students could be expected to walk to/from the site for local journeys (i.e., commuting, shopping etc.).

4.1.13 Given the location of the site within close proximity to Cardiff City Centre, there are an abundance of local amenities within walking distance, and in particular within one kilometre. This includes the following:

- Bus Stops on Tyndall Street — 100 metres (2-minute walk)
- Coop on Tyndall Street — 300 metres (4-minute walk)
- Subway — 490 metres (6-minute walk)
- Lidl — 710 metres (9-minute walk)
- Adamsdown Post Office — 870 metres (12-minute walk)
- Cardiff Queen Street Station — 1.0km metres (13-minute walk)

4.1.14 Also within one kilometre walking distance are several schools (The Cardiff Academy, The Learning Tree Day Nursery) and places of worship (Jesus is Love Church, Adamsdown Gospel). Cardiff City Centre is within walking distance to the northwest of the site which has a range of high-street style shops and food outlets, as well as dentist, church, public houses, chemist, and leisure outlets.

4.1.15 Overall, it is demonstrated that the pedestrian infrastructure is very good, and the availability of local amenities within walking distance of the site is conducive to residents to walk for local journeys.

4.2 Disabled Accessibility

4.2.1 There are no relevant age-related requirements that have been considered for occupants of a student accommodation. Any children or old age visitors to the site would likely be escorted by friends or family.

4.2.2 The site will be suitably accessible to people with reduced mobility or those who are visually impaired; based on the existing infrastructure on the surrounding network.

4.2.3 The area surrounding the site will be suitably level / flush and would therefore be suitable for wheelchair users.

4.3 Local Amenities

4.3.1 There are several local amenities within easy walking distance of the site which will serve the students.

4.3.2 In accordance with the BREEAM standards for TA's and TP's, the number and type of accessible amenities located within 500m of the site have been outlined.

4.3.3 Importantly, it should be noted that the distances to these amenities are true "walking distances" from the building entrance using safe routes on footways and pedestrian crossings and not "as the crow flies". The BREEAM compliant amenities and the distances from the site are listed below:

Appropriate food outlet:

- Tyndall St Co-op 300 metres (4-min walk)

Access to cash:

- Tyndall St Co-op ATM 300 metres (4-min walk)

Access to an outdoor open space

- Bute East Dock Footpath 210 metres (3-min walk)

Access to a recreation or leisure facility for fitness or sports:

- InBalance Wellness 360 metres (5-min walk)

Publicly available postal facility:

- *None within 500m walking distance (although marginally on Schooner Way)*

Community facility:

- *None within 500m walking distance*

Over the counter services associated with a pharmacy:

- *None within 500m walking distance*

Public sector GP surgery or general medical centre:

- *None within 500m walking distance*

4.3.4 A plan of BREEAM compliant amenities within 500 metres of the site is shown as Appendix 3.2.

4.3.5 The provision of amenities within walking distance of the site negates the need for journeys to be made by private car and makes walking a convenient and attractive mode of travel for the majority of local journeys. It is also worth noting that Appendix 3.2 demonstrates only a small selection of the closest nearby amenities, there are additional amenities in the surrounding area.

4.4 Cyclists

Cycling Distance

4.4.1 According to the Department for Transport's *Cycle Infrastructure Design* Local Transport Note (1/20), 8km (i.e. 5mi) is considered to be a suitable distance to cycle for local journeys. As such, an isochrone map showing this extent has been provided as Appendix 3.3.

4.4.2 Appendix 3.3 demonstrates that a significant proportion of the greater Cardiff metropolitan area is within cycling distance of the site. There is therefore a large potential catchment for students to cycle for local journeys.

- ***Local Cycle Infrastructure***

4.4.3 Within the vicinity of the site there is extensive cycle infrastructure provided in the form of shared footway / cycleways with clear signage.

4.4.4 Furthermore, there is also Advanced Stop Lines (ASL) provided in the immediate vicinity of the site in locations such as at the Ellen Street / Tyndall Street and Schooner Way / Tyndall Street Junction.

- ***National Cycle Routes***

4.4.5 Cardiff is served by the National Cycle Network (NCN) which forms a complex and diverse network of on-road and traffic free, way-marked long distance cycle routes across the UK. Route 8 is a long-distance route between Cardiff and Holyhead (Anglesey) via Brecon, Builth Wells, Machynlleth, Porthmadog and Bangor. Route 8 benefits from some traffic-free sections, and is accessible on Penarth Road (approximately 1.4km to the west, i.e. a 8-minute bicycle journey) where it continues northwards along the River Taff towards Cardiff Central Railway Station.

4.4.6 NCN Route 88 is a proposed coastal route between Newport, Cardiff, Bridgend and Margam County Park. The Cardiff to Penarth section has recently benefited from a new bridge which has been installed which crosses the River Ely between Penarth and the International Sports Village at Cardiff Bay.

4.4.7 There are also extensive National Cycle Network Links (NCN Route 0) which provide a range of connections across Cardiff between residential areas and the main National Cycle Network Routes. The closest NCN Link to the site is situated on Bute Street and provides access towards Wood Street where it meets NCN Route 8.

4.4.8 It is concluded that the site is very well positioned amongst local and national cycle network routes, which is conducive to both students and staff travelling by cycle for local journeys.

4.5 Public Transport

Bus

4.5.1 According to the Chartered Institute for Highways and Transportation (CIHT) "Buses in Urban Development" report (2018), 500 metres is considered the preferred maximum walking distance to bus stops on core corridors with two or more high-frequency services.

4.5.2 The nearest bus stops to the site are located on Tyndall Street approximately 100m to the southwest of the site (i.e. a 2-min walk) which is accessible via the good quality footways and pedestrian light-controlled crossing. Based on Section 4.1, the pedestrian infrastructure between the site and this bus stop is good.

4.5.3 The bus stops are provided with bus flags and timetable information boards. The services are summarised in Table 4A below:

Table 4A Summary of Services

Service	Route	Frequency (Per Hour)		
		Mon-Fri	Sat	Sun
1 / 1A	City Circle (Clockwise)	2 / hr	1 / hr	-
2 / 2A	City Circle (Anti – clockwise)	2 / hr	1 / hr	-

Source: https://www.traveline.info/ as of 07.10.2025

4.5.4 Table 4A demonstrates that the site is well served by bus regular bus services which provide an extensive connection around Cardiff. The clockwise and anti-clockwise bus services provide a circular route via Cardiff Bay, Grangetown, Canton, CMet Llandaff, Heath Hospital, Albany Road, Tremorfa and Spoltt.

4.5.5 The bus services 1 and 2 also provide great connection for onward travel across Cardiff with the bus service providing access to Cardiff Central Railway Stations and additional bus stops with alternative bus services.

4.5.6 The Cardiff City Centre Bus Route Map with the site location for context, is provided as Appendix 3.4.

National Services (Coach)

4.5.7 For national services; National Express operators run inter-city services across the UK. National Express services are available at the Cardiff Coach Station, approximately 3.0km (12-minute cycle) from the site, respectively. These services would be used by students for journeys home to visit family / friends as well as the start / end of term.

Rail

4.5.8 Cardiff Central Railway Station is the principal railway station serving Cardiff, on the South Wales Main Line. The entrance is approximately 1.1km from the site, via Tyndall Street.

4.5.9 Cardiff Central Railway Station provides both intercity and local rail services. The station provides regular rail services to major destinations such as Carmarthen, Bridgend, Swansea, Nottingham, Manchester Picadilly, London Paddington and Portsmouth Harbour.

4.5.10 The station is equipped with 156 cycle parking spaces. Sheffield stands are provided at the east end of platforms 1 and 2, 3 and 4, 6 and 7. Sheffield stands are also located outside the southern entrance to the station. There is step-free access coverage to all platforms and the ticket office. The station benefits from as a Category A step-free accessibility.

4.5.11 Cardiff Queen Street Railway Station is also located approximately 1.0km from the site, via Smart Bridge and Churchill Way. The station is equipped with 36 cycle parking spaces. There is step-free access coverage to all platforms and the ticket office.

4.5.12 A plan of the train stations within the vicinity of the site is provided as Appendix 3.5.

4.6 Car Clubs

4.6.1 Car clubs are a pay-as-you-drive option for short term car use. This gives proposed site users the flexibility to use a car (as required), without the need to bring a car to site. There is one Car Club spaces within 1km of the site as outlined below:

- Enterprise Car Club (10 Churchill Way CF10 2HE): 1km

4.6.2 The Car Club Annual Report by CoMoUK (2021) states that each car club space, on average (in the UK), reduces car ownership locally by 20 cars.

4.7 BREEAM Public Transport Accessibility Index

4.7.1 In accordance with the BREEAM requirements, the existing public transport Accessibility Index (AI) has been calculated.

4.7.2 The AI measures the accessibility of the site, considering bus stops within 650m walking distance and railway stations within 1000m (1km) walking distance. The AI accounts for service frequency at each node between 08:00 – 19:00 (i.e., 11-hour period). The results are summarised in Table 4B.

4.7.3 As with local amenities, the distance to each node has been measured from the building entrance along a safe walking route (i.e. along suitable footways and using crossing points).

Table 5B BREEAM Accessibility Index

Transport Type	Location	Distance from Main Building Entrance (m)	Service	№ of Services 08:00 – 19:00	Average Frequency / hr.
Bus	Tyndall Street (opp 27)	165m	1 (City Centre)	10	0.91
			1A	4	0.36
Bus	Tyndall Street (o/s 31)	105m	2 (City Centre)	11	1.0
			2A	1	0.09
Bus	Herbert Street	650m	6	22	2.0
			304	10	0.90
			305	7	0.64
Train	Cardiff Queen Street	1.0km	Cardiff Bay	44	4.0
			Penarth	44	4.0
			Barry Island	31	2.82
			Cardiff Central	132	12.0
			Aberdare	22	2.0
			Pontypridd	97	8.82
			Treherbert	23	2.09
			Bargoed	43	3.90
			Rhymney	22	2.00
			Coryton	22	2.00
			Bridgend	9	0.82
Total					**50.35**
Accessibility Index Calculation					**11.97**

**Train frequency based on https://www.thetrainline.com/ counting direct services only to a terminus station (to avoid double counting) on a normal weekday.*

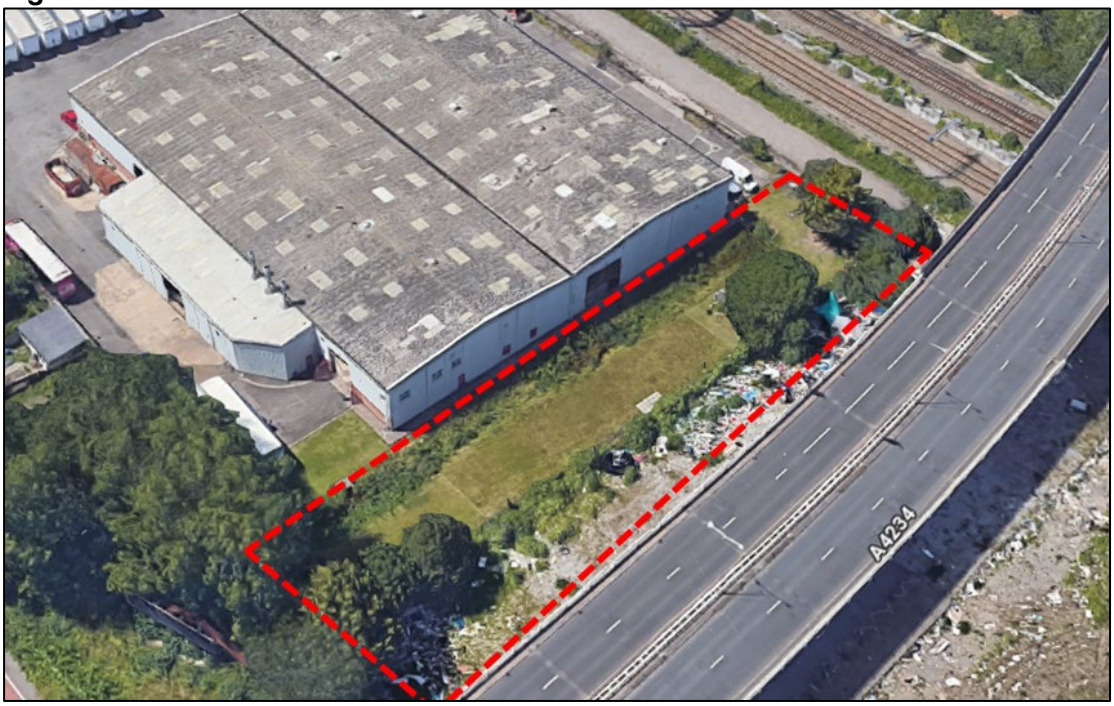
4.7.4 The site has a calculated public transport AI of 11.97. The AI calculator is provided as Appendix 3.6.

5.0 BASELINE TRAFFIC CONDITIONS

5.1 As previously mentioned, the site is a vacant parcel with no former uses or current uses.

5.2 Therefore, for the purpose of this assessment we will assume the trip generation associated with the site to be nil. For completeness, the site is shown in the following Figure 5A and demonstrates its current and previous use:

Figure 5A Current Site



6.0 PROPOSED DEVELOPMENT

6.1 The Proposal

6.1.1 The proposal comprises construction of a purpose-built student accommodation (Sui Generis use) comprising 295no. beds with new landscaped area, plant areas, cycle parking, and car parking at the site of vacant land to the east of 'Cardiff Theatrical Services Ltd' Rosemary Street, Cardiff, CF10 4TT.

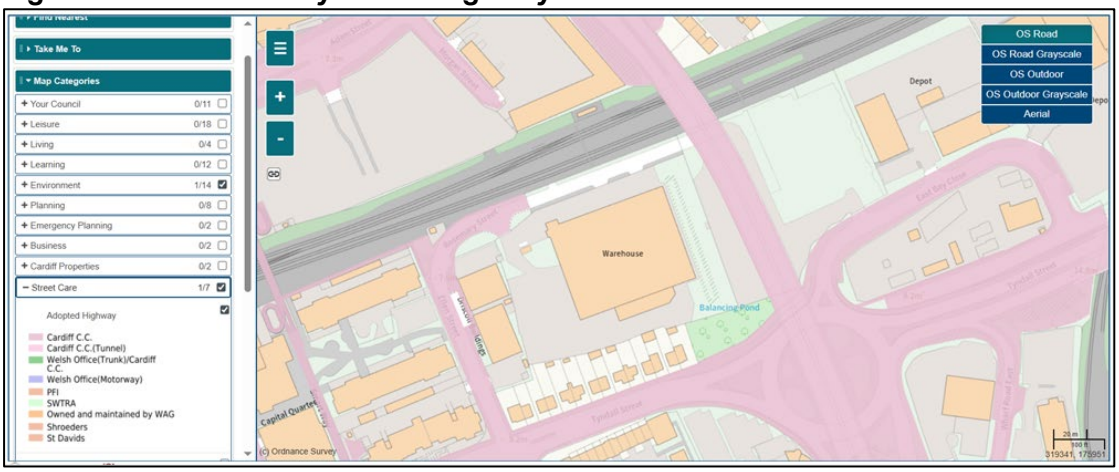
6.1.3 The proposed layout is provided as Appendix 4.1.

6.2 Access Arrangements

Highway Extents

6.2.1 The easternmost section of Rosemary Street is unregistered but is officially owned by Network Rail whereby rights of access were guaranteed to the WNO Workshops and adjacent property (East Bay Close). Access to / from the site is therefore possible via Rosemary Street, and for completeness the following Highway Extents are shown below:

Figure 6A Rosemary Street Highway Extents



Pedestrians

6.2.2 The main pedestrian access to the site is provided at the northwest corner of the site on the northern façade of the building, facing to Rosemary Street. Although there will be additional access points to various staircases situated on both the east and western façade of the building located centrally, and to the southern corners which provide access to the student floors / accommodation.

6.2.3 There will be a pedestrianised route around the entire perimeter of the building, and a courtyard / garden provided centrally. The pedestrian footway along the western façade of the building will provide access to the secure and covered cycle storage spaces. The pedestrianised routes will also extend southwards providing a connection to the existing footways on Tyndall Street.

Vehicles

6.2.4 Vehicular access to site will be possible from Rosemary Street which will extend into the sites parking area. Visibility splays of 2.4 metres x 43 metres from the northern access (onto Rosemary Street) are achievable as per Manual for Streets (MfS, 2007) guidance for 30-mph roads.

Off-site Highway Improvements

6.2.5 The access arrangements and visibility splays are shown on a drawing provided as Appendix 4.2.

6.2.6 As a part of the proposal, it is intended to provide dropped kerbs and tactile paving across the existing accesses into the adjacent 'Cardiff Theatrical Services Ltd' which will provide a connection towards the existing dropped kerb and tactile paving across Ellen Street. Therefore, there will be a continuous and safe pedestrian route connecting the site to the Smart Way and Smart Way Bridge towards Cardiff Centre.

Cyclists

6.2.7 As previously mentioned, the main entrance will front Rosemary Street. There will be a wide pedestrianised area around the perimeter of the building, creating an open and pleasant environment. The bicycle storage spaces are to be two-tier secure and covered and situated to the southwestern corner of the site. There will also be 14no. spaces (7no. Sheffield stands) for short stay parking located to the northwest corner of the site. There will also be a connection between the site and the footway / cycleway on Tyndall Street which will be gated.

Disabled Accessibility

6.2. Wheelchair accessible lifts will be provided to ensure access to all floors is available for individuals with mobility requirements.

6.3 Parking Arrangements

Car Parking

6.3.1 City of Cardiff Council's Managing Transportation Impacts (Incorporating Parking Standards) SPD (July 2018) sets out the *maximum* car parking standards for PBSA at *'1 space per 25 beds for operational parking'.*

6.3.2 It is proposed to provide 4no. parking spaces (2no. standard, and 2no. disabled accessible parking spaces) on-site and accessible from Rosemary Street.

6.3.3 Although there will be the provision of 4no. parking spaces, the site will essentially be 'car free' in nature and the parking spaces will help facilitate visitor parking to the site and assist the moving in / moving out periods for students.

6.3.4 As demonstrated in Section 1.2, there are a range of similar PBSA schemes within Cardiff that have recently been approved which are 'car free' in nature. This scheme is most appropriately comparable to 'The Wharf' (approximately 550m from the site) which under application ref: 24/01635/FUL provided 2no. parking spaces which would be used for visitors and move in / move out day.

6.3.5 Students would therefore be precluded from owning and bringing a car to site and from obtaining any parking permits (as part of their tenancy agreement) and will be expected to travel to site via sustainable modes of transport given the close links to public transport interchanges.

Car Parking – Disabled Provision

6.3.6 As mentioned previously, there will be 2no. disabled parking space. Although, these spaces will facilitate visitor parking and moving in / moving out days.

6.3.7 When selecting their accommodation and prior to signing the tenancy agreement, students will be aware that the PBSA will essentially be "car-free" and therefore this element will not generate any general (or disabled) parking demand.

Cycle Parking

6.3.8 City of Cardiff Council's Managing Transportation Impacts (Incorporating Parking Standards) SPD (July 2018) sets out the *minimum* cycle parking standards for PBSA at *'1 space per 2 beds'.*

6.3.9 The cycle spaces are provided in a mix of Sheffield and two-tier cycle stands (which will be covered and secure). This will be in accordance with the City of Cardiff Councils standards.

6.4 Servicing and Deliveries

6.4.1 Deliveries and refuse collection would take place within the parking area off Rosemary Street. Delivery and refuse vehicles would be able to use the existing turning head on Rosemary Street to reverse into the site (allowing the rear of the vehicle to be within close distance of the bin store) and exit in a forward gear.

6.4.2 There is a bin store proposed within the immediate vicinity of Rosemary Street. Waste operatives can wheel the bins from the refuse store to the rear of the vehicle (approximately a 13m drag distance). A plan showing the refuse bin store and collection, in accordance with Manual for Streets and Part H of the Building Regulations (i.e. within 25m of stores for refuse operatives), is provided as Appendix 5.1.

6.4.3 Deliveries to the student accommodation would also be able to use the existing turning head and enter the parking area. This would likely include long wheelbase vans, postal delivery vehicles, cars/mopeds associated with food takeaway deliveries as well as less frequent larger deliveries. Vehicle tracking analysis of a standard 7.5T delivery vehicle is provided as Appendix 5.2.

6.5 Emergency Access

6.5.1 Regarding emergency vehicle access, Manual for Streets (MfS, 2007) states the following (in terms of access to a building):

> *"The Building Regulation requirement B5 (2000)10 concerns 'Access and Facilities for the Fire Service'. Section 17, 'Vehicle Access', includes the following advice on access from the highway:*
>
> - *there should be vehicle access for a pump appliance within 45 m of every dwelling entrance for flats/maisonettes"*

6.5.2 The fire operatives will be able to quickly and efficiently connect a short length of hose from their pumping appliance to the dry riser inlet situated within the stairwell.

6.5.3 A plan showing a 7.7m fire tender entering the site car park and exiting in a forward gear is provided as Appendix 5.3.

7.0 PROPOSED TRIP GENERATION

7.1.1 The multi-modal trip generation associated with the proposed student accommodation has been calculated using the TRICS database. To be representative of the site, the following criteria were selected:

- Main Land Use — Residential
- Sub Land Use — Student Accommodation
- No. of Residents — 15 – 1100
- Available Dates — 01/01/05 – 01/05/24
- Location Type — Edge of Town Centre

7.1.2 The TRICS output is provided as Appendix 6.0. The multi-modal trip rates and traffic generation are summarised in Table 7A below.

Table 7A Multi-Modal Trips – Student Accommodation

Mode	Time	Trip Rate (Per Resident)		Traffic Generation (295 Residents)		
		In	Out	In	Out	2-Way
Total People	08:00 – 09:00	0.013	0.098	4	29	33
	17:00 – 18:00	0.115	0.065	34	19	53
	Daily	**0.904**	**0.953**	**266**	**282**	**548**
Total Vehicles	08:00 – 09:00	0.005	0.004	1	1	2
	17:00 – 18:00	0.005	0.006	1	2	3
	Daily	**0.09**	**0.097**	**26**	**29**	**55**
Pedestrians	08:00 – 09:00	0.006	0.059	2	17	19
	17:00 – 18:00	0.067	0.041	20	12	32
	Daily	**0.541**	**0.574**	**160**	**170**	**330**
Public Transport Users	08:00 – 09:00	0.003	0.033	1	10	11
	17:00 – 18:00	0.038	0.013	11	4	15
	Daily	**0.224**	**0.244**	**66**	**73**	**139**
Cyclists	08:00 – 09:00	0	0.002	0	1	1
	17:00 – 18:00	0.004	0.003	1	1	2
	Daily	**0.03**	**0.029**	**9**	**8**	**17**

7.1.3 Table 7A demonstrates that the proposed student accommodation could generate up to 1 and 2 vehicular trips (two-way) during typical network AM and PM peak hours, respectively, and 55 vehicular trips (two-way) on a daily basis.

7.1.4 Given that the proposal is predominantly ‘car free’ in its nature and that students would not be permitted to bring a car to site, the vehicular trips associated with the student accommodation element would be associated with servicing trips, deliveries, and taxis, which would be short-term trips likely to occur outside of the typical network peak hours.

7.1.5 The above trip generation does not consider the start/end of term moving in/out periods where vehicle trips would likely be higher. However, this is an exceptional circumstance which occurs only a few times per year on primarily on weekend days, and as discussed in Chapter 9.0, this will be carefully managed by the Management Company to minimise disruption.

7.1.6 According to TRICS, of the total person trips, there would be up to 32 two-way pedestrian trips during peak hours and 330 two-way pedestrian trips on a daily basis; up to 15 two-way public transport user trips during peak hours, and 139 two-way public transport user trips on a daily basis; and up to 2 cyclist trip during peak hours, and 17 cyclist trips on a daily basis. Given the proximity of the site in relation to Cardiff Queen Street Railway Station and the surrounding bus stops, this could be an underestimate to the usage of cycling and public transport.

7.1.7 In summary, the proposed development would not generate a severe residual impact on the highway network, adhering to National Planning Policy Framework 2024 paragraph 116, and therefore should not be refused on highways grounds.

8.0 MITIGATION

8.1 The location of the application site in the vicinity of Cardiff City Centre encourages active and sustainable travel through the provision of local amenities and public transport links including Cardiff Queen Street Railway Station (1km walking distance) and the nearby bus stops on Tyndall Street which are within 200m walking distance of the site.

8.2 There are a number of mitigation measures which help to ensure that the proposed development produces minimal traffic.

Location

8.3 The location of the development is such that students, and visitors are close to Cardiff City Centre and associated amenities as discussed in Chapter 4.0. In addition, public transport nodes including Queen Street Railway Station are located within suitable walking distance of the site.

8.4 The location of the development therefore mitigates against access via private car by virtue of the nearby facilities which students will use. There is also a significant catchment in which potential visitors of the site could walk, cycle, or use public transport to travel to and from the site.

Parking Arrangements

8.5 By providing limited parking spaces, which will be predominantly used for visitors and for moving in / out day, the development is discouraging car borne trips in the strongest way possible. This is not dissimilar to other recently approved PBSA schemes which have been outlined in Section 1.0.

Car-Free Tenancy Agreements

8.6 Within the Tenancy Agreements which all students will sign, there will be a clause forbidding them from bringing a car to university entirely. Ultimately, students can be ejected from halls of residence if they are found to be in breach of this rule. Before students enter into their Tenancy Agreement, they will be informed that there are limited parking spaces on site (which will be used by visitors and for moving in / moving out days) and that they prohibited from bringing cars to Cardiff under the terms of their Tenancy Agreement.

8.7 A Student Management Plan will be prepared to enforce this. The wording of the Parking Enforcement Section within the Student Management Plan is proposed as follows:

> ***"Not to keep or use private motor vehicle within the boundaries of the Cardiff City Council except that such a vehicle may be used, for one journey only at the beginning and end of each academic term, for the purpose of transporting that person and his or her belongings to or from the site, such vehicle then to be removed from and not otherwise kept or used within the City.***
>
> ***The Tenant will complete a Declaration in respect of Vehicle ownership, custody and/or control. The Tenant will provide the Landlord with a written statement giving details of any change in the information supplied to the Landlord in respect of their immediate ownership and custody or immediate control of any vehicle within 14 days of any such change taking place."***

8.8 Students will be required to sign a Parking Declaration Form, as mentioned in the wording above, to confirm that they will adhere to this element of their Tenancy Agreement. The form will also collect the registration details of vehicles in ownership, custody, or control. These restrictions will be addressed during induction talks to all students.

Travel Planning

8.9 In addition to the above, a Travel Plan has been prepared as part of the application which will encourage new students to travel sustainably and by active modes (walking and cycling).

9.0 START AND END OF TERM PROCEDURE

Moving In

9.1 There will be vehicular trips to and from the student accommodation at the start and end of term, when students move into and out of the accommodation. The Student Management Company will operate and manage student arrivals.

9.2 The management team will co-ordinate arrivals over a strict period prior to the start of the academic year, to ensure arrivals are phased carefully and do not stay longer than permitted. Cars will only be allowed to stop for long enough to drop off luggage and occupants and will then be directed to park elsewhere to a public car park. Student wardens and helpers would assist new residents with this process to ensure new residents feel welcomed, but at the same time do not clog up local streets with cars.

9.3 In this case, well in advance of the move-in period, students will be allocated fixed arrival time slots (15-minute duration), providing a comfortable period of time to complete the unloading of luggage and move the vehicle off-street directed by staff. An addition, a 5-minute window between arrival slots will ensure a smooth transition between vehicles arriving and departing.

9.4 There are 4no. parking spaces available on site which will be used for the moving in / moving out days. It will therefore be possible to accommodate 12 arrivals per hour (15-min set down + 5-min buffer = 20-min per arrival).

9.5 In a worst-case scenario, up to 295 students would be moving in on a weekend. It is unrealistic that all students arrive by car, as many would travel by alternative means, and not all would plan to arrive over the same weekend. The majority of students will likely arrive to site via train, stopping at Cardiff Queen Street. Nonetheless, based on 12 arrivals per hour, it would take up to 25 hours to move all students. Realistically, this could be achieved over the course of one (or two) weekends.

9.6 Arrivals will be managed over a weekend to allow for greater flexibility for both the arriving students (to select which day, subject to availability) and to allow for late arrivals who will need a re-allocated slot at the end of the day.

9.7 Therefore, the move in process will be limited to 10-hour periods over a Saturday and Sunday causing minimal disruption whilst maintaining flexibility to adapt to other factors that may disrupt the plan, such as extreme traffic conditions impacting arrival times.

Moving Out

9.8 Students tend to move out of their properties over a much longer period compared to when they arrive, as courses and exams finish at different dates, so it is unlikely that congestion will be an issue.

9.9 However, the management team will assess and monitor this process once the property opens to ensure that, if necessary, time slots are allocated for both arrivals and departures.

9.10 The aim will be to ensure that student residents enjoy a smooth moving in / out experience and cause as little disruption as possible to neighbouring stakeholders within the vicinity of the site.

10.0 SUMMARY AND CONCLUSIONS

10.1 ADL Traffic & Highways Engineering Ltd (ADL) have prepared this Transport Assessment (TA) on behalf of the Client, CNM Estates to support an application for the construction of PBSA (purpose-built student accommodation) consisting of 295no. beds, and associated access and landscaping works at vacant land to the east of 'Cardiff Theatrical Services Ltd' Rosemary Street, Cardiff, CF10 4TT.

10.2 The site is bounded by Rosemary Street / the railway line to the north, the Central Link (A4234) to the east & East Bay Close approved development (application ref: 22/01404/MJR), East Bay Close / Tyndall Street roundabout to the south, and the 'Cardiff Theatrical Services Ltd' to the west.

10.3 The accessibility of the site is demonstrated to be acceptable with the presence of nearby bus stops providing clockwise and anticlockwise circuits around Cardiff,

10.4 The proposed PBSA would provide 295 student beds and would be 'car free' in nature with the provision of 4no. parking spaces (including 2no.) which will be primarily for the use of visitors and for moving in / moving out days. The site will also provide 148no. bicycle storage spaces and a pedestrianised route around the perimeter of the building.

10.7 Based on TRICS, the proposed development would generate 1 and 2 vehicular trips (two-way) during typical network AM and PM peak hours, respectively, and 55 vehicular trips (two-way) on a daily basis and 32 two-way pedestrian trips during peak hours and 330 two-way pedestrian trips. This level of vehicular generation would have an imperceptible impact on the surrounding highway network.

10.8 The proposed redevelopment would not generate a severe residual traffic impact on the local highway network given that the permitted use generates a greater level of vehicular traffic compared to the proposed mixed accommodation and commercial use.

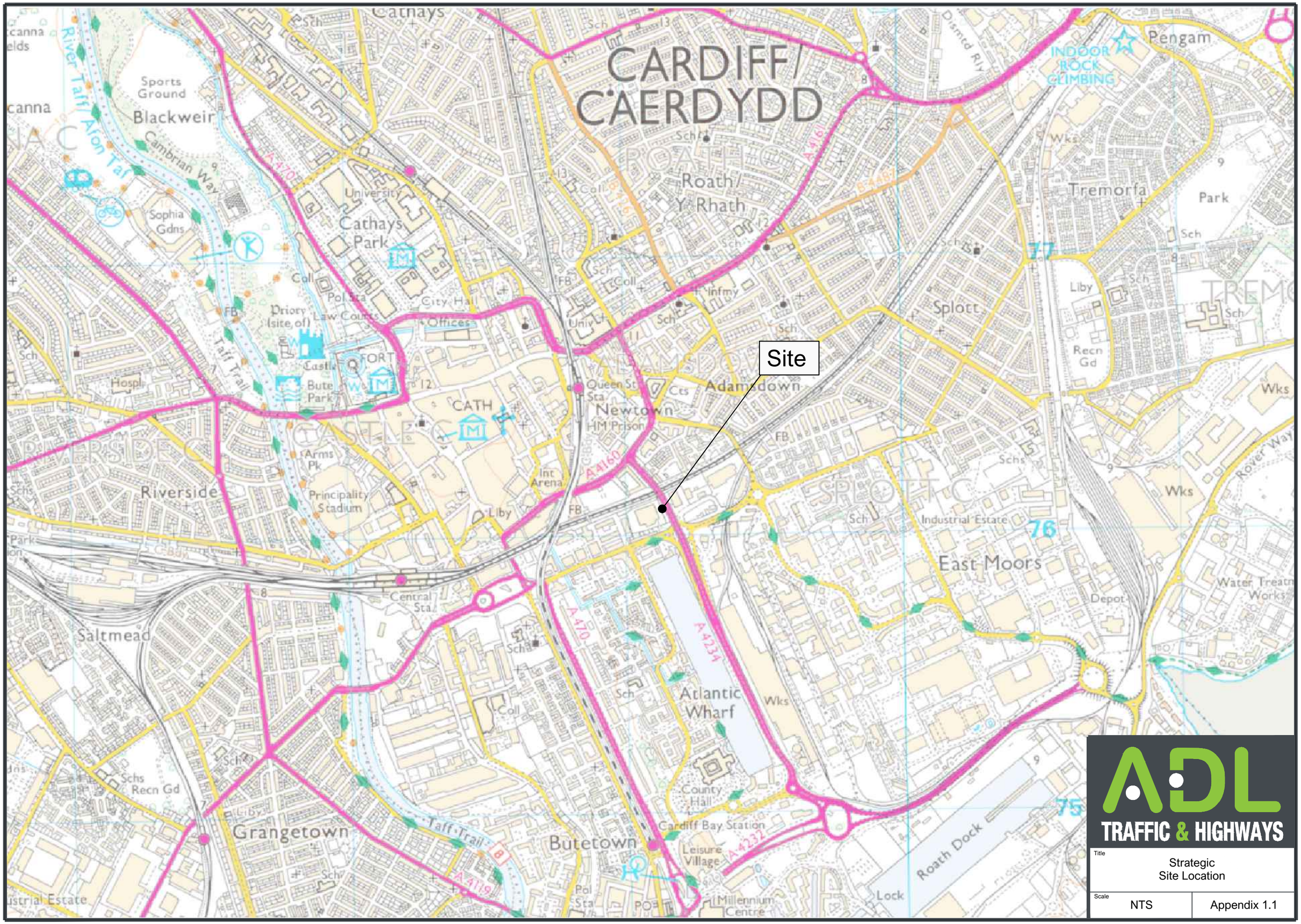
10.9 There will be vehicular trips to and from the student accommodation at the start and end of term, when students move into and out of the accommodation. This procedure would utilise the 4no. parking spaces. The Student Management Company will operate and manage student arrivals to minimise impact on the local highway network.

10.10 In conclusion, the proposed redevelopment will not generate a significant residual impact on the local highway network, in accordance with National Planning Policy Framework 2024 paragraph 116, and therefore should not be refused on highways grounds.

APPENDIX 1.0

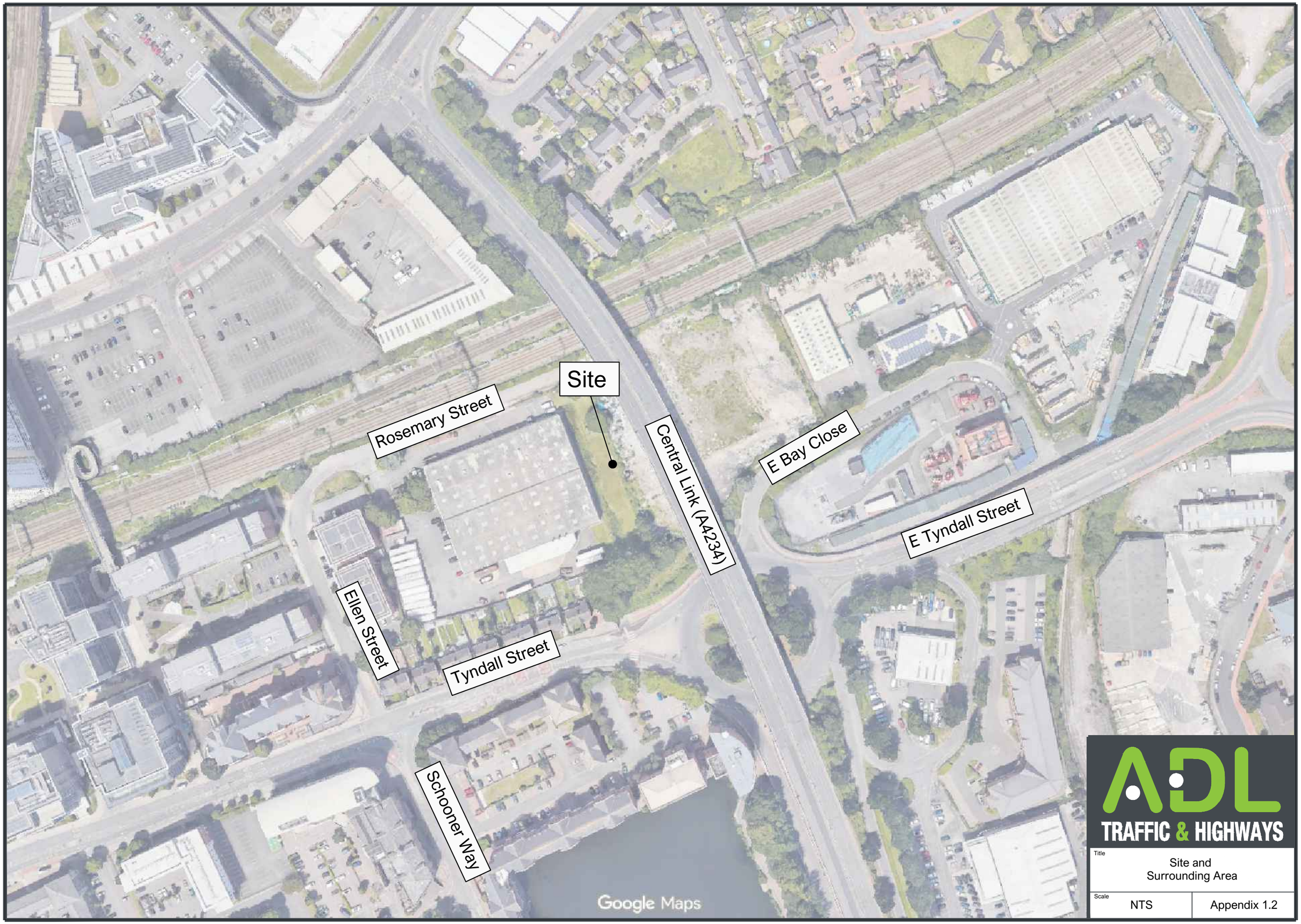
SITE LOCATION

1.1 Site Location
1.2 Site and Surrounding Area



ADL TRAFFIC & HIGHWAYS

Title	
Strategic Site Location	
Scale	
NTS	Appendix 1.1

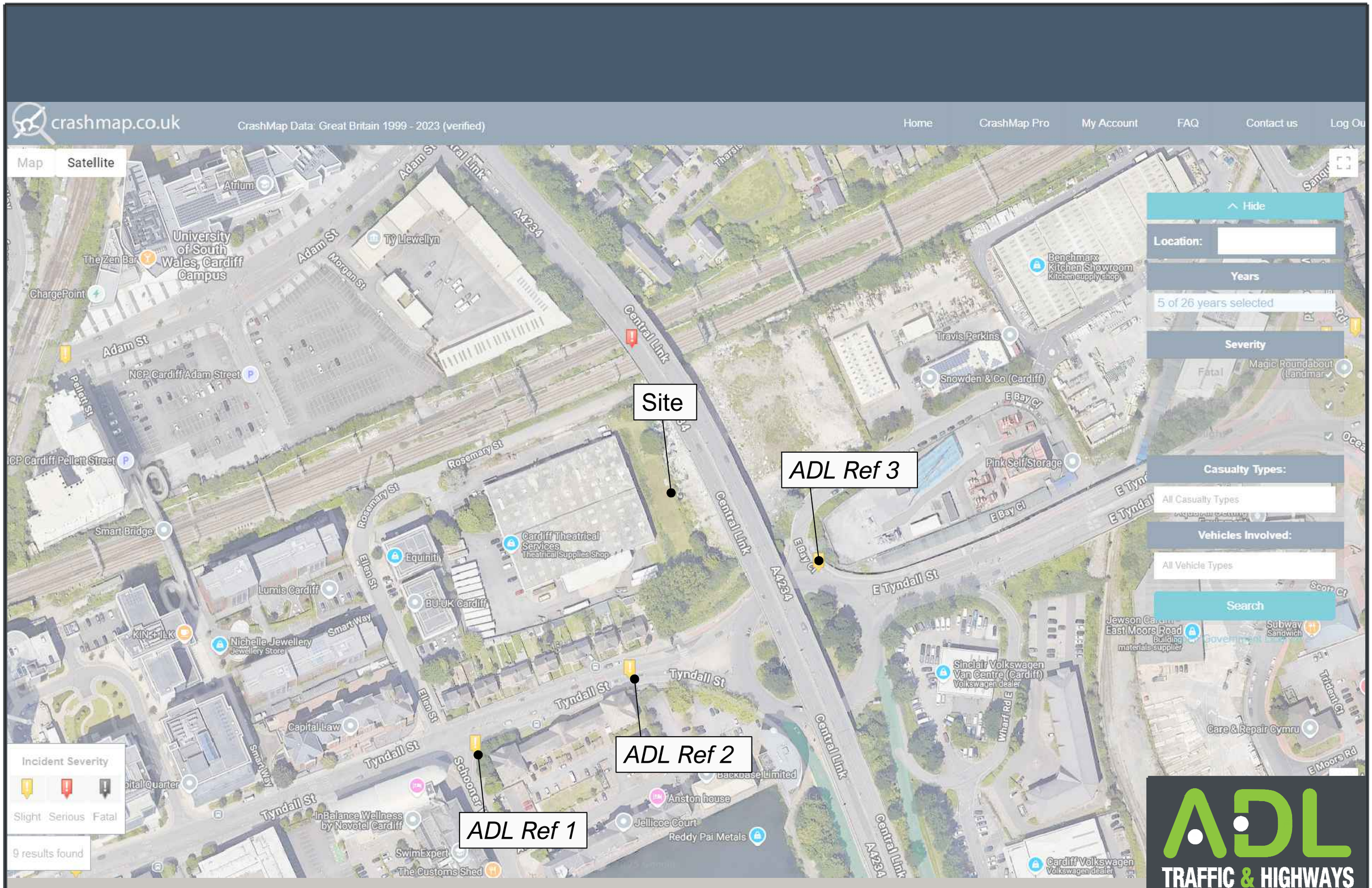


ADL TRAFFIC & HIGHWAYS

Title	
Site and Surrounding Area	
Scale	
NTS	Appendix 1.2

APPENDIX 2.0

COLLISION DATA



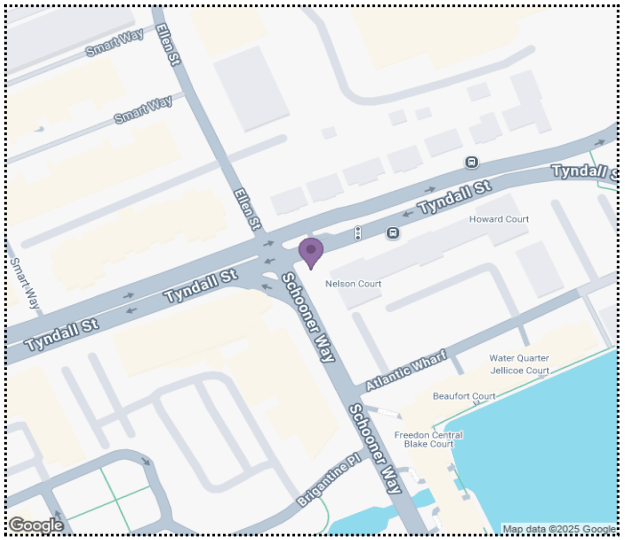
ADL TRAFFIC & HIGHWAYS

Title	Crashmap Collision Search Extent
Scale	NTS
	Appendix 3.1

crashmap.co.uk

Validated Data

Crash Date:	Monday, June 10, 2024	**Time of Crash:**	08:00:00	**Crash Reference:**	2024622400392
Highest Injury Severity:	Slight	**Road Number:**	U	**Casualties:**	1
Highway Authority:	Cardiff			**Vehicles:**	2
Local Authority:	Cardiff			**OS Grid Reference:**	319027 175949
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	20				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Unknown				
Junction Pedestrian Crossing:	Pedestrian phase at traffic signal junction				
Road Type:	Single carriageway				
Junction Control:	Auto traffic signal				



For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

powered by agilysis

Crash Date: Monday, June 10, 2024 **Time of Crash:** 08:00:00 **Crash Reference:** 2024622400392

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	11	Male	36 - 45	Vehicle is in the act of turning right	Front	Unknown	None	None
2	Pedal cycle	-1	Male	36 - 45	Unknown	Offside	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

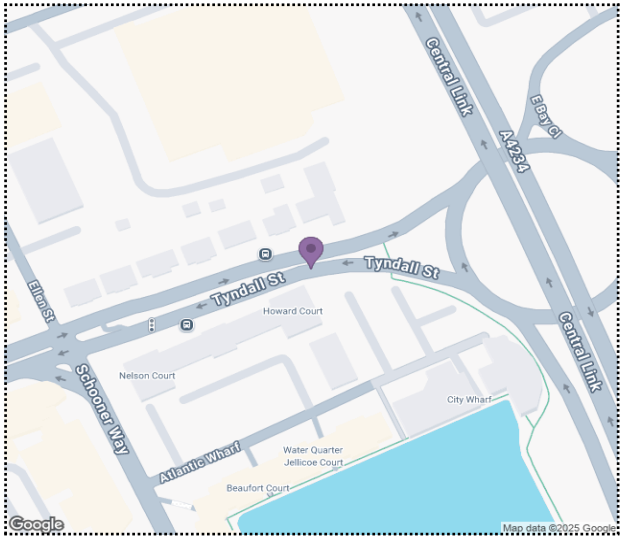
For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

crashmap.co.uk

Validated Data

Crash Date:	Sunday, May 7, 2023	**Time of Crash:**	23:50:00	**Crash Reference:**	2023622300417
Highest Injury Severity:	Slight	**Road Number:**	U	**Casualties:**	1
Highway Authority:	Cardiff			**Vehicles:**	3
Local Authority:	Cardiff			**OS Grid Reference:**	319108 175986
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	20				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	Zebra crossing				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

powered by agilysis

Crash Date: Sunday, May 7, 2023 **Time of Crash:** 23:50:00 **Crash Reference:** 2023622300417

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
3	Pedal cycle	-1	Unknown	Unknown	Unknown	Did not impact	Unknown	None	None
1	Car (excluding private hire cars 2005 onwards)	13	Male	56 - 65	Unknown	Front	Unknown	None	None
2	Taxi/Private hire car (2005 onwards)	-1	Male	36 - 45	Vehicle is slowing down or stopping	Back	Unknown	None	None

Casualties

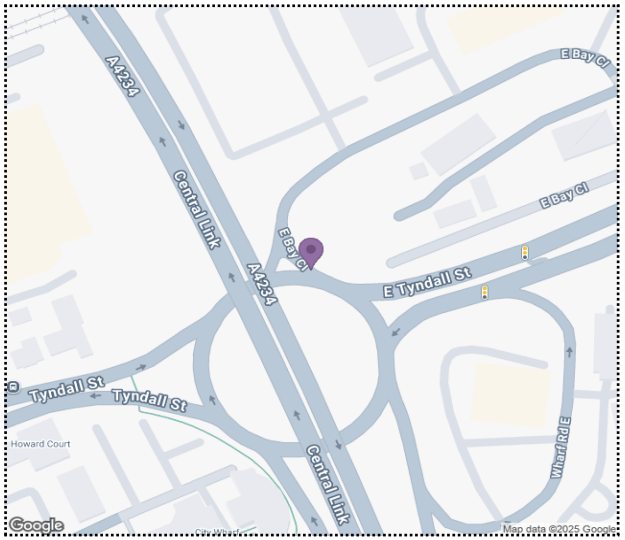
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

crashmap.co.uk

Validated Data

Crash Date:	Thursday, May 25, 2023	**Time of Crash:**	14:22:00	**Crash Reference:**	2023622300617
Highest Injury Severity:	Slight	**Road Number:**	U	**Casualties:**	1
Highway Authority:	Cardiff			**Vehicles:**	2
Local Authority:	Cardiff			**OS Grid Reference:**	319207 176040

Weather Description:	Fine without high winds
Road Surface Description:	Dry
Speed Limit:	30
Light Conditions:	Daylight: regardless of presence of streetlights
Carriageway Hazards:	None
Junction Detail:	Not at or within 20 metres of junction
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres
Road Type:	Roundabout
Junction Control:	Give way or uncontrolled



For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

powered by agilysis

Validated Data

Crash Date: Thursday, May 25, 2023 **Time of Crash:** 14:22:00 **Crash Reference:** 2023622300617

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes maximum gross weight (mgw) and under	9	Male	36 - 45	Vehicle is moving off	Front	Commuting to/from work	None	None
2	Pedal cycle	-1	Male	16 - 20	Vehicle is moving off	Front	Unknown	None	None

Casualties

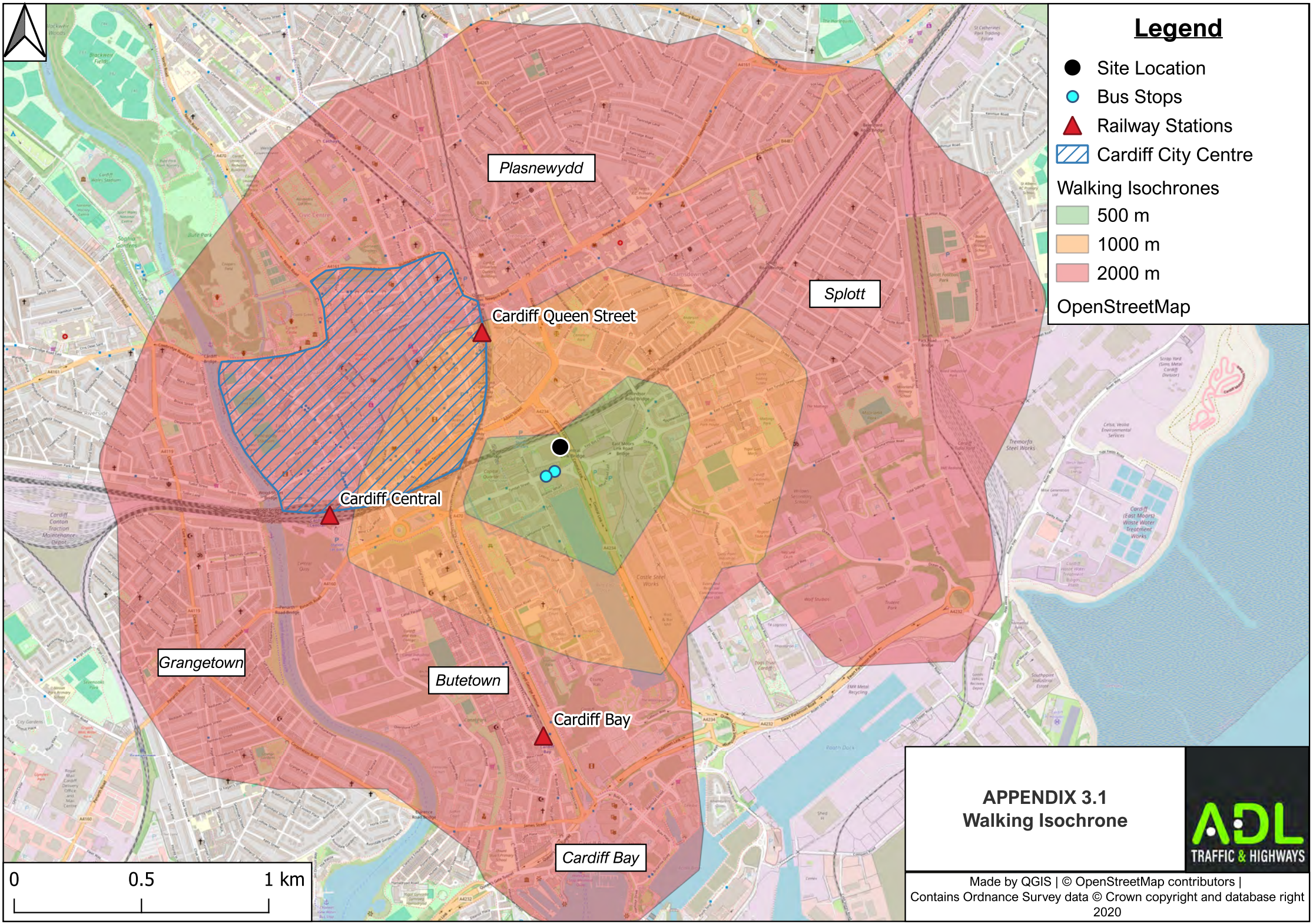
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

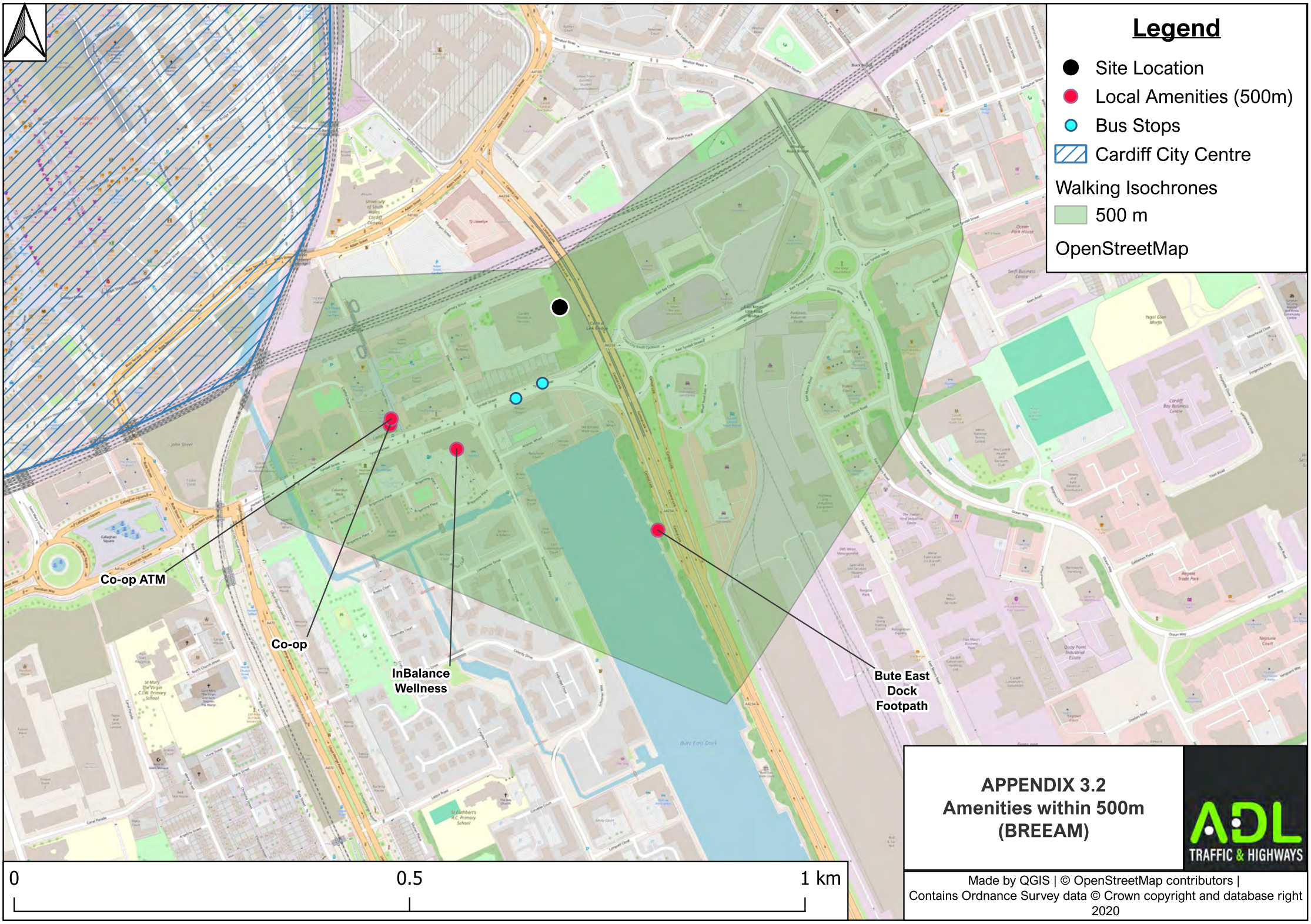
APPENDIX 3.0

ACCESSIBILITY



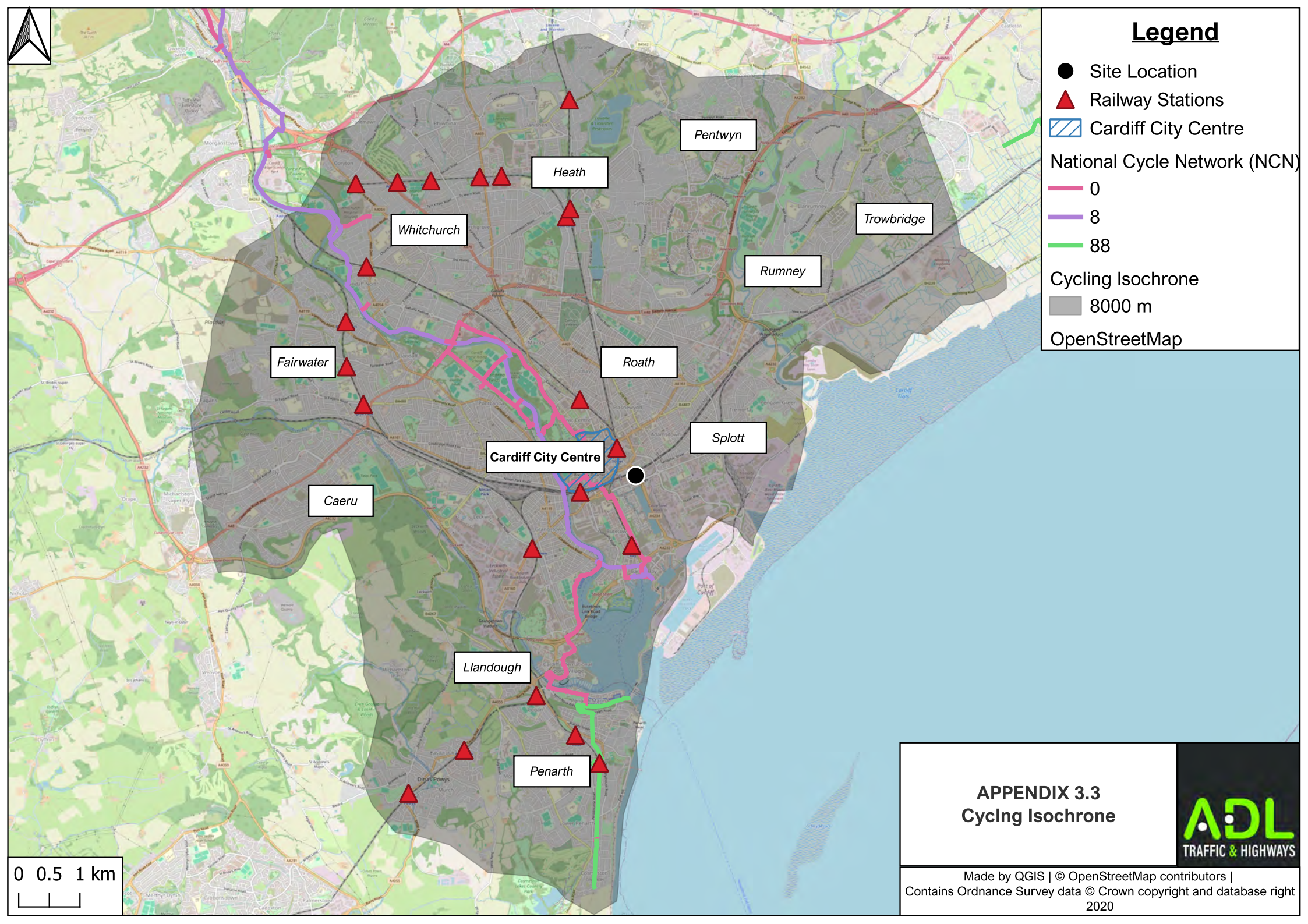
APPENDIX 3.1
Walking Isochrone

ADL TRAFFIC & HIGHWAYS



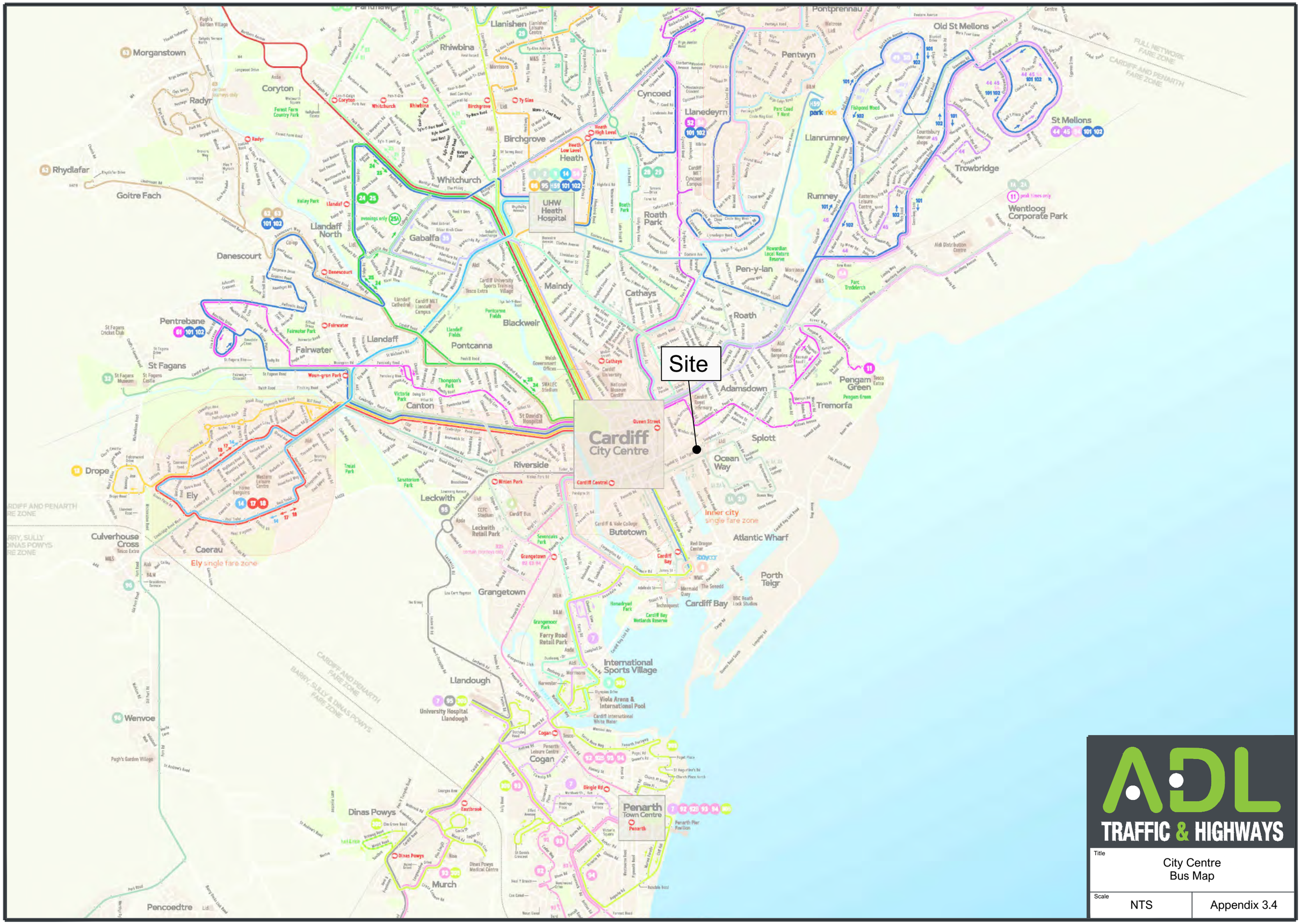
APPENDIX 3.2
Amenities within 500m (BREEAM)

ADL TRAFFIC & HIGHWAYS



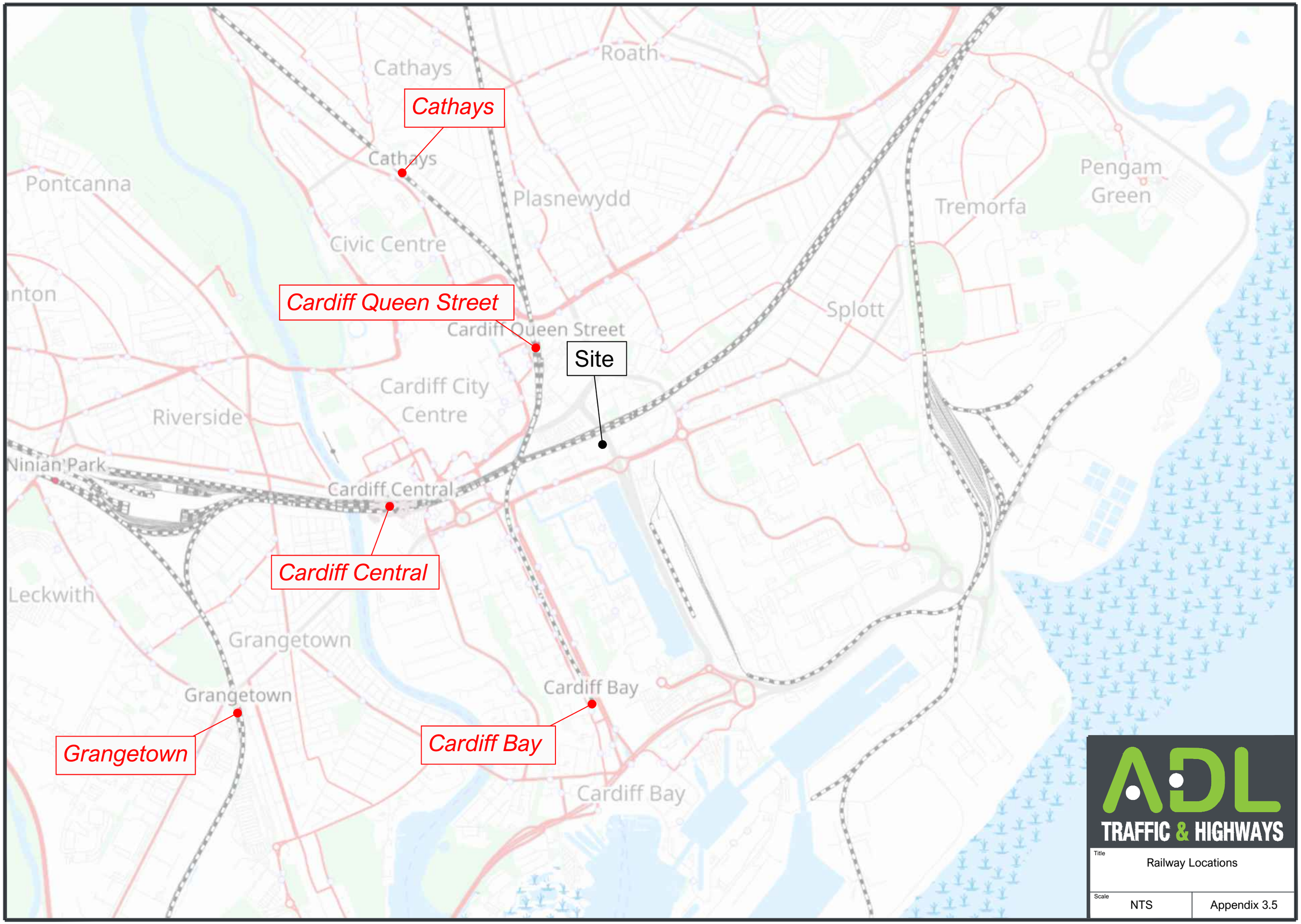
APPENDIX 3.3
Cyclng Isochrone

ADL TRAFFIC & HIGHWAYS



ADL TRAFFIC & HIGHWAYS

Title	City Centre Bus Map
Scale	NTS
	Appendix 3.4



ADL TRAFFIC & HIGHWAYS

Title	Railway Locations	
Scale	NTS	Appendix 3.5

APPENDIX 4.0

PROPOSED DEVELOPMENT

ADL
TRAFFIC & HIGHWAYS

Title: Proposed Site Layout

Scale: 1:500 (A3)

Appendix 4.1

ROSEMARY STREET

2.4m x 43m Visibility Splay

Bin Store

ADL TRAFFIC & HIGHWAYS

Title: Access Arrangements and Visibility Splays

Scale: 1:250 (A3)

Appendix 4.2

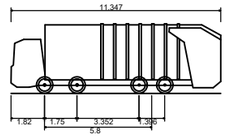
APPENDIX 5.0

VEHICLE TRACKING ANALYSIS

ROSEMARY STREET

Bin Store

~13m bin drag from bin store entrance to rear of refuse vehicle.



Large Refuse Vehicle (4 axle)	
Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

ADL TRAFFIC & HIGHWAYS

Title: Vehicle Tracking for 11.347m Refuse Vehicle

Scale: 1:250 (A3)

Appendix 5.1

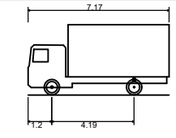
ROSEMARY STREET

~13m distance to reception entrance from bin store rear of delivery vehicle.

Bin Store

ROSEMARY STREET

Bin Store



FTA Design 7.5 Tonne Rigid Vehicle (2016)

Overall Length	7.170m
Overall Width	2.300m
Overall Body Height	3.580m
Min Body Ground Clearance	0.375m
Track Width	2.120m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	7.000m

ADL TRAFFIC & HIGHWAYS

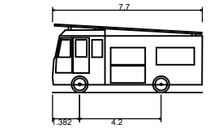
Title: Vehicle Tracking for 7.5T Rigid

Scale: 1:250 (A3)

Appendix 5.2

ROSEMARY STREET

Bin Store



Dennis Sabre Fire Tender (LWB)	
Overall Length	7.700m
Overall Width	2.430m
Overall Body Height	3.512m
Min Body Ground Clearance	0.397m
Track Width	2.380m
Lock to lock time	5.00s
Kerb to Kerb Turning Radius	7.400m

ADL TRAFFIC & HIGHWAYS

Title: Vehicle Tracking for 7.7m Fire Tender

Scale: 1:250 (A3)

Appendix 5.3

APPENDIX 6.0

TRICS – STUDENT ACCOMODATION

Audit Code: 5110427d-174c-4725-99e9-30a51c3411e4

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: G - STUDENT ACCOMODATION

Selected Vehicle Type: Total People

Selected regions and areas:

01	**GREATER LONDON**		
	CN	CAMDEN	1 day
	HM	HAMMERSMITH AND FULHAM	1 day
	IS	ISLINGTON	1 day
	KI	KINGSTON	2 days
03	**SOUTH WEST**		
	DV	DEVON	1 day
06	**WEST MIDLANDS**		
	WM	WEST MIDLANDS	1 day
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	KS	KIRKLEES	2 days

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

Audit Code: 5110427d-174c-4725-99e9-30a51c3411e4

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:	RESIDE
Actual Range:	15 to 1100 (units:RESIDE)
Range Selected by User:	15 to 1100 (units:RESIDE)
Parking Spaces Range:	3 - 87

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/05 to 01/05/24

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:

Friday	3 days
Thursday	2 days
Tuesday	1 days
Wednesday	3 days

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

Selected survey types:

Manual count	9
Direction ATC Count	0

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 undertaking using machines

Selected Locations:

Edge of Town Centre	9 days

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:

Built-Up Zone	6 days
Residential Zone	3 days

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

Inclusion of Servicing Vehicle Counts:

Servicing vehicles Excluded	5 days
Servicing vehicles Included	4 days

Secondary Filtering Selection:

Use Class:

C3	9 surveys

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

Population within 500m Range:

0 - 0

Population within 1 mile:

1,001 to 5,000	1 surveys
10,001 to 15,000	1 surveys
20,001 to 25,000	2 surveys
25,001 to 50,000	4 surveys
50,001 to 100,000	1 surveys

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

Population within 5 miles:

125,001 to 250,000	3 surveys
25,001 to 50,000	1 surveys
250,001 to 500,000	3 surveys
500,001 or More	2 surveys

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

Car ownership within 5 miles:

0.5 or Less	1 surveys
0.6 to 1.0	6 surveys
1.1 to 1.5	2 surveys

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.

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	8 surveys
Yes	1 surveys

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:

4 - Good	2 surveys
6a - Excellent	2 surveys
6b - Excellent	1 surveys
No PTAL Present	4 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

1	**CN-03-G-01**	**STUDENT FLATS**	**CAMDEN**

SAINT PANCRAS WAY
KING'S CROSS
Edge of Town Centre
Built-Up Zone
Site area: 0.1 hect
Survey date: Tuesday 14/11/2017 Survey Type: Manual

2	**DV-03-G-04**	**STUDENT ACCOMMODATION**	**DEVON**

BONHAY ROAD
EXETER
Edge of Town Centre
Residential Zone
Site area: 0.38 hect
Survey date: Thursday 28/11/2013 Survey Type: Manual

3	**HM-03-G-02**	**STUDENT FLATS**	**HAMMERSMITH AND FULHAM**

PADDENSWICK ROAD
HAMMERSMITH
Edge of Town Centre
Residential Zone
Site area: 0.22 hect
Survey date: Friday 25/06/2021 Survey Type: Manual

4	**IS-03-G-01**	**STUDENT FLATS**	**ISLINGTON**

OLD STREET
ST LUKE'S
Edge of Town Centre
Built-Up Zone
Site area: 0.13 hect
Survey date: Friday 07/12/2012 Survey Type: Manual

5	**KI-03-G-01**	**STUDENT FLATS**	**KINGSTON**

PENRHYN ROAD
KINGSTON UPON THAMES
Edge of Town Centre
Built-Up Zone
Site area: 0.07 hect
Survey date: Wednesday 12/06/2019 Survey Type: Manual

6	**KI-03-G-02**	**STUDENT FLATS**	**KINGSTON**

CAMBRIDGE ROAD
KINGSTON UPON THAMES
NORBITON
Edge of Town Centre
Residential Zone
Site area: 0.22 hect
Survey date: Wednesday 26/06/2019 Survey Type: Manual

7	**KS-03-G-01**	**STUDENT FLATS**	**KIRKLEES**

KINGS MILL LANE
HUDDERSFIELD
ASPLEY
Edge of Town Centre
Built-Up Zone
Site area: 2.3 hect
Survey date: Wednesday 13/09/2006 Survey Type: Manual

8	**KS-03-G-02**	**STUDENT FLATS**	**KIRKLEES**

BANKFIELD ROAD
HUDDERSFIELD
FOLLY HALL

Edge of Town Centre
Built-Up Zone
Site area: 0.06 hect
Survey date: Friday 03/11/2006 Survey Type: Manual

9	**WM-03-G-02**	**STUDENT FLATS**	**WEST MIDLANDS**

RAGLAN STREET
COVENTRY
Edge of Town Centre
Built-Up Zone
Site area: 0.36 hect
Survey date: Thursday 17/10/2013 Survey Type: Manual

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMODATION

Total Vehicles

Calculation factor: 1 RESIDE

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. RESIDE	Arrivals	Departures	Totals
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	**1**	**241**	**0.000**	**0.000**	**0.000**
07:00-08:00	**8**	**245**	**0.002**	**0.003**	**0.005**
08:00-09:00	**8**	**245**	**0.005**	**0.004**	**0.009**
09:00-10:00	**8**	**245**	**0.004**	**0.006**	**0.010**
10:00-11:00	**8**	**245**	**0.006**	**0.006**	**0.012**
11:00-12:00	**8**	**245**	**0.009**	**0.007**	**0.016**
12:00-13:00	**8**	**245**	**0.006**	**0.006**	**0.012**
13:00-14:00	**8**	**245**	**0.007**	**0.007**	**0.014**
14:00-15:00	**8**	**245**	**0.008**	**0.009**	**0.017**
15:00-16:00	**8**	**245**	**0.009**	**0.008**	**0.017**
16:00-17:00	**8**	**245**	**0.009**	**0.009**	**0.018**
17:00-18:00	**8**	**245**	**0.005**	**0.006**	**0.011**
18:00-19:00	**8**	**245**	**0.005**	**0.007**	**0.012**
19:00-20:00	**5**	**285**	**0.004**	**0.004**	**0.008**
20:00-21:00	**5**	**285**	**0.004**	**0.004**	**0.008**
21:00-22:00	**2**	**219**	**0.007**	**0.011**	**0.018**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.090**	**0.097**	**0.187**

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.*

Audit Code: 5110427d-174c-4725-99e9-30a51c3411e4

Parameter Summary:

Trip rate parameter range selected:	15 - 1100 (units: RESIDE)
Survey date date range:	13/09/2006 - 25/06/2021
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
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.

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMODATION

Total People

Calculation factor: 1 RESIDE

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. RESIDE	Arrivals	Departures	Totals
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	**1**	**241**	**0.000**	**0.000**	**0.000**
07:00-08:00	**8**	**245**	**0.005**	**0.029**	**0.034**
08:00-09:00	**8**	**245**	**0.013**	**0.098**	**0.111**
09:00-10:00	**8**	**245**	**0.023**	**0.067**	**0.090**
10:00-11:00	**8**	**245**	**0.035**	**0.081**	**0.116**
11:00-12:00	**8**	**245**	**0.051**	**0.069**	**0.120**
12:00-13:00	**8**	**245**	**0.056**	**0.078**	**0.134**
13:00-14:00	**8**	**245**	**0.068**	**0.079**	**0.147**
14:00-15:00	**8**	**245**	**0.079**	**0.084**	**0.163**
15:00-16:00	**8**	**245**	**0.084**	**0.074**	**0.158**
16:00-17:00	**8**	**245**	**0.110**	**0.061**	**0.171**
17:00-18:00	**8**	**245**	**0.115**	**0.065**	**0.180**
18:00-19:00	**8**	**245**	**0.110**	**0.063**	**0.173**
19:00-20:00	**5**	**285**	**0.053**	**0.033**	**0.086**
20:00-21:00	**5**	**285**	**0.054**	**0.035**	**0.089**
21:00-22:00	**2**	**219**	**0.048**	**0.037**	**0.085**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.904**	**0.953**	**1.857**

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.*

Audit Code: 5110427d-174c-4725-99e9-30a51c3411e4

Parameter Summary:

Trip rate parameter range selected:	15 - 1100 (units: RESIDE)
Survey date date range:	13/09/2006 - 25/06/2021
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
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.

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMODATION

Cyclists

Calculation factor: 1 RESIDE

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. RESIDE	Arrivals	Departures	Totals
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	**1**	**241**	**0.000**	**0.000**	**0.000**
07:00-08:00	**8**	**245**	**0.000**	**0.001**	**0.001**
08:00-09:00	**8**	**245**	**0.000**	**0.002**	**0.002**
09:00-10:00	**8**	**245**	**0.001**	**0.005**	**0.006**
10:00-11:00	**8**	**245**	**0.000**	**0.002**	**0.002**
11:00-12:00	**8**	**245**	**0.002**	**0.004**	**0.006**
12:00-13:00	**8**	**245**	**0.002**	**0.002**	**0.004**
13:00-14:00	**8**	**245**	**0.004**	**0.004**	**0.008**
14:00-15:00	**8**	**245**	**0.003**	**0.001**	**0.004**
15:00-16:00	**8**	**245**	**0.004**	**0.001**	**0.005**
16:00-17:00	**8**	**245**	**0.003**	**0.000**	**0.003**
17:00-18:00	**8**	**245**	**0.004**	**0.003**	**0.007**
18:00-19:00	**8**	**245**	**0.004**	**0.004**	**0.008**
19:00-20:00	**5**	**285**	**0.002**	**0.000**	**0.002**
20:00-21:00	**5**	**285**	**0.001**	**0.000**	**0.001**
21:00-22:00	**2**	**219**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.030**	**0.029**	**0.059**

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.*

Audit Code: 5110427d-174c-4725-99e9-30a51c3411e4

Parameter Summary:

Trip rate parameter range selected:	15 - 1100 (units: RESIDE)
Survey date date range:	13/09/2006 - 25/06/2021
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
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.

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMODATION

Pedestrians

Calculation factor: 1 RESIDE

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. RESIDE	Arrivals	Departures	Totals
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	**1**	**241**	**0.000**	**0.000**	**0.000**
07:00-08:00	**8**	**245**	**0.002**	**0.012**	**0.014**
08:00-09:00	**8**	**245**	**0.006**	**0.059**	**0.065**
09:00-10:00	**8**	**245**	**0.010**	**0.030**	**0.040**
10:00-11:00	**8**	**245**	**0.019**	**0.043**	**0.062**
11:00-12:00	**8**	**245**	**0.025**	**0.037**	**0.062**
12:00-13:00	**8**	**245**	**0.031**	**0.047**	**0.078**
13:00-14:00	**8**	**245**	**0.040**	**0.049**	**0.089**
14:00-15:00	**8**	**245**	**0.053**	**0.051**	**0.104**
15:00-16:00	**8**	**245**	**0.049**	**0.046**	**0.095**
16:00-17:00	**8**	**245**	**0.069**	**0.037**	**0.106**
17:00-18:00	**8**	**245**	**0.067**	**0.041**	**0.108**
18:00-19:00	**8**	**245**	**0.069**	**0.040**	**0.109**
19:00-20:00	**5**	**285**	**0.027**	**0.025**	**0.052**
20:00-21:00	**5**	**285**	**0.035**	**0.027**	**0.062**
21:00-22:00	**2**	**219**	**0.039**	**0.030**	**0.069**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.541**	**0.574**	**1.115**

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.*

Audit Code: 5110427d-174c-4725-99e9-30a51c3411e4

Parameter Summary:

Trip rate parameter range selected:	15 - 1100 (units: RESIDE)
Survey date date range:	13/09/2006 - 25/06/2021
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
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.

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMODATION

Public Transport Users

Calculation factor: 1 RESIDE

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. RESIDE	Arrivals	Departures	Totals
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	**1**	**241**	**0.000**	**0.000**	**0.000**
07:00-08:00	**8**	**245**	**0.002**	**0.014**	**0.016**
08:00-09:00	**8**	**245**	**0.003**	**0.033**	**0.036**
09:00-10:00	**8**	**245**	**0.008**	**0.027**	**0.035**
10:00-11:00	**8**	**245**	**0.010**	**0.028**	**0.038**
11:00-12:00	**8**	**245**	**0.013**	**0.020**	**0.033**
12:00-13:00	**8**	**245**	**0.016**	**0.023**	**0.039**
13:00-14:00	**8**	**245**	**0.014**	**0.019**	**0.033**
14:00-15:00	**8**	**245**	**0.013**	**0.020**	**0.033**
15:00-16:00	**8**	**245**	**0.018**	**0.014**	**0.032**
16:00-17:00	**8**	**245**	**0.028**	**0.012**	**0.040**
17:00-18:00	**8**	**245**	**0.038**	**0.013**	**0.051**
18:00-19:00	**8**	**245**	**0.030**	**0.012**	**0.042**
19:00-20:00	**5**	**285**	**0.018**	**0.005**	**0.023**
20:00-21:00	**5**	**285**	**0.013**	**0.004**	**0.017**
21:00-22:00	**2**	**219**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.224**	**0.244**	**0.468**

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.*

Audit Code: 5110427d-174c-4725-99e9-30a51c3411e4

Parameter Summary:

Trip rate parameter range selected:	15 - 1100 (units: RESIDE)
Survey date date range:	07/12/2012 - 25/06/2021
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
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.