Haulfryn, Llanarth

Transport Statement

Client: **Wales & West Housing**

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REPORT DETAILS

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1. INTRODUCTION

1.1 Background

1.1.1 Apex Transport Planning Ltd ('Apex TP') has been commissioned by Wales & West Housing to produce a Transport Statement (TS) in relation to a planning application for a residential development for 17 dwellings on Land North of Aylestone, Llanarth, Ceredigion.

1.1.2 The application site ('the site') is located on the northern edge of Llanarth to the west of St David Church, Llanarth, Ceredigion.

1.1.3 The site is permitted for a residential development of 12 units, comprising of 10no. private four-bedroom detached houses and 2no. affordable two-bedroom semi-detached houses. Therefore, the site has been considered suitable for a residential development of a similar scale by the local planning and highway authorities. Further details on the planning history are included in Section 3.2.

1.1.4 The TS considers the impacts of the proposals in relation to transport including the site connectivity, parking provision and access arrangements, road safety and vehicle trip generation. It has been produced to inform CCC on 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 Future Wales, Planning Policy Wales 12 (PPW12), Technical Advice Note 18: Transport (TAN18), the Active Travel Act (Wales – 2013), the CCC Local Development Plan (LDP), Transport Assessment SPG and Parking Standards SPG, as well as considering our previous experience of other similar sites.

1.2.2 As such, the TS has been structured to include the following, which is in accordance with the 'Local Transport Assessment' requirements in the CCC Transport Assessment SPG and is in line with the previous assessment that was undertaken for the permitted site:

- A description of the existing conditions including, site location and use, highway network, road safety analysis and existing travel behaviour in the surrounding area
- A review of the existing planning context
- Review of the connectivity of the site by sustainable modes including walking, cycling and public transport. This focuses on the key walking routes to the site
- 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
- Consideration of the impact of the proposals on the local highway network
- Proposed off-site improvements

2. PLANNING CONTEXT

2.1 Future Wales: The National Plan 2040

2.1.1 This is the national development framework, setting the direction for development in Wales to 2040. It provides an overarching development plan with a strategy for addressing key national priorities through the planning system.

2.1.2 It is a framework which will be built on by Strategic Development Plans at a regional level and Local Development Plans at local authority level. Planning decisions at every level of the planning system in Wales must be taken in accordance with the development plan as a whole.

2.1.3 In relation to transport, it states on page 51 that *"Growth should be shaped around sustainable forms of transport and places that make us and the environment healthier"*. Page 55 continues on to state that *"Development will focus on active travel and public transport, allied with a reduced reliance on private vehicles"*.

2.1.4 In the supporting text for Policy 2 - Shaping Urban Growth and Regeneration – Strategic Placemaking, it is stated that *"To enable active and healthy lives, people should be able to easily walk to local facilities and public transport."*

2.1.5 Policy 11 sets out National Connectivity, this states that *"Our priorities are to encourage longer distance trips to be made by public transport, while also making longer journeys possible by electric vehicles."*

2.1.6 Policy 12 sets out Regional Connectivity. This states that *"in urban areas our priorities are improving and integrating active travel and public transport."*

2.1.7 In relation to Active Travel and developments it is stated that *"Active travel must be an essential and integral component of all new developments, large and small."*

2.1.8 In relation to travelling in Wales, on page 84 it is stated that *"The Welsh Government's aim is to reduce the need to travel, particularly by private vehicles, and support a modal shift to walking, cycling and public transport."*

2.1.9 On page 174, supporting Policy 36, it is stated that *"Welsh Government wishes to see development built in sustainable locations that are supported by the active travel and public transport infrastructure and services needed to enable people to live active and healthy lives."*

2.1.10 As such, the key themes are that development should be sited where it can benefit from active travel and public transport connections and reduce the need to travel by car. Facilities should be within easy walking distance and a key priority is to encourage electric vehicle use, particularly for longer journeys.

2.1.11 The site is situated within an existing residential area with key facilities and services within suitable walking distance. The site will be well integrated with the existing infrastructure and encourages walking and cycling for local journeys. The site is also well situated to benefit from public transport services. In addition, electric vehicle charging will be provided to encourage the use of more sustainable vehicles.

2.1.12 The site location is therefore considered consistent with the policies and aims of Future Wales and further details of the sustainable connectivity are set out within Section 4.

2.2 Planning Policy Wales 12th Edition (PPW12)

2.2.1 PPW12 provides overarching Welsh Government policies with transport policies set out in Section 4.1. This states in paragraph 4.1.10 *"The planning system has a key role to play in reducing the need to travel, particularly by private car, and supporting sustainable transport, by facilitating developments which:*

** are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car*

** make it possible for all short journeys within and beyond the development to be easily made by walking and cycling."*

2.2.2 PPW12 sets out a *"Sustainable Transport Hierarchy for Planning"* in Figure 9. This states in paragraph 4.1.12 *"It is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development, which prioritises walking, cycling and public transport ahead of the private motor vehicles."*

2.2.3 It continues to state that *"The sustainable transport hierarchy should be used to reduce the need to travel [and] prevent car-dependent developments in unsustainable locations."*

2.2.4 The site's location provides opportunities for the site to be accessible by walking, cycling and public transport. The site location enables access to nearby facilities and services within walking and cycling distances including local bus services.

2.2.5 Further details are provided within Section 4 which demonstrate that the site location is fully compliant with PPW12.

2.3 Technical Advice Note 18: Transport (TAN18)

2.3.1 The importance of walking and cycling in contributing towards sustainable travel patterns is detailed in the guidance contained within TAN18: Transport (March 2007). The guidance emphasises not only the role walking and cycling can have as main modes of transport for local journeys but also the considerable contribution they play in forming parts of longer journeys by public transport.

2.3.2 The importance of the location of a site in relation to encouraging sustainable travel is set out within paragraph 3.3 which states *"The location of new residential development has a significant influence on travel patterns as the majority of trips start or finish at home… It should be a key aim of development plans to identify residential sites that are accessible to jobs, shops and services by modes other than the car."*

2.3.3 Paragraph 3.8 continues on to state that *"Locations that are highly accessible by a variety of travel modes offer significant opportunities to make travel patterns more sustainable."*

2.3.4 As such it is recognised by TAN18 that the sustainable location of a site can assist in facilitating sustainable travel habits. The site is situated in a sustainable location accessible by walking and cycling to community uses, leisure uses, retail, schools and public transport stops, therefore fully in accordance with transport policies in TAN18.

2.4 Ceredigion Local Development Plan 2007-2022 (Adopted 2013)

2.4.1 The LDP outlines the policies that need to be considered in relation to all developments and outlines the vision of the County: *"by supporting and enhancing the County's urban and rural service centres,*

their inter-relationship will be strengthened, the necessity to travel will be reduced and access to local and sustainable facilities will be enhanced and secured."

2.4.2 Policy DM03 relates to the need for sustainable travel and what development can do to facilitate that; *"Development should minimize the need to travel, provide opportunity for and promote sustainable modes of transport in Ceredigion."*

3. EXISTING SITUATION

3.1 Site Location, Use and Access

3.1.1 The site is located on the northern edge of Llanarth, adjacent to an unnamed road which links the B4342 to St David Church. It is approximately 180m to the north of the B4342 and 200m to the west of the A487. Llanarth is situated approximately 6.5km to the southwest of Aberaeron.

3.1.2 The indicative location of the site in its local context is provided in Figure 3-1.

3.1.3 The site is bound to the north by residential and agricultural properties, to the east by the unnamed road which serves the site, to the south lies a sole property and the unnamed road, and to the west by an agricultural property and farmland.

3.1.4 It is currently undeveloped land with a gated field access onto the unnamed road to the east, broadly in the centre of the site.

Figure 3-1: Indicative Site Location

Source: Google Maps

3.2 Planning History

3.2.1 The site has an extensive history of planning applications for residential use since 2000, with a summary of the applications and decisions shown in Table 3-1. This includes two refused planning applications in 2002 and 2007, but the most recent applications were approved for residential development in 2011 and 2024.

Table 3-1: Planning history

Planning Application Number	Proposal	Decision
A010870	Erection of 7 dwellings	Refused 14/2/2002
A030714	Erection of residential development (7 bungalows)	Disposed of Art. 26 (11) a. 18/11/2004
A051024	Residential Development (12 dwellings)	Refused 1/5/2007
A080557	Outline PP Residential Development	Approved STC 8/3/2011
A110061	Reserved Matters Residential Development	Approved STC 17/6/2011
A220368	Full Planning Residential development	Approved STC 28/03/2024

3.2.2 In 2022, a full planning application for a residential development with associated access, landscaping and ancillary works was submitted, and approved in March 2024 subject to conditions and a S106 Agreement. The approved application comprised of 12 residential units (10 private houses and 2 affordable houses).

3.2.3 The access arrangements, minor mitigation on the carriageway adjacent to the site and internal layout were all agreed and accepted for the proposed scheme.

3.2.4 The scheme also obtained traffic surveys on two of the unnamed roads adjacent to and opposite the site. These were collected from Friday 24 September 2021 and Thursday 7 October 2021 on Unnamed Road 1 and Unnamed Road 2 (as detailed in Figure 3-2. These showed a maximum of 26 vehicle movements in the peak hour on Unnamed Road 1 and 9 vehicle movements in the peak hour on Unnamed Road 2. Traffic speeds were low with 85th percentile speeds being a maximum of 18.6mph on Unnamed Road 1 and 13.9mph on Unnamed Road 2.

3.2.5 A detailed route analysis was undertaken of the forward visibility along the roads and this shows that visibility of 25m is achievable along the entire length of the route, which equates to 20mph speeds. This is with the exception of the edge of the site and as such, this was proposed to be improved as part of the proposals. All routes were considered to be safe and suitable for accommodating pedestrian, cyclist and vehicular movements and this was accepted by CCC through the approval of the planning application.

3.2.6 Therefore, this site has recently been considered acceptable by CCC to deliver a residential development of a similar scale to that now proposed and benefits from an extant planning permission for this use.

3.3 Local Highway network

Unnamed Roads and Surrounding Highway Network

3.3.1 The site is currently served from an unnamed road via a gated field access to the east. This road runs along the site's eastern boundary and gains access to the wider road network via the B4342 to the south and A487 to the east (via two possible routes). The routes to the east of the site have a downhill gradient on approach to the A487 with the route south to the B4342 having a flatter gradient up to the southern boundary of the site.

3.3.2 The highway network surrounding the site which has been reviewed is shown in Figure 3-2.

Figure 3-2: Surrounding Highway Network

Source: Google Maps

3.3.3 Unnamed Road 1 connects the site to the B4342 to the south forming the minor arm of a priority junction. It is a single carriageway rural lane which serves as a main access road to a number of residential and agricultural properties. The road is lit at regular intervals and is subject to a 20mph speed limit.

3.3.4 Approximately 150 metres north of the B4342, opposite the southern boundary of the site, the road forms a minor unmarked junction with Unnamed Road 2. This provides access to Maes Dafydd before continuing east to form the minor arm of a priority junction with the A487.

3.3.5 To the north of the Unnamed Road 2 junction, Unnamed Road 1 runs parallel to the site until it adjoins Unnamed Road 3 at another unmarked junction adjacent to St David Church. Unnamed Road 3 continues to the east and connects to the A487 as the minor arm of a priority junction.

3.3.6 The Unnamed Road 1 also loops back to the B4342 to the north of the Unnamed Road 3 junction. However, this section is narrow with minimal passing places and would be unattractive to users of the site on this basis, with the shorter and more suitable route to the B4342 being to the south. As such, the proposals are likely to generate a minimal level of vehicle movements on this section of the route and this has not been considered further.

3.3.7 These unnamed roads are predominantly flanked by grass verges and hedgerows, with limited footway provision. The grass verges provide opportunities for pedestrians to step off the carriageway should this be required.

B4342

3.3.8 The B4342 is a 20mph single carriageway road located to the south which serves the unnamed highway from which the site is accessed. The road provides a connection to New Quay to west and to the A487 to the east. Street lighting is provided either side of the junction with Unnamed Road 1, with one located directly opposite the junction mouth on the southern side of the B4342.

3.3.9 Footways are provided along the east side of the carriageway which connect to the Unnamed Road 1 junction. A narrow footway is also provided on the west side of the carriageway between the A487 and the Unnamed Road 1.

3.3.10 Dropped kerb crossings are provided at the B4342 / Unnamed Road 1 junction and at the Pine Grove junction which include tactile paving.

A487

3.3.11 The A487 provides a strategic regional connection to Llanarth and the site. This road is part of the WG Strategic Road Network and routes between Fishguard and Bangor. Within the vicinity of the unnamed roads and the B4342, the A487 has central hatching and intermittent traffic islands which restrict overtaking within Llanarth. It is subject to a 20mph speed limit from the western extent of Llanarth to the Unnamed Road 2 where this increases to 40mph to the east for the remainder of the village.

3.3.12 Footways are located on both sides of the carriageway for the majority of Llanarth, which benefit from crossings at key junctions with tactile paving.

3.4 Road Safety

3.4.1 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.

3.4.2 The data has been reviewed using the Crashmap website. The study area within the analysis covers the local highway network and the A487 within the vicinity of the site. The locations of the recorded PIAs are shown in Figure 3-3.

Figure 3-3: Location of Recorded PIA's

Source: Crashmap

3.4.3 Over the seven-year period, two PIAs occurred within the study area, both of which were recorded as 'slight' in nature. There were no serious or fatal incidents recorded during this period.

3.4.4 No PIAs occurred on any of the unnamed roads, along the B4342 or at the B4342 / A497 junction. None of the PIAs involved pedestrians or cyclists, including within the entire village outside of the study area. As such, there is no evidence of a road safety issue relating to pedestrian or cyclist movements within Llanarth.

3.4.5 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.

3.4.6 Although all incidents are regrettable, the PIAs that occurred within the seven-year period do not indicate a specific pattern or an issue with the geometry of the highway that would be exacerbated by the proposals, particularly on the unnamed roads linking to the site. It also does not show any evidence of a safety issue for access from the site to the local facilities in the village, particularly for pedestrian and cyclist movements.

3.4.7 As such, there is no evidence of a road safety issue on any of these routes including for pedestrians, who safely share the carriageway with vehicles.

3.5 Modal Share

3.5.1 A review of census travel to work mode share data has been undertaken. Due to restrictions in place at the time of the 2021 Census, the modal share is not representative of typical journeys to work. As such, the 2011 Census data is considered more applicable in this regard.

3.5.2 The site is predominantly located within output area W00002822 in Ceredigion, although a small section of the site is included in the adjacent output area W00002821. Two additional adjoining output areas have also been included within the modal share analysis as they are representative of the likely travel behaviour from the site. Table 3-2 shows how the existing residents of these areas currently travel to work, as well as a comparison with the entire Ceredigion District as obtained from 2011 Census data (via Nomis dataset QS701EW).

Table 3-2: Journey to Work Mode Split (Census 2011)

Mode	OA W00002820	OA W00002821	OA W00002822	OA W00002824	Average	Ceredigion District
Public Transport	4%	6%	9%	15%	8%	4%
Car Driver	79%	77%	84%	75%	79%	69%
Motorcycle	0%	0%	0%	2%	1%	1%
Car Passenger	3%	6%	2%	4%	4%	6%
Bicycle	1%	0%	0%	0%	0%	1%
On Foot	12%	10%	5%	2%	7%	18%
Other	2%	1%	0%	2%	1%	1%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

3.5.3 The census data shows that an average of 80% of residents living in the area surrounding the site travel to work using their car/motorcycle, with 7% walking and 8% travelling by public transport.

3.5.4 The data shows that although residents in this area undertake more journeys to work by car /motorcycle than the entire of Ceredigion, the level of public transport use is higher. The data also shows a proportion of work journeys are undertaken by car sharing.

3.5.5 These statistics have been adjusted to exclude working from home. If this was included, c.17% of residents currently in work, do so from home rather than commuting and this is likely to have significantly increased since 2011.

3.5.6 It is noted that travelling to work is only one journey purpose during peak hours from a residential site. A significant proportion of journeys will also be for education, leisure, and local retail purposes and these are likely to have higher levels of sustainable travel, particularly given the nearby location of key facilities and services within Llanarth.

3.5.7 The data demonstrates that there is some potential for walking, cycling, and public transport trips to be made to and from the site and that these movements already occur, without evidence of a safety issue, in this area.

3.6 Car Ownership

3.6.1 The 2021 Census data for car ownership levels by household has been reviewed, considering the surrounding areas in which the site is situated. The output areas are the same as those used in the modal share analysis. The 2021 Census is considered appropriate for this analysis as the data shows that vehicle ownership increased from 2011 data and as such, it is considered robust.

Census Analysis – Overall

3.6.2 The 2021 Census data (TS045) has been reviewed for the average car ownership in the four output areas from W00002820 to W00002822 and W00002824. This shows an average of 1.56 cars per household across the study area, based on 841 cars across 540 households (2021 census data does not provide a total sum of all cars or vans in the area, so it is assumed that all households with 3 or more cars have an average of 3.38 cars, based on the equivalent data from 2011).

3.6.3 It is also shown that 13.1% of households did not own a car and 52% owned one car or less. However, this overall average includes all tenure types and a significant proportion are likely to be privately owned and therefore the overall average is not directly comparable with the proposed development as all units on the site would be for affordable housing.

Census Analysis – Tenure Type

3.6.4 As the overall Census data includes all tenure types, car ownership levels by tenure type in the study area OA's have been reviewed.

3.6.5 Tenure type can influence car ownership levels as there would likely be a reduced demand for affordable housing compared with private housing.

3.6.6 The Census 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. The social rented category provides a more realistic estimate of the car ownership for affordable housing.

3.6.7 A total of 49 households are within the output areas reviewed are social rented accommodation, which also reflects a need for additional units within the local area, and of these households 39% have no car ownership 49% have one car and just 12% have two or more cars. In the local area this equates to an average of 0.8 cars per socially rented household. This is around half of the overall car ownership level showing the significantly lower ownership for affordable housing.

3.6.8 By way of comparison, the ownership across the entire Ceredigion area has also been reviewed. The Census shows a total of 3,242 socially rented households, of which 40% have no car ownership, 43% have one car and 16% have two or more cars. This equates to an average of 0.85 cars per socially rented household. As such, the significant majority of social rented households in CCC have low car ownership, although this also shows that the levels of ownership are lower in the site locality than across CCC as a whole.

4. CONNECTIVITY BY SUSTAINABLE MODES OF TRAVEL

4.1 Introduction

4.1.1 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. Active travel routes have been considered in the context of the Active Travel Act Design Guidance (ATADG).

4.2 Walking

Overview

4.2.1 Alongside cycling, walking is one of the most important modes of travel at a local level and offers the greatest potential to replace short car journeys. It is the top of the PPW12 hierarchy.

4.2.2 The site is situated within the northern extent of Llanarth within proximity of key local facilities and services, as detailed in Section 4.6.

Infrastructure

4.2.3 The roads adjoining the site are considered suitable for pedestrians to share with vehicles. Traffic surveys of traffic flows and speeds were undertaken as part of the 2022 planning application and set out in Section 3.

4.2.4 In relation to walking, Manual for Streets notes at p.83, that pedestrians are comfortable treating roads with traffic flows of <100 vehicles per hour as shared spaces. Above this level, pedestrians tend to treat the carriageway as a 'road' and to walk at the sides of the road, as is usual practice on narrow rural and country lanes (similar to the unnamed roads). The traffic flows on the unnamed roads are comfortably within levels which would be considered acceptable for pedestrians to either share the carriageway or step off on to the verge safely.

4.2.5 To further define what can reasonably be considered low traffic flows, the DfT Circular Traffic Advisory Leaflet 02/2006 "*The Quiet Lanes and Home Zones (England) Regulations 2006*", has been used as a comparison with the Manual for Streets thresholds. Although not strictly applicable in Wales, this provides a useful guide to the level of traffic that would be acceptable within rural locations on shared routes.

4.2.6 The definition of a Quiet Lane is *"minor rural roads or networks of minor rural roads appropriate for shared use by walkers, cyclists, horse riders and other vehicles."* It is also suggested that *"They should be rural in character, though they do not necessarily have to be in a rural area."* The guidance suggests that *"Quiet Lanes should have no more than about 1000 motor vehicles per day."*

4.2.7 The existing traffic flows on the unnamed roads are significantly lower than the threshold level for a 'Quiet Lane' even during the peak day on the peak route (205 daily movements). As a Quiet Lane can be defined as suitable for shared use by walkers, cyclists, equestrians, and motorists then it is considered that the unnamed roads are suitable for shared use by all modes of transport as they have low traffic flows.

4.2.8 In addition, the Welsh Government Active Travel Act Design Guidance in paragraph 11.33.3 states *"on-carriageway active travel cycle routes in rural areas should generally follow roads with low traffic flows, preferably below 1,000 vehicles AADT and with actual traffic speeds no greater than 30mph."* The Active Travel Act accords with the 'Quiet Lanes' and Manual for Streets guidance and further confirms that the unnamed roads should be suitable for shared use between all modes of travel.

4.2.9 Paragraph 6.4.1 of Manual for Streets also states that '*Cyclists should generally be accommodated on the carriageway. In areas with low traffic volumes and speeds, there should not be any need for dedicated cycle lanes on the street.'* Based on the low flows and speeds shown in the surveys, the unnamed roads would also be suitable and safe for accommodating cyclists.

4.2.10 Given there is no evidence of an existing safety issue, that the site is allocated and has an extant residential planning permission, the recorded low speeds and flows, and the acceptable forward visibility along the length of the unnamed roads, these roads are considered appropriate for safely accommodating shared use between vehicles and pedestrians including the movements generated by the site. This is in accordance with Welsh Government, Manual for Streets and DfT guidance.

4.2.11 As such the roads surrounding the site provide a suitable shared surface route linking the site to the surrounding pedestrian network and facilities.

4.2.12 These routes are lit and appropriately and safely accommodate existing pedestrian movements, they have been used in this way for a prolonged period of time without any road safety incidents, and they are considered to remain appropriate for the minimal change in movements which would be generated by the development proposals. They have also been accepted as appropriate routes to the site through the approved 2024 residential scheme as well as the allocation of the site for residential use.

4.2.13 The nearest footways are located along the B4342 to the south, A487 to the east as well as short sections located along the minor roads to the east. The B4342 benefits from a two-metre-wide footway on its northern side, providing a connection to facilities within Llanarth to the southwest and to the east. The carriageway is lit in this location with informal crossings with tactile paving provided at junction. This provides a good quality continuous link for pedestrians to access the local facilities and services appropriately and safely.

4.2.14 The A487 benefits from a lit footway on both sides of the carriageway within the majority of Llanarth, linking to key facilities and services. Crossings are provided at key junctions along this route with tactile paving.

4.2.15 Short sections of footway are provided along the unnamed roads to the east of the site within the proximity of side road junctions and the A487. Unnamed Road 2 will also benefit from a short section of footway as part of a consented application for one dwelling at 'Land adjoining Brynmorgan' (Application Ref: A100260).

Key Routes

4.2.16 The majority of key facilities and services are situated within a 400m walk of the site and as such, the proposed development offers a good potential for walking to replace short car journeys in accordance with PPW12. Further details of facilities are included in Section 4.6.

4.2.17 There are three possible routes between the site and the A487 which provides access to a number of facilities and services. These routes are shown in Figure 3-2, labelled as Unnamed Road 1, 2 and 3.

4.2.18 The assessment of local key facilities and services (in Section 4.6) shows that most facilities and services are located to the southwest of the site and therefore Unnamed Road 1 provides the most direct, convenient, and comfortable route for pedestrians to access these facilities. This route is considered appropriate to accommodate shared use.

4.2.19 Pedestrian routes via Unnamed Road 2 and 3 are considered less likely to be used as they provide direct access to a lower level of facilities and services and have steeper gradients. However, the low

level of vehicle movements and slow speeds as well as intermittent footways, passing places and verges do provide some potential for use for some journeys.

4.3 Cycling

4.3.1 The roads which provide access to the site are considered suitable for shared use by walkers, cyclists, and motorists. The shared use of lightly trafficked, low speed roads such as those adjacent to the site is supported by Welsh Government, Manual for Streets and DfT guidance.

4.3.2 A high proportion of the National Cycle Network, for example, comprises of country lanes which are not dissimilar to the unnamed roads connecting to the site.

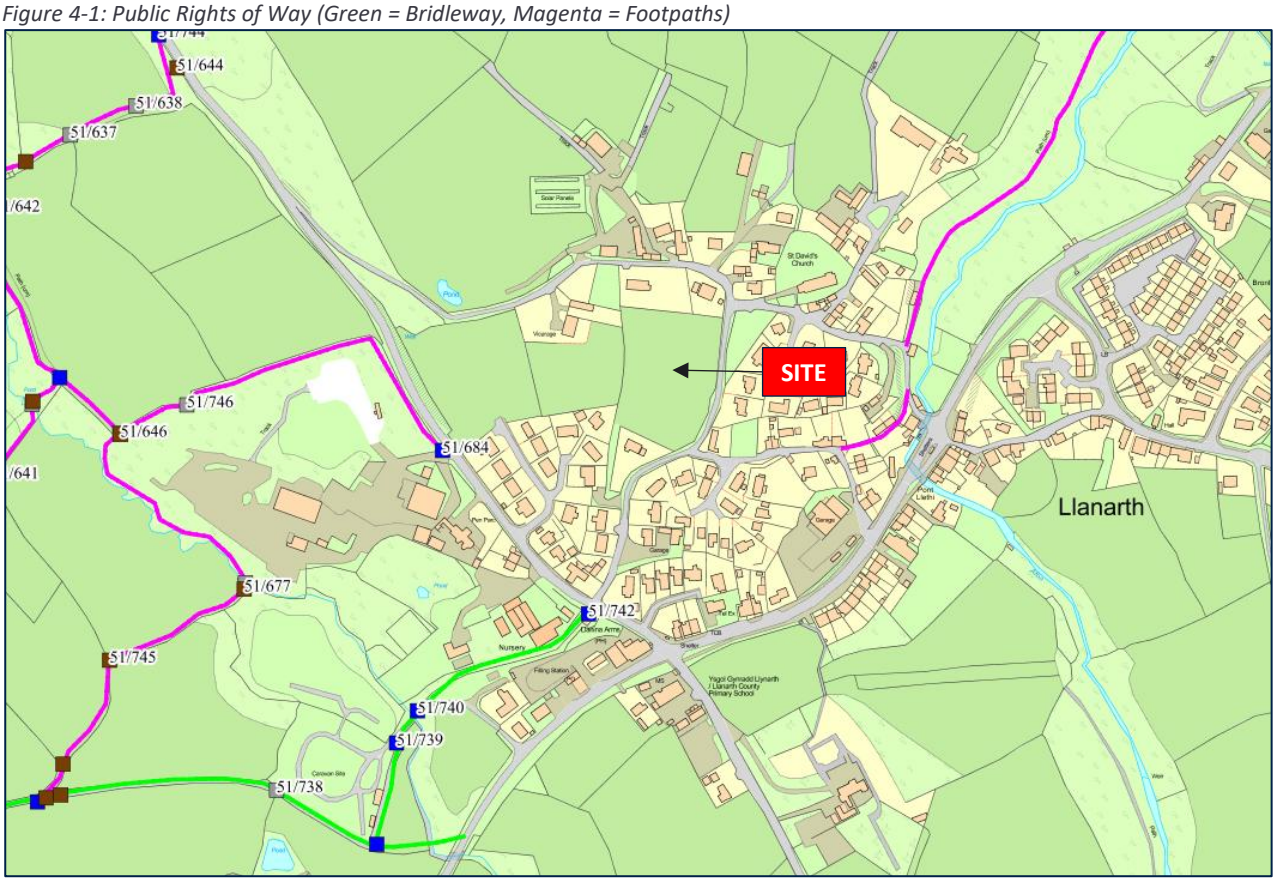
4.3.3 As such, it is considered there is some opportunity for cycling to and from the site and as shown in Section 3, there are some existing cycling trips generated by residents within the village.

4.4 Public Rights of Way

4.4.1 There are Public Rights of Way (PRoW) located within the vicinity of the site and around Llanarth, which provide residents with the opportunity for leisure walks as well as providing routes to the surrounding smaller settlements. A Bridleway is located directly opposite the B4342 / Unnamed Road 1 junction to the south of the site, with further footpath connections provided to the east via Unnamed Roads 2 and 3 as well as via the B4342 to the west.

4.4.2 The PRoW within the vicinity of the site are shown in Figure 4-1.

Figure 4-1: Public Rights of Way (Green = Bridleway, Magenta = Footpaths)



Source: Ceredigion Rights of Way Map, www.ceredigion.gov.uk/resident/coast-countryside/public-rights-of-way/the-definitive-map-public-right-of-way-registers/rights-of-way-map

4.5 Distances to Facilities

4.5.1 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).

4.5.2 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' and would be highly sustainable locations.

4.5.3 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.

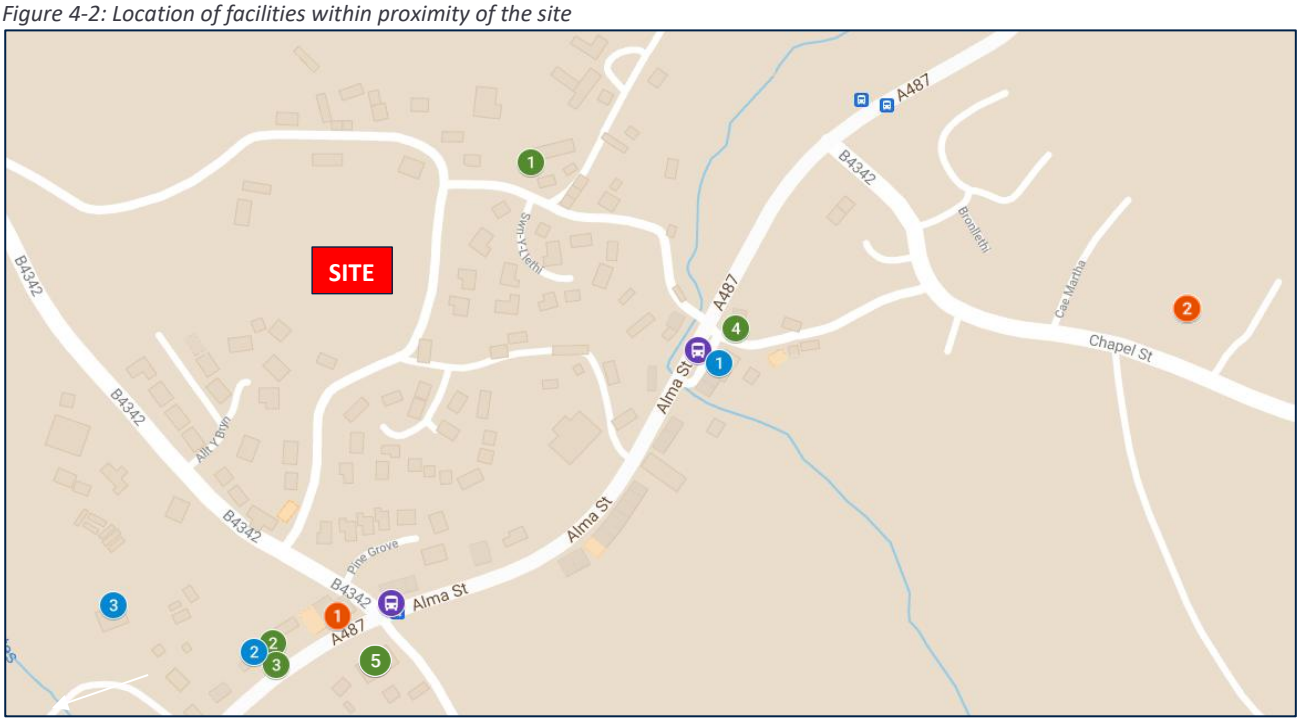
4.5.4 To demonstrate the site's connectivity, facilities within appropriate distances which are accessed via the outlined suitable and established routes have been summarised in Table 4-1. These facilities have been summarised based on approximate travel distances from the site access via the appropriate routes, not straight-line distances. The location of these facilities in the context of the site are shown in Figure 4-2.

Table 4-1: Proximity of the site to local facilities and services

Facility / Amenity	Distance from site centre (metres)	Walking Travel Time (minutes)	Cycling Travel Time (minutes)
Community Facilities			
1 St David Church	100	1	<1
2 Llanarth Post Office	400	5	1
3 Texaco petrol station	400	5	1
4 Barbershop	400	5	1
5 Llanarth Primary School	360	4	1
Bus Stops			
Llanina Arms	300	4	1
Pont Llethi	350	4	1
Retail			
1 Convenience shop	300	4	1
2 Convenience shop	400	5	1
3 Llanarth Garden Centre	400	5	1
Leisure			
1 Llanina Arms Public House	340	4	1
2 Llanarth Play Area	700	9	2

** Based on walking speeds of 80 metres per minute and Cycling Speeds of 320 metres per minute.*

Figure 4-2: Location of facilities within proximity of the site



Source: Google Maps
Note: Numbers and colours correlate to Table 4-1

4.5.5 Table 4-1 and Figure 4-2 show a range of facilities and services situated within walking and cycling distance from the site. The site lies within close proximity to facilities and services located adjacent to the A487 which consist of a post office, convenience store, primary school, petrol station, public house, bus stop and car garage. All facilities are within Welsh Government guidance walking and cycling distances and also within MfS 'walkable neighbourhood' distances.

4.5.6 The site is therefore considered to be situated in a location which makes it possible for short journeys to be made on foot or by cycle, including journeys for everyday needs purposes.

4.5.7 It is therefore considered to be situated in a reasonably sustainable location, particularly given the sites rural location. 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. In addition, these everyday needs facilities will minimise the need for those working from home to travel by car during the day.

4.5.8 The location has also been considered appropriate for residential use by virtue of its extant residential planning consent.

4.6 Public Transport

Bus

4.6.1 The closest bus stops to the site are located on A487 approximately 300 metres (four-minute walk) to the south of the site adjacent to the Llanina Arms public house. Additional stops are provided further north along the A487, approximately a 350 metre (four-minute walk) from the site.

4.6.2 The stops are served by the T1X and T5 service. The T1X provides two services from Monday to Saturday (06:31 and 21:22) between Carmarthen and Aberystwyth via Synod Inn. The T5 offers a bi-hourly service from 6:05 until 20:10 from Monday to Saturday between Haverfordwest and Aberystwyth.

4.6.3 Based on the times of operation, potential future residents of the site can use the bus services for commuting purposes to Haverfordwest and Aberystwyth. The bus service therefore provides a feasible option for people working full-time in these areas. The service can also be used to access destinations for leisure, retail, and health purposes as well as connecting to additional rail services from Aberystwyth. As set out in Section 3, there is already some public transport journeys for commuting purposes in this area, which demonstrates that this would be a realistic choice of travel.

4.6.4 It is considered that the site has reasonable accessibility by bus, particularly given the rural location and this offers a realistic travel option for residents of the site. This will assist in minimising the vehicle trip generation in accordance with the aspirations of PPW12.

4.7 Summary

4.7.1 The site is situated in a location where journeys by sustainable modes are a reasonable and realistic alternative to the private car, as would be expected for a site situated within an established residential area, which has been allocated for residential use. The site benefits from being connected to existing walking and public transport routes as well as public rights of way.

4.7.2 Residents can walk (or cycle) to a number of everyday needs facilities (local shop, school, public house, post office, hairdressers, bus stop, church, playing fields) within appropriate distances via safe routes, reducing the need to travel by car. In this regard, the site location is consistent with the sustainable transport policies in PPW12.

4.7.3 Potential future residents would have a realistic choice of modes of travel for all journey purposes, which will assist in constraining the level of vehicle generation from the site and minimise the impact of the development.

4.7.4 The site location will encourage and promote sustainable travel behaviour and therefore is in accordance with transport policies in TAN18, PPW12, the LDP and the Active Travel Act.

5. DEVELOPMENT PROPOSALS

5.1 Overview

5.1.1 The proposals are for a development of 17 affordable residential dwellings. The development will comprise a mix of one bedroom bungalows, and two and three bed units, which would comprise of the following:

- 4no. One-bedroom bungalows
- 10no. Two-bedroom houses
- 3no. Three-bedroom houses

5.1.2 The houses would be built to a high standard, which would encourage working from home in accordance with the aspirations of the Welsh Government. The construction will include high speed fibre broadband connections, WiFi and offices. Each house will be energy efficient to minimise the costs of running a home office, which will attract residents who wish to work from home. This will assist in constraining the level of vehicle generation from the site onto the local highway network.

5.1.3 The proposed site layout is shown in Appendix A.

5.2 Access and Layout

Vehicular access

5.2.1 Vehicular access is proposed from the eastern site boundary onto Unnamed Road 1 via a new priority junction, comprising a 5.5m carriageway width and 6m junction radii. The junction will tie into the new nearside kerb line and widened carriageway to the north and south of the access. This new arrangement provides additional width at the junction to 5.7m, which enables larger vehicles to access and egress the site safely.

5.2.2 Footways of 2m in width are provided on both sides of the access, which link to the proposed footways to the north and south of the access, which route along the entire site frontage. The access also incorporates dropped kerb crossings at the junction mouth to enable suitable crossing for pedestrians.

5.2.3 Visibility from the proposed access junction can be provided at 2.4m x 25m in each direction at a distance of 2.4m back from the edge of the carriageway. This is in line with requirements for a 20mph carriageway based on TAN18 and exceeds the vehicle speeds recorded on the local roads as part of the previously approved application.

5.2.4 As detailed in Section 7, the proposals would also include significant carriageway widening along the entire site frontage either side of the access, resulting in widths of between 4.1m-5.7m. This enables vehicles to pass at the junction and along the entire site frontage, providing an improvement over the existing situation. In addition, the widening and footway provision will enable improved forward visibility along this route, to enable vehicles to informally give-way appropriately.

5.2.5 The additional widening and improved forward visibility to the south of the site access will encourage vehicles to use the Unnamed Road 1 to and from the south, rather than the two narrower routes on Unnamed Roads 2 and 3 to the north and east. This will minimise the impact of the scheme on the surrounding network.

5.2.6 A general arrangement plan of the proposed access arrangements and off-site improvements is provided in Appendix B.

5.2.7 The access arrangements and improvements were agreed as part of the approved 2024 application and as such the principle of residential development and the access arrangements / mitigation has previously been accepted by CCC.

Site Layout

5.2.8 Forward visibility of 25 metres is provided along the length of the site access road within the carriageway / footway / verge which ensures suitable visibility is achievable for 20mph speeds.

5.2.9 The access road provides a turning head at its northern extent which provides suitable space for large vehicles to turn in and out of the site in forward gear. Swept path analysis has been provided in Appendix C to demonstrate a large refuse vehicle turning appropriately.

5.2.10 These arrangements are broadly the same as agreed as part of the previous planning approval, with some minor amendments to reflect comments received from the highway authority as part of pre-application discussions for this application.

Pedestrian access

5.2.11 Footways are provided within the site along both sides of the access road to a width of 2 metres. These connect to the proposed footways which route along the entire site frontage in both directions from the access which measure between 1.8m and 2m. These footways tie into the existing shared carriageway arrangements at each end. Dropped kerb crossing points are provided at the site access to ease crossing movements.

5.2.12 The footway proposals are considered to provide a significant enhancement to the pedestrian environment in this location and the widening of the carriageway improves forward visibility and enables users to pass safely.

5.2.13 The proposed footways can be seen on the proposed site access and improvements plan in Appendix B.

5.3 Parking

Car Parking Provision

5.3.1 The proposed car parking has considered the LDP's Supplementary Planning Guidance (SPG) *Ceredigion County Council Parking Standards* as adopted in 2015. This identifies how the CSS Wales – Wales Parking Standards 2008 will be applied across the County.

5.3.2 In accordance with the descriptions in the SPG, the site is situated within a Zone 4 or 5 location. The parking standards state a maximum provision of one space per bedroom, with a maximum of three spaces per house and an additional one space per five houses for visitors.

5.3.3 The proposals include two spaces per dwelling, equating to a total of 34 spaces provided on private driveways located adjacent to the units, which is in accordance with the SPG. This is also in accordance with the total number of spaces agreed for the previously approved scheme which provided 3 spaces per unit for the 10 private units and 2 spaces per unit for the 2 affordable units.

5.3.4 This level of parking is slightly below the maximum levels for the three-bedroom units and slightly above the maximum levels for the one-bedroom units. However, the SPG allows for flexibility to be applied to the provision where *"clear evidence has been supplied that car ownership levels will be lower than normal*".

5.3.5 As set out in Section 3, the average level of car ownership for affordable units is less than 1 vehicle per dwelling. The site is also connected by sustainable modes, with local journeys possible on foot, which reduces the requirement to own a car or to make journeys by car for everyday purposes, as shown in Section 4. As such, the provision of two car parking spaces per dwelling is considered appropriate to accommodate the likely demand and unlikely to lead to overspill off the site. This level of provision was also discussed and agreed with CCC as part of pre-application discussions.

5.3.6 A higher provision of parking is likely to lead to numerous unoccupied spaces and an inefficient use of space on the site that could be utilised for amenity space or landscaping. This would also be contrary to the policies set out in Future Wales and PPW12.

5.3.7 A total of four visitor parking spaces on site have been provided, in line with the guidance. In addition, a total of five bays have been provided as part of the improvements made to the adjacent unnamed road within a layby arrangement. These bays have been provided to benefit existing residents in the area, as on-street parking occurs in this area in association with the local church and this layby provides a betterment to this existing situation.

Car Parking Layout

5.3.8 All residential parking spaces across the site would be accommodated on private driveways and have dimensions of 2.4m x 4.8m, consistent with the CCC guidance, and vehicles can manoeuvre into and out of the spaces appropriately. The visitor parking would be provided in four marked bays in two different locations (two spaces in each location) and these spaces would also be provided with the same dimensions.

5.3.9 Further visitor parking and existing resident / visitor parking is also located within a layby parking arrangement offsite, to the north of the site access. Vehicles can manoeuvre into and out of all spaces appropriately as shown within the swept path analysis in Appendix C.

Cycle Parking

5.3.10 The SPG sets out the cycle parking standards but not specifically for private dwellings. It states that *"All residential developments must be accessible by cycles and cycle storage must be a factor of dwelling design."*

5.3.11 As these are residential dwellings, there will be sufficient space provided for on-plot cycle storage within the curtilage of each dwelling. This will be in the form of a shed or space within the dwelling.

5.4 Servicing and Refuse Collection

5.4.1 Servicing would mainly relate to refuse collection which would be undertaken on-street from the access road. Refuse vehicles are able access and egress the site safely in forward gear. Swept path analysis demonstrates appropriate refuse vehicles turning within the proposed turning head and entering and exiting the site in forward gear. Swept path analysis is shown in Appendix C.

5.4.2 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 and residents should not carry waste further than 35 metres. As collection can take place from kerbside, the arrangements are in line with Building Regulations (and MfS) and considered safe and appropriate.

5.4.3 A fire tender will also be able to get within 45 metres of all properties and turn at the turning head. As such, the layout is appropriate for access by emergency vehicles.

6. TRIP GENERATION AND IMPACTS

6.1 Introduction

6.1.1 This section sets out the forecast trip generation of the permitted and proposed schemes using the Trip Rate Information Computer System (TRICS). The TRICS database has been analysed for sites with similar characteristics in terms of use, scale, location, accessibility, and surrounding population.

6.1.2 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 peak hours on a weekday and over a daily period.

6.1.3 A net change in movements between the two schemes is provided to demonstrate the forecast change in two-way vehicle movements in relation to the affordable housing proposals when comparing to the permitted and predominantly private detached housing scheme.

6.2 Permitted Scheme

6.2.1 In relation to the permitted scheme, the TRICS sites used within the original application contained a high proportion of affordable housing, when the site has been approved for predominantly large detached residential units. It also included a site with just one parking space per unit, which is significantly below the approved provision. As such, TRICS has been considered for more comparable sites with detached units and higher levels of car parking to provide an appropriate comparison against the proposed affordable housing scheme.

6.2.2 The TRICS category '03 - RESIDENTIAL/A – HOUSES PRIVATELY OWNED' has been selected to derive trip rates for the scheme, given the significant majority of units on the site would be privately owned and all private dwellings were four bedroom detached houses.

6.2.3 The following parameters have been applied to the search criteria to obtain sites of a comparable nature to the permitted site:

- Located in England and Wales (excluding London)
- Vehicle Surveys
- Sites between 6 and 25 dwellings
- Suburban Area / Edge of Town Locations
- From 2000 onwards
- Sites with at least two car parking spaces per dwelling
- Removal of Surveys of Sites with over 250,000 population within five miles
- Removal of sites in areas with car ownership less than 1 vehicle per household
- Using detached housing sites only
- Removal of surveys undertaken during Covid

6.2.4 The application of these parameters resulted in identifying four comparable sites. The resultant vehicle trip rates, and vehicle trip generation based upon the permitted 12 dwelling scheme are summarised in Table 6-1. The full TRICS report is included in Appendix D.

Table 6-1: Permitted Development - Vehicle Trip Rates and Trip Generation

Time Period	Trip Rates (per dwelling)			Trip Generation (12 dwellings)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (07:00-08:00)	0.128	0.362	0.490	2	4	6
AM Peak (08:00-09:00)	0.170	0.489	0.659	2	6	8
PM Peak (16:00-17:00)	0.362	0.149	0.511	4	2	6
PM Peak (17:00-18:00)	0.511	0.383	0.894	6	5	11
12 Hours (07:00-19:00)	2.660	3.084	5.744	32	37	69

6.2.5 Table 6-2 demonstrates that the approved scheme is forecast to generate 8 two-way vehicular movements during the AM (0800 – 0900) peak period and 11 two-way vehicular movements during the PM (1700 – 1800) network peak hour.

6.2.6 Over a 12-hour period, the approved scheme is forecast to generate 69 two-way vehicle movements.

6.3 Proposed Affordable Scheme Trip Generation

6.3.1 The TRICS category '03 - RESIDENTIAL/B – AFFORDABLE/LOCAL AUTHORITY HOUSES' has been selected to derive trip rates for the proposed affordable residential development.

6.3.2 The following parameters have been applied to the search criteria to obtain sites of a similar nature:

- Located in England and Wales (excluding London)
- Vehicle Surveys
- Sites between 10 and 35 dwellings
- Suburban Area / Edge of Town Locations
- From 2000 onwards
- Sites with at least 1.5 car parking spaces per dwelling
- Removal of Surveys of Sites with over 250,000 population within five miles
- Removal of sites with private housing
- Removal of surveys undertaken during Covid

6.3.3 The application of these parameters resulted in identifying two comparable sites. The resultant vehicle trip rates, and vehicle trip generation based upon the proposed 17 dwellings are summarised in Table 6-2. The full TRICS report is included in Appendix E.

Table 6-2: Proposed Development Vehicle Trip Rates and Trip Generation

Time Period	Trip Rates (per dwelling)			Trip Generation (17 dwellings)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (07:00-08:00)	0.037	0.259	0.296	1	4	5
AM Peak (08:00-09:00)	0.185	0.296	0.481	3	5	8
PM Peak (16:00-17:00)	0.037	0.259	0.296	1	4	5
PM Peak (17:00-18:00)	0.074	0.037	0.111	1	1	2
12 Hours (07:00-19:00)	1.962	1.813	3.775	33	31	64

6.3.4 Table 6-2 demonstrates that the proposed scheme is forecast to generate 8 two-way vehicular movements during the AM (0800 – 0900) peak period and 5 two-way vehicular movements during the PM (1600 – 1700) network peak hour.

6.3.5 Over a 12-hour period, the proposed development is forecast to generate 64 two-way vehicle movements.

6.4 Net Change in Movements

6.4.1 The net change in vehicles when comparing the proposed affordable development of 17 units to the permitted development of 12 predominantly private detached units, is summarised in Table 6-3.

Table 6-3: Net Change in Vehicle Movements

Time Period	Existing			Proposed			Net Change		
	ARR	DEP	TOT	ARR	DEP	TOT	ARR	DEP	TOT
AM Peak (07:00-08:00)	2	4	6	1	4	5	-1	0	-1
AM Peak (08:00-09:00)	2	6	8	3	5	8	1	-1	0
PM Peak (16:00-17:00)	4	2	6	1	4	5	-3	2	-1
PM Peak (17:00-18:00)	6	5	11	1	1	2	-5	-4	-9
12 Hours (07:00-19:00)	32	37	69	33	31	64	1	-6	-5

6.4.2 Table 6-3 demonstrates that the proposals are forecast to generate a slightly lower, albeit similar level of vehicle movements in the AM and PM peak hours, as well as over a 12 hour period, when compared to the permitted scheme.

6.4.3 As such, the impact of the vehicle movements generated by the proposals would be within the levels accepted as part of the approved scheme. As such, the proposals would not have a material impact on the highway network, which would remain operating within the previously agreed and accepted parameters.

7. PROPOSED IMPROVEMENTS

7.1.1 The proposals include significant off-site improvements which consist of carriageway widening and new footways along the entire site frontage in both directions from the site access. The proposed off-site improvements are shown in Appendix B.

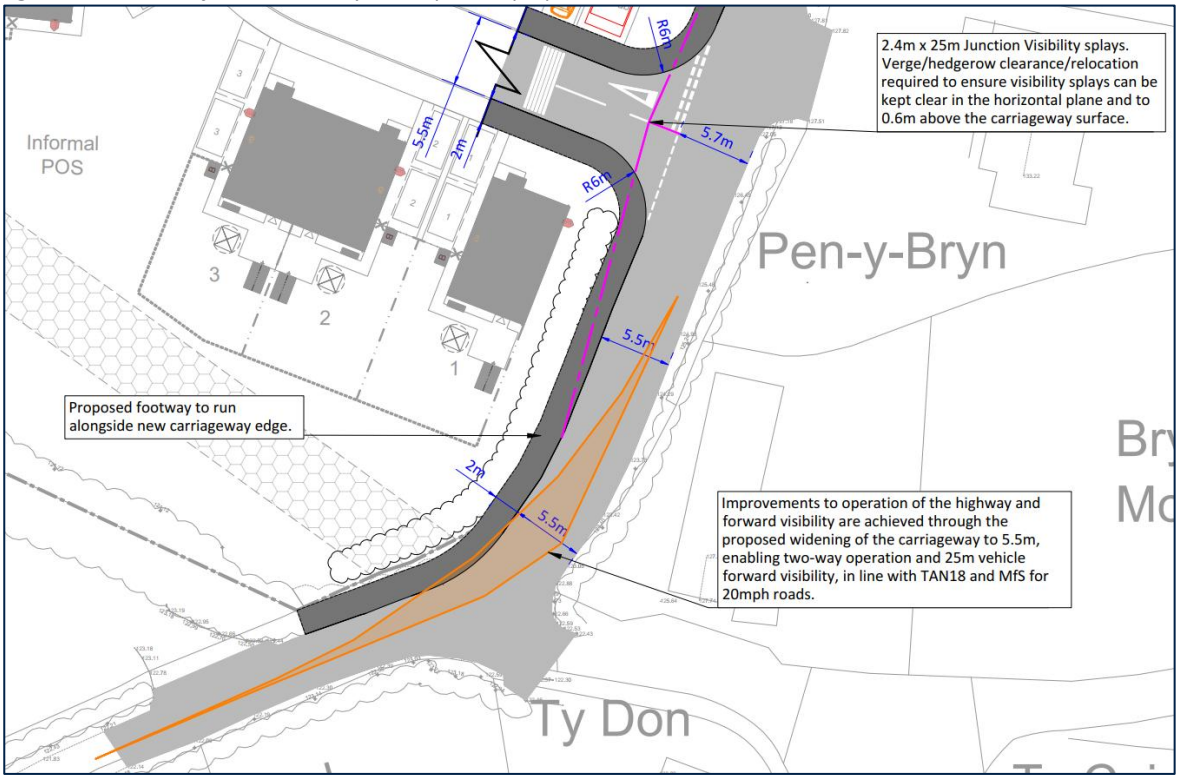
7.1.2 As part of the proposals, the lane adjacent to the site will be widened along the entire site frontage either side of the proposed access, resulting in widths of between 4.1m-5.0m to the north and 5.5m-5.7m to the south. This will improve the existing operation of the road by enabling vehicles to pass safely along the site frontage in both directions. The additional width and enhanced forward visibility provided to the south will also encourage vehicles to travel to and from the south and connect to the B4342, avoiding the narrower routes to the east and north of the site. Swept path analysis, included at Appendix C, shows two-way vehicle movements along the site frontage as a result of the proposals. These arrangements were previously agreed with the highway authority as part of the permitted development application.

7.1.3 The proposed footways will provide pedestrians with an off-carriageway route past the site. Dropped kerbs are proposed at the site access and at either end of the footways where this connects back onto Unnamed Road 1. Although the existing routes have been demonstrated as acceptable for shared use, the footways will provide an improvement for pedestrian movements.

7.1.4 The footways and carriageway widening will improve forward visibility for vehicles which is currently restricted by hedgerows adjacent to the carriageway.

7.1.5 Figure 7-1 shows the extent of a 25 metre forward visibility around the bend at the southern end of the site which can be provided with these improvements. This visibility is not currently possible, and the improvements will allow vehicles to pass more easily at this location with an informal give-way arrangement.

Figure 7-1: 25 metre forward visibility envelope with proposals



8. SUMMARY AND CONCLUSIONS

8.1 Summary

8.1.1 This Transport Statement (TS) has been provided to support a planning application for a residential development for 17 dwellings on Land North of Aylestone, Llanarth, Ceredigion.

8.1.2 This report has been prepared to provide the necessary information for the Local Highway and Planning Authorities to consider the merits of the proposals in terms of location, connectivity, highway safety, parking, access, and the impact on the local highway network.

8.1.3 The development will comprise a mix of one-bedroom bungalows, two and three bed dwellings, all of which will be affordable. Access is proposed from the eastern site boundary via a new priority junction which provides safe access to all users.

8.1.4 A previous scheme on the site was granted consent for a residential development in 2024 which provided broadly the same access arrangements and mitigation. As such, the principle of residential development and access arrangements have recently been accepted by CCC.

8.1.5 The site is situated in a location which offers the potential for access by walking, cycling and public transport. Key facilities and services are situated within suitable walking, cycling, and public transport distances via appropriate and safe routes, reducing the need to travel by car. Potential future residents will have a realistic choice of modes of travel for all journey purposes, which will assist in minimising the level of vehicle trip generation from the site.

8.1.6 The proposed parking provision is considered appropriate for the car ownership levels in the surrounding area and therefore fully in accordance with the CCC standards.

8.1.7 Obtained road safety data does not indicate an existing safety issue within the vicinity of the site which would be exacerbated by the proposals. There are no accidents within proximity to the proposed site access or along the unnamed roads leading to and from the site. No accidents have occurred which involved pedestrians or cyclists over the most recent seven-year period within the entire of Llanarth, and therefore there is no evidenced safety issue in relation to pedestrian movements connecting to the site.

8.1.8 Trip generation analysis demonstrates that the proposals for an affordable scheme will generate broadly the same level of vehicle movements (or slightly lower) in network peak hours and over a daily period compared to the permitted development of predominantly detached and private units. As such, the latest proposals will not have a material impact on the highway network and vehicle movements remain within the previously accepted parameters.

8.1.9 A footway is proposed along the length of the site boundary to improve the pedestrian environment. This is accompanied by carriageway widening which will assist with vehicle passing movements. The additional width to the south will encourage site traffic to route south to and from the B4342, avoiding the narrower routes to the north and east. The improvements will also improve forward visibility for vehicles approaching and passing the site.

8.2 Conclusions

8.2.1 The site location will encourage and promote sustainable travel behaviour, in accordance with transport policies in TAN18, PPW12, and the Active Travel Act.

8.2.2 Data does not indicate a road safety issue which would be exacerbated by the proposals. The development would not have a material impact on road safety and the access arrangements and pedestrian routes, particularly given the proposed improvements, will provide safe and suitable access for the proposed residential use.

8.2.3 The proposals will not have a material impact on the operation of the highway network and suitable mitigation which is proportionate to the scheme has been proposed.

8.2.4 It is therefore considered that there are no reasons relating to transport or highways for objecting to the application.

Appendix A Proposed Site Layout

SITE KEY

Boundary Treatments
- Site Boundary
- 1.8m High timber hit & miss fence
- 1.8m High close board timber fence
- 0.45m High timber knee rail

Access Points
- Primary door to dwelling *(Part M)*
- Secondary door(s) to dwelling
- 1.8m High close board personal gate
- Parking Space

Hard Surfacing
- Highway - *Tarmacadam Finish*
- Highway Footpath - *Tarmacadam Finish*
- Private Driveway - *Porous Tarmacadam Finish*
- Gravel - *Mixed Buff*
- Private Footpath - *Bradstone PCC slabs*
- Refuse collection point - *PCC Slabs* (for plots accessed off shared private drives)

Soft Surfacing
- Front Garden
- Rear Garden
- Amenity Space / Green Infrastructure / POS

Site Features
- Shed Storage
- Air Source Heat Pump Location - *Locations to be agreed by M&E consultant*
- Bin Slab Location - *Locations to be agreed*
- Rotary Line
- Easement
- Visitor Parking Space

Accomodation Schedule

House Name	Code	Beds	(NIA) m²	No of Units	Total Area
Affordable Units					
1 Bed Bungalow	2P1B	1	48.85	4	195.4
2 Bed WDQR House	4P2B	2	83.1	10	831
3 Bed WDQR House	5P3B	3	46.85	3	140.55
Total				**4**	**195.4**

N

Scale 1:500

0 10 20 50

REV.	DESCRIPTION	DATE
A	HT footprints updated to working drawings. Swapped Plots 8-9 with 12-13.	03.06.25

CLIENT
Wales & West HA

JOB TITLE
Haulfryn, Llanarth

DRAWING TITLE
Planning Layout

SCALE @ A2	DATE	DRAWN BY
1:500	April '25	KE
JOB NO.	**DRAWING NO.**	**REVISION**
2520	PL-01	01

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Appendix B Access Design

Proposed layby parking arrangement to accomodate 5 vehicles.

Carriageway to be widened to at least 4.1m to enable two-way car movements along entire site frontage. New footway to be constructed along western side of the carriageway.

2.4m x 25m Junction Visibility splays. Verge/hedgerow clearance/relocation required to ensure visibility splays can be kept clear in the horizontal plane and to 0.6m above the carriageway surface.

Proposed footway to run alongside new carriageway edge.

Improvements to operation of the highway and forward visibility are achieved through the proposed widening of the carriageway to 5.5m, enabling two-way operation and 25m vehicle forward visibility, in line with TAN18 and MfS for 20mph roads.

KEY PLAN

SCALE BAR

0m 5m 10m

SCALE BAR (1:250)

NOTES

1. General arrangement design design for planning purposes, and is subject to detailed design matters such as drainage, utilities and earthworks.
2. Drawing is based on topographical survey data and OS mapping data. Ordnance Survey, (c) Crown Copyright 2025. All rights reserved. Licence number 100022432.
3. It is assumed that existing services and street furniture can be relocated within the new carriageway areas and footways.
4. All land ownership details and rights of way to be confirmed.
5. Assumes all landscaping can be altered and no trees are subject to TPO.
6. Please do not scale from this drawing.

REVISIONS *(CONTINUED)*

REVISIONS

Rev	Date	Description	By	App
P02	13/06/2025	Second Issue.	AC	DC
P01	12/02/2025	First Issue.	AC	DC

Apex TRANSPORT PLANNING

CLOCKWISE
BRUNEL HOUSE
CARDIFF
CF24 0HA
t: 02920 619 361
e: cardiff@apextp.co.uk

RUNWAY EAST
101 VICTORIA STREET
BRISTOL
BS1 6PU
t: 0117 427 0414
e: bristol@apextp.co.uk

CLIENT
WALES AND WEST HOUSING

PROJECT
HAULFRYN, LLANARTH

TITLE
PROPOSED SITE ACCESS AND IMPROVEMENTS PLAN

PROJECT NO. C24-229

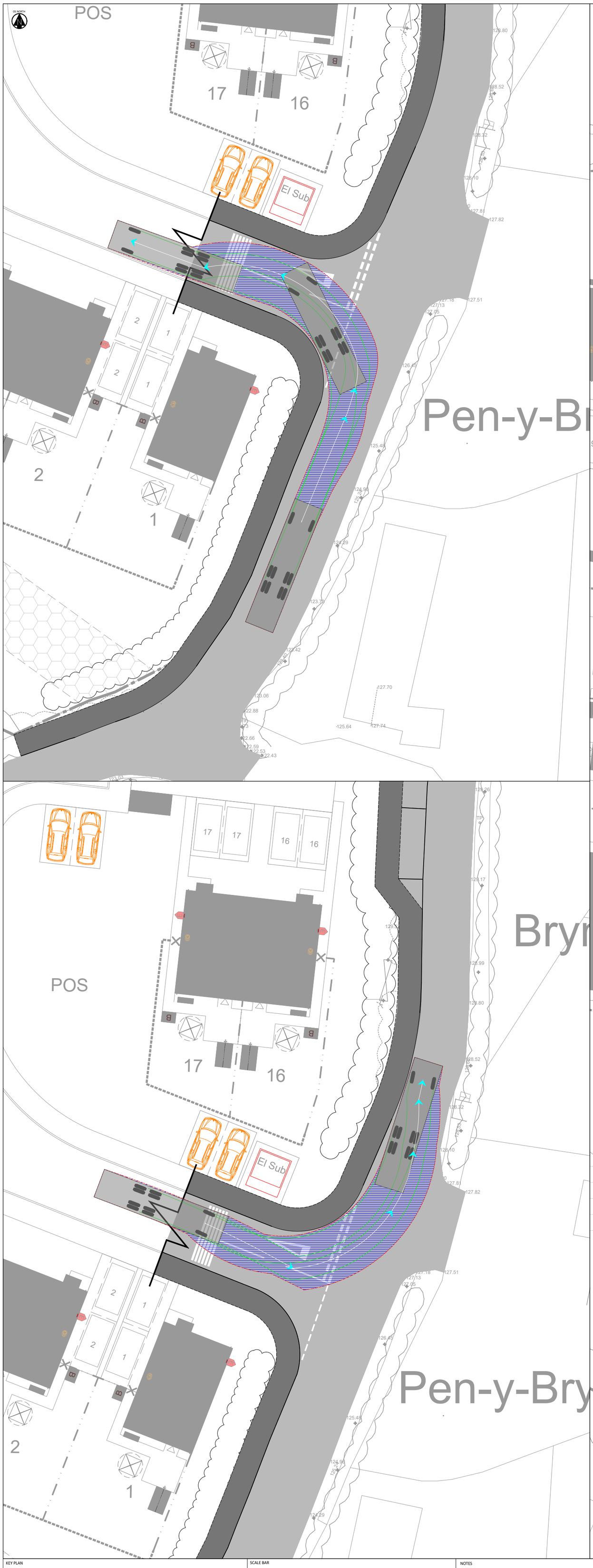
SCALE @ A2 1:250

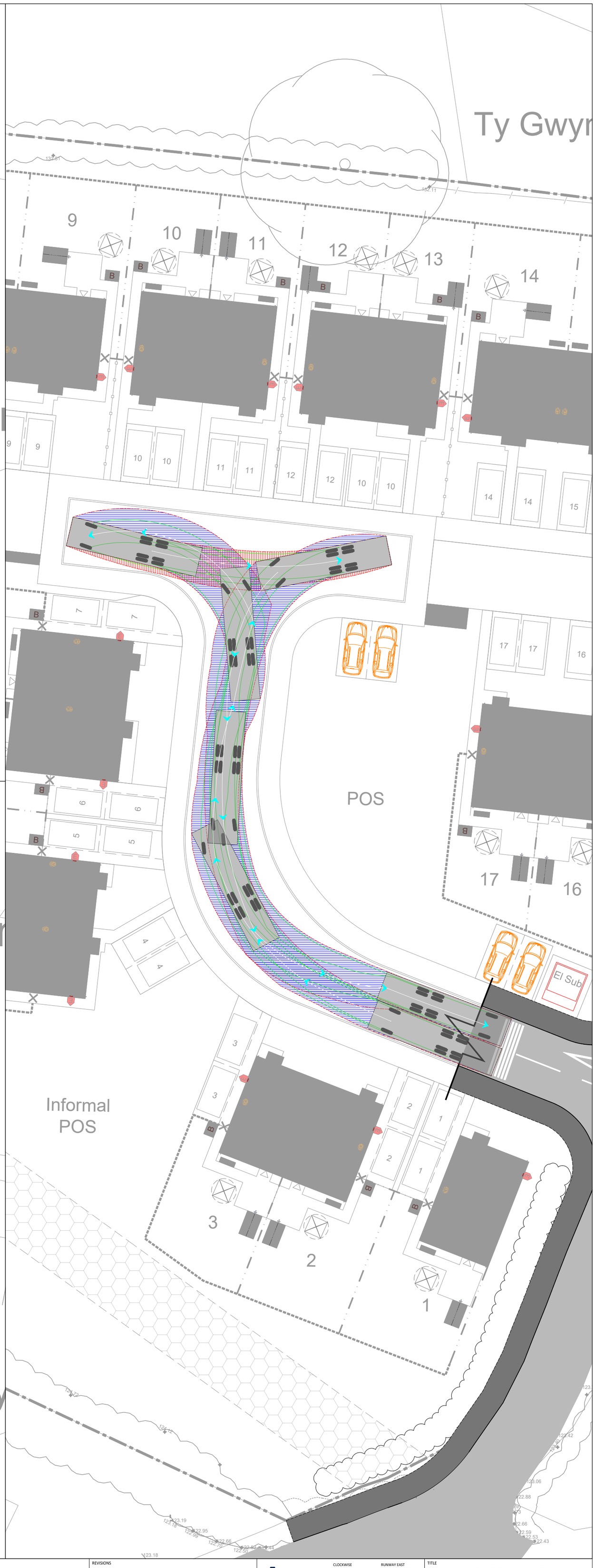
STATUS DESCRIPTION INFORMATION

STATUS S2

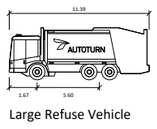
DRAWING NO. C24229-ATP-DR-TP-001

Appendix C Swept Path Analysis



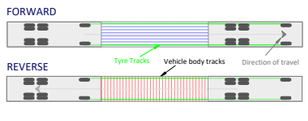


KEY PLAN

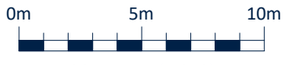


Large Refuse Vehicle

	metres
Width	: 2.53
Track	: 2.15
Lock to Lock Time	: 4.0
Steering Angle	: 30.2



SCALE BAR



SCALE BAR (1:250)

NOTES

1. General arrangement design design for planning purposes, and is subject to detailed design matters such as drainage, utilities and earthworks.
2. Drawing is based on topographical survey data and OS mapping data. Ordnance Survey, (c) Crown Copyright 2025. All rights reserved. Licence number 100022432.
3. It is assumed that existing services and street furniture can be relocated within the new carriageway areas and footways.
4. All land ownership details and rights of way to be confirmed.
5. Assumes all landscaping can be altered and no trees are subject to TPO.
6. Please do not scale from this drawing.

REVISIONS

Rev	Date	Description	By	App
P02	13/06/2025	Second Issue.	AC	DC
P01	12/02/2025	First Issue.	AC	DC

Apex TRANSPORT PLANNING

CLOCKWISE
BRUNEL HOUSE
CARDIFF
CF24 0HA
t: 02920 619 361
e: cardiff@apextp.co.uk

RUNWAY EAST
101 VICTORIA STREET
BRISTOL
BS1 6PU
t: 0117 427 0414
e: bristol@apextp.co.uk

CLIENT
WALES AND WEST HOUSING

PROJECT
HAULFRYN, LLANARTH

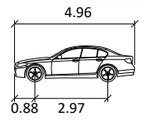
TITLE
PROPOSED SITE ACCESS AND INTERNAL SWEPT PATH ANALYSIS OF A LARGE REFUSE VEHICLE

PROJECT NO.	SCALE @ A2
C24-229	1:250

STATUS DESCRIPTION	STATUS
INFORMATION	S2

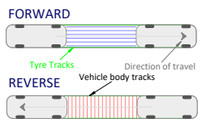
DRAWING NO.
C24229-ATP-DR-TP-002

KEY PLAN

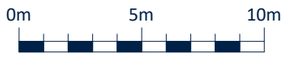


BMW 5 SERIES SALOON

	meters
Width	: 1.87
Track	: 1.87
Lock to Lock Time	: 6.0
Steering Angle	: 36.9



SCALE BAR



SCALE BAR (1:250)

NOTES

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4. All land ownership details and rights of way to be confirmed.
5. Assumes all landscaping can be altered and no trees are subject to TPO.
6. Please do not scale from this drawing.

REVISIONS

Rev	Date	Description	By	App
P02	13/06/2025	Second Issue.	AC	DC
P01	12/02/2025	First Issue.	AC	DC

Apex TRANSPORT PLANNING

CLOCKWISE
BRUNEL HOUSE
CARDIFF
CF24 0HA
t: 02920 619 361
e: cardiff@apextp.co.uk

RUNWAY EAST
101 VICTORIA STREET
BRISTOL
BS1 6PU
t: 0117 427 0414
e: bristol@apextp.co.uk

CLIENT
WALES AND WEST HOUSING

PROJECT
HAULFRYN, LLANARTH

TITLE
SWEPT PATH ANALYSIS OF PROPOSED PARKING LAYBY ARRANGEMENT USING A LARGE CAR

PROJECT NO.	SCALE @ A2
C24-229	1:250

STATUS DESCRIPTION	STATUS
INFORMATION	S2

DRAWING NO.
C24229-ATP-DR-TP-003

Ty Gwyn Bach

Bryn-yr-Eglwys

Pen-y-Bryn

Bryn Morgan

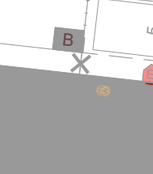
Ty Don

Informal POS

POS

El Sub

KEY PLAN



BMW 5 SERIES SALOON

	meters
Width	: 1.87
Track	: 1.87
Lock to Lock Time	: 6.0
Steering Angle	: 36.9

SCALE BAR

SCALE BAR (1:250)

NOTES

1. General arrangement design design for planning purposes, and is subject to detailed design matters such as drainage, utilities and earthworks.
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4. All land ownership details and rights of way to be confirmed.
5. Assumes all landscaping can be altered and no trees are subject to TPO.
6. Please do not scale from this drawing.

REVISIONS

Rev	Date	Description	By	App
P02	13/06/2025	Second Issue.	AC	DC
P01	12/02/2025	First Issue.	AC	DC

Apex TRANSPORT PLANNING

CLOCKWISE
BRUNEL HOUSE
CARDIFF
CF24 0HA
t: 02920 619 361
e: cardiff@apextp.co.uk

RUNWAY EAST
101 VICTORIA STREET
BRISTOL
BS1 6PU
t: 0117 427 0414
e: bristol@apextp.co.uk

CLIENT
WALES AND WEST HOUSING

PROJECT
HAULFRYN, LLANARTH

TITLE
SWEPT PATH ANALYSIS OF LARGE CAR

TWO-WAY PASSING ALONG SITE FRONTAGE WITH PROPOSED IMPROVEMENTS

PROJECT NO.	SCALE @ A2
C24-229	1:250

STATUS DESCRIPTION	STATUS
INFORMATION	S2

DRAWING NO.
C24229-ATP-DR-TP-004

Appendix D TRICS Outputs – Private Units

Apex Transport Planning Ltd Clockwise, Brunel House Cardiff Licence No: 502501

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-25 DWELLS	
Actual Trip Rate Calculation Parameter Range	9-17 DWELLS	
Date Range	Minimum: 01/01/00	Maximum: 18/09/24
Parking Spaces Range	All Surveys Included	
Parking Spaces Per Dwelling Range:	Selected: 2 to 6.26	Actual: 0.83 to 6.26
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Tuesday Friday	3 1
Main Location Types selected	Suburban Area (PPS6 Out of Centre) Edge of Town	2 2
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included Servicing vehicles Excluded	2 - Selected 23 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000 5,001 to 10,000 15,001 to 20,000	1 2 1
Population <5 Mile ranges selected	75,001 to 100,000 100,001 to 125,000 125,001 to 250,000	1 2 1
Car Ownership <5 Mile ranges selected	1.1 to 1.5	4
PTAL Rating	No PTAL Present	4

Calculation Reference: AUDIT-502501-250627-0642

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA		
	PB	PETERBOROUGH	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
08	NORTH WEST		
	AC	CHESHIRE WEST & CHESTER	1 days
	EC	CHESHIRE EAST	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: 9 to 17 (units:)
Range Selected by User: 6 to 25 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: Selected: 2 to 6.26 Actual: 0.83 to 6.26

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: 01/01/00 to 18/09/24

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

Selected survey days:

Tuesday	3 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	2

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	3
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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	23 days - Selected

Secondary Filtering selection:

Use Class:

C3	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (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
15,001 to 20,000	1 days

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

Population within 5 miles:

75,001 to 100,000	1 days
100,001 to 125,000	2 days
125,001 to 250,000	1 days

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

Car ownership within 5 miles:

1.1 to 1.5	4 days

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

Travel Plan:

No	4 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1 AC-03-A-02 DETACHED CHESHIRE WEST & CHESTER
WHITCHURCH ROAD
CHESTER
BOUGHTON HEATH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 11
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

2 EC-03-A-04 DETACHED CHESHIRE EAST
SYDNEY ROAD
CREWE
SYDNEY
Edge of Town
Residential Zone
Total No of Dwellings: 17
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

3 PB-03-A-03 DETACHED PETERBOROUGH

PETERBOROUGH
THORPE PARK ROAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 9
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

4 SH-03-A-03 DETATCHED SHROPSHIRE
SOMERBY DRIVE
SHREWSBURY
BICTON HEATH
Edge of Town
No Sub Category
Total No of Dwellings: 10
Survey date: FRIDAY *26/06/09* *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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CW-03-A-01	terraced
HF-03-A-05	terraced
SF-03-A-04	bungalows
SH-03-A-06	bungalows
SH-03-A-06	bungalows
VG-03-A-01	terraced
VG-03-A-01	terraced
WK-03-A-01	terraced

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	12	0.128	4	12	0.362	4	12	0.490
08:00 - 09:00	4	12	0.170	4	12	0.489	4	12	0.659
09:00 - 10:00	4	12	0.128	4	12	0.234	4	12	0.362
10:00 - 11:00	4	12	0.191	4	12	0.213	4	12	0.404
11:00 - 12:00	4	12	0.191	4	12	0.298	4	12	0.489
12:00 - 13:00	4	12	0.128	4	12	0.170	4	12	0.298
13:00 - 14:00	4	12	0.149	4	12	0.106	4	12	0.255
14:00 - 15:00	4	12	0.255	4	12	0.191	4	12	0.446
15:00 - 16:00	4	12	0.213	4	12	0.298	4	12	0.511
16:00 - 17:00	4	12	0.362	4	12	0.149	4	12	0.511
17:00 - 18:00	4	12	0.511	4	12	0.383	4	12	0.894
18:00 - 19:00	4	12	0.234	4	12	0.191	4	12	0.425
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.660			3.084			5.744

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.*

Parameter summary

Trip rate parameter range selected:	9 - 17 (units:)
Survey date date range:	01/01/00 - 18/09/24
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	-3
Surveys manually removed from selection:	8

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	12	0.000	4	12	0.000	4	12	0.000
08:00 - 09:00	4	12	0.000	4	12	0.000	4	12	0.000
09:00 - 10:00	4	12	0.000	4	12	0.000	4	12	0.000
10:00 - 11:00	4	12	0.021	4	12	0.021	4	12	0.042
11:00 - 12:00	4	12	0.000	4	12	0.000	4	12	0.000
12:00 - 13:00	4	12	0.000	4	12	0.000	4	12	0.000
13:00 - 14:00	4	12	0.000	4	12	0.000	4	12	0.000
14:00 - 15:00	4	12	0.000	4	12	0.000	4	12	0.000
15:00 - 16:00	4	12	0.000	4	12	0.000	4	12	0.000
16:00 - 17:00	4	12	0.000	4	12	0.000	4	12	0.000
17:00 - 18:00	4	12	0.021	4	12	0.021	4	12	0.042
18:00 - 19:00	4	12	0.000	4	12	0.000	4	12	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.042			0.084

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/A - HOUSES PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	12	0.000	4	12	0.000	4	12	0.000
08:00 - 09:00	4	12	0.021	4	12	0.021	4	12	0.042
09:00 - 10:00	4	12	0.000	4	12	0.000	4	12	0.000
10:00 - 11:00	4	12	0.000	4	12	0.000	4	12	0.000
11:00 - 12:00	4	12	0.000	4	12	0.000	4	12	0.000
12:00 - 13:00	4	12	0.000	4	12	0.000	4	12	0.000
13:00 - 14:00	4	12	0.000	4	12	0.000	4	12	0.000
14:00 - 15:00	4	12	0.000	4	12	0.000	4	12	0.000
15:00 - 16:00	4	12	0.000	4	12	0.000	4	12	0.000
16:00 - 17:00	4	12	0.000	4	12	0.000	4	12	0.000
17:00 - 18:00	4	12	0.000	4	12	0.000	4	12	0.000
18:00 - 19:00	4	12	0.000	4	12	0.000	4	12	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.021			0.042

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/A - HOUSES PRIVATELY OWNED
CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	12	0.000	4	12	0.128	4	12	0.128
08:00 - 09:00	4	12	0.021	4	12	0.043	4	12	0.064
09:00 - 10:00	4	12	0.000	4	12	0.000	4	12	0.000
10:00 - 11:00	4	12	0.021	4	12	0.021	4	12	0.042
11:00 - 12:00	4	12	0.000	4	12	0.021	4	12	0.021
12:00 - 13:00	4	12	0.000	4	12	0.000	4	12	0.000
13:00 - 14:00	4	12	0.043	4	12	0.000	4	12	0.043
14:00 - 15:00	4	12	0.000	4	12	0.000	4	12	0.000
15:00 - 16:00	4	12	0.064	4	12	0.000	4	12	0.064
16:00 - 17:00	4	12	0.064	4	12	0.000	4	12	0.064
17:00 - 18:00	4	12	0.021	4	12	0.000	4	12	0.021
18:00 - 19:00	4	12	0.000	4	12	0.000	4	12	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.234			0.213			0.447

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.*

Appendix E TRICS Outputs – Affordable Units

Apex Transport Planning Ltd Clockwise, Brunel House Cardiff Licence No: 502501

Filtering Summary

Land Use	03/B	RESIDENTIAL/AFFORDABLE/LOCAL AUTHORITY HOUS
Selected Trip Rate Calculation Parameter Range	10-35 DWELLS	
Actual Trip Rate Calculation Parameter Range	10-17 DWELLS	
Date Range	Minimum: 01/01/00	Maximum: 06/09/23
Parking Spaces Range	All Surveys Included	
Parking Spaces Per Dwelling Range:	Selected: 1.5 to 3.30	Actual: 0.43 to 3.30
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Wednesday Friday	1 1
Main Location Types selected	Suburban Area (PPS6 Out of Centre) Edge of Town	1 1
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included Servicing vehicles Excluded	X - Selected 4 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	5,001 to 10,000 25,001 to 50,000	1 1
Population <5 Mile ranges selected	125,001 to 250,000 500,001 or More	1 1
Car Ownership <5 Mile ranges selected	0.6 to 1.0 1.1 to 1.5	1 1
PTAL Rating	No PTAL Present	2

Calculation Reference: AUDIT-502501-250627-0600

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	KS	KIRKLEES	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: 10 to 17 (units:)
Range Selected by User: 10 to 35 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: Selected: 1.5 to 3.30 Actual: 0.43 to 3.30

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: 01/01/00 to 06/09/23

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:

Wednesday	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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of 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	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	4 days - Selected

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 (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:

5,001 to 10,000	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
500,001 or More	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 KS-03-B-02 TERRACED HOUSES KIRKLEES
SYKES CLOSE
BATLEY

Edge of Town
Residential Zone
Total No of Dwellings: 17
Survey date: FRIDAY *19/10/18* *Survey Type: MANUAL*

2 WM-03-B-02 SEMI-DETACHED WEST MIDLANDS
SHENLEY FIELDS ROAD
BIRMINGHAM
SHENLEY GREEN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *07/06/23* *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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
MS-03-B-01	not comparable location
NN-03-B-01	private

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	14	0.037	2	14	0.259	2	14	0.296
08:00 - 09:00	2	14	0.185	2	14	0.296	2	14	0.481
09:00 - 10:00	2	14	0.111	2	14	0.111	2	14	0.222
10:00 - 11:00	2	14	0.074	2	14	0.222	2	14	0.296
11:00 - 12:00	2	14	0.148	2	14	0.037	2	14	0.185
12:00 - 13:00	2	14	0.111	2	14	0.148	2	14	0.259
13:00 - 14:00	2	14	0.074	2	14	0.111	2	14	0.185
14:00 - 15:00	2	14	0.185	2	14	0.074	2	14	0.259
15:00 - 16:00	2	14	0.593	2	14	0.037	2	14	0.630
16:00 - 17:00	2	14	0.037	2	14	0.259	2	14	0.296
17:00 - 18:00	2	14	0.074	2	14	0.037	2	14	0.111
18:00 - 19:00	2	14	0.333	2	14	0.222	2	14	0.555
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.962			1.813			3.775

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.*

Parameter summary

Trip rate parameter range selected:	10 - 17 (units:)
Survey date date range:	01/01/00 - 06/09/23
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:	2

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	14	0.000	2	14	0.000	2	14	0.000
08:00 - 09:00	2	14	0.000	2	14	0.000	2	14	0.000
09:00 - 10:00	2	14	0.000	2	14	0.000	2	14	0.000
10:00 - 11:00	2	14	0.000	2	14	0.000	2	14	0.000
11:00 - 12:00	2	14	0.037	2	14	0.037	2	14	0.074
12:00 - 13:00	2	14	0.037	2	14	0.037	2	14	0.074
13:00 - 14:00	2	14	0.000	2	14	0.000	2	14	0.000
14:00 - 15:00	2	14	0.000	2	14	0.000	2	14	0.000
15:00 - 16:00	2	14	0.000	2	14	0.000	2	14	0.000
16:00 - 17:00	2	14	0.000	2	14	0.000	2	14	0.000
17:00 - 18:00	2	14	0.000	2	14	0.000	2	14	0.000
18:00 - 19:00	2	14	0.000	2	14	0.000	2	14	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.074			0.074			0.148

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	14	0.000	2	14	0.000	2	14	0.000
08:00 - 09:00	2	14	0.000	2	14	0.000	2	14	0.000
09:00 - 10:00	2	14	0.000	2	14	0.037	2	14	0.037
10:00 - 11:00	2	14	0.000	2	14	0.000	2	14	0.000
11:00 - 12:00	2	14	0.000	2	14	0.000	2	14	0.000
12:00 - 13:00	2	14	0.000	2	14	0.000	2	14	0.000
13:00 - 14:00	2	14	0.000	2	14	0.000	2	14	0.000
14:00 - 15:00	2	14	0.000	2	14	0.000	2	14	0.000
15:00 - 16:00	2	14	0.037	2	14	0.000	2	14	0.037
16:00 - 17:00	2	14	0.000	2	14	0.000	2	14	0.000
17:00 - 18:00	2	14	0.000	2	14	0.000	2	14	0.000
18:00 - 19:00	2	14	0.000	2	14	0.000	2	14	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.037			0.074

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	14	0.037	2	14	0.259	2	14	0.296
08:00 - 09:00	2	14	0.185	2	14	0.259	2	14	0.444
09:00 - 10:00	2	14	0.074	2	14	0.111	2	14	0.185
10:00 - 11:00	2	14	0.074	2	14	0.185	2	14	0.259
11:00 - 12:00	2	14	0.111	2	14	0.000	2	14	0.111
12:00 - 13:00	2	14	0.037	2	14	0.111	2	14	0.148
13:00 - 14:00	2	14	0.074	2	14	0.074	2	14	0.148
14:00 - 15:00	2	14	0.185	2	14	0.074	2	14	0.259
15:00 - 16:00	2	14	0.593	2	14	0.037	2	14	0.630
16:00 - 17:00	2	14	0.037	2	14	0.259	2	14	0.296
17:00 - 18:00	2	14	0.074	2	14	0.037	2	14	0.111
18:00 - 19:00	2	14	0.296	2	14	0.185	2	14	0.481
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.777			1.591			3.368

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	14	0.000	2	14	0.000	2	14	0.000
08:00 - 09:00	2	14	0.000	2	14	0.037	2	14	0.037
09:00 - 10:00	2	14	0.037	2	14	0.000	2	14	0.037
10:00 - 11:00	2	14	0.000	2	14	0.037	2	14	0.037
11:00 - 12:00	2	14	0.000	2	14	0.000	2	14	0.000
12:00 - 13:00	2	14	0.037	2	14	0.000	2	14	0.037
13:00 - 14:00	2	14	0.000	2	14	0.037	2	14	0.037
14:00 - 15:00	2	14	0.000	2	14	0.000	2	14	0.000
15:00 - 16:00	2	14	0.000	2	14	0.000	2	14	0.000
16:00 - 17:00	2	14	0.000	2	14	0.000	2	14	0.000
17:00 - 18:00	2	14	0.000	2	14	0.000	2	14	0.000
18:00 - 19:00	2	14	0.000	2	14	0.000	2	14	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.074			0.111			0.185

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	14	0.000	2	14	0.000	2	14	0.000
08:00 - 09:00	2	14	0.000	2	14	0.000	2	14	0.000
09:00 - 10:00	2	14	0.000	2	14	0.000	2	14	0.000
10:00 - 11:00	2	14	0.000	2	14	0.000	2	14	0.000
11:00 - 12:00	2	14	0.000	2	14	0.000	2	14	0.000
12:00 - 13:00	2	14	0.000	2	14	0.000	2	14	0.000
13:00 - 14:00	2	14	0.000	2	14	0.000	2	14	0.000
14:00 - 15:00	2	14	0.000	2	14	0.000	2	14	0.000
15:00 - 16:00	2	14	0.000	2	14	0.000	2	14	0.000
16:00 - 17:00	2	14	0.000	2	14	0.000	2	14	0.000
17:00 - 18:00	2	14	0.000	2	14	0.000	2	14	0.000
18:00 - 19:00	2	14	0.037	2	14	0.037	2	14	0.074
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.037			0.074

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.*