



Proposed Residential  
Development

Land North of Chiswell  
Green Lane, Chiswell  
Green, Hertfordshire,  
AL2 3AJ

Residential Travel Plan on behalf  
of Headlands Way Limited

November 2021

**MILESTONE**  
TRANSPORT PLANNING

# Land North of Chiswell Green Lane, Chiswell Green, Hertfordshire, AL2 3AJ

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## Document history and status

Revision	Date	Description	Prepared By	Checked By	Authorised By
-	22/10/2021	Residential Travel Plan (1 <sup>st</sup> Draft)	E Hill	T Wares	T Wares
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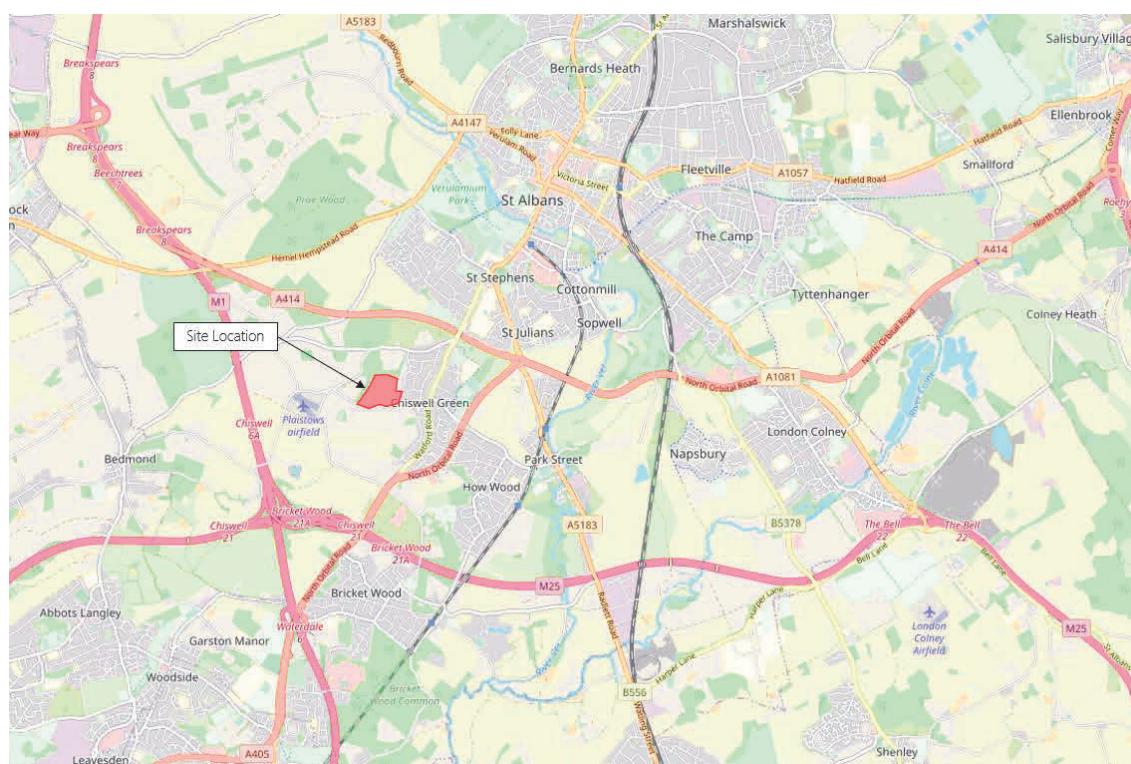
- Appendix 1 SADC Cycling Map
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## 1. Introduction

### Scope of Residential Travel Plan

- 1.1 This Residential Travel Plan (RTP) has been prepared by Milestone Transport Planning (MTP) on behalf of Headlands Way Limited ('the applicant') in support of an outline planning application with all matters reserved other than access for a development proposal comprising the erection of 330 residential units (Use Class C3) of mixed size and type together with associated cycle / refuse storage, car parking, and soft landscaping on land north of Chiswell Green Lane in Chiswell Green, Hertfordshire.
- 1.2 The site encompasses an area of 14.2 hectares located off the northern side of Chiswell Green Lane, opposite the former '*Butterfly World*' / '*The Gardens of The Rose*' tourist attractions, to the west of the predominately residential area of Chiswell Green.
- 1.3 The site boundaries are formed by Chiswell Green Lane to the south, and parts of the Public Right of Way (PROW) network (i.e. St Stephens 21, 80 and 82) to the west, north, and in part to the east. The site's north-eastern boundary borders open undeveloped land, beyond which lies a number of dwellings located off the eastern side of The Croft and Cherry Hill. The site location in context with the local area is shown below in Figure 1.

**Figure 1** Site Location Plan – Wider Context



- 1.4 The majority of the site comprises a former polo field and a large metal barn with two small paddocks and stables situated in the south-eastern corner. The site was previously used by St Albans Polo Club and for hosting 'one-off' polo charity events with visitors parking vehicles at the car park of the former Butterfly World visitor attraction, situated directly opposite.

- 1.5 As defined in the Department for Transport's (DfT's) 'National Planning Policy Guidance' (March 2014) *"Travel Plans are long-term management strategies for integrating proposals for sustainable travel into the planning process. They are based on evidence of the anticipated transport impacts of development and set measures to promote and encourage sustainable travel (such as promoting walking and cycling). They should not, however, be used as an excuse for unfairly penalising drivers and cutting provision for cars in a way that is unsustainable and could have negative impacts on the surrounding streets."*
- 1.6 The development proposals comprise the erection of 330 residential units (i.e. 32 x one-bed, 116 x two-bed, and 182 x three-bed, under Use Class C3), the creation of a new access off the northern side of Chiswell Green Lane, a separate emergency access off The Croft, and associated refuse / cycle storage, shared foot / cycleway infrastructure, car parking, public open space, a memorial garden, and soft landscaping. In keeping with the concept of "local homes for local heroes", all 330 residential units will be available for key workers (i.e. nurses, police officers, firefighters, teachers, military personnel, care workers and Local Government staff) in the form of home ownership affordable housing.
- 1.7 The purpose of this RTP is to provide a long-term strategy aimed at encouraging future end-users (i.e. households and visitors) to reduce their dependency on travelling by single occupancy vehicles (SOVs) in favour of the more sustainable modes such as car sharing, public transport, walking and cycling. To accomplish this aim, the document sets out measures and initiatives, appropriate to future households, thereby ensuring a targeted approach is applied. The RTP should be read in conjunction with the Transport Assessment (TA) that has been prepared by MTP to accompany the planning application.
- 1.8 Since details of future households are not yet known, it is not possible to derive site specific targets. In this regard, provisional trip rate targets, based on the multi-modal trip generation of the proposed residential development have been used. The main target of the RTP would aim to achieve a 10% modal shift from single occupancy car driver to the more sustainable modes of car sharing, public transport, walking and cycling over the lifetime of the RTP (5-years).
- 1.9 Consequently, this document therefore represents an initial strategy through which sustainable travel patterns and behaviour can be promoted amongst future end-users (i.e. households and visitors) of the proposed residential development. It is designed to be a flexible document, which will evolve over time, thereby ensuring that it remains relevant to all future households. It is envisaged that an updated version of the RTP would be prepared in support of a future Reserved Matters planning application.
- 1.10 The preparation of this RTP has been informed by relevant national and local planning policy (see below) and best practice guidance including the Ministry of Housing, Communities & Local Government's (formerly the Department for Communities and Local Government's) Planning Policy Guidance on '*Travel Plans, Transport Assessments and Statements*' (March 2014), Hertfordshire County Council (HCC) Local Transport Plan (LTP4). Further reference is also made to HCC's document '*Travel Plan Guidance for Business and Residential Development*'.

## Planning Policy Context

### National Planning Policy Framework (July 2021)

- 1.11 The Ministry of Planning, Communities and Local Government (MHCLG) initially published the National Planning Policy Framework (NPPF) in March 2012. This document was revised in July 2018, and updated in February 2018, and July 2021, respectively.

1.12 Promoting sustainable transport is a key thread of the NPPF and paragraph 104 highlights the importance of considering transport issues from the earliest stages of development proposals to ensure 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."*

1.13 Paragraph 105 goes on to state that "*The planning system should actively manage patterns of growth...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..."*

1.14 Paragraph 108 states that "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; 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."*

1.15 Paragraph 111 continues to state that '*...development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'*.

1.16 Paragraph 112 requires that "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."

#### Hertfordshire County Council Local Transport Plan (LTP4)

1.17 The vision of HCC's Local Transport Plan (LTP) 4 is for "*Hertfordshire to continue to be a county where people have the opportunity to live healthy, fulfilling lives in thriving prosperous communities*". This vision is supported by nine key objectives:

- "Improve access to international gateways and regional centres outside Hertfordshire;
- Enhance connectivity between urban centres in Hertfordshire;
- Improve accessibility between employers and their labour markets;
- Enhance journey reliability and network resilience across Hertfordshire;
- Enhance the quality and vitality of town centres;
- Preserve the character and quality of the Hertfordshire environment;
- Reduce carbon emissions;
- Make journeys and their impact safer and healthier;
- Improve access and enable participation in everyday life through transport."

1.18 LTP4 Policy 1 requires development proposals to prioritise the hierarchy of users where emphasis is placed on:

- Opportunities to reduce travel demand and the need for travel.
- Vulnerable road user needs (pedestrians and cyclists).
- Passenger Transport user needs.
- Powered two-wheeler (mopeds and motorbikes) user needs.
- Other motor vehicle needs.

- 1.19 Under LTP Policy 2, HCC will encourage the location of new development in areas served by, or with the potential to be served by, high quality passenger transport facilities so they can form a real alternative to the car, and where key services can be accessed by walking and cycling.
- 1.20 Within Policy 3 of LTP4 '*Travel Plans and Behaviour Change*', HCC will encourage the widespread adoption of travel plans through... (part B): Seeking the development, implementation and monitoring of travel plans as part of the planning process for new developments.
- 1.21 Policy 5: Development Management of LTP4 provides the framework within which HCC will work with development promoters to:
- Ensure the location and design of proposals reflect the LTP Transport User Hierarchy and encourage movement by sustainable transport modes and reduced travel demand.
  - Ensure access arrangements are safe, suitable for all people, built to an adequate standard and adhere to the county council's Highway Design Standards.
  - Consider the adoption of access roads and internal road layouts where they comply with the appropriate adoption requirements and will offer demonstrable utility to the wider public. Where internal roads are not adopted the county council will expect suitable private management arrangements to be in place.
  - Secure developer mitigation measures to limit the impacts of development on the transport network, and resist development where the residual cumulative impact of development is considered to be severe.
  - Require a travel plan for developments according to the requirements of 'Hertfordshire's Travel Plan Guidance'.
  - Only consider new accesses onto primary and main distributor roads where special circumstances can be demonstrated in favour of the proposals.
  - Resist development that would either severely affect the rural or residential character of a road or other right of way, or which would severely affect safety on rural roads, local roads, and rights of way especially for vulnerable road users. This should include other routes which are important for sustainable transport or leisure.
  - Ensure that any new parking provision in new developments provides facilities for electric charging of vehicles, as well as shared mobility solutions such as car clubs and thought should be made for autonomous vehicles in the future.

## Report Structure

1.22 The remainder of this RTP is structured as follows: -

- Section 2 outlines the aims and objectives of the RTP in accordance with various current national and local planning policies.
- Section 3 provides a description of the site's location in context with the local area and considers the site's accessibility by a variety of travel modes.
- Section 4 provides an overview of the development proposals including consideration of the access, parking, delivery, and servicing arrangements having regard to relevant national, regional, and local planning design guidance.
- Section 5 sets out a range of measures aimed at encouraging future households and visitors of the approved development to adopt sustainable travel patterns and behaviour, primarily for journeys to and from various workplace destinations.
- Section 6 outlines the roles and responsibilities for the appointed Travel Plan Co-ordinator as well as proposes a strategy for the on-going monitoring and review of the RTP.
- Section 7 presents provisional mode share targets, which seek a progressive decrease in the proportion of future households travelling by private car and corresponding increase in those walking and cycling. Further, it sets out an Action Plan detailing the timescales for when various initiatives would be implemented.
- Section 8 presents a summary of the RTP.

## 2. Travel Plan Aims & Objectives

### Aims

2.1 In accordance with national and local planning objectives, the main aim of this RTP is to reduce the dependency of future households to travel by private car for both essential and non-essential journeys to and from the residential development. This will reduce the impact of such travel on the local environment by: -

- Minimising travel by private car to achieve fewer trips from the development than would otherwise have been the case;
- Reducing congestion on surrounding roads and effects of development-based traffic on emissions, noise, visual intrusion and road traffic accidents;
- Encouraging the use of alternative methods of travel that minimise the environmental impact on the local residential community through the promotion of safe, viable and efficient modes;
- Raising awareness of environmental issues, especially those which impact on personal health and involve transport matters.

### Objectives

2.2 The aims of the RTP are supported by four key objectives. The key objectives are: -

- The promotion and encouragement of walking as a primary means of transport or as part of a journey in conjunction with other modes of transport as well as its health benefits;
- The promotion and encouragement of cycling as a healthy form of private transport;
- The promotion and encouragement of the use of public transport; and
- The promotion of the RTP itself and its specific measures as well as providing improved public transport information.

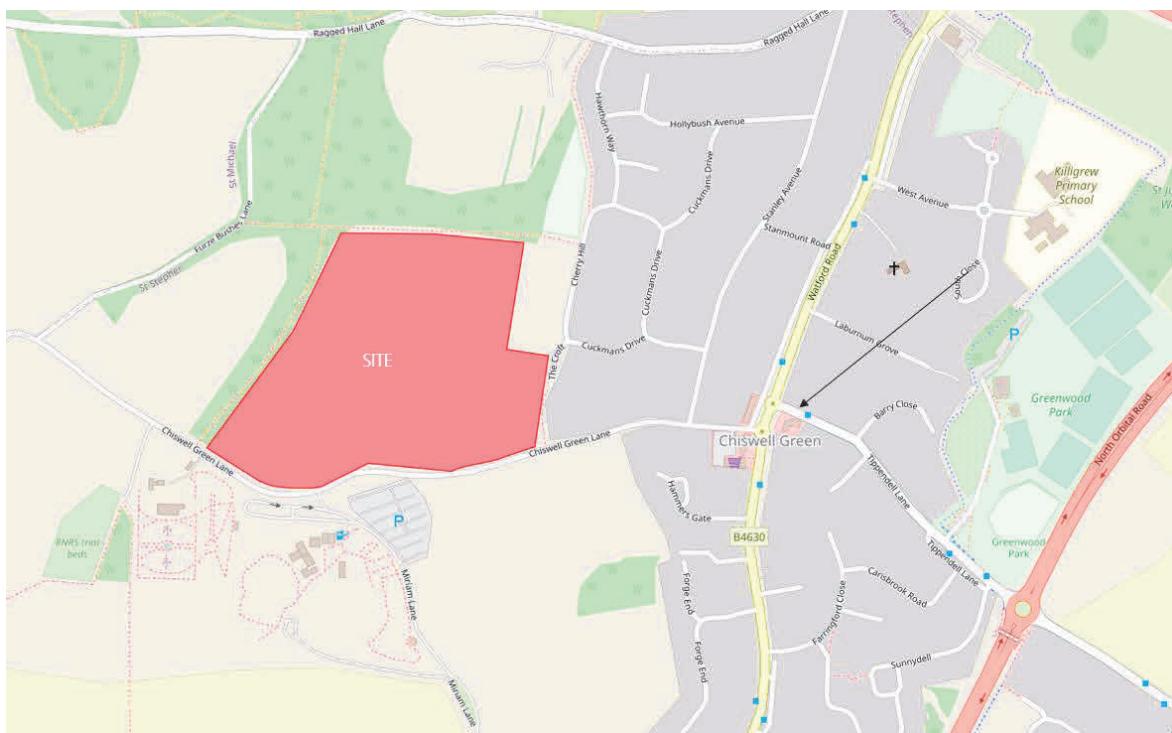
### 3. Site Description and Accessibility Credentials

- 3.1 In order to gain an understanding of the potential for future households of the approved residential development to travel by the more sustainable modes of travel, this section of the RTP evaluates the existing provision of transport infrastructure and services within the vicinity of the site.

#### Site Location and Context

- 3.2 The application site comprises a rectilinear shaped parcel of land that encompasses an area of 14.2-hectares, located off the northern side of Chiswell Green Lane, opposite the former 'Butterfly World' tourist attraction and western periphery of Chiswell Green, approximately 730-metres west of the village centre.
- 3.3 The majority of the site comprises a former polo field and a large metal barn with two small paddocks and stables situated in the south-eastern corner. The site was previously used by St Albans Polo Club and for hosting 'one-off' polo charity events with visitors parking vehicles at the car park of the former Butterfly World visitor attraction, situated directly opposite.
- 3.4 The site boundaries are formed by Chiswell Green Lane to the south, and parts of the Public Right of Way (PRoW) network (i.e. St Stephens 21, 80 and 82) to the west, north, and in part to the east. The site's north-eastern boundary borders open undeveloped land, beyond which lies a number of dwellings located off the eastern side of The Croft and Cherry Hill. The site location in context with the local area is shown below in Figure 1.

**Figure 1** Site Location Plan – Local Context



## Existing Access Arrangements

- 3.5 The site is served by three separate access points located off the northern side of Chiswell Green Lane and off the western side of The Croft.

### Primary Access

- 3.6 The site's primary access, which facilitates vehicular movements to / from the polo field and large metal barn takes the form of a simple priority junction located off the northern side of Chiswell Lane Green, approximately 650-metres west of the 3-arm double mini-roundabout junction with the B4630 Watford Road and Tippendell Lane.
- 3.7 As shown in Figure 2, the site's primary access is gated and set-back from the edge of the carriageway of Chiswell Green Lane by circa 6.0-metres, to accommodate the length of a standard sized car, free of the highway.

**Figure 2 View of Site's Accesses off the Northern Side of Chiswell Green Lane**



- 3.8 Due to being partially positioned on the inside of a bend, and presence of mature vegetation car driver inter-visibility with other motorised and non-motorised users is slightly restricted (see Figure 3), particularly to the right (leading traffic direction). However, in context of the negligible number of vehicular movements generated by the site's existing operation, as well as those observed along Chiswell Green Lane, this is not considered to have a material impact on highway safety.

Figure 3 Car Driver Sight Lines from Site's Primary Access off Chiswell Green Lane



#### Secondary Accesses

- 3.9 Vehicular access to the paddock situated in the south-eastern corner of the site is via an unmetalled track measuring circa 3.5-metres in width and simple priority junction, off the northern side of Chiswell Green Lane, approximately 350-metres east of the primary access.
- 3.10 The access track forms part of the PRoW (i.e. St Stephens 082), which beyond the access to the paddock continues in a northerly direction towards The Croft.
- 3.11 An additional field access that takes the form of a bellmouth junction with a concrete surface is located off the western side of The Croft, approximately 80.0-metres south of the junction with Cherry Hill.

Figure 4 View of Secondary Access off The Croft



- 3.12 Similar to the site's main access, the paddocks are likely to be subject to an immaterial number of vehicular movements over the course of a typical weekday.

## Local Highway Network

- 3.13 Within the vicinity of the site, Chiswell Green Lane comprises a narrow unlit lane, approximately 1.6-kilometres in length and with a carriageway width varying between 3.5 to 5.5-metres. In keeping with the semi-rural aesthetic, no footways are present.
- 3.14 The section of Chiswell Green Lane that abuts the site's southern boundary is subject to the national speed limit (i.e. 60 mph for single carriageway roads) with the transition to the 30 mph posted speed limit situated adjacent to the property of No. 48 Chiswell Green Lane, and secondary access to the paddock situated in the south-east corner. Notwithstanding this, given the horizontal alignment of Chiswell Green Lane, it is unlikely that motorist users would travel at speeds in excess of 40 mph.
- 3.15 As shown in Figure 5, the section of carriageway adjacent to the property of No. 48 Chiswell Green and secondary access narrows to circa 3.5-metres in width, restricting vehicular traffic flow to one-way operation and further reducing the potential for motorised users to travel at speeds above 30 mph.

**Figure 5** View of Chiswell Green Lane



- 3.16 As well as providing direct access to the large metal barn and polo field, Chiswell Green Lane serves the former '*The Garden of the Rose*' visitor attraction, Chiswell Green Riding School, Bone Hill (Bonehill Cottages and The Mansion House), St Stephen Green Farm, and Plaistows Farm / Airfield to the west, a car park for the co-op foodstore and Three Hammers Public House and residential dwellings to the east.
- 3.17 The DfT Circular 02/2006 '*Quiet Lane and Homes Zones (England) Regulations 2006*' defines the characteristics of routes, which may be considered acceptable for designation as Quiet Lanes. Paragraph 4 defines as "*minor rural roads or networks of minor rural roads appropriate for shared use by walkers, cyclists, horse riders and other vehicles.*" It further states, under paragraph 7 that "*designated Quiet Lanes should have no more than about 1000 motor vehicles per day. Vehicle speeds should be kept to levels appropriate to the mix of uses and activities expected to take place, usually with the 85th percentile speed below 35 mph.*"
- 3.18 Whilst Chiswell Green Lane is not designated as a '*Quiet Lane*', due to the lightly trafficked nature and low speed environment present along this section of highway, it is likely to attract a significant number of pedestrian / cycle and equestrian movements over the course of a typical weekday.

- 3.19 Chiswell Green Lane intersects with the B4630 Watford Road and Tippendell Lane via two double mini-roundabout junctions, approximately 650-metres east of the site's primary access. The B4630 Watford Road is defined as a Secondary Distributor Road within the SACDC Local Plan and extends northwards from The Noke Roundabout, leading through Chiswell Green to link-up with St Albans city centre via the A5183 Stephens Hill double mini-roundabout junction.
- 3.20 In the vicinity of The Noke Roundabout, the B4630 Watford Road is a wide single carriageway road of between 7.3 and 8.5 metres in width. Footways of approximately 2.0-metres in width and street lighting is provided on both sides of the carriageway.
- 3.21 The A405 North Orbital Road is a strategic, regional route and defined as a Primary Road within the SACDC Local Plan. The A405 North Orbital Road is a dual two-lane carriageway, with each lane measuring circa 7.0-metres in width and is subject to the national speed limit. The carriageway is provided with street lighting and is divided by a wide grassed central reservation.
- 3.22 The A405 North Orbital Road forms a roundabout junction with the B4630 Watford Road, adjacent to the site's north-western boundary, known as The Noke Roundabout. The roundabout also provides access to The Noke Thistle Hotel on its north-western side and dropped kerb access to the site. The Noke roundabout is oval-shaped, and the circulatory carriageway is provided with sufficient width to accommodate two lanes past each approach arm. The A405 North Orbital Road is provided with two lanes on both approaches to and exit from the roundabout. The B4360 Watford Road is provided with a flared single lane approach and both of the accesses to The Noke Thistle Hotel and the development site are single lane approaches.
- 3.23 The roundabout is subject to a committed improvement scheme associated with a new hotel development to the south (planning reference 5/2015/0722), known as 'Copsewood'. This approved application alters the arrangement of the roundabout to allow a fifth arm to the south, which is intended to provide the main vehicular access to the new hotel development.
- 3.24 To the north-east of the site, the A405 North Orbital Road connects with the A414 at the Park Street Roundabout, which in turn links to the M1 to the west and to the A1 (M) to the east. To the south-west, the A405 North Orbital Road meets the M25 at Junction 21A at a large, grade separated roundabout providing access to the M25 in both directions, as well as the A405 to the south, which allows connections to the M1, via Junction 6. It is understood that the M25 Junction 21A is subject to an improvement scheme, promoted by Highways England. However, no firm details of what this scheme consists of are available at present.

## Accessibility Overview

- 3.25 The planning process at national and local level seeks to ensure that development proposals are located in areas where the need to travel will be minimised and opportunities for encouraging sustainable travel behaviour and patterns can be maximised. Consequently, this section of report assesses the existing provision of transport infrastructure and services by mode within the vicinity of the site.

## Pedestrian & Cycle Accessibility

- 3.26 Walking and cycling play a vital role in healthy and active lifestyles and if convenient and safe links are available, there is significant potential to reduce the need for short journeys to be undertaken by private car, in turn minimising levels of vehicular traffic on the surrounding local highway network.

- 3.27 In keeping with the semi-rural location and aesthetic, no footway is present along either side of the carriageway of Chiswell Green Lane, adjacent to and opposite the site's southern boundary.
- 3.28 However, as shown in Figure 6, a lit footway measuring circa 1.2 to 1.8-metres commences along the northern side of Chiswell Green Lane, near to the site's south-east corner and east of the access track that forms part of Footpath No. 82 (FP82). Grass verges are present at the back edge of footway in between vehicle crossovers connecting the private driveways of properties to Chiswell Green Lane. A 1.8-metre-wide footway is also present along the southern side of the carriageway of Chiswell Green Lane, commencing from the private access of Chiswell Green Farm.

**Figure 6 View of Footway Infrastructure along Chiswell Green Lane**



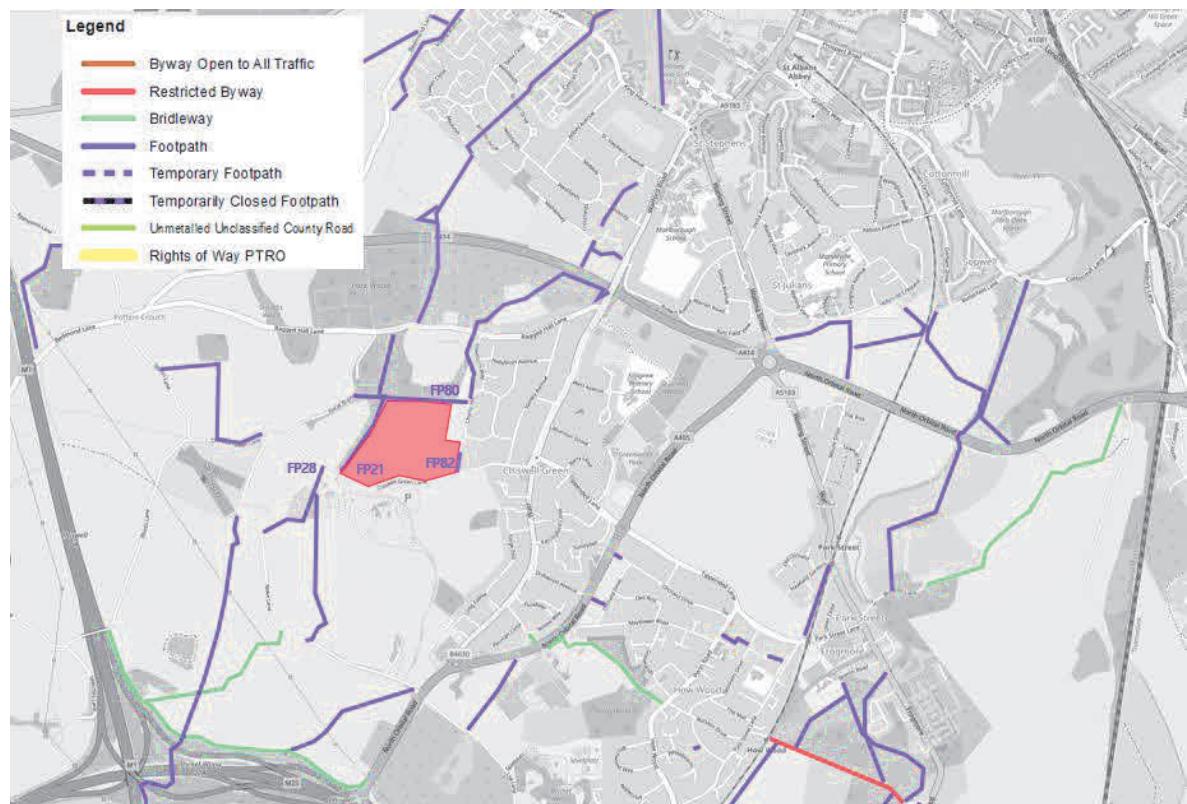
- 3.29 These footways extend in an easterly direction and adjoin the wider network at the intersection with Stanley Avenue where dropped kerbs are present, and the B4630 Watford Road. The footway on both the western and eastern sides of the B4630 Watford Road are separated from the carriageway by wide grass verges with semi-mature trees / vegetation. Where pedestrian desire lines interact with busier routes, suitable crossing facilities are provided, primarily in the form of dropped kerbs and tactile paving.
- 3.30 A Zebra Crossing with a refuge island is located circa 12.0-metres north and south of the double 3-arm mini-roundabout junction of the B4630 Watford Road / Chiswell Green Lane, and B4630 Watford Road / Tippendell Lane, respectively. This caters for the main west to east pedestrian desire line, in-turn providing safe and direct access to the nearest bus stop (Three Hammers Public House) served by southbound services heading towards Watford as well as range of local amenities located off the eastern side of the B4630 Watford Road and either side of Tippendell Lane.

Figure 7 View of Footway Infrastructure along The Croft and the B4630 Watford Road



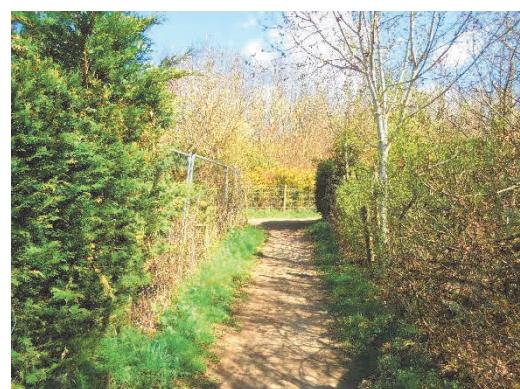
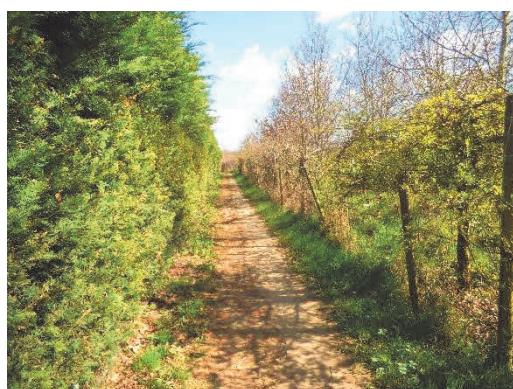
- 3.31 A Pelican Crossing with dropped kerbs and tactile paving is situated approximately 135.0-metres south of the 3-arm mini-roundabout junction of the B4630 Watford Road / Chiswell Green Lane, and this facilities safe and direct access to Watford Road Post Office and Shell Petrol Station.
- 3.32 Other than for a short gap in provision at the western end of Chiswell Green Lane, it is evident that the existing pedestrian environment provides safe and direct access to the nearest bus stops and range of amenities situated off either side of the B4630 Watford Road and predominantly residential area of Chiswell Green and How Wood.
- 3.33 In addition to the formal footway infrastructure, the site benefits from being directly accessible on-foot to the Public Right of Way (PRoW) network. As shown in Figure 8, the site is bounded to the west, north, and east by footpaths (i.e. St Stephen 021, St Stephen 080, and St Stephen 082). These provide alternative north to south and east to west walking routes to the predominately residential area of St Stephens, south of St Albans city centre and Chiswell Green, respectively.

**Figure 8** Public Right of Way Network Plan



3.34 The St Stephen 021 footpath (FP21) measures circa 2.0-metres in width and commences off the northern side of Chiswell Green Lane, opposite the property known as Bone Hill and heads in a north-easterly direction for a distance of circa 380.0-metres. It intersects with the St Stephen 080 footpath, which runs adjacent to the site's northern boundary (see Figure 9).

**Figure 9** View of the St Stephen 021 Footpath and Intersection with the St Stephen 080 Footpath



- 3.35 The St Stephen 080 footpath (FP80) commences off the western side of Cherry Hill, running alongside the play area / recreation ground and heads in a westerly direction for a distance of circa 400.0-metres, where it intersects with the St Stephen 021 (FP21) and St Stephen 081 (FP81) footpaths, prior to terminating at the junction of Furzebushes Lane circa 110.0-metres to the west. The St Stephen 080 footpath has a variable width of between 3.0 and 4.0-metres.

Figure 10 View of the St Stephen 080 Footpath



- 3.36 The St Stephen 081 footpath (FP81) measures circa 4.0-metres in width and commences at the junction with FP80, and heads in a northerly direction for a distance of circa 290.0-metres prior to terminating at the junction with Ragged Hall Lane. This adjoins to the St Michael Rural 008 footpath, which heads northwards via a footbridge over the A414, before connecting to a series of other footpaths (i.e. St Albans City 035, St Albans City 087, and then St Albans City 034), the latter running in a north-easterly direction towards the St Stephens residential area and St Albans City Centre beyond.

Figure 11 View of the St Stephen 081 Footpath Looking Northwards to Ragged Hall Lane



- 3.37 The St Stephen 082 footpath (FP82) commences off the northern side of Chiswell Green Lane, adjacent to the two paddocks situated in the site's south-east corner and to the west of several private dwellings (No. 48 Chiswell Green Lane and 29 The Croft) for a distance of circa 85.0-metres, prior to terminating at the junction with The Croft.

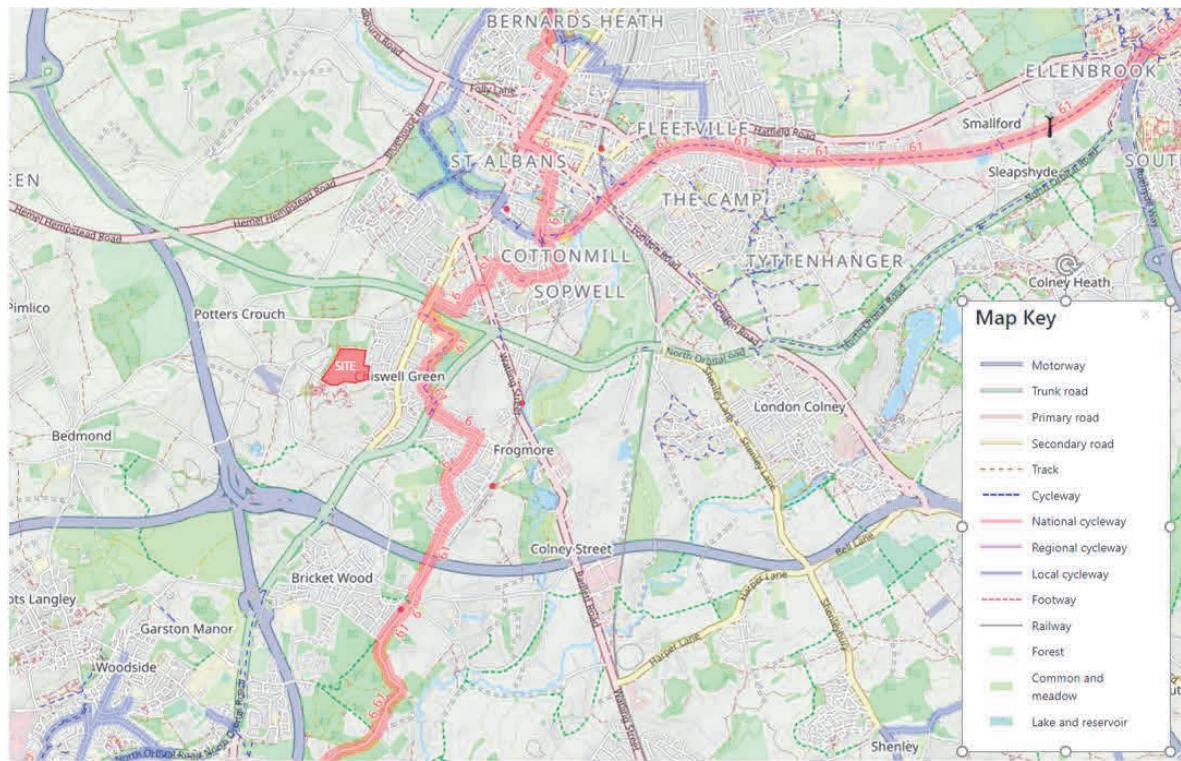
- 3.38 As shown in Figure 12, it mostly comprises of an unmetalled track / rough verge and bounds the site's easter boundary and access point to the southern-most paddock. The St Stephen 082 Footpath has an initial width of 3.5-metres narrowing to 2.7-metres at the northern end.

**Figure 12 View of the St Stephen 082 Footpath Heading Northwards to The Croft**



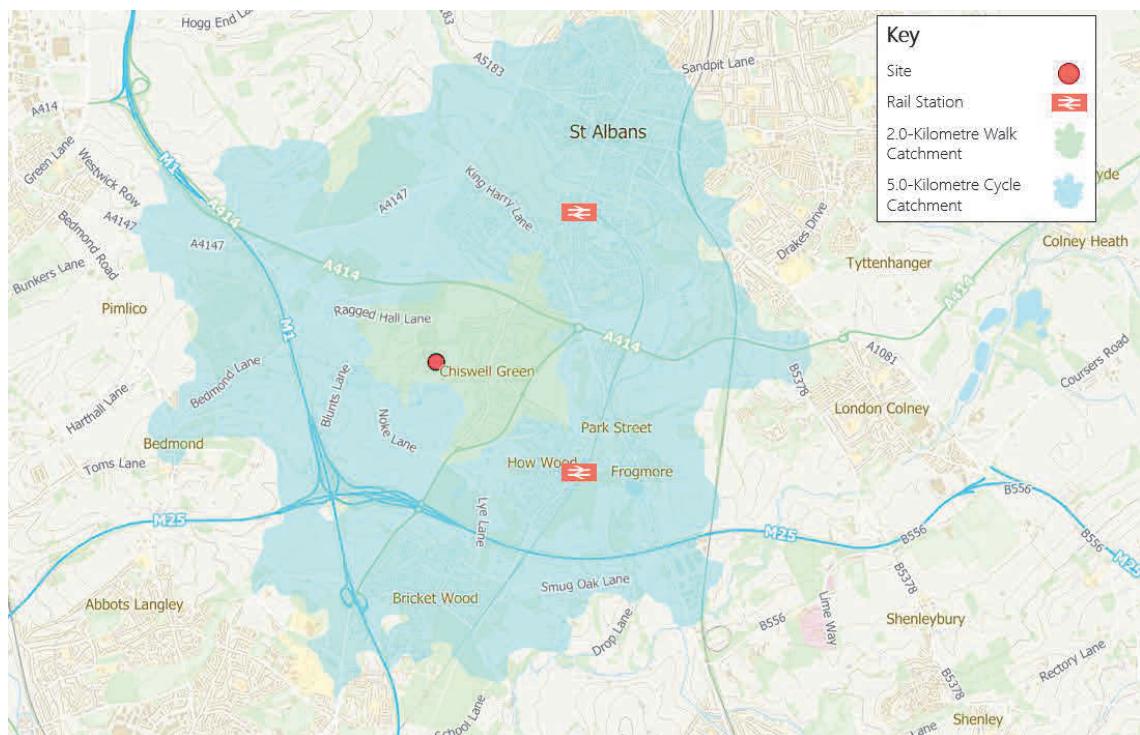
- 3.39 An addition footpath (St Stephen 068) commences off the southern side of Chiswell Green Lane circa 20.0-metres west of the give-way priority junction with Stanley Avenue. This heads in a southerly direction for a distance of 75.0-metres before emerging onto the residential cul-de-sac of Hammers Gate and western side of the B4630 Watford Road, near to the Pelican Crossing facility. On a local level, it provides a short walking route to Watford Road Post Office.
- 3.40 Whilst there is no dedicated cycling infrastructure in the immediate vicinity of the site, it is noteworthy that Furzebushes Lane, Chiswell Green Lane, Stanley Avenue, and Ragged Hall Lane are recognised by the Local Planning Authority's, St Albans City & District's (SADC's) Cycling Map, as "*routes suggested by local cyclists along usually quieter roads.*" These parts of the local highway network are also likely to experience low vehicular speeds over the course of a typical weekday. A copy of SADC's Cycling Map is attached at Appendix 1 of this report.
- 3.41 When this is considered in context with the carriageway width of Chiswell Green Lane (see section 4) and other parts of the local highway network, which are generally of sufficient width to accommodate both vehicular traffic and cycle movements in a safe and convenient manner, it is evident that the existing conditions would provide a favourable environment for cyclists undertaking various journey purposes.
- 3.42 National Cycle Network (NCN) Route 6, which comprises of both on and off-carriageway sections is accessible via the north-eastern side of Tippendell Lane, at the junction with Greenwood Park, approximately 750.0-metres east of the site (i.e. a 3-minute cycle journey). On a local level, NCN Route 6 connects Chiswell Green to St Albans City Centre and Watford (via the district centres of How Wood and Bricket Wood) to the north and south, respectively.

**Figure 13 Local Cycle Route Plan**



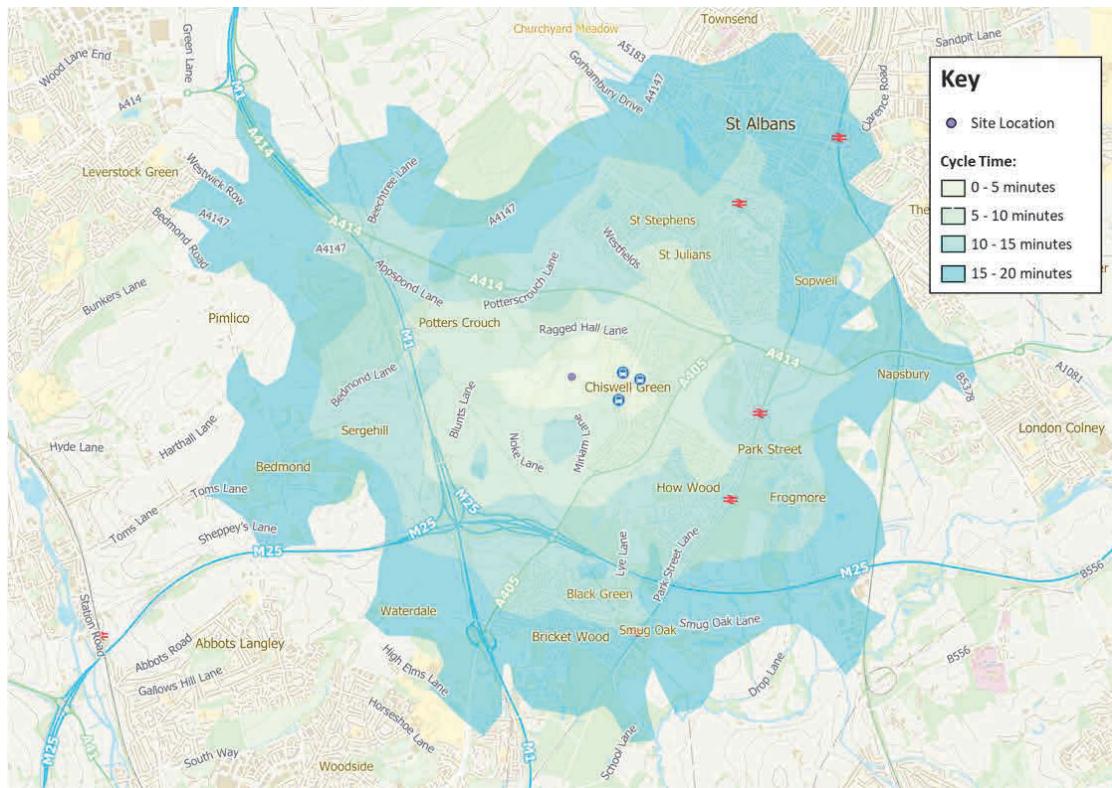
- 3.43 The Chartered Institute of Highways and Transportation's (CIHT's) publication '*Providing for Journeys on Foot*' (2000), states the average length of a walk journey is 1.0 kilometre. It further suggests a preferred maximum walking distance of 2.0 kilometres for commuting / school journeys and 1.2 kilometres for other journey destinations. Other national planning guidance / best practice publications have previously recommended a maximum distance of 5.0 kilometres for reasonably fit individuals to cycle to / from workplace destinations.
- 3.44 As shown in Figure 14, it is evident that the entire urban area of Chiswell Green is accessible on-foot within a 2.0-kilometre walk distance of the site. In addition, the neighbouring district centres of How Wood, Park Wood and Bricket Wood and St Albans city centre including a number of rail stations situated on the 'Abbey Line' are accessible by cycle within a 5.0-kilometre cycle distance of the site.

**Figure 14** Walk and Cycle Catchment Plan



3.45 Figure 15 reveals that the majority of the residential area of Chiswell Green is accessible by cycle within a 5-minute cycle distance of the site, when measured from the centre. The neighbouring district centres of How Wood and Park Street including the rail stations are within a 10 to 15-minute cycle journey time of the site. St Albans city centre and Bricket Wood are accessible by cycle within a 15 to 20-minute cycle journey time of the site.

**Figure 15** Estimated Cycle Journey Times to Local and Regional Destinations



- 3.46 In summary, the existing pedestrian and cycle facilities in the area are of a good standard and offer connections to key local and regional destinations, which would encourage day-to-day walking and cycling journeys. The proposed development could easily connect to these facilities as part of a package of sustainable transport measures.

## Public Transport Accessibility

### Bus Services

- 3.47 The nearest bus stops (near and opposite the Three Hammers Public House) are located on either side of the B4630 Watford Road, approximately 650 and 700-metres (a 10-minute walk time) east of the site as measured mid-way along the site's southern frontage with Chiswell Green Lane, respectively. Both the northbound and southbound bus stops benefit from having sheltered seating, flagpoles with timetable information.

- 3.48 These stops are served by route no. 321 (Arriva, the Shires), which operates between Luton to Watford via Harpenden, St Albans, and Chiswell Green on a frequency of 1 service every 20-minutes, Monday to Saturday; and hourly on a Sunday. On a typical weekday, the first and last bus service operating to Luton Station Interchange Stand 8 departs the northbound bus stop (near Three Hammers Public House) at 06:00 and 23:42, respectively. The first and last bus service operating to Watford Market Stop J departs the southbound bus stop (opposite the Three Hammers Public House) at 05:57 and 23:46, respectively.
- 3.49 Route no. 724 (Greenline), which operates between Harlow and Heathrow Airport (via Watford, St Albans, Hatfield, Welwyn Garden City, Hertford & Ware) on a frequency of 1 service every 2 hours, Monday to Saturday, and every 2 hours on a Sunday is also available from the nearest bus stops. On a typical weekday, the first and last bus service to Heathrow Airport departs the southbound bus stop at 04:28 and 21:05. Further, the first and last bus service to Harlow departs the northbound bus stop at 07:41 and 23:39, respectively.
- 3.50 In addition, route no. 361 (Red Eagle Buses), which operates between Garston / Bricket Wood to New Greens Estate / St Albans on a frequency of 1 service every hour, Monday to Saturday is available from the northbound bus stop.
- 3.51 A summary of all bus services accessible on-foot from bus stops located along either side of the B4630 Watford Road and Tippendell Lane including destinations served and frequency is shown in Table 3.

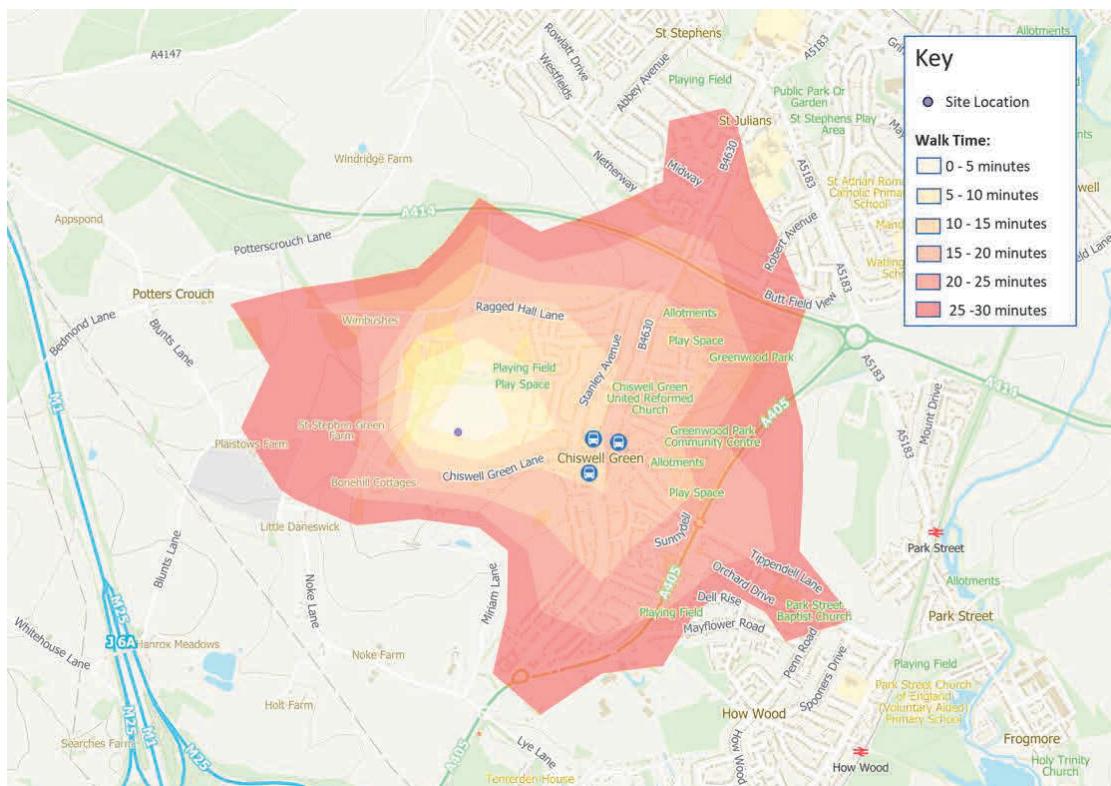
**Table 3 Summary of Services Accessible from the Three Hammers Public House Bus Stops**

Bus No.	Direction/Destination	First Bus	Last Bus	Frequency
321	St Albans, Harpenden, Luton	06:00	23:42	3 per hour, Monday to Saturday, and hourly on a Sunday
	Watford	05:57	23:46	
361	St Albans	07:51	16:58	1 per hour, Monday to Saturday
	Bricket Wood	08:31	17:32	
724	Watford Junction, Rickmansworth, Uxbridge, Heathrow Airport	04:28	21:05	1 per hour, Monday to Saturday, and 1 every two hours on a Sunday
	St Albans, Hatfield, Welwyn Garden City, Hertford, Harlow	07:41	23:49	

- 3.52 It is noteworthy that bus service 321 directly serves Luton, St Albans Abbey, and Watford Junction rail stations, thereby providing opportunities for interchange with mainline rail and London Overground (LO) services operating to a host of local, regional, and national destinations including Birmingham, Clapham Junction, Liverpool, London, Manchester, Milton Keynes, Wolverhampton, and Glasgow.
- 3.53 Whilst the location of the nearest bus stops located along either side of the B4630 Watford Road and Tippendell Lane are beyond the CIHT's recommended maximum walking distance of 300-metres for what is defined as '*less frequent routes*', as set out in the '*Buses in Urban Developments*' (January 2018) publication, it is noteworthy that there are a number of factors, which may influence future households and visitors to travel by bus to / from the proposed development.

- 3.54 Importantly, future households are likely to accept slightly longer walk distances to reach bus services, which are fast and direct, more frequent, and to stops serving a wider range of destinations. Further, the topographical, quality and safety of a walking route is also likely to have an influence. For example, safe routes, which are well overlooked will be perceived as less onerous than isolated and poorly lit routes.
- 3.55 As outlined earlier in this section of the report, the nearest bus stops (near and opposite the Three Hammers Public House) are served by bus route 321, which provides frequent and direct access to a host of local and regional destinations. These services operate over an extensive part of a typical weekday / end, thereby providing a realistic mode of travel for households undertaking shift work with early starts / late finishes. The typical bus journey time to Harpenden, Luton, St Albans, and Watford is 20, 45, 5, and 32 minutes respectively.
- 3.56 The potential walking route from the site to the nearest bus stops (near and opposite the Three Hammers Public House) is via Chiswell Green Lane, which as demonstrated earlier in this section of the report is well-lit / overlooked by existing dwellings and is over a level gradient.
- 3.57 As shown in Figure 16, the nearest bus stops (near and opposite the Three Hammers Public House) located along the B4630 Watford Road are within a 10 to 15-minute walk journey time of the centre of the site.

**Figure 16      Estimated Walk Journey Times to Local Bus Stops**



- 3.58 It is therefore concluded that the quality and frequency of the existing routes is likely to influence a significant proportion of future households to travel by bus to gain access to education, employment, leisure, and retail destinations, thereby reducing dependency on use of the private car for various journey purposes.

### Rail Services

- 3.59 How Wood rail station is located at the southern end of Hyde Lane, approximately 2.6-kilometres (a 34-minute walk and 12-minute cycle journey time) south-east of the site. It forms part of the '*Abbey Line*' branch, a single-track route between St Albans Abbey and Watford Junction. The route is operated by London Northwestern Railway. Services run hourly in each direction with journey times being 10 and 28 minutes to St Albans Abbey and Watford Junction stations respectively.
- 3.60 Bricket Wood station is also situated along the '*Abbey Line*', one stop closer to Watford, and is located circa 4.2-kilometres south of the site (i.e. a 16-minute cycle journey time) of the site.
- 3.61 Watford Junction rail station provides numerous opportunities for interchange with other mainline rail and London Overground (LO) services operating to a wide range of local and regional destinations including Clapham Junction, Edinburgh, Liverpool, London, Manchester, Milton Keynes, and Wolverhampton.
- 3.62 It is noteworthy that there are proposals to i) reopen a passing loop at Bricket Wood; ii) run trains which bypass certain stations; iii) convert the line to light rail operation; and iv) convert the line to a guided busway. The installation of a passing loop and / or conversion of the '*Abbey Line*' to a guided busway would enable higher service frequencies to be provided and increase the attractiveness of this mode to future households and other end-users.
- 3.63 St Albans City rail station is situated off the western side of Station Way, approximately 5.0-kilometres north-east of the site (a 20-minute cycle journey). The station is operated by Thameslink and facilitates access to a host of local, regional, and national destinations including Bedford, Brighton, Gatwick Airport, Luton, Sutton, and Wimbledon.
- 3.64 As shown in Table 3.1, the nearby rail stations of Bricket Wood, St Albans Abbey, and St Albans City benefit from having dedicated cycle parking spaces. The presence of these facilities will enable future households to travel by a multitude of modes for journeys to various workplace destinations.

**Table 3.1      Summary of Cycle Parking Facilities Available at Nearest Rail Stations**

Station	Cycle Parking Facilities
Bricket Wood	12 cycle parking spaces on Platform 1
How Wood	0 cycle parking spaces
St Albans Abbey	20 cycle parking spaces on Platform 1
St Albans City	1,150 secure and covered cycle parking spaces adjacent to Platforms 1 and 4

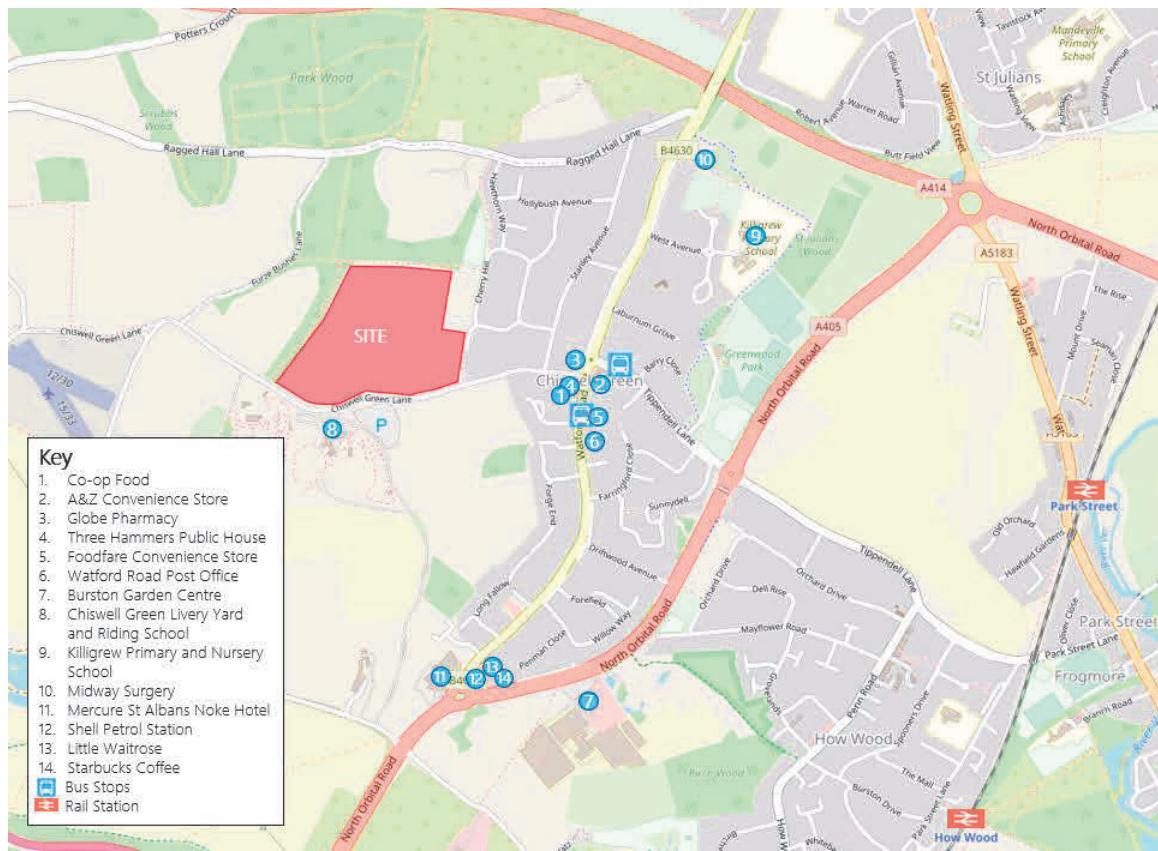
## Accessibility to Local Amenities

- 3.65 The CIHT cites a maximum acceptable walking distance for day-to-day amenities of around 2.0-kilometres, whilst other best practice guidance suggests that cycling has the most potential to replace vehicle journeys under 5.0-kilometres in length.
- 3.66 When applying the above-mentioned thresholds to the centre of the site, it is evident, as shown in Table 3.2 and Figure 17, that a wide range of local amenities, which are likely to cater for the everyday needs of future households are within the maximum walking and cycling distances.

**Table 3.2 Summary of Local Amenities Accessible On-Foot and By Cycle**

Type of Amenity	Destination	Distance (Kilometres)	Walk Journey Time /mins	Cycle Journey Time /mins
Convenience	Co-op Foodstore	0.6	7	3
	Simmons Bakers	0.7	9	3
	Watford Road Post Office & Convenience Store	0.8	9	3
Education	Killigrew Primary and Nursery School	1.3	16	5
	How Wood Primary	2.1	24	8
	St Colomba's College	2.4	30	8
	The Marlborough Science Academy	2.7	34	10
Employment	St Albans City Centre	4.0	-	15
Faith	Homewood United Reformed Church	1.0	13	4
	St Stephens Church	2.3	29	8
Healthcare	Globe Pharmacy	0.65	8	3
	Midway Surgery	1.3	16	5
Leisure and Fitness	Chiswell Green Livery Yard & Riding School	0.2	2	1
	Greenwood Park & Lawn Tennis Club	1.2	15	4
	Westminster Lodge Leisure Centre & Track	2.8	35	9
	Abbey Theatre	2.8	35	9
Retail	Abbey View Retail Park	3.1	-	10
	St Albans City Centre	4.0	-	15

## Figure 17 Local Amenities Plan



## Summary

3.67 The review of the baseline conditions demonstrates:

- The site benefits from being accessible on-foot, by cycle and by public transport infrastructure and services, which combine to provide a good level of connectivity to a host of local and regional destinations as well as a wide range of amenities likely to cater for the everyday needs of future households.
  - Consequently, in accordance with the main aims and objectives of national, regional, and local planning policy, the development proposals would provide numerous opportunities for future households and other end-users to adopt long-term sustainable travel patterns and behaviour for various journey purposes.

## 4. Proposed Development

### Overview

- 4.1 The development proposals comprise the erection of up to 330 residential units (i.e. 32 x one-bed, 116 x two-bed, and 182 x three-bed, Under Use Class C3) together with the creation of a new access, internal roads / footpaths, car parking, cycle / refuse storage, public open space, and soft landscaping together with other supporting infrastructure and utilities on land north of Chiswell Green Lane in Chiswell Green, Hertfordshire
- 4.2 A proposed masterplan layout plan, prepared by Tom Gristwood Architects is attached as Appendix 2 of this report. As shown in Table 5.1, 100% of the residential units would be comprised of affordable housing.

**Table 5.1 Schedule of Accommodation**

Description / House Type	No. of Units	%
1-Bedroom Dwelling	32	10%
2-Bedroom Dwelling	116	35%
3-Bedroom Dwelling	182	55%
<b>TOTAL</b>	<b>330</b>	<b>100</b>

### Proposed Movement and Access Strategy

- 4.3 The proposed development is supported by a comprehensive Movement and Access Strategy (MAS) developed in the context of the current policy framework. This will provide a balanced approach between the various road user functions, taking account of constraints and opportunities. The MAS has been informed by key guiding principles, including:
- The promotion of road safety;
  - Sustainability - minimising impact on the environment;
  - Integration with the local community, promoting accessibility by non-car modes of travel; and
  - The operational efficiency of the local and strategic networks.
- 4.4 The following sub-sections provide further detail in respect of the MAS by road user function.

## Proposed Access Arrangements

### Primary Access

- 4.5 Vehicular, pedestrian and cycle access to the proposed development would be achieved by the creation of a priority give-way junction located off the northern side of Chiswell Green Lane, approximately 45.0 and 400.0-metres west of the access track forming FB82 and the double mini-roundabout junction with the B4630 Watford Road / Tippendell Lane, respectively.
- 4.6 As shown on Drawing No. 21-086 / 001 Rev B (attached), the geometric design of the access would take the form of a bellmouth junction with 6.0-metre kerb radii and a 5.5-metre-wide access road, sufficient to accommodate the simultaneous entry and exit movements of various sized vehicles.
- 4.7 As part of the proposed access design, a short section of the carriageway of Chiswell Green Lane to the east of the site's access would be narrowed to 3.5-metres in width, to promote one-way operation (priority afforded to westbound traffic movements). This feature would influence motorised users to travel at low speeds (i.e. sub-30 mph) in both an east and westbound direction along Chiswell Green Lane.
- 4.8 The existing 30-mph posted speed limit would also be extended to a point beyond the west of the site's proposed access to ensure car drivers are afforded sufficient inter-visibility with other motorised and non-motorised users. The section of Chiswell Green Lane to the west would remain unchanged / maintained as a quiet rural lane, to discourage motorised users from '*rat running*' to local destinations (e.g. Bedmond).
- 4.9 The design of the proposed access would require the full utilisation of the public highway, and result in the displacement of parked vehicles, likely to be in association with Nos. 46 and 48 Chiswell Green Lane. To compensate for the loss of off-street parking, the design includes the provision of 3 parallel parking bays within a section of the public highway located off the southern side of the carriageway. The provision of these spaces would require the removal of two mature trees.
- 4.10 The design would incorporate a shared foot / cycleway measuring 3.0-metres in width on the eastern side of the proposed access road. This would connect to a new shared foot / cycleway running in an easterly direction along the full length of the northern side of Chiswell Green Lane and tie into existing infrastructure either side of the double mini-roundabout junction of the B4630 Watford Road / Tippendell Lane. The provision of this new infrastructure would provide convenient, direct, and safe walking routes to the nearest bus stops and range of amenities available in Chiswell Green village centre.
- 4.11 To inform the design and optimum position of the access, the 85th percentile speeds from the ATC survey along Chiswell Green Lane, was used to calculate the required visibility splays based on the stopping sight distance formula, as set out in the DfT's '*Manual for Streets 1*' (MfS1) publication.

### Secondary Access

- 4.12 A secondary emergency vehicle access measuring circa 5.0-metres in width would be located off the western side of The Croft. Pedestrians and cyclists would be prohibited from using the emergency vehicle access.

## Internal Layout

- 4.13 The internal layout of the masterplan would reflect the principles of MfS1 and Policy 1 of HCC's LTP4 publication by creating a layout with safe routes for vehicular traffic, but which ultimately promotes the interests of households as pedestrians and cyclists, providing optimal access to local amenities and sustainable transport connections.
- 4.14 The aim is to encourage the use of walking and cycling within the proposed development and to surrounding amenities. This will be achieved by combining the provision of new and improved infrastructure and with the implementation of a Residential Travel Plan.
- 4.15 Achieving an increase in walking and cycling will be accomplished through the following broad strategy:
- Provide a continuous network;
  - Maximise convenience by ensuring that all routes reflect desire lines of movement;
  - Ensure that usable, comfortable places are created and that crossing places are level;
  - Make routes clear and easy to follow with good sightlines and signage, and;
  - Create spaces that are safe, active, and accessible to all.

4.16 Overall, a high-quality environment for both pedestrians and cyclists will be created internally that provides direct connections within the site and beyond, creating a development that is permeable with coherent, safe routes that reflect desire lines of households.

## Shared Foot / Cycleway

- 4.17 The design of the proposed access would also incorporate a shared foot / cycleway measuring 3.0-metres in width on the eastern side of the proposed access road. This would connect to a new shared foot / cycleway running in an easterly direction along the full length of the northern side of Chiswell Green Lane and tie into existing infrastructure either side of the double mini-roundabout junction of the B4630 Watford Road / Tippendell Lane.
- 4.18 As shown on Drawing No. 21-086 / 002 (attached), the width of the carriageway way of Chiswell Green Lane would be reduced to 5.5-metres, to accommodate a raised table feature at the intersection with Stanley Avenue and allow priority to be afforded to pedestrians and cyclists over motorised users. Further this would enable existing trees and a telegraph pole currently located in the highway verge to be retained. The provision of this feature would also discourage future households from '*rat-running*' via Stanley Avenue, in attempting to gain access to the B4630 Watford Road through bypassing the double mini-roundabout junctions.
- 4.19 A similar raised table feature would be provided at the junction of Chiswell Green Lane and Watford Road (Minor), the latter providing direct access to the parade of shops located off the western side of the B4630 Watford Road. It is proposed that the shared foot / cycleway would extend around the north-western corner of the mini-roundabout junction of the B4630 Watford Road / Chiswell Green Lane, prior to adjoining an upgraded Zebra Crossing positioned on a raised table.

- 4.20 The footway located along the eastern side of the Zebra Crossing would be upgraded to a shared foot / cycleway and widened to circa 5.5-metres in width. This would continue in a north-easterly direction to a shared space raised table at the junction of Tippendell Lane and access road serving the parade of shops situated off the eastern side of the B4630 Watford Road. Bollards would be installed at the back edge of the shared foot / cycleway to prevent encroachment from motorised users accessing the local shops.
- 4.21 The footway along the eastern side of the access road serving the local shops would comprise of dropped kerbs to enable vehicles to enter and exit the area of hardstanding that is used for parking, adjacent to the main entrances.
- 4.22 The provision of this new infrastructure would provide convenient, direct, and safe walking and cycling routes to public transport infrastructure / services as well as a range of amenities available in Chiswell Green village centre and beyond.

## Proposed Parking Arrangements

### Car

- 4.23 As shown on the current iteration of the masterplan, each residential unit would be provided with an appropriate level of car parking spaces in accordance with SADC's adopted standards and likely levels of car ownership.
- 4.24 Since the development proposals are only indicative in nature, the provision of car parking in accordance with SADC's car parking standards and current levels of car ownership of existing households from the 2011 census will be considered in greater detail, as part of a Reserved Matters (RM) planning application.
- 4.25 In addition, the proposed masterplan shows the provision of a dedicated car parking facility for the memorial park located in the site's south-eastern corner. This facility would prevent the potential for visitors to park vehicles along either side of the carriageway. Further, it would be gated to prevent the misuse by non-visitors.

### Cycle

- 4.26 Regarding cycle parking, the adopted standards require 1 long-term cycle space per residential unit in the form of garages / sheds for houses and communal covered stores for apartments. In addition, 1 short-term space per 3 units plus 1 long-term space per 5 units would be required.
- 4.27 To ensure compliance with adopted cycle parking standards, it is envisaged that the emerging masterplan for a development proposal would provide sufficient space for the storage of cycles within the curtilage of each residential unit, in the form of garages / garden sheds for each of the houses. For flats / apartments and the commercial uses, dedicated sheltered cycle stores will be provided to accommodate the cycle parking space requirement.

## Proposed Delivery / Servicing Arrangements

### Waste Refuse and Recycling

- 4.28 Waste refuse and recycling collections for the proposed development would predominately take place on-street within the internal road layout.
- 4.29 Bin stores would be located conveniently throughout the site to ensure compliance with the maximum carry distances for both residents (i.e. 30-metres) and waste operatives (i.e. 25-metres), as recommended in '*Schedule 1, Part H of the Building Regulations 1*' (2000), as outlined in the DfT's MfS1 guidance.
- 4.30 As shown on Drawing No. 21-086 / TK01 Rev A (attached), it is evident that a large refuse truck can enter, exit, and turn within the proposed masterplan layout in a safe and convenient manner without overrunning adjacent footways, parking spaces or areas of soft landscaping.

### Emergency Access

- 4.31 With regards to emergency access, '*The Building Regulations Approved Document B Section B5 Access and Facilities for the Fire Service*' document states that "*there should be vehicle access for a pump appliance within 45m of every dwelling entrance for flats / maisonettes.*"
- 4.32 Based on the layout of the masterplan, and as shown on Drawing No. 21-086 / TK02 Rev A (attached), a fire tender truck can access all of the residential units comprising the within the 45.0-metre threshold.
- 4.33 Consequently, it is concluded that the proposed masterplan layout is acceptable for delivery / servicing and emergency vehicles access.

## 5. Sustainable Travel Initiatives

### Overview

- 5.1 This section outlines a number of '*hard*' infrastructural and '*soft*' behavioural measures, which will be implemented, refined, and expanded on throughout the lifetime of the RTP; a five-year period commencing after initial occupation of the residential development.
- 5.2 As far as is possible, the sustainable travel measures / initiatives outlined in this section of the report are designed to be suitable for review and monitoring. However, this list is not exhaustive, and the Travel Plan Coordinator (TPC) will be free to investigate other potential initiatives.
- 5.3 Whilst some of the travel initiatives may be implemented from the commencement of occupation of the development, others will need to be determined once a review of the initial travel survey has been completed.

### Home Travel Packs

- 5.4 An introductory Home Travel Pack (HTP) will be provided to all households upon completion of the purchase of a property. The HTP will be designed specifically for the households to include details of key local facilities within walking and cycling distance of the residential development.
- 5.5 The HTP will contain up-to-date details of public transport services and the location of bus stops, underground and mainline rail stations. The pack will also provide promotional material highlighting the health benefits of walking and cycling. In addition, it will include details of essential contact addresses, telephone numbers and websites administered by the local authority and transport providers as well as details of local business offering home delivery services.
- 5.6 Within the HTP, a minimum of £100 will be provided per unit in sustainable travel vouchers.

### Promotional Material

- 5.7 The appointed TPC will work closely with the Sales and Marketing team. The TPC will give them appropriate information that will help to promote the use of sustainable transport for travel to and from the development. In this way, households will have had the opportunity to consider their travel options prior to taking up residence in their new apartment.
- 5.8 Travel information will be updated and provided to households over the lifetime of the Travel Plan to ensure residents are aware of the latest local transport routes, timetables etc.

### Walking and Cycling

- 5.9 Walking and cycling play a vital role in healthy and active lifestyles and if convenient and safe links are provided there is significant opportunity to reduce the need for households to undertake private car journeys over relatively short distances, in turn decreasing the level of traffic on the surrounding local highway network.

5.10 To encourage future residents and visitors to travel on-foot for various journey purposes, the following initiatives will be implemented:

- The TPC will promote the personal health benefits of walking by encouraging households to participate in national travel awareness events including '*Walk-to-Work*' and '*Walk to School*' Week.
- Secure and covered cycle parking facilities would be provided for each residential unit to actively encourage future households to travel by cycle for various journey purposes.
- The TPC will also investigate the possibility of obtaining discounts for households at a local cycle retailer. The intention will be to encourage cycling by providing households with discounts on cycles, accessories and maintenance and repair services.
- The TPC would seek to set up a Bicycle User Group (BUG) to encourage cycling amongst new households. It is intended that this group will meet regularly to discuss issues related to cycling both on site and within the surrounding area. Households will be encouraged to manage the meetings themselves and to feedback comments to the TPC.
- The BUG will also provide information regarding the Government backed '*CycleScheme*' which allows employees to purchase a bicycle tax-free via their employer. The scheme needs to be instigated by a resident's prospective employer. The benefits of the scheme include reduced costs for purchasing a bicycle to an employee (equivalent to saving on Income Tax and National Insurance and benefit of spreading the cost over 12 months). Further an employer would save National Insurance contributions since the scheme is based on a salary sacrifice and would redeem the VAT on the purchase.

### Public Transport

5.11 Details of local public transport services will be included within the HTP and on notice boards. This will include the location of bus stops, operator websites and the ticket types available.

5.12 The TPC will also liaise with the local public transport operators (Arriva, the Shires; Greenline, and Red Eagle Buses) to explore the potential of obtaining bus '*taster*' tickets on behalf of households Subject to the outcome of future discussions, this initiative will increase bus patronage and contribute towards achieving the set mode share targets.

### Car Sharing

5.13 Car sharing involves two or more people travelling together for all or part of a journey. It represents a relatively convenient, flexible, and cost-effective mode of travel if car sharers live and work in similar locations.

5.14 Liftshare is the UK's largest car share database with approximately 724,877 registered members. Typically, around 45% of registered members regularly car share, often as part of their journey to and from work. The Liftshare website provides a '*savings calculator*' to enable members to work out specific savings. It is noted that for journeys comprised of 5 miles, an individual can potentially save in the order of £334 per annum if travelling within a standard sized vehicle (i.e. between 1.4 and 2.0 litres).

- 5.15 In order to encourage future households to car share with individuals undertaking similar journeys, details of Liftshare ([www.liftshare.com/uk](http://www.liftshare.com/uk)) including information on how to register and identify suitable journey matches will be promoted within the HTPs.

### Homeworking

- 5.16 All residential units within the approved development will be provided with broadband infrastructure to enable future households to work from home as well as gain access to various goods and services online (e.g. shopping and banking) thereby reducing the demand for travel. Further, future households would also be able to gain access to websites administered by public transport operators, the Local Authority, local taxi companies and local cycle shops etc.

### Personalised Travel Planning

- 5.17 To ensure prospective households are made aware of the site's accessibility by a variety of travel modes and associated benefits, sales and marketing staff working on behalf of the applicant will receive appropriate training on the RTP initiative.
- 5.18 It is recognised by Transport Planning practitioners that the event of home relocation represents a change in the situational context, thereby providing a window of opportunity for previous travel habits / behaviour to be reconsidered. When this window of opportunity is combined with information on travel alternatives to the private car, new homeowners are more likely to be preconceived to changing their behaviour from private car to the use of sustainable modes such as public transport, walking and cycling.
- 5.19 Consequently, the HTPs will be delivered to each household within the first month of occupation to ensure that travel habits regarding the use of private car for various journey purposes does not become habitual. The process of delivering HTPs to each household will form part of the Personalised Travel Planning (PTP) initiative, undertaken by the appointed TPC. The aim of the RTP initiative will be to obtain an in-depth understanding of new household's specific travel requirements.

## 6. Management, Monitoring and Review

### Travel Plan Coordinator

- 6.1 To ensure the effectiveness of the RTP in achieving set aims / objectives and mode share targets, the applicant of a future Reserved Matters planning application would appoint a Travel Plan Co-ordinator (TPC) to manage the implementation of the RTP. Once appointed, the contact details of the TPC would be issued to HCC's Travel Plan Officer.
- 6.2 It is envisaged that the TPC would dedicate circa 2-days per month to undertake the role, although this will be reviewed on a regular basis and remain flexible. The applicant of a Reserved Matters planning application would liaise with HCC's Travel Plan Officer to inform them of any changes to personnel / contact details of the TPC.
- 6.3 The TPC would be responsible for the implementation, communication, monitoring and management of the defined aims and objectives. The responsibilities of the TPC are to:
- Oversee the development and implementation of the RTP;
  - Set-up, administer and service the RTP steering group / committee and provide effective communication at all levels;
  - Raise awareness of the RTP through the implementation and promotion of effective marketing campaigns through a range of media including a community website and regular newsletters / leaflet drops etc.;
  - Act as the point of contact for all residents on a day-to-day basis;
  - Organise the necessary surveys or other data collection exercises required to develop / review the Travel Plan;
  - Act as the point of liaison with external organisations such as HCC and public transport operators;
  - Coordinate the monitoring programme for the RTP;
  - Ensure survey results and monitoring are submitted to HCC Travel Plan Advisor in Years 1, 3 and 5 for approval; and
  - Control the budget for the development of the RTP to ensure its efficient and effective use.

### Residents Association

- 6.4 The TPC will set up a Residents Association at a point in time when the proposed development is fully occupied to continue the long-term promotion of sustainable travel patterns and behaviour. The Residents Association will transition into this role after the fifth-year anniversary of implementation and subject to the set trip rate target being satisfactorily achieved.

## Communication

- 6.5 The success of the RTP will rely on the support of residents. The TPC will need to ensure that the principles and initiatives within the RTP are fully understood and will act as the first point of contact for any Travel Plan related issues or queries. Continual monitoring of the RTP will need to be a progressive and staged process.
- 6.6 Promotional material will also be used periodically to highlight the RTP initiatives. The promotional material will include advice on the appropriate channels for raising specific transport-related matters, encouraging residents to contact the nominated TPC who in turn will liaise with the appropriate authorities.
- 6.7 Promotional material, both in paper and digital formats, will be used to highlight the Travel Plan initiatives. Promotional material will include advice on the appropriate channels for raising specific transport-related matters, encouraging the community to contact the TPC for liaison with the appropriate authorities. Households will also be made aware of any changes to RTP initiatives through various media outlets including flyers, posters and/ or e-mails.

## Monitoring

- 6.8 A programme of monitoring and review will be implemented to generate information by which the success of the RTP can be evaluated. Monitoring and review will be the responsibility of the TPC for reporting purposes. Information gathered through the monitoring process will be recorded for input to the review process.
- 6.9 The monitoring of the RTP to be undertaken annually in the form of household travel surveys / questionnaires. Multi-modal counts will be undertaken by a 3<sup>rd</sup> party on a biennial basis at the cost of the applicant. Approximately 6 months post-occupation (i.e. prior to the first review of the RTP), a comprehensive travel survey will be undertaken, using standardised methodology.
- 6.10 Travel surveys will be regularly issued and structured to provide a robust level of information from which comparative assessments of travel demand can be made but also to encourage recipients to detail any ideas or comments they may have on the success or otherwise of the RTP.
- 6.11 As part of the monitoring process the following measures incorporate both the collection of 'hard' analytical data and 'soft' data in the form of general feedback and correspondence. The format of the survey will comply with the HCC's standards and will seek to establish the following:
- The number of trips made per day (by day of week) and mode of travel by journey purpose;
  - Opportunities for linked trips by journey purpose;
  - Particular needs for the use of a private car for work or other purposes (as applicable – likely to focus on needs of disabled residents);
  - Special needs requirements;
  - Monitor issues surrounding access and car parking;
  - Attitudes towards other travel arrangements that could be considered and ways in which they could be encouraged to do so; and

- Liaise with local public transport operators and other relevant local bodies to establish the level of demand for local services and to provide services that meet the need of residents.

6.12 Information gathered through the monitoring process will be recorded for input to the review process.

6.13 Monitoring schedules which adhere to HCC's guidance would be followed, as set out below:

- Trigger points for the initial review, e.g. at the stage the development reaches 75% occupancy to provide the information base for future monitoring of the plan;
- Multi-modal counts conducted annually after the initial RTP trigger point has been reached;
- Annual monitoring reports thereafter for the initial 5 years after full occupation; and
- A requirement after 5 years to outline how future monitoring will be undertaken if all the key targets have not been met.

## Travel Plan Review

6.14 The RTP is a strategy that will evolve over time. Although the objectives of the Plan to '*educate*' residents and to facilitate travel by sustainable modes will not change, it may be possible over time to define or re-define specific targets.

6.15 The RTP will therefore be the subject of a regular review process in order to measure its success or otherwise and to identify the potential for improvements to the physical and behavioural travel initiatives being offered.

6.16 In addition to carrying out the repeat household travel surveys annually, a full RTP review will be undertaken in Years 1, 3 and 5. This will involve assessing the effectiveness of the initiatives (detailed in Section 5) and amending them or adding new measures as appropriate. A summary report will be made available to HCC and other key stakeholders. HCC's Travel Plan Officer may wish to meet with the TPC to discuss the survey results and the contents of the associated report.

## 7. Targets and Action Plan

### Targets

- 7.1 In order to determine the effectiveness of measures in accomplishing the set objectives, mode targets based on the DfT's '*Specific, Measurable, Achievable, Realistic and Time-bound*' (SMART) criteria are set out in this section of the report, to ensure that the main outcomes of the RTP can be quantified.
- 7.2 Since the travel patterns / behaviour of future households of the proposed development are not yet known, the multi-modal trip generation, as presented in Section 6 of the TA submitted in support of the planning application have been used to provide an indicative basis for informing provisional trip rate targets.
- 7.3 It is not until the initial travel survey has been completed, reviewed, and analysed that site specific modal shift targets can be identified. Thereafter the RTP would be revised to contain suggested targets against which the success of measures can be determined. The targets will then form a continual part of the review process over subsequent years with revised targets set in conjunction with HCC's Travel Plan Officer on an agreed basis.

### Provisional Mode Share Targets

- 7.4 As shown in Table 7.1, development proposals would have the potential to generate in the order of 296 and 242 two-way person trip movements during the AM (08:00 – 09:00) and PM (17:00 – 18:00) peak hour periods respectively. Of these, approximately 223 and 182 would comprise private car trips, 38 and 31 by public transport and 17 and 14 by the '*active*' modes of walking and cycling.

**Table 7.1 AM & PM Peak Hour Trip Generation**

Mode	AM Peak Hour (08:00 – 09:00)		PM Peak Hour (17:00 – 18:00)	
	Arrivals	Departures	Arrivals	Departures
Car Driver	48	175	111	71
Car Passenger	2	9	6	4
Public Transport Users	8	30	19	12
Pedestrians	3	11	7	5
Cyclists	1	2	1	1
Other	2	7	5	3
<b>TOTALS</b>	<b>63</b>	<b>233</b>	<b>147</b>	<b>95</b>