Client:

Marston’s PLC

Project:

St. Arvans
Chepstow

Project No:

T21562

Report Title:

Transport Statement

Prepared by:	JP
Authorised by:	GM
Rev:	B
Date:	20/12/2023

Hub Transport Planning Ltd
Floor 1B
4 Temple Row
Birmingham
B2 5HG
T. 0121 454 5530

TABLE OF CONTENTS

FIGURES

DRAWINGS

APPENDICES

THIS PAGE IS LEFT INTENTIONALLY BLANK

1.0 Introduction

Background

1.1 Hub Transport Planning Ltd has been commissioned by Marston's PLC to provide transport advice for a proposed residential development off the A466 at St. Arvans.

1.2 It is intended that the site will provide c.15 dwellings; the site location is shown on **Figure 1.1**.

Structure of the Report

1.3 This report is intended to determine the relevant highway issues and indicate potential solutions, with reference to the impact of the proposed development site at St. Arvans.

1.4 Following this introduction, the report is set out as follows:

- Section 2.0 – Policy Review;
- Section 3.0 – Background Information and Sustainability;
- Section 4.0 – Development Proposals;
- Section 5.0 – Traffic Generation, Assignment, and Impact;
- Section 6.0 – Summary and Conclusion;

Limitations of the Report

1.5 This report has been undertaken at the request of Marston's PLC, thus should not be entrusted to any third party without written permission from Hub Transport Planning Ltd. However, should any information contained within this report be used by any unauthorised third party, it is done so entirely at their own risk and shall not be the responsibility of Hub Transport Planning Ltd.

1.6 This report has been compiled using data from a number of external sources (such as TRICS, traffic count data and public transport information); these sources are considered to be trustworthy and therefore the data provided is considered to be accurate and relevant at the time of preparing this report.

2.0 Policy Review

Introduction

2.1 This section summarises the relevant transport policy documents against which the development proposals are considered at a national, regional, and local level. The most relevant policy documents relating to this study are detailed below:

- Planning Policy Wales: Edition 11 (February 2021)
- Active Travel Act Guidance for Wales (July 2021)
- Monmouthshire County Council Adopted Local Development Plan 2011-2021 (Adopted February 2014)

National Policy

Planning Policy Wales: Edition 11

2.2 The latest national guidance for Wales, Planning Policy Wales (PPW) 11, was published in February 2021 and sets out the Welsh Government's planning policies and how these are expected to be applied.

2.3 PPW11 sets out policy on Active and Social Places in Section 4 with Transport the focus of Section 4.1:

"The planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, by cycling and public transport. By influencing the location, scale, density, mix of uses and design of new development, the planning system can improve choice in transport and secure accessibility in a way which support sustainable development, increases physical activity, improves heath and helps to tackle the courses of climate change and airborne pollution by:

- *Enabling More Sustainable Travel Choices*
- *Network Management*
- *Demand Management"*

2.4 PPW11 addresses the importance of sustainable transport and how development can facilitate this:

"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 development which:

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

2.5 A key takeaway from PPW11 is The Sustainable Transport Hierarchy for Planning, specifically for new developments:

"It is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development, which prioritise walking, cycling and public transport ahead of the private motor vehicles. The

transport hierarchy recognises that Ultra Low Emission Vehicles also have an important role to play in the decarbonisation of transport, particularly in rural areas with limited public transport services."

"The sustainable transport hierarchy must be a key principle in the preparation of development plans, including site allocations, and when considering and determining planning applications."

2.6 Technical Advice Note 18: Transport (TAN18) is a supplementary document to PPW11. It reinforces the importance of sustainable travel patterns as main mode of transport for local journeys but also the considerable contribution they play in forming parts of longer journeys by public transport.

"The location of new residential development has a significant influence on travel patterns as many 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."

2.7 TAN18 recognises that the sustainable location of a site can assist in facilitating sustainable travel habits.

Active Travel Act Guidance

2.8 The latest Active Travel Act guidance was published in July 2021 and sets out the Welsh Government's vision and priorities for walking and cycling, as well as the delivery and design of proposals.

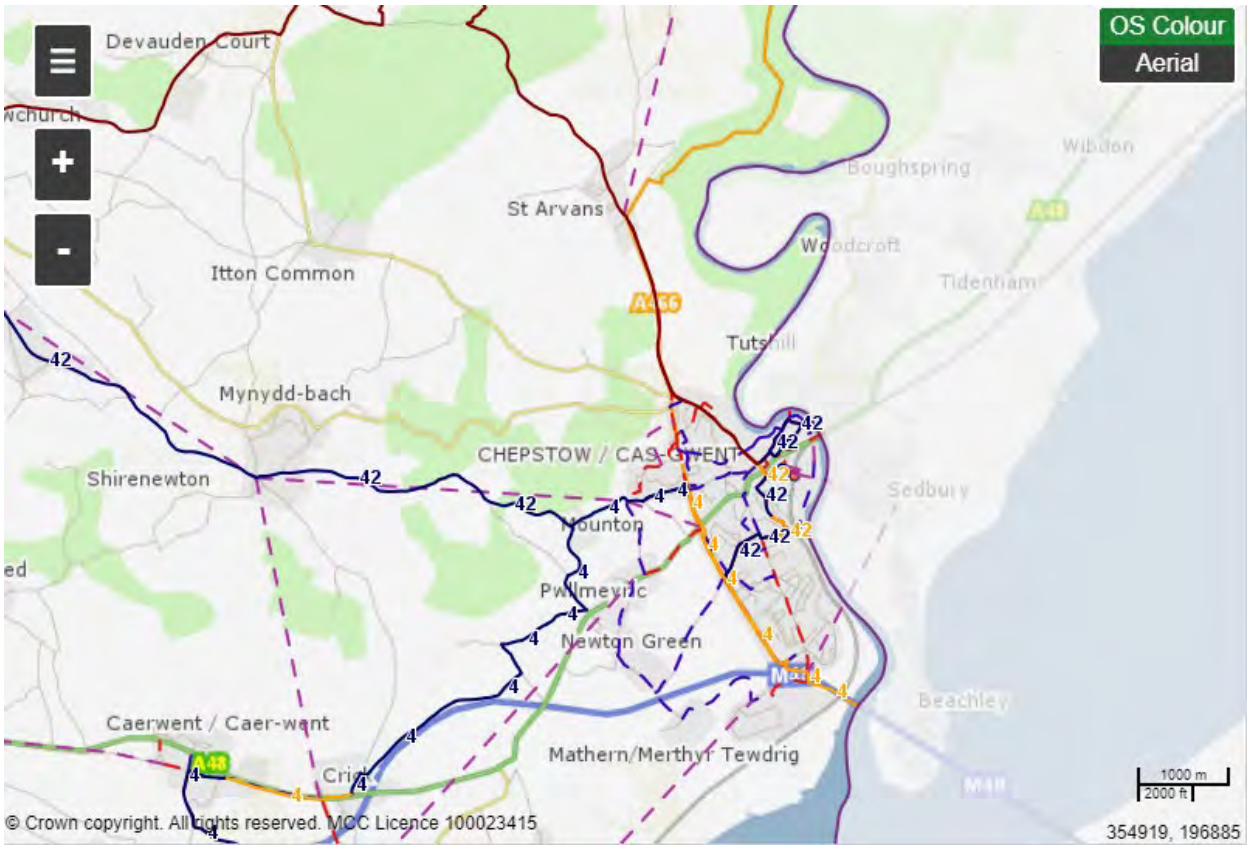
2.9 The vision set out within the guidance is for:

"…walking and cycling to be the natural mode of choice for short everyday journeys, or as part of a longer journey in combination with other sustainable modes."

2.10 The document details several five-year priorities, a selection of which are set out below and include working with partners to:

- *"continuously develop a network of local routes for walking and cycling to connect people with the places they travel to for everyday journeys*
- *put in place a policy framework that ensures that all new developments, including new school and health facilities, make provision for walking and cycling from the outset*
- *change the default speed limit from 30mph to 20mph in built-up areas to reduce traffic related injuries and fatalities and make walking and cycling safer and more attractive*
- *support safer, better cycle paths and more space for walking and cycling through closing roads for vehicle traffic, more facilities for pedestrians, and support for cycle training and safety scheme for all road users*
- *work towards 'safe cycling from village to town' giving villages safe cycling access to the nearest town and creating hub-and-spoke active travel corridors connecting market towns and other significant local centres to surrounding villages and outlying developments"*

2.11 Active Travel Network Maps (ATNMs) can be used as a tool for planning, and the Monmouthshire ATNM is shown below which demonstrates that St Arvans connects to the Chepstow (and further afield) via local/regional cycle routes, and National Cycle Network (NCN) Routes 4, 31 and 42.



(Source: https://mccactivetravelconsultation.commonplace.is/proposals/chepstow-cycling)

Regional Policy

2.12 Monmouthshire County Council (MCC) Adopted Local Development Plan (LDP) 2011-2021 (adopted in 2014) sets out the local Council's vision and objectives for the development and use of land in Monmouthshire. Section 6.4 focuses on sustainable accessibility.

2.13 Policy MV1 addresses proposed development and highways considerations:

"All planning applications for developments which are likely to have a significant impact on trip generation and travel demand must, as appropriate, be accompanied by a Transport Assessment that includes a Transport Implementation Strategy for the development detailing the measures proposed to improve access by public transport, walking and cycling and reduce the number and impacts of car journeys associated with the proposals.

Development that is likely to create significant and unacceptable addition traffic growth in relation to the capacity of the existing road network and/or fails to provide a safe and easy access for road users will not be permitted, unless appropriate proposals for related improvements to the highway system or a contribution towards mitigating traffic management/reduction measures are made.

Where appropriate, development proposals will be expected to satisfy:

A) The adopted highway design guide; and

B) The adopted parking guidelines."

2.14 Policy MV2 addresses sustainable transport access:

"The development of site shall, dependent on their location, size and local need, include provision for and the integration of appropriate sustainable transport links, including public transport, walking and cycling. Non-car access will be supported and prioritised over access by car.

Development should link into the existing or proposed public rights of way, walking, cycleway and green infrastructure networks and this will be reflected in the layout and conditions/obligations on any permission granted.

Where deemed necessary, financial contributions will be required towards improvement in transport infrastructure and services, in particular to support sustainable travel links/public transport, cycling and walking."

3.0 Background Information and Sustainability

Existing Highway Network

3.1 The site is bounded by the A466 to the east, agricultural fields to the south and west, and residential properties and The Piercefield public house to the north.

3.2 Past the frontage of the site, the A466 measures c.6.5 to 7.3m in width and is subject to a 30mph speed limit; footways are present on both sides of the carriageway, the footway on the western side measuring between 1.5m and 1.8m in width, whilst the eastern footway varies in width between 1.2m and 1.7m to the north of the site, and c.2.0m in width to the south of the site where it serves as a share footway/cycleway facility.

3.3 To both the north and south of the site, the footway on the eastern side of the road is separated from the A466 carriageway by verge, which in places is up to 2.6m in width.

3.4 The A466 runs north to south through St. Arvans and is the main route connecting Monmouth and Chepstow running alongside the River Wye. Chepstow is the closest town to the site located c.3.0km south of the proposed development site.

3.5 The A466 forms a junction with Devauden Road in the centre of St. Arvans, c.175m north of the site. Devauden Road runs northwest out of the village towards Devauden where is becomes the B4293, from which further destinations northwest of the site can be accessed.

3.6 To the south of the site beyond Chepstow, at a distance of some 5.0km, the A466 accesses the strategic road network at the M48 junction 2. The M48 merges with the M4 to both the east and west, east over the Severn Bridge into England and west towards Newport and Cardiff.

Highway Safety

3.7 To establish road safety conditions on the highway network in the vicinity of the site, reference has been made to the Crashmap.co.uk website and consideration has been given to the A466 corridor and local road network within the village.

3.8 An extract from Crashmap and the search area can be seen in **Appendix A**.

3.9 In the latest five-year period available (up to the end of 2022), there have been only two Personal Injury Accidents (PIAs) in the vicinity of the site; one occurred in 2018 on Devauden Road and was classified as slight in severity.

3.10 The second was a single vehicle slight injury accident on the A466 in the vicinity of the Piercefield Public House.

3.11 Whilst all PIAs are regrettable, the quantity and severity of PIAs recorded in the vicinity of the site does not give any undue cause for concern.

3.12 Furthermore, Section 5.0 of this report demonstrates that the proposed development will not generate a significant number of additional trips across the local highway network; it will therefore not have a material impact on highway safety.

Sustainable Transport

3.13 Active Travel Wales guidance highlights the typical distance range for each mode of travel, in Table 4.1 on page 40, as shown below:

Table 4.1 – Typical distance range for each mode of active travel

Mode	Less than 1 mile	Up to 2 miles	Up to 3 miles	Up to 4 miles	Up to 5 miles	Up to 7.5 miles	Up to 15 miles
Walk	Many	Many	Some	Few	Few	Few	Few
Cycle	Many	Many	Many	Many	Many	Some	Few
e-Cycle	Many	Many	Many	Many	Many	Some	Some

Colour	Average active user likelihood
Many	Many users likely to travel this distance for utility journeys
Some	Some users likely to travel this distance for utility journeys
Few	Few or no users likely to travel this distance for utility journeys

3.14 It highlights that *"Two out of every three journeys are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking"*.

3.15 In Chapter 9, the guidance states 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 (although a rise in popularity of e-cycles can increase the distances covered)."*

3.16 The following sections consider the opportunities for sustainable travel that are available in the vicinity of the site.

Pedestrian Accessibility

3.17 Pedestrian access to the site will be provided via footways on either side of the site access road off the A466, connecting to the existing provision on the western side of the carriageway.

3.18 The roads within the village are generally residential in nature and well lit, meaning routes to local facilities and services are considered appropriate for pedestrian use.

3.19 St. Arvans also has several Public Rights of Way (PRoWs) accessible from the village, including one running along the southern boundary of the site. These provide pedestrian only routes to local destinations within the area such as Wyndcliff Wood and Chepstow Park Wood.

3.20 The proposed development site is located within 800m, or 10-minutes' walk of several local facilities off the A466 and around the village. The key local facilities in the vicinity of the site are listed in **Table 2** and can be identified in **Figure 3.1**.

Table 1 – Local Facilities

Facility	Distance (Approx.)
The Piercefield Inn	100m
Little Trees Day Nursery	100m
Ride & Stride	150m
Parkfield Stores	250m
St. Arvans Memorial Hall	250m
St. Arvans Parish Church	450m
St. Arvans Community Council	500m
Chepstow Racecourse	1.50km

3.21 Most of the facilities listed above are located within a comfortable walking distance of the site, and well within the threshold set out in the Active Travel Wales guidance.

3.22 The site benefits from being within a comfortable walking distance of a nursery, local store, public house, and community facilities.

3.23 Whilst the Active Travel Wales guidance highlights the potential for walking up to 2 miles; MfS suggests an 800m 'walkable neighbourhood' distance and up to 2.0km based on the former PPG13 guidance. A plan of the local area showing the 800m, 1.2km and 2.0km MfS walking distance thresholds from the site can be seen in **Figure 3.2**.

3.24 It is considered the site is appropriately located for accessing local facilities by foot; whilst a wider range of facilities can be accessed within Chepstow Town Centre (including via connecting bus services, which are outlined below), which is within the Active Travel Wales distance of 2 miles.

Cycling Accessibility

3.25 Within the village, the roads within the vicinity of the site are subject to a 30mph speed limit and therefore considered suitable for use by cyclists.

3.26 To the south of the site, the A466 is subject to a 50mph speed limit, but with a shared footway/cycleway along the eastern side of the A466, providing a traffic-free option.

3.27 National Cycle Network (NCN) Route 31 is located running north to south through St. Arvans. It runs along Devauden Road and onto the A466 before the shared pedestrian/cycleway begins opposite the site.

3.28 Route 31 provides access south into Chepstow before merging with NCN Routes 4 and 42. It links northward into the local woodland before merging with Route 32, from with local destinations and leisure routes can be accessed.

3.29 Although the Active Travel Wales guidance highlights the potential for cycling up to 5 miles by pedal cycle, and up to 15 miles (for some users) by E-bike; MfS suggests a 5.0km threshold as being a reasonable distance for most cyclists (as a mode to replace local car trips).

3.30 A plan of the local area showing the 5.0km cycling distance as well as the NCN Routes 31, 32, 4, and 42 can be seen in **Figure 3.3**.

Bus Accessibility

3.31 The nearest bus stops to the site are located on the A466, within 150m for the northbound stop and 130m for the southbound stop; both providing shelters.

3.32 The local bus service is run by Phil Anslow Coaches and a summary of the frequency and destinations is provided in **Table 3** below.

Table 2 – Local Bus Service

Service No.	Route	Frequency (approx.)		
		Mon - Fri	Sat	Sun
69	Monmouth – Redbrook – Llandogo – St. Arvans – Chepstow	60 mins (10 to 11 per day)	120 mins (4 per day)	N/A

3.33 The number 69 service provides suitable links to Chepstow and Monmouth for residents to travel by bus for a variety of purposes, including employment, educational, and leisure.

Rail Accessibility

3.34 Chepstow Rail Station is located c.3.6km to the south of the site and can be accessed by cycle (c.15-minute journey), by bus (c.15-minute journey), or by car (c.8 to 12-minute journey).

3.35 The station benefits from 11 car parking spaces and 1 accessible space. An additional car park is located adjacent to the station comprising of 55 spaces.

3.36 The station is operated by Transport for Wales (TfW) and provides hourly services in each direction between Maesteg and Cheltenham/Gloucester via Cardiff. CrossCountry also provides a less regular service from Chepstow between Cardiff and Nottingham via Birmingham.

Summary

3.37 The above review demonstrates that the site is accessible by a variety of modes of transport that have the potential to reduce reliance upon the private car.

3.38 It is therefore considered that residents will have a real choice about how they travel and that the proposals therefore accord with the guiding principles of the PPW11 and Active Travel Act.

4.0 Development Proposals

Introduction

4.1 The development proposal is for c.15 dwellings with access taken from the A466.

Vehicular Access

4.2 Vehicular access to the site will be provided via a priority T-junction off the A466. The access will be provided towards the centre of the eastern boundary of the site and positioned to minimise conflict with the car park opposite and optimise visibility splay provision.

4.3 The proposed site access layout is shown in **Drawing T21562.001 rev B**. This has been designed in line with the principles of Manual for Streets (MfS) and MfS2.

4.4 The Welsh government has also passed 'The Restricted Roads (20mph Speed Limit) (Wales) Order 2022' legislation, which means most restricted roads will reduce from a 30mph speed limit to a 20mph speed limit from September 2023.

4.5 Therefore, whilst the proposed site access junction sits well within the 30mph speed limit zone, on the basis of the above legislation, the site access junction can deliver visibility splays of 2.4m x 33m to both the north and south along the A466.

4.6 Whilst MfS indicates a 25m splay is appropriate for 20mph vehicle speeds, the 33m splay provided allows for the contingency of the expected 85th percentile speed of traffic along the A466 being above 20mph.

4.7 **Drawing T21562.002 rev B** demonstrates that a large refuse vehicle can be accommodated within the access junction layout using the carriageway provided.

Pedestrian/Cycle Access

4.8 With the site, the layout will be designed to a 20mph speed limit and, as such, cyclists can safely utilise the carriageway.

4.9 A footway 2.0m in width is proposed on the northern side of the site access road and will tie into the existing footway located on the western side of the carriageway.

4.10 However, it is also considered appropriate to improve the existing footway to the south of the site access junction (along the site frontage), providing a 2.5m width into the site, to facilitate improved access to the cycle route on the eastern side of the A466 for younger or less experienced cyclists.

4.11 Whilst the 2.5m provision is marginally below the LTN 1/20 3.0m minimum recommended width for shared-use footway/cycleway provision, that 3.0m width is capable of accommodating up to 300 pedestrians per hour alongside 300 cyclists per hour; clearly, such provision would be excessive for the proposed development, but a 2.5m width will provide more space for those younger or less experienced cyclists to be able to ride safely alongside pedestrians.

4.12 The existing tactile paving dropped-kerb crossing to the south of the access junction will be refreshed and upgraded to also provide a new central refuge on the A466; to the north of the access junction, adjacent to the

Piercefield Inn public house, the existing pedestrian refuge will be upgraded to a modern and improved provision. Both proposals are shown on **Drawing T21562.001 rev B**.

4.13 A connection will also be provided to the PRoW that runs along the southern boundary of the site; this route varies in width between around 2.5m and 3.0m.

4.14 It is expected that further discussions with the local authority will be undertaken at the appropriate time, with a view to reinforcing the eventual 20mph speed limit on entry to the village from the south (along the A466) through an enhanced 'gateway' feature, assisting in keeping speeds low as traffic passes the site.

Sustainability Improvements

4.15 Planning Policy Wales (PPW) Edition 11, February 2021, sets out that:

"4.1.11: Development proposals must seek to maximise accessibility by walking, cycling and public transport, but prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services. Importantly, sustainable transport infrastructure and services should be prioritised and put in place from the outset before people have moved in and travel patterns have been established.

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. The transport hierarchy recognises that Ultra Low Emission Vehicles also have an important role to play in the decarbonisation of transport, particularly in rural areas with limited public transport services."

4.16 Figure 9 on page 48 of PPW 11 sets out the sustainable transport hierarchy and is shown below:

Figure 9: The Sustainable Transport Hierarchy for Planning

4.17 The proposed residential site will promote itself as a sustainable site by providing the following measures:

- Secure cycle parking, including for e-bikes;
- Provision of walking and cycling maps for dwellings;
- Provision of up-to-date public transport timetables for local bus services and Chepstow rail services;

- Provision of an electric vehicle charging point for each dwelling; and
- At the A466, improved connectivity across to the cycle route along the eastern side of the A466 and also discussion with the local authority regarding the potential to provide some local widening into the existing verge to improve accessibility within the village.

4.18 In addition to the above, superfast broadband will be provided to the site, to ensure that residents also have the opportunity to work from home.

4.19 On the basis of the above measures, it is considered that the proposed development site will accord with the principles of PPW11 in respect of the promotion of sustainable means of travel and by sustainably accommodating the needs of residents.

5.0 Traffic Generation, Assignment and Impact

Traffic Generation

5.1 The proposed development site of c.15 dwellings has been assessed using the TRICS (7.10.3) database to inform the potential traffic generation of this scale, in accordance with the TRICS Good Practice Guide.

5.2 With the TRICS assessment work, the following parameters have been used:

- Land Use – Residential, Houses Privately Owned
- Regions – United Kingdom (excl. Greater London and Northern Ireland)
- Units – up to 50
- Date Range – 01/01/2012 to 14/10/2022
- Selected Days – Weekdays
- Selected Locations – Edge of Town, Neighbourhood Centre
- Car Ownership <1.0 removed
- Population within 1 mile >15,000 removed
- All Covid sites removed

5.3 The trip rates are presented in **Table 3** and the TRICS output is provided in **Appendix B**.

Table 3 – TRICS Trip Rates – 15 Dwellings

Peak Period	Trip Rate (per Dwellings)		Vehicle Trips		Total
	In	Out	In	Out	
AM	0.189	0.368	3	6	**9**
PM	0.396	0.198	6	3	**9**

NB: AM peak is 08:00-09:00 and PM peak is 17:00-18:00; trips have been rounded.

5.4 **Table 3** indicates that the proposed development is forecast to result in 9 two-way vehicle movements during the AM and PM peak hours.

5.5 This generation is the equivalent of approximately one additional vehicle on the local highway network every six to seven minutes.

Distribution and Assignment

5.6 To determine the likely distribution of development traffic to and from the site, 2011 Census Travel to Work data has been used. The MSOA Monmouthshire 007 has been used as the usual residence. Full details are included as **Appendix C**.

5.7 Traffic has been assigned to the network using an appropriate online route mapping tool along with knowledge of the existing area.

5.8 The resulting assignment from the site access and along the A466 is as follows:

- A466 (South) = 74.6%
- A466 (North) = 25.4%

5.9 In terms of vehicle movements, this will result in a maximum of 7 two-way vehicle trips travelling to/from the south of the site access, and 2 vehicle trips to/from the north during any peak hour period.

Traffic Impact

5.10 The traffic generation and assignment demonstrate that the development will have a negligible impact on the adjacent highway network.

5.11 On the basis of the above, it is not considered necessary to undertake any junction capacity assessments at any off-site junctions.

6.0 Summary and Conclusion

Summary

6.1 Hub Transport Planning Ltd has been commissioned by Marston's PLC to provide transport advice for a proposed residential development off the A466, St. Arvans; it is intended that the site will comprise c.15 dwellings.

6.2 The site is sustainably located in transport terms, with local facilities within comfortable walking distance and sustainable travel options available to future residents.

6.3 The site benefits from being adjacent to bus stops, providing bus services to the local towns of Chepstow and Monmouth.

6.4 A review of PIA data obtained from Crashmap.co.uk indicates that there has only been two accidents within St. Arvans in the most recent five-year period; the volume and pattern of accidents recorded in the area does not give any cause for concern given the very low level of traffic generation associated with the proposed development, particularly when considered in the context of background traffic flow along the A466 corridor.

6.5 The development is forecast to generate a maximum of 9 two-way vehicle trips during any given peak hour, which is a very low traffic generation by any measure; the impact of the development traffic on the local highway network will be negligible.

6.6 Improvements to sustainable travel within the village can be delivered and further enhancement of these will be discussed with the highway authority in due course.

6.7 Safe and suitable vehicle access can be provided to the proposed development site from the A466 via a new priority-controlled T-junction; pedestrian and cycle access will also be accommodated and will tie into the existing infrastructure along the A466.

Conclusion

6.8 PPW11 sets out to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental, and cultural well-being of Wales.

6.9 Whilst prioritising walking and cycling is a key theme of the PPW, paragraph 3.39 highlights that for most rural areas *"the opportunities for reducing car use and increasing walking, cycling and the use of public transport are more limited than in urban areas"*.

6.10 It continues by stating that *"In rural areas most new development should be located in settlements which have relatively good accessibility by non-car modes when compared to the rural area as a whole. Development in these areas should embrace the national sustainable placemaking outcomes and, where possible, offer good active travel connections to the centres of settlements to reduce the need to travel by car for local journeys"*.

6.11 Figure 9 of PPW 11 sets out the 'Sustainable Transport Hierarchy for Planning', placing walking and cycling at the top, then public transport, then ULEVs, then other private motor vehicles.

6.12 As detailed in this report, the site will offer sustainability improvements to access local facilities and destinations by sustainable means.

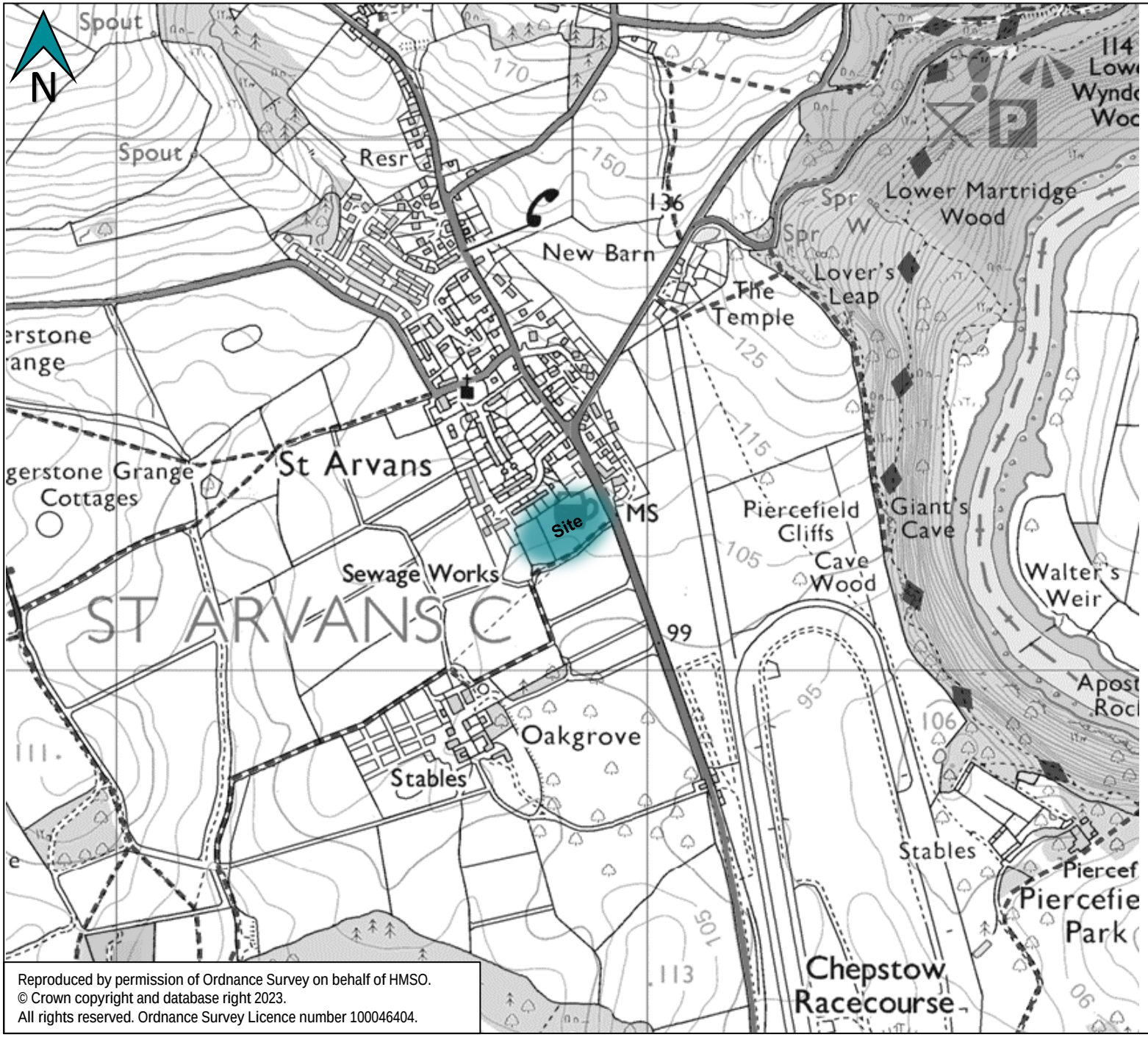
6.13 The site is located close to several PRoWs, along with NCN routes which indicate that the area is convenient for cycling, providing the opportunity for residents to make trips to/from the site by sustainable means.

6.14 Therefore, despite its rural location, the site will deliver infrastructure and measures that are in accordance with the sustainable transport hierarchy.

6.15 Based on the above, the proposals accord with the guiding principles of PPW 11 and as such, it is considered that there are no reasons why the site should be resisted on traffic or transportation grounds.

THIS PAGE IS LEFT INTENTIONALLY BLANK

Figures



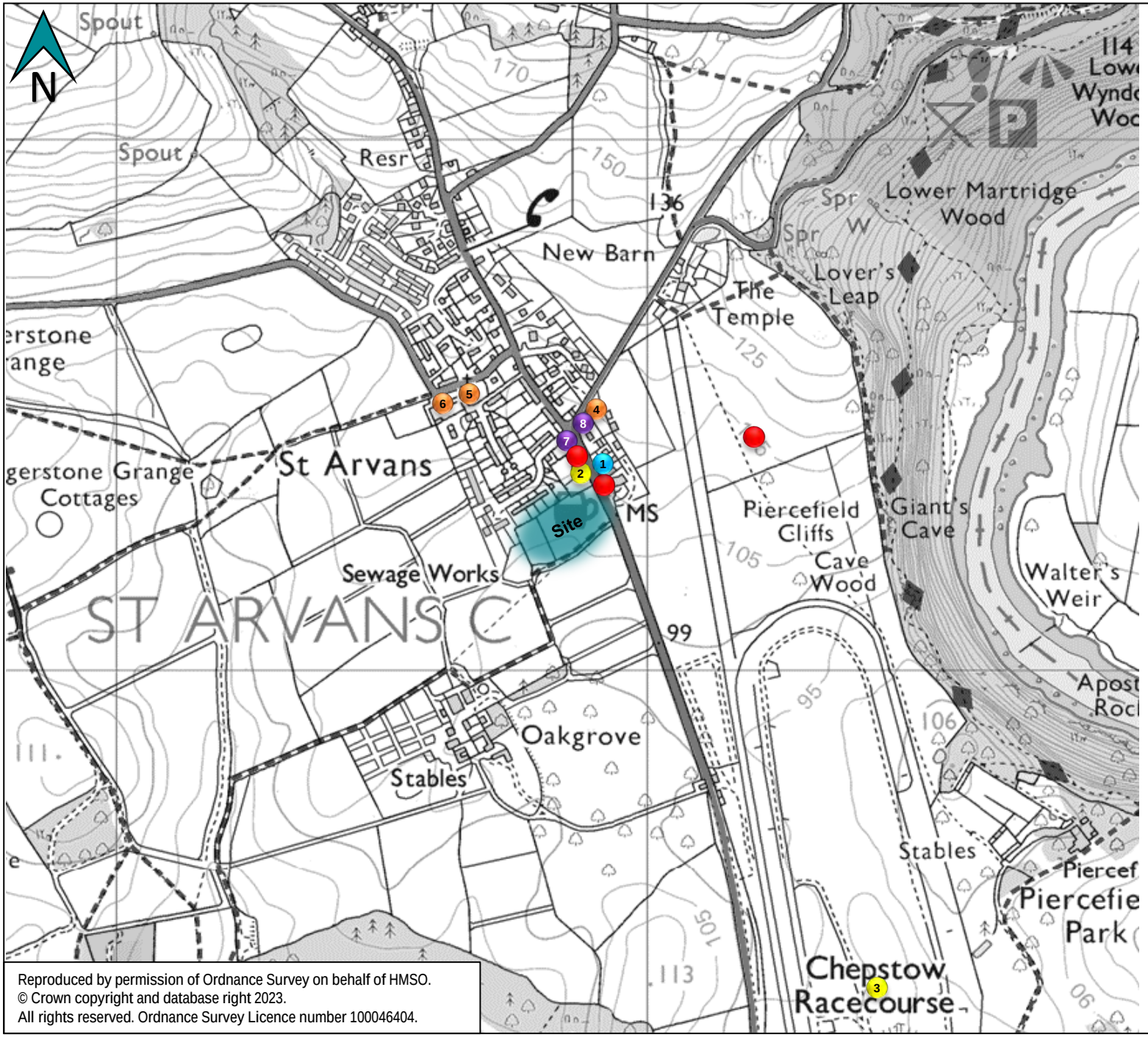
Legend

hub TRANSPORT PLANNING LTD

Not to Scale

St. Arvans

Figure 1.1 – Site Location



Legend

- Bus Stops
- 1 Little Trees Day Nursery
- 2 The Piercefield Inn
- 3 Chepstow Racecourse
- 4 St. Arvans Memorial Hall
- 5 St. Arvans Parish Church
- 6 St. Arvans Community Council
- 7 Ride & Stride
- 8 Parkfield Stores

hub TRANSPORT PLANNING LTD

Not to Scale

St. Arvans

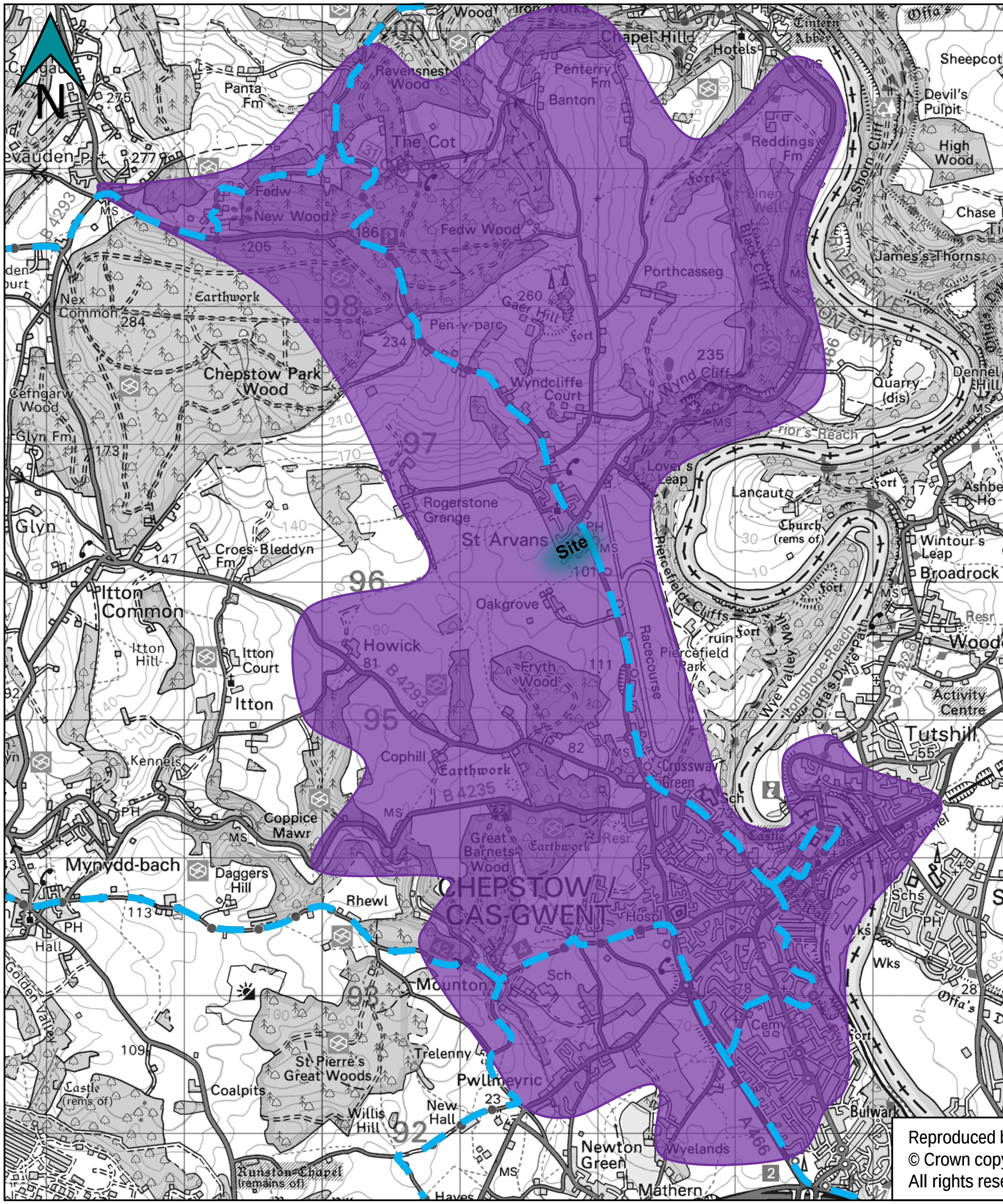
Figure 3.1 – Local Facilities

hub TRANSPORT PLANNING LTD

Not to Scale

St. Arvans

Figure 3.2 – Walk Distances



Legend

5.0km Cycle Distance

NCN Routes (4, 31, 32, 42)

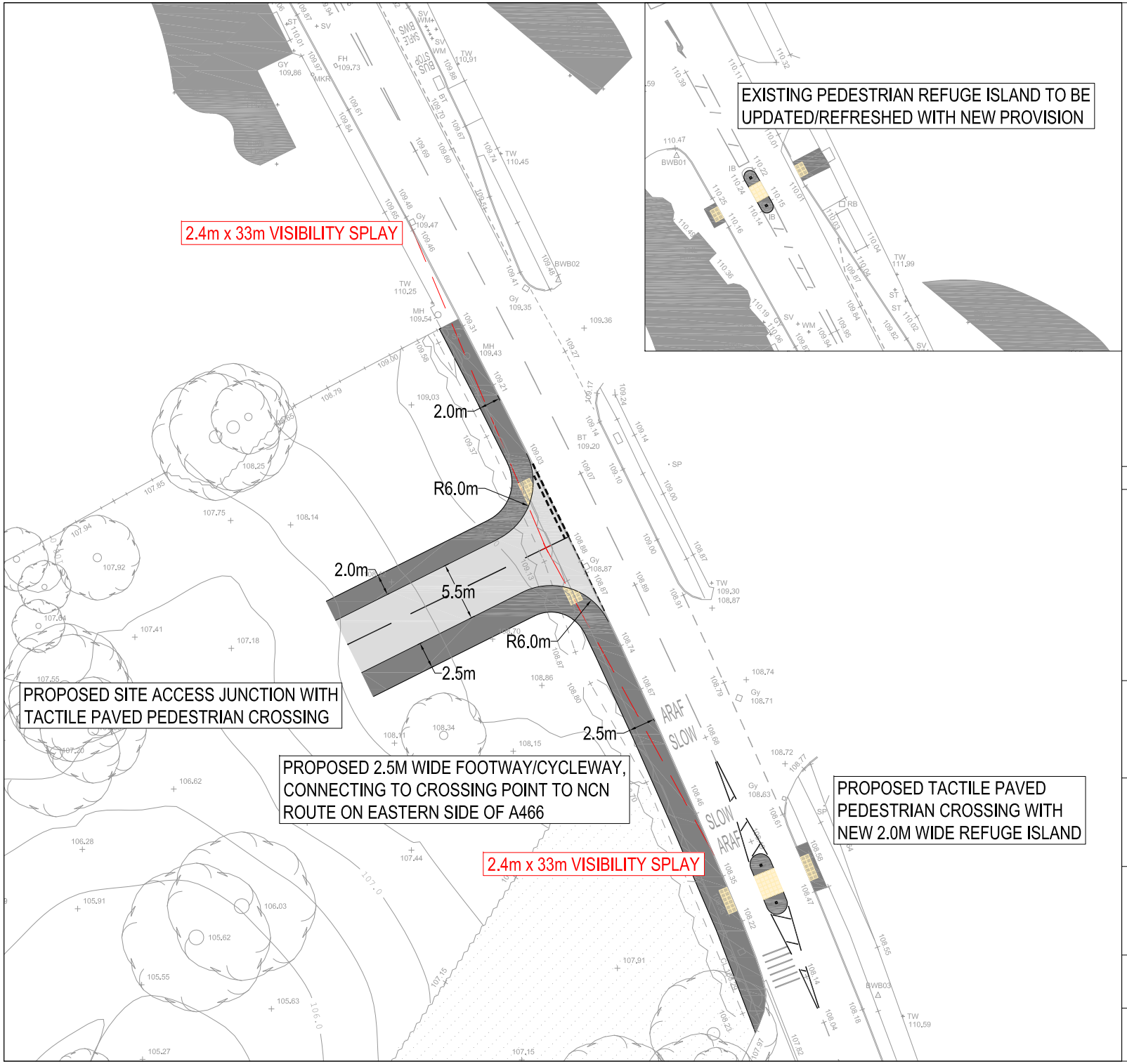
hub TRANSPORT PLANNING LTD

Not to Scale

St. Arvans

Figure 3.3 – Cycle Distance

Drawings



1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.

REV	DESCRIPTION	DATE	BY	AUTH
B	DRAWING UPDATED FOLLOWING COMMENTS FROM LPA AND LHA	19.12.23	JP	GM
A	DRAWING UPDATED FOLLOWING MEETING WITH LPA AND LHA	27.02.23	JP	GM

Hub Transport Planning Ltd
Floor 1B
4 Temple Row
Birmingham
B2 5HG

T : 0121 454 5530

CLIENT
MARSTONS PLC

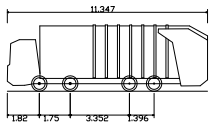
PROJECT
ST ARVANS

TITLE
PROPOSED SITE ACCESS JUNCTION WITH PEDESTRIAN REFUGE IMPROVEMENTS

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
JP	GM	1:500	A4	05.08.21

PROJECT NO.	DRAWING NO.	REV
T21562	001	B

1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.



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

REV	DESCRIPTION	DATE	BY	AUTH
B	DRAWING UPDATED FOLLOWING COMMENTS FROM LPA AND LHA	19.12.23	JP	GM
A	DRAWING UPDATED FOLLOWING MEETING WITH LPA AND LHA	27.02.23	JP	GM

Hub Transport Planning Ltd
Floor 1B
4 Temple Row
Birmingham
B2 5HG

T : 0121 454 5530

CLIENT

MARSTONS PLC

PROJECT

ST ARVANS

TITLE

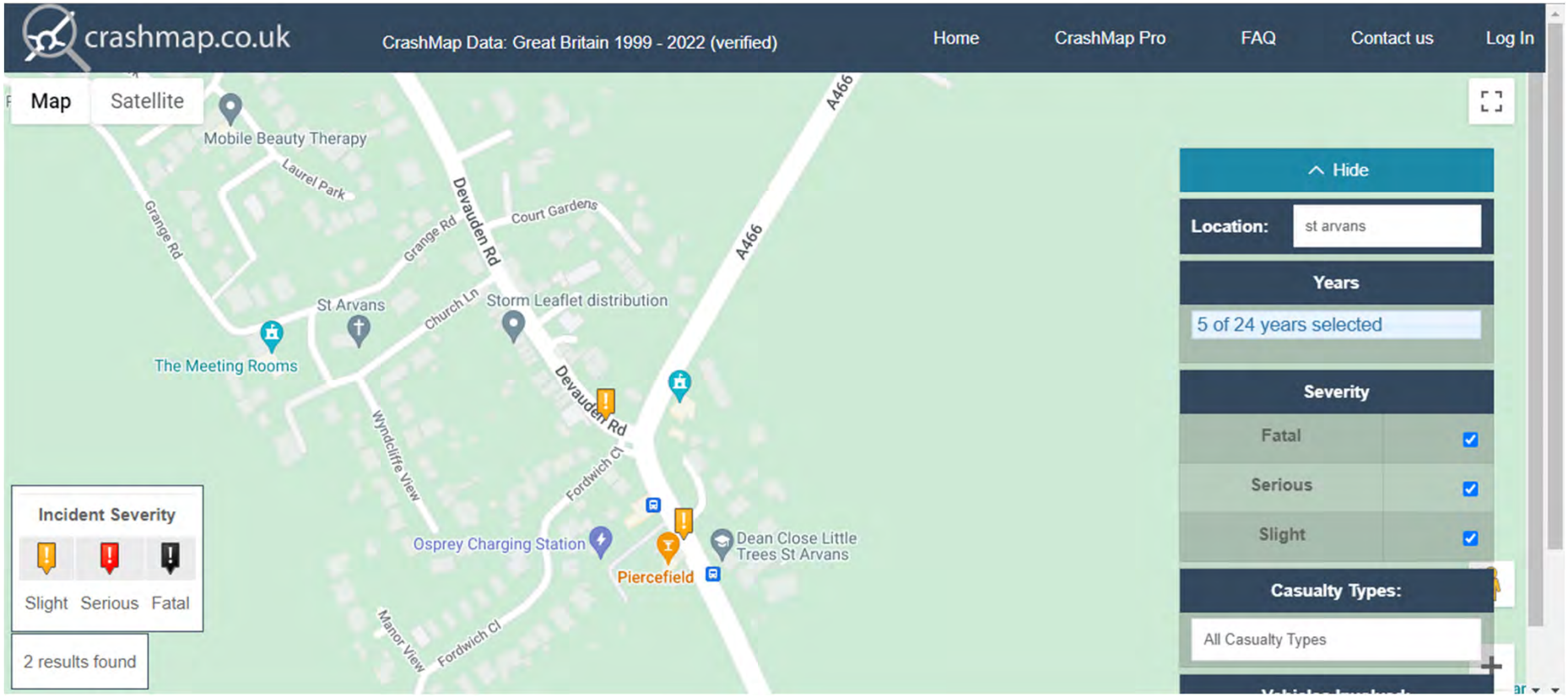
PROPOSED SITE ACCESS JUNCTION SWEPT PATH ANALYSIS 01

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
JP	GM	1:500	A4	05.08.21

PROJECT NO.	DRAWING NO.	REV
T21562	002	B

Appendix A

Crashmap Data



Source: Crashmap.co.uk; Google Maps

Appendix B

TRICS Output

Calculation Reference: AUDIT-141301-231219-1240

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	CT	CENTRAL BEDFORDSHIRE	1 days
	ES	EAST SUSSEX	1 days
	HC	HAMPSHIRE	1 days
	MW	MEDWAY	2 days
	SC	SURREY	2 days
03	SOUTH WEST		
	DC	DORSET	2 days
	SM	SOMERSET	2 days
04	EAST ANGLIA		
	NF	NORFOLK	3 days
	SF	SUFFOLK	1 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	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: 8 to 50 (units:)
Range Selected by User: 5 to 50 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 13/03/23

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

Selected survey days:

Monday	3 days
Tuesday	3 days
Wednesday	6 days
Thursday	1 days
Friday	5 days

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

Selected survey types:

Manual count	17 days
Directional ATC Count	1 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:

Edge of Town	13
Neighbourhood Centre (PPS6 Local Centre)	5

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	12
Village	5
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	10 days - Selected
Servicing vehicles Excluded	39 days - Selected

Secondary Filtering selection:

Use Class:

C3	18 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:

1,000 or Less	1 days
1,001 to 5,000	6 days
5,001 to 10,000	5 days
10,001 to 15,000	6 days

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

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	4 days
50,001 to 75,000	2 days
75,001 to 100,000	3 days
100,001 to 125,000	2 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

1.1 to 1.5	16 days
1.6 to 2.0	2 days

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

Travel Plan:

Yes	10 days
No	8 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	18 days

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

LIST OF SITES relevant to selection parameters

1 CT-03-A-01 MIXED HOUSES CENTRAL BEDFORDSHIRE
ARLESEY ROAD
STOTFOLD

Edge of Town
Residential Zone
Total No of Dwellings: 46
Survey date: WEDNESDAY *22/06/22* *Survey Type: MANUAL*

2 DC-03-A-09 MIXED HOUSES DORSET
A350
SHAFTESBURY

Edge of Town
No Sub Category
Total No of Dwellings: 50
Survey date: FRIDAY *19/11/21* *Survey Type: MANUAL*

3 DC-03-A-10 MIXED HOUSES DORSET
ADDISON CLOSE
GILLINGHAM

Edge of Town
Residential Zone
Total No of Dwellings: 26
Survey date: WEDNESDAY *09/11/22* *Survey Type: MANUAL*

4 EC-03-A-06 TERRACED HOUSES CHESHIRE EAST
GREYSTOKE ROAD
MACCLESFIELD
HURDSFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 24
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

5 ES-03-A-09 DETACHED & SEMI-DETACHED EAST SUSSEX
THE FAIRWAY
NEWHAVEN

Edge of Town
Residential Zone
Total No of Dwellings: 47
Survey date: MONDAY *13/03/23* *Survey Type: MANUAL*

6 HC-03-A-31 MIXED HOUSES & FLATS HAMPSHIRE
KILN ROAD
LIPHOOK

Edge of Town
Residential Zone
Total No of Dwellings: 44
Survey date: FRIDAY *07/10/22* *Survey Type: MANUAL*

7 MW-03-A-01 DETACHED & SEMI-DETACHED MEDWAY
ROCHESTER ROAD
NEAR CHATHAM
BURHAM
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 8
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

8 MW-03-A-02 MIXED HOUSES MEDWAY
OTTERHAM QUAY LANE
RAINHAM

Edge of Town
Residential Zone
Total No of Dwellings: 19
Survey date: MONDAY *06/06/22* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 NF-03-A-05 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

10 NF-03-A-10 MIXED HOUSES & FLATS NORFOLK
HUNSTANTON ROAD
HUNSTANTON

Edge of Town
Residential Zone
Total No of Dwellings: 17
Survey date: WEDNESDAY *12/09/18* *Survey Type: DIRECTIONAL ATC COUNT*

11 NF-03-A-37 MIXED HOUSES NORFOLK
GREENFIELDS ROAD
DEREHAM

Edge of Town
Residential Zone
Total No of Dwellings: 44
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

12 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total No of Dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

13 SC-03-A-07 MIXED HOUSES SURREY
FOLLY HILL
FARNHAM

Edge of Town
Residential Zone
Total No of Dwellings: 41
Survey date: WEDNESDAY *11/05/22* *Survey Type: MANUAL*

14 SC-03-A-10 MIXED HOUSES SURREY
GUILDFORD ROAD
ASH

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 32
Survey date: WEDNESDAY *14/09/22* *Survey Type: MANUAL*

15 SF-03-A-06 DETACHED & SEMI-DETACHED SUFFOLK
BURY ROAD
KENTFORD

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 38
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

16 SM-03-A-02 MIXED HOUSES SOMERSET
HYDE LANE
NEAR TAUNTON
CREECH SAINT MICHAEL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 42
Survey date: TUESDAY *25/09/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

17 SM-03-A-03 MIXED HOUSES SOMERSET
HYDE LANE
NEAR TAUNTON
CREECH ST MICHAEL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 41
Survey date: TUESDAY *25/09/18* *Survey Type: MANUAL*

18 WK-03-A-04 DETACHED HOUSES WARWICKSHIRE
DALEHOUSE LANE
KENILWORTH

Edge of Town
Residential Zone
Total No of Dwellings: 49
Survey date: FRIDAY *27/09/19* *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
BO-03-A-01	Covid
CA-03-A-07	Covid
ES-03-A-06	Covid
GS-03-A-02	Covid
KC-03-A-09	Covid
NM-03-A-02	Covid
SE-03-A-01	Covid
SH-03-A-06	Bungalows

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	18	35	0.114	18	35	0.323	18	35	0.437
08:00 - 09:00	18	35	0.189	18	35	0.368	18	35	0.557
09:00 - 10:00	18	35	0.165	18	35	0.212	18	35	0.377
10:00 - 11:00	18	35	0.139	18	35	0.168	18	35	0.307
11:00 - 12:00	18	35	0.162	18	35	0.155	18	35	0.317
12:00 - 13:00	18	35	0.179	18	35	0.217	18	35	0.396
13:00 - 14:00	18	35	0.177	18	35	0.152	18	35	0.329
14:00 - 15:00	18	35	0.174	18	35	0.206	18	35	0.380
15:00 - 16:00	18	35	0.298	18	35	0.190	18	35	0.488
16:00 - 17:00	18	35	0.266	18	35	0.201	18	35	0.467
17:00 - 18:00	18	35	0.396	18	35	0.198	18	35	0.594
18:00 - 19:00	18	35	0.279	18	35	0.171	18	35	0.450
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.538			2.561			5.099

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:	8 - 50 (units:)
Survey date date range:	01/01/13 - 13/03/23
Number of weekdays (Monday-Friday):	18
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

Appendix C

2011 Census – Journey to Work Data

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011
method of travel to work	Driving a car or van

place of work : 2011 census merged local authority district	usual residence W02000342 : Monmouthshire 007	%	%/2	Assignment
Monmouthshire	915			
Newport	269	10.6%		A466 (S)
South Gloucestershire	261	10.2%		A466 (S)
Bristol, City of	245	9.6%		A466 (S)
Cardiff	199	7.8%		A466 (S)
Forest of Dean	178	7.0%	3.5%	A466 (N)
			3.5%	A466 (S)
Torfaen	117	4.6%	2.3%	A466 (N)
			2.3%	A466 (S)
Caerphilly	47	1.8%	0.9%	A466 (N)
			0.9%	A466 (S)
Herefordshire, County of	45	1.8%		A466 (N)
Gloucester	33	1.3%		A466 (S)
North Somerset	32	1.3%		A466 (S)
Blaenau Gwent	21	0.8%		A466 (N)
Stroud	17	0.7%		A466 (S)
Tewkesbury	16	0.6%		A466 (S)
Swindon	15	0.6%		A466 (S)
Bath and North East Somerset	14	0.5%		A466 (S)
Cheltenham	13	0.5%		A466 (S)
Rhondda Cynon Taf	13	0.5%		A466 (S)
Wiltshire	12	0.5%		A466 (S)
Powys	11	0.4%		A466 (N)
Merthyr Tydfil	9	0.4%	0.2%	A466 (N)
			0.2%	A466 (S)
Westminster,City of London	8	0.3%		A466 (S)
Bridgend	8	0.3%		A466 (S)
Neath Port Talbot	7	0.3%		A466 (S)
Carmarthenshire	6	0.2%	0.1%	A466 (N)
			0.1%	A466 (S)
The Vale of Glamorgan	6	0.2%		A466 (S)
Vale of White Horse	5	0.2%		A466 (S)
Cotswold	5	0.2%		A466 (S)
Swansea	5	0.2%		A466 (S)
Reading	4	0.2%		A466 (S)
Wokingham	4	0.2%		A466 (S)
Cornwall,Isles of Scilly	4	0.2%		A466 (S)
Plymouth	4	0.2%		A466 (S)
W02000343 : Monmouthshire 008	247	9.7%		A466 (S)
W02000342 : Monmouthshire 007	211	8.3%	4.1%	A466 (N)
			4.1%	A466 (S)
W02000339 : Monmouthshire 004	159	6.2%		A466 (N)
W02000344 : Monmouthshire 009	74	2.9%		A466 (S)
W02000345 : Monmouthshire 010	52	2.0%		A466 (S)
W02000336 : Monmouthshire 001	49	1.9%		A466 (N)
W02000340 : Monmouthshire 005	45	1.8%		A466 (N)
W02000341 : Monmouthshire 006	44	1.7%	0.9%	A466 (N)
			0.9%	A466 (S)
W02000346 : Monmouthshire 011	24	0.9%		A466 (S)
W02000337 : Monmouthshire 002	5	0.2%		A466 (N)
W02000338 : Monmouthshire 003	5	0.2%		A466 (N)
	2,548	**100.0%**		

Assignment	%
A466 (N)	25.4%
A466 (S)	74.6%
	100.0%

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.