

Englishcombe Lane Supported Living

Transport Statement

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P1	20/03/2024	BG	DS	EW	GC	First draft.
P2	26/03/2024	BG	DS	EW	GC	Revised for planning submission.

This report dated 26 March 2024 has been prepared for Bath and North East Somerset Council (the “Client”) in accordance with the terms and conditions of appointment (the “Appointment”) between the Client and Arcadis Consulting (UK) Limited (“Arcadis”) for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

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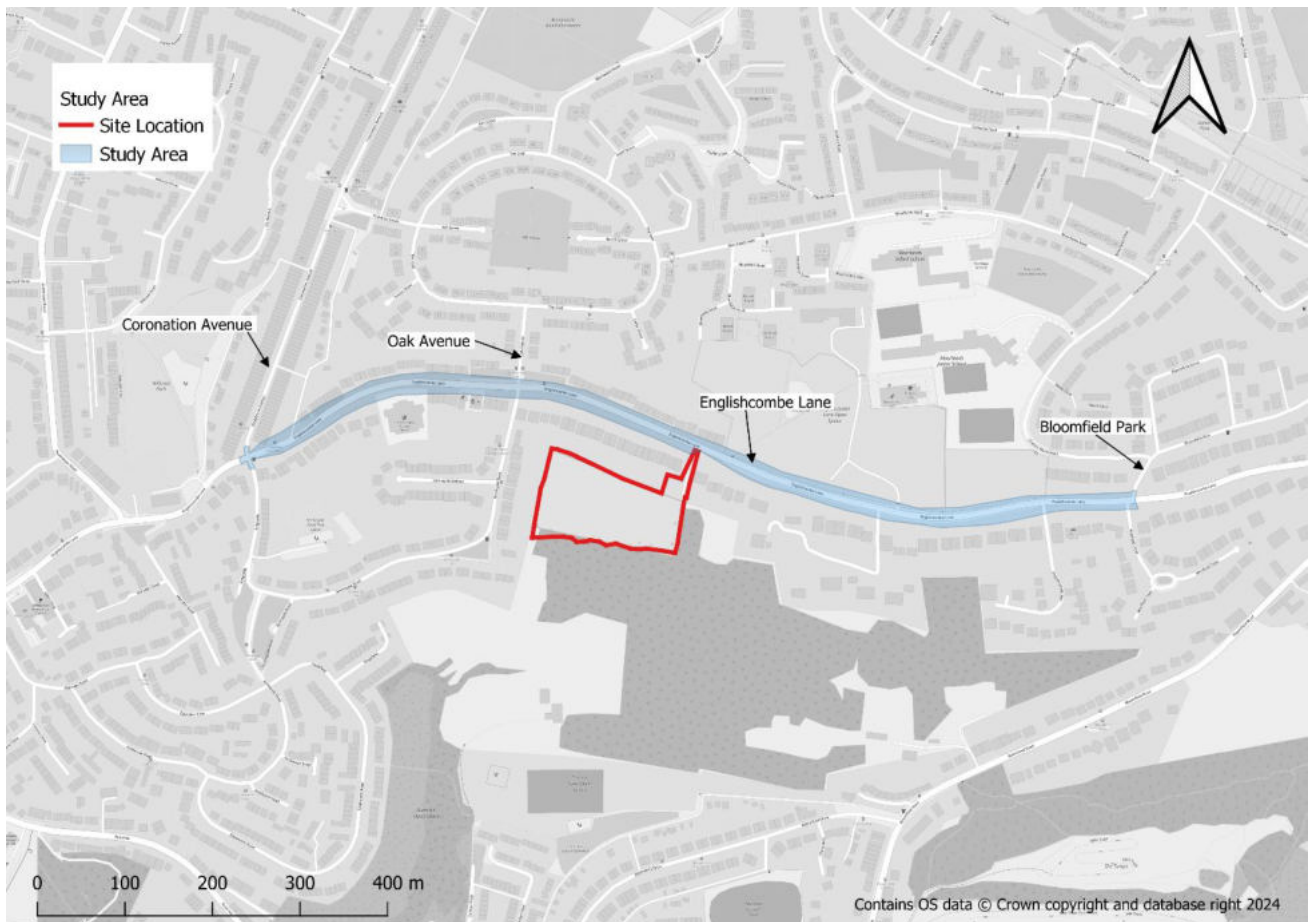
1 Introduction

1.1 Background

1.1.1 This Transport Statement (TS) has been prepared by Arcadis on behalf of Bath and North East Somerset Council (B&NES) in support of a planning application for the erection of 16 no. supported living units (Use Class C3(b)) with associated communal hub (to include ancillary carers' accommodation), access, landscaping and ancillary works' at Land To The Rear Of 89 To 123 Englishcombe Lane, Southdown, Bath, Bath And North East Somerset.

1.1.2 The Application Site and wider study area for this TS are shown in Figure 1.

Figure 1: Site Location



1.2 Site Context

1.2.1 The Application Site comprises a parcel of land to the south of Englishcombe Lane, between the Bloomfield, Moorlands and Kingsway areas in Bath. The existing access to the Application Site from Englishcombe Lane is via a track immediately east of 89 Englishcombe Lane. The Site is bounded to the north and west by residential properties, and a wooded area to south and east.

- 1.2.2 The Site Location Plan is contained at **Appendix A**, while the Site Masterplan is contained at **Appendix B**.

1.3 Planning History

- 1.3.1 B&NES previously sought full planning permission in 2018 (planning reference: 18/01516/REG04), for a scheme of open-market housing. This was of medium density consisting of 37 units, most of which were two or three storeys or flats with split level access to accommodate the Site topography.
- 1.3.2 In September 2020 B&NES Planning Committee resolved to grant permission to the proposed scheme, subject to completion of a Section 106 (S106) agreement and compliance with 34 planning conditions. However, a decision was made not to pursue the proposed scheme and a decision notice was not issued.
- 1.3.3 Following a review of local housing need and the unique site-based opportunities offered by the Englishcombe Lane Site, B&NES decided to revise the previous planning application to provide an exemplar community of purpose-built housing for persons living independently in need of care and support with autism and other disabilities.

2 Planning Policy

2.1 Overview

- 2.1.1 This chapter provides a summary of the relevant national and local transport and planning policy and strategy in relation to the Proposed Development. The Site lies within the unitary authority of B&NES.

2.2 National Policy

National Planning Policy Framework

- 2.2.1 The National Planning Policy Framework (NPPF), revised in December 2023, sets out the Government's planning policies for England and how these should be applied. The NPPF is a material consideration in planning decisions.

- 2.2.2 Paragraph 114 of the NPPF states that, when assessing applications for development, it should be ensured that:

- *“Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location.*
- *Safe and suitable access to the site can be achieved for all users.*
- *The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code.*
- *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”*

- 2.2.3 Paragraph 115 of the NPPF advises that:

“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

- 2.2.4 Paragraph 116 of the NPPF states that applications for development should:

- *“Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.*
- *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport.*
- *Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards.*
- *Allow for the efficient delivery of goods, and access by service and emergency vehicles.*
- *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”*

- 2.2.5 Paragraph 117 of the NPPF states that *“all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed.”*

Planning Practice Guidance

- 2.2.6 The Planning Practice Guidance accompanies the NPPF and gives more detailed advice on specific matters. The guidance on Travel Plans, Transport Assessments, and Statements was published in March 2014.
- 2.2.7 The guidance notes that *“Transport Statements are a ‘lighter-touch’ evaluation to be used where this would be more proportionate to the potential impact of the development (i.e., in the case of developments with anticipated limited transport impacts).”*

2.3 Local Policy

Bath & North East Somerset Core Strategy, Placemaking Plan and Local Plan Partial Update

- 2.3.1 The Local Plan 2011-2029 comprises the Core Strategy, Placemaking Plan and Local Plan Partial Update (LPPU). The Core Strategy was adopted in 2014, and the Placemaking Plan in 2017. The LPPU was adopted by B&NES on 19 January 2023, which included changes to a number of relevant policies in the Core Strategy and Placemaking Plan.
- 2.3.2 For ease of use, the policies have been combined into a single set of documents (Composite Plans).

Districtwide Composite Plan

- 2.3.3 Policy ST1 sets out the principles to be addressed by planning applications to ensure the delivery of well-connected places accessible by sustainable means of transport:
1. *“Development is located where there are, or will be at the time of development, a range of realistic travel opportunities to provide genuine alternatives to private car usage and where opportunities to reduce travel distances exist.*
 2. *The design of the development reduces car dependency and actively supports travel by sustainable modes, including providing attractive sustainable travel connections.*
 3. *The growth and the overall level of traffic and congestion are reduced by measures which encourage movement by public transport, bicycle and on foot, including traffic management and assisting the integration of all forms of transport.*
 4. *Mitigation for traffic impacts maximises opportunities to achieve mode shift towards sustainable transport modes before proposing traffic capacity enhancements.*
 5. *Transport proposals align with relevant area-specific transport strategies, plans, policy documents, local guidance and the current adopted Joint Local Transport Plan.*
 6. *Proposals provide and enhance facilities for pedestrians, cyclists, including disabled people, that is fit for purpose and have regard to the B&NES Transport and Development SPD.*
 7. *Proposals safeguard, enhance and extend the network of public rights of way and cycle routes.*

8. *Opportunities for low-carbon, last mile transport of goods and deliveries have been taken up which are appropriate to the location and scale of the development.*
9. *The development reduces the adverse impact of all forms of travel on the natural and built environment.*
10. *Development does not prejudice the efficient functioning and acceptable development of the railway network.*
11. *The use of car clubs and Ultra-Low Emissions Vehicles (ULEV) are promoted.*
12. *Access to high quality public transport facilities is achieved by improving existing and providing new public transport facilities which would increase the proportion of journeys made by public transport; and*
13. *Proposals support and promote measures which reduce the levels of traffic pollution in the interests of improving health and quality of life and reducing harmful impacts on the built and natural environment."*

2.3.4 Policy ST2A seeks to ensure that any publicly accessible routes are not adversely affected by development proposals, stating that:

1. *"Development which adversely affects the recreational and amenity value of, or access to, public rights of way and other publicly accessible routes for walking, cycling and riding will not be permitted, unless any harm can be successfully mitigated.*
2. *Development proposal affecting a publicly accessible active travel route will be expected to maintain and/or incorporate the route within the scheme, provide appropriate enhancements to the route having regard to guidance set out in the Transport and Development SPD, and support additional linkages between urban areas and the wider countryside, open spaces and the River or Canal. Opportunities to make and enhance strategic connections between, and within, urban areas and other key origins/destinations, utilising these routes, should be investigated and implemented wherever feasible and necessary.*
3. *Development that adversely impacts on the established active travel routes shown on the Policies Map will not be permitted, unless any harm can be successfully mitigated."*

2.3.5 Policy ST3 sets out the requirements for the development of transport infrastructure, stating that it will only be permitted provided that the following requirements have been met:

"Within the context of Core Strategy Policy CP6(1) the development of transport infrastructure will only be permitted provided that the following requirements have been met:

1. *The need for intervention has been robustly justified and decisions in relation to the planning and design of the scheme have been made in line with the sustainable transport hierarchy, promoting the use of sustainable modes.*
2. *The needs of pedestrians, disabled people, cyclists and horse riders are met.*
3. *The quality, patronage and efficiency of public transport operations must not be compromised.*
4. *Schemes which propose increases in traffic capacity will need to demonstrate that all other opportunities to achieve mode shift as an alternative solution have been exhausted.*
5. *Schemes which propose increases in traffic capacity will also be required to incorporate appropriate improvements to the sustainable transport network.*
6. *The environmental benefits to be secured through implementation of the scheme and any additional traffic management or calming measures to maximise those benefits should be clearly articulated.*

7. *There is no unacceptable impact on heritage and environmental assets and amenity including the World Heritage Site and its setting, Areas of Outstanding Natural Beauty and on the National Site Network (SACs/SPA).*
8. *The visual and functional impact of the scheme and any associated elements such as surface-treatment, street furniture, signing, road markings, roadside verges and lighting upon the character of the area is minimised.*
9. *The environmental impact of the scheme, such as from noise and other forms of pollution, is minimised and of an acceptable level in accordance with relevant topic-specific environmental guidance and standards.*
10. *The need for provision of street furniture which aids security of premises without adversely affecting mobility.*
11. *The response time of emergency services must not be compromised.*
12. *The acceptable provision of the transportation of materials to and from the site or disposal of spoil during construction.*

All highway infrastructure will be required to comply with national guidance and standards set out in 'Manual for Streets', 'Manual for Streets 2 – wider application of the principles', LTN 1/20, the 'Design Manual for Roads and Bridges' and any subsequent updates to these documents."

2.3.6 Policy ST7 sets out the transport requirements for managing development:

1. *"Development will be permitted providing the following provisions are met:*
 - a) *Users of the development benefit from genuine choice in their mode of travel through opportunities to travel by sustainable modes.*
 - b) *Highway safety is not prejudiced.*
 - c) *Walking and cycling assessment and facilities are provided having regard to the Transport and Development SPD, including safe, convenient and inclusive access to and within the site for pedestrians and cyclists.*
 - d) *Vehicular access is both safe and suitable.*
 - e) *No introduction to traffic of excessive volume, size or weight onto an unsuitable road system or into an environmentally sensitive area.*
 - f) *Provision is made for any improvements to the transport system required to render the development proposal acceptable. Improvement requirements will maximise opportunities to travel by sustainable modes.*
 - g) *Necessary mitigation measures can be delivered without unacceptable harm to the historic or natural environment.*
2. *In the case of new development proposals, facilities for charging plug-in and other ultra-low emission vehicles will be sought having regard to the Transport and Development SPD.*
3. *Transport assessments/statements & Travel Plans*
 - a. *Planning applications for developments that generate significant levels of movement should be accompanied by a transport assessment or transport statement in accordance with National Planning Policy Framework and Planning Practice Guidance. Schemes will be expected to be tested through transport modelling, as necessary.*
 - b. *Travel Plans will be expected to be provided having regard to the Transport and Development SPD.*

4. *Car and cycle parking provision and design must contribute to the aims of the Climate and Ecological Emergency, support creating better and healthier places, and be appropriate to the context of the development. Parking needs to be provided at a level appropriate to reduce the convenience of unnecessary car usage and make sustainable transport a more attractive choice. Parking provision must support good urban design and placemaking through minimising the proportion of space allocated to vehicle storage and usage, and reducing car dominance on our natural and built environment. Proposals must avoid contributing to haphazard, informal or inconsiderate parking behaviours and their associated effects, including through ensuring suitable parking controls and management, availability of alternative travel options including car clubs, and ensuring sufficient parking provision to meet residual demand. There should be no increase in on-street parking in the vicinity of the site which would affect highway safety and/or the operational function of the local highway network in terms of emergency access, refuse collection, goods delivery and accessibility. Detailed parking policy guidance and parking standards for all forms of development are set out in the Transport and Development SPD.”*

Bath Composite Plan

- 2.3.7 Policy SB17 – South of Englishcombe Lane advises on the Development and Design Principles for the Application Site:

“Development and Design Principles

1. *Around 40 dwellings*
2. *Vehicular access from between numbers 87-89 Englishcombe Lane, retaining as many trees as possible and replacing those lost, elsewhere within the site.*
3. *Retention of hedgerows along the boundaries of the site.*
4. *Identify and assess the ecological interests of the site and the likely effects of development on them. Protect and enhance these aspects and mitigate to avoid or minimise the effects*
5. *Lighting and Green Infrastructure at this location must be designed to safeguard the ecological and habitat requirements of bats.*
6. *Undertake a detailed historic environment assessment, and where necessary evaluation, in order to identify and implement appropriate mitigation.”*

Transport & Development Supplementary Planning Document

- 2.3.8 The Transport & Development Supplementary Planning Document (SPD) was published in 2023 and sets out B&NES’ approach and expectations for developments in relation walking and cycling, parking standards, ultra-low emission vehicles (ULEV), and Travel Plans.

- 2.3.9 The SPD vision for walking and cycling is as follows:

“Safe, resilient, and universally inclusive walking and cycling infrastructure that enables mass uptake of active travel, has a positive impact on tackling the Climate and Ecological Emergency, supports health and wellbeing, and reflects local needs.”

- 2.3.10 Paragraph 3.11.2 of the SPD advises that:

“The SPD creates a mandatory requirement for this Active Travel Checklist to be filled in and included as part of the Transport Assessment (TA) documentation submitted as part of a planning application.”

2.3.11 The Active Travel Checklist, illustrated in Table 3.5 of the SPD, contains details for off-site and on-site provision to ensure that active travel has been properly considered. An additional Walking & Cycling Developer Checklist is contained at Appendix B of the SPD. A completed Active Travel Checklist is included in Chapter 4.

2.3.12 The SPD sets out at Paragraph 3.11.3 that:

“Developments must plan for both on and off-site active travel movements, and seamless integration between the two. For off-site movements, origins, destinations and routes must be analysed in terms of travel demand and potential barriers to walking and cycling.”

2.3.13 The SPD vision for parking standards is as follows:

“Parking Policy that contributes to creating better places, supports Climate Emergency commitments by enabling low carbon mobility, improving health and wellbeing and reduces the impact of vehicle usage and storage on our built and natural environment, whilst helping to address inequalities across the district.”

2.3.14 To help achieve this vision, the SPD identifies a number of specific parking objectives:

- **“Creating Better Places** – promote good, efficient design of parking spaces integral to the layout of developments and compatible with other design considerations, to deliver good quality placemaking whilst ensuring parking provision remains balanced, mixed and flexible
- **Prioritising Sustainable Transport** – Levels of parking must be set to discourage car usage in favour of sustainable travel, further promoting health and wellbeing of residents and visitors, and only increased where opportunities to facilitate sustainable travel have been exhausted.
- **Car Ownership** – Utilise parking policy to influence levels of car ownership where attractive sustainable alternatives can be made available and controls limiting overspill impacts are in place.
- **Local Context** – Ensure that parking levels for each development are suitable for the local context, recognising significant differences in accessibility and mobility options across the District
- **Access for All** – Ensure there is appropriate access for all at all new developments. This includes, but is not restricted to, providing sufficient and appropriate cycle and car parking for disabled users and ensuring internal and external environments are safe, attractive, and accessible for all users.
- **Enabling Cycling** – Ensure that the level and design of cycle facilities, including adapted cycles, e-bike and other micromobility modes, enables large scale uptake.”

2.3.15 The SPD includes parking standards for both cycles and cars that are reviewed in Chapter 4, which sets out the proposed parking rates for the Proposed Development.

West of England Joint Local Transport Plan 4

2.3.16 The Joint Local Transport Plan (JLTP4) has been prepared by the West of England Combined Authority (WECA), which comprises Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire Councils. The plan, which was adopted in March 2020, considers transport matters up to 2036 and sets out how to achieve a well-connected sustainable transport network.

2.3.17 The JLTP4 has a number of key objectives that the policies are intended to address. These are:

- Take action against climate change and address poor air quality.
- Support sustainable and inclusive economic growth.
- Enable equality and improved accessibility.
- Contribute to better health, wellbeing, safety and security.
- Create better places.

3 Existing Transport Conditions

3.1 Overview

- 3.1.1 This chapter sets out the existing transport conditions in the vicinity of the Application Site, including an overview of the local highway network, a review of public transport conditions, and an appraisal of walking and cycling accessibility.

3.2 Local Highway Network

- 3.2.1 This section describes the local highway network within the vicinity of the Application Site.

Englishcombe Lane

- 3.2.2 Englishcombe Lane comprises a single carriageway of width circa 8m and is subject to a 20mph speed limit. Street lighting is provided throughout its length. Traffic calming in the form of sinusoidal humps are provided intermittently at pedestrian crossings along its stretch. At its eastern extent, it connects to Bloomfield Road at a priority controlled junction. At its western extent, it connects to Whiteway Road / Rush Hill at a priority controlled junction. There is on-street parking along Englishcombe Lane. Parking restrictions are limited to double yellow lines at its junctions with Coronation Avenue and Oak Avenue respectively.

Coronation Avenue / Sladebrook Avenue

- 3.2.3 Coronation Avenue / Sladebrook Avenue comprises a single carriageway of width circa 5.2m and is subject to a 20mph speed limit. Street lighting is provided throughout its length. Due to on-street parking and the presence of pinch points along its stretch, southbound traffic has priority over vehicles from the opposite direction on the approach to Englishcombe Lane. On-street parking is permitted on the western side of the carriageway and is largely prohibited on the eastern side. At its southern extent, it meets the junction with Englishcombe Lane.

Oak Avenue

- 3.2.4 Oak Avenue comprises a single carriageway of width circa 4.8m and is subject to a 20mph speed limit. Street lighting is provided on Oak Avenue. At its southern end, it meets the crossroads with Englishcombe Lane / Stirlingale Road. At its northern end, it connects to The Oval at a priority controlled junction. On street parking is present on Oak Avenue, which reduces the effective carriageway width to 3m at various points.

3.3 Traffic Flows

- 3.3.1 An Automatic Traffic Count (ATC) survey was conducted on Englishcombe Lane circa 50m east of the existing access track between Wednesday 31 January and Tuesday 6 February 2024. The results of the survey, including the annual average daily traffic flow (AADT) and traffic speeds are presented in Table 1.

Table 1: Englishcombe Lane Traffic Flows (Two-Way)

Link	Description	AADT (all vehicles)	Mean Speed (mph)	85 th ile Speed (mph)
Englishcombe Lane	Englishcombe Lane between Bloomfield Road and Coronation Avenue	3,308	21.5	24.8

3.3.2 The data shows that Englishcombe Lane carries around 3,300 vehicles per day. The 85th percentile speed is 24.8mph, while the recorded mean speed is 21.5mph.

3.4 Public Transport

Bus

- 3.4.1 The closest bus stops to the Application Site are the Englishcombe Lodge (westbound) and Oak Avenue (eastbound) bus stops on Englishcombe Lane, located circa 175m east and 178m west of the site access respectively. It should be noted that these bus stops are unmarked and are served exclusively by the R3, a daily school service running between Weston Village and Ralph Allen School. The R2 provides an additional daily service to Ralph Allen School from Sladebrook Avenue, however it routes via Twerton rather than Weston.
- 3.4.2 Service 1 provides a connection to Bath City Centre from the Sladebrook Court bus stop located north of the junction with Englishcombe Lane every ten minutes during weekdays. The southbound Trowbridge House bus stop located south of Chestnut Grove caters for arrivals from Bath. Service 8 provides additional connections to Bath City Centre and Kingsway from the Oak Avenue bus stops, located at the Oak Avenue / Englishcombe Lane junction.
- 3.4.3 Service 22, which connects Twerton with University of Bath, can be accessed from the Sladebrook Court bus stop. It provides an hourly service during the AM peak, and a service every two hours throughout the rest of each weekday.
- 3.4.4 A summary of local bus services is provided in Table 2.

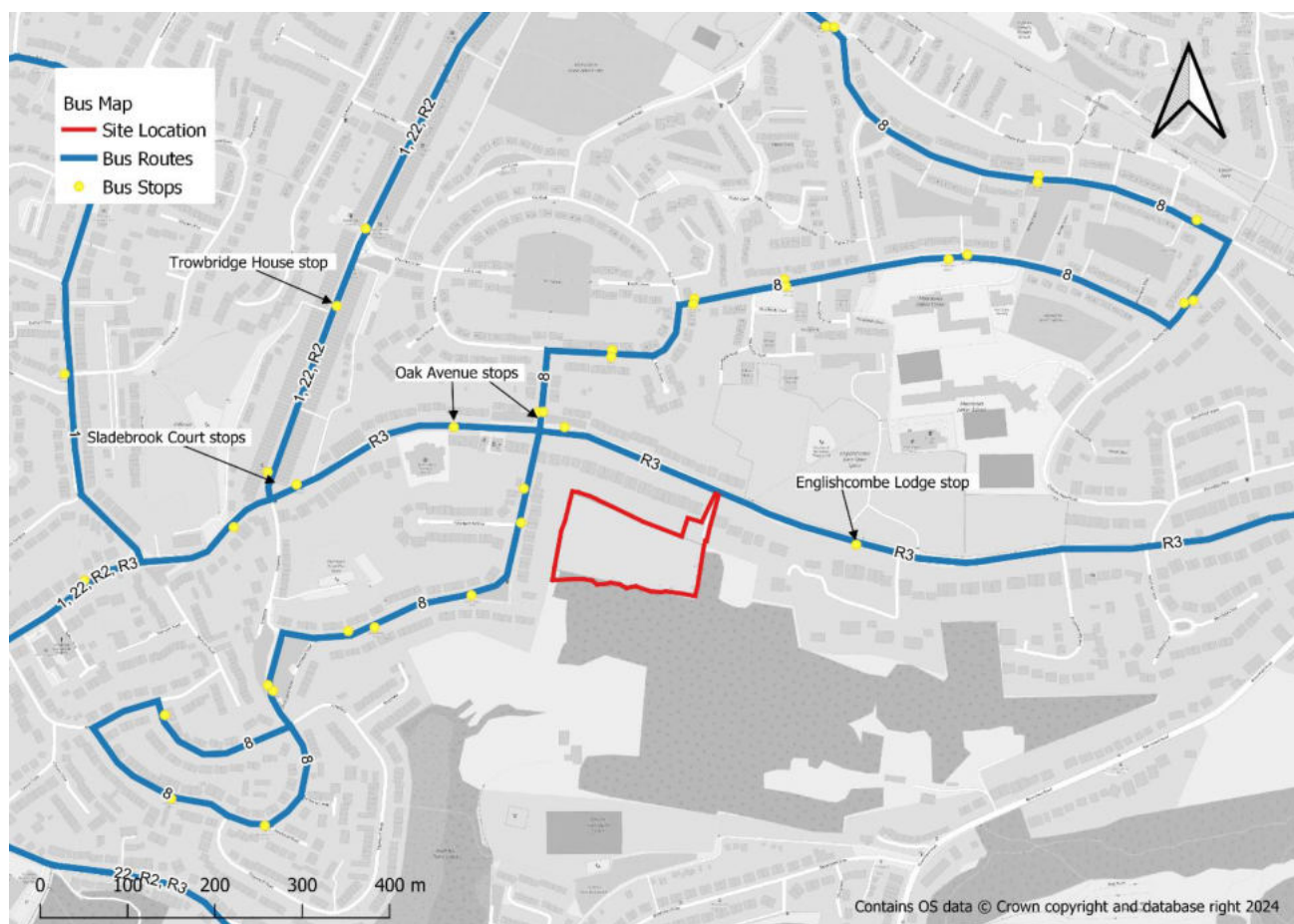
Table 2: Bus Services

Route	Towards	Weekday First Service	Weekday Last Service	Weekday Frequency	Saturday Frequency	Sunday Frequency
1	Bath City Centre via Southdown	0549	2358	Every 10 minutes	Every 15 minutes	Every 15 minutes
8	Bath City Centre	0653	2337	Every 45 minutes	Every 45 minutes	No service

Route	Towards	Weekday First Service	Weekday Last Service	Weekday Frequency	Saturday Frequency	Sunday Frequency
	Kingsway	0721	2330	Every 45 minutes	Every 45 minutes	No service
22	University of Bath via Twerton	0704	1846	Every 1-2 hours	No service	No service
R2	Ralph Allen School (via Twerton)	0738	0738	1 per day	No service	No service
	Southdown	1554	1554	1 per day	No service	No service
R3	Ralph Allen School	0755	0755	1 per day	No service	No service
	Weston	1554	1554	1 per day	No service	No service

3.4.5 The local bus stops and routes are mapped at Figure 2.

Figure 2: Bus Routes



Rail

- 3.4.6 The closest railway stations are Oldfield Park and Bath Spa, which are located circa 1.2km north and 1.9km north east of the Application Site respectively. Despite being further from the Site, Bath Spa can be accessed more easily due to greater bus connectivity and parking options. It provides connections to major cities such as London, Bristol and Cardiff, as well as regional services to surrounding towns and cities, such as Chippenham, Swindon and Salisbury.

3.5 Walking and Cycling

Walking

- 3.5.1 Footways circa 1.5m-1.8m in width are provided on both sides of Englishcombe Lane for the majority of its length. Between Bloomfield Park and Bloomfield Road, a footway is provided only on the southern side of the carriageway.
- 3.5.2 No signalised crossings are present along Englishcombe Lane. Several uncontrolled crossings with central refuge are provided, including at Bloomfield Park junction, Oak Avenue / Stirlingale Road junction, Coronation Avenue junction and at Moorlands Park, east of Englishcombe Court.

- 3.5.3 There are instances of footway parking along Englishcombe Lane. There are large corner radii at the Englishcombe Lane / Bloomfield Park junction that diverts pedestrians from desire lines.

Cycling

- 3.5.4 There is no dedicated infrastructure for cyclists on the surrounding highway network.
- 3.5.5 National Cycle Network (NCN) Route 244 is located circa 600m north of the Application Site and 300m north of The Oval. NCN Route 244 is known locally as the Two Tunnels Greenway and is a short traffic-free cycle path that connects Twerton to Midford.

Public Rights of Way

- 3.5.6 There are a number of Public Rights of Way (PRoW) in the study area that provide further connectivity to the Application Site, including:
- Footpath BC33/19 connecting to Play Space & Moorlands Junior School (c. 153m in length, asphalt surface).
 - Footpath BC33/2 connecting to Play Space & Moorlands Junior School (c. 260m in length, asphalt surface).
 - Footpath BC33/1 West of Coronation Avenue connecting to Hillcrest Park (c. 213m in length, asphalt surface).

3.6 Local Amenities

Health

- 3.6.1 The nearest doctor's surgery is Rush Hill and Weston Surgery, located circa 1km west of the Application Site.
- 3.6.2 The nearest dental clinic is Morley D, located circa 1.1km east of the Application Site.

Retail

- 3.6.3 Tesco Express is located approximately 830m west of the Application Site. Southdown Convenience Store & Post Office is located circa 860m north west of the Application Site.

Sports and Recreation

- 3.6.4 There are a number of green spaces in the study area including the Oval Park (c. 300m north), Moorlands Park (c. 200m east) and Hillcrest Park (c. 580m west).
- 3.6.5 Rejuvenate Fitness Bath is located 260m west of the Application Site, while Baskervilles Gymnastic Centre is located 270m north east, adjacent to Moorlands Park. In addition, CrossFit Bath is located 570m north of the Application Site.

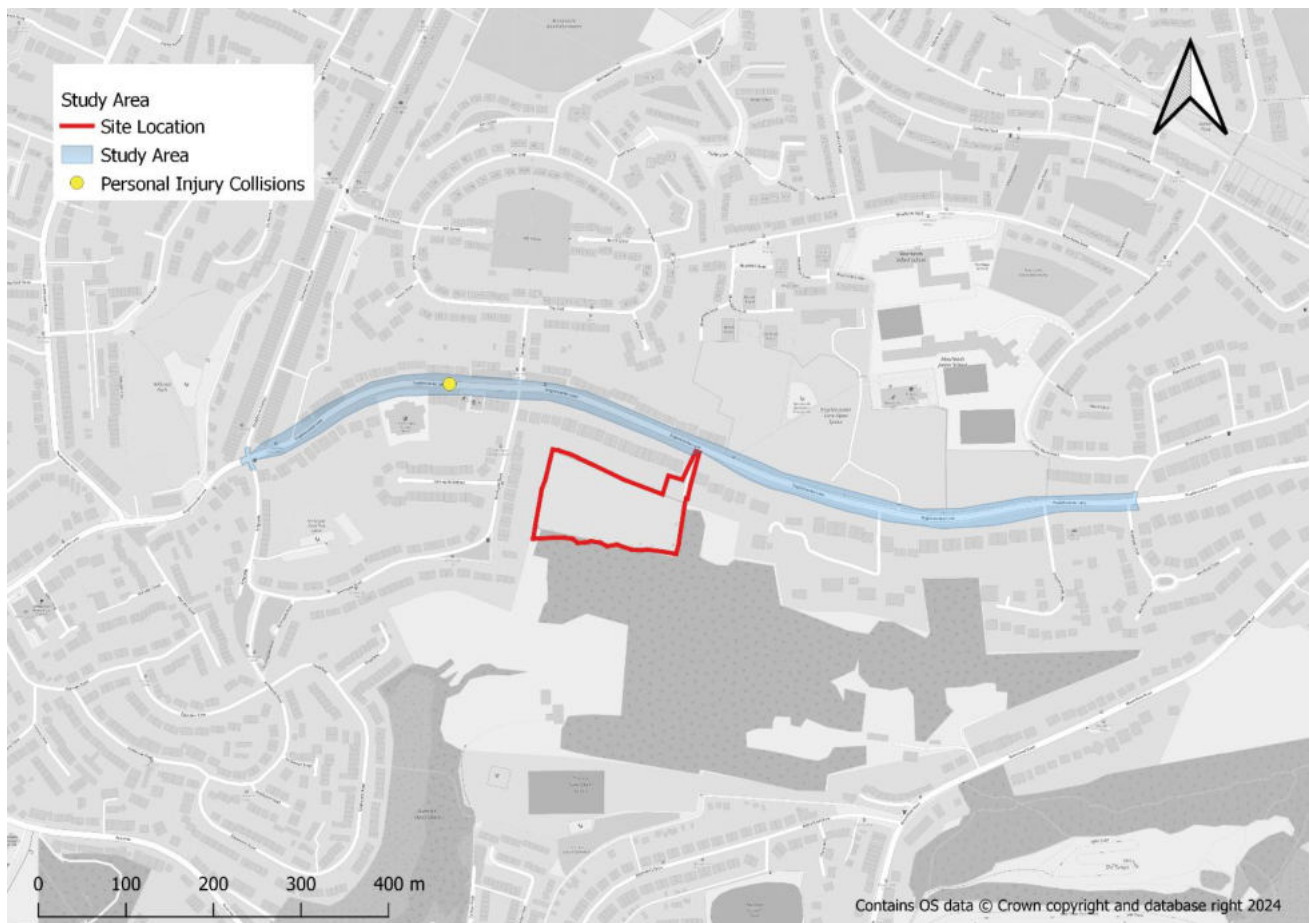
Education

- 3.6.6 Moorlands Junior School is located circa 250m north of the Application Site. St John's Primary School is located circa 700m north of the Application Site.

3.7 Road Safety

- 3.7.1 Personal Injury Collision (PIC) data was obtained from the Department for Transport for the most recent available five years (2018-2022). The data gave a record of collisions resulting in personal injury that were recorded on the local highway network.
- 3.7.2 A solitary PIC, shown in Figure 3, occurred west of Englishcombe Lane / Oak Avenue junction. The PIC resulted in slight injury and did not involve a vulnerable road user (pedestrian, pedal cycle or motorcycle).

Figure 3: Personal Injury Collisions



4 Proposed Development

4.1 Overview

- 4.1.1 This section sets out details of the Proposed Development, including its proposed access arrangements, proposed parking, and servicing considerations.

4.2 Development Details

- 4.2.1 The Proposed Development comprises the erection of 16 no. supported living units (Use Class C3(b)) with associated communal hub (to include ancillary carers' accommodation), access, landscaping and ancillary works' at Land To The Rear Of 89 To 123 Englishcombe Lane, Southdown, Bath, Bath And North East Somerset.
- 4.2.2 A description of C3(b) is provided in Table 3.

Table 3: Land Use Class

Land Use Type	Land Use Class	Description
Dwelling Houses	C3(b)	"C3(b) covers up to six people living together as a single household and receiving care e.g. supported housing schemes such as those for people with learning disabilities or mental health problems."

- 4.2.3 As shown in Table 4, it is expected that across the 16 dwellings, there will be a total of 23 bedrooms. The dwellings will be divided between two 'clusters'.

Table 4: Number of Bedrooms

Location	Number of Bedrooms
Cluster 1	12
Cluster 2	11
Total	23

- 4.2.4 It has been assumed that, during the busiest times of day, there would be up to ten staff members on Site. This has formed the basis of the staff parking requirements set out in Section 4.5.

4.3 Access

- 4.3.1 Access to the Application Site would be taken off Englishcombe Lane, at the location of the existing access track between nos. 87 and 89.
- 4.3.2 To improve visibility at the Site access, it is proposed that the existing access is replaced with a new footway crossover with widening of the footway and narrowing of the carriageway on Englishcombe Lane.

- 4.3.3 The proposed access arrangements are shown on drawing no. 30210292-ARC-XX-XX-DR-HE-00001 contained at **Appendix C**.
- 4.3.4 Within the Site, a 4.8m access road with a 2.0m footway on its western side would route south from the proposed access off Englishcombe Lane, as shown on the proposed Site Masterplan reproduced at **Appendix B**.

4.4 Road Safety Audit

- 4.4.1 A Stage One Road Safety Audit (RSA) is being prepared for the proposed access arrangements off Englishcombe Lane.
- 4.4.2 In accordance with the Design Manual for Roads and Bridges (DMRB) GG 119, the RSA will comprise an RSA Brief, RSA Report and RSA Response Report.
- 4.4.3 The RSA Brief, which has been agreed with B&NES Transport Development Management (TDM), is reproduced at **Appendix D**.
- 4.4.4 The RSA Report and RSA Response Report will be submitted as separate supporting documentation upon agreement with TDM.

4.5 Parking

Parking Standards

- 4.5.1 The Districtwide Composite Plan describes how parking standards for cars, blue badge holders and cycles have been relocated from the Placemaking Plan into the new Transport and Development SPD. This comes after B&NES conducted a review of parking standards in light of justification presented by the Climate Emergency.
- 4.5.2 The proposed parking standards are split by zone, with the Site falling within Zone B – Outer Bath, Keynsham and Saltford.
- 4.5.3 The SPD sets out parking standards by land use. While the Proposed Development most closely aligns with use class C3(b) as explained in Section 4.2, the SPD advises that:
- “For developments where there is a need for regular staffing (e.g. proposals for C3(b)), then the staff parking requirements should be implemented as set out under ‘C2 Convalescent, Residential Care and Nursing Homes’ for both vehicle and bicycle parking.”*
- 4.5.4 The parking standards for C2 - Convalescent, Residential Care and Nursing Homes are therefore reproduced in Table 5. Car parking is set as maximum standards, as per SPD guidance.

Table 5: Parking Standards

Development Type	Planning Use	Vehicle Parking	Blue Badge Parking	Cycle Parking		Motorcycle / PTW
				Long Stay	Short Stay	
Convalescent, Residential Care and Nursing Homes	C2	1 space per 2 members of staff 1 space per 6 beds	6% of capacity or 3 spaces, whichever is greater	1 space per 4 members of staff	1 space per 10 beds	2% of vehicle parking spaces

4.5.5 Pertinent to the Proposed Development, the SPD recognises that the list of development types is not an exhaustive list of residential institutions within the C2 Category, and that there will be variations in levels of car ownership for residents across the category (e.g. Extra-Care dwellings, Co-Living dwellings, Sheltered Accommodation, Retirement Homes etc).

4.5.6 The SPD therefore advises that:

“The parking requirement for residents and visitors should be provided at an appropriate level commensurate with the forecasted parking demand, in comparison with similar land uses, and in line with the parking standards Vision and Objectives.”

Proposed Parking

Car Parking

4.5.7 Given the nature of the Proposed Development, it is unlikely that residents would drive themselves to and from the Site. Therefore, it is envisaged that parking would be provided solely for members of staff and visitors, as well as drop-off locations for minibuses. It is proposed that the Proposed Development incorporates the minimum rates of blue badge parking as set out in the Transport & Development SPD and reproduced in Table 5.

4.5.8 The proposed car parking provision by type is set out in Table 6.

Table 6: Car Parking by Type

Type	Number of Spaces	SPD Guidance
Staff Parking	5	1 space per 2 members of staff
Visitor Parking	3	1 space per 6 beds, rounded down as per SPD guidance.
Blue Badge Parking	3 of total	6% of capacity or 3 spaces, whichever is greater
Total	8	

4.5.9 Additionally, one motorcycle space would be provided.

Minibus Drop-Off

4.5.10 Minibuses would be able to drop-off and turn adjacent to each cluster.

4.5.11 The SPD provides guidance on operational vehicle parking bay dimensions. For vans and minibuses, a minimum width of 3.5m and a minimum length of 7.5m is advised. The drop-off locations exceed these dimensions and are therefore suitable for access via minibuses.

Cycle Parking

4.5.12 Cycle parking provision is set out in Table 7. Cycle parking would be secure, sheltered, and sited at each of the two clusters with good natural surveillance and improved convenience when compared with vehicular parking.

4.5.13 As per SPD guidance, the required number of cycle parking spaces are expressed as minimum standards to ensure sufficient levels are provided to support uptake.

Table 7: Cycle Parking

Type	Number of Spaces	SPD Guidance
Staff Cycle Parking (long stay)	3	1 space per 4 members of staff
Visitor Cycle Parking (short stay)	3	1 space per 10 beds
Total	6	-

4.5.14 In accordance with the SPD requirements, a minimum of six cycle parking spaces would be provided.

4.6 ULEV Charging

4.6.1 The SPD contains charging standards for residential buildings covered under Sections 1 to 3 of Building Regulations. It advises that for a multi-dwelling development with more than one space, there is an active ultra-low emission vehicle (ULEV) charging requirement for all spaces.

4.6.2 However, under the ULEV Guiding Principles, the SPD encourages an agile approach to ULEV infrastructure planning:

*“User compatibility: Match the ULEV user to the development by considering the parking and charging needs of the different types of ULEV user, specific to the function and use of the new development. **Short-term visitors will have different charging needs to residents or business premises. Do not assume all ULEV users are the same.**”*

4.6.3 It is proposed that five car parking spaces would be provided for staff purposes and three for visitor purposes. It is not expected that residents would have their own vehicles, therefore negating the need for ULEV charging for resident origin purposes.

4.6.4 On this basis, it is therefore proposed to provide ULEV charging in accordance with the SPD requirements for non-residential development which are more appropriate for the charging needs of visitors to developments.

4.6.5 The SPD standards for ULEV charging for non-residential development are set out in Table 8.

Table 8: ULEV Charging Standards for Non-Residential Development

Number of Parking Spaces	Active ULEV Charging Requirement	Passive ULEV Charging Requirement
1 space	1 space	N/A
1-30 spaces	1 in 10 spaces	1 in 2 spaces
>30 spaces	1 in 10 spaces	1 in 5 spaces

4.6.6 It is proposed that eight car parking spaces would be provided at the proposed development. In accordance with the charging standards, one active charger would be provided, with an additional four spaces provided with passive provision.

4.7 Servicing

4.7.1 Swept path analysis has been undertaken for the Site access junction and internal access road. The analysis has been undertaken for an 8.68m fire tender and demonstrates that suitable access can be achieved for servicing the proposed development. The swept path analysis for the internal Site layout is shown on drawing no. 30210292-ARC-XX-XX-DR-HE-00002 contained within **Appendix E**.

4.7.2 A refuse collection point will be located on Englishcombe Lane, directly west of the access road. Communal bin storage would be provided for each cluster and transported to the collection point by members of staff.

4.8 Active Travel Checklist

4.8.1 As set out in Section 2.3, the Transport and Development SPD creates a mandatory requirement for an Active Travel Checklist to be filled in and included as part of the assessment documentation submitted as part of a planning application. The checklist contains details for off-site and on-site provision to ensure that active travel has been suitably prioritised and assessed in line with the requirements of the SPD.

4.8.2 The completed Active Travel Checklist is provided in Table 9.

4.8.3 As described in Section 2.3 additional 'Walking & Cycling Developer Checklist' is contained at Appendix B of the SPD. It states that a clear and concise audit of existing walking and cycling facilities, as well as a description of how the development supports walking and cycling, should be contained in an appropriate chapter within the report. These details are included as part of Section 3.5 (Walking and Cycling) and Section 4.3 (Access) of this TS respectively.

- 4.8.4 It should be noted that the remainder of the Walking and Cycling Developer Checklist assessment criteria is deemed not applicable to this application, as the SPD advises that these elements are only required either if “*significant walking / cycling infrastructure improvements are expected*”, or if “*significant additional pedestrian / cycling movements are expected*”. Chapter 5 provides further context on the minimal travel demand forecast associated with the Proposed Development.

Table 9: Active Travel Checklist

Item	Sub-item	Y/N	Supporting Evidence
Off-site Provision / Routes			
Have the potential origins and destinations (including distances) of where people using the development will want to travel to and from been identified?	Commuting	✓	Section 3.4 (Public Transport)
	Retail	✓	Section 3.6 (Local Amenities)
	Education	✓	Section 3.6 (Local Amenities)
	Public Transport	✓	Section 3.4 (Public Transport)
	Leisure	✓	Section 3.6 (Local Amenities)
	Strategic active travel routes	✓	Section 3.5 (Walking and Cycling)
Does the TS identify the existing routes to these locations, including alternative routes which may be unattractive at present?		✓	Chapter 3 (Existing Transport Conditions)
Has the potential level of walking and cycling demand and options to grow been identified for aforementioned destinations? (Level of detail regarding peak/off peak demand should be negotiated with the LHA)		✗	Future users of the proposed development will generally be escorted for off-site trips.
Are potential active travel schemes which may influence active travel routes well understood in terms of existence, content, status, deliverability and funding? E.g. LCWIP		N/A	No relevant schemes identified
Have route audits of aforementioned walking and cycling routes been undertaken using an appropriate audit tool?	On foot	✗	Minimal active travel demand forecast – future users of development will be escorted for off-site trips.

Item	Sub-item	Y/N	Supporting Evidence
	By bicycle	✗	Minimal active travel demand forecast – future users of development will be escorted for off-site trips.
Have the route audits identified existing issues which could present a barrier to active travel for some users, and are these issues documented in terms of location, photographs and description?	Walking	✗	Not applicable – audits not completed due to forecasted minimal active travel demand.
	Cycling	✗	Not applicable – audits not completed due to forecasted minimal active travel demand.
Are appropriate solutions proposed to issues identified in route audits, commensurate to the scale of active travel demand which could be achieved by attractive infrastructure? Solutions would need to be compliant with CIL guidance and need to reflect the mode share that could be achieved with a good walking/cycling network.	Walking	✗	Not applicable – audits not completed due to forecasted minimal active travel demand.
	Cycling	✗	Not applicable – audits not completed due to forecasted minimal active travel demand.
Does the resultant active travel network (post-implementation) provide routes suitable for a range of user types?		✓	No proposed changes to infrastructure
Has there been consultation on the issues and potential solutions?	With the LHA	✗	Not applicable – audits not completed due to forecasted minimal active travel demand.
	With the public	✗	Not applicable – audits not completed due to forecasted minimal active travel demand.

Item	Sub-item	Y/N	Supporting Evidence
Has there been appropriate discussion and agreement as to active travel solutions proposed with other LPA departments? Including ecology, landscape, conservation, arboriculture, drainage and others as appropriate to the scheme.		✗	No proposed changes to infrastructure
On-site Provision			
Do the pedestrian and cyclist access points allow for seamless integration with the wider off-site active travel route network?		✓	Appendix C (Proposed Access Arrangements)
Have opportunities to prioritise active travel over private vehicles been taken up? including in terms of site access and internal site layout.		✓	Section 4.3 (Access)
Does the masterplan respond well to pedestrian and cyclist desire lines? Including directness of routes, alignment of crossing points and legibility of wayfinding.		✓	Appendix B (Site Masterplan)
Have opportunities to reduce vehicle traffic flows and speeds been taken up?		✓	Appendix B (Site Masterplan)
Is pedestrian and cycle infrastructure provision appropriate to expected levels of ped/cycle demand and traffic speeds and flows?		✓	Section 3.3 (Traffic Flows)
Is street space allocated fairly between road users, and have carriageway widths and corner radii been minimised, appropriate to the intended use of the highway?		✓	Appendix C (Proposed Access Arrangements)
Are walking and cycling facilities, e.g. parking, showers, changing facilities, and benches conveniently located for users?		✓	Section 4.4 (Parking) and Appendix B (Site Masterplan)
Will active travel routes and facilities feel safe for all users? For example, this relates to natural surveillance, visibility and lighting, as well as road safety. Perception of safety is as important as actual safety.		✓	Appendix D (Road Safety Audit)
Do active travel routes complement and enhance the natural and built environment?		✓	Appendix B (Site Masterplan)

5 Trip Generation

5.1 Overview

5.1.1 This section sets out the forecast trip generation of the Proposed Development.

5.2 Trip Rates

5.2.1 To forecast the trip generation of the Proposed Development, average weekday multimodal trip rates were extracted from TRICS for the following TRICS Land Use Type:

- 03 Residential / P – Assisted Living (Planning Use Class: C3)

5.2.2 To generate representative rates, survey sites were filtered by location; population within one mile and population within five miles.

5.2.3 The extracted vehicular trip rates (per dwelling) are summarised in Table 10, with the full TRICS outputs included at [Appendix F](#).

Table 10: Vehicular Trip Rates per dwelling (Typical Weekday)

Period	All Vehicles			Heavy Vehicles			Light Vehicles		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
0700-0800	0.093	0.042	0.135	0.000	0.000	0.000	0.093	0.042	0.135
0800-0900	0.102	0.068	0.170	0.017	0.017	0.034	0.085	0.051	0.136
0900-1000	0.220	0.169	0.389	0.000	0.000	0.000	0.220	0.169	0.389
1000-1100	0.186	0.144	0.330	0.000	0.000	0.000	0.186	0.144	0.330
1100-1200	0.153	0.186	0.339	0.000	0.000	0.000	0.153	0.186	0.339
1200-1300	0.136	0.127	0.263	0.000	0.000	0.000	0.136	0.127	0.263
1300-1400	0.169	0.178	0.347	0.000	0.000	0.000	0.169	0.178	0.347
1400-1500	0.102	0.186	0.288	0.000	0.000	0.000	0.102	0.186	0.288
1500-1600	0.110	0.102	0.212	0.000	0.000	0.000	0.110	0.102	0.212
1600-1700	0.085	0.102	0.187	0.000	0.000	0.000	0.085	0.102	0.187
1700-1800	0.059	0.076	0.135	0.000	0.000	0.000	0.059	0.076	0.135
1800-1900	0.042	0.042	0.084	0.000	0.000	0.000	0.042	0.042	0.084
Total	1.457	1.422	2.879	0.017	0.017	0.034	1.440	1.405	2.845

5.2.4 The data shows that the total trip rate for the AM and PM peaks for all vehicles are 0.170 and 0.135 respectively.

5.2.5 Multimodal trip rates, accounting for the development peaks for Total People, are presented in Table 11.

Table 11: Multimodal Trip Rates (Development Peaks for Total People During Typical Weekday)

Mode	0900-1000			1100-1200			0700-1900		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
Pedestrian	0.025	0.017	0.042	0.076	0.051	0.127	0.337	0.321	0.658
Cyclist	0.008	0.000	0.008	0.008	0.000	0.008	0.024	0.016	0.040
Public Transport User	0.017	0.000	0.017	0.000	0.000	0.000	0.033	0.016	0.049
Vehicle Driver	0.220	0.169	0.389	0.153	0.186	0.339	1.457	1.422	2.879
Vehicle Passenger	0.043	0.043	0.086	0.016	0.026	0.042	0.254	0.288	0.542
Total People	0.314	0.229	0.543	0.254	0.263	0.517	2.102	2.035	4.137

Notes:

Summation errors due to rounding.

5.2.6 The table shows that vehicle driver accounts for the largest trip rates, followed by pedestrian and vehicle passenger.

5.3 Trip Generation

5.3.1 Based upon the method set out in Section 5.2, the resulting forecast vehicular trip generation of the Proposed Development is set out in Table 12.

Table 12: Vehicular Trip Generation (Typical Weekday)

Period	All Vehicles			Heavy Vehicles			Light Vehicles		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
0700-0800	1	1	2	0	0	0	1	1	2
0800-0900	2	1	3	0	0	1	1	1	2
0900-1000	4	3	6	0	0	0	4	3	6
1000-1100	3	2	5	0	0	0	3	2	5
1100-1200	2	3	5	0	0	0	2	3	5
1200-1300	2	2	4	0	0	0	2	2	4
1300-1400	3	3	6	0	0	0	3	3	6
1400-1500	2	3	5	0	0	0	2	3	5
1500-1600	2	2	3	0	0	0	2	2	3
1600-1700	1	2	3	0	0	0	1	2	3
1700-1800	1	1	2	0	0	0	1	1	2
1800-1900	1	1	1	0	0	0	1	1	1
Total	23	23	46	0	0	1	23	22	46

Notes:

Summation errors due to rounding.

5.3.2 The data show that the Proposed Development is forecast to generate a total of three vehicular trips during the Weekday AM Peak of 0800-0900 and an additional two trips during PM peak of 1700-1800. Over the course of a typical weekday, the Proposed Development is forecast to generate a total of 46 vehicular trips.

5.3.3 Table 13 presents the forecast multimodal trip generation of the Proposed Development, accounting for the development peaks for Total People.

Table 13: Multimodal Trip Generation

Mode	0900-1000			1100-1200			0700-1900		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
Pedestrian	0	0	1	1	1	2	5	5	11
Cyclist	0	0	0	0	0	0	0	0	1
Public Transport User	0	0	0	0	0	0	1	0	1
Vehicle Driver	4	3	6	2	3	5	23	23	46
Vehicle Passenger	1	1	1	0	0	1	4	5	9
Total People	5	4	9	4	4	8	34	33	66

Notes:

Summation errors due to rounding.

5.3.4 The data shows that the movement of people is expected to be greatest between the hours of 0900-1000 and 1100-1200 respectively. During a typical weekday, a total of 66 people movements is forecast, with vehicle driver having the largest mode share, followed by pedestrian and vehicle passenger.

6 Summary and Conclusions

- 6.1.1 Arcadis has prepared this TS on behalf of B&NES in support of a planning application for the erection of 16 no. supported living units (Use Class C3(b)) with associated communal hub (to include ancillary carers' accommodation), access, landscaping and ancillary works at Land To The Rear Of 89 To 123 Englishcombe Lane, Southdown, Bath, Bath And North East Somerset.
- 6.1.2 Vehicular access to the Proposed Development will be via a 4.8m wide access road between Nos. 89 and 87 Englishcombe Lane. For non-motorised access, the access road will feature a footway crossover as it meets Englishcombe Lane to prioritise pedestrian movements. A 2.0m wide footway will be provided on the western side of the access road that connects to the Proposed Development.
- 6.1.3 The forecast trip generation has been calculated using trip rates derived from TRICS. It is forecast that the Proposed Development would generate up to 46 vehicular trips on a typical weekday, accounting for arrivals and departures. It is forecast that the Proposed Development would generate a total of three vehicular trips during the AM peak of 0800-0900 and an additional two trips during PM peak of 1700-1800.
- 6.1.4 This TS therefore concludes that the Proposed Development would not result in any severe residual impacts on the highway network and there is no transport reason for the development to not proceed. This conclusion has been made because the Proposed Development would not result in a significant increase in trip generation.

Appendix A

Site Location Plan

OS DATA:

- PROPERTY BOUNDARY
- SITE BOUNDARY

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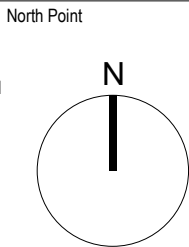
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- This drawing may contain colour.

Scale Bar

0 12.5m 37.5m 62.5m

Scale: 1:1250



Key Plan

Hazard

HAZ-xx

To warn of significant hazards or information that is unusual

To be read in conjunction with all other consultant's information

Refer to CDM Schedule

The following external model files are included within this drawing:

- NOTES:
- THIS IS THE FINAL DRAFT - INFORMATION AND GRAPHICS WILL BE UPDATED PRIOR TO FINAL PLANNING SUBMISSION.
 - ALL LANDSCAPING (INCLUDING LEVELS) SHOWN INDICATIVELY - SUBJECT TO LANDSCAPE DESIGN AND COORDINATION.
 - EXISTING TOPOGRAPHY BASED ON SURVEY BY SOLUM SURVEYING LTD.

P04	20/03/2024	Final draft planning submission issued for review and comment	EK	MHS
P03	04/03/2024	Draft Planning pack issued internally for review and comment	EK	MHS
P02	19/01/2024	Existing site sections and updated location plan issued for review and coordination	EK	MHS
P01	17/01/2024	Location plan issued for internal coordination	EK	MHS
Rev	Date	Revision Notes	Drawn	Review

Bath & North East
Somerset Council

Improving People's Lives



Project

Englishcombe Lane Supported Housing

Drawing Title

Site Location Plan

Job Number	145599	Jan 2024	Security Classification	N/A	Drawn By	EK
Scale@A2	1 : 1250	DRAFT PLANNING	Reviewed By	MHS		
Drawing Number	145599-ARC-WS-XX-PL-A-100-0000	Revision	Suitability	P04	S2	

Appendix B

Site Masterplan



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Scale Bar

0 5m 15m 25m

Scale: 1:500

North Point

N

Key Plan

Hazard	HAZ-xx To warn of significant hazards or information that is unusual To be read in conjunction with all other consultant's information Refer to CDM Schedule
	1

The following external model files are included within this drawing.

NOTES:

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Rev	Date	Revision Notes	Drawn	Review
P05	20/03/2024	Final draft planning submission issued for review and comment	EK	MHS
P04	07/03/2024	Site Plan updated for public consultation	EK	MHS
P03	04/03/2024	Draft Planning pack issued internally for review and comment	EK	MHS
P02	01/03/2024	Site plan updated - issued for coordination	EK	MHS
P01	26/02/2024	Site Plans updated to structural and specialist services requirements	EK	MHS

Bath & North East Somerset Council

Improving People's Lives

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Project

Englishcombe Lane Supported Housing

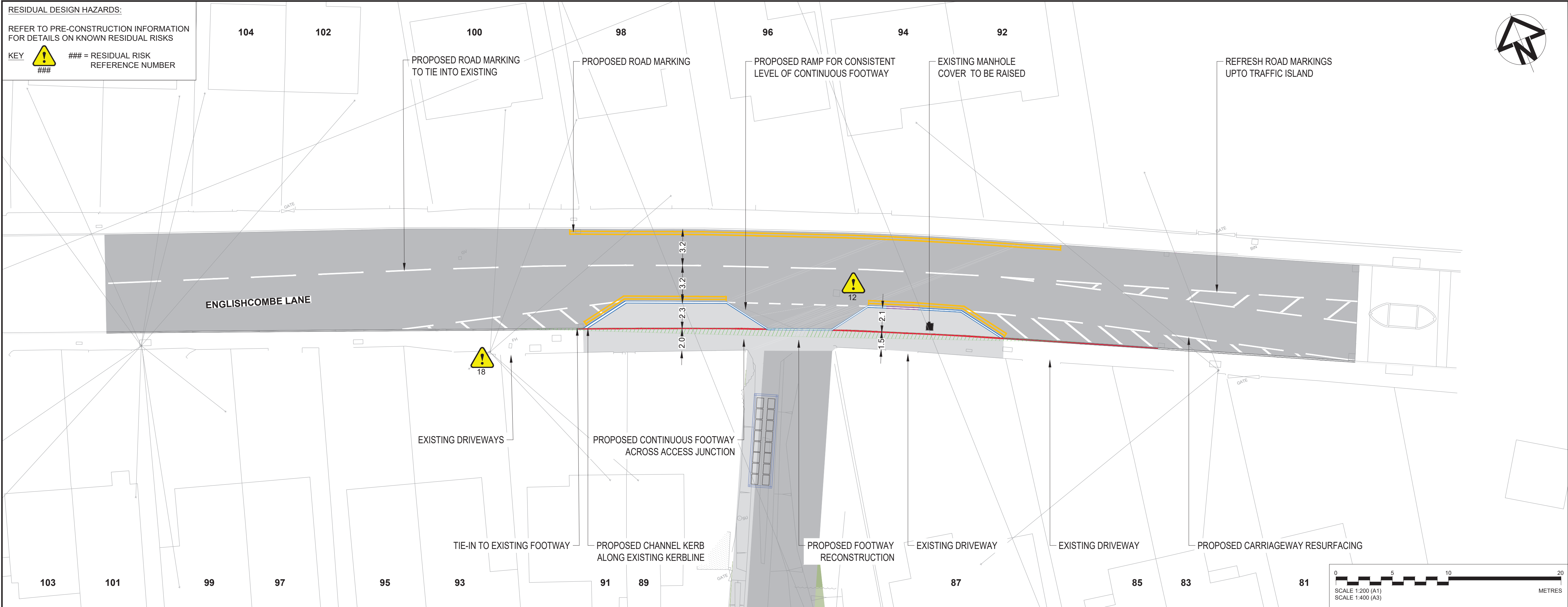
Drawing Title

Proposed Site Plan

Job Number	Date	Security Classification	Drawn By
145599	Feb 2024	N/A	EK
Scale@A2	Purpose	Reviewed By	
1 : 500	DRAFT PLANNING	MHS	
Drawing Number	Revision	Suitability	
145599-ARC-WS-XX-PL-A-100-0002	P05	S2	

Appendix C

Proposed Access Arrangements



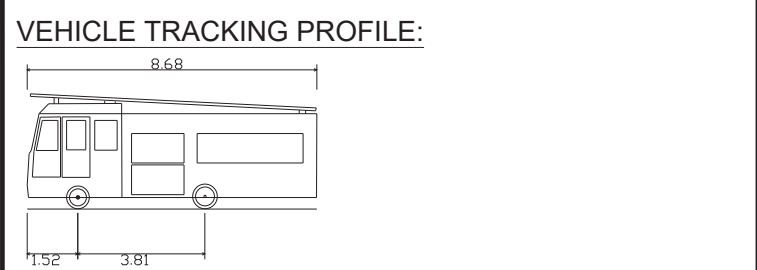
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- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONCEPT DESIGN DRAWINGS FOR THIS SCHEME.
- ALL NEW ROAD MARKINGS ARE TO BE LAID IN ACCORDANCE WITH THE "TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS 2016" (TSRGD 2016)
- SPECIFICATION OF MATERIALS TO BE CONFIRMED DURING THE PRELIMINARY DESIGN STAGE.
- VISIBILITY CHECK CONSISTS OF X=2.4M AND Y=25M IN ACCORDANCE TO MANUAL FOR STREETS 2 TABLE 7.1.

LEGEND:

- FOOTWAY
- CARRIAGEWAY
- PROPOSED KERBS
- PROPOSED DROPPED KERBS
- EXISTING KERB LINE
- PROPOSED CHANNEL KERB
- EXISTING MANHOLE COVER
- VISIBILITY SPLAY

VEHICLE TRACKING PROFILE:



DB32 Fire Appliance

Overall Length	8.680m
Overall Width	2.400m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

Rev	Date	Description	Prod	Chk	Rev	App
P03	19/03/24	MINOR AMENDMENTS	JN	RY	LR	NW
P02	12/03/24	MINOR AMENDMENTS	JN	RY	LR	NW
P01	01/03/24	DRAFT ISSUE	JN	RY	RY	LR

Client:

Bath & North East Somerset Council
Improving People's Lives

Project:

ENGLISHCOMBE LANE
SUPPORTED HOUSING

Site: ENGLISHCOMBE LANE
BATH, BAZ 2EH

Client: BATH & NORTH EAST SOMERSET
COUNCIL

ARCADIS

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Tel: 44 (0)117 372 1200

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Drawing Title:

ENGLISHCOMBE LANE
CONCEPT DESIGN
SHEET 1 OF 2

Designed: J. NAWAZ	Signed: JN	Date: 12/03/2024
Produced: J. NAWAZ	Signed: JN	Date: 12/03/2024
Checked: R. YAPP	Signed: RY	Date: 12/03/2024
Reviewed: L. ROBINSON	Signed: LR	Date: 12/03/2024
Approved: N. WESTWOOD	Signed: NW	Date: 12/03/2024

Design Stage: CONCEPT DESIGN

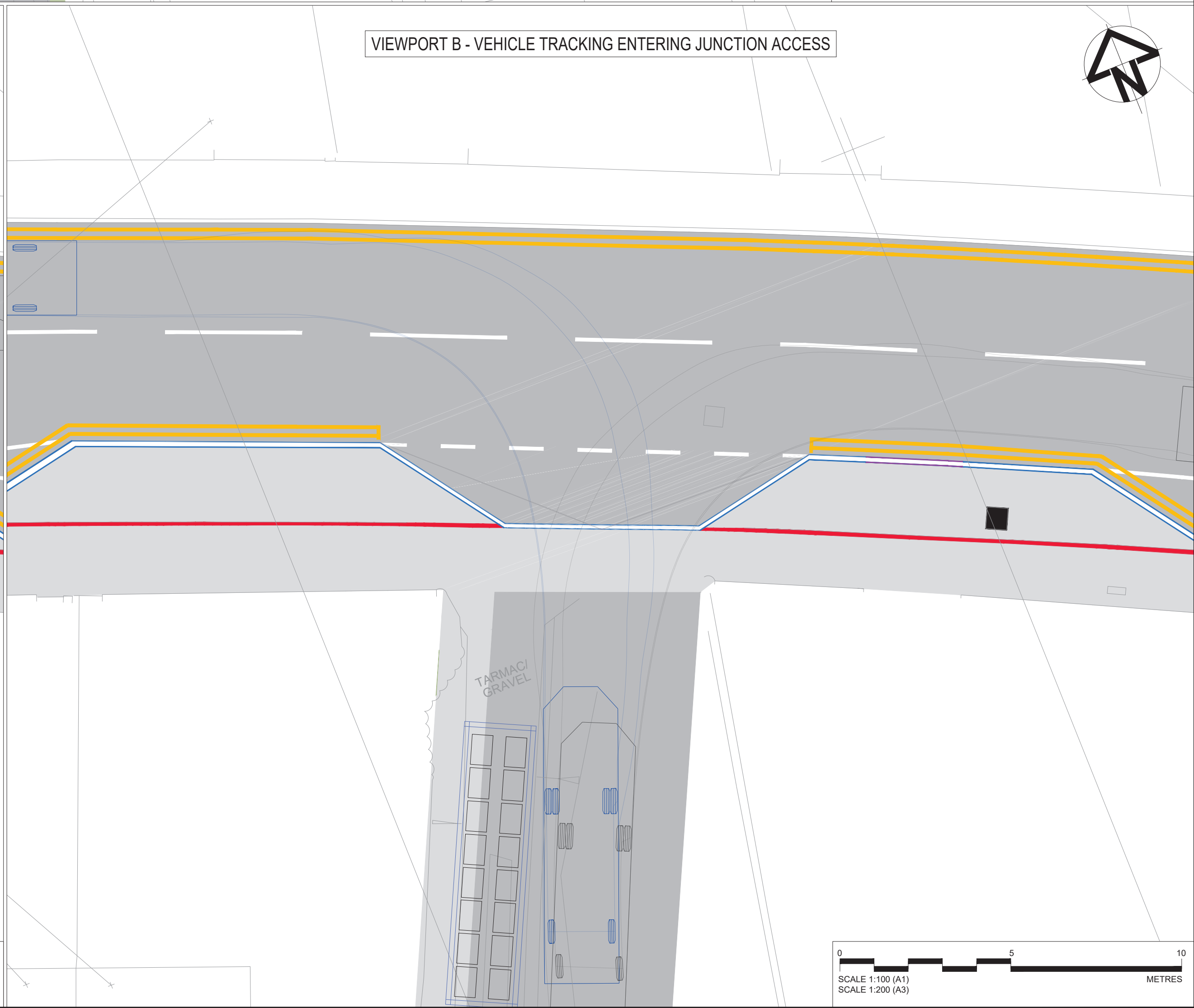
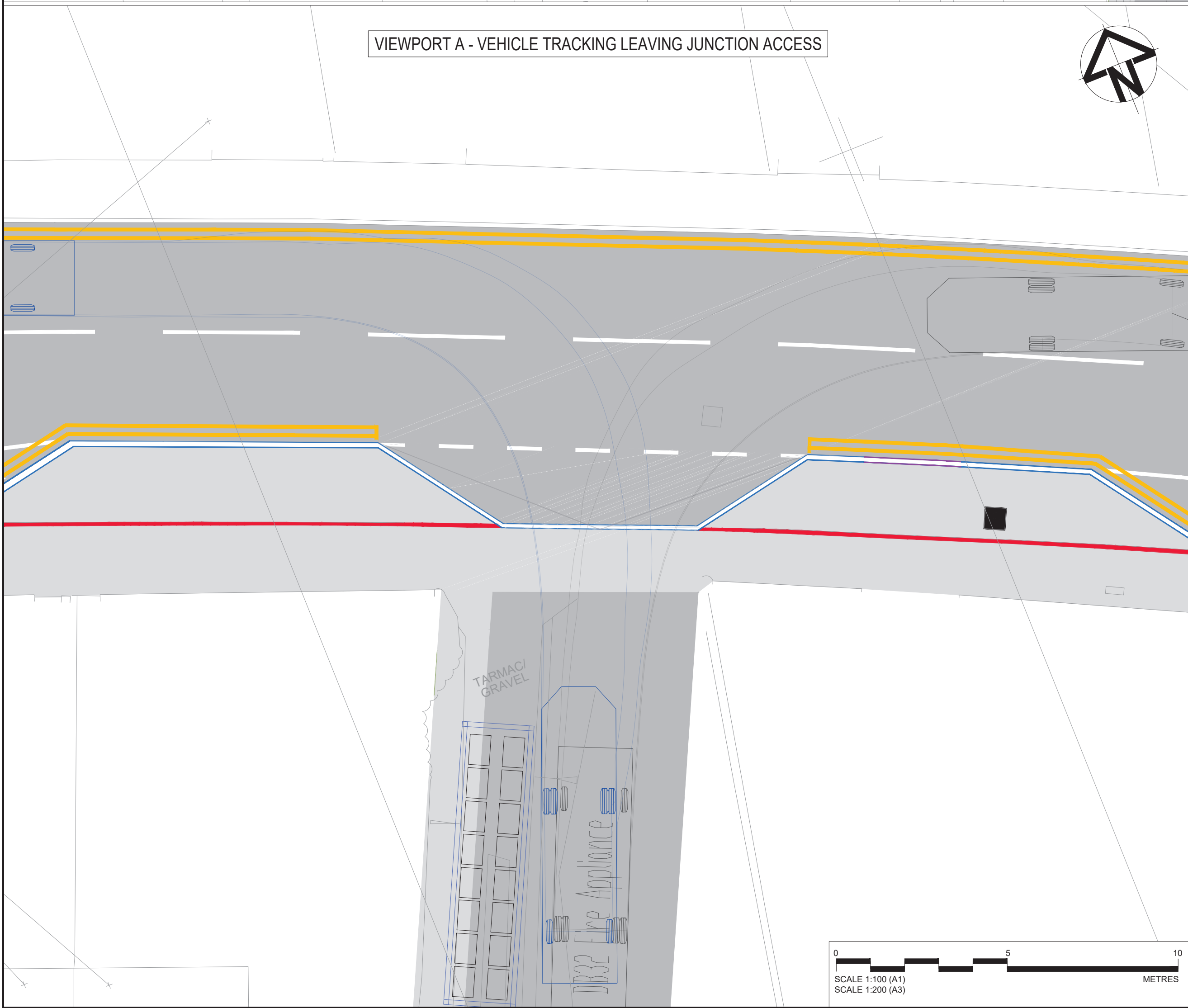
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Suitability Code: S2	Scale: As Shown	Project Number: 30210292

Suitability Description:

FOR INFORMATION

Drawing Number: 30210292 - ARC - XX
XX - DR - HE - 00001

Revision: P03



Appendix D

Road Safety Audit Brief

Englishcombe Lane Supported Living

Stage One Road Safety Audit Brief

Document Ref: 30210292-AUK-XX-XX-RP-TP-0002

Revision: P02

MARCH 2024

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Englishcombe Lane Supported Living

Stage One Road Safety Audit Brief

Author BG

Checker DS

Reviewer EW

Approver EW

Document Ref. 30210292-AUK-XX-XX-RP-TP-0002

Date MARCH 2024

Version Control

Version	Date	Author	Checker	Reviewer	Approver	Changes
P01	12/03/2024	BG	DS	EW	EW	First Draft
P02	26/03/2024	BG	DS	EW	EW	Revised with updated Appendix A

This report dated 26 March 2024 has been prepared for Bath and North East Somerset Council (the “Client”) in accordance with the terms and conditions of appointment (the “Appointment”) between the Client and Arcadis Consulting (UK) Limited (“Arcadis”) for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

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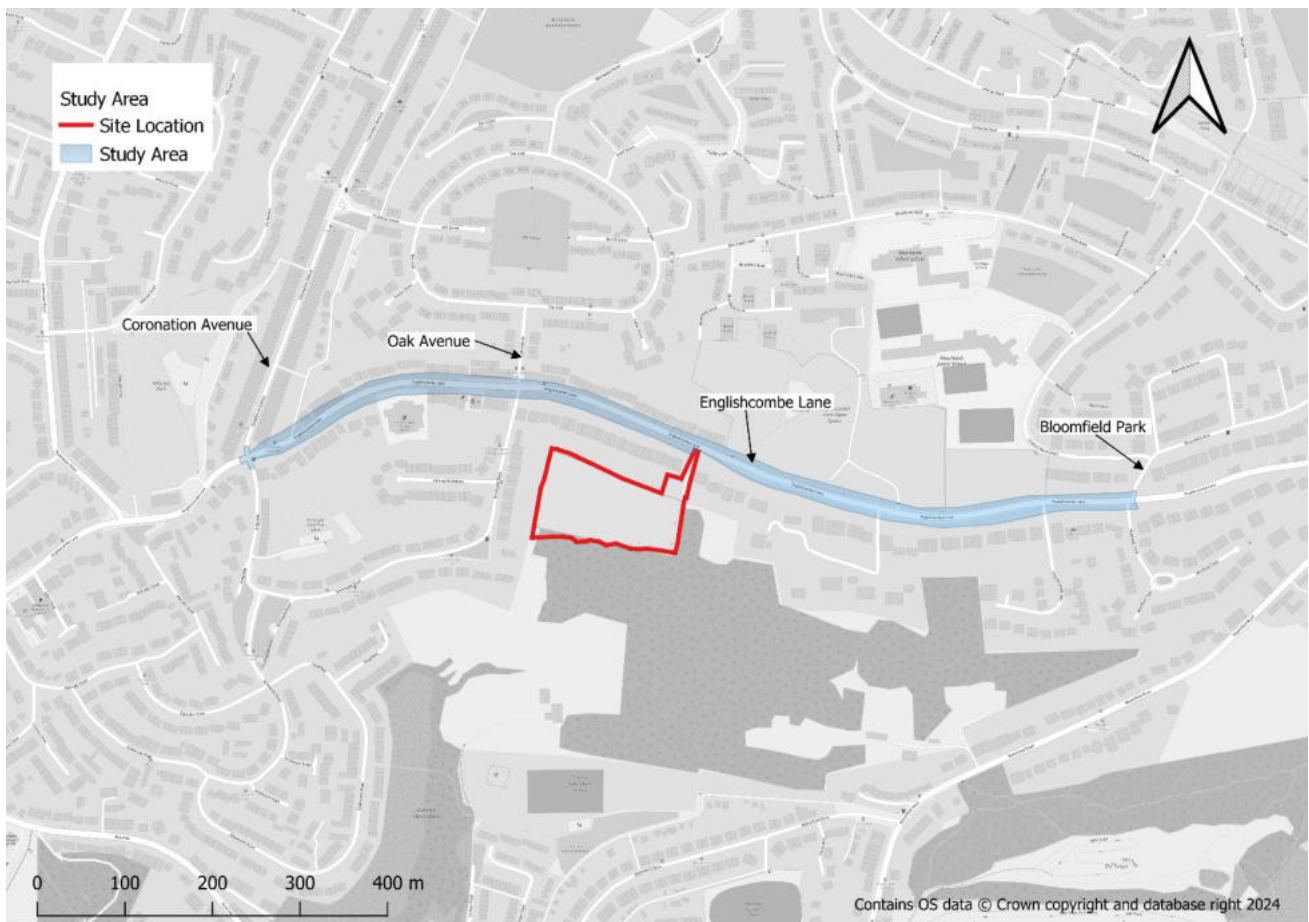
Environmental Constraints

1 Introduction

1.1 Overview

- 1.1.1 This Stage One Road Safety Audit (RSA) Brief has been prepared by Arcadis, the design organisation, on behalf of Bath & North East Somerset Council, the Overseeing Organisation. It provides the information required for a Stage One RSA to be undertaken for the proposed access arrangements for a proposed residential development off Englishcombe Lane.
- 1.1.2 The site location is shown in Figure 1. The existing access to the Application Site from Englishcombe Lane is by an access track between Nos. 89 and 87 Englishcombe Lane.

Figure 1: Site Location




- 1.1.3 The scheme comprises the creation of a footway crossover at the access off Englishcombe Lane along with narrowing of the carriageway. Preliminary design has been completed for the proposed access arrangements along with Swept Path Analysis, as shown on drawing no. 30210292-ARC-XX-XX-DR-HE-00001 at **Appendix A**.
- 1.1.4 The Stage One RSA is to be undertaken in accordance with the guidance set out in the Design Manual for Roads and Bridges (DMRB) GG 119 Road Safety Audit. This RSA Brief has been prepared in accordance with this guidance.

1.2 Project Summary

1.2.1 The project summary is set out in Table 1.

Table 1: Project Summary

Date:	12/03/2024
Document Reference:	30210292-AUK-XX-XX-RP-TP-0002
Prepared by:	Arcadis
On behalf of:	Bath and North East Somerset Council
Authorisation Sheet	
Project	Englishcombe Lane Supported Living
Report Title	Stage One Road Safety Audit
Prepared By	
Name:	Edward Whitney
Signed	
Organisation	Arcadis
Date	12/03/2024
I approve the RSA Brief and instruct the RSA to take place on behalf of the overseeing organisation:	
Name:	
Signed	
Organisation:	Bath and North East Somerset Council
Date:	

2 Details

2.1 General Details

2.1.1 General details regarding the scheme are set out in Table 2.

Table 2: General Details

Highways Scheme Name and Road Name:	Englishcombe Lane Supported Living – Access Works Englishcombe Lane
Type of Scheme:	Access Works
RSA Stage	1
Overseeing Organisation Details:	Bath & North East Somerset Council Lewis House Manvers Street Bath BA1 1JG
Design Organisation Details:	Arcadis Consulting (UK) Limited 2 Glass Wharf Bristol BS2 0FR
Police Contact Details	Not required for Stage One
Maintaining Agent Contact Details:	Bath & North East Somerset Council Lewis House Manvers Street Bath BA1 1JG
RSA Team Membership:	Jonathan Lewis (Team Leader) Philip Salter (Principal Engineer)
Terms of Reference:	The access works for the Proposed Development are intended to provide a new footway crossover configuration that prioritises pedestrian movements and improves visibility for vehicles egressing the Application Site onto Englishcombe Lane.

2.2 Scheme Details

General

- 2.2.1 The extents of the RSA comprise the proposed access works for the Proposed Development, located east of 89 Englishcombe Lane, as shown on the preliminary design drawing no. 30210292-ARC-XX-XX-DR-HE-00001 at **Appendix A**. The scheme will feature a footway crossover where the internal access road meets Englishcombe Lane to prioritise pedestrian movements.

Design Standards

- 2.2.2 The proposed design has been produced in accordance with the following contractual design standards and guidance:

- The Traffic Signs Regulations and General Directions 2016 (TSRGD 2016)
- Manual for Streets
- Manual for Streets 2
- Local Transport Note 1/20 - Cycle infrastructure design
- The Design Manual for Roads and Bridges (DMRB); including but not limited to:
 - CD 123 – Geometric design of at-grade priority and signal-controlled junctions
 - CD 195 – Designing for cycle traffic

Design Speeds

- 2.2.3 The design speed that applies to Englishcombe Lane is 32 kph (20mph).

Speed Limits

- 2.2.4 The existing mandatory speed limit on Englishcombe Lane is 20mph. Data obtained as part of an Automatic Traffic Count (ATC) survey between Wednesday 31 January and Tuesday 6 February 2024 shows that mean speeds on Englishcombe Lane (two-way) are 21.5mph, while the 85th percentile speed is 24.8mph.

Existing Traffic Data

- 2.2.5 Data obtained from the aforementioned ATC survey indicates the two-way annual average daily traffic (AADT) on Englishcombe Lane is 3,308 (all vehicles). The data obtained from the ATC survey is contained at **Appendix B**.

Forecasted Traffic Flows

- 2.2.6 The TS (30210292-AUK-XX-XX-RP-TC-0001) sets out forecasted traffic flows for the Proposed Development. It is forecast that the Proposed Development would generate up to 46 vehicular trips on a typical weekday, accounting for arrivals and departures.

Pedestrian, Cyclist and Equestrian Desire Lines

- 2.2.7 The main pedestrian desire line in the vicinity of the scheme are footways circa 1.5-1.8m in width on both sides of the of Englishcombe Lane. Between Bloomfield Park and Bloomfield Road, a footway is provided only on the southern side of the carriageway.
- 2.2.8 There is no dedicated infrastructure for cyclists on the surrounding highway network.
- 2.2.9 There are no known equestrian desire lines in the vicinity.
- 2.2.10 A Walking, Cycling and Horse-Riding Assessment and Review has not been undertaken as part of this RSA Brief, however the TS includes a review of walking and cycling conditions within the vicinity of the scheme.

Environmental Constraints

- 2.2.11 A map showing the environmental statutory designations is included at **Appendix C**. The scheme is located within a Site of Special Scientific Interest (SSSI) Impact Risk Zone.
- 2.2.12 The scheme is located within the Bath World Heritage Site and a Conservation Area.
- 2.2.13 The Moorlands (also known as Englishcombe Court, The Moorlands) is a Grade II Listed building located circa 200m north of the scheme.
- 2.2.14 A reproduction of the flood risk for planning map is included at **Appendix C**. The proposed scheme is located in Flood Zone 1, an area with a low probability of flooding.

3 Locality

3.1 Overview

- 3.1.1 The Application Site comprises a parcel of land to the south of Englishcombe Lane, between the Bloomfield, Moorlands and Kingsway areas in Bath.
- 3.1.2 Englishcombe Lane features a single carriageway of width circa 8.0m. Traffic calming in the form of sinusoidal humps are provided intermittently at pedestrian crossings along its stretch. At its eastern extent, it connects to Bloomfield Road at a priority junction. At its western extent, it connects to Whiteway Road / Rush Hill at a priority junction. There is on-street parking along Englishcombe Lane. Parking restrictions are limited to double yellow lines at its junctions with Coronation Avenue and Oak Avenue respectively.

Existing Access

- 3.1.3 The existing access to the Application Site from Englishcombe Lane is via an access track between Nos. 89 and 87 Englishcombe Lane. The visibility from the existing access is substandard due to the presence of vegetation and adjacent property frontages.

Nearby Land Uses

- 3.1.4 There are a variety of different land uses within the vicinity of the Application Site. Moorlands Junior School is located circa 250m north of the Application Site. St John's Primary School is located circa 700m north of the Application Site.
- 3.1.5 There are a number of green spaces including the Oval Park (c. 300m north), Moorlands Park (c. 200m east) and Hillcrest Park (c. 580m west). Leisure trip generators include Rejuvenate Fitness Bath located 260m west of the Application Site and Baskervilles Gymnastic Centre is located 270m north east, adjacent to Moorlands Park. In addition, CrossFit Bath is located 570m north of the Application Site.
- 3.1.6 It should be noted that the proposed land use will encompass the creation of 16 supported living homes for residents with learning disabilities, and therefore consideration should also be given to the vulnerable users that will be residing there following construction of the scheme.

3.2 Road Safety Factors

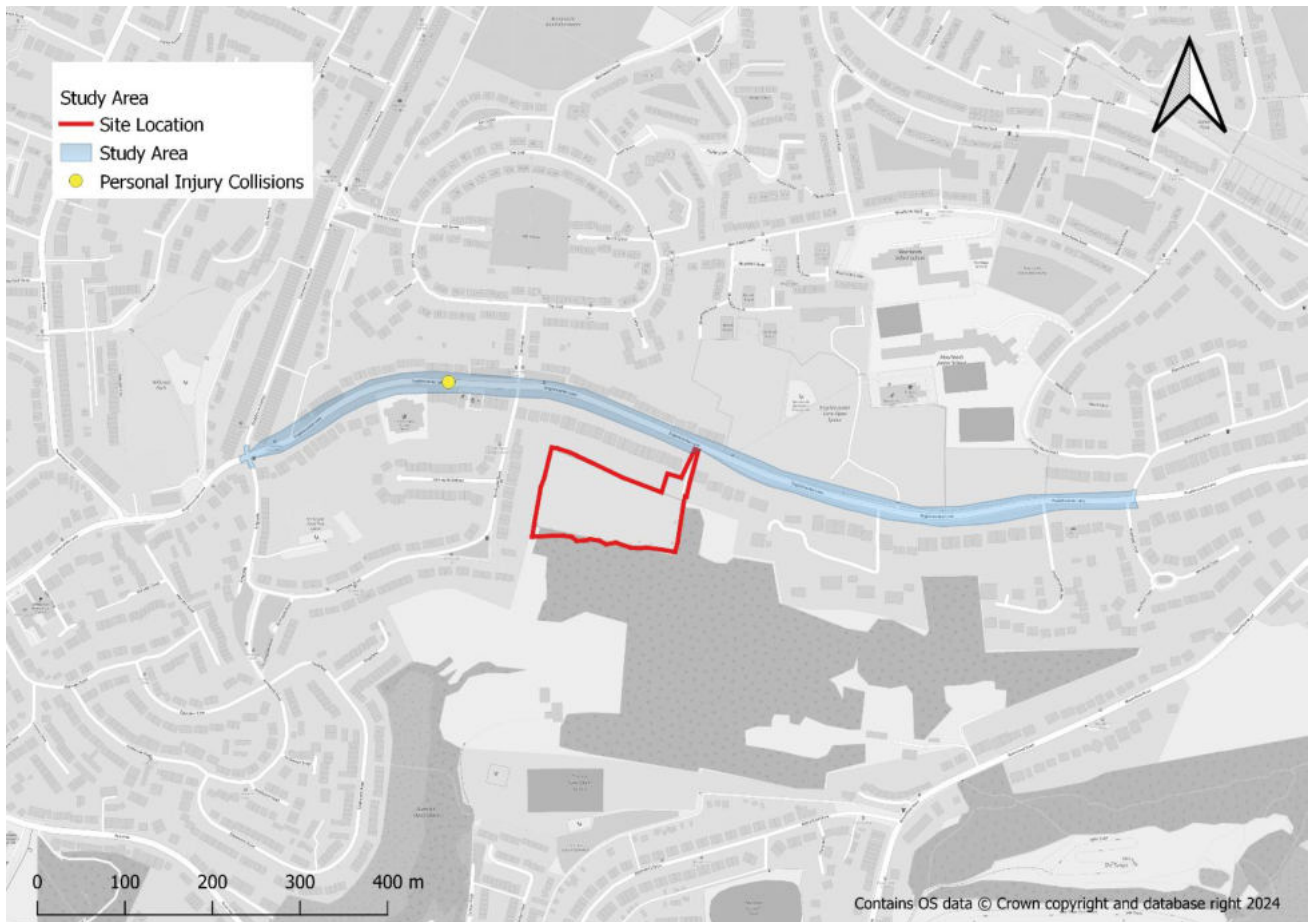
- 3.2.1 The visibility from the existing access is substandard due presence of the existing wall and vegetation, meaning that it does not comply with visibility standards set out in the Manual for Streets and CD 123 Geometric design of at-grade priority and signal-controlled junctions.
- 3.2.2 Instances of on-street parking along Englishcombe Lane can also reduce pedestrian visibility.

4 Analysis

4.1 Collision Data

- 4.1.1 Personal Injury Collision (PIC) data was obtained from the Department for Transport for the most recent available five years (2018-2022). During this period, one PIC was recorded within the study area, located west of Englishcombe Lane / Oak Avenue junction. The PIC, plotted in Figure 2, did not involve a vulnerable road user (pedestrian, pedal cycle or motorcycle).

Figure 2: Personal Injury Collisions



4.2 Departures from Standards

- 4.2.1 None.

4.3 Previous RSA Reports

- 4.3.1 There are no previous RSA reports as this is a Stage One RSA.

4.4 Strategic Decisions

- 4.4.1 The scheme access works will feature a footway crossover. To meet visibility requirements, the design includes a build-out, which brings the give way line into the carriageway.

4.5 Documents

- 4.5.1 The documents set out in Table 3 have been previously prepared as part of the planning submission and should be read alongside this RSA Brief.

Table 3: Documents

Document No.	Title	Date
30210292-AUK-XX-XX-RP-TP-0001-P2 Transport Statement	Transport Statement	26/03/2024

- 4.5.2 The Transport Statement will be submitted as supporting documentation to the planning application for the creation of 16 supported living homes and will be [available for download from B&NES' website](#).

4.6 Drawings

- 4.6.1 The drawings set out in Table 4 have been previously prepared as part of the planning submission and should be read alongside this RSA Brief.

Table 4: Drawings

Drawing No.	Title	Date
30210292-ARC-XX-XX-DR-HE-00001	Proposed Access Arrangements	26/03/2024

- 4.6.2 This drawing is included at [Appendix A](#) of this RSA Brief.

5 Checklist

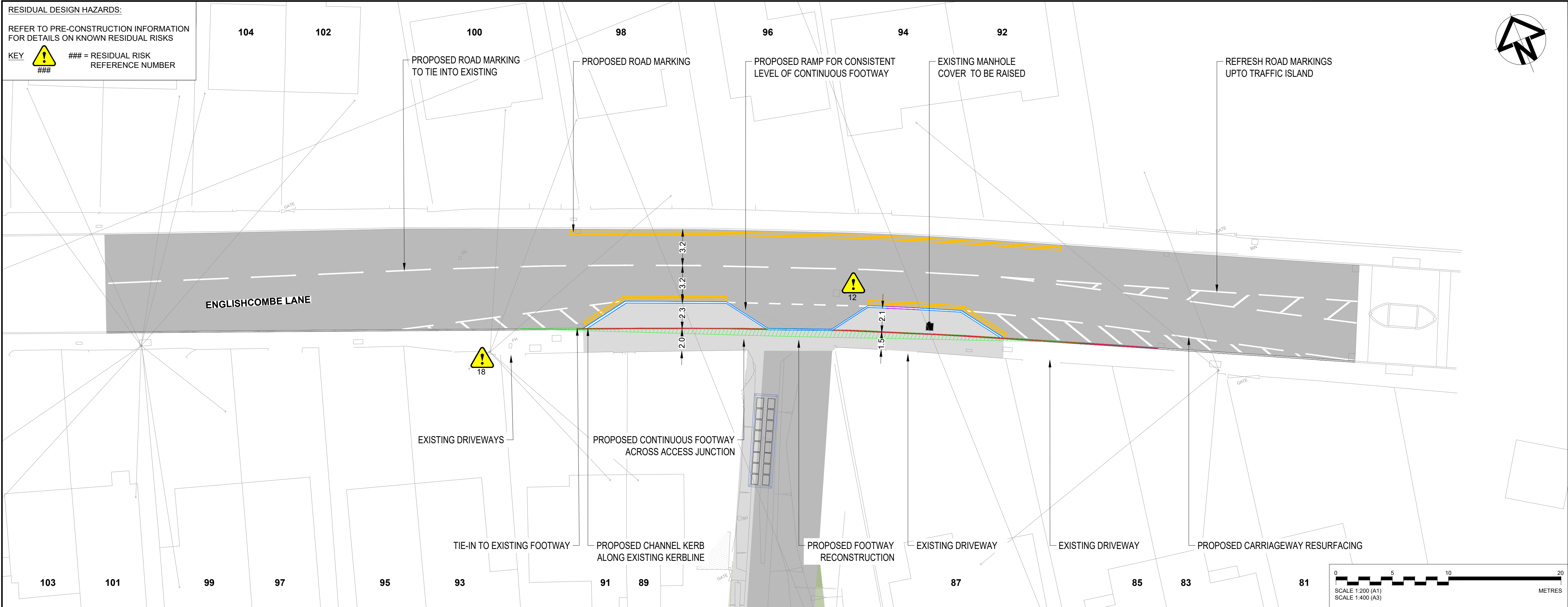
5.1.1 The items that have been included in this RSA Brief, and the reasons for items that are not included, are set out in Table 5.

Table 5: Checklist

Site Location Plan	✓
Scale Layout Plan	✓
Departures and Relaxations from Standards	None identified
Previous RSA Reports	Not applicable – Stage One RSA
Previous RSA Response Reports and Evidence of Agreed Actions	Not applicable – Stage One RSA
Collision Data and Collision Data Analysis	✓
Road Traffic Collision Plot	✓
Traffic Signal Staging	Not applicable – Not proposing any traffic signals
Traffic Counts	✓
Speed Surveys	✓
Pedestrian, Cyclist and Horse-Riding Desire Lines and Volumes	Volumes not available
Walking, Cycling and Horse-Riding Assessment and Review	Not applicable – A review of walking and cycling conditions provided in the TS
Items outside the scope of the RSA / Strategic Decisions	✓
Other Factors that may Impact on Road Safety	✓
Design Speeds / Speed Limits	✓
Design Standards	✓
Adjacent Land Uses	✓

Appendix A

Scheme Drawing



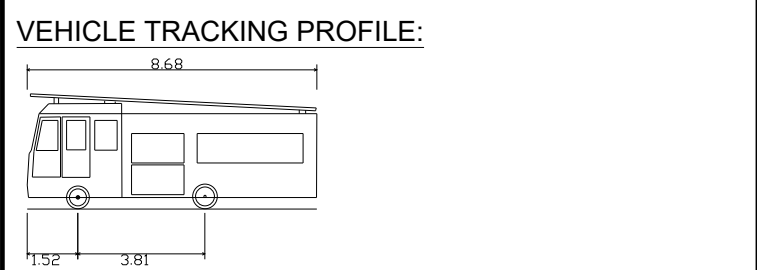
NOTES:

- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- DO NOT SCALE FROM THIS DRAWING.
- DESIGN BASED ON TOPOGRAPHICAL SURVEY PROVIDED BY SOLUM SURVEYING LTD ON 13/03/23. LEVELS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO THE START OF THE WORKS.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONCEPT DESIGN DRAWINGS FOR THIS SCHEME.
- ALL NEW ROAD MARKINGS ARE TO BE LAID IN ACCORDANCE WITH THE "TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS 2016" (TSRGD 2016)
- SPECIFICATION OF MATERIALS TO BE CONFIRMED DURING THE PRELIMINARY DESIGN STAGE.
- VISIBILITY CHECK CONSISTS OF X=2.4M AND Y=25M IN ACCORDANCE TO MANUAL FOR STREETS 2 TABLE 7.1.

LEGEND:

- FOOTWAY
- CARRIAGEWAY
- PROPOSED KERBS
- PROPOSED DROPPED KERBS
- EXISTING KERB LINE
- PROPOSED CHANNEL KERB
- EXISTING MANHOLE COVER
- VISIBILITY SPY

VEHICLE TRACKING PROFILE:



DB32 Fire Appliance

Overall Length	8.680m
Overall Width	2.400m
Overall Body Height	3.450m
Min Body Ground Clearance	0.337m
Max Track Width	2.120m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

Rev	Date	Description	Prod	Chk	Rev	App
P03	19/03/24	MINOR AMENDMENTS	JN	RY	LR	NW
P02	12/03/24	MINOR AMENDMENTS	JN	RY	LR	NW
P01	01/03/24	DRAFT ISSUE	JN	RY	RY	LR

Client:

Bath & North East Somerset Council
Improving People's Lives

Project:

ENGLISHCOMBE LANE SUPPORTED HOUSING

Site: ENGLISHCOMBE LANE BATH, BA2 2EH

Client: BATH & NORTH EAST SOMERSET COUNCIL

ARCADIS

Registered office: 80 Fenchurch Street, London EC3M 4BY

Coordinating office: 2 Glass Wharf, Temple Quay, Bristol BS2 0FR

Tel: 44 (0)117 372 1200

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Drawing Title:

ENGLISHCOMBE LANE CONCEPT DESIGN SHEET 1 OF 2

Designed: J. NAWAZ	Signed: JN	Date: 12/03/2024
Produced: J. NAWAZ	Signed: JN	Date: 12/03/2024
Checked: R. YAPP	Signed: RY	Date: 12/03/2024
Reviewed: L. ROBINSON	Signed: LR	Date: 12/03/2024
Approved: N. WESTWOOD	Signed: NW	Date: 12/03/2024

Design Stage: CONCEPT DESIGN

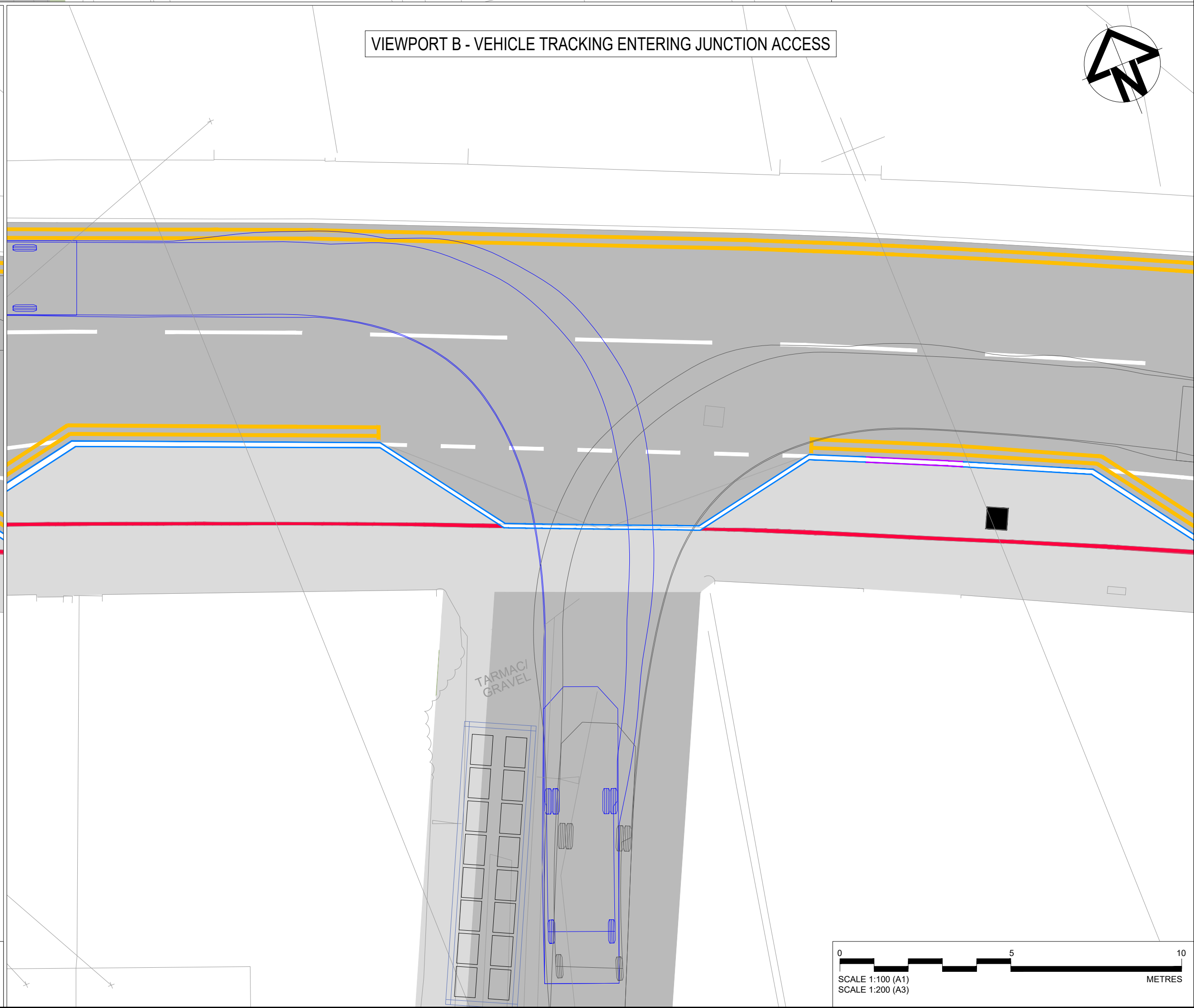
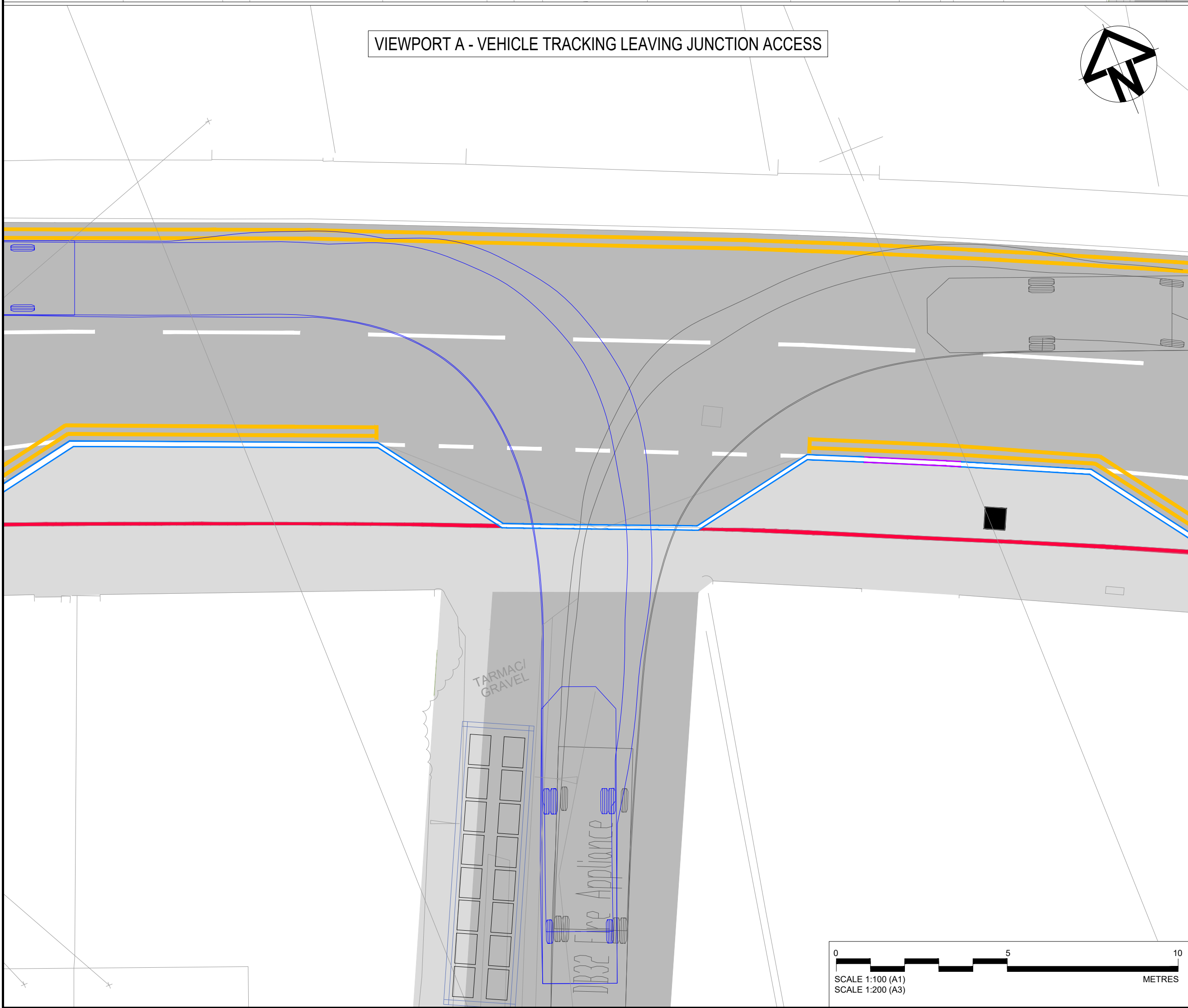
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Suitability Code: S2	Scale: As Shown	Project Number: 30210292

Suitability Description:

FOR INFORMATION

Drawing Number: 30210292 - ARC - XX XX - DR - HE - 00001

Revision: P03



Appendix B

Existing Traffic Data

Bath - ATC 1 - Englishcombe Lane

Produced by Streetwise Services Ltd.



Channel - Eastbound

	31/01/2024 Wednesday	01/02/2024 Thursday	02/02/2024 Friday	03/02/2024 Saturday	04/02/2024 Sunday	05/02/2024 Monday	06/02/2024 Tuesday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	1859	1970	1966	1461	1057	1856	1970	1924	1734
Mean Speed	21.3	21.5	21.3	21.4	21.7	21.3	21.2	21.3	21.4
85%ile Speed	24.6	24.6	24.5	24.6	25.1	24.4	24.4	24.5	24.6
No. Vehicles > 20 MPH Limit	1189	1358	1255	958	720	1218	1269	1258	1138
% Vehicles > 20 MPH Limit	64.0	68.9	63.8	65.6	68.1	65.6	64.4	65.4	65.8
No. Vehicles > 35 MPH	5	5	0	5	4	2	2	4	4
% Vehicles > 35 MPH	0.3	0.3	0.0	0.3	0.4	0.1	0.1	0.2	0.2

Channel - Westbound

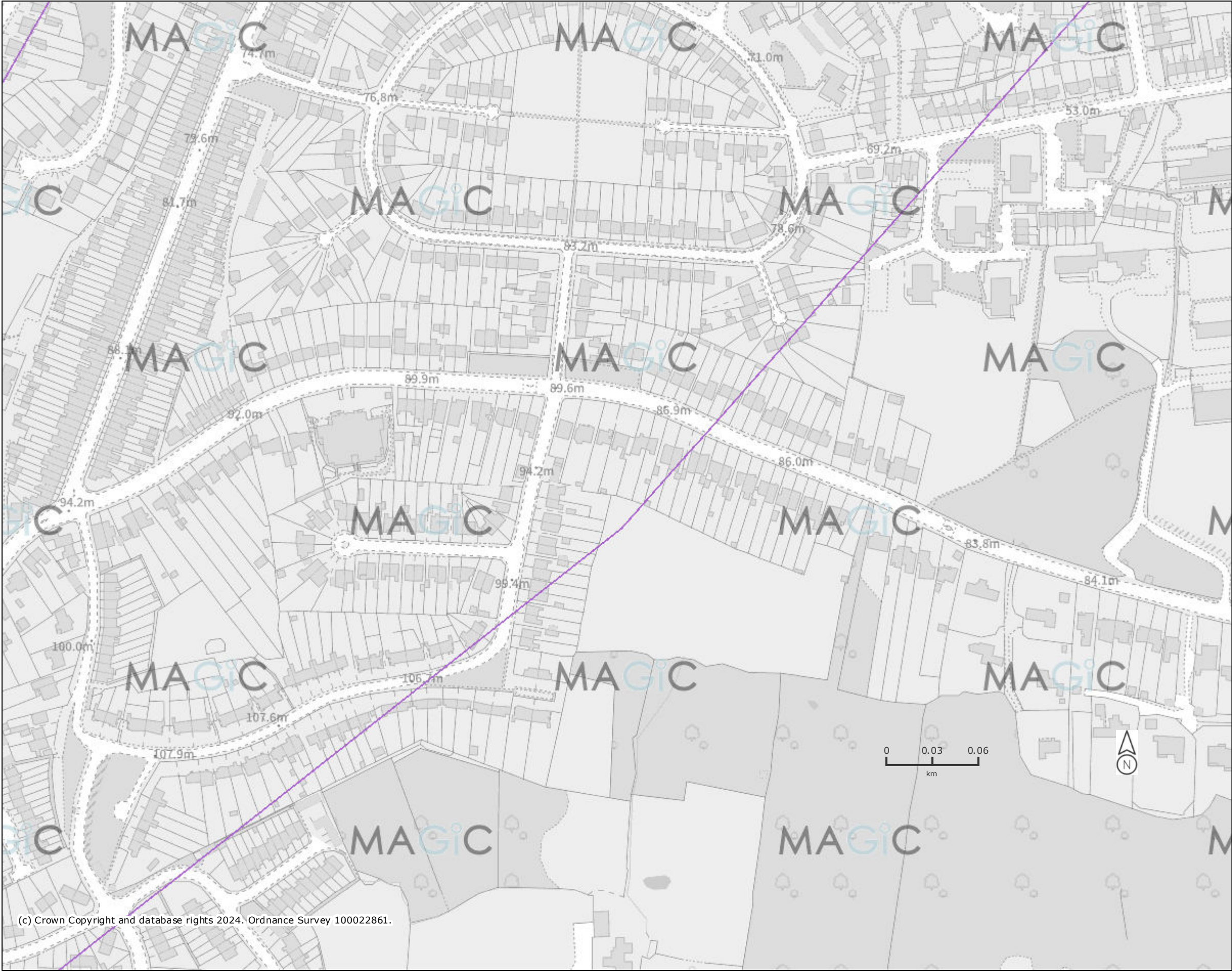
	31/01/2024 Wednesday	01/02/2024 Thursday	02/02/2024 Friday	03/02/2024 Saturday	04/02/2024 Sunday	05/02/2024 Monday	06/02/2024 Tuesday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	1707	1778	1757	1277	973	1668	1855	1753	1574
Mean Speed	21.4	21.6	21.7	22.1	22.0	21.5	21.7	21.6	21.7
85%ile Speed	24.8	24.9	25.0	25.1	25.6	25.1	24.9	24.9	25.1
No. Vehicles > 20 MPH Limit	1093	1233	1198	939	690	1097	1295	1183	1078
% Vehicles > 20 MPH Limit	64.0	69.3	68.2	73.5	70.9	65.8	69.8	67.4	68.8
No. Vehicles > 35 MPH	4	3	0	6	2	0	5	4	4
% Vehicles > 35 MPH	0.2	0.2	0.0	0.5	0.2	0.0	0.3	0.2	0.3

Eastbound & Westbound

	31/01/2024 Wednesday	01/02/2024 Thursday	02/02/2024 Friday	03/02/2024 Saturday	04/02/2024 Sunday	05/02/2024 Monday	06/02/2024 Tuesday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	3566	3748	3723	2738	2030	3524	3825	3677	3308
Mean Speed	21.3	21.6	21.4	21.7	21.8	21.4	21.4	21.4	21.5
85%ile Speed	24.7	24.7	24.8	24.9	25.3	24.7	24.7	24.7	24.8
No. Vehicles > 20 MPH Limit	2282	2591	2453	1897	1410	2315	2564	2441	2216
% Vehicles > 20 MPH Limit	64.0	69.1	65.9	69.3	69.5	65.7	67.0	66.3	67.2
No. Vehicles > 35 MPH	9	8	0	11	6	2	7	7	7
% Vehicles > 35 MPH	0.3	0.2	0.0	0.4	0.3	0.1	0.2	0.2	0.2

Appendix C

Environmental Constraints



(c) Crown Copyright and database rights 2024. Ordnance Survey 100022861.

Legend

Areas of Outstanding Natural Beauty (England)

Limestone Pavement Orders (England)

Local Nature Reserves (England)

National Nature Reserves (England)

Ramsar Sites (England)

Proposed Ramsar Sites (England)

Sites of Special Scientific Interest Units (England)

Favourable Condition

Unfavourable Recovering

Unfavourable no change

Unfavourable Declining

Part Destroyed

Destroyed

Not Assessed

Sites of Special Scientific Interest (England)

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

Special Areas of Conservation (England)

Possible Special Areas of Conservation (England)

Special Protection Areas (England)

Potential Special Protection Areas (England)

Biosphere Reserves (England)

Less Favoured Areas (England)

Disadvantaged

Severely Disadvantaged

Nitrate Vulnerable Zones 2017 Designations (England)

Wild Bird General Licence Protected Sites Condition Zone (England)

Projection = OSGB36
xmin = 372800
ymin = 163000
xmax = 374100
ymax = 163600

00.0450.09

km

Map produced by MAGIC on 6 March, 2024.
Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

Flood map for planning

Your reference
Englishcombe

Location (easting/northing)
373636/163291

Created
6 Mar 2024 10:09

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

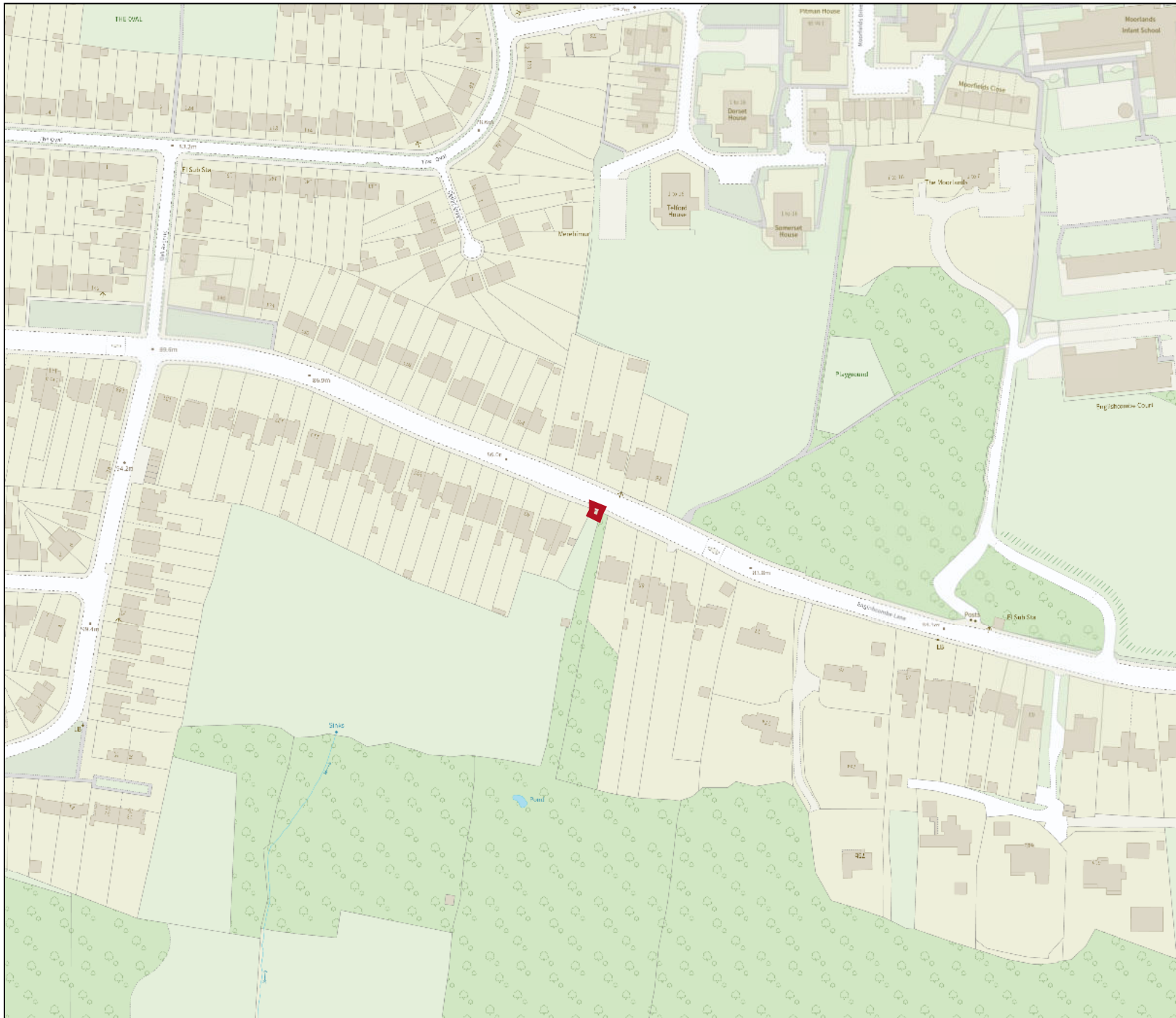
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>





Flood map for planning

Your reference
Englishcombe

Location (easting/northing)
373636/163291

Scale
1:2500

Created
6 Mar 2024 10:09

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area

0 20 40 60m

Arcadis Consulting (UK) Limited

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BS2 0FR

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[arcadis.com](https://www.arcadis.com)

Appendix E

Swept Path Analysis

VIEWPORT A - VEHICLE TRACKING ENTERING PROPOSED DEVELOPMENT SITE

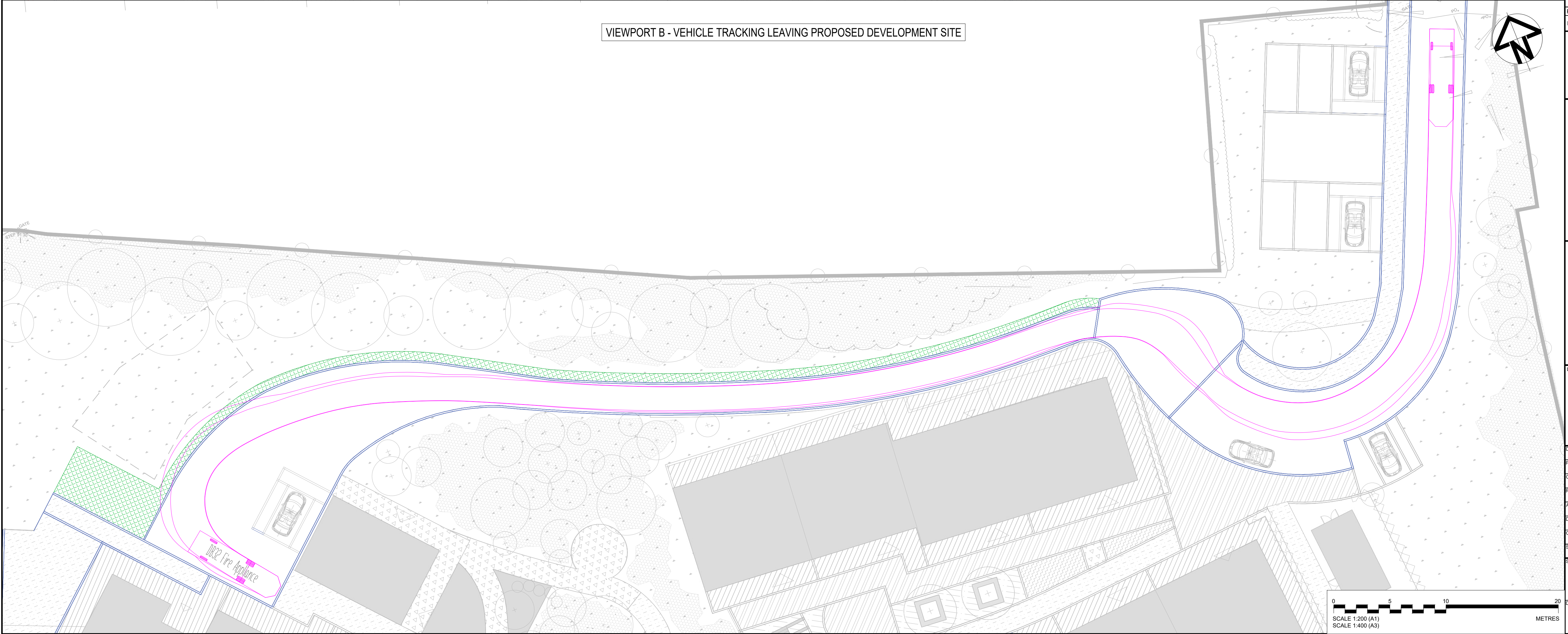
Jazz Fire Appliance

0 5 10 20
SCALE 1:200 (A1)
SCALE 1:400 (A3)
METRES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DO NOT SCALE FROM THIS DRAWING.
3. SWEPT PATH ANALYSIS CARRIED OUT IS BASED ON 30210292-ARC-XX-XX-DR-LA-00012 P01.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONCEPT DESIGN DRAWINGS FOR THIS SCHEME.

Technical drawing of the bus chassis showing dimensions: total length 8.68m, wheelbase 3.81m, and front overhang 1.52m.

Overall Length	8.680m
Overall Width	1.80m
Overall Body Height	1.50m
Min Body Ground Clearance	7.52m
Max Track Width	1.21m
Lock to Lock time	0.05s
Kerb to Kerb Turning Radius	7.910m



VIEWPORT B - VEHICLE TRACKING LEAVING PROPOSED DEVELOPMENT SITE

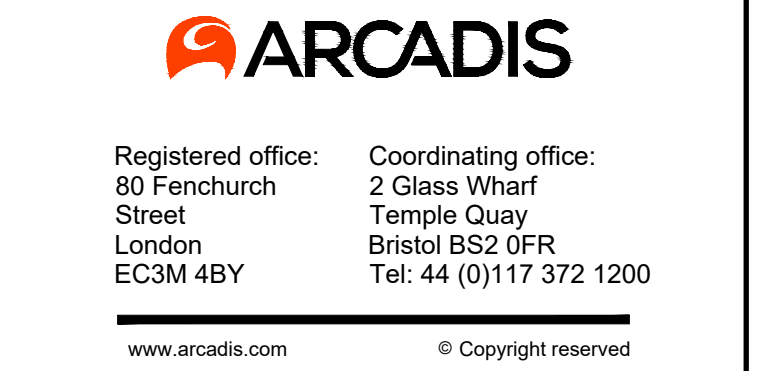
0 5 10 20
SCALE 1:200 (A1)
SCALE 1:400 (A3)
METRES

**Bath & North East
Somerset Council**

Improving People's Lives

Project: ENGLISHCOMBE LANE
SUPPORTED HOUSING

Site	Client
ENGLISHCOMBE LANE BATH, BA2 2EH	BATH & NORTH EAST SOMERSET COUNCIL



Registered office: 80 Fenchurch Street
London EC3M 4BY

Coordinating office: 2 Glass Wharf
Temple Quay
Bristol BS2 0FR
Tel: 44 (0)117 372 1200

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Drawing Title:

INTERNAL SITE LAYOUT
SWEPT PATH ANALYSIS
SHEET 02 OF 02

Designed:	Signed	Date
J.NAWAZ	JN	20/03/2024
Produced:	Signed	Date
J.NAWAZ	JN	20/03/2024
Checked:	Signed	Date
R.YAPP	RY	20/03/2024
Reviewed:	Signed	Date
L.ROBINSON	LR	20/03/2024
Approved:	Signed	Date
N.WESTWOOD	NW	20/03/2024

Design Stage: CONCEPT DESIGN		
Original Size: A1	Grid: OS	Datum: AOD
Suitability Code: S2	Scale: As Shown	Project Number: 30210292

FOR INFORMATION	
Drawing Number: 30210292 - ARC - XX XX - DR - HE - 00002	Revision: P01

Drawing Number:	Revision:
30210292 - ARC - XX XX - DR - HE - 00002	P01

Appendix F

TRICS Outputs

TRIP RATE CALCULATION SELECTION PARAMETERS:

Calculation Reference: AUDIT-111306-240221-0259

Land Use : 03 - RESIDENTIAL
Category : P - ASSISTED LIVING
MULTI-MODAL TOTAL VEHICLES

<u>Selected regions and areas:</u>		
02	SOUTH EAST	
	WS WEST SUSSEX	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
11	SCOTLAND	
	AD ABERDEEN CITY	1 days

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

Arcadis 2 Glass Wharf Bristol

Licence No: 111306

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: 24 to 54 (units:)
Range Selected by User: 24 to 66 (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: 01/01/15 to 27/09/22

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 2 days
Friday 1 days

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

Selected survey types:

Manual count 3 days
Directional ATC Count 0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2
Neighbourhood Centre (PPS6 Local Centre) 1

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

Selected Location Sub Categories:

Residential Zone 2
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 5 days - Selected
Servicing vehicles Excluded X days - Selected

Secondary Filtering selection:

Use Class:

C3 3 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:

20,001 to 25,000	1 days
25,001 to 50,000	2 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	3 days
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This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
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	3 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	3 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AD-03-P-01	ASSISTED LIVING		ABERDEEN CITY
	ST MACHAR DRIVE			
	ABERDEEN			
	OLD ABERDEEN			
	Neighbourhood Centre (PPS6 Local Centre)			
	No Sub Category			
	Total No of Dwellings:	24		
	Survey date: WEDNESDAY	20/11/19	Survey Type: MANUAL	
2	NF-03-P-02	ASSISTED LIVING		NORFOLK
	LAKENFIELDS			
	NORWICH			
	LAKENHAM			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	40		
	Survey date: FRIDAY	22/11/19	Survey Type: MANUAL	
3	WS-03-P-01	ASSISTED LIVING		WEST SUSSEX
	DURRINGTON LANE			
	WORTHING			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	54		
	Survey date: WEDNESDAY	18/05/22	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.

Arcadis 2 Glass Wharf Bristol

Licence No: 111306

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING
MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.44

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	39	0.093	3	39	0.042	3	39	0.135
08:00 - 09:00	3	39	0.102	3	39	0.068	3	39	0.170
09:00 - 10:00	3	39	0.220	3	39	0.169	3	39	0.389
10:00 - 11:00	3	39	0.186	3	39	0.144	3	39	0.330
11:00 - 12:00	3	39	0.153	3	39	0.186	3	39	0.339
12:00 - 13:00	3	39	0.136	3	39	0.127	3	39	0.263
13:00 - 14:00	3	39	0.169	3	39	0.178	3	39	0.347
14:00 - 15:00	3	39	0.102	3	39	0.186	3	39	0.288
15:00 - 16:00	3	39	0.110	3	39	0.102	3	39	0.212
16:00 - 17:00	3	39	0.085	3	39	0.102	3	39	0.187
17:00 - 18:00	3	39	0.059	3	39	0.076	3	39	0.135
18:00 - 19:00	3	39	0.042	3	39	0.042	3	39	0.084
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.457			1.422			2.879

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

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

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Parameter summary

Trip rate parameter range selected: 24 - 54 (units:)
 Survey date range: 01/01/15 - 27/09/22
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

Arcadis 2 Glass Wharf Bristol

Licence No: 111306

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	39	0.000	3	39	0.000	3	39	0.000
08:00 - 09:00	3	39	0.017	3	39	0.017	3	39	0.034
09:00 - 10:00	3	39	0.000	3	39	0.000	3	39	0.000
10:00 - 11:00	3	39	0.000	3	39	0.000	3	39	0.000
11:00 - 12:00	3	39	0.000	3	39	0.000	3	39	0.000
12:00 - 13:00	3	39	0.000	3	39	0.000	3	39	0.000
13:00 - 14:00	3	39	0.000	3	39	0.000	3	39	0.000
14:00 - 15:00	3	39	0.000	3	39	0.000	3	39	0.000
15:00 - 16:00	3	39	0.000	3	39	0.000	3	39	0.000
16:00 - 17:00	3	39	0.000	3	39	0.000	3	39	0.000
17:00 - 18:00	3	39	0.000	3	39	0.000	3	39	0.000
18:00 - 19:00	3	39	0.000	3	39	0.000	3	39	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.017			0.034

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.

Arcadis 2 Glass Wharf Bristol

Licence No: 111306

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	39	0.008	3	39	0.000	3	39	0.008
08:00 - 09:00	3	39	0.000	3	39	0.000	3	39	0.000
09:00 - 10:00	3	39	0.008	3	39	0.000	3	39	0.008
10:00 - 11:00	3	39	0.000	3	39	0.008	3	39	0.008
11:00 - 12:00	3	39	0.008	3	39	0.000	3	39	0.008
12:00 - 13:00	3	39	0.000	3	39	0.000	3	39	0.000
13:00 - 14:00	3	39	0.000	3	39	0.008	3	39	0.008
14:00 - 15:00	3	39	0.000	3	39	0.000	3	39	0.000
15:00 - 16:00	3	39	0.000	3	39	0.000	3	39	0.000
16:00 - 17:00	3	39	0.000	3	39	0.000	3	39	0.000
17:00 - 18:00	3	39	0.000	3	39	0.000	3	39	0.000
18:00 - 19:00	3	39	0.000	3	39	0.000	3	39	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.016			0.040

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

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

Arcadis 2 Glass Wharf Bristol

Licence No: 111306

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	39	0.093	3	39	0.042	3	39	0.135
08:00 - 09:00	3	39	0.119	3	39	0.076	3	39	0.195
09:00 - 10:00	3	39	0.263	3	39	0.212	3	39	0.475
10:00 - 11:00	3	39	0.203	3	39	0.178	3	39	0.381
11:00 - 12:00	3	39	0.169	3	39	0.212	3	39	0.381
12:00 - 13:00	3	39	0.195	3	39	0.186	3	39	0.381
13:00 - 14:00	3	39	0.186	3	39	0.203	3	39	0.389
14:00 - 15:00	3	39	0.127	3	39	0.237	3	39	0.364
15:00 - 16:00	3	39	0.127	3	39	0.085	3	39	0.212
16:00 - 17:00	3	39	0.119	3	39	0.127	3	39	0.246
17:00 - 18:00	3	39	0.051	3	39	0.059	3	39	0.110
18:00 - 19:00	3	39	0.051	3	39	0.059	3	39	0.110
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.703			1.676			3.379

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.

Arcadis 2 Glass Wharf Bristol

Licence No: 111306

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	39	0.008	3	39	0.008	3	39	0.016
08:00 - 09:00	3	39	0.017	3	39	0.000	3	39	0.017
09:00 - 10:00	3	39	0.025	3	39	0.017	3	39	0.042
10:00 - 11:00	3	39	0.042	3	39	0.034	3	39	0.076
11:00 - 12:00	3	39	0.076	3	39	0.051	3	39	0.127
12:00 - 13:00	3	39	0.017	3	39	0.034	3	39	0.051
13:00 - 14:00	3	39	0.034	3	39	0.068	3	39	0.102
14:00 - 15:00	3	39	0.017	3	39	0.025	3	39	0.042
15:00 - 16:00	3	39	0.042	3	39	0.025	3	39	0.067
16:00 - 17:00	3	39	0.017	3	39	0.034	3	39	0.051
17:00 - 18:00	3	39	0.025	3	39	0.017	3	39	0.042
18:00 - 19:00	3	39	0.017	3	39	0.008	3	39	0.025
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.337			0.321			0.658

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.

Arcadis 2 Glass Wharf Bristol

Licence No: 111306

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING
MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	39	0.008	3	39	0.000	3	39	0.008
08:00 - 09:00	3	39	0.000	3	39	0.008	3	39	0.008
09:00 - 10:00	3	39	0.017	3	39	0.000	3	39	0.017
10:00 - 11:00	3	39	0.000	3	39	0.000	3	39	0.000
11:00 - 12:00	3	39	0.000	3	39	0.000	3	39	0.000
12:00 - 13:00	3	39	0.008	3	39	0.000	3	39	0.008
13:00 - 14:00	3	39	0.000	3	39	0.000	3	39	0.000
14:00 - 15:00	3	39	0.000	3	39	0.000	3	39	0.000
15:00 - 16:00	3	39	0.000	3	39	0.000	3	39	0.000
16:00 - 17:00	3	39	0.000	3	39	0.000	3	39	0.000
17:00 - 18:00	3	39	0.000	3	39	0.008	3	39	0.008
18:00 - 19:00	3	39	0.000	3	39	0.000	3	39	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.033			0.016			0.049

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.

Arcadis 2 Glass Wharf Bristol

Licence No: 111306

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.44

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	39	0.119	3	39	0.051	3	39	0.170
08:00 - 09:00	3	39	0.136	3	39	0.085	3	39	0.221
09:00 - 10:00	3	39	0.314	3	39	0.229	3	39	0.543
10:00 - 11:00	3	39	0.246	3	39	0.220	3	39	0.466
11:00 - 12:00	3	39	0.254	3	39	0.263	3	39	0.517
12:00 - 13:00	3	39	0.220	3	39	0.220	3	39	0.440
13:00 - 14:00	3	39	0.220	3	39	0.280	3	39	0.500
14:00 - 15:00	3	39	0.144	3	39	0.263	3	39	0.407
15:00 - 16:00	3	39	0.169	3	39	0.110	3	39	0.279
16:00 - 17:00	3	39	0.136	3	39	0.161	3	39	0.297
17:00 - 18:00	3	39	0.076	3	39	0.085	3	39	0.161
18:00 - 19:00	3	39	0.068	3	39	0.068	3	39	0.136
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.102			2.035			4.137

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

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

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