

Red Dragon Public House, Moorland Road, Port Talbot

Transport Statement

Client: Castell Group

04 August 2025

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1. INTRODUCTION

1.1 Background

- 1.1.1 Apex Transport Planning Ltd has been commissioned to produce a Transport Statement (TS), on behalf of Castell Group, to support a planning application for the redevelopment of the former Red Dragon public house, Moorland Road, Port Talbot.
- 1.1.2 The proposals are to redevelop the site, through demolishing the existing building and constructing a single building accommodating 22 residential apartments. This will comprise of 16no. one-bedroom apartments and 6no. two-bedroom apartments. Vehicular access will be obtained via a new dropped kerb crossover onto Abbeyville Avenue.
- 1.1.3 The TS considers the impacts of the proposals in relation to transport including the connectivity by active travel and public transport, parking provision and access arrangements, road safety and vehicle trip generation. It has been produced to inform Neath Port Talbot County Borough Council (NPTCBC) of the highways and transport implications of the proposals.

1.2 Scope of Report

- 1.2.1 The scope of work has considered policies and advice set out in Planning Policy Wales 12 (PPW12), Technical Advice Note 18: Transport (TAN18), Future Wales - the National Plan 2040, the Active Travel Act (Wales – 2021), the NPTCBC Local Development Plan (LDP), Car Parking Standards LDP5 SPG, as well as considering experience of other similar sites.
- 1.2.2 A formal pre-application advice response was also received from NPTCBC on 6th February 2025 which included comments from the highway authority, informed by a previous issue of this TS. The comments from the highway authority have been considered within this TS and the site layout.
- 1.2.3 The TS has been structured to include the following:
 - A description of the existing conditions including, site location and use, access, road safety analysis and existing travel behaviour in the surrounding area
 - Overview of highway network and vehicular connections to the site
 - A review of the connectivity of the site by sustainable modes including walking, cycling and public transport
 - Description of the development proposals, demonstrating safe and appropriate access by all modes, car and cycle parking, and servicing and delivery arrangements
 - Forecast vehicle trip generation in the peak hours and comparison to existing site use
 - Consideration of the acceptability of the parking provision in terms of likely demand and sustainable location of the site
 - Consideration of the impact of the proposals on the local highway network
- 1.2.4 This TS demonstrates that the site is sustainably located and suitable for a residential redevelopment, in accordance with policies in Future Wales, PPW12 and the LDP (namely SP20 and TR2).

2. EXISTING SITUATION

2.1 Site Location, Use and Access

2.1.1 The site is located on the corner of Moorland Road and Abbeyville Avenue in the southwestern area of Port Talbot, approximately 2km west of Port Talbot Parkway Rail Station. The existing use of the site is a public house, although this is not currently open, and this consists of one building and a car parking area. The site obtains vehicular access from Moorland Road at its southern boundary via a dropped kerb crossover arrangement. There is also a pedestrian access on the eastern boundary of the site which links to the footways on Abbeyville Avenue. The site has historically accommodated movements by all modes, including vehicles, over an extended period in relation to its existing planning use as a public house.

Figure 2-1: Indicative Site Location



Source: Google Maps

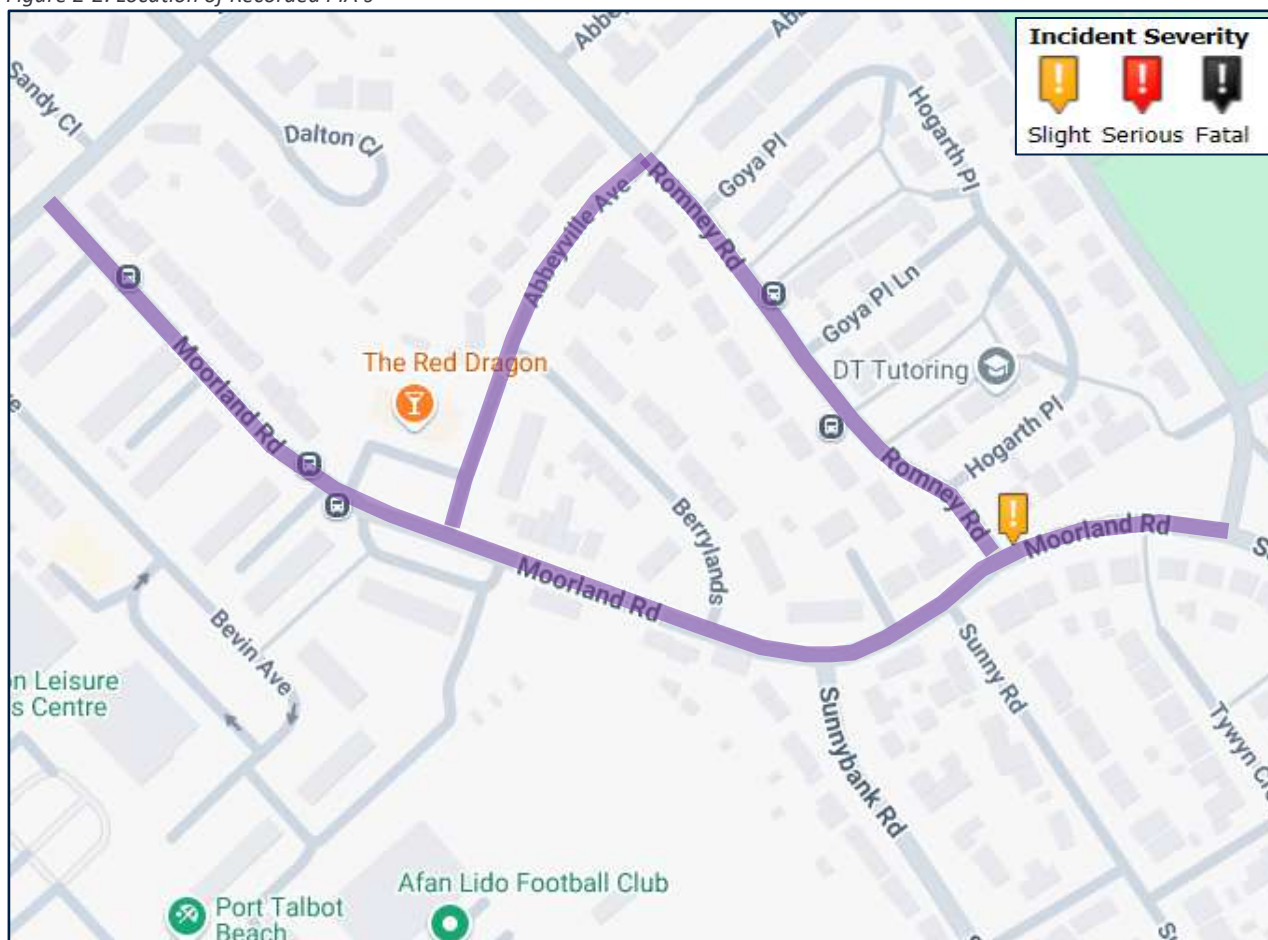
2.2 Local Highway Network

- 2.2.1 Moorland Road is a single carriageway road routing from Dalton Road at its northwestern extent and continues as Sandown Road at its southeastern extent. Moorland Road is predominantly residential in nature and provides connections to other residential roads including Abbeyville Avenue, Sunnybank Road, Sunny Road, Berrylands and Romney Road.
- 2.2.2 Street lighting is present and occurs intermittently along the length of the street. Within the vicinity of the site frontage, the carriageway measures approximately 6 metres in width and has footways on both sides. Moorland Road and surrounding streets are subject to a 20mph speed limit. Moorland Road and Abbeyville Avenue are not subject to parking restrictions and some on-street parking does occur.
- 2.2.3 Abbeyville Avenue routes along the eastern boundary of the site forming a priority junction with Moorland Road at its southern extent, and a priority junction with Romney Road at its northern extent. Abbeyville Avenue is residential in nature and also provides a connection to Berrylands. The carriageway measures approximately 6m in width, has footways on both sides of the carriageway and street lighting along its length.
- 2.2.4 Approximately 160m from the site, Dalton Road routes in a northeast to southwest direction from the Dalton Road / The Princess Margaret Way / Western Avenue roundabout to Afan Way (A4241). Along Dalton Road there are a number of traffic calming measures including road humps and raised zebra crossings to minimise vehicle speeds. Dalton Road connects to Afan Way (A4241) at its northeast extent which is a double carriageway road with two lanes in each direction. Within a wider context, the A4241 is a distributor road within Port Talbot and provides a connection to the A48.

2.3 Road Safety

- 2.3.1 Personal Injury Accident (PIA) data has been reviewed from data published annually by the Department for Transport (DfT). The statistics provide PIA data which has been recorded using the STATS19 accident reporting form. This review covers the three-year period prior to the pandemic between 1st January 2017 and 31st December 2019, data from the two years during the pandemic between 1st January 2020 and 31st December 2021, as well as the most recent publicly available data which covers up to 31 December 2023. The most recent seven years of data has therefore been reviewed, which includes the most recent five full years of data outside of the pandemic.
- 2.3.2 The study area considered within the analysis covers the local highway network surrounding the site, the routes to the closest bus stops, The length of Moorland Road and Abbeyville Avenue, including at the location of the proposed site access, with the entire study area shown in Figure 2-2.

Figure 2-2: Location of Recorded PIA's



Source: Crashmap

- 2.3.3 Over the seven-year period, one PIA occurred within the vicinity of the site that was classified as a slight injury accident. No serious or fatal PIAs were recorded within the vicinity of the site during this study period.
- 2.3.4 The one PIA occurred adjacent to the Romney Road / Moorland Road junction in March 2023. This involved one car and one bus and resulted in one slight casualty.
- 2.3.5 There were no PIAs that involved a pedestrian or a cyclist and as such there is no evidence to suggest a safety issue relating to active travel within the vicinity of the site.
- 2.3.6 There were no clusters of four or more PIAs occurring in the same location, therefore no evidence to suggest a re-occurring road safety issue.
- 2.3.7 As such, although all incidents are regrettable, the PIAs that occurred do not indicate a specific pattern or issue with the geometry of the highway that would be exacerbated by the proposals, particularly when considering that the area already accommodates pedestrian, cycle, and vehicular activity.

2.4 Existing Travel Behaviour

Modal Share

- 2.4.1 The site is located within output area W00005085 in Neath Port Talbot. Table 2-1 shows how the existing residents of this output areas currently travel to work, together with a comparison against all households in Neath Port Talbot, as obtained from 2011 Census data using the Nomis website.

- 2.4.2 The 2011 data is considered more appropriate than the recently published 2021 data in relation to travel to work information. This is due to the impact of the pandemic and restrictions on the day of the 2021 Census which affected movements to and from work (i.e. reduced public transport) and increasing levels of home working.

Table 2-1: Journey to Work Modal Split

Mode	W00005085	Neath Port Talbot
Public Transport	10%	5%
Car Driver	55%	75%
Motorcycle	4%	1%
Car Passenger	11%	8%
Bicycle	4%	1%
On Foot	14%	9%
Other	3%	1%
Total	100%	100%

- 2.4.3 The census data shows that an average of 55% of residents living in the output area travel to work as a car driver. A total of 14% walk, 4% travel by bike, 10% travel by public transport, and 11% travel as a car passenger.
- 2.4.4 The data shows a higher level of travel by sustainable travel to the entire of the NPTCBC area. This demonstrates the sustainable attributes of this location and ability for the surrounding infrastructure to accommodate pedestrian movements.
- 2.4.5 Travelling to work is also only one journey purpose during peak hours from a residential site. A significant proportion of journeys will also be for education, leisure, and retail purposes and these are likely to have higher levels of sustainable travel, particularly given local primary schools, retail, leisure and public transport facilities are situated within short walking distances and accessible via appropriate routes (as shown in Section 3).
- 2.4.6 The data demonstrates that there is good potential for walking and public transport trips to be made to and from the site and that these movements already occur in this area, without evidence of a safety issue (as demonstrated in Section 2.3).

2.5 Car Ownership

Census Analysis - Overall

- 2.5.1 The 2021 Census data has been reviewed for the average car ownership in the OA within which the site is situated - W00005085.
- 2.5.2 This shows an average of 0.59 cars per household across the OA, based on 71 cars across 121 households (2021 census data doesn't provide a total sum of all cars or vans in the area, so based on analysis of household data across the entire of Wales for the 2011 data, it has been assumed that households with 3 or more cars have an average of 3.38 cars). It is also shown that 89% of households owned one car or less.
- 2.5.3 This compares with an average ownership level across the entire of Neath Port Talbot of 1.29 cars per household. As such, this demonstrates that car ownership in this area is low and well below the average levels.

Census Analysis - Dwelling Type

- 2.5.4 As the overall Census data includes all house and tenure types, car ownership levels by dwelling type in the W00005085 output area have been reviewed, as the proposals are for an affordable apartment scheme.
- 2.5.5 Data has been analysed in Nomis Table *“RM001 - Accommodation type by car or van availability by number of usual residents aged 17 years or over in household”*. This data separates car ownership into two categories – firstly houses and secondly flats / maisonettes / apartments.
- 2.5.6 Within the W00005085 output area there were 76 flats of which 69.7% had no car ownership and all owned one car or less. The average car ownership for flats was 0.30 per household.
- 2.5.7 The ownership for flats is less than a third of the car ownership for houses across the same output area (houses were c. 1.09 cars per household). This demonstrates that flats in this area have significantly lower car ownership than houses.

Census Analysis - Tenure Type

- 2.5.8 Data has been analysed in Nomis Table *“RM131 - Tenure by car or van availability by number of usual residents aged 17 or over in household”*. This data separates car ownership into three categories – Owned / shared ownership, Social rented and Private rented / living rent free.
- 2.5.9 Within W00005085 there are a total of 75 social rented households, with an average ownership of 0.41 cars per household. This includes 64% of social rented households who do not own a car and 96% owning one car or less. As such, on average, social rented households in this area have lower car ownership than owner-occupied accommodation, which has a car ownership of 1.06 per household.
- 2.5.10 On this basis, there is evidence that both flats and affordable housing have significantly lower than average car ownership in this area, which already has significantly lower ownership than the average across NPTCBC, and the proposed car parking provision has therefore appropriately considered this.

3. CONNECTIVITY BY SUSTAINABLE MODES OF TRAVEL

3.1 Introduction

- 3.1.1 This section describes the opportunities to make everyday trips by non-car modes. It considers the likelihood of trips being made on foot, by cycle, bus and rail.

3.2 Walking and Cycling

- 3.2.1 Walking and cycling (collectively known as active travel) are the most important mode of travel at a local level and offer the greatest potential to replace short car journeys.

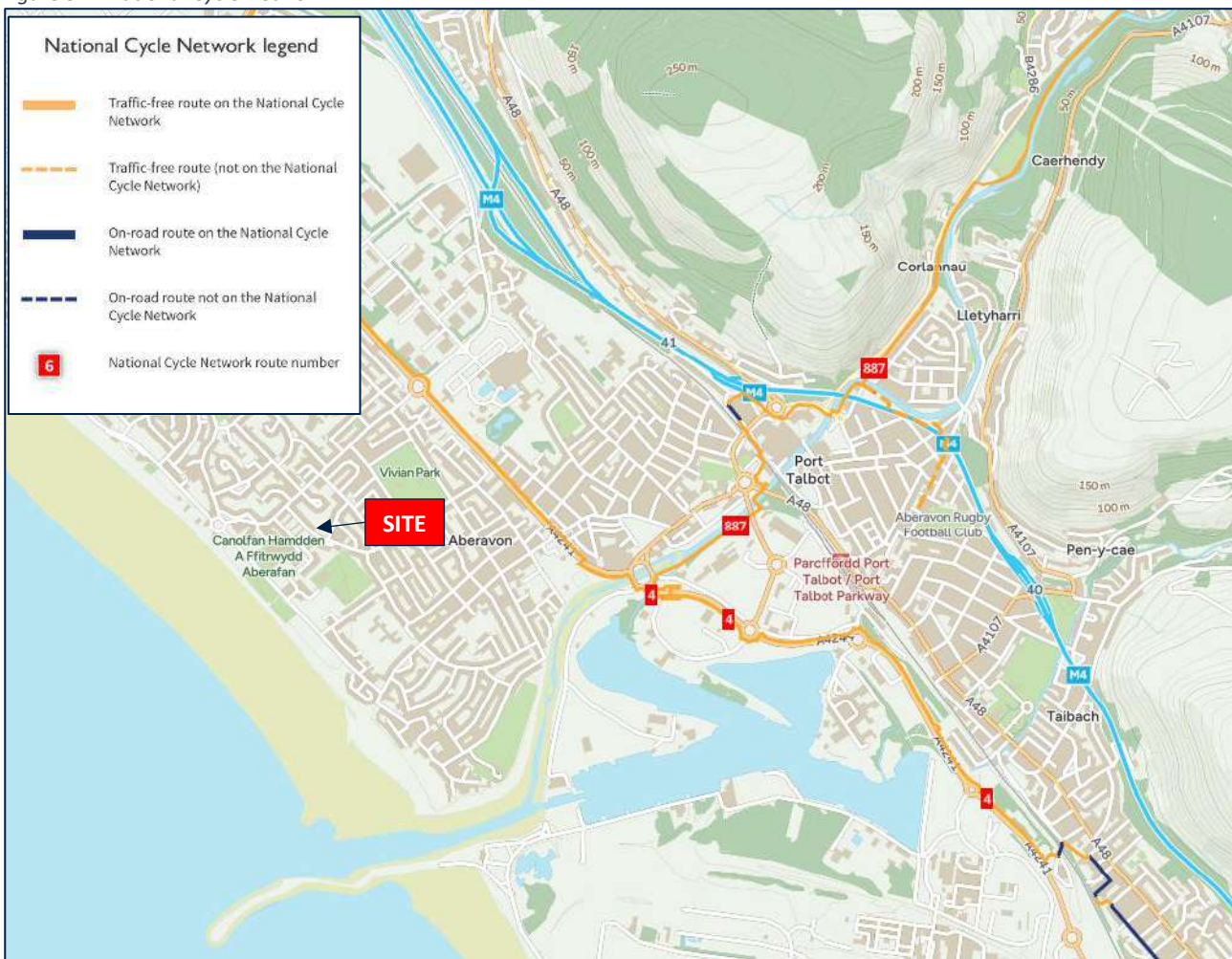
Walking Infrastructure and Routes

- 3.2.2 The site is well situated to benefit from existing walking routes. Suitable footways and crossings are provided along key routes and in the vicinity of the site, as would be expected in an existing residential area. The majority of local streets have footways on both sides of the carriageway and benefit from streetlighting, providing links between the site and the surrounding facilities.
- 3.2.3 The site connects to the footway on the northern side of Moorland Road. Moorland Road has footways on both sides of the carriageway measuring c.2m in width and links to further residential streets which also provide footways and streetlighting. Adjacent to the southern corner of the site, there is a dropped kerb with tactile paving on the northern side of Moorland Road which connects to the dropped kerb on the southern footway. This crossing provides a connection to the facilities to the south of the site and connects the eastbound and westbound bus services on Moorland Road.
- 3.2.4 The site is also connected to the footway on the western side of Abbeyville Avenue which runs adjacent to the site boundary. There are dropped kerb crossings with tactile paving on Abbeyville Avenue linking the eastern and western footways. These footways extend north connecting to those on Romney Road. From here, the footways connect to the Goya Road bus stops. As such there is continuous pedestrian infrastructure to the closest bus stops.
- 3.2.5 The site is therefore well positioned to benefit from existing high quality walking infrastructure, which connects to key local facilities and services. The local area appropriately accommodates existing pedestrian movements, including for pupils travelling to the nearby schools and the infrastructure would be attractive to potential future residents walking to and from the site.

Cycling Infrastructure and Routes

- 3.2.6 The streets within the vicinity of the site are considered conducive to cycling, encouraged by 20mph speed limits and traffic calming measures. The surrounding highway network is provided with street lighting, which encourages pedestrian and cycle trips to occur during hours of darkness.
- 3.2.7 The closest National Cycle Network (NCN) Route to the site is NCN 4 which is approximately 750m northeast of the site accessed via Moorland Road and using the overbridge across the A4241. NCN 4 runs from London to Fishguard and forms part of the Celtic Trail West which runs from Chepstow to Pembrokeshire. On a more local level, NCN route 4 provides connections between Aberavon, Port Talbot, Sandfields, and Margam. NCN 4 also provides a connection to NCN Route 887 which runs from Port Talbot to Afan Forest Park, passing through Cwmavon and Pontrhydyfen.
- 3.2.8 The NCN cycle routes within the vicinity of the site are shown in Figure 3-1.

Figure 3-1: National Cycle Network



Source: Sustrans

Active Travel Network Maps

- 3.2.9 The Welsh Government DataMap Wales shows the Active Travel Network Maps (ATNM) across all authorities, including NPTCBC. This shows existing walking routes and where upgrades or new routes are anticipated to be provided.
- 3.2.10 A review of the ATNMs within the vicinity of the site shows a future walking and cycling route on Moorland Road that routes along the southern boundary of the site and can be accessed directly from the southern pedestrian access (Ref:FR-PT-SU091). This route runs along the length of Moorland Road, connecting to the closest bus stops and providing connections to additional routes. This includes future walking and cycling link FR-PT-SU094 which runs along Abbeyville Avenue and can also be accessed from the eastern boundary of the site.
- 3.2.11 Future walking and cycle route FR-PT-SU094 extends the length of Abbeyville Avenue connecting route FR-PT-SU091 to route FR-PT-SU039. Route FR-PT-SU039 is also shown as a future walking and cycling route and runs along Romney Road connecting to the Goya Road bus stops. As such there are continuous walking and cycling routes to the closest bus services.
- 3.2.12 Additionally, Port Talbot Parkway Rail Station is accessible via a number of consecutive proposed and existing routes as can be seen on Figure 3-2.

3.2.13 The ATNM showing the existing and proposed routes within the vicinity of the site has been reproduced in Figure 3-2.

Figure 3-2: Active Travel Network Map - within vicinity of the site



Source: Welsh Government Active Travel Map

3.2.14 As such, the site is well positioned to benefit from existing routes and potential future high-quality walking and cycling links, which connect to further routes in the wider area and improve links to key local facilities and services. The site would therefore encourage and promote walking and cycling movements for potential future residents.

3.3 Distances to Facilities

3.3.1 There are a number of publications which suggest guidance for appropriate and acceptable walking and cycling distances to facilities. For reference, these have been summarised as follows.

- Welsh Government - Active Travel (Wales) Act 2021: It is stated within paragraph 4.1.5 that “Walking is most suitable for journeys of less than two miles whilst cycling is also convenient for longer journeys, typically up to five miles for regular utility journeys”. This equates to distances for walking of up to 3.2km and cycling of up to 8km.
- This also states in paragraph 9.5.3 that “Walkable neighbourhoods also referred to as ‘low-traffic neighbourhoods’, or ‘active neighbourhoods’, (see figure 9.6) are characterised by having a

range of facilities within 20 minutes' walking distance which people may access comfortably on foot." This would equate to c. 1.6km.

- Department for Transport (DfT) – Manual for Streets (2007): MfS states that ‘walkable neighbourhoods’ are typically characterised by having a range of facilities within 10 minutes walking distance (c. 800 metres). MfS also acknowledges that this is not an upper limit and references previous planning policy guidance in that it is generally acknowledged that walking offers the greatest potential to replace short car trips, particularly under 2km.
- CIHT (2015) – Planning for Walking: In relation to shorter trips in particular, (section 2.1) states that across Britain about ‘80% of journeys shorter than 1 mile (1.6km) are made wholly on foot’.
- CIHT - Guidelines for Providing for Journeys on Foot (2000): suggests preferred maximum distances for commuting journeys are up to 2km.
- DfT – LTN1/20 Cycle Infrastructure Design (paragraph 2.2.2) – states that “Two out of every three personal trips are less than five miles in length, an achievable distance to cycle for most people” (c.8km).

3.3.2 As such, based on guidance, it is considered that suitable walking distances are up to 3.2km, but journeys within 2km have a greater potential to be made on foot. A 2km distance equates to around a 25-minute walk travelling at 3mph (4.8kph). A 3.2km distance equates to around a 40 minute walk. Sites with a range of facilities within 1.6km are considered to be within a ‘walkable neighbourhood’.

3.3.3 It is considered that journeys of up to 8km are within a suitable cycling distance. A cycling journey of 8km would equate to approximately a 25-minute travel time.

3.3.4 To demonstrate the site’s connectivity, facilities within appropriate distances which are accessed via suitable and established routes have been summarised in Table 3-1. The location of the facilities in the context of the site are shown in Figure 3-3.

Table 3-1: Proximity of the site to local facilities and services

Facility / Amenity		Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
Community Facilities				
1	Afan Community Hub	180	2	1
2	The Rainbow Tree Wales Play Therapy and Children's Wellbeing	200	3	1
3	InPost Parcel Locker	500	6	2
4	Aberafan Elim Church	570	7	2
5	St John Cymru-Wales, Port Talbot Division	610	8	2
6	Sandfields Library	700	9	2
7	Cash point	740	9	2
8	Morrison Road Post Office & Newsagents	750	9	2
9	Morrison Road Doctors Surgery	760	10	2
10	Allied Pharmacy	760	10	2
11	Sandfields Presbyterian Church	770	10	2
12	Neath Port Talbot Hospital	1270	16	4
13	Holy Trinity Church	1280	16	4
14	Aberavon Community Resource Centre	1500	19	5
15	Dunes Dental Care	1750	22	5
16	Mozart Drive Community Centre	1790	22	6
17	Mydentist, Port Talbot	1970	25	6
Public Transport				
	Red Dragon	30	<1	<1
	Romney Road	255	3	1
	Port Talbot Parkway	2800	35	9
Retail				
1	SPAR Aberavon	330	4	1

Facility / Amenity		Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
2	Londis	480	6	2
3	Premier	580	7	2
4	Morrison Road Late Shop - Premier	780	10	2
5	One Stop Sandfields Fairways	1460	18	5
6	Lidl	1600	20	5
7	Morrisons	1780	22	6
8	Baglan bay Retail Park	1880	24	6

Education

1	Tywyn Primary School	530	7	2
2	Awel y Môr Primary School	540	7	2
3	Brightwater Education Ltd	650	8	2
4	Sandy Feet Day Nursery	930	12	3
5	St Therese's Catholic Primary School	940	12	3
6	Funky Footsteps Day Nursery Ltd (Hospital site)	1120	14	4
7	St Joseph's Junior School	1730	22	5
8	St Joseph's R C Comprehensive School	2000	25	6

Leisure

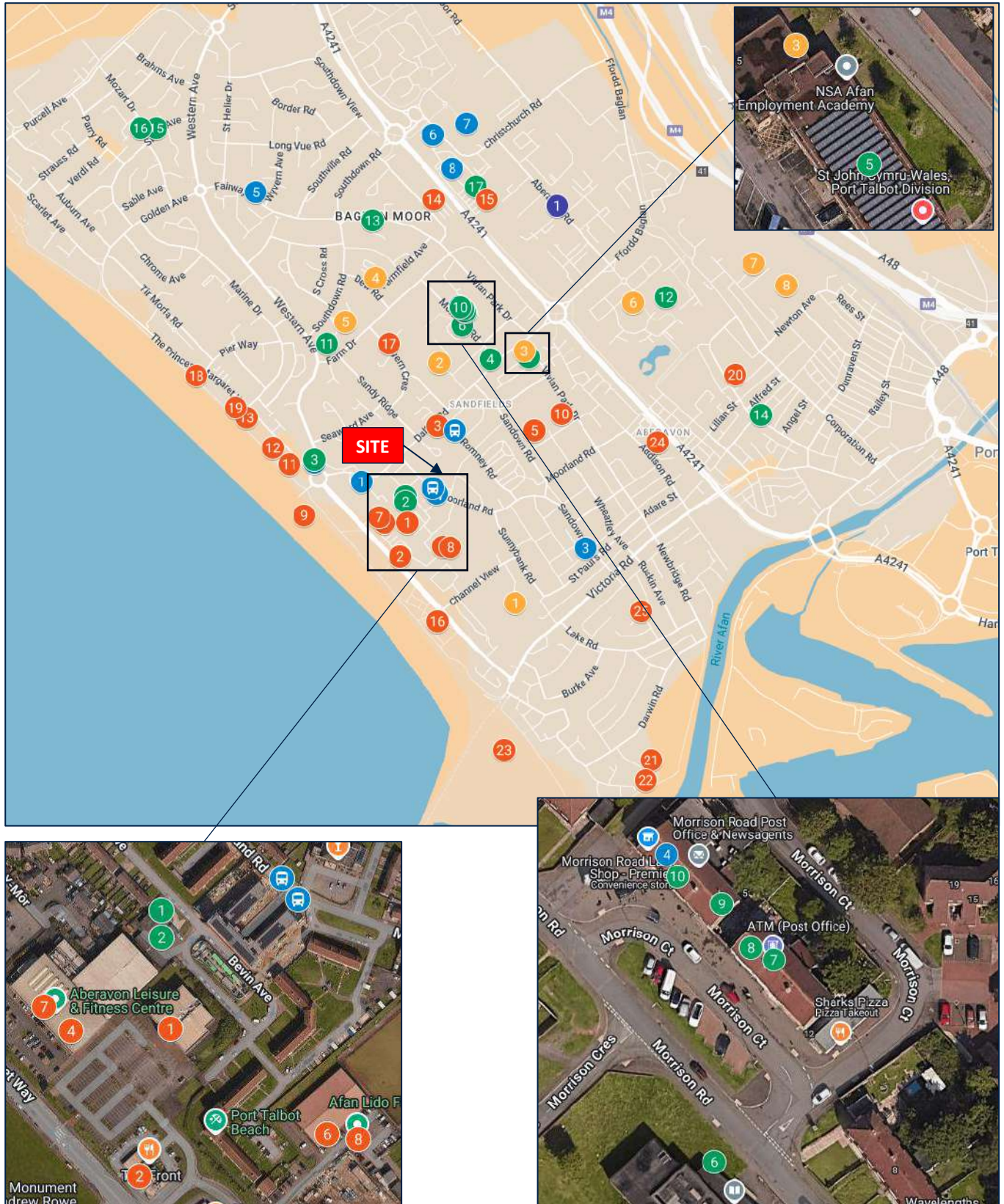
1	Reel Cinema Port Talbot	240	3	1
2	The Front restaurant	260	3	1
3	Seaside Social & Labour Club	330	4	1
4	Aberavon Leisure & Fitness Centre	390	5	1
5	Vivian Park Playing Fields and playground	400	5	1
6	Port Talbot Indoor Bowls	410	5	1
7	Scuba Wales Scuba Diving Courses	440	6	1
8	Afan Lido Football Club	450	6	1
9	Aberavon Beach	570	7	2
10	Tennis courts / basketball courts	570	7	2
11	Surf School Wales	580	7	2
12	Aberavon Aqua Splash	650	8	2
13	Sandfields lions and lionesses FC C.I.C	650	8	2
14	Aberavon Seafront Outdoor Gym	730	9	2
15	Raptors Kickboxing	820	10	3
16	Pirate Cove Adventure Golf Aberavon	850	11	3
17	Aberavon Adventure Park	880	11	3
18	Port Talbot Town FC	950	12	3
19	The Small Beach	990	12	3
20	Aberavon Skatepark. (Port Talbot)	1050	13	3
21	Vitality Health & Fitness	1200	15	4
22	11th Port Talbot Scout Group	1450	18	5
23	Aberavon Green Stars RFC	1480	19	5
24	Aberavon Harlequins RFC	1650	21	5
25	PureGym Port Talbot	2000	25	6

Employment

1	Baglan Industrial Park	1300	16	4
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* Based on walking speeds of 80 metres per minute and Cycling Speeds of 320 metres per minute

Figure 3-3: Location of facilities within proximity of the site



Source: Google Maps

Note: Numbers and colours correlate to Table 3-1

- 3.3.5 Table 3-1 and Figure 3-3 show there are an extensive number and range of facilities and services situated within comfortable walking and cycling distances which can be accessed via suitable active travel routes. All facilities are within Welsh Government guidance walking and cycling distances.
- 3.3.6 Within an 800m walk, residents would be able to access the closest bus stops, four convenience stores, two primary schools, an education centre, a library, a community hub, a cinema, fitness centre, playing fields, a doctors surgery, pharmacy, and additional sports and leisure facilities.
- 3.3.7 A number of additional facilities are within further, but suitable walkable distances include five more schools, two food superstores, an employment area, a hospital, a dentist, and a number of leisure facilities. This is a significant number of services / facilities within a short walking distance, which can be utilised for everyday needs purposes, demonstrating that the site is situated within a walkable neighbourhood consistent with the Active Travel Act guidance.
- 3.3.8 The site is situated in a highly sustainable location, as would be expected for a site in an existing and established residential area. This will encourage walking and cycling and reduce the reliance on the private car, consistent with relevant policies and guidance, including sustainable transport policies in Future Wales, PPW12 and TAN18.

3.4 Public Transport

Bus

- 3.4.1 The closest bus stops to the site are the Red Dragon stops situated adjacent to the site access on Moorland Road. Eastbound bus services benefit from a bus shelter. These stops are served by bus service 82 which is operated by First South & West Wales. This provides an hourly service to Margam, Port Talbot and Sandfields.
- 3.4.2 Additional bus services are provided from the Romney Road bus stops within a 300m (4 minute) walk from the site access. These bus stops benefit from shelter, seating, bus cage markings (northbound), bus lay-by (southbound), and raised kerb for accessible boarding. These bus stops are served by services 9, 84, 87, 901, and 902.
- 3.4.3 Services commence from 06:37 and run until 19:12 Monday to Saturday. These combined services provide links to Port Talbot, Sandfields, Margam, Neath, and Swansea. There are a combined 7-8 services during the AM Peak and a combined 3-4 services during the PM Peak hours across all stops.
- 3.4.4 From the stops of Romney Road, there are 3-4 services per hour across all services, with the 9 service running every 1-2 hours, the 84 service running every 2 hours and the 87 service running every 30 minutes.
- 3.4.5 This journey time to Port Talbot Bus Station is approximately 11 minutes, the journey time to Swansea is approximately 36 minutes, the journey time to Neath is approximately 34 minutes, and the journey time to Margam is 28 minutes.
- 3.4.6 A summary of the local bus services is provided in Table 3-2.

Table 3-2: Local Bus Services

Route No.	Route and Stop	Frequency				
		Mon-Fri Peaks	Mon-Fri Daytime	Mon-Fri Evening	Sat	Sun
82	Margam – Port Talbot - Sandfields	Hourly	Hourly 07:36 – 19:12	Hourly until 19:12	Hourly 08:15 – 19:12	No service
9	Port Talbot – Sandfields (Romney Road)	Every 1-2 hours	Hourly 08:59 – 16:59	Hourly until 16:59	No service	No service

Route No.	Route and Stop	Frequency				
		Mon-Fri Peaks	Mon-Fri Daytime	Mon-Fri Evening	Sat	Sun
84	Swansea – Port Talbot (Romney Road)	Every 2 hours	Every 2 hours 06:37 – 18:21	Every 2 hours until 18:21	Same as Mon-Fri	No service
87	Neath – Margam (Romney Road)	2 per hour	2 per hour 06:49 – 19:09	2 per hour until 19:09	2 per hour 06:46 – 19:07	No service
901	Neath College – Margam (Romney Road)	08:03 08:15	No service	No service	No service	No service
902	Neath College – Cwmavon (Romney Road)	07:52 07:58	No service	No service	No service	No service

3.4.7 The bus services provide a good frequency of service connecting to the key local centres of Port Talbot, Margam, Swansea, and Neath and run throughout the day. As such, the journey times to Swansea and Neath combined with the times of operation, offer a viable option for commuting purposes. They can also be used to access destinations for leisure, retail and education purposes.

3.4.8 Given the close proximity of the bus routes, the site has good accessibility by bus which offers a realistic travel option for potential future residents of the site. This will assist in minimising the vehicle generation from the site and reduce the need for residents to own a car.

Rail

3.4.9 The nearest railway station is Port Talbot Parkway, located approximately 2.8km to the east of the site. This can be accessed via a 9-minute cycle via appropriate routes as discussed in section 3.2. Port Talbot Parkway has cycle parking spaces with a capacity for 48 cycles. This enables journeys to be made from the site by cycle and then rail, with a cycle parked at the station.

3.4.10 Bus service 82 also stops at the station, therefore offering the opportunity for a combined bus then rail journey, which is a realistic alternative given the close proximity of the bus stop to the site.

3.4.11 Trains departing from Port Talbot Parkway are operated by Transport for Wales and Great Western Railway, and provide connections to London Paddington, Cardiff Central, Swansea, Manchester Piccadilly and Carmarthen.

3.4.12 There is a journey time of c.20 minutes for journeys to Swansea and c.35 minutes to Cardiff Central. There are approximately five trains per hour departing from Port Talbot Parkway.

3.4.13 As such, it is feasible and attractive to use the rail services for commuting purposes, particularly to Swansea and Cardiff, although rail is also likely to be attractive for other journey purposes such as leisure, retail, or business journeys. A combined cycle and rail journey has excellent potential for replacing car journeys and further reducing the requirement for owning or travelling by car.

3.5 Summary

3.5.1 The site is situated in a highly sustainable location which benefits from being well connected to existing walking and cycling infrastructure, and public transport routes.

3.5.2 Potential future residents can walk or cycle to a number and range of facilities and services within appropriate distances via good quality routes, reducing the need to own a car. In this regard, the site location is consistent with the sustainable transport policies in PPW12 (in particular paras 4.1.10 – 4.1.17).

- 3.5.3 The site also has good public transport links, which provide a suitable, attractive and realistic alternative to travelling by car.
- 3.5.4 Potential future residents would have a realistic choice of modes of travel for all journey purposes. This will minimise the impact of the development and reduce the parking demand on the site.
- 3.5.5 The site location will encourage and promote sustainable travel behaviour, be attractive to residents who do not own a car or have low car ownership and is fully in accordance with transport policies in TAN18, PPW12 and Future Wales.

4. DEVELOPMENT PROPOSALS

4.1 Overview

4.1.1 The proposals are for a redevelopment of the site for 22 affordable apartments consisting of:

- 16no. one-bedroom apartments
- 6no. two-bedroom apartments

4.1.2 These will be provided in one building situated across the southern and eastern extents of the site. Car parking will be provided in the northern part of the site, with a new access obtained onto Abbeyville Avenue. The vehicular access junction would be a dropped kerb crossover arrangement and pedestrian access will be gained from both Moorland Road and Abbeyville Avenue.

4.1.3 The site also provides landscaping and amenity space surrounding the buildings.

4.1.4 The proposed site layout is provided in Appendix A.

4.2 Site Access and Layout

4.3 Access

Vehicular

4.3.1 The vehicular access to the site would be obtained from a new dropped kerb crossover arrangement onto Abbeyville Avenue. Initially within the site, the access road width measures 5.5m which widens to 6m within the car parking area to enable vehicles to turn in and out appropriately. Vehicles can enter and exit the site in forward gear and turn within the turning head. There is no evidence of an existing safety issue at the proposed access point or along Abbeyville Avenue and it is considered to be a suitable location for accommodating the vehicle movements associated with the proposed development.

4.3.2 Visibility of 2.4m x 25m is provided at the junction, which is in accordance with the requirements in TAN18 for 20mph speeds. Visibility is contained entirely within the adopted highway or within the site boundary. The boundary wall and vegetation will be maintained at an appropriate height to ensure the sightlines are unrestricted above a height of 0.6m to the nearside kerb. Additionally pedestrian visibility splays of 2.4m x 2.4m from the back of the footway are achievable from the centre of the exit lane.

4.3.3 The access geometry and visibility splays, including the pedestrian visibility splays, are shown in Appendix B. Swept path analysis showing a large car entering and exiting the site access appropriately is provided within Appendix C. This includes vehicles turning in and out, even when there is on-street parking on the opposite side of the street on Abbeyville Avenue.

4.3.4 Additionally, two driveway parking spaces for plots 21 and 22 are accessed from the southern boundary onto Moorland Road. These are located towards the southwestern boundary of the site and provide suitable visibility to the back of the footway from each space, with the boundary walls being a height of 0.6m or less.

4.3.5 The site access arrangements are considered safe and suitable to accommodate the movements generated by the proposals.

Pedestrians

- 4.3.6 Pedestrian access would be obtained from four access points, two from Moorland Road, and two from Abbeyville Avenue which will connect directly to the building from the existing footways. These arrangements are considered suitable and would ensure pedestrian movements are prioritised through minimising journey lengths. A footway will also be provided adjacent to the car parking spaces which will connect into the building from its northern side. The internal footways would measure 1.2m in width which is considered suitable within the internal site areas.

Layout

- 4.3.7 The internal access road has an initial width of 5.5m which widens to 6m throughout the car parking area. The internal access road provides access to the carpark, bin store, and cycle parking. The layout encompasses a turning head to enable vehicles to turn that enter the car park and do not use the spaces, i.e. a panel van for deliveries. This ensures that all vehicles can enter and exit the site in forward gear.
- 4.3.8 The parking spaces are 2.6m in width and 5.0m in length and cars can enter and exit all spaces appropriately, as shown in swept path analysis in Appendix C. There are footpaths linking from the car parking spaces to the building entrances to ensure pedestrians can access each building appropriately.
- 4.3.9 The building has bin and cycle stores located in close proximity. The bin store is located a short distance from Abbeyville Avenue to enable refuse collection to take place appropriately on-street, and the cycle store will provide secure and covered cycle parking in the northwestern area of the site.

4.4 Parking

- 4.4.1 NPTCBC's Supplementary Planning Guidance (SPG) LDP – Car Parking Standards, as adopted in October 2016 ('the Parking SPG'), provides the applicable standards to apply to the proposed development.
- 4.4.2 The site is based in a Zone 3 - 'Urban' location and the residential maximum parking standards state one space per bedroom for apartments and houses, with a maximum requirement of three spaces per unit. In addition, a total of one space per five units should be provided for visitors. These are maximum standards, as set out in paragraph 3.02 of the SPG – *"The interpretation of the parking requirements as outlined in the Wales Parking Standards 2014 is that of maximum standards - i.e. 'not more than' figures. This is reflected in the NPT Parking Standards set out in the document."* As such, a provision of one space per bedroom is a maximum level and lower provision can be provided, which would also be in accordance with national planning policies.
- 4.4.3 Applying the maximum standards to the site proposals, this would equate to a maximum of 28 parking spaces for the 22 residential apartments/flats, plus 4 visitor spaces, equating to a total maximum provision of 32 parking spaces. The site proposes to provide a total of 22 car parking spaces for residents use and one space for visitors, totalling 23 spaces. This is 9 spaces below this maximum parking level (inclusive of visitor parking spaces).
- 4.4.4 This provision is suitable and in accordance with the SPG which clearly outlines that these are maximum standards and that reductions are possible considering the sustainable location of a site.
- 4.4.5 PPW12 states at paragraph 5.1.53 that *"Local authorities will need to ensure that their parking standards reflect local transport provision"* and that supplementary planning guidance, *"are kept under review"* where *"standards should be applied flexibly and allow for the provision of lower levels of parking and the creation of high-quality places."*

- 4.4.6 Future Wales and PPW12 were published after the adoption of the Parking Standards SPG and should hold significantly greater weight when considering an application in a sustainable location such as this.
- 4.4.7 PPW12 states at paragraph 4.1.50 that ***“car parking provision is a major influence on how people choose to travel”*** and at paragraph 4.1.51 states that ***“parking provision should be informed by the local context, including public transport accessibility”***. Furthermore, it states that its aims are ***“reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport”*** and that local authorities ***“must support schemes which keep parking levels down.”***
- 4.4.8 Paragraph 5.1.53 states that ***“Local authorities will need to ensure that their parking standards reflect local transport provision”*** and that supplementary planning guidance, ***“are kept under review”*** where ***“standards should be applied flexibly and allow for the provision of lower levels of parking and the creation of high-quality places.”***
- 4.4.9 In addition to this, Future Wales is also clear in Policy 12 that ***“Planning authorities must act to reduce levels of car parking in urban areas.”*** Within the supporting text for this policy it is stated that ***“Planning authorities should promote car-free and low car developments in accessible locations.”***
- 4.4.10 Since the publication of the two key national policy documents, the SPG has not been reviewed to reflect the aspirations of Welsh Government to deliver lower levels of parking as part of developments, or reduce car parking in urban areas, or promote low car developments in accessible locations.
- 4.4.11 The development site has an existing use, as well as a consented use and is seeking permission to deliver affordable housing. This is also in line with PPW12 paragraph 4.1.54, which states that authorities should ***“seek to encourage appropriate redevelopment... to bring the provision down.”***
- 4.4.12 The key national planning policies have a consistent and clear requirement. Schemes in accessible areas, should be providing low levels of parking, particularly where these are redevelopment sites. In accordance with the key national policies it is considered that a flexible approach to parking provision is appropriate for this redevelopment site in this location.
- 4.4.13 This flexible approach is reflected in the Parking SPG which states in paragraph 3.2.1 ***“Interpretation and application of the standards will rest with the Local Authority, but flexibility in the standards allows local circumstances to be taken into account.”*** Factors allowing for this flexibility include the accessibility of the site by public transport, walking and cycling and the availability of parking. The site’s sustainable location is set out in detail within Section 3 and this has been used to assess the site against the sustainability criteria outlined within the SPG.
- 4.4.14 The Parking SPG also allows for reductions to be applied to the maximum provision based on the potential car ownership levels. Note 5 within the residential standards states ***“For developments where clear evidence has been supplied that car ownership levels will be lower than normal, a more flexible approach to numbers of parking spaces may be taken.”***
- 4.4.15 As such, in accordance with the Parking SPG, the potential level of car ownership has also been considered, and as shown in the Census analysis in Section 2, the level of demand for parking for an affordable development of flats would be significantly lower than for private houses (for example) and would be well below the maximum parking standard levels.

Reduction based on sustainability criteria

- 4.4.16 Sustainability criteria is set out in Appendix F of the SPG which provides a scoring system to apply a reduction in parking requirements based on a points score. The SPG specifically states that ***“Award of***

these sustainability points will result in a reduction in parking requirement” and then sets out the criteria against which a development will be assessed.

4.4.17 A sustainability points calculation has therefore been undertaken using the criteria in Appendix F of the SPG. The resultant calculations and sustainability points score for the site have been summarised in Table 4-1.

Table 4-1: Parking Sustainability Points Calculation

Sustainability Criteria	Maximum Walking Distance	Available Single Sustainability Points	Notes	Points Scored by the Site
Local Facilities				
Local facilities include a food store over 1000 sqm, post office, community medical practice, school etc. Access to two of these within the same walking distance will score single points, whereas access to more than two of these will double the points score.	200m	3	Afan Community Centre (180m), The Rainbow Tree Wales Play Therapy and Children's Wellbeing (200m)	
	400m	2		
	800m	1	Tywyn Primary School (530m), Awel y Môr Primary School (540m), Morrison Road Post Office (750m), Morrison Road Surgery, (760m), Allied Pharmacy (760m)	2
Public Transport				
Access to bus stop or railway station	300m	3	Red Dragon bus stops (30m), Romney Road bus stops (255m)	3
	400m	2		
	800m	1		
Cycle Route				
A cycle route needs to be segregated from vehicular traffic and must provide links to local facilities and employment area	200m	1		
Frequency of Public Transport				
Bus or rail service within 800m walking distance which operates consistently between 7am and 7 pm. Deduct one point for service which does not extend to these times.	10 minutes	3		
	20 minutes	2	Romney Road bus stops (255m) offer a combined 3-4 services per hour between the hours of 7am and 7pm, as outlined in Section 3.3	2
	30 minutes	1		
Total				7

4.4.18 The site location scores 7 sustainability points against the criteria in the SPG which equates to an allowable reduction of up to one space per dwelling for a residential use, as stated within Appendix F of the SPG.

4.4.19 The SPG states that within a Zone 3 location, any reduction cannot take provision to below one space per unit. Although the guidance states less than one space ‘remaining’ it is assumed this means one space ‘remaining per unit’. As such, applying the minimum requirement of one space per unit would equate to 22 spaces for the site. This is in accordance with the proposed provision and the requirements of the sustainability criteria within Appendix F of the SPG.

4.4.20 Based on the Census analysis for flats and social rented housing, the car ownership could be between 0.3 and 0.4 cars per unit, equating to a demand of 7 to 9 vehicles for residents. It is considered that any visitor demand (the standards suggest four spaces) can therefore be accommodated within the likely spare capacity on the site.

- 4.4.21 Indeed, it is unlikely that even those residents that do own a car would be occupying a space at all times, and as such these spaces can also be used by visitors when residents vehicles are away from the site. As such, the proposed parking provision is appropriate for accommodating the demand for both residents and visitors, whilst encouraging travel by other more sustainable modes, through not overproviding spaces on the site.
- 4.4.22 Potential residents will likely be in an informed position on a variety of matters, including the availability of parking and alternative travel modes prior to moving into a property. If they perceive parking to be an issue, they would be likely to amend their behaviour accordingly (i.e. only own one vehicle or not own a vehicle). The sustainable location of the site would be helpful and attractive to occupiers who do not own a car or have low car ownership, or prefer to travel by public transport. This could be a significant proportion of occupants based on analysis of ownership data within the local area.
- 4.4.23 As such, the provision is appropriate for the demand, considers the sustainable location of the site, is consistent with the sustainability reduction criteria in the SPG, and would not lead to overspill onto the highway network. Even so, on rare occasions there is overspill, this can be accommodated appropriately on-street for the short term demand would be generated as the surrounding streets are unrestricted.
- 4.4.24 As such, the provision is considered to be fully in accordance with the Welsh Government policies in Future Wales and PPW12 for supporting low car ownership developments and increasing sustainable travel. It will provide a less car dominated development with more green space, improving the quality of the scheme. It is also fully in accordance with the standards in the SPG.

Parking Layout

- 4.4.25 The car park has been designed to appropriately accommodate a large car turning to and from all spaces. The spaces have dimensions of 2.6m x 5.0m in accordance with the Parking SPG and there is an aisle width of 6m between bays. The swept paths of a large car turning into and out of the end spaces (the most difficult spaces to access) has been provided in Appendix C.

Cycle Parking

- 4.4.26 The SPG provides a minimum standard of one stand per five bedrooms for residential apartments which would equate to 6 stands if applied to the 28 bedrooms within the proposed scheme. The cycle store will provide cycle parking in accordance with the standards with 6 stands accommodating 12 cycles. The cycle shelter is secure and covered and would provide suitable dimensions for manoeuvring and parking. The provision would further reduce the requirement to own a car and encourages travel by more sustainable modes.

4.5 Service and Deliveries

- 4.5.1 Servicing would mainly relate to refuse collection which would be undertaken on-street from Abbeyville Avenue and Moorland Road as per the surrounding properties.
- 4.5.2 MfS states Building Regulations on refuse collection distances in that waste collection vehicles should be able to get within 25 metres of the storage points. There are two bin stores, one of which is located in the car park within a 5m walk of Abbeyville Avenue and as such, collection can comfortably take place from kerbside from Abbeyville Avenue within the guideline distance outlined in MfS.

- 4.5.3 The second bin store is situated within 5m of the carriageway on Moorland Road, adjacent to the driveway parking space for unit 21. As such, refuse collection would be able to take place kerbside on Moorland Road. All residents are within a 30m walking distance to a bin store.
- 4.5.4 Refuse collection would not cause an issue in terms of vehicle visibility at the site access on Abbeyville Avenue as the vehicle would only temporarily block through traffic on this street, if there is on-street parking opposite the site access. This would only occur once a week for a very short period and as such would not impact the operation of this road, given that these vehicles already travel on this route to collect waste from the properties opposite, and there are short alternative diversion routes using Berrylands and Moorland Road for through vehicles. As such, the arrangements are in line with Building Regulations (and MfS) and considered safe and appropriate, and in line with the existing arrangements.
- 4.5.5 A fire tender will also be able to get within 45 metres of all parts of the building from Moorland Road and Abbeyville Avenue. As such, the layout is appropriate for access by emergency vehicles and in accordance with Building Regulations Approved Document B.

5. TRIP GENERATION AND IMPACTS

5.1 Introduction

- 5.1.1 This section sets out the forecast vehicle trip generation of the proposals. The existing site use for a public house would also have generated movements on the network, but for robustness within this report, these movements have not been considered. The existing use also has a larger car park which can accommodate additional vehicles on the site compared to the proposals.
- 5.1.2 The trip generation has been calculated using the Trip Rate Information Computer System (TRICS). The TRICS database has been analysed for sites with similar characteristics in terms of scale, location, accessibility, and surrounding population numbers.
- 5.1.3 The TRICS database predicts the likely numbers of arrivals and departures by utilising surveys of existing sites. Trip rates have been obtained and applied to establish the forecast trip generation during network peak hours on a weekday and over a daily period. The weekday network peak hours have been assumed as 08:00 to 09:00 and 17:00 to 18:00.

5.2 Proposed Trip Generation

- 5.2.1 The TRICS category '03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY FLATS' has been selected to derive trip rates for the proposed scheme. The following parameters have been applied to the search criteria to obtain sites of a similar nature:
- Located in England, Scotland and Wales (Excluding Greater London)
 - Vehicle Surveys
 - Sites of up to 60 dwellings
 - Edge of town, suburban area and neighbourhood centre locations
 - Weekday surveys
 - From 2010 onwards
 - Removed sites with populations over 250,000 within 5 miles
- 5.2.2 The application of these parameters resulted in identifying 7 comparable sites. The resultant vehicle trip rates, and vehicle trip generation based upon the proposed 22 units are summarised in Table 5-1. The full TRICS report is included in Appendix D.

Table 5-1: Proposed Development - Vehicle Trip Rates and Trip Generation

Time Period	Trip Rates (per unit)			Trip Generation (22 units)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.193	0.348	0.541	4	8	12
PM Peak (17:00-18:00)	0.295	0.232	0.527	6	5	11
12 Hours (07:00-19:00)	2.339	2.366	4.705	51	52	103

- 5.2.3 Table 5-1 demonstrates that the proposed development is forecast to generate 11 - 12 two-way vehicular movements during the AM and PM peak hours. Over a 12-hour period, the scheme is forecast to generate 103 two-way vehicle movements.
- 5.2.4 This equates to one vehicle every c.6 minutes in the busiest peak hour, on average. This forecast level of trip generation would not have a material impact on traffic flows or congestion on the highway network. This is excluding any consideration of the existing site use which has generated movements on the network over a long period of time.

- 5.2.5 This level of generation is also considered extremely robust, given the likely car ownership for residents of affordable flats in this area. The forecast demand for parking is for just 7-9 vehicles, which would be unlikely to generate the level of movements shown in Table 5-1. Regardless, the robust generation still shows a minimal level of movements on the network.
- 5.2.6 The scheme would also not have an unacceptable impact on safety. There is no evidence of a safety issue in relation to the existing access arrangements, or on the immediate surrounding network, and the minimal vehicle movements generated by the scheme would not materially change this situation. As such, the proposed access arrangements would be suitable and safe for the proposals.

6. SUMMARY AND CONCLUSIONS

6.1 Summary

- 6.1.1 This Transport Statement (TS) supports a planning application for the redevelopment of the former Red Dragon public house, Moorland Road, Port Talbot.
- 6.1.2 The TS has been produced to inform Neath Port Talbot County Borough Council (NPTCBC) of the highways and transport implications of the proposals.
- 6.1.3 The proposals are to redevelop the site, through demolishing the existing building and constructing a single building accommodating 22 residential apartments. This will comprise of 16no. one-bedroom apartments and 6no. two-bedroom apartments. Vehicular access will be obtained via a new dropped kerb crossover onto Abbeyville Avenue, as well as two parking spaces being accessed from Moorland Road.
- 6.1.4 The site is situated in a highly sustainable location. Potential future residents can walk or cycle to a number and range of facilities, services and schools within appropriate distances via good quality routes, reducing the need to own a car.
- 6.1.5 There are continual and suitable active travel links from the site to the surrounding area, and NPTCBC propose to provide improved active travel links within the vicinity of the site. There are also footways on both sides of the carriageway and well-lit streets within the surrounding area. Walking would therefore be an attractive mode of transport for potential future residents.
- 6.1.6 The site also has good public transport links, which provide a suitable and realistic alternative to travelling by car. This will assist in constraining vehicle generation and reduce the need for residents to own a car. It will also benefit and attract residents that would prefer to travel by public transport.
- 6.1.7 Obtained road safety data does not indicate an existing safety issue which would be exacerbated by the proposals, with just one incident recorded over a seven year period within the vicinity of the site, which did not involve active travel modes.
- 6.1.8 The site will be accessed from new dropped kerb crossover arrangement onto Abbeyville Avenue. There is no evidence of an existing safety issue along Abbeyville Avenue and the swept path analysis demonstrates the suitability of the access design. As such this is considered appropriate for accommodating the vehicle movements associated with the proposed development.
- 6.1.9 Pedestrian access would be obtained from four points, two from Moorland Road, and two from Abbeyville Avenue which will connect directly to the building from the existing footways. This will suitably encourage walking, by minimising journey distances.
- 6.1.10 Parking is provided at an appropriate level (one space per unit plus one visitor space) considering the likely demand for an affordable apartment scheme and is in accordance with the maximum parking standards, through appropriately applying the allowable sustainability reduction. The provision can comfortably accommodate the forecast demand (between 7 and 9 vehicles), as well as accommodate visitors. The provision is also in line with the aspirations of Future Wales and PPW12 in relation to minimising parking. The parking provision enables a less car dominated development to be provided with more green space, improving the quality of the scheme.
- 6.1.11 Refuse will be collected on-street from Abbeyville Avenue and Moorland Road with vehicles being able to stop within suitable distances of the bin stores. Access for fire tenders is also appropriate from on-carriageway.

- 6.1.12 A robust vehicle trip generation analysis shows that the proposals are forecast to generate 11 - 12 two-way movements during the AM Peak and the PM Peak. This is a minimal level of vehicle movements which would not have a material impact on the operation of the highway or an unacceptable impact on road safety, particularly given the existing public house use would have generated movements on the network.

6.2 Conclusions

- 6.2.1 The site location will encourage and promote sustainable travel behaviour in accordance with transport policies in Future Wales, PPW12, TAN18 and the LDP.
- 6.2.2 Data does not indicate a road safety issue which would be exacerbated by the proposals. The development would not have an unacceptable impact on road safety and the access arrangements onto the highway would be safe and suitable.
- 6.2.3 The proposals will not have a material impact on the operation of the highway network and as such no mitigation is required in relation to highway capacity.
- 6.2.4 It is therefore considered that there are no reasons relating to transport or highways for objecting to the application.

Appendix A Proposed Site Layout

"Planning Drawings" - Proposed Site Plan



Revision:	Date:	By:
REV A - Site area increased allowing unit density to increase to 22 units.	31st March 2025	RH
REV B - General site updates following highways comments.	31st July 2025	RH

Appendix B Site Access Arrangements and Visibility



Visibility will be maintained and sightlines would be unrestricted above a height of 0.6m to the nearside kerb.

SCALE BAR

0m 5m 10m

SCALE BAR (1:250)

KEY

4.90

0.83 2.97

2010 BMW 5-Series

Width : 1.86
Track : 1.85
Lock to Lock Time : 6.0
Steering Angle : 36.9

FORWARD

Tyre Tracks

Vehicle body tracks

Direction of travel

REVERSE

REVISIONS (CONTINUED)

Rev	Date	Description	By	App
P03	04/08/25	Third Issue	SD	DC
P02	09/05/25	Second Issue	SD	DC
P01	23/09/24	First Issue	SD	DC

REVISIONS

Rev	Date	Description	By	App
P03	04/08/25	Third Issue	SD	DC
P02	09/05/25	Second Issue	SD	DC
P01	23/09/24	First Issue	SD	DC

Apex
TRANSPORT PLANNING

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PROJECT
RED DRAGON PUB, MOORLAND PUB

TITLE
PROPOSED SITE ACCESS AND VISIBILITY SPLAYS

PROJECT NO.
C24-155

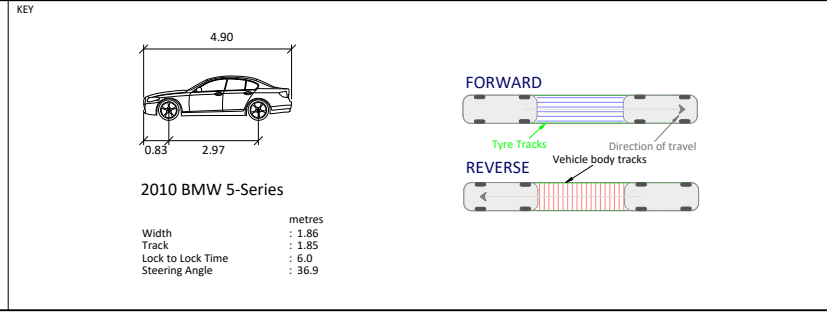
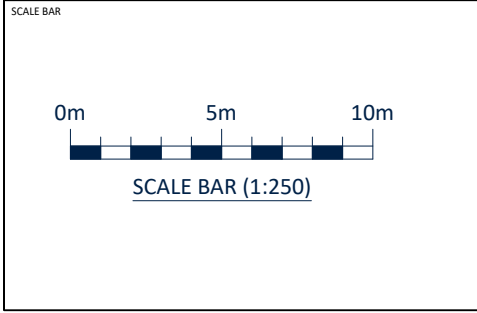
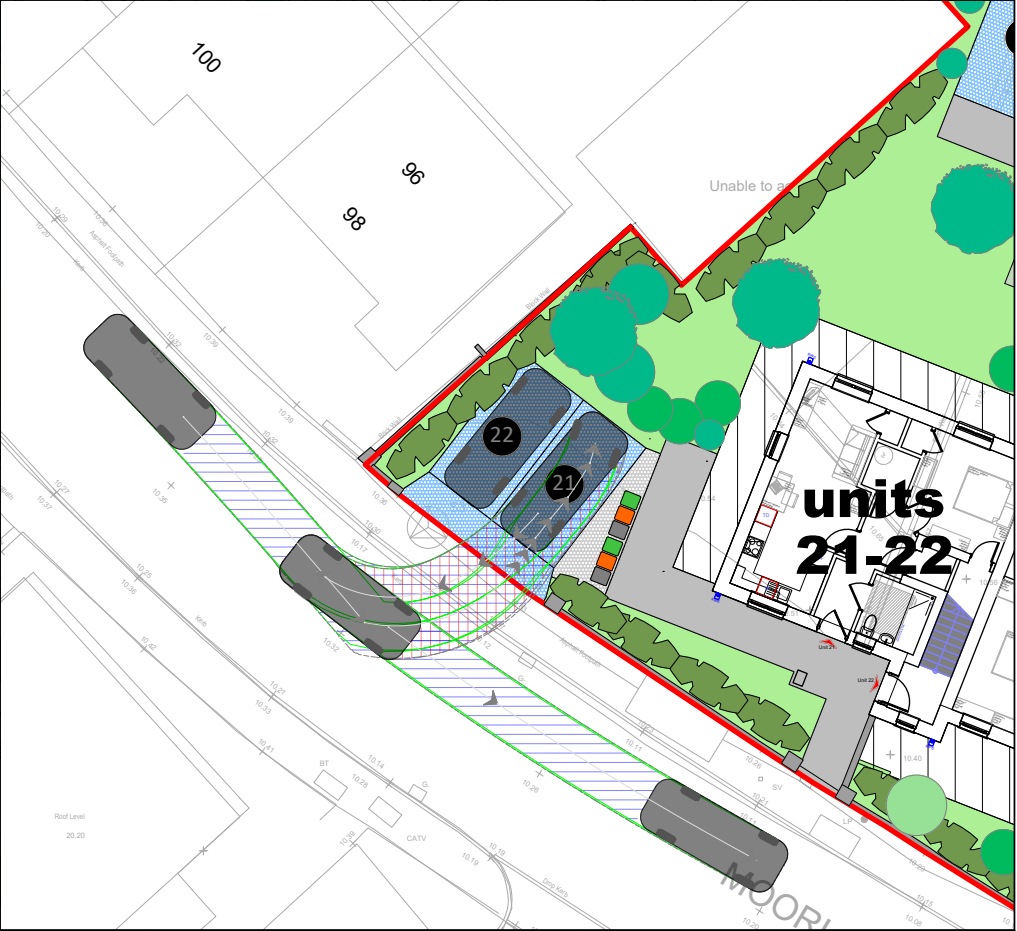
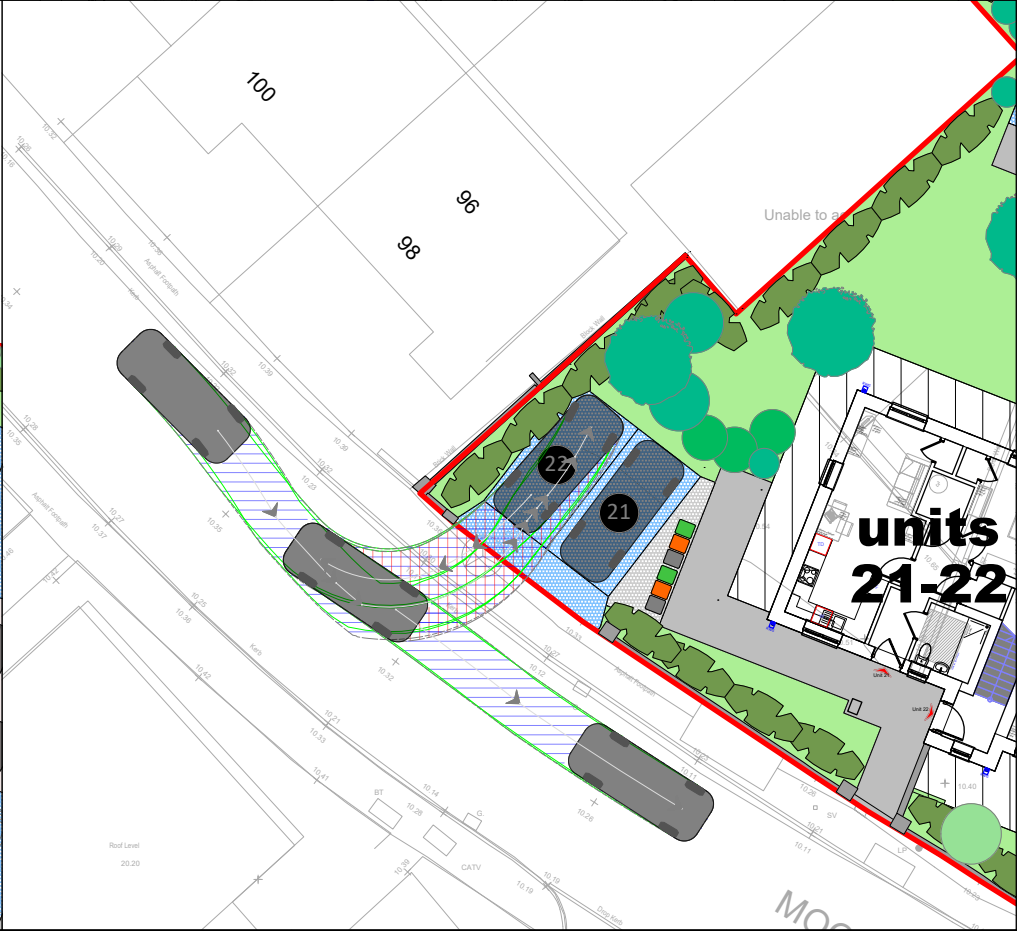
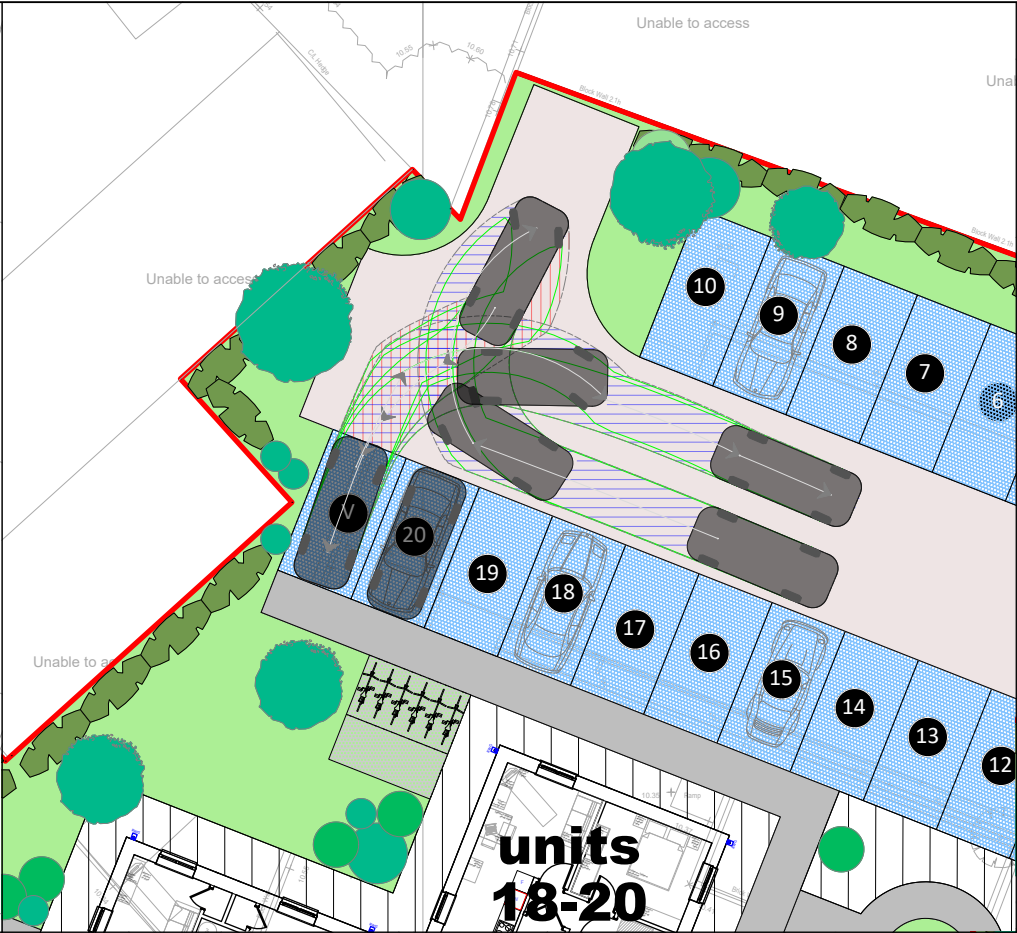
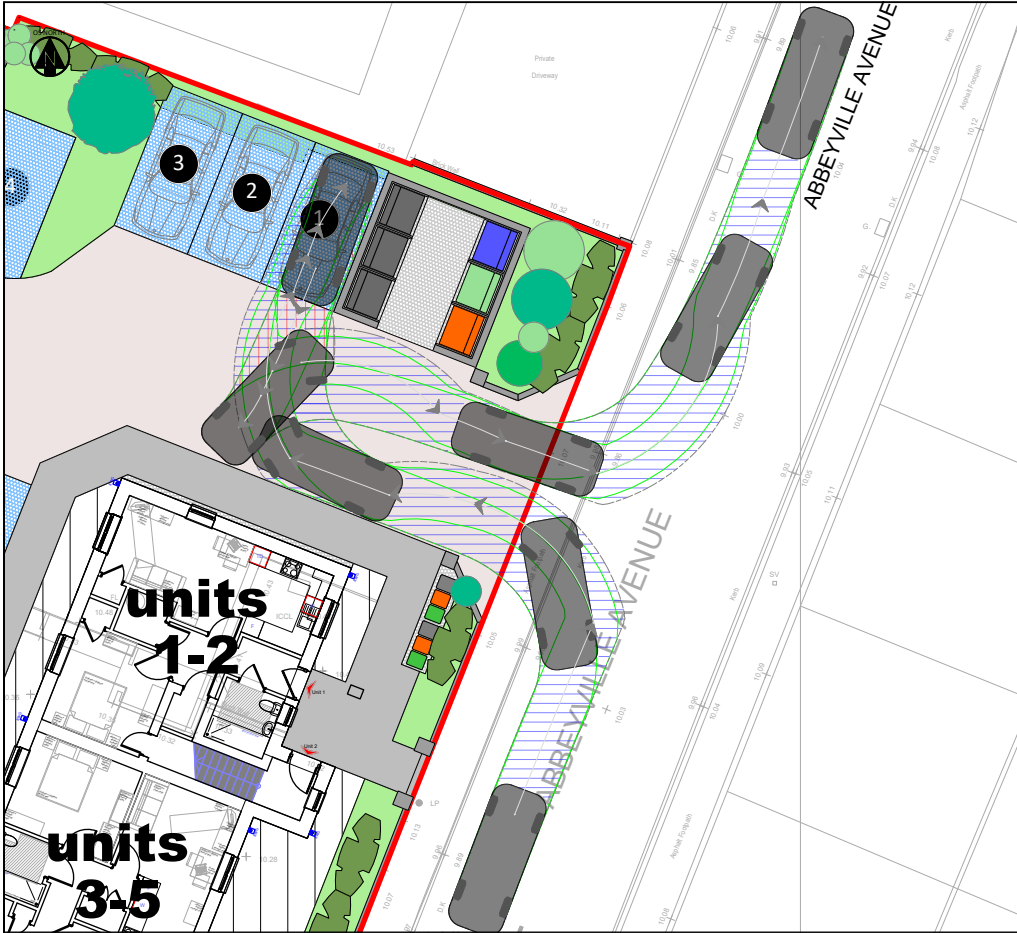
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STATUS DESCRIPTION
INFORMATION

STATUS
S2

DRAWING NO.
C24155-ATP-DR-TP-001

Appendix C Swept Path Analysis



REVISIONS (CONTINUED)				
Rev	Date	Description	By	App
P03	04/08/25	Third Issue	SD	DC
P02	07/05/25	Second Issue	SD	DC
P01	23/09/24	First Issue	SD	DC

REVISIONS				
Rev	Date	Description	By	App
P03	04/08/25	Third Issue	SD	DC
P02	07/05/25	Second Issue	SD	DC
P01	23/09/24	First Issue	SD	DC

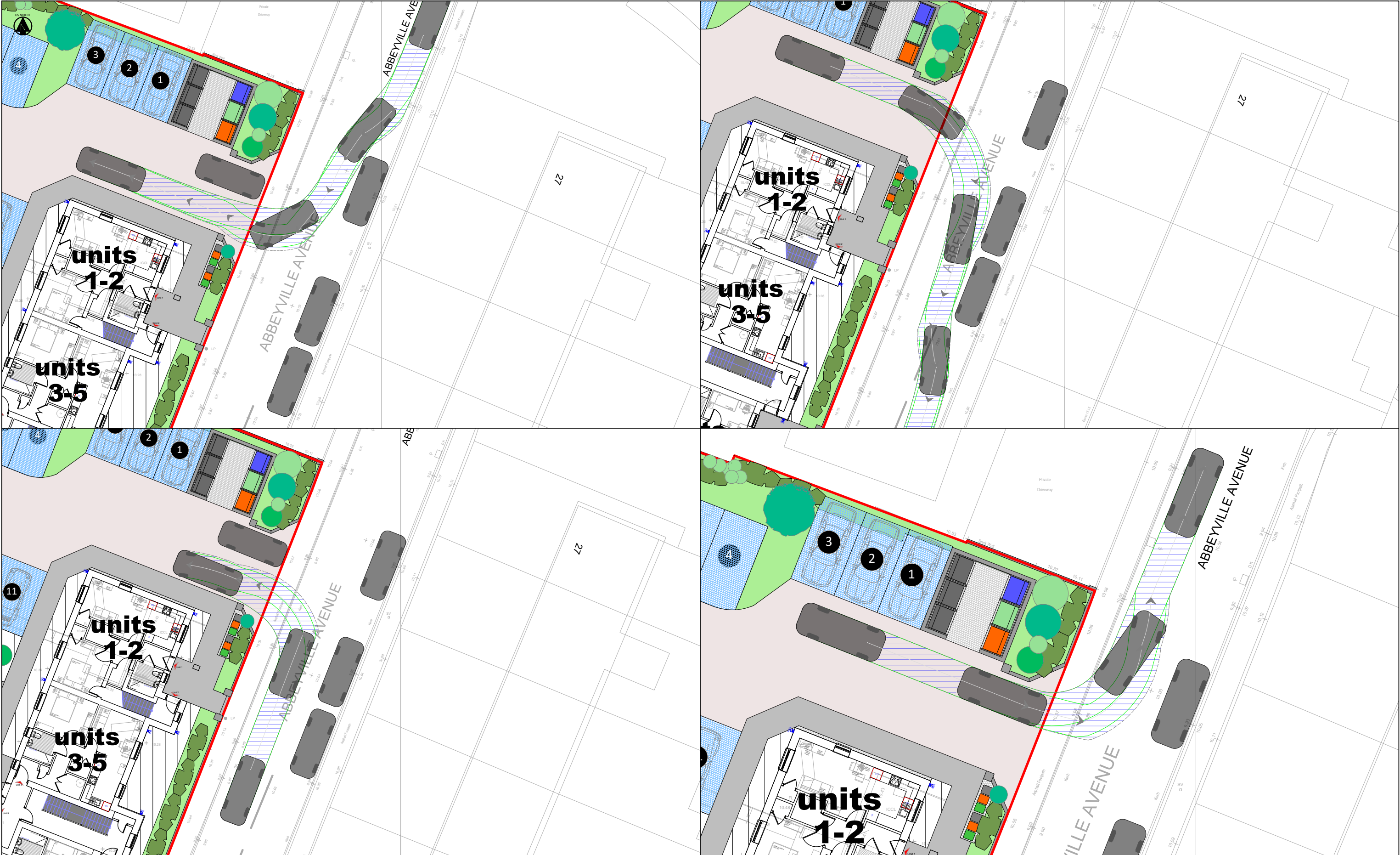
CLOCKWISE
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CLIENT
CASTELL GROUP

PROJECT
RED DRAGON PUB, MOORLAND PUB

TITLE SWEPT PATH ANALYSIS - LARGE CAR		
PROJECT NO. C24-155	SCALE @ A3 1:250	
STATUS DESCRIPTION INFORMATION		STATUS S2
DRAWING NO. C24155-ATP-DR-TP-002		



SCALE BAR

SCALE BAR (1:250)

KEY

2010 BMW 5-Series

Width	metres
Track	1.86
Lock to Lock Time	1.85
Steering Angle	6.0
	36.9

REVISIONS (CONTINUED)

FORWARD	
Tyre Tracks	Direction of travel
REVERSE	Vehicle body tracks

REVISIONS

PO2	04/08/25	Second Issue	SD	DC
PO1	09/05/25	First Issue	SD	DC
Rev	Date	Description	By	App

Apex
TRANSPORT PLANNING

CLIENT
CASTELL GROUP

PROJECT
RED DRAGON PUB, MOORLAND PUB

CLOCKWISE
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TITLE
SWEEP PATH ANALYSIS - LARGE CAR

PROJECT NO. C24-155	SCALE @ A3 1:250
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C24155-ATP-DR-TP-003	

Appendix D TRICS Outputs – Affordable Housing

Apex Transport Planning Ltd 11-13 Penhill Road Cardiff

Licence No: 502501

Filtering Summary

Land Use	03/B	RESIDENTIAL/AFFORDABLE/LOCAL AUTHORITY HOUS
Selected Trip Rate Calculation Parameter Range	10-60 DWELLS	
Actual Trip Rate Calculation Parameter Range	16-54 DWELLS	
Date Range	Minimum: 01/01/10	Maximum: 07/06/23
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	
Days of the week selected	Monday	1
	Tuesday	3
	Wednesday	1
	Thursday	1
	Friday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	3
	Edge of Town	3
	Neighbourhood Centre (PPS6 Local Centre)	1
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	X - Selected
	Servicing vehicles Excluded	10 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	5,001 to 10,000	2
	10,001 to 15,000	1
	25,001 to 50,000	3
Population <5 Mile ranges selected	5,001 to 25,000	1
	25,001 to 50,000	1
	50,001 to 75,000	1
	75,001 to 100,000	2
	125,001 to 250,000	2
Car Ownership <5 Mile ranges selected	0.6 to 1.0	4
	1.1 to 1.5	3
PTAL Rating	No PTAL Present	7

Calculation Reference: AUDIT-502501-240919-0952

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST	
	WL WILTSHIRE	1 days
05	EAST MIDLANDS	
	NN NORTH NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	KS KIRKLEES	2 days
	LS LEEDS	1 days
08	NORTH WEST	
	MS MERSEYSIDE	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: 16 to 54 (units:)
 Range Selected by User: 10 to 60 (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: 01/01/10 to 07/06/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	3 days
Wednesday	1 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	3
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:

Residential Zone	6
Built-Up Zone	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	10 days - Selected

Secondary Filtering selection:**Use Class:**

C3 7 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	2 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	4 days
1.1 to 1.5	3 days

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

Travel Plan:

No	7 days
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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	7 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

Site(1):	KS-03-B-01	Site area:	1.53 hect
Development Name:	MIXED HOUSES	No of Dwellings:	54
Location:	HUDDERSFIELD	Housing density:	39
Postcode:	HD2 1LU	Total Bedrooms:	144
Main Location Type:	Edge of Town	Survey Date:	17/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	60
Site(2):	KS-03-B-02	Site area:	0.71 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	17
Location:	BATLEY	Housing density:	36
Postcode:	WF17 0PR	Total Bedrooms:	43
Main Location Type:	Edge of Town	Survey Date:	19/10/18
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	50
Site(3):	LS-03-B-02	Site area:	0.38 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	29
Location:	LEEDS	Housing density:	91
Postcode:	LS9 7JB	Total Bedrooms:	64
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	19/09/13
Sub-Location Type:	Built-Up Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	31
Site(4):	MS-03-B-01	Site area:	0.20 hect
Development Name:	TERRACED	No of Dwellings:	16
Location:	LIVERPOOL	Housing density:	107
Postcode:	L24 0SS	Total Bedrooms:	36
Main Location Type:	Edge of Town	Survey Date:	18/06/13
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	32
Site(5):	NN-03-B-01	Site area:	0.80 hect
Development Name:	SEMI-DETACHED HOUSES	No of Dwellings:	21
Location:	CORBY	Housing density:	27
Postcode:	NN17 1EP	Total Bedrooms:	69
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	13/10/21
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	41
Site(6):	WL-03-B-01	Site area:	1.60 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	54
Location:	AMESBURY	Housing density:	68
Postcode:	SP4 7SS	Total Bedrooms:	118
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/09/18
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	106
Site(7):	WO-03-B-02	Site area:	0.35 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	16
Location:	WORCESTER	Housing density:	89
Postcode:	WR3 8AE	Total Bedrooms:	50
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	14/11/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	29

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	30	0.063	7	30	0.193	7	30	0.256
08:00 - 09:00	7	30	0.193	7	30	0.348	7	30	0.541
09:00 - 10:00	7	30	0.232	7	30	0.280	7	30	0.512
10:00 - 11:00	7	30	0.150	7	30	0.198	7	30	0.348
11:00 - 12:00	7	30	0.135	7	30	0.116	7	30	0.251
12:00 - 13:00	7	30	0.126	7	30	0.130	7	30	0.256
13:00 - 14:00	7	30	0.159	7	30	0.126	7	30	0.285
14:00 - 15:00	7	30	0.184	7	30	0.198	7	30	0.382
15:00 - 16:00	7	30	0.319	7	30	0.193	7	30	0.512
16:00 - 17:00	7	30	0.246	7	30	0.188	7	30	0.434
17:00 - 18:00	7	30	0.295	7	30	0.232	7	30	0.527
18:00 - 19:00	7	30	0.237	7	30	0.164	7	30	0.401
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.339			2.366			4.705

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

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

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Parameter summary

Trip rate parameter range selected: 16 - 54 (units:)
 Survey date range: 01/01/10 - 07/06/23
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	30	0.005	7	30	0.005	7	30	0.010
08:00 - 09:00	7	30	0.010	7	30	0.010	7	30	0.020
09:00 - 10:00	7	30	0.034	7	30	0.029	7	30	0.063
10:00 - 11:00	7	30	0.014	7	30	0.024	7	30	0.038
11:00 - 12:00	7	30	0.019	7	30	0.019	7	30	0.038
12:00 - 13:00	7	30	0.014	7	30	0.010	7	30	0.024
13:00 - 14:00	7	30	0.000	7	30	0.005	7	30	0.005
14:00 - 15:00	7	30	0.019	7	30	0.014	7	30	0.033
15:00 - 16:00	7	30	0.019	7	30	0.019	7	30	0.038
16:00 - 17:00	7	30	0.010	7	30	0.010	7	30	0.020
17:00 - 18:00	7	30	0.005	7	30	0.005	7	30	0.010
18:00 - 19:00	7	30	0.014	7	30	0.014	7	30	0.028
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.163			0.164			0.327

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

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	30	0.000	7	30	0.000	7	30	0.000
08:00 - 09:00	7	30	0.000	7	30	0.000	7	30	0.000
09:00 - 10:00	7	30	0.005	7	30	0.000	7	30	0.005
10:00 - 11:00	7	30	0.000	7	30	0.005	7	30	0.005
11:00 - 12:00	7	30	0.005	7	30	0.005	7	30	0.010
12:00 - 13:00	7	30	0.000	7	30	0.000	7	30	0.000
13:00 - 14:00	7	30	0.000	7	30	0.000	7	30	0.000
14:00 - 15:00	7	30	0.000	7	30	0.000	7	30	0.000
15:00 - 16:00	7	30	0.000	7	30	0.000	7	30	0.000
16:00 - 17:00	7	30	0.000	7	30	0.000	7	30	0.000
17:00 - 18:00	7	30	0.000	7	30	0.000	7	30	0.000
18:00 - 19:00	7	30	0.000	7	30	0.000	7	30	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.010			0.020

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

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	30	0.005	7	30	0.005	7	30	0.010
08:00 - 09:00	7	30	0.000	7	30	0.000	7	30	0.000
09:00 - 10:00	7	30	0.000	7	30	0.000	7	30	0.000
10:00 - 11:00	7	30	0.000	7	30	0.000	7	30	0.000
11:00 - 12:00	7	30	0.000	7	30	0.000	7	30	0.000
12:00 - 13:00	7	30	0.000	7	30	0.000	7	30	0.000
13:00 - 14:00	7	30	0.000	7	30	0.000	7	30	0.000
14:00 - 15:00	7	30	0.000	7	30	0.000	7	30	0.000
15:00 - 16:00	7	30	0.005	7	30	0.005	7	30	0.010
16:00 - 17:00	7	30	0.000	7	30	0.000	7	30	0.000
17:00 - 18:00	7	30	0.000	7	30	0.000	7	30	0.000
18:00 - 19:00	7	30	0.000	7	30	0.000	7	30	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.010			0.020

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	30	0.000	7	30	0.010	7	30	0.010
08:00 - 09:00	7	30	0.005	7	30	0.019	7	30	0.024
09:00 - 10:00	7	30	0.010	7	30	0.010	7	30	0.020
10:00 - 11:00	7	30	0.005	7	30	0.005	7	30	0.010
11:00 - 12:00	7	30	0.000	7	30	0.000	7	30	0.000
12:00 - 13:00	7	30	0.000	7	30	0.000	7	30	0.000
13:00 - 14:00	7	30	0.000	7	30	0.000	7	30	0.000
14:00 - 15:00	7	30	0.005	7	30	0.000	7	30	0.005
15:00 - 16:00	7	30	0.024	7	30	0.010	7	30	0.034
16:00 - 17:00	7	30	0.024	7	30	0.024	7	30	0.048
17:00 - 18:00	7	30	0.005	7	30	0.005	7	30	0.010
18:00 - 19:00	7	30	0.010	7	30	0.000	7	30	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.088			0.083			0.171

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

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	30	0.043	7	30	0.155	7	30	0.198
08:00 - 09:00	7	30	0.159	7	30	0.314	7	30	0.473
09:00 - 10:00	7	30	0.159	7	30	0.222	7	30	0.381
10:00 - 11:00	7	30	0.116	7	30	0.130	7	30	0.246
11:00 - 12:00	7	30	0.092	7	30	0.068	7	30	0.160
12:00 - 13:00	7	30	0.101	7	30	0.111	7	30	0.212
13:00 - 14:00	7	30	0.150	7	30	0.116	7	30	0.266
14:00 - 15:00	7	30	0.159	7	30	0.174	7	30	0.333
15:00 - 16:00	7	30	0.256	7	30	0.135	7	30	0.391
16:00 - 17:00	7	30	0.208	7	30	0.174	7	30	0.382
17:00 - 18:00	7	30	0.280	7	30	0.217	7	30	0.497
18:00 - 19:00	7	30	0.208	7	30	0.150	7	30	0.358
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.931			1.966			3.897

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

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	30	0.010	7	30	0.024	7	30	0.034
08:00 - 09:00	7	30	0.024	7	30	0.019	7	30	0.043
09:00 - 10:00	7	30	0.034	7	30	0.029	7	30	0.063
10:00 - 11:00	7	30	0.019	7	30	0.039	7	30	0.058
11:00 - 12:00	7	30	0.019	7	30	0.024	7	30	0.043
12:00 - 13:00	7	30	0.010	7	30	0.010	7	30	0.020
13:00 - 14:00	7	30	0.005	7	30	0.005	7	30	0.010
14:00 - 15:00	7	30	0.005	7	30	0.010	7	30	0.015
15:00 - 16:00	7	30	0.039	7	30	0.034	7	30	0.073
16:00 - 17:00	7	30	0.024	7	30	0.005	7	30	0.029
17:00 - 18:00	7	30	0.010	7	30	0.010	7	30	0.020
18:00 - 19:00	7	30	0.014	7	30	0.000	7	30	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.213			0.209			0.422

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

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	30	0.000	7	30	0.005	7	30	0.005
08:00 - 09:00	7	30	0.000	7	30	0.005	7	30	0.005
09:00 - 10:00	7	30	0.000	7	30	0.000	7	30	0.000
10:00 - 11:00	7	30	0.000	7	30	0.000	7	30	0.000
11:00 - 12:00	7	30	0.000	7	30	0.000	7	30	0.000
12:00 - 13:00	7	30	0.000	7	30	0.000	7	30	0.000
13:00 - 14:00	7	30	0.005	7	30	0.000	7	30	0.005
14:00 - 15:00	7	30	0.000	7	30	0.000	7	30	0.000
15:00 - 16:00	7	30	0.000	7	30	0.000	7	30	0.000
16:00 - 17:00	7	30	0.005	7	30	0.000	7	30	0.005
17:00 - 18:00	7	30	0.000	7	30	0.000	7	30	0.000
18:00 - 19:00	7	30	0.000	7	30	0.000	7	30	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.010			0.020

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.