



Transport Statement

Former Fairwater Social Club

Cardiff Council

Former Fairwater Social Club, Fairwater, Cardiff

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Basis of Report

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- Appendix A** **Site Masterplan**
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1.0 Introduction

Overview

- 1.1 SLR Consulting Limited (SLR) has been appointed by Cardiff Council to provide highways and transportation advice in relation to the redevelopment of the former Fairwater Social Club, Fairwater, Cardiff.
- 1.2 The proposed development is as follows:
- 1.3 *Demolition of the former Fairwater Social Club and construction of affordable houses together with access, landscaping, drainage, engineering, and other associated works.*
- 1.4 This Transport Statement (TS) sets out the transport and highway matters related to the proposed development.

Site Location

- 1.5 The site is located to the west of Fairwater Park, approximately 4.8km west of Cardiff city centre.
- 1.6 The site is presently occupied by the former Fairwater Social & Athletic Club and associated parking area, the site additionally incorporates number 51 Ferrier Avenue. An existing vehicle access is provided from Plas-Mawr Road at the south western boundary of the site whilst a pedestrian link is provided from Ferrier Avenue at the northern boundary of the site.
- 1.7 The site is well located with regard to local amenities and transport opportunities with the shops and services of Fairwater approximately 450 metres to the south, local bus stops within 100 metres of the site on Plas-Mawr Road. Fairwater railway station is located approximately 1.1 kilometres to the east.

Pre Application Engagement

- 1.8 The site has been the subject of Pre Application engagement with Cardiff Council and this TS reflects comments provided by Cardiff Council Highways officers.

Report Structure

- 1.9 Following this introduction, the remainder of this report is structured as follows:
 - **Section 2** summarises the accessibility of the site by a range of transport modes;
 - **Section 3** provides an overview of the policy against which the proposals will be considered;
 - **Section 4** provides an overview of the development proposals;
 - **Section 5** considers the effect of the development on the local transport network; and,
 - **Section 6** summarises and concludes this report.



2.0 Baseline Conditions

Overview

- 2.1 The site is presently occupied by the former Fairwater Social & Athletic Club and associated parking area, the site additionally incorporates number 51 Ferrier Avenue. An existing vehicle access is provided from Plas-Mawr Road at the south western boundary of the site whilst a pedestrian link is provided from Ferrier Avenue at the northern boundary of the site.
- 2.2 The site location in relation to the surrounding area is shown in **Figure 2-1**.

Figure 2-1: Site Location Plan



Active Travel Network

- 2.3 Walking and cycling provide important modes of transport and should also be encouraged as part of longer journeys via public transport.
- 2.4 Manual for Streets (MfS) identifies 'walkable neighbourhoods' as being:

“characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which residents may access comfortably on foot.”



2.5 However, it is important to recognise that MfS does not consider 800 metres to be a maximum walking distance. MfS contends that walking can be used to access a variety of destinations within a range of up to 2 kilometres.

2.6 More recently, there has been an emergence of 15-minute neighbourhoods, based on a design ethos of creating complete, compact and connected neighbourhoods, where people can meet their everyday needs within a short walk or cycle. This concept builds upon the notion of walkable neighbourhoods and places designed at pedestrian scale and is supported by a 15-minute neighbourhood guide published by the Town and Country Planning Association in March 2021.



2.7 The idea of the 15-minute neighbourhood presents multiple benefits including boosting local economies, improving people’s health and wellbeing, increasing social connections in communities, and tackling climate change.

Pedestrian Network

2.8 A pedestrian link is currently provided through the site connecting Ferrier Avenue to the north with Plas-Mawr Road to the south west. The link is provided as a footpath from Ferrier Avenue to the site whilst the section connecting to Plas-Mawr Road comprises a footway on the eastern side of the access.

2.9 Footways are provided on both sides of Plas-Mawr Road creating a convenient pedestrian link from the site towards the shops and services of Fairwater to the south. To the north of the site access, a Zebra crossing is located on Plas-Mawr Road providing a safe connection to bus stops on the western side of the carriageway.

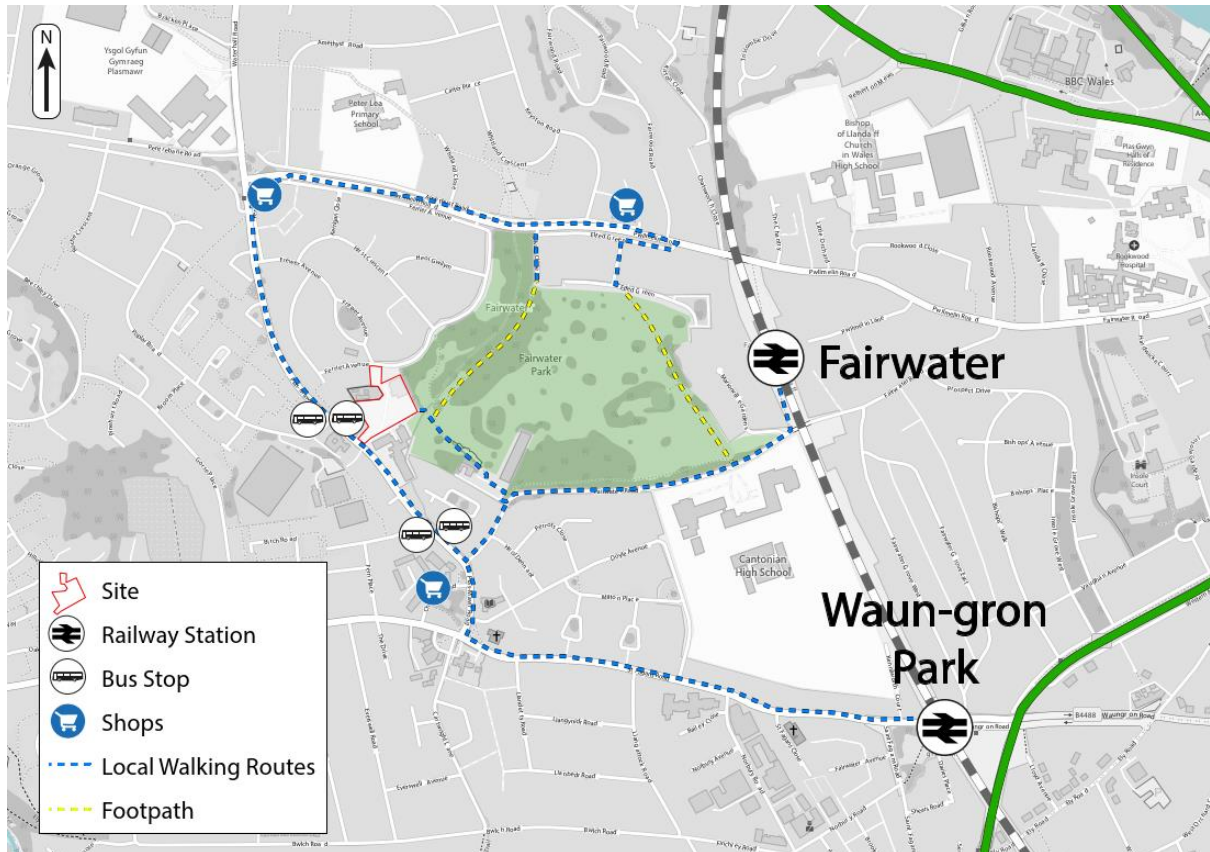
2.10 Ferrier Avenue, to the north of the site, benefits from continuous footways on the northern side of the carriageway. No footway is provided on the southern side of the carriageway along the Fairwater Park frontage to the immediate east of the site, however, a footway is provided to the west of the park.

2.11 Alongside local footways, there are a range of traffic-free routes in the vicinity of the site. These include pedestrian routes throughout Fairwater Park and access to the Ely Trail to the south. The Ely Trail connects Fairwater in the east with St Fagans in the west. The start of the trail is located an approximate 1.2km route from the site.



2.12 A summary of the local pedestrian network is provided in **Figure 2-2**.

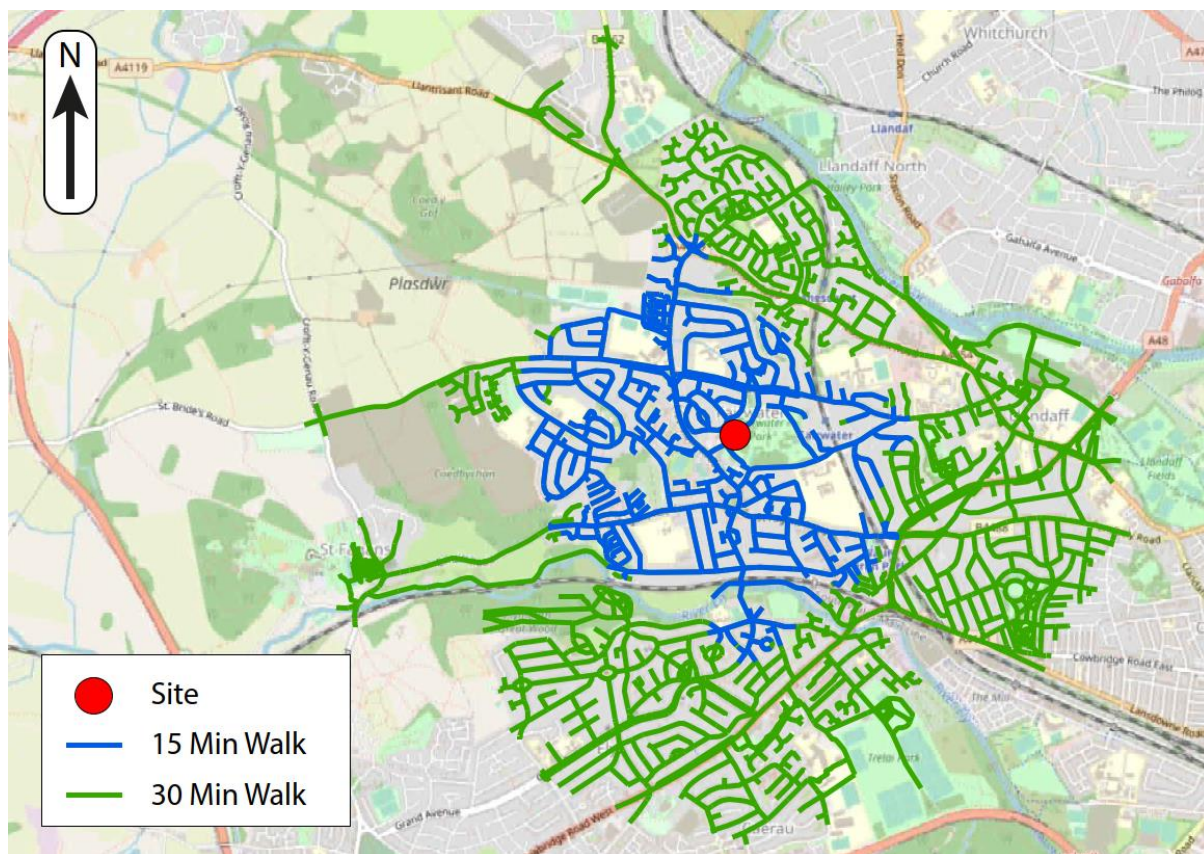
Figure 2-2: Local Pedestrian Network



2.13 With consideration for the local network outlined above, a review of the areas accessible on foot within a 15-minute and 30-minute walk time has been undertaken. A summary of these accessible areas is shown in the isochrones included at **Figure 2-3**.



Figure 2-3: Walking Isochrones

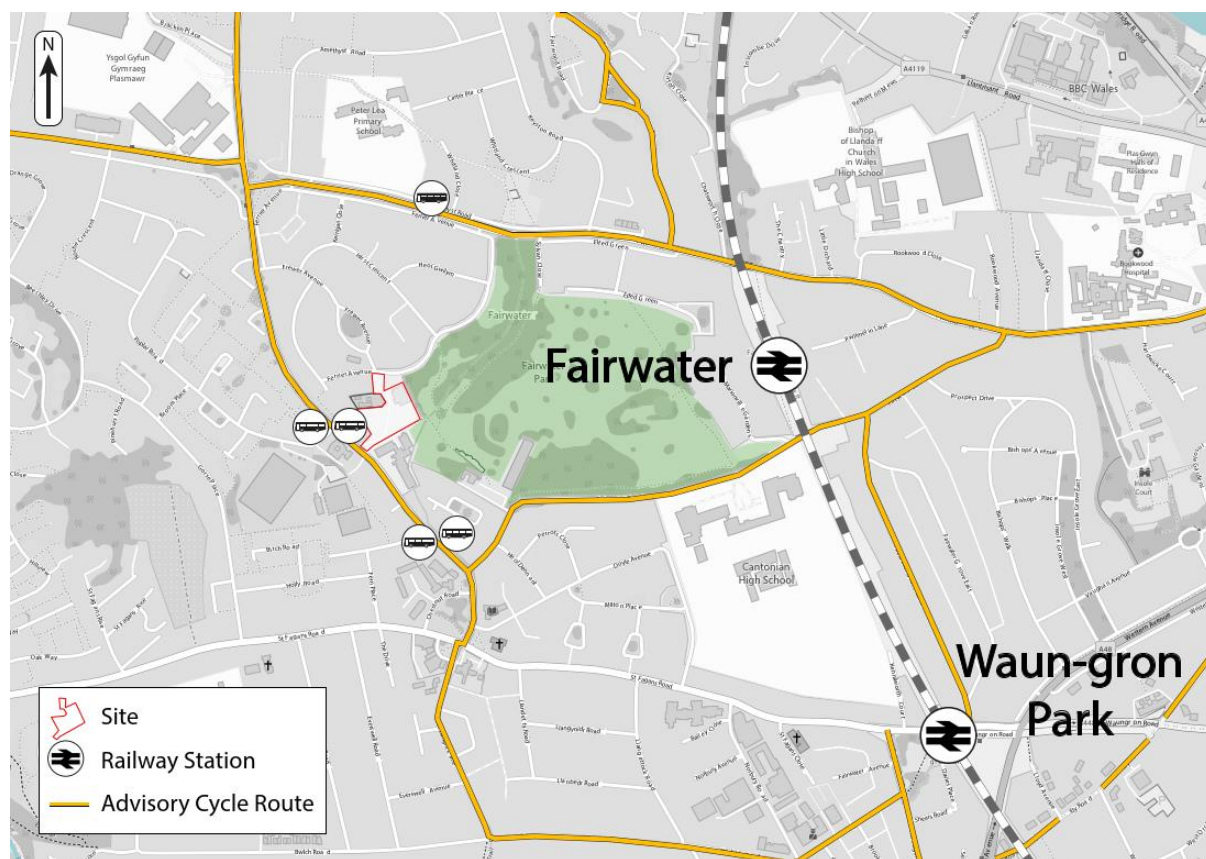


Cycle Network

- 2.14 The site is well located with regard to local cycle routes, particularly to advisory routes including Plas-Mawr Road, Pwllmelin Road and Fairwater Road. These advisory routes connect the site to the wider network, such as the Taff Trail, as well as to the shops and services of central Cardiff.
- 2.15 A summary of the local cycle network is provided in **Figure 2-4**.



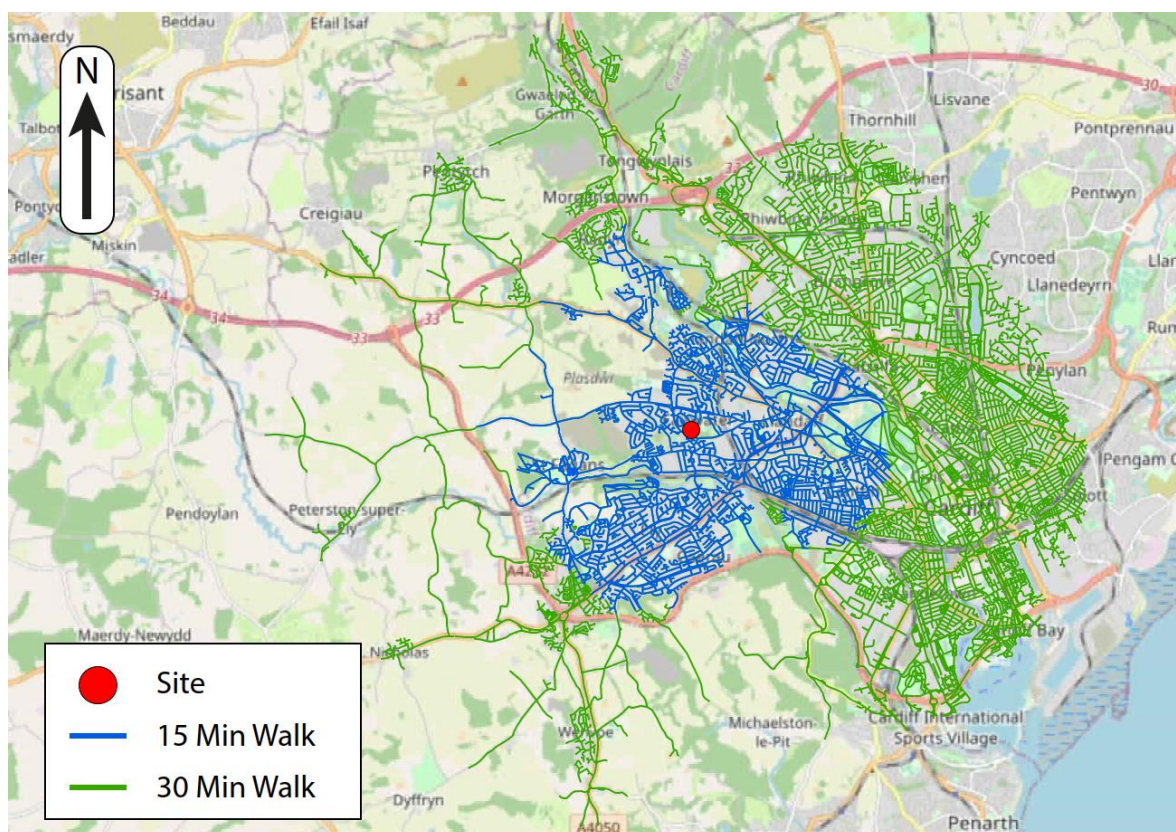
Figure 2-4: Local Cycle Network



2.16 With consideration for the local network outlined above, a review of the areas accessible by cycle within a 15-minute and 30-minute cycle time has been undertaken. A summary of these accessible areas is shown in the isochrones included at **Figure 2-5**.



Figure 2-5: Cycle Isochrones



Local Amenities

2.17 The site is well located with regard to local amenities with the shops and services of Fairwater approximately 450 metres to the south. **Table 2-1** provides a summary of a range of local amenities whilst the location of these relative to the site are shown in **Figure 2-6**.

Table 2-1: Local Amenities

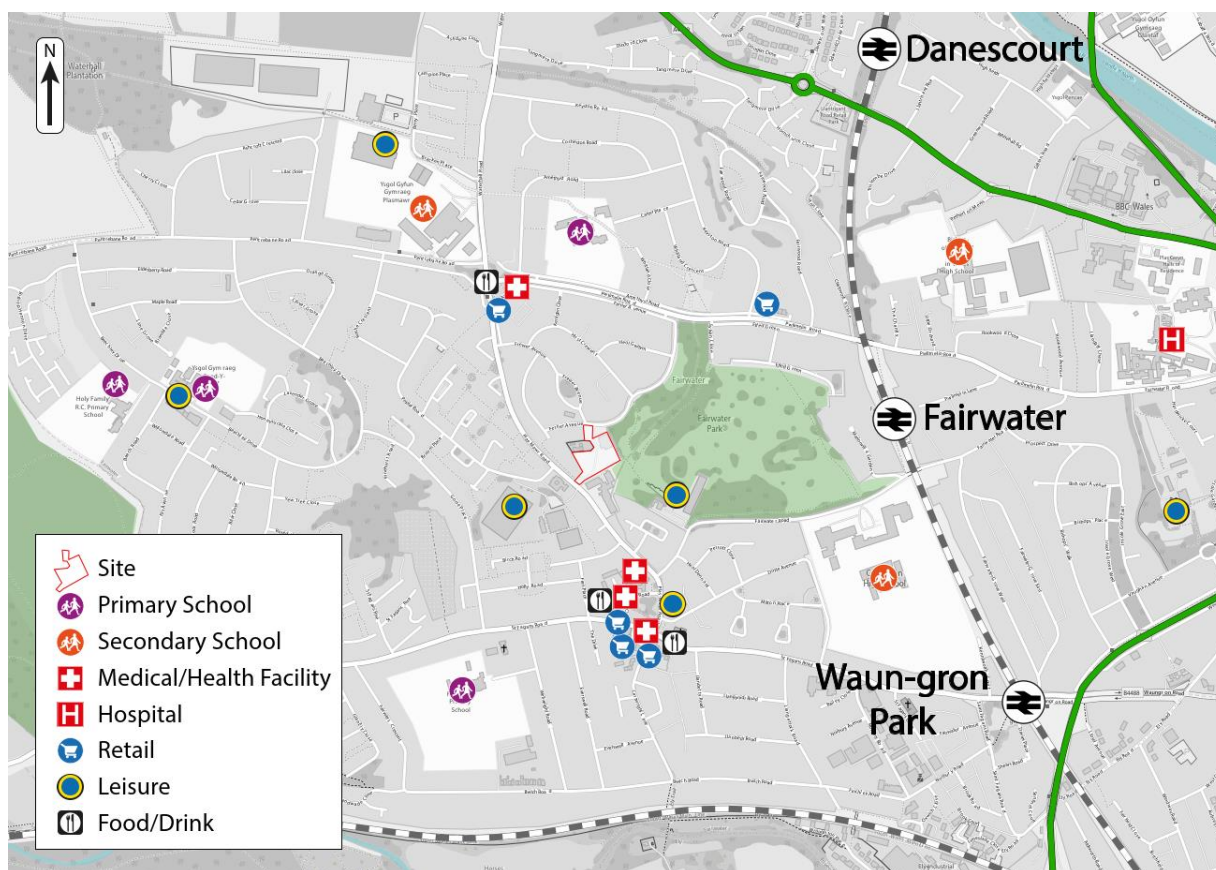
Education	Distance	Walk Time	Cycle Time
Fairwater Primary School	800 metres	10 minutes	3 minutes
Cantonian High School	800 metres	10 minutes	3 minutes
Ysgol Gyfun Plasmawr	800 metres	10 minutes	3 minutes
Pentrebane Primary School & Nursery	1,100 metres	13 minutes	4 minutes
Healthcare	Distance	Walk Time	Cycle Time
Fairwater Health Centre	300 metres	4 minutes	1 minute
Lloyds Pharmacy	500 metres	6 minutes	2 minutes
Bainbridge Pharmacy	500 metres	6 minutes	2 minutes
Fairwater Green Opticians	500 metres	6 minutes	2 minutes
Fairwater Green Dental Practice	500 metres	6 minutes	2 minutes
Retail	Distance	Walk Time	Cycle Time
Spar	500 metres	6 minutes	2 minutes
Londis	500 metres	6 minutes	2 minutes
Cooperative Food	500 metres	6 minutes	2 minutes



Brutons Bakery	500 metres	6 minutes	2 minutes
St Fagans Road Post Office	500 metres	6 minutes	2 minutes
Aldi	1,750 metres	21 minutes	7 minutes
Leisure	Distance	Walk Time	Cycle Time
Fairwater Football Club	300 metres	4 minutes	1 minute
Snowsport Cymru Wales	500 metres	6 minutes	2 minutes
Fairwater Hub	500 metres	6 minutes	2 minutes
Fairwater Leisure Centre	950 metres	11 minutes	4 minutes
Pentrebane Zone Community Centre	1,100 metres	13 minutes	4 minutes
Employment	Distance	Walk Time	Cycle Time
Cardiff Hackspace	1,500 metres	18 minutes	6 minutes
Desg Coworking Space	3.1km	37 minutes	12 minutes
Hub XV Coworking Space	4.1 km	49 minutes	16 minutes

2.18 The location of these facilities is provided in **Figure 2.6**.

Figure 2-6: Local Amenities



2.19 The existing Cantonian High School site is currently the subject of an extensive redevelopment and modernisation programme.



2.20 The redevelopment will incorporate the following:

- Expanding Cantonian High School from 6FE to 8FE with sixth form places for 250 pupils served by new facilities;
- Expanding the Specialist Resource Base at Cantonian High School from 20 to 30 places with new purpose built accommodation;
- Relocating the Riverbank Special School to new facilities on the Cantonian High School site and expanding from 70 to 140 places;
- Relocating Woodlands High School to new facilities on the Cantonian High School site and expanding from 140 to 240 places.

2.21 This development is currently under construction. It was previously expected that the school would be open in 2025/2026. This however is likely to be revised following delays with construction.

Public Transport Network

2.22 The site is well located with regard to local transport opportunities with nearby bus stops within 100 metres of the site on Plas-Mawr Road, and Fairwater railway station is approximately 1.1 kilometres to the east.

Local Bus Services

2.23 Bus stops on Plas-Mawr Road are within 100 meters of the site and are served by route 61 which operates every 20 minutes between Cardiff city centre and Pentrebane. Further bus stops are located on St Fagans Road, approximately 550 metres to the south of the site. These stops are served by routes 32A, 64 and 320 connecting to Heath Hospital, Cardiff city centre and Talbot Green.

2.24 **Table 2-2** summarises the local bus services.

Table 2-2: Local Bus Services

	Route	Frequency		
		Mon-Fri	Saturday	Sunday
61	Cardiff City Centre – Canton – Fairwater Green – Pentrebane	20 minutes	20 minutes	30 minutes
32A	Cardiff City Centre – Victoria Park – Fairwater Green – St Fagans	60 minutes	60 minutes	60 minutes
64	Cardiff City Centre – Ely Bridge – Llandaff – Heath Hospital	60 minutes	120 minutes	N/A
320	Cardiff City Centre – Fairwater – St Fagans – Pontyclun – Talbot Green	120 minutes	120 minutes	N/A

Local Rail Services

2.25 Fairwater station is approximately 1.1 kilometres to the east of the site. Services operate every 30 minutes to Coryton via Cardiff Central, Cardiff Queen Street and Whitchurch. A further half hourly service connects Fairwater to Radyr via Danescourt.



Rail Service Improvements

- 2.26 Fairwater station is on one of the Core Valley Lines and subsequently is set to benefit from a package of improvements as part of the South Wales Metro project.
- 2.27 The station platforms have recently been extended to accommodate longer trains. The rail line has also been electrified which will enable electric services to operate in the future, providing quicker and more comfortable journeys.
- 2.28 In addition to the above, a range of improvements are substantially progressed at Waun-gron Park station, located approximately 1.2 kilometres to the south east of the site. As with Fairwater station, improvements have included platform extensions to facilitate the introduction of new, longer trains. Planning consent for the platform extension was granted in May 2022 (Planning Ref. PRAP/22/00008/MNR).
- 2.29 The station was further identified as a key location for an ‘integrated hub’ as part of the South Wales Metro project with a range of local bus routes diverted through the new interchange. The proposals would further include 44 dwellings, office and commercial spaces, as well as active travel improvements, and were granted consent in May 2022 (Planning Ref. 21/01359/MJR).
- 2.30 As part of the development proposals, a range of station improvements have been proposed including the following:
- New smart card system;
 - CCTV cameras;
 - Wi-Fi provision;
 - New cycle parking stands; and,
 - Integrated bus and rail arrival and departure screens.
- 2.31 Alongside station improvements, a package of active travel measures has been proposed including new raised table crossings with pedestrian and cycle priority at each end of the interchange road.

Local Highway Network

- 2.32 The site is accessed via Plas-Mawr Road, a two-way carriageway subject to a 20mph speed limit in the vicinity of the site. To the south Plas-Mawr Road joins St Fagans Road, via a signalised junction, providing access to the A48 to the east and St Fagans to the west. To the north Plas-Mawr Road becomes Waterhall Road which joins the A4119 operating between the A48 via Cardiff Road to the south and Rhydlafar, Capel Llanilltern the M4 at Junction 34 to the northwest.
- 2.33 The site is therefore well connected to the wider strategic highway network, particularly to the A48 and M4.
- 2.34 The former connects the A4232 to the west with the M4 to the east and comprises a mix of single and dual carriageway. The M4 provides a motorway linking Cardiff to Bridgend and Swansea to the west whilst serving Bristol, Reading and London to the east.



Personal Injury Collision (PIC) Data

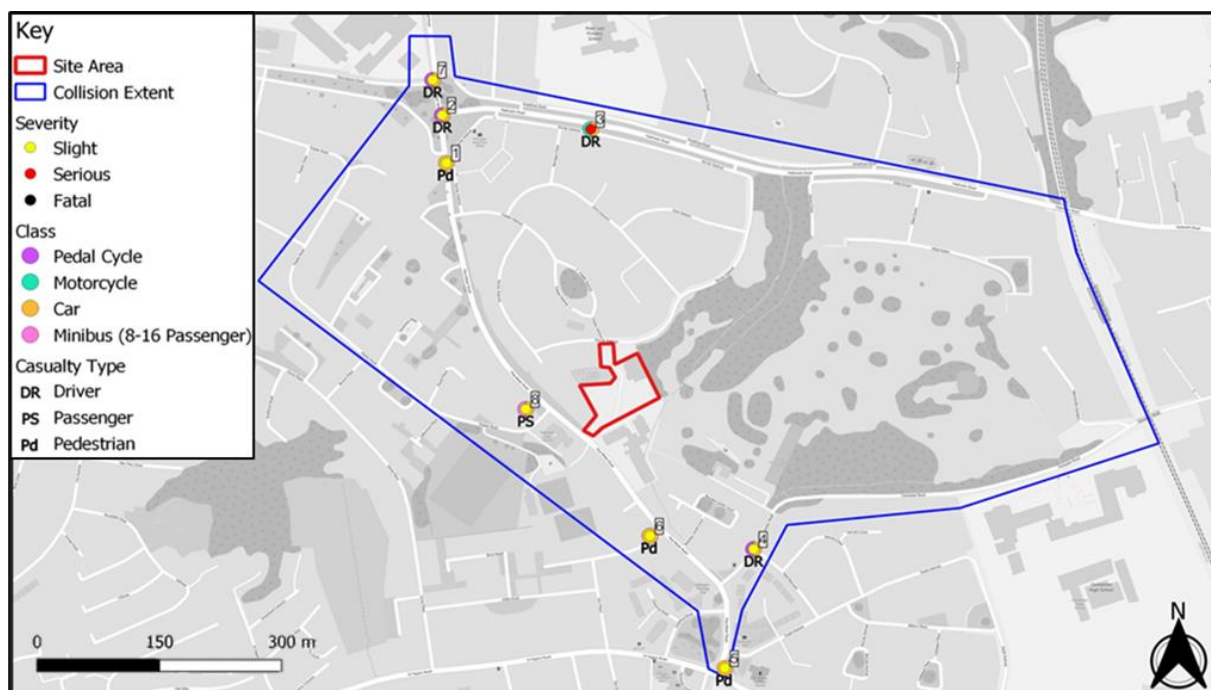
- 2.35 A review of Personal Injury Collision (PIC) data for the site has been undertaken using Stats19 data, an online government database of PIC records. The records relate to PICs on public roads that are reported to the police and subsequently recorded, using the STATS19 collision reporting form. The most recently available five-year period has been analysed between 30/6/2017 and 30/6/2022.
- 2.36 A summary of collisions by year is provided in **Table 2-3**.

Table 2-3: PIC Collision Summary

Year	Slight	Serious	Fatal	Total
2017	1	0	0	1
2018	3	1	0	4
2019	1	0	0	1
2020	1	0	0	1
2021	0	0	0	0
2022	0	0	0	0
Total	7	1	0	8

- 2.37 The location and severity of collisions are shown in **Figure 2-7**.

Figure 2-7: PIC Overview



- 2.38 A total of eight collisions have been recorded in the study area over the most recently available 5-year period. A downward trend is also present in the data, with zero collisions recorded in 2021 or the first half of 2022.



- 2.39 The eight recorded collisions resulted in seven slight injuries and one serious injury. There were zero fatal collisions recorded. The majority of incidents occurred in the vicinity of local junctions and are likely to be attributed to vehicles manoeuvring and changing speed.
- 2.40 No collisions are associated with access to the site.
- 2.41 Of the collisions, six involved vulnerable road users with three incidents involving a pedestrian and three incidents involving cyclists. The majority of these incidents are considered to be isolated, and do not form a cluster of incidents which would indicate towards a highway design-based safety concern. A cluster of incidents would be classified as four incidents within three years and all within 100m of each other in accordance with Statistic for Wales and Welsh Government Guidance¹.
- 2.42 On the basis of the above, it is considered that there are no inherent safety issues associated with the existing highway network and junction arrangement in the vicinity of the site.

Summary

- 2.43 It is evident from the above review that the site is well located with regard to a range of local amenities, including schools, shops and healthcare facilities which can be accessed in a convenient walk or cycle time.
- 2.44 In addition, local bus services can be accessed within 100 metres of the site via the 'Poplar Road' bus stop located on Plas-Mawr Road. Buses operate every 20 minutes between Cardiff city centre and Pentreban. Further bus stops circa 550 metres from the site provide access to locations such as Heath Hospital, Ely Bridge and Talbot Green. These services would provide residents with suitable alternatives to the private car for purposes including commuting and leisure trips.
- 2.45 The site is located approximately 1.1 kilometres to the east of Fairwater railway station and can be accessed in less than 15 minutes on foot or circa 5 minutes by bicycle. Rail services operate every 30 minutes to Cardiff Central and are the subject of ongoing refinement as timetables are improved as part of the South Wales Metro.
- 2.46 It has therefore been demonstrated that the site is suitably located for future residents to benefit from the opportunity to travel via more sustainable travel modes than the private car.

¹ <https://www.gov.wales/sites/default/files/publications/2017-08/guidelines-for-the-submission-of-road-safety-schemes.doc>

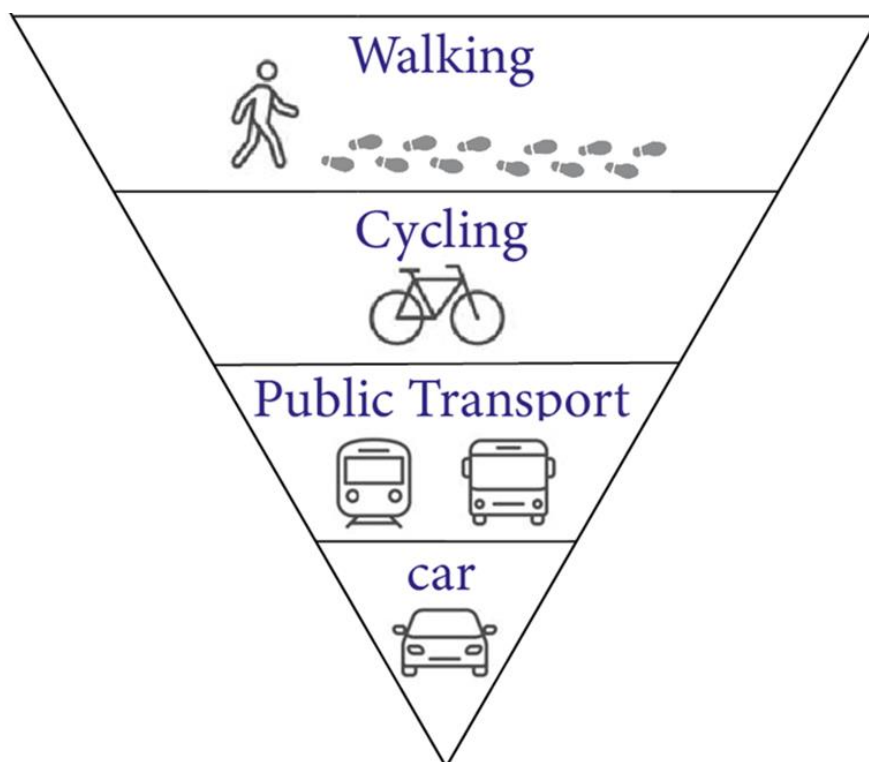


3.0 Policy Context

Overview

- 3.1 This section of the report outlines relevant policies for development and transport in Wales, which are cognisant of one another and follow a common theme; moving towards carbon reduction in the promotion of communities, virtual and active mobility, followed by public transport with private vehicle trips at the bottom of the hierarchy. This hierarchy is demonstrated in **Figure 3-1**.

Figure 3-1: Transport Hierarchy (Active Travel Act Guidance 2021)



Planning Policy Wales (Edition 12) (February 2024)

- 3.2 Planning Policy Wales Edition 12 (PPW12) sets out the land use planning policies of the Welsh Government. The primary objective of PPW12 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.”

- 3.3 With regards to sustainable transport, PPW12 advises that, in the context of active and social places, developments should encourage modal shift and be easily accessible by walking, cycling and public transport, by virtue of their location, design and provision of on and off-site sustainable transport infrastructure.



- 3.4 A key theme throughout PPW is the aim of reducing reliance on travel by private car, and the adverse impacts of motorised transport on the environment and people’s health, by prioritising and increasing active travel and public transport. Additionally, it states that development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services.
- 3.5 It is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development, which is; walking, cycling, ultra-low emission vehicles and public transport.
- 3.6 Paragraph 4.1.8 relates specifically to sustainable transport and states:
- 3.7 *“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”.*

Llwybr Newydd – The Wales Transport Strategy (May 2021)

- 3.8 The new Transport Strategy for Wales sets out the ‘new path’ that will shape the transport system over the next 20 years. It is a *“new way of thinking that places people and climate change at the front and centre of our transport system”*. This document crucially defines the climate emergency as one of the biggest defining issues of our time, and the need to achieve net zero by 2050.
- 3.9 This seeks to improve the social, economic, environmental and cultural well-being of Wales. It contains seven well-being goals which local authorities as well as other public bodies must seek to achieve in order to improve well-being both now and in the future.
- 3.10 The strategy sets out three urgent priorities which are illustrated in **Figure 3-2**.

Figure 3-2: Wales Transport Strategy Priorities

Priority 1	Priority 2	Priority 3
Bring services to people in order to reduce the need to travel	Allow people and goods to move easily from door to door by accessible sustainable transport	Encourage people to make the change to move sustainable transport

- 3.11 Priority 1 seeks to reduce the need for people to use their cars on a daily basis by:
- Supporting remote working in line with Welsh Government target of 30% remote working;
 - Locate new public services close to where people live and to existing public transport routes;
 - Design new developments to be walk and cycle friendly from the outset;



- Maximise the use of land close to transport hubs;
 - Improve access to fast and reliable broadband; and
 - Set aside land for multi-modal hubs to transfer freight to smaller vans or e-cargo bikes for last mile deliveries.
- 3.12 Priority 2 aims to achieve a shift away from private car use to more sustainable transport modes, enabling more people to walk, cycle, and use public transport, as well as low-emissions vehicles.
- 3.13 Priority 3 seeks to encourage people to change their travel behaviour to use low carbon, sustainable transport. This will be done through (but not limited to):
- Developing a range of behaviour-change projects;
 - Move from individual vehicle ownership to shared solutions;
 - Reduce the cost of sustainable travel; and
 - Support digital innovation.
- 3.14 The development has been designed where possible to reduce reliance on the private car and encourage future residents to undertake trips on foot, by cycle or public transport.

Future Wales – The National Plan 2040 (February 2021)

- 3.15 'Future Wales – the National Plan 2040' (Future Wales) is the national development framework, setting the direction for development in Wales to 2040. Future Wales strongly considers the Well-Being of Future Generations (Wales) Act 2015, which gives a legally-binding common purpose – the seven well-being goals – for national government, local government, local health boards and other specified public bodies. It details the ways in which these bodies must work, and work together, to improve the well-being of Wales.
- 3.16 Future Wales recognises that Placemaking is at the heart of the planning system in Wales, and that this policy establishes a strategic placemaking approach and principles to support planning authorities to shape urban growth and regeneration.
- 3.17 Within its Strategic Placemaking Principles, Future Wales considers mix of uses, variety of housing, walkable scale, density, street network, plot-based development and green infrastructure.
- 3.18 Of vital importance to new developments such as the proposed site is the concept of the 'walkable scale'. This strategic placemaking principle states that to enable active and healthy lives, people should be able to easily walk to local facilities and public transport.

Active Travel Act Guidance (July 2021)




- 3.19 The act requires local authorities in Wales to produce maps of walking and cycling networks, and to deliver year on year active travel improvements along the mapped routes and their related facilities. These routes should be coherent, direct, safe, comfortable and attractive. The maps shall now be known as Active Travel Network Maps (ATNM) – showing existing routes and future routes which shall combine the Existing Routes Map, and the Integrated Network Map required by the act.



3.20 As well as creating the infrastructure, the act includes provision for making people aware of the existing and future routes through the publication of the maps and for the promotion of active travel as a means of transport.

3.21 **Figure 3-3** is an extract of Table 4.1 within the guidance which provides a guide for network development in relation to reasonable distances that would be travelled by each respective mode for everyday journeys.

Figure 3-3: Active Travel Guidance Table 4.1

	Less than 1km	Up to 3km	Up to 5km	Up to 8km	Up to 12km	Up to 24km
	Many users	Many users	Some users	Few users	Few users	Few users
	Many users	Many users	Many users	Many users	Some users	Few users
	Many users	Many users	Many users	Many users	Some users	Some users

3.22 Two out of every three journeys are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking. For school children the opportunities are even greater: three quarters of children live within a 15-minute cycle ride of a secondary school, while more than 90% live within a 15-minute walk of a primary school².

3.23 The guidance further states that developments that do not adequately make provision for walking and cycling should not be approved. This may include adequate off-site improvements for pedestrians and cyclists using existing highways that are affected by the development. The site has the potential to provide excellent pedestrian links allowing for residents of the site to connect with the local area, including the adjacent Fairwater Park.

² DfT – Cycling and Walking Investment Strategy (2017)



Well-being of Future Generations (Wales) Act (April 2015)

3.24 Wales faces a number of challenges now and in the future, such as climate change, poverty, health inequalities and jobs and growth.

3.25 The Well-being of Future Generations Act puts in place seven well-being goals that will help to tackle these challenges. The Act makes it clear the listed public bodies must work to achieve all of the goals, not just one or two.

3.26 In terms of the impact of the goals on develop and travel, the first goal of 'A Prosperous Wales' recognises the need for an innovative, productive and low carbon society and is somewhat all-encompassing of the other goals and the need for sustainable travel options and low carbon communities.



Cardiff Local Development Plan (LDP)

3.27 The adopted Cardiff Local Development Plan (LDP) provides the statutory framework for the development and use of land within Cardiff during the plan period of 2006 to 2026, in conjunction with Supplementary Planning Guidance (SPG).

3.28 A number of development principles are included within the LDP, of particular relevance these include:

- Minimise car travel, maximise sustainable transport use and decrease air pollution by creating accessible, permeable and legible places, preventing predominantly car-based developments and focusing new development in accessible locations which are linked to the strategic cycle network and can be served mainly by effective networks of sustainable transport - walking and cycling and fast and frequent public transport around and beyond the city.
- Maximise the principles of good design - to create places that look good, are of an appropriate and efficient density, fully respect their local context and are successfully integrated with adjoining areas. To design buildings that are resilient and can easily adapt to changing future needs. To design clean and attractive areas where people feel safe and have a sense of ownership.

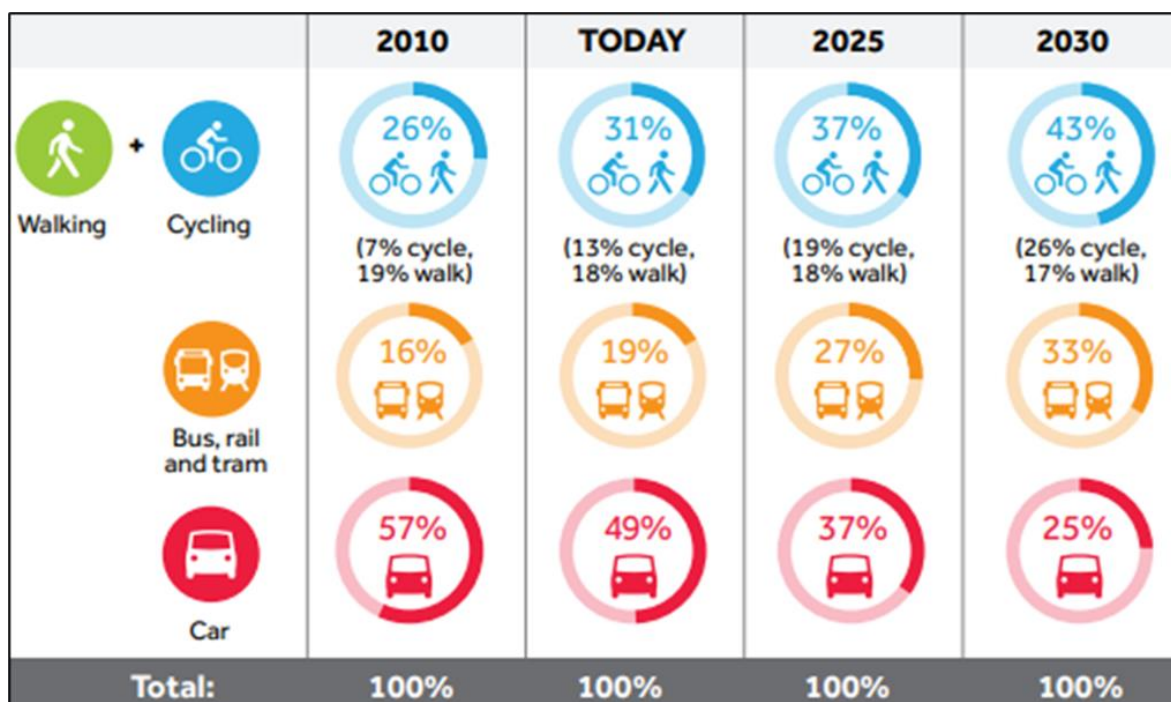
3.29 Policy TC1 considers walking and cycling with an overarching principle to support development which incorporates:

- Permeable and legible active travel networks.
- Measures to minimise vehicle speeds and prioritise pedestrians and cyclists.
- Safe and convenient connections to the wider neighbourhood.



- 3.30 Policy KP8 relates to sustainable transport. The policy states that any new developments in Cardiff will be integrated with transport infrastructure and services in order to achieve a wide range of outcomes. This includes reducing travel demand and dependence on the car, maintaining and improving the efficiency and reliability of the transport network and managing freight movements by road and minimise their impacts.
- 3.31 The policy also notes the intention of the council to achieve a 50/50 modal split between journeys by car and journeys by walking, cycling and public transport. **Figure 3-4**, as shown within the Cardiff Transport White Paper, published in 2020, shows the progress Cardiff has already achieved in meeting this policy. It also indicates the ambition of the council to go further in reducing car usage through a mixture of public transport and active travel.

Figure 3-4: Current and Future Ambitions for Cardiff Modal Split



Managing Transportation Impacts (Incorporating Parking Standards)

- 3.32 Local parking standards are provided within the Managing Transportation Impacts (Incorporating Parking Standards) supplementary planning guidance (April, 2018).
- 3.33 The standards differ for central and non-central areas with the site located within the latter. The car parking standards within the SPG are a maximum level of provision with cycle parking a minimum requirement.
- 3.34 **Table 3-1** summarises the parking standards to be applied to the site.



Table 3-1: Cardiff Council Parking Standards

Dwelling Size	Maximum Vehicle Parking	Minimum Cycle Parking
1 bedroom	1 space per unit	1 space per bedroom
2+ bedroom	2 spaces per unit	1 space per bedroom

Summary

- 3.35 It is evident that national policy including PPW12 is focused on encouraging trips via foot and cycle ahead of other modes. As demonstrated in **Section 2**, the site is well located to take advantage of the existing active travel network in accordance with these policy aims.
- 3.36 More locally, the Cardiff LDP aims for development to be located close to pedestrian, cycle and public transport networks. As noted above, the site has been demonstrated to be accessible by foot, cycle and frequent bus services. The LDP additionally considers the design of development with an aim to integrate new development within the existing street scene. It is considered that, giving the residential nature of the surrounding area, the development is suitably located to achieve these principles.
- 3.37 The LDP additionally aims to achieve a 50/50 modal split between journeys by car and those by walking, cycling and public transport. It is clear from Section 2 that the site is well located to encourage sustainable travel in accordance with these mode split aims.
- 3.38 It is therefore demonstrated that the principles of the development proposals comply with the transport related planning policies discussed within this chapter. The site will seek to reduce the need to travel in the first instance with more sustainable modes of transport promoted for journeys beyond the site. This will be aided through design and continued promotion of the transport hierarchy placing pedestrian and cycle movements at the forefront of all development.



4.0 Development Proposals

Overview

- 4.1 It is proposed to demolish the former social club and adjacent bungalow. The proposals seek to provide 14 dwellings, all to be council houses including an assisted living bungalow. The site masterplan is shown in **Figure 4-1** and is also provided in **Appendix A**.

Figure 4-1: Fairwater Site Masterplan



Access Strategy

- 4.2 The access strategy for the development considers how safe and suitable access can be achieved by all users across a range of transport modes.
- 4.3 The site benefits from an existing vehicular access taken from Plas Mawr Road. The existing access in its current alignment would be retained to serve the proposed development. The access will be subject to new surfacing and white lining.

Pedestrian and Cycle Access

- 4.4 The access from Plas-Mawr Road retains the existing footway into the site.
- 4.5 A vehicle crossover is proposed which provides a raised footway crossing of the site access with Plas-Mawr Road. The vehicle crossover is provided in **Appendix B**.



- 4.6 In addition, a new north south connection will be provided through the site which connects Ferrier Avenue in the north with Fairwater Park in the south. The route to the south will require limited use of the adjacent sheltered living internal access route to provide onward connections to Fairwater Park.

Delivery & Servicing

- 4.7 The internal layout of the site has been designed such that all servicing and delivery activities associated with the development can be undertaken within the curtilage of the site.
- 4.8 Swept path analysis demonstrating how typical servicing and delivery vehicles can access and manoeuvre within the site is included at **Appendix B**.

Parking Strategy

- 4.9 Parking for vehicles and cycles will be provided in accordance with the Cardiff Council standards as outlined in **Section 3** of this report.
- 4.10 Vehicle parking is provided as follows:
- one space per units for the two and three bed units; and
 - two spaces per unit for the four bed units.
- 4.11 In addition to the above, it is noted that the end occupier has advised that the assisted living bungalow requires 4 car parking spaces to include provision for carers. This has been determined as a suitable level to fulfil the operational needs of the future users.

Electric Vehicle Charging Points

- 4.12 Electric Vehicle Charging Points (EVCP) are proposed to be provided for each parking space provided across the site.



5.0 Trip Generation

Overview

5.1 This section provides a summary of the expected trip generation of the existing and proposed land uses at the site so as to determine the likely net change in trips as a result of the development.

Existing Trips

5.2 The site is presently occupied by the former Fairwater Social Club, whilst not currently operational, it could be reoccupied under its lawful use at any time and as such, a trip generation assessment has been undertaken based on the existing 850 sqm social club.

5.3 The TRICS database has been reviewed to determine the expected trip rates associated with a social club. However, as data is not held within the database for social club land uses, trips associated with a public house (without a restaurant) have been obtained as a suitable alternative. The full output reports are attached at **Appendix C**, whilst **Table 5-1** provides a summary of the trip rates and resulting vehicle trips.

Table 5-1: Vehicle Trip Rates and Resulting Trips – Social Club

Time	Vehicle Trip Rate (per sqm)			Vehicle Trips (sqm)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
AM Peak 08:00-09:00	0.000	0.000	0.000	0	0	0
PM Peak 17:00-18:00	2.710	2.065	4.775	23	18	41
Daily 10:00-24:00	18.304	20.572	38.876	156	175	330

5.4 The above demonstrates that, should the Social Club be reoccupied, it could be expected to generate 330 daily vehicle trips with no trips expected during the morning peak hour and 41 two-way vehicle trips during the evening peak hour.

Proposed Trips

5.5 The proposals provide in the region of 14 dwellings. Trip rates have been obtained from the TRICS database associated with similar affordable housing developments in similar locations. The full output reports are attached at **Appendix D**, whilst **Table 5-2** provides a summary of the trip rates and resulting person trips.

Table 5-2: Person Trip Rates and Resulting Trips – Residential

Time	Person Trip Rate (per dwelling)			Person Trips (14 dwellings)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
AM Peak 08:00-09:00	0.383	0.702	1.085	5	10	15
PM Peak 17:00-18:00	0.404	0.447	0.851	6	6	12
Daily 07:00-19:00	4.915	4.959	9.874	69	69	138



- 5.6 **Table 5-2** demonstrates that the proposed development could be expected to generate 15 person trips during the morning peak hour and 12 person trips during the evening peak hour. Across an average weekday it is expected that the proposals would likely generate 138 two-way person trips.
- 5.7 To determine the likely trips by mode, reference has been made to the 2011 Census with method of travel to work data obtained for the Cardiff 031A output area, within which the site is located. The mode share has then been applied to the person trips presented in **Table 5-2**.
- 5.8 It should be noted that while the 2021 Census dataset has been released, Covid-19 restrictions and furlough is expected to have distorted movement and mode share patterns.
- 5.9 Whilst not accounting for the increased levels of home and hybrid working, the 2011 Census is still considered to be the most appropriate method of forecasting.
- 5.10 The resulting mode share is provided in **Table 5-3**.

Table 5-3: Person Trips by Mode

Mode	Share	AM Peak (08:00 – 09:00)		PM Peak (17:00 – 18:00)		Daily (07:00 – 19:00)	
		Arr.	Dep.	Arr.	Dep.	Arr.	Dep.
Train	3%	0	0	0	0	2	2
Bus	20%	1	2	1	1	13	14
Taxi	0%	0	0	0	0	0	0
Motorcycle	0%	0	0	0	0	0	0
Car Driver	58%	3	6	3	4	4	40
Car Passenger	6%	0	1	0	0	4	4
Bicycle	3%	0	0	0	0	2	2
Foot	9%	0	1	1	1	6	6
Total	100%	5	10	6	6	69	69

- 5.11 **Table 5-3** demonstrates that the proposed development could be expected to generate nine two-way vehicle trips during the morning peak hour with three trips undertaken via public transport and one via active travel modes.
- 5.12 During the evening peak hour, it is expected that the proposals would generate seven two-way vehicle trips with two trips undertaken via public transport and two via active travel modes.
- 5.13 Across the average weekday it is expected that the proposals could generate 44 two-way vehicle trips with 31 trips undertaken via public transport and 16 via active travel modes.

Net Trip Generation

- 5.14 Consideration has been made as to the expected net trip generation of the proposals when compared with the extant use of the site.
- 5.15 **Table 5-4** summarises the anticipated net change in vehicle trips.



Table 5-4: Net Change in Vehicle Trips

Scenario	AM Peak			PM Peak			Daily		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Existing	0	0	0	23	18	41	156	175	330
Proposed	3	6	9	3	4	7	40	40	80
Net Change	+3	+6	+9	-20	-14	-34	-116	-135	-250

- 5.16 **Table 5.4** demonstrates that the proposals would likely generate 9 additional two-way vehicle trips during the morning peak hour whilst resulting in a reduction of 34 two-way vehicle trips during the evening peak hour. Across an average weekday it is expected that the proposed development would result in 250 fewer vehicle trips when compared with the existing lawful use at the site.
- 5.17 It is considered that nine additional trips, equating to less than one vehicle every six minutes, would not result in a material impact on the local highway network. Indeed, once distributed on the network it is considered that the additional trips would have a negligible effect which would likely be within the daily fluctuations experienced on the highway network.

Summary

- 5.18 It has been demonstrated that the proposed development would likely generate 15 trips during the morning peak hour and 12 during the evening peak hour. It is expected that these trips would be distributed across a variety of modes including public transport and active travel. It is considered that the relatively modest change in trips could be accommodated on the existing network without any material impact.
- 5.19 An assessment of the net change in vehicle trips compared with the extant use of the site has illustrated that the proposals would likely generate 9 additional two-way vehicle trips during the morning peak hour (08:00 – 09:00) whilst resulting in a reduction of 34 two-way vehicle trips during the evening peak hour and 250 fewer movements across an average weekday.
- 5.20 It is considered that the potential uplift in the morning peak hour is modest and once distributed it is considered that the additional trips would have a negligible effect on the operation of the local highway network.



6.0 Summary and Conclusions

Summary

- 6.1 SLR Consulting Limited (SLR) has been appointed by Cardiff Council to provide highways and transportation advice in relation to the redevelopment of the former Fairwater Social Club, Fairwater, Cardiff.
- 6.2 The site is presently occupied by the former Fairwater Social & Athletic Club and associated parking area, the site additionally incorporates number 51 Ferrier Avenue. An existing vehicle access is provided from Plas-Mawr Road at the south west boundary of the site whilst a pedestrian link is provided from Ferrier Avenue at the northern boundary of the site.
- 6.3 A review of the existing transport network has demonstrated that the site is sustainably located with a range of transport opportunities in the immediate vicinity including access to the pedestrian, cycle and public transport network. In addition, there are a good level of amenities within the locality to encourage future residents to travel by modes other than the private vehicle in accordance with the policy aims of the Welsh Government and Cardiff Council.
- 6.4 An overview of the development proposals demonstrates that safe and suitable access to the site can be achieved for residents, visitors, delivery and servicing vehicles.
- 6.5 It has been demonstrated that the proposed development would likely generate 15 trips during the morning peak hour and 12 during the evening peak hour. It is expected that these trips would be distributed across a variety of modes including public transport and active travel. It is considered that the relatively modest change in trips could be accommodated on the existing network without detriment to the operation of sustainable transport modes.
- 6.6 An assessment of the net change in vehicle trips compared with the extant use of the site has illustrated that the proposals would likely generate 9 additional two-way vehicle trips during the morning peak hour whilst resulting in a reduction of 34 two-way vehicle trips during the evening peak hour.
- 6.7 It is considered that the potential uplift in the morning peak hour is modest and once distributed it is considered that the additional trips would have a negligible effect on the operation of the local highway network.

Conclusion

- 6.8 It has been demonstrated that the development proposals accord with local and national transport planning policy and would not have a severe impact on the local highway or transport networks. It is therefore concluded that the proposals provide a sustainable development in transport and highway terms and the site is suitably located for residential development.





Appendix A Site Masterplan

Transport Statement

Former Fairwater Social Club

Cardiff Council

SLR Project No.: 425.001564.00001

29 October 2024

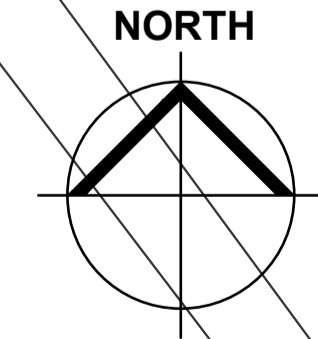
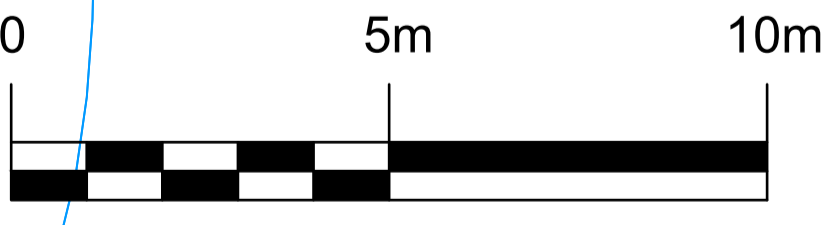


Figured dimensions and levels to be used. Any inaccuracies must be notified to the architect. Detail drawings and large scale drawings take precedence over smaller drawings.

Rev:	Chk'd:	Rev:	Chk'd:
C		Schedule of Accommodation updated. RF 06.11.23	
D		Schedule of Accommodation updated. RF 28.11.23	
E		Boundary Treatments, Rear Garden Patio, Bin Locations, Bike Store/Shed Locations Added and Porch Orientations updated to align with elevations TP 11.09.2024	
F		Fences enclosing void spaces to east and west added. TP 12.10.2024	

Chk'd:	Rev:	Chk'd:	Rev:

PRELIMINARY	
PLANNING	
DESIGN	
TENDER	
CONSTRUCTION	



powelldobson
ARCHITECTS

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Tel: +44 (0)333 33 201 001 www.powelldobson.com

Contract: Cardiff Council, Cardiff 3 Sites
Fairwater Site
Proposed Site Layout

Drawing No. 22007 (05) 120
Rev. F

Scale: 1: 200 @ A1
Date: March 2023
Drawn: RF
Checked: BK



Appendix B SLR Drawings

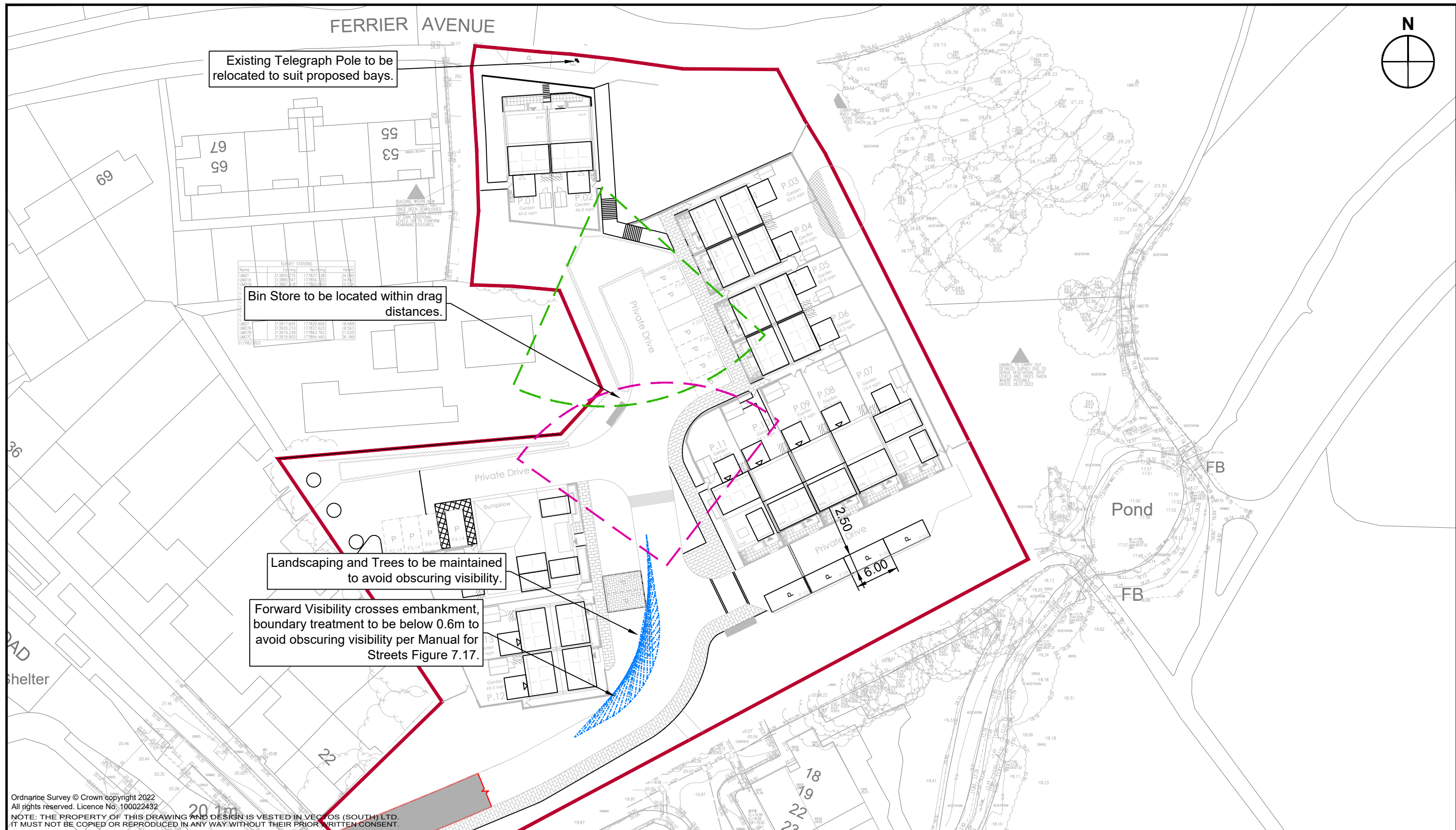
Transport Statement

Former Fairwater Social Club

Cardiff Council

SLR Project No.: 425.001564.00001

29 October 2024



REV.	DETAILS	DRAWN	CHECKED	DATE
A	New Masterplan	RJ	KR	25.04.23
B	New Masterplan	RJ	KR	25.04.23
C	New Masterplan	KR	EW	21.08.24
D	New Masterplan	KR	EW	29.10.24

Notes:

- This is not a construction drawing and is intended for illustrative purposes only.
- White lining is indicative only.

----- 17m Forward Visibility

----- 25m Operator Drag Distance

----- 30m Bin Drag Distance

INFORMATION ONLY

Cardiff Housing Sites: Fairwater

General Arrangement

DRAWN: KR CHECKED: EW DATE: 31.03.23 SCALES: 1:500 at A3

Cardiff Council

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t: 02920 720 860 e: vectos@vectos.co.uk

DRAWING NUMBER: **226773_SK01** REVISION: **D**

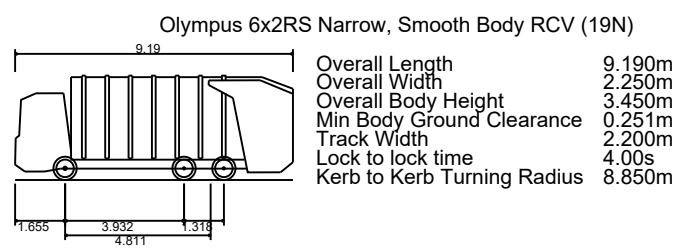


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REV.	DETAILS	DRAWN	CHECKED	DATE
A	New Masterplan	RJ	KR	25.04.23
B	New Masterplan	RJ	KR	25.04.23
C	New Masterplan	KR	EW	29.10.24

Notes:
 1. This is not a construction drawing and is intended for illustrative purposes only.
 2. White lining is indicative only.



INFORMATION ONLY

Cardiff Housing Sites: Fairwater

Swept Path Analysis
 11.2m Refuse Vehicle
 Servicing

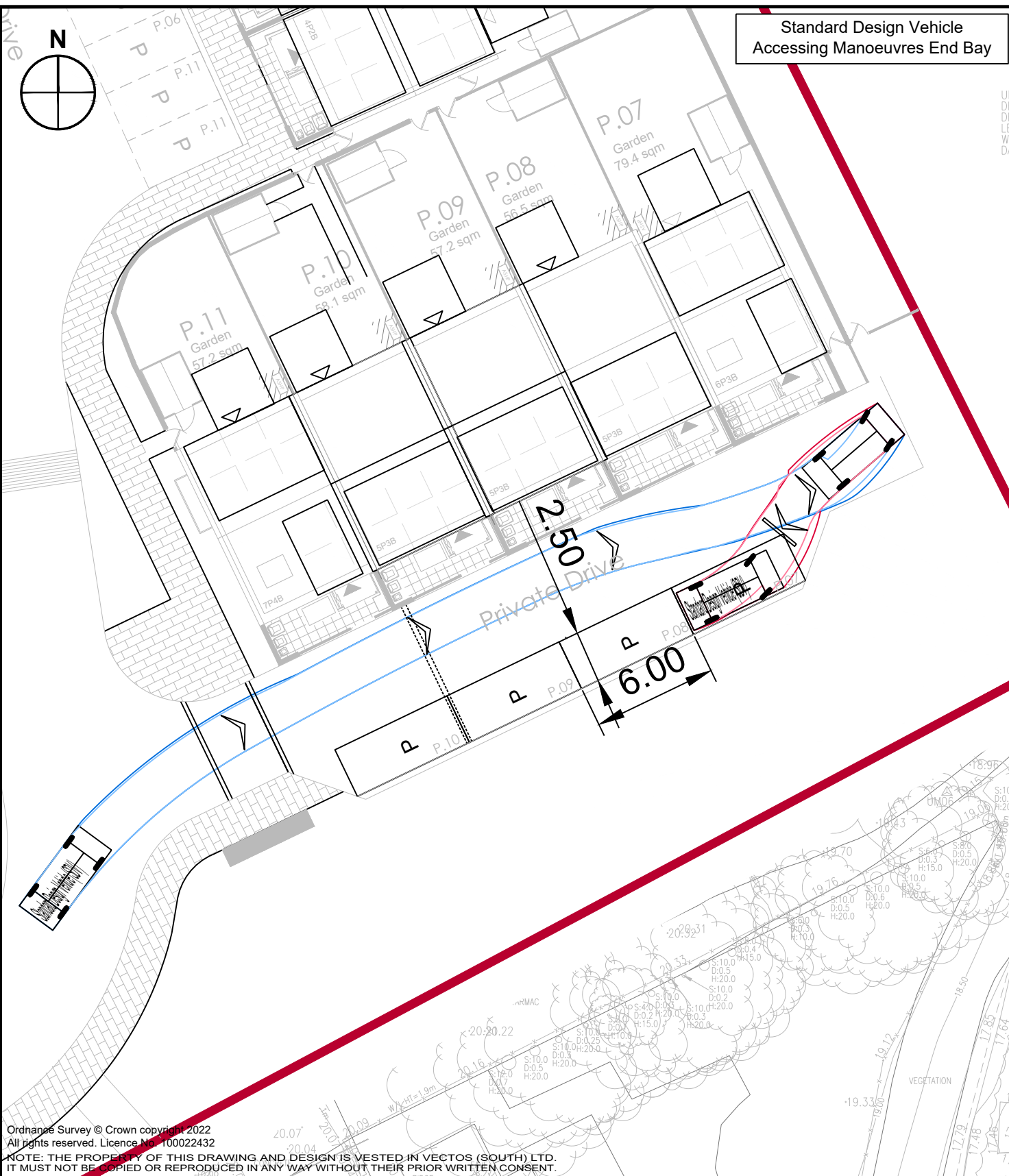
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Cardiff Council

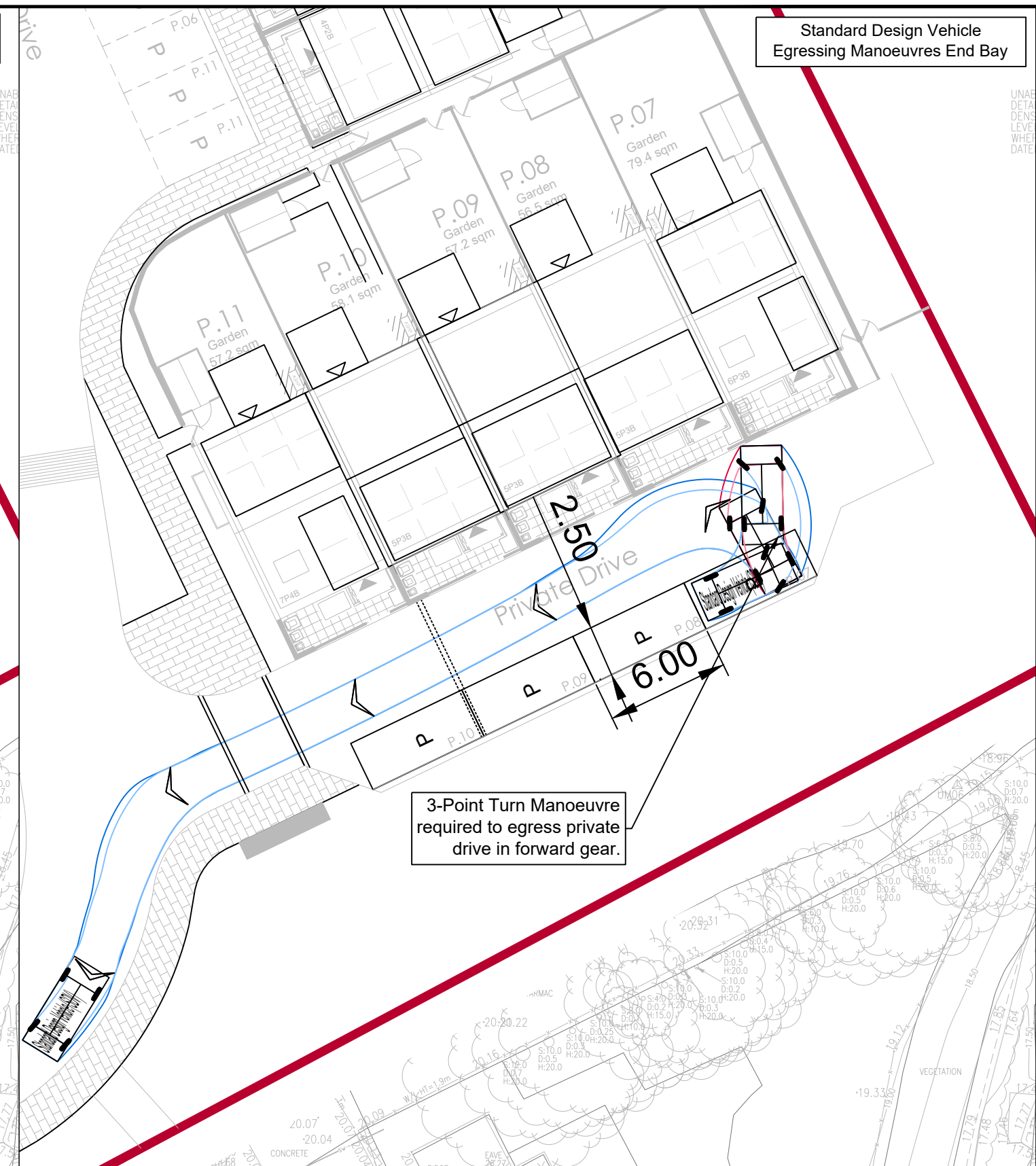
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226773_AT_C01	C



Standard Design Vehicle
Accessing Manoeuvres End Bay



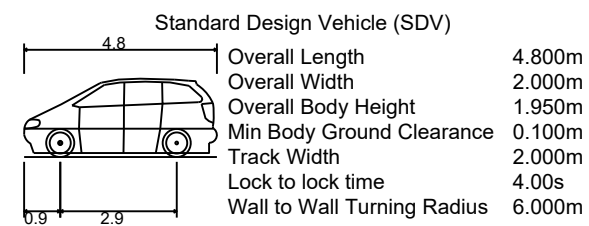
Standard Design Vehicle
Egressing Manoeuvres End Bay

3-Point Turn Manoeuvre
required to egress private
drive in forward gear.

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REV.	DETAILS	DRAWN	CHECKED	DATE
A	New Masterplan	RJ	KR	25.04.23
B	New Masterplan	RJ	KR	25.04.23
C	New Masterplan	KR	EW	29.10.24

Notes:
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INFORMATION ONLY

Cardiff Housing Sites: Fairwater

Swept Path Analysis
Standard Design Vehicle
Proposed Bays

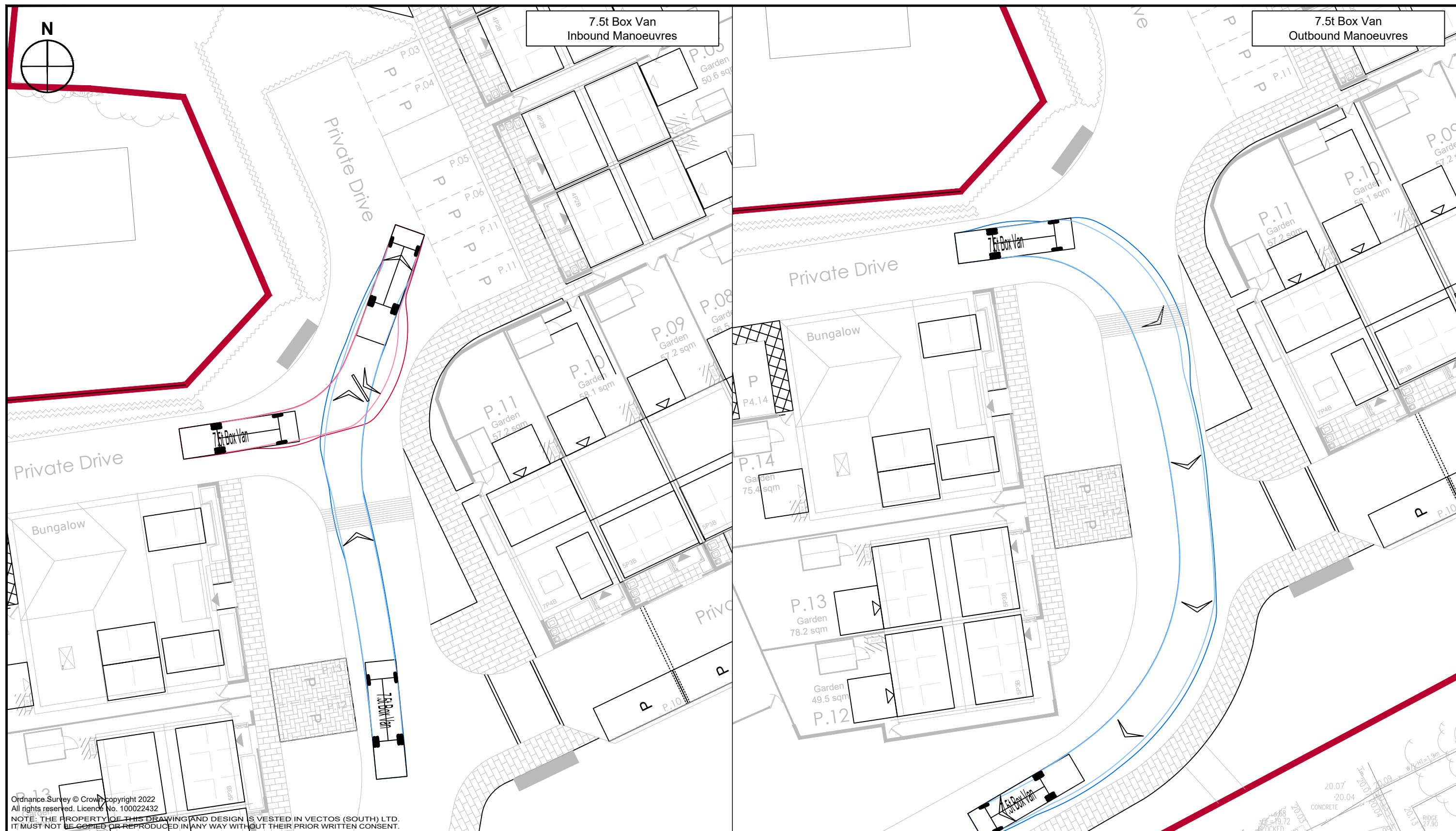
DRAWN:	CHECKED:	DATE:	SCALES:
KR	EW	31.03.23	1:250 at A3

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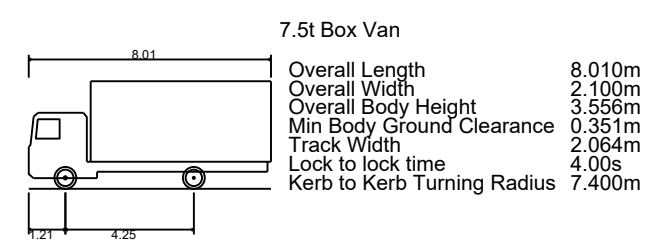
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226773_AT_C02	C



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REV.	DETAILS	DRAWN	CHECKED	DATE
A	New Masterplan	RJ	KR	25.04.23
B	New Masterplan	RJ	KR	25.04.23
C	New Masterplan	KR	EW	29.10.24

Notes:
 1. This is not a construction drawing and is intended for illustrative purposes only.
 2. White lining is indicative only.



INFORMATION ONLY

Cardiff Housing Sites: Fairwater

**Swept Path Analysis
 7.5t Box Van
 Servicing**

DRAWN:	CHECKED:	DATE:	SCALES:
KR	EW	31.03.23	1:250 at A3

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226773_AT_C03	C



Appendix C TRICS – Public House (without restaurant)

Transport Statement

Former Fairwater Social Club

Cardiff Council

SLR Project No.: 425.001564.00001

29 October 2024

Calculation Reference: AUDIT-152302-220711-0733

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
 Category : I - PUBLIC HOUSE (WITHOUT RESTAURANT)
 TOTAL VEHICLES

Selected regions and areas:

07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 175 to 600 (units: sqm)
 Range Selected by User: 120 to 750 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 10/07/16

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:

Tuesday	1 days
Friday	1 days

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

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Edge of Town	1

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

Selected Location Sub Categories:

Residential Zone	1
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

Sui Generis 2 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000 1 days

25,001 to 50,000 1 days

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

Population within 5 miles:

5,001 to 25,000 1 days

125,001 to 250,000 1 days

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

Car ownership within 5 miles:

0.6 to 1.0 1 days

1.1 to 1.5 1 days

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

Travel Plan:

No 2 days

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

PTAL Rating:

No PTAL Present 2 days

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

LIST OF SITES relevant to selection parameters

1	GM-06-I-01 SYKE ROAD ROCHDALE	PUBLIC HOUSE		GREATER MANCHESTER
	Edge of Town Residential Zone			
	Total Gross floor area:		175 sqm	
	<i>Survey date: TUESDAY</i>		<i>25/11/14</i>	<i>Survey Type: MANUAL</i>
2	WY-06-I-01 HALIFAX ROAD LIVERSEDGE	PUBLIC HOUSE		WEST YORKSHIRE
	Edge of Town Centre No Sub Category			
	Total Gross floor area:		600 sqm	
	<i>Survey date: FRIDAY</i>		<i>25/04/14</i>	<i>Survey Type: MANUAL</i>

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/I - PUBLIC HOUSE (WITHOUT RESTAURANT)

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00									
11:00 - 12:00	1	175	0.000	1	175	0.000	1	175	0.000
12:00 - 13:00	2	388	0.258	2	388	0.258	2	388	0.516
13:00 - 14:00	2	388	0.774	2	388	0.645	2	388	1.419
14:00 - 15:00	2	388	0.645	2	388	0.387	2	388	1.032
15:00 - 16:00	2	388	1.806	2	388	0.774	2	388	2.580
16:00 - 17:00	2	388	2.194	2	388	1.419	2	388	3.613
17:00 - 18:00	2	388	2.710	2	388	2.065	2	388	4.775
18:00 - 19:00	2	388	1.161	2	388	1.806	2	388	2.967
19:00 - 20:00	2	388	1.677	2	388	2.194	2	388	3.871
20:00 - 21:00	2	388	2.323	2	388	2.065	2	388	4.388
21:00 - 22:00	2	388	1.419	2	388	2.194	2	388	3.613
22:00 - 23:00	2	388	2.194	2	388	2.194	2	388	4.388
23:00 - 24:00	1	175	1.143	1	175	4.571	1	175	5.714
Total Rates:			18.304			20.572			38.876

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

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

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Parameter summary

Trip rate parameter range selected:	175 - 600 (units: sqm)
Survey date range:	01/01/14 - 10/07/16
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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



Appendix D TRICS Output - Residential

Transport Statement

Former Fairwater Social Club

Cardiff Council

SLR Project No.: 425.001564.00001

29 October 2024

Calculation Reference: AUDIT-152302-220621-0655

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : L - MIXED AFFORD HOUS (FLATS AND HOUSES)
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

10	WALES	
	CF	CARDIFF 1 days
	SW	SWANSEA 1 days

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

Primary Filtering selection:

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

Parameter:	No of Dwellings
Actual Range:	21 to 26 (units:)
Range Selected by User:	21 to 37 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 14/05/21

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

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

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:

No Sub Category	2
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This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 2 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000 1 days

25,001 to 50,000 1 days

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

Population within 5 miles:

125,001 to 250,000 1 days

250,001 to 500,000 1 days

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

Car ownership within 5 miles:

0.6 to 1.0 2 days

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

Travel Plan:

No 2 days

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

PTAL Rating:

No PTAL Present 2 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	CF-03-L-02	SEMI DETACHED & FLATS	CARDIFF
	SANQUHAR STREET		
	CARDIFF		
	SPLOTT		
	Neighbourhood Centre (PPS6 Local Centre)		
	No Sub Category		
	Total No of Dwellings:	26	
	Survey date: FRIDAY	14/05/21	Survey Type: MANUAL
2	SW-03-L-03	TERRACED HOUSES AND FLATS	SWANSEA
	CROWN STREET		
	SWANSEA		
	MORRISTON		
	Edge of Town		
	No Sub Category		
	Total No of Dwellings:	21	
	Survey date: FRIDAY	14/05/21	Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/L - MIXED AFFORD HOUS (FLATS AND HOUSES)

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.44

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	24	0.106	2	24	0.191	2	24	0.297
08:00 - 09:00	2	24	0.128	2	24	0.128	2	24	0.256
09:00 - 10:00	2	24	0.106	2	24	0.106	2	24	0.212
10:00 - 11:00	2	24	0.085	2	24	0.149	2	24	0.234
11:00 - 12:00	2	24	0.191	2	24	0.149	2	24	0.340
12:00 - 13:00	2	24	0.085	2	24	0.128	2	24	0.213
13:00 - 14:00	2	24	0.234	2	24	0.191	2	24	0.425
14:00 - 15:00	2	24	0.149	2	24	0.191	2	24	0.340
15:00 - 16:00	2	24	0.319	2	24	0.234	2	24	0.553
16:00 - 17:00	2	24	0.170	2	24	0.149	2	24	0.319
17:00 - 18:00	2	24	0.170	2	24	0.234	2	24	0.404
18:00 - 19:00	2	24	0.277	2	24	0.170	2	24	0.447
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.020			2.020			4.040

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

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

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Parameter summary

Trip rate parameter range selected: 21 - 26 (units:)
 Survey date range: 01/01/14 - 14/05/21
 Number of weekdays (Monday-Friday): 2
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 2
 Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/L - MIXED AFFORD HOUS (FLATS AND HOUSES)

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.44

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	24	0.191	2	24	0.234	2	24	0.425
08:00 - 09:00	2	24	0.383	2	24	0.702	2	24	1.085
09:00 - 10:00	2	24	0.234	2	24	0.277	2	24	0.511
10:00 - 11:00	2	24	0.149	2	24	0.319	2	24	0.468
11:00 - 12:00	2	24	0.447	2	24	0.277	2	24	0.724
12:00 - 13:00	2	24	0.277	2	24	0.426	2	24	0.703
13:00 - 14:00	2	24	0.553	2	24	0.447	2	24	1.000
14:00 - 15:00	2	24	0.468	2	24	0.426	2	24	0.894
15:00 - 16:00	2	24	0.766	2	24	0.468	2	24	1.234
16:00 - 17:00	2	24	0.383	2	24	0.489	2	24	0.872
17:00 - 18:00	2	24	0.404	2	24	0.447	2	24	0.851
18:00 - 19:00	2	24	0.660	2	24	0.447	2	24	1.107
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.915			4.959			9.874

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.

