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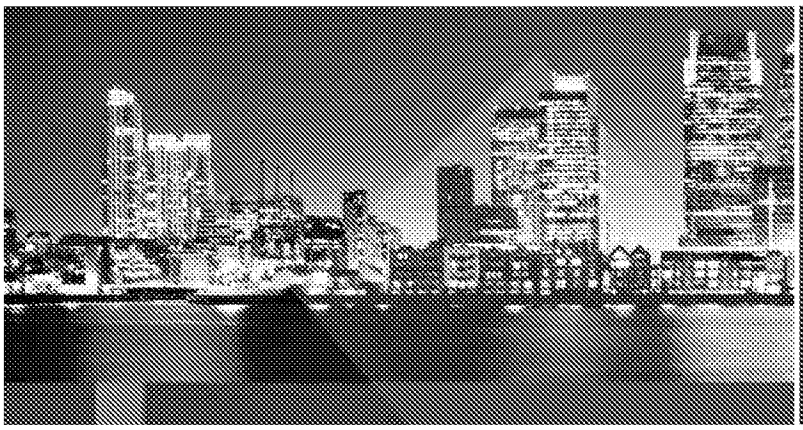
Transport Statement

Land at Toddington Lane, Toddington, West Sussex, BN17 7PN

Prepared for Worthing Homes

By YES Engineering Group Ltd

September2024



Revision History

Revision N°	Prepared By	Description	Date

Document Acceptance

Action	Name	Signed	Date
Prepared by	Jocelyn Willis	[redacted]	September2024
Reviewed by	Paul Willis		September2024
Approved by	Kathryn Backhouse		September2024
on behalf of	YES Engineering Group Ltd		

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1 Introduction

YES Engineering Group Ltd was appointed by Worthing Homes to produce a Transport Statement (TS) to accompany a planning application for the provision of 10 new residential units (C3 use) at Land off Toddington Lane, Toddington, West Sussex, BN17 7PN. (The Site)

A location plan is shown at **Figure 1.1** below, where it can be seen that the development is bound to the north and east by Toddington Lane, to the south by railway line and to the west by an industrial area.

Figure 1.1 – Location Plan

Site lies within the administrative area of Arun District Council (local planning authority) and the West Sussex County Council (WSCC) (highways authority).

1.1 Development Proposals

The development proposals involve the demolition of the existing buildings and the redevelopment of the Site to provide 10 residential dwellings.

- 6 x 2-bed/4-person units
- 4 x 3-bed/5-person units

21 car parking spaces and 14 cycle parking spaces will be provided. The architects' proposed layout plan is attached as **Appendix A**.

1.2 Previous Applications

Appeal Ref: APP/C3810/W/18/3197149

The application Ref LU/162/17/PL, dated 12 May 2017, was refused by notice dated 21st November 2017. The development proposed is the demolition of existing building, erection of 10 residential dwellings (Use Class C3) with associated open space, landscaping, parking, and access.

The appeal was allowed, and planning permission was granted for the demolition of existing building, erection of 10 residential dwellings (Use Class C3) with associated open space, landscaping, parking, and access at Land at Toddington Lane, Littlehampton, Wick, West Sussex BN17 7PP in accordance with the terms of the application, Ref LU/162/17/PL, dated 12 May 2017.

The main issues: '*are the effect of the proposal on the character and appearance of the area; highway safety; and the provision of a financial contribution towards infrastructure*.

Highway safety

The alternative site layout submitted by the appellant (Ref 6436 (00) 005 Rev A) identifies a number of minor amendments to the scheme. I have taken these into account in assessing the proposal.

The proposal would utilise the existing access which is a small distance from the railway level crossing on Toddington Lane. Toddington Lane provides a link between Lyminster Road and Littlehampton Road. The highway at the junction with the access road is subject to a 30mph speed limit, and at this point on Toddington Lane vehicles are physically required to slow down in order to travel around a bend in the road at this point of the lane.

The access would be in excess of 12 metres at the bellmouth with Toddington Lane. Whilst the width of the access at 4 metres would allow the passing of 2 estate cars, it is acknowledged in the evidence that at least 2 vans could be expected to access the site each day. A width of 4 metres would not allow a service vehicle, or a van to comfortably pass another vehicle. The amended plan proposes an access some 4.8 metres in width and this would allow two vehicles to comfortably pass each other.

Whilst vehicles reduce in speed towards the bend, if a reduced access were permitted it may lead to vehicles having to wait on Toddington Lane whilst other vehicles exit the site. I have serious concerns that there may be events in which this would lead to cars seeking to pass those waiting, and thereby creating hazards on the bend in the road. On this basis I consider that the access as proposed in the amended plans would comfortably accommodate vehicles and would negate the possibility of cars having to wait on the highway.

The access would have good inter visibility along its length and within the turning area to allow vehicles to give way to each other. This arrangement would not be dissimilar to other arrangements within the locality which appear to work comfortably and safely.

The initial plan showed a footpath of 1.5 metres around the site, with soft landscaping to the front of the dwellings facing onto Toddington Lane. Whilst opening up the boundary of the site would contribute to the visibility, I am conscious that the bend itself is incredibly sharp and I noticed at the time of my site visit that the lane carries a relatively steady flow of traffic, including service vehicles. In order to increase the level of visibility to a suitable degree, taking into account the possibility of waiting traffic on the bend, I consider that the wider visibility identified in the amended plan alongside the 2 metre footpath and reduced height of soft landscaping would suitably accommodate the site and ensure that the access would remain safe for vehicle users and pedestrians. Visibility splays identify that a minimum of 23 metres could be achieved in the trailing traffic direction, and 43 metres in the leading traffic direction.

Therefore, subject to ensuring that the splays are maintained, which could be secured by a condition, the proposed splays would provide adequate and safe access. Accordingly I find that the proposed access as shown in the amended plan would safely accommodate the passing of vehicles on the access way itself, and would allow safe access and egress from the appeal site onto Toddington Lane.

Pedestrian access to the site would be provided via access points on the northern boundary, and the main access to the site. The original suggested width of the footpath would accord with the guidance in Manual for Streets. However, the plans do not identify areas of street lighting, and the footpath is on a sharp bend. The proposed ramped access would be on the northern side of the site, and pedestrians would need to walk around the site to utilise the ramp. Accordingly I consider that the amended plan delineating a 2.0 metre footpath would be more suitable for this particular site, and would ensure that those with limited mobility or those with pushchairs would be able to use the footpath safely to access the site via the ramp.

It would not be possible for the appellant to arrange for the boundary footpath to link to the new development sites towards Lyminster Road due to a change in land ownership. I am satisfied that the footpath would be provided around the entirety of the appeal site, and in due course it could be linked with the wider footway network.

Overall, I am satisfied that the appellant has secured three safe and accessible points of access for pedestrians. The provision of a boundary footpath is a benefit on this site, and would significantly improve the current position. Whilst I appreciate that it would be preferable for sites to come forward in conjunction with each other to ensure that highway benefits are secured at the same time, each application must be considered on its own merits in accordance with the development plan. I do not consider that it would be justifiable to refuse the proposal on the basis that it did not provide a footpath link when that link is dependent on the use of land outside of the control of the appellant.

A number of the proposed houses within the scheme would be configured to front onto Toddington Lane, with parking provided to the rear of the properties. I consider that due to the location of soft planting to the front of the site, and the ground floor layout which would allow for access to the rear of the properties, the parking to the rear would be fully utilised and the orientation of the properties would not encourage occupants to park on Toddington Lane.

I do not consider that it would be suitable to reconfigure the dwellings to provide parking to the front facing onto Toddington Lane. It has not been demonstrated that parking at the front of the site directly accessing Toddington Lane could be safely accommodated. Vehicles using

such a cross over may result in conflict with pedestrians, and have an adverse impact on highway safety and I am satisfied that the configuration of the dwellings as proposed would provide a better option with regards to highway safety.

The original scheme proposed parking for each unit, along with 3 visitor spaces in accordance with County Council standards. Although on street parking is not restricted, I am concerned that the level of visitor parking may result in some overspill. Due to the nature and orientation of the site and the bend, overspill parking may have an adverse impact on highway safety.

The amended plan has increased the level of visitor parking which would reduce the pressure to park outside of the site. On the basis of the amended drawing I consider the scheme to be acceptable with regards to the level of parking.

Accordingly, I find that the proposal would provide a safe means of access for vehicles and pedestrians. On-site parking would be suitable for the proposed development. It would therefore comply with Policy T SP1 of the Local Plan and the Framework with regards to ensuring safe access on to the highway network and contributing to highway improvements.'

1.3 Pre-Application Advice

Pre application advice was received from Arun District Council on 24th July 2024 (Ref: PAA/41/24). In relation to this application the following points were raised. A fully copy of this advice can be found at **Appendix B.**

TRANSPORT AND PARKING

Policy T SP1 of the ALP supports development which incorporates appropriate levels of parking in line with the West Sussex County Council guidance on parking provision. Arun District Council adopted Parking Standards SPD in Jan 2020.

The existing access is to be utilised with a new (or widened) access road being created and extended westwards, to the southern section of the site. The driveway will serve the new development and 1-3 Toddington Farm Cottages. Turning appears to be possible within the layout. It will need to be demonstrated that larger vehicles and refuse trucks can turn on site to ensure the safety of other users of Toddington Lane. Entry onto the lane should be achievable in forward gear. The 4.8m wide internal access road is wide enough to facilitate passing of two vehicles, and the passing of a vehicle sharing the space with pedestrians. Visibility splays will need to be demonstrated on plan.

The 2 and 3 bed dwellings should have 2 parking spaces each. This has been provided. Parking spaces should measure 2.5m by 5m. Given the layout of the spaces i.e in tandem, it is assumed that parking spaces will be allocated. The ADG states that all parking spaces on a driveway or within a garage, should be provided with 'active' EV charging points. All other spaces should be provided with 30% 'active' EV spaces, with all spaces provided with the necessary ducting to allow for future conversion. The correct provision of EV charging point will be required. Please note, although not a material consideration within an application, Building Regulations Part S may require a more stringent EV charging provision.

A 20% ratio is applied to account for visitor parking equating to an additional 2 spaces, only 1 has been provided however it is believed that another could fit on site. The northern block of dwellings has spaces directly to the front of 2 of the properties. The tandem spaces may negatively impact the nearest dwellings with noise and light pollution. With the recommended layout change noted above, this issue may rectify itself. If not, changes to the layout should include a buffer zone between un-associated parking spaces and dwellings.

Cycle parking can be provided in the rear garden sheds. 2-bed houses/flats require 1 cycle parking space, 3-bed houses require 2 cycle parking spaces.

The proposal complies with T SP1 of the Arun Local Plan.

1.4 National Policy

National Planning Policy Framework (2023)

The National Planning Policy Framework (NPPF) adopted in 2023 sets out the Government's economic, environmental and social planning policies for England. Taken together, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations.

Section 9 – Promoting Sustainable Transport is relevant and is reproduced below.

108. Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

a) the potential impacts of development on transport networks can be addressed;

b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

c) opportunities to promote walking, cycling and public transport use are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

109. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

110. Planning policies should:

a) support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;

b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;

c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;

d) provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans);

e) provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements; and

f) recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time–taking into account their economic value in serving business, leisure, training and emergency service needs, and the Government's General Aviation Strategy.

111. If setting local parking standards for residential and non-residential development, policies should take into account:

a) the accessibility of the development;

b) the type, mix and use of development;

c) the availability of and opportunities for public transport;

d) local car ownership levels; and

e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

112. Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework).In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists.

113. Planning policies and decisions should recognise the importance of providing adequate overnight lorry parking facilities, taking into account any local shortages, to reduce the risk of parking in locations that lack proper facilities or could cause a nuisance. Proposals for new or expanded distribution centres should make provision for sufficient lorry parking to cater for their anticipated use.

Considering development proposals

114. In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users;

c) 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 46; and

d) 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.

115. 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.

116. Within this context, applications for development should:

a) 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;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) 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;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

117. 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.

1.5 Regional Policy

The West Sussex Transport Plan (WSTP)

Adopted 1st April 2022

As a local transport authority, the County Council is a consultee in the land use planning process. The County Council works with LPAs to develop plans for development by providing technical advice to inform planning decisions and where necessary to submit formal representations to be considered as part of local or neighbourhood plan examinations. In doing so, the County Council will have regard to this Plan to ensure that transport and land use planning is closely aligned. Spatial strategies such as focusing development around transport hubs, have the potential to support delivery of this Plan. Therefore, early involvement of the County Council in the preparation of local plans, including development of spatial strategy options, is both necessary and desirable. However, it is up to the LPAs to decide how and when the County Council should be involved in plan-making and the weight to be given to its views.

In line with Government guidance, the County Council encourages developers to front load the planning process to avoid potentially costly or unexpected issues at the planning application stage by requesting pre application advice. In providing advice on planning applications, the County Council will have regard to all aspects of this Plan, including those

which are not the direct responsibility of the County Council such as shared transport services. The County Council also maintains guidance for developers on matters such as preparation of transport assessments and parking at new developments that will also be taken into account. The County Council intends to develop a Design Guide for developers setting out its expectations for highway design and standards for highway adoption.

The County Council would like to see LPAs and developers taking a 'vision led' approach to development and improvement of the transport network. This approach should place emphasis on place-shaping and creating liveable neighbourhoods with infrastructure to support travel by a range of modes of transport rather than designing to cater for forecast traffic demand. Reference should also be made to the Creating Healthy and Sustainable Places Framework for West Sussex 2021.

On occasions, it may be necessary to comment on matters through the land use planning process that are not specifically addressed by this Plan. In these cases, the County Council will provide advice by having particular regard to the vision and objectives of this Plan.

West Sussex County Council

Guidance on Parking at New Developments (September 2020)

The County Council, in its role as the local highway authority, is a statutory consultee on planning applications that affect the highway. The parking guidance is needed to help determine the County Council's response to consultations on planning applications and the preparation of planning policies. The County Council provides advice to Local Planning Authorities (LPA) on the transport implications of developments to inform their decision-making. The County Council is also consulted during the preparation of local and neighbourhood plans and may provide advice on the soundness of policies that relate to parking in new developments.

The County Council's overall ambition for parking at new developments is to ensure that sufficient parking is provided to meet the needs of the development while maintaining highway network operations, protecting surrounding communities and pursuing opportunities to encourage use of sustainable modes of transport. This ambition is not intended to replace relevant national and local planning policy on this issue.

This guidance note outlines the County Council's approach to parking at new developments (both residential and non-residential). It should be used to help determine the level of parking at new developments and provides the basis for the County Council's advice to the LPAs in West Sussex on planning applications and the soundness of policies relating to parking at new developments.

It replaces the County Council's previous guidance: 'Standards and Transport Contributions Methodology' (2003) and 'Guidance for Parking in New Residential Developments' (2010).

It should be noted that a number of the LPAs have adopted or draft local plans that set out their approach to parking. Similarly draft or 'made' neighbourhood (or town) plans outline local conditions and, in some cases, propose local parking standards. Each LPA will decide how to take forward parking policies. Some authorities are expected to use the County Council's new guidance, while others will prepare their own supplementary planning documents based on the County Council's guidance or similar evidence. In cases where LPAs have their own parking standards, these will also be referred to, but the County Council

would only consider objecting to development on parking grounds where the proposed parking arrangements do not comply with WSCC guidance as this could result in a highway safety or capacity issue.

Principle A: Accommodating Parking Demand

Parking provision should be sufficient to accommodate parking demand while exploiting the potential for sustainable travel, minimising adverse effects on road safety, and avoiding increased on-street parking demand.

If parking could reasonably be expected to take place in existing streets, then it will be necessary to demonstrate through a parking capacity survey (see Section 7) that there is sufficient capacity to accommodate the expected parking demand.

Expected levels of parking demand in residential developments should be determined, where appropriate taking account of; location (parking behaviour zone), dwelling size (rooms), parking provision (allocated or unallocated), and arrangements for control/enforcement (charges, etc). Calculation of expected levels of parking demand should normally be based on local or comparable data taking account of forecast changes in demand for the local plan period. Table 2 (Residential Parking Demand) should be used to calculate the parking demand for each development.

Calculation of demand for parking at non-residential developments should normally be based on the land-use; the trip rate associated with the development (including base and forecast mode share); and, the user group of staff/visitors of the site (including shift patterns).

In some areas of the County, parking of commercial vehicles (e.g. Light Goods Vehicles) that are not for private use, can lead to an increase in parking demand. The evidence-base used for calculating parking demand is Census 2011 data which only includes vehicles that are for private use so other commercial vehicles will not be represented in the calculation. Therefore, where relevant, the calculation of parking demand should include an allowance for commercial vehicles that are not for private use but are expected to require parking spaces. Where relevant, the allowance will be based on location-specific evidence provided by the developer.

Principle B: Electric Vehicle Charging Infrastructure

'Active' charging points for electric vehicles should be provided at a minimum of 20% of all parking spaces with ducting provided at all remaining spaces where appropriate to provide 'passive' provision for these spaces to be upgraded in future.

Due to the unprecedented scale of change in vehicle manufacturing and sales, the guidance of electric vehicle car parking places should be reassessed when local plans and supplementary planning documents are reviewed to take account of any recent developments in this technology.

Principle C: Sustainable Transport

In some locations, limiting parking provision should form part of a strategy to exploit the potential for sustainable transport. In order to realistically promote lower levels of car ownership and use whilst avoiding unacceptable consequences, all of the following should be available or provided:

a) travel plan measures, targeted at reducing vehicle ownership levels such as car clubs;
b) high levels of accessibility to non-car modes of travel and to local amenities and
c) facilities; and comprehensive parking controls; i.e. Controlled Parking Zone.

Principle D: Traffic Regulation Orders

In some circumstances, it may be necessary to regulate on-street parking to manage or mitigate the impact of development. If Traffic Regulation Orders (TRO) are required, developers will be expected to fund administration and works costs. In some circumstances, it may be necessary to undertake consultation on TROs to establish the principle of any changes before this can be relied upon.

It may be necessary to prevent residents of new development within Controlled Parking Zones from qualifying for residents and visitors parking permits. Residents could qualify for permits, provided spare on-street capacity exists and the issue of permits will not undermine planning policies and travel plan measures.

Principle E: Design Considerations

Good parking design is as important as providing the appropriate number of spaces. Therefore, developers will be expected to provide balanced, mixed, and flexible parking provision and ensure that all spaces are useable without creating highway safety issues such as vehicles overhanging footways. This should reflect best practice as set out in national guidance and best practise, such as 'Manual for Streets', and 'Car Parking: What Works Where', to ensure high quality design of parking provision.

To ensure that developments function efficiently and as intended, detailed consideration needs to be given to the following at the design stage:

a) Providing garages of sufficient size at new residential developments - If garages are provided they should be at least 6m x 3m internally. If garages meet this requirement, they will be regarded as an allocated parking space of 0.5 and calculations of parking demand will take this into account.
b) Providing adequate visitor parking at new residential developments - Adequate visitor parking is required and this will be influenced by the level of unallocated parking. Table 2 (Residential Parking Demand) should be used to ensure sufficient visitor parking is provided.
c) Where 'active' electric vehicle charging points are provided, if these spaces are dedicated to electric vehicles only, they should be included in the 'total demand' as allocated spaces (see Principle B).
d) Likely cycle ownership and storage – Although good cycle storage facilities are important, requirements should take account of dwelling size and type, and have regard to existing levels of cycle ownership. The minimum levels of cycle provision are set out in Table 1. The distinction has been made for cyclists on the basis of space requirements, availability of secure communal storage facilities, and the anticipated occupants of flats.

e) Spaces for people with disabilities – Provision should be consistent with guidance in 'Manual for Streets'.
f) Motorcycle parking - Provision should be consistent with guidance in 'Manual for Streets'.
g) Space for storage bins at new residential developments – Part H of the Building Regulations suggests storage areas dimensions which are suitable for refuse and recycling bin storage. Development may be required to demonstrate suitable storage to ensure parking provision is available at all times.

Table 1: Minimum levels of cycle provision

Type	Dwelling Size	Cycle Provision (per unit)
Houses	Up to 4 rooms (1 & 2 bed)	1 space
Houses	5+ rooms (3+ bed)	2 spaces
Houses	Multiple Occupation	1 space
Flats	Up to 3 rooms (1 & 2 bed)	0.5 space (if communal storage otherwise same as 1 & 2 bed house)
Flats	4+ rooms (3+ bed)	1 space

Guidance for New Residential Developments

In order to take account of expected future growth in the demand for parking, growth factors have been identified using the Department for Transport's (DfT) National Trip End Model dataset (i.e. TEMPro) for a forecast year of 2033, as this broadly aligns with the end of current local plan periods. The growth factors were applied to 2011 census data to provide expected levels of parking demand in 2033 for different sizes of dwelling in each Parking Behaviour Zone (PBZ) - see Appendix A.

Accordingly, the expected parking demand per dwelling in Table 2 should be used to calculate the number of parking spaces that should be provided in the design of new residential developments. In general, the choice of PBZ should correspond to the location of the development. However, if the location is not regarded as typical of the PBZ; for example, sites near transport hubs, then consideration can be given to using a different PBZ that more closely relates to the location of the development.

Table 2: Residential Parking Demand (spaces per dwelling)

Number of Bedrooms	Number of Habitable Rooms	PBZ1	PBZ2	PBZ3	PBZ4	PBZ5
1	1 to 3	1.5	1.4	0.9	0.9	0.6
2	4	1.7	1.7	1.3	1.1	1.1
3	5 to 6	2.2	2.1	1.8	1.7	1.6
4+	7 or more	2.7	2.7	2.5	2.2	2.2

To accommodate potential variations in parking demand within a single ward, consideration may be given to varying the expected parking demand by 10% above or below, which is based on the average variation in demand between PBZs. In order to determine whether or not this is acceptable, the applicant will need to provide justification through, for example, the provision of parking beat surveys

Arun District Council

Parking Standards Supplementary Planning Document

Adopted 15th January 2020

In October 2018, West Sussex County Council consulted upon the 'West Sussex County Council Guidance on Parking at New Developments May 2019' (WSCC GPND). The purpose of this document was to provide guidance across the County on parking standards and to update the standards that were adopted in 2010.

Arun District Council is using this document and the data behind it to progress a draft Supplementary Planning Document (SPD) for Arun District which will be used in the determination of planning applications. This SPD takes the WSCC GPND approach to parking standards with the exception that:

- standards for Electric Vehicle provision takes a hybrid approach using both the Arun Electric Vehicle Infrastructure Study (2017) requirements alongside the WSCC GPND approach
- rounded figures are given in table 3.1 'Expected level of provision for new residential developments';
- lower stepped percentage Electrical Vehicle Charging Points requirements are required from 2018 to 2030 but include 100% provision of active EV charging facilities target by 2033;
- cycle provision rounded from 0.5 to 1 space for Flats with up to 3 rooms (1 & 2 bed).

The National Planning Policy Framework 2018 (NPPF) highlights the need to consider transport in plan making and in the determination of planning applications.

Further, the Arun Local Plan has policies on parking provision. Policy T SP1 'Transport & Development' requires appropriate levels of car parking and in particular states:

"d. Incorporates appropriate levels of parking in line with West Sussex County Council guidance on parking provision and the forthcoming Arun Design Guide taking into consideration the impact of development upon on-street parking and;..."

This draft SPD seeks to define and formalise these standards in order to give them greater weight when considering planning applications. A forthcoming Arun Design Guide will provide guidance on the design of parking within schemes.

The County Council, in its role as the local highway authority, is a statutory consultee on planning applications that affect the highway and provides advice to local planning authorities on the transport implications of developments to inform planning decisions.

This SPD is intended to outline Arun District Council's approach to parking at new developments (residential/commercial). It should be used to help determine the level of parking at new developments and provide the basis for the County Council's advice to local planning authorities on planning applications.

In preparing their draft guidance, the County Council has taken a strongly evidence-led approach to parking in new developments, to ensure that the number of parking spaces provided is appropriate to the location and the characteristics of the development. The evidence base includes a range of primary and secondary data sources that are intended to

provide a robust and credible evidence base. The following data sources have been reviewed and used to support the development of new guidance, including:

- Census Data;
- The National Highways and Transport Network Public Satisfaction Survey 2017;
- TRICS Database (where surveys exist within West Sussex or relates to the region);
- National research and studies on demand for commercial parking; and
- Parking based surveys at a sample of recent developments undertaken in 2018.
- WSCC Parking Standards Review, May 2018

Guiding Principles for Developments

The following principles set out the District Council's approach to parking in new residential developments and Commercial developments and should be used as a starting point in the design of new developments.

In the preparation of the 'West Sussex County Council Guidance on Parking at New Developments May 2019'., an iterative review of mapped census statistics across the whole of West Sussex was undertaken using iGIS (WSP Geographical Information System interface). The county wide review identified 9 key statistical interest values that informed the identification of Parking Behaviour Zones. For Arun only three zones are identified (these zones are shown in Appendix 1)

Zone 1 - Rural (village locations e.g Walberton)

Zone 2 Peri rural (large villages or small settlements close to town e.g. Angmering, Barnham);

Zone 4 Urban (within towns but not in a central location); and

Principle 1

Parking provision should be sufficient to accommodate demand whilst exploiting the potential for sustainable travel, minimizing adverse effects on road safety and avoiding increased on-street parking demand.

If parking could reasonably be expected to take place in existing streets, then it will be necessary to demonstrate through a parking capacity survey that there is sufficient capacity to accommodate the expected parking demand.

Principle 2

Expected levels of vehicle ownership should be determined taking account of dwelling size (rooms); unit type (houses or flats); unit tenure (private/affordable), parking provision (allocated or unallocated), control/enforcement (charges etc.).

Calculation of expected levels of vehicle ownership should normally be based on local or comparable data which may include Census data and local Household Surveys of new development carried out by the Local Authority where these exist, taking account of forecast changes in demand for the Local Plan period. Where electric vehicle charging points are

provided, these will be included in the "total demand" as a percentage of the allocated spaces.

Principle 3

'Active' charging points for electric vehicles shall be provided at a minimum of 20% (at 2019 levels of provision) of all parking spaces with ducting provided at all remaining spaces where appropriate to provide 'passive' provision for these spaces to be upgraded in future. This applies to residential, retail (supermarkets), Office/industrial, and other Commercial land uses.

Passive provision involves the inclusions of the necessary infrastructure underground in order to enable connection to a charging point at a later date.

Principle 4

In some locations, limiting parking provision will form part of a strategy to exploit the potential for sustainable transport. In order to realistically promote lower levels of car ownership and use whilst avoiding unacceptable consequences, all of the following must be available or provided:

- Travel plan measures, targeted at reducing car use and thereby reduce ownership levels;
- High levels of accessibility to non-car modes of travel and to local amenities and facilities; and
- Comprehensive parking controls; i.e. Controlled Parking Zone

Principal 5

In some circumstances it may be necessary to regulate on-street parking to manage or mitigate the impact of development. If Traffic Regulation Orders (TRO) are required then developers will be expected to fund administration and works costs. However, the starting point is that each development site provides sufficient parking to meet its own demands within the application site.

Principle 6

To ensure that developments function efficiently and as intended, detailed consideration needs to be given to the following:

a) Providing garages of sufficient size -If garages are provided they must be at least 6m x 3m internally. If garages meet this requirement, they will be regarded as an allocated parking space of 0.5 but a car port or parking space of this dimension would count as 1 parking space and calculations of parking demand will take account of this. Where garages do not meet this minimum size, they will not be counted towards meeting parking demand.
b) Providing adequate visitor parking -Adequate visitor parking is required and this will be influenced by the level of unallocated parking.
c) Likely cycle ownership and storage - Good cycle storage facilities are important, but requirements should take account of dwelling size and type. The minimum standard of cycle provision is set out in Table 2.3.
d) Where accessible or wheelchair friendly accommodation is proposed or required, parking spacing and garaging should be provided in accordance with the requirements for increased parking space proportions.

e) Impact on "total demand" where electric vehicle charging points are provided.
f) Spaces for disabled people – Provision should be consistent with guidance in "Manual for Streets".
g) Motorcycle parking -Provision should be consistent with guidance in "Manual for Streets".
h) Space for storage bins – Part H of the Building Regulations suggests storage areas dimensions which are suitable for refuse and recycling bin storage. Development may be required to demonstrate suitable storage to ensure parking provision is available at all time.

Table 2.3: Recommended levels of cycle provision.

Type	Dwelling Size	Cycle Provision (per unit)
Houses	Up to 4 rooms (1 & 2 bed)	1 space
Houses	5+ rooms (3+ bed)	2 spaces
Flats	Up to 3 rooms (1 & 2 bed)	1 space (if communal storage otherwise same as 1 & 2 bed house)
Flats	4+ rooms (3+ bed)	1 space

Principle 7

The varying characteristics across the District means that the amount of commercial vehicle parking will vary greatly between one site and another. The amount of car parking should be based on:

a) The development's land use,
b) Trip rate associated with the development (including base and forecast mode share), and
c) The user group of staff/visitors of the site (including shift patterns)

Residential Parking Guidance

The values of parking demand presented in Table 3.1 will be used as expected levels of demand for the design and master planning of new residential developments. These include provision of EV spaces as set out in Principle 3. As part of the Design & Access Statement applicants will be expected to schedule the parking provision, detailing the number of allocated and unallocated spaces including garages and electric vehicle charging spaces (active and passive). The Design & Access Statement should explain how the provision of parking will meet the needs of the development including how these needs are expected to change in the future.

To satisfy the promotion of sustainable travel modes and choices it is considered that a 10% variation below the target parking demand value be allowed where appropriate travel option provision is provided including travel plans, public transport contributions (e.g. through section 106 contributions involving Strategic Allocations and Community Infrastructure Levy once adopted, for other non-strategic sized developments for offsite infrastructure of a strategic nature) and other sustainable travel initiatives. This is also as a result of increasing affordability issues resulting in young people staying with parents for longer.

Table 3.1 – Expected level of provision for new residential developments

Number of bedrooms	Number of habitable rooms	Parking Behaviour Zone		
		1	2	4
1	1 to 3	2	2	1
2	4	2	2	1
3	5 to 6	2	2	2
4+	7 or more	3	3	2

Figures have been rounded to whole numbers compared to the 'West Sussex council guidance on Parking at new Developments May 2019' for ease of interpretation and implementation.

In addition to the above, visitor parking will be required to be provided at a ratio of 20% of the total number of residential units. For example, if there were 100 dwellings proposed, in addition to the allocated residents parking, 20 visitor spaces should be provided. A more flexible approach will be taken with schemes that incorporate flats and on sites close to urban centres.

Table 2.2 – Electric Vehicle Charging Points Minimum Requirements

Year	% of Parking Spaces with Active EV Charging Points	% of Parking Spaces with Active EV Charging Points
	Houses with a driveway or garage	All other developments
2018	100	20
2023	100	30
2028	100	50
2033	100	100

Note: these percentages are lower than shown in the WSCC GPND 2019, but aim to ensure that 100% of new parking spaces associated with new development have active EV charging points by 2033. Unlike the WSCC GPND, the % requirement increase every 5 years instead of incrementally every year. Also, the percentage figures are rounded to the nearest 10, for ease of implementation.

1.6 Scope of the Transport Statement

The report is structured in the following manner:

Section 2.0, The Site and Surrounding Area: Describes the site and the local highway network.

Section 3.0, Development Proposals and Access Arrangements: Provides a summary of the planning application including access, parking and servicing arrangements.

Section 4.0, Access via Alternative Modes of Transport: Investigates the infrastructure and services available for occupants and visitors to the site travelling via alternative modes of transport to the private car. Reference is also made to the linkage between the modes.

Section 5.0, Trip Generation: Considers the level of traffic to be generated by the former/proposed use of the site.

Section 6.0, Construction Logistics: Assesses the construction logistics associated with the development.

Section 7.0, Traffic Impact: Assesses the effect that the additional traffic has on the highway network.

Section 8.0, Parking: Examines the level of car parking available for the development and the adequacy of waiting restrictions prohibiting parking in the area. The Council and national guidance are used to determine the acceptability of the scheme in this location.

Section 9.0, Summary and Conclusions: Provides a summary of the report and draws together its conclusions.

2 THE SITE AND SURROUNDING AREA

The Site currently consists of undeveloped land and hardstanding, with a disused agricultural building and open sided metal structure located in the centre of the Site. It benefits from an existing access from Toddington Lane, which also serves Toddington Farm Cottages.

As set out in Section 1.2 the site was subject to a planning appeal which was allowed, and planning permission was granted for the demolition of existing building, erection of 10 residential dwellings (Use Class C3) with associated open space, landscaping, parking, and access at Land at Toddington Lane, Littlehampton, Wick, West Sussex BN17 7PP in accordance with the terms of the application, Ref LU/162/17/PL, dated 12 May 2017.

2.1 Local Highway Network

Toddington Lane is a single-lane carriageway that runs in a north-south direction before curving westward and extending beyond the northern boundary of the Site. The road is subject to a 30mph speed limit and presently lacks footpaths or street lighting along its entirety. Toddington Lane measures approximately 5.4m in width opposite the entrance of the Site.

Approximately 35m south of the Site entrance, Toddington Lane features a sharp bend and a railway level crossing, necessitating vehicles to reduce speed. Toddington Lane to the south intersects with the A259 Worthing, a primary thoroughfare connecting Littlehampton with Worthing to the east and Bognor Regis to the west.

Arun District Council has outlined plans for North Littlehampton, proposing the closure of the Toddington Lane level crossing and the conversion of the lane into a 'quiet route' primarily for pedestrians, cyclists, and resident access. These plans aim to substantially reduce vehicular traffic.

2.2 Public Transport

Rail

Littlehampton railway station is located approximately 2.3km (10-minute cycle) to the south of the Site operating by Southern Rail.

The typical off-peak train service pe hour is:

- 2 trains per hour to London Victoria via Worthing
- 1 train per hour to Bognor Regis
- 1 train per hour to Portsmouth and Southsea

Littlehampton railway station would provide a suitable and convenient mode of travel for residents and visitors at the new development Site.

Buses

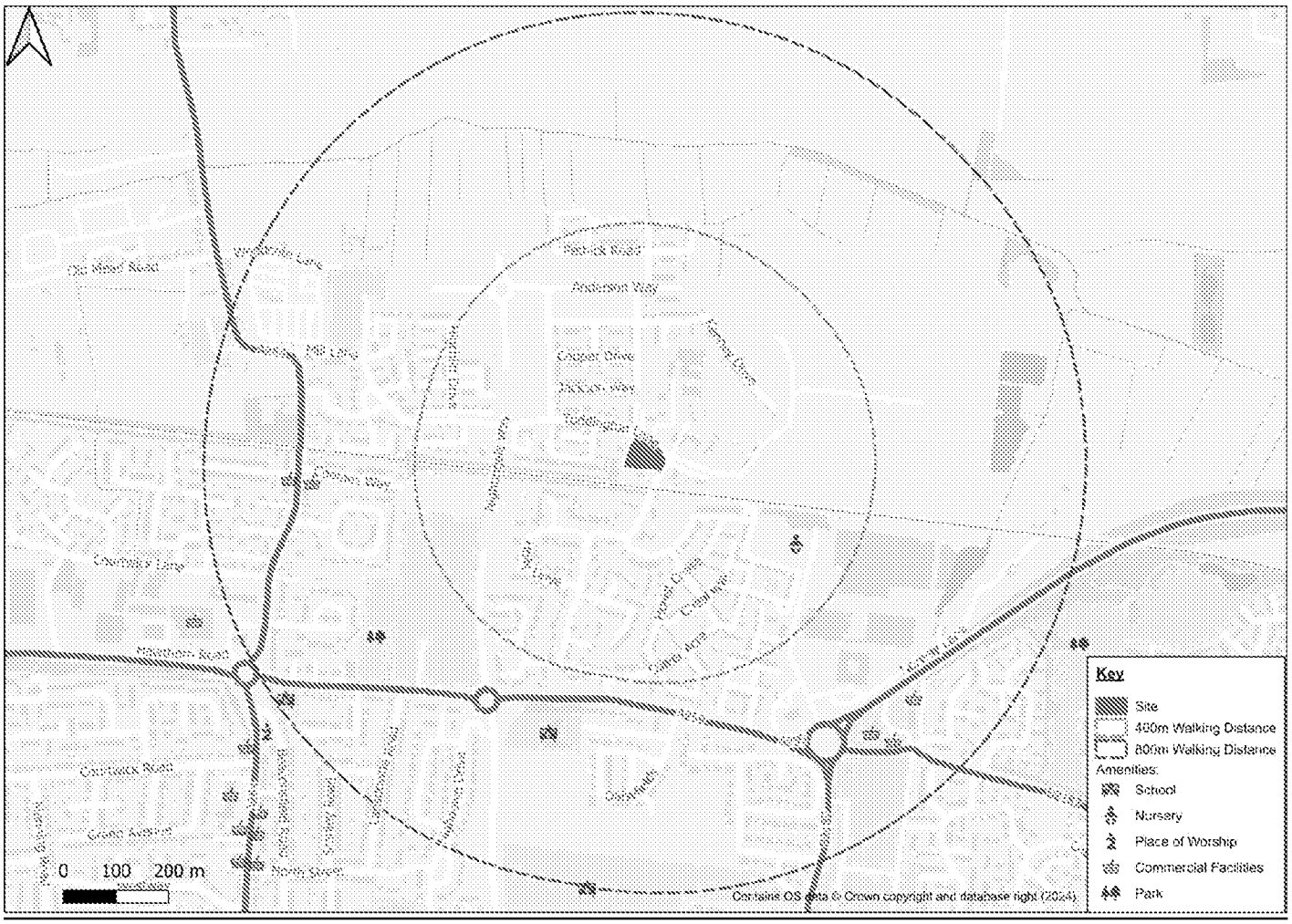
There are 3 bus services available within 1.1km (15-minute walk / 4-minute cycle ride). The nearest bus stop to the Site is located on Seaton Road 1km (14-minute walk / 3-minute cycle ride) west of the Site. This stop provides services running between Holmbush Shopping Centre and Arundel.

2.3 Local Amenities

There are currently no footways or street lighting on either side of the carriageway adjacent to the Site, however a new footway is proposed along the Site frontage of Toddington Lane associated with other planning obligations. To the south of the Site, the area becomes more developed, featuring a higher density of residential properties along with sections of footways and some street lighting. Key amenities in the vicinity include The Co-op Childcare, located 313m (a 5-minute walk) to the southeast; Lyminster Primary School, situated 500m (an 8-minute walk) to the southwest; and Cornfield School, positioned 550m (a 9-minute walk) to the south of the Site. Within the 800m there are several local shops that are easily accessible by foot or cycle

A plan showing the local amenities is set out at **Figure 2.1.**

Figure 2.1 – Local Amenities



3 DEVELOPMENT PROPOSALS AND ACCESS ARRANGEMENTS

The development proposals involve the demolition of the existing buildings and the redevelopment of the Site to provide 10 residential dwellings.

- 6 x 2-bed/4-person units
- 4 x 3-bed/5-person units

The proposed Site layout is attached as **Appendix A**.

3.1 Access Arrangements

The proposal would utilise the existing access as per the consented scheme. Toddington Lane serves as a connection between Lyminster Road and Littlehampton Road. The highway at the junction with the access road is subject to a 30mph speed limit. At this point on Toddington Lane, vehicles are naturally required to slow down to navigate a bend in the road.

The proposed access road will measure 4.8m wide, allowing two vehicles to pass each other comfortably. To ensure that vehicles are able to pass at all times appropriate parking restrictions shall be implemented within the site. **Figure 3.1** illustrates the swept paths of a large car entering and exiting the Site, together with visibility splays consistent with the consented scheme.

Pedestrian access to the Site would be provided through access points on the northern boundary and the main entrance to the Site. A 2m footway will be constructed around the entire Site as part of highway improvements being conducted for a neighbouring development planning obligation. This footway will include ramped access points at both entrances to accommodate those with limited mobility or pushchairs.

3.2 Delivery and Servicing

Refuse collection will be conducted on-site. A turning area will be provided to allow refuse vehicles to enter the Site and exit in a forward gear. On collection days, residents will bring their waste to the kerb for collection, ensuring that waste operatives do not have to drag waste more than 10m. **Figure 3.1** shows a refuse service vehicle entering the Site, turning and exiting in forward gear.

General deliveries, such as those from Amazon, online grocery services, and similar providers, will also occur on-site. Delivery personnel will temporarily park outside the premises to which they are delivering goods. It is anticipated that these stops will be of short duration and part of an existing planed delivery route.

3.3 Parking

The development proposes a total of 21 (including 1 dedicated visitor space) car parking spaces, which exceeds the average car ownership rate of 1.34 vehicles per household, as indicated by the 2021 census data. This provision is more than sufficient to meet the needs of residents, as well as any foreseeable visitor parking demand.

14 cycle parking spaces will be proved in sheds to the rear of properties to encourage sustainable travel.

4 ACCESS VIA ALTERNATIVE MODES OF TRANSPORT

To accord with the government's objectives and planning guidance for a more sustainable environment it is necessary to consider the accessibility of the site by alternative modes of transport to the private car.

4.1 Buses

There are 3 bus services available within 1.1km (15-minute walk / 4-minute cycle ride). The nearest bus stop to the Site is located on Seaton Road 1km (14-minute walk / 3-minute cycle ride) west of the Site. This stop provides services running between Holmbush Shopping Centre and Arundel.

The local bus routes are presented on **Figure 4.1** below.

Figure 4.1 – Bus Route Map

Details of each of the bus services with regards to the route and the general frequency of the service provision are outlined in **Table 4.1**.

Table 4.1 – General Daytime Frequency of Bus Services

Number	Route	Frequency (Vph)	Distance (m)
9	Holmbush Shopping Centre – Arundel	1	1km
700	Coastliner – Littlehampton – Bognor Regis - Chichester	3	1.1km
12	Littlehampton – East Preston	1	1.1km

4.2 Rail

Littlehampton railway station is located approximately 2.3km (10-minute cycle) to the south of the Site operating by Southern Rail.

The typical off-peak train service pe hour is:

- 2 trains per hour to London Victoria via Worthing
- 1 train per hour to Bognor Regis
- 1 train per hour to Portsmouth and Southsea

Littlehampton railway station would provide a suitable and convenient mode of travel for residents and visitors at the new development Site. A plan showing the rail routes in the vicinity of the is set out in **Figure 4.2** below.

Figure 4.2 – Rail Map

It can be seen from the above that the Site is located within a sustainable area with access to several bus routes, Littlehampton rail station all within cycling distance to the Site. The public transport provision will allow future residents excellent connections to surrounding towns and Central London.

4.2 Pedestrian and Cycle Access

As shown in **Figure 2.1** the Site is located within a short walk of amenities, schools and public transport options. To the south of the Site, the area becomes more developed, featuring a higher density of residential properties along with sections of footways and some street lighting. Key amenities in the vicinity include The Co-op Childcare, located 313m (a 5-minute walk) to the southeast; Lyminster Primary School, situated 500m (an 8-minute walk) to the southwest; and Cornfield School, positioned 550m (a 9-minute walk) to the south of the Site. Within the 800m there are several local shops that are easily accessible by foot or cycle.

Arun District Council has outlined plans for North Littlehampton, proposing the closure of the Toddington Lane level crossing and the conversion of the lane into a 'quiet route' primarily for pedestrians, cyclists, and resident access. These plans aim to substantially reduce vehicular traffic and will encourage walking and cycling as a primary mode of transport, contributing to a healthier lifestyle and reducing local traffic congestion.

When assessing the existing provision of walking and cycling facilities it can be useful to examine the likely destinations walkers and cyclist will wish to connect.

The DfT reports `Cycling in Great Britain' and `Walking in Great Britain' contain tables showing the proportion of cycling journeys for a given length. The reports identify that, for the south east, 91% of walking and 55% of cycling journeys are less than 2km as the crow flies. The reports also show that 99% of walking journeys are less than 4km and 87% of cycling journeys are less than 5km.

The cycle paths around Toddington Lane offer significant benefits for residents and visitors alike, promoting an active lifestyle and providing safe, convenient routes for commuting and recreation. The well-marked paths ensure that cyclists can easily navigate through the area, reducing reliance on motor vehicles and encouraging a healthier mode of transportation.

From Toddington Lane, the north-south cycle route runs parallel to Nightingale Way (A284), offering a direct path to various residential areas and key intersections. This route connects seamlessly with the east-west cycle path along the A259, which provides extensive access to the broader region, including major shopping areas and recreational facilities. Additionally, there are several connecting paths branching off these main routes, enabling easy access to local neighbourhoods and amenities. These well-planned cycle routes enhance the accessibility of the area, making it easier and safer for residents to travel by bike, whether for daily commutes or leisure..

Cycling routes in this area range from gentle, flat paths suitable for beginners to more challenging terrains for more experienced cyclists. The nearby South Downs National Park provides a beautiful backdrop for longer rides, offering stunning views and a chance to explore the rich biodiversity of the region.

For those who prefer walking, the surrounding areas offer an extensive network of footpaths and walking trails. The coastal path along the English Channel is a highly popular route, providing stunning sea views. Additionally, local parks and nature reserves offer quiet leisurely walks. The nearby town of Littlehampton serves as an attractive destination for walkers, featuring a picturesque harbour, historic architecture, and a selection of shops and cafes.

Figure 4.3 overleaf shows the local cycling routes within the vicinity of the Site.

Figure 4.3 – Local Cycle Network

4.3 Census Data

The 2021 Census data for car availability was obtained for the E020006545 Arun 004 Super Output Middle Layer, where the Site resides. This information is set out in **Table 4.2** overleaf along with the percentage of households. The full census data is presented in **Appendix C**.

Table 4.2 – 2021 Census Data – Car Availability E020006545 Arun 004 Super Output Middle Layer

Cars or Vans	Unit	Number of Cars per Unit
No car or van	813	
1 car or van in household	1977	
2+ cars or vans in household	1534	**1.34**
3+ cars or vans in household	464	
Total	**4788**	

Table 4.2 above shows that the average car ownership in the local area is just 1.34 cars per dwelling. The 10 residential units would therefore likely generate a maximum of 14 cars.

The E020006545 Arun 004 Super Output Middle Layer Census data was also examined to establish the profile of residents' method of travel to work. This information is attached at **Appendix C** and set out in **Table 4.3** below. The 2011 Census Data has been examined as it is noted that the 2021 Census was undertaken during the Covid-19 lockdown period where a large percentage of the population worked from home so does not provide a robust assessment.

Table 4.3 – Method of Travel to Work (E01000575 Arun 004)

Main Mode	Number of People	Percentage
Work mainly at or from home	124	2%
Underground, metro, light rail, tram	5	0%
Train	192	3%
Bus, minibus or coach	84	1%
Taxi	20	0%
Motorcycle, scooter or moped	39	1%
Driving a car or van	2448	41%
Passenger in a car or van	282	5%
Bicycle	190	3%
On foot	477	8%
Other method of travel to work	24	0%
Not in employment	2045	34%
Total	**5930**	**100%**

It can be seen that 41% of residents use a car as a method of travel to work, 11% walk or cycle, and some 4% residents use public transport to travel to work. It is noted that this census data is over 12 years of age and may not accurately reflect current day working patterns where a greater proportion of the population now flexibly work from home and choose greener more sustainable travel choices.

5 TRIP GENERATION

To consider the suitability of the potential impact that the proposed development may have on the local highway network, it is necessary to determine the level of trip generation expected during weekday morning (from 08:00 to 09:00) and evening (from 17:00 to 18:00) peak periods.

5.1 Proposed Use

The development proposals are for a new 10-unit residential scheme. Privately owned houses in West Sussex were selected within the TRICS database (**Appendix D**) as a worst case scenario. The peak hour vehicle trip rates per dwelling are set out in **Table 5.1** and the resultant number of vehicle trips generated is presented in **Table 5.2**.

Table 5.1 – Predicted Residential Peak Hour Trip Rates (per dwelling)

Mode		Morning Peak Hour Arrivals	Morning Peak Hour Departures	Evening Peak Hour Arrivals	Evening Peak Hour Departures
Total Vehicles		0.109	0.237	0.222	0.109
Car		0.092	0.197	0.173	0.094
Public transport		0.000	0.042	0.049	0.000
LGV		0.010	0.030	0.037	0.008
OGV		0.003	0.002	0.002	0.002

Table 5.2 – Predicted Residential Peak Hour Trips (10 dwellings)

Mode	Morning Peak Hour Arrivals	Morning Peak Hour Departures	Evening Peak Hour Arrivals	Evening Peak Hour Departures
Total Vehicles	1	2	2	1
Car	1	2	2	1
Public transport	0	0	0	0
LGV	0	0	0	0
OGV	0	0	0	0

It can be seen from **Table 5.2** above that the 10 residential dwellings would only be expected to generate 3 total vehicle movements in the am peak hour and 3 total vehicle movement trips in the pm peak hour. No servicing vehicle or public transport movements are anticipated during the peak network hours.

6 Construction Logistics

The development of the Site is to provide 10 new residential units following the demolition of the existing property.

6.1 Construction Routes

The construction routes will be established once it is known where the materials are going to be sourced.

6.2 Hours of Construction

Working hours will be agreed with ADC but are expected to be as set out below:

- Monday – Friday 08:00 – 18:00
- Saturday 08:00 – 13:00
- Sundays and Bank Holidays the Site would be closed

Vehicles would only travel to and from Site between the hours set out above in order to avoid noise being generated by heavy goods vehicles close to residential properties around the Site.

Notwithstanding this there may be certain occasions when work outside these hours may be necessary. In the event of this, work would only be carried out following consultation and agreement with the ADC.

The Site will be staffed during the working hours set out above.

6.3 Deliveries

This Site will operate a material delivery scheduling and booking system to ensure that congestion is avoided on the surrounding highway. Each delivery will be allocated a delivery time period and an allotted area from which to load or unload. Clear instructions will be issued to all direct suppliers and subcontractors detailing access routes.

Delivery vehicles will be controlled to ensure that unloading only takes place within designated times and in the correct location. All subcontractors will be required to produce a procurement schedule for their materials which will be monitored, and they will be required to book a delivery slot with the Traffic Controller.

"Just in Time" scheduling of deliveries will be used where possible will minimise any storage capacity required. Where "Just in Time" deliveries are not economic or practical, Site storage of materials and plant will be very carefully controlled by restricted allocation of zones.

Although abnormal loads are not anticipated, should it be necessary to deliver using abnormal loads the Local Authorities/Police will be notified in advance. All deliveries to Site will be scheduled by the Site manager.

6.4 Environmental Considerations

The Site is located within an area that contains residential properties and it is the developer's intention to minimise the impact that the construction process could cause to the Local Environment and the neighbouring community. All care will be taken not to cause the primary

environmental nuisances, noise and dust pollution. Below are some actions that will be carried out to abate these problems.

Reduction in Construction Noise:

- Coordinated delivery times and efficient traffic management to prevent queues of traffic accessing the Site
- Ensuring all plant has sound reduction measures (mufflers, baffles or silencers)
- Utilising construction techniques that minimise the production of noise
- Using Acoustic hoarding where necessary

Reduction in Dust Pollution and other Airborne Debris:

- Ensure that all materials transported to and from Site are in enclosed containers or fully sheeted
- During dry periods the works are to be damped down to control the generation of dust
- Ensuring materials have a minimum of packaging
- Ensuring all polystyrene and similar lightweight materials are weighted down
- Making sure all dust generating materials are adequately packaged
- Ensuring loads are covered where spoil or demolition material is being removed
- Provide regular road cleaning using road sweepers or brushes to control dust and mud
- Keeping the loading drop heights of spoil into lorries as low as possible

Implementing an effective procedure to deal with complaints from third parties to ensure issues are dealt with efficiently and quickly, via an advised and dedicated telephone number.

6.5 Impacts on Pedestrians/Footways

Pedestrian routes around the Site will be maintained during construction.

7 Impacts

The data provided in **Table 5.2** above demonstrates that based on TRICS trip rates the proposed development of 10 residential units is predicted to generate 3 total vehicle movements during the morning and 3 total vehicle movements in evening peak hours. Servicing and deliveries will take place on-site in accordance with neighbouring properties and such movements are not anticipated to occur during the network peak hours. There are no OGV or LGVs predicted during peak hours.

8 PARKING

8.1 Parking Standards

The residential parking standards are established in both the West Sussex County Council Guidance on Parking at New Developments (September 2020) and the Arun District Council Parking Standards Supplementary Planning Document (January 2020). These documents provide comprehensive guidelines to ensure that new developments, including the proposed scheme, adhere to the required parking provisions and standards.

In cases where local planning authorities, such as Arun District Council, have their own parking standards, these will also be referred to. However, the County Council would only consider objecting to the development on parking grounds if the proposed parking arrangements do not comply with their guidance, as non-compliance could result in a highway safety or capacity issue.

Arun District Council has categorised three distinct zones within their boundaries. The Site is located in Zone 2, which stipulates that properties with 1 to 3 bedrooms should have 2 parking spaces each. This translates to a requirement of 20 parking spaces for the residents that are each required to measure 2.5m by 5m. Additionally, the standards require 20% of the total number of units to be allocated as visitor parking, bringing the overall provision up to 22 parking spaces.

To satisfy the promotion of sustainable travel modes and choices it is considered that a 10% variation below the target parking demand value be allowed where appropriate travel option provision is provided including travel plans, public transport contributions (e.g. through section 106 contributions involving Strategic Allocations and Community Infrastructure Levy once adopted, for other non-strategic sized developments for offsite infrastructure of a strategic nature) and other sustainable travel initiatives.

Arun District Council requires that all parking spaces on a driveway or within a garage, should be provided with 'active' EV charging points. All other spaces should be provided with 30% 'active' EV spaces, with all spaces provided with the necessary ducting to allow for future conversion.

Arun District Council requires houses with 1 to 2 bedrooms to have 1 cycle parking space and houses with 3 bedrooms to have 2 cycle parking spaces. Therefore, the development will provide the appropriate level of cycle parking (14 spaces) within the rear gardens sheds to comply with these standards.

8.2 Parking

The development proposes a total 21 car parking spaces, which exceeds the average car ownership rate of 1.34 vehicles per household, as indicated by the 2021 census data. This provision is more than sufficient to meet the needs of residents and avoids any overspill (unlikely) on the surrounding highway network. Each unit will benefit for 2 parking spaces whilst there will be 1 dedicated visitor space.

Furthermore, by integrating sustainable travel initiatives, such as EV charging points and dedicated cycle parking spaces, the development actively promotes alternative modes of transportation. This approach supports the reduction of car dependency, aligns with

sustainable development goals, and addresses the need for environmentally friendly infrastructure.

The inclusion of 'active' EV charging points for all parking spaces on driveways or within garages, along with 30% of all other spaces, facilitates the transition to electric vehicles. This not only reduces the carbon footprint of the development but also supports the government's broader goals for carbon reduction and the promotion of cleaner energy solutions.

To encourage the use of sustainable transportation options, provisions for cycling have also been made. Houses with 1 to 2 bedrooms are allocated one cycle parking space, while those with 3 bedrooms are allocated two spaces. These facilities will be integrated within the rear garden sheds, offering secure and convenient access for residents. This initiative not only complies with local guidelines but also encourages a shift towards greener modes of travel, reducing the percentage of car commuters over time.

In conclusion, the transport strategy is well-aligned with local parking and transportation standards, census data on car ownership and commuting patterns, and broader environmental goals. By incorporating sustainable travel solutions, the development balances the needs of residents while supporting a healthier lifestyle, reducing carbon emissions, and promoting sustainable practices. This holistic approach to transportation ensures that the development contributes positively to both the local community and the environment.

9 SUMMARY AND CONCLUSIONS

a) YES Engineering Group Ltd was appointed by Worthing Homes to produce a Transport Statement (TS) to accompany a planning application for the provision of 10 new residential units (C3 use) at Land off Toddington Lane, Toddington, West Sussex, BN17 7PN. (The Site)

b) The development proposals involve the demolition of the existing buildings and the redevelopment of the Site to provide 10 residential dwellings proving 6 x 2-bedroom and 4 x 3 bedroom houses.

c) The development proposes 21 car parking spaces, which exceeds the average car ownership rate of 1.34 vehicles per household, as indicated by the 2021 census data. This provision is more than sufficient to meet the needs of residents, as well as any foreseeable visitor parking demand

d) The proposed access road will measure 4.8m wide, allowing two vehicles to pass each other comfortably. To ensure that vehicles are able to pass at all times appropriate parking restrictions shall be implemented.

e) Pedestrian access to the Site would be provided through access points on the northern boundary and the main entrance to the Site. A 2m footway will be constructed around the entire Site as part of highway improvements being conducted for a neighbouring development. This footway will include ramped access points at both entrances to accommodate those with limited mobility or pushchairs.

f) Arun District Council requires houses with 1 to 2 bedrooms to have 1 cycle parking space and houses with 3 bedrooms to have 2 cycle parking spaces. Therefore, the development will provide the appropriate level of cycle parking (14 spaces) within the rear gardens sheds to comply with these standards.

g) Refuse collection will be conducted on-site. A turning area will be provided to allow refuse vehicles to enter the Site and exit in a forward gear. On collection days, residents will bring their waste to the kerb for collection, ensuring that waste operatives do not have to drag waste more than 10m

h) General deliveries, such as those from Amazon, online grocery services, and similar providers, will also occur on-site. Delivery personnel will have the option to stop in one of the two designated visitor bays or temporarily park outside the premises to which they are delivering goods. It is anticipated that these stops will be of short duration and part of an existing planed delivery route.

i) NPPF paragraph 115 states 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.'. As demonstrated within this report no impacts have been identified.

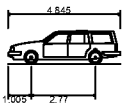
j) It is concluded that there is no highway or transportation reasons to object to the proposed development.

Appendices

Figure 3.1 – Swept Path Analysis and Visibility Splays

Suite E, Maples Business Centre
144 Liverpool Road
London, N1 1LT

Client: Worthing Homes
Drawing No.: Figure 3.1
Scale: 1:500@A4
Revision: A

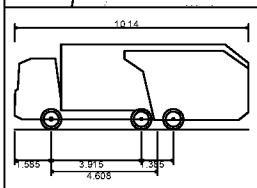


Estate Car	
Overall Length	4.845m
Overall Width	1.750m
Overall Body Height	1.424m
Min Body Ground Clearance	0.189m
Max Track Width	1.655m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	4.950m

KEY:
- Application boundary
- Permeable concrete block paving
- Private terraces, concrete slabs
- Refuse storage locations
- Refuse collection points
- Garden shed

Toddington Farm Cottages

Level Crossing



Arun Refuse Vehicle	
Overall Length	10.140m
Overall Width	2.550m
Overall Body Height	3.690m
Min Body Ground Clearance	0.416m
Track Width	2.530m
Lock to lock time	4.00s
Wall to Wall Turning Radius	10.250m

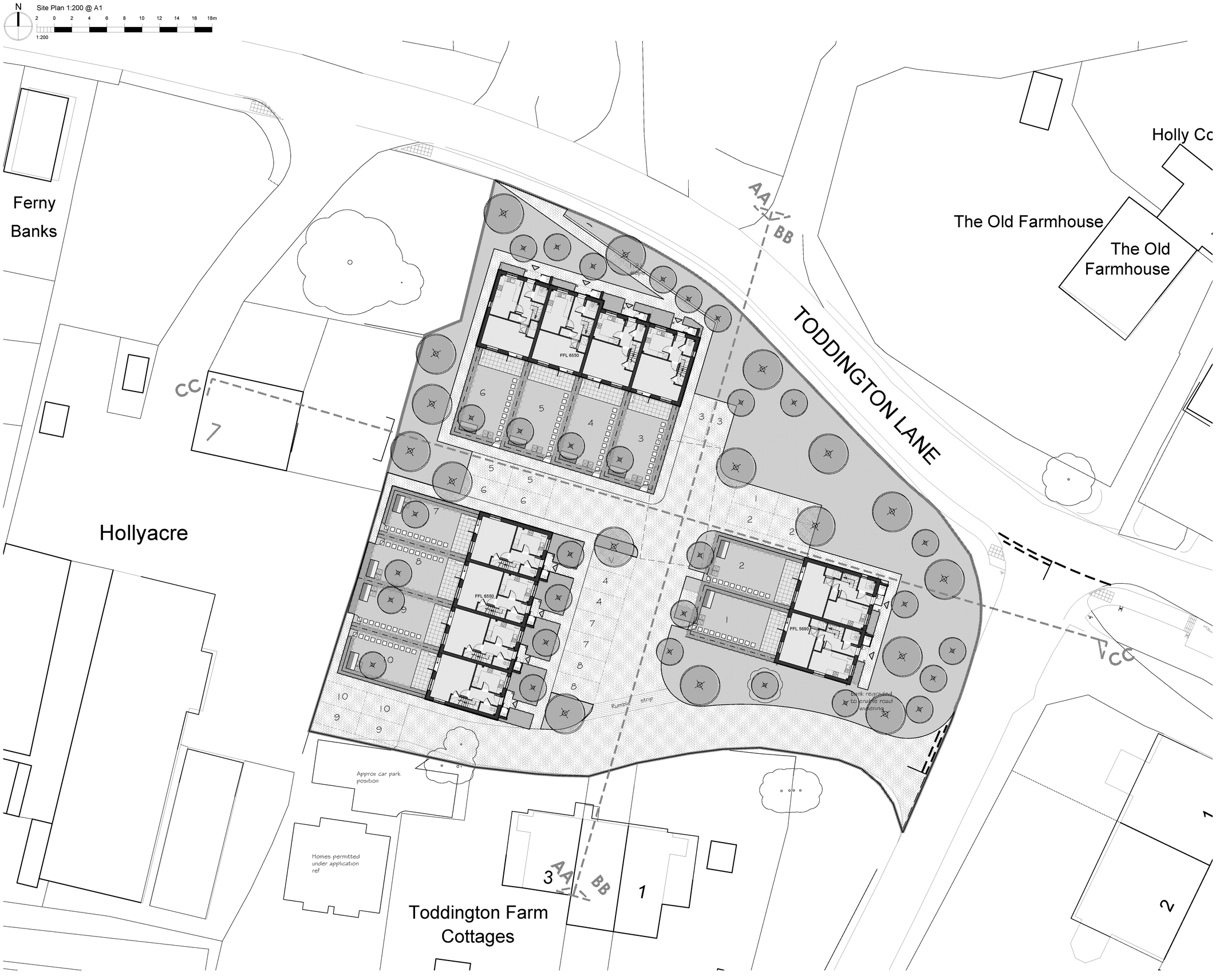
NOTES:

SWEPT PATHS FOR INDICATIVE PURPOSES ONLY. ALL ROAD HIGHWAY DIMENSIONS/ARRANGEMENTS TO BE CONFIRMED ON SITE AND VEHICLE MEASUREMENTS AND CHARACTERISTICS CONFIRMED BY END USER.

HIGHWAY ARRANGEMENT TO BE AGREED/APPROVED WITH LOCAL HIGHWAY AUTHORITY.

FOR PLANNING ONLY, NOT TO BE USED FOR CONSTRUCTION.

Appendix A – Proposed Site Layout Plan



Notes

1. This drawing is the copyright of MH Architects Ltd
2. Do not scale this drawing except for Local Authority planning purposes
3. All dimensions must be checked on site by the contractor prior to commencement of the works.

Client Approval

A - Approved

B - Approved with comments

C - Do not use

Rev.	Revision Note/Purpose of issue	Drw By	Date	Chk By	Date

SCHEDULE OF ACCOMMODATION

UNIT	ACCOMMODATION	Internal Area	
01	5 person 3 Bed house	93.2 sq. m	affordable rent
02	5 person 3 Bed house	93.2 sq. m	affordable rent
03	4 person 2 Bed house	80.0 sq. m	affordable rent
04	4 person 2 Bed house	80.0 sq. m	affordable rent
05	5 person 3 Bed house	93.2 sq. m	affordable rent
06	5 person 3 Bed house	93.2 sq. m	affordable rent
07	4 person 2 Bed house	79.0 sq. m	affordable rent
08	4 person 2 Bed house	79.0 sq. m	affordable rent
09	4 person 2 Bed house	79.0 sq. m	affordable rent
10	4 person 2 Bed house	79.0 sq. m	affordable rent

TOTALS:-

4 person 2 Bed house	= 6 units
5 person 3 Bed house	= 4 units

Development Site	0.35 Ha
Site Density	28.5 Units/Ha

Car Parking	TOTAL = 21 spaces on site
	2 spaces for each 2 bed house
	2 spaces for each 3 bed house
	1 visitors space

Cycle Parking:	2 secure cycle space per house in private gardens (see plans)
Refuse & recycling :	House bins integrated into rear garden (access is near to roadside)

KEY:

- Application boundary
- Permeable concrete block paving
- Private terraces, concrete slabs
- Hedges
- Mixed shrubs
- Meadow
- Lawns
- Garden sheds
- Garden fence
- Proposed trees
- Garden shed

Plans 1:200 @ A1

N 2 0 2 4 6 8 10 12 14 16 18m

1:200

Client

Worthing Homes

Job title

Land at Toddington Lane
Toddington
West Sussex

Drawing title

Site Plan

Drawn	Date	Checked	Date	Scale at A1
MD	27/01/22			1:200

Job No.	Pro.	Org.	Zone	Level	Type	Role	No.	Rev.
21-097	TDL	MHA	XX	XX	DR	A	003	P09

Purpose of issue

PLANNING

Ground Floor | Bicentennial Building
Southern Gate | Chichester
West Sussex | PO19 8EZ

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e. admin@mharchitects.co.uk
www.mharchitects.co.uk

Limited Company
Registered in England No.5994133

ARUN DISTRICT COUNCIL LU/246/24/PL

Appendix C – Census Data

QS701EW - Method of travel to work

population	All usual residents aged 16 to 74
units	Persons
area type	2011 super output areas - middle layer
area name	E02006545 : Arun 004
rural urban	Total

Method of Travel to Work	2011
All categories: Method of tra	5,930
Work mainly at or from hom	124
Underground, metro, light ra	5
Train	192
Bus, minibus or coach	84
Taxi	20
Motorcycle, scooter or mope	39
Driving a car or van	2,448
Passenger in a car or van	282
Bicycle	190
On foot	477
Other method of travel to w	24
Not in employment	2,045

In order to protect against disclosure of personal information, records have been swapped between diff

TS045 - Car or van availability

population	All households
units	Households
area type	2021 super output areas - middle layer
area name	E02006545 : Arun 004

Number of cars or vans	2021
Total: All households	4,788
No cars or vans in household	813
1 car or van in household	1,977
2 cars or vans in household	1,534
3 or more cars or vans in house	464

In order to protect against disclosure of personal information, records have been swapped between differer

Appendix D – TRICS Data

Calculation Reference: AUDIT-460201-240521-0538

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:
02 SOUTH EAST
WS WEST SUSSEX 3 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 57 to 480 (units:)
Range Selected by User: 8 to 918 (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: 01/01/16 to 14/11/23

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

Selected survey days:

Wednesday	1 days
Thursday	2 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 undertaking using machines.

Selected Locations:

Neighbourhood Centre (PPS6 Local Centre)	3

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:

Village	3

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	14 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:

1,001 to 5,000	1 days
5,001 to 10,000	2 days

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

Population within 5 miles:

25,001 to 50,000	3 days

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

Car ownership within 5 miles:

1.1 to 1.5	2 days
1.6 to 2.0	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:

Yes	2 days
No	1 days

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

PTAL Rating:

No PTAL Present	3 days

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

LIST OF SITES relevant to selection parameters

1 **WS-03-A-07** **BUNGALOWS** **WEST SUSSEX**
EMMS LANE
NEAR HORSHAM
BROOKS GREEN
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 57
Survey date: THURSDAY *19/10/17* *Survey Type: MANUAL*

2 **WS-03-A-16** **DETACHED & SEMI-DETACHED** **WEST SUSSEX**
BRACKLESHAM LANE
BRACKLESHAM BAY

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 58
Survey date: WEDNESDAY *09/11/22* *Survey Type: MANUAL*

3 **WS-03-A-21** **MIXED HOUSES** **WEST SUSSEX**
HILLAND ROAD
BILLINGSHURST

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 480
Survey date: THURSDAY *09/11/23* *Survey Type: MANUAL*

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DC-03-A-09	not w sussex
ES-03-A-06	not w sussex
IW-03-A-01	not w sussex
KC-03-A-08	not w sussex
MW-03-A-01	not w sussex
SC-03-A-09	not w sussex
SC-03-A-10	not w sussex
SM-03-A-02	not w sussex
SM-03-A-03	not w sussex
SP-03-A-02	not w sussex

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
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): 1.85

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	198	0.059	3	198	0.185	3	198	0.244
08:00 - 09:00	3	198	0.109	**3**	**198**	**0.237**	**3**	**198**	**0.346**
09:00 - 10:00	3	198	0.148	3	198	0.146	3	198	0.294
10:00 - 11:00	3	198	0.104	3	198	0.108	3	198	0.212
11:00 - 12:00	3	198	0.101	3	198	0.116	3	198	0.217
12:00 - 13:00	3	198	0.116	3	198	0.094	3	198	0.210
13:00 - 14:00	3	198	0.106	3	198	0.114	3	198	0.220
14:00 - 15:00	3	198	0.138	3	198	0.138	3	198	0.276
15:00 - 16:00	3	198	0.160	3	198	0.148	3	198	0.308
16:00 - 17:00	3	198	0.205	3	198	0.133	3	198	0.338
17:00 - 18:00	**3**	**198**	**0.222**	3	198	0.109	3	198	0.331
18:00 - 19:00	3	198	0.151	3	198	0.089	3	198	0.240
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.619			1.617			3.236

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

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

Parameter summary

Trip rate parameter range selected:	57 - 480 (units:)
Survey date date range:	01/01/16 - 14/11/23
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	10

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	198	0.002	3	198	0.002	3	198	0.004
08:00 - 09:00	3	198	0.003	3	198	0.002	3	198	0.005
09:00 - 10:00	**3**	**198**	**0.005**	**3**	**198**	**0.005**	**3**	**198**	**0.010**
10:00 - 11:00	3	198	0.003	3	198	0.003	3	198	0.006
11:00 - 12:00	3	198	0.003	3	198	0.003	3	198	0.006
12:00 - 13:00	3	198	0.003	3	198	0.003	3	198	0.006
13:00 - 14:00	3	198	0.003	3	198	0.005	3	198	0.008
14:00 - 15:00	3	198	0.002	3	198	0.002	3	198	0.004
15:00 - 16:00	3	198	0.002	3	198	0.002	3	198	0.004
16:00 - 17:00	3	198	0.002	3	198	0.002	3	198	0.004
17:00 - 18:00	3	198	0.002	3	198	0.002	3	198	0.004
18:00 - 19:00	3	198	0.002	3	198	0.002	3	198	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.033			0.065

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	198	0.000	**3**	**198**	**0.055**	**3**	**198**	**0.055**
08:00 - 09:00	3	198	0.000	3	198	0.042	3	198	0.042
09:00 - 10:00	3	198	0.000	3	198	0.013	3	198	0.013
10:00 - 11:00	3	198	0.003	3	198	0.020	3	198	0.023
11:00 - 12:00	3	198	0.003	3	198	0.013	3	198	0.016
12:00 - 13:00	3	198	0.005	3	198	0.003	3	198	0.008
13:00 - 14:00	3	198	0.008	3	198	0.000	3	198	0.008
14:00 - 15:00	3	198	0.002	3	198	0.002	3	198	0.004
15:00 - 16:00	3	198	0.025	3	198	0.002	3	198	0.027
16:00 - 17:00	3	198	0.029	3	198	0.000	3	198	0.029
17:00 - 18:00	**3**	**198**	**0.049**	3	198	0.000	3	198	0.049
18:00 - 19:00	3	198	0.027	3	198	0.000	3	198	0.027
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.151			0.150			0.301

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	198	0.044	3	198	0.139	3	198	0.183
08:00 - 09:00	3	198	0.092	**3**	**198**	**0.197**	**3**	**198**	**0.289**
09:00 - 10:00	3	198	0.119	3	198	0.106	3	198	0.225
10:00 - 11:00	3	198	0.084	3	198	0.091	3	198	0.175
11:00 - 12:00	3	198	0.076	3	198	0.086	3	198	0.162
12:00 - 13:00	3	198	0.099	3	198	0.084	3	198	0.183
13:00 - 14:00	3	198	0.089	3	198	0.091	3	198	0.180
14:00 - 15:00	3	198	0.108	3	198	0.116	3	198	0.224
15:00 - 16:00	3	198	0.128	3	198	0.126	3	198	0.254
16:00 - 17:00	**3**	**198**	**0.175**	3	198	0.111	3	198	0.286
17:00 - 18:00	3	198	0.173	3	198	0.094	3	198	0.267
18:00 - 19:00	3	198	0.134	3	198	0.082	3	198	0.216
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.321			1.323			2.644

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	198	0.008	**3**	**198**	**0.034**	3	198	0.042
08:00 - 09:00	3	198	0.010	3	198	0.030	3	198	0.040
09:00 - 10:00	3	198	0.020	3	198	0.030	**3**	**198**	**0.050**
10:00 - 11:00	3	198	0.015	3	198	0.013	3	198	0.028
11:00 - 12:00	3	198	0.017	3	198	0.022	3	198	0.039
12:00 - 13:00	3	198	0.012	3	198	0.007	3	198	0.019
13:00 - 14:00	3	198	0.012	3	198	0.017	3	198	0.029
14:00 - 15:00	3	198	0.024	3	198	0.015	3	198	0.039
15:00 - 16:00	3	198	0.024	3	198	0.015	3	198	0.039
16:00 - 17:00	3	198	0.027	3	198	0.018	3	198	0.045
17:00 - 18:00	**3**	**198**	**0.037**	3	198	0.008	3	198	0.045
18:00 - 19:00	3	198	0.015	3	198	0.005	3	198	0.020
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.221			0.214			0.435

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.*