



Birdworld and Haskins Forest Lodge Garden Centre  
Transport Assessment [ISSUE]

Client: Birdworld Ltd and Haskins Garden Centres Ltd

i-Transport Ref: SAW/DF/HC/ITB16329-013B R

Date: 25 January 2024

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## Quality Management

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<b>ITB16329-GA-020F</b>	<b>Site Layout Review – Visibility</b>
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## **Appendices**

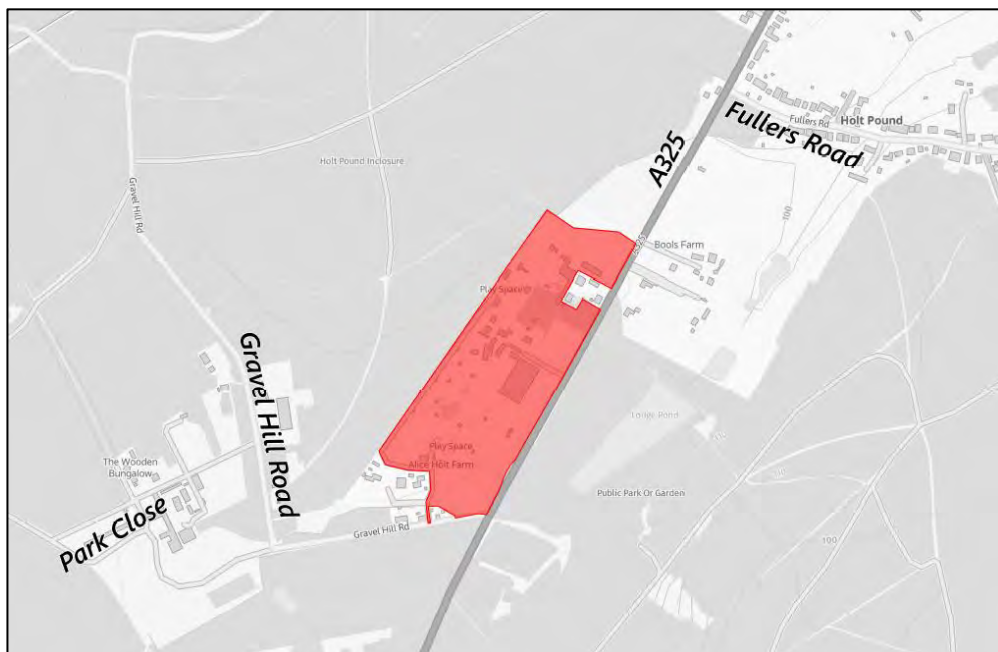
<b>APPENDIX A.</b>	<b>Proposed Site Plan</b>
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## SECTION 1 Introduction

### 1.1 Overview

1.1.1 Birdworld Ltd and Haskins Garden Centres Ltd ('the Applicant') is proposing to redevelop the Birdworld visitor attraction ('Birdworld') and their adjacent existing Forest Lodge Garden Centre site ('Forest Lodge'). The site is located some 5km to the southeast of Farnham with a site location plan included as **Figure 1.1** of this note (an extract is reproduced below).

**Image 1.1: Site Location Plan**



1.1.2 This Transport Assessment (TA) has been prepared to accompany the planning application and to assess the development proposal against the 'key transport tests' set out in paragraph 114 of the National Planning Policy Framework (NPPF), i.e.:

- Can the opportunities for sustainable travel modes be appropriately taken up?
- Can safe and suitable access be provided?
- Will the transport elements of the proposal reflect current national guidance?
- Will the traffic impacts be acceptable?

## 1.2 Planning History

1.2.1 A summary of recent planning history at the site is provided below, including the previously agreed single point of access via a signalised junction on the A325:

- *'Partial redevelopment of Birdworld and Forest Lodge Garden Centre and joint single access (as amended by plans received 14/08/2009)'* (planning reference: 20533/049), granted permission November 2010 albeit the existing sub-standard Birdworld priority access was retained to access residential development and for emergency access to Birdworld.
  - i-Transport prepared a Transport Assessment (SAW/EC/ITB2024-05C) which was submitted as part of that application. All transport and highways matters were agreed, including the joint single point of access to Forest Lodge Garden Centre and Birdworld by way of traffic signals and existing sub-standard Birdworld priority access to be retained for residential development and emergency access to Birdworld, was agreed in principle by the highway authority as part of the application.
- *'Partial redevelopment of Birdworld and Forest Lodge Garden Centre and joint single access'* (planning reference: 20533/054), granted permission March 2014.
  - The Transport Assessment (SAW/EC/ITB2024-05C), including access drawings ITB2024-GA-301 and ITB2024-GA-401, was re-submitted as part of the application. All transport and highways matters were agreed, including the joint single point of access to Forest Lodge Garden Centre and Birdworld by way of traffic signals and existing sub-standard Birdworld priority access to be retained for residential development and emergency access to Birdworld.
- *'Partial redevelopment of Birdworld and Forest Lodge Garden Centre (as amended by plans received 09/03/17, 13/03/17, 14/03/17, 22/05/17, 13/06/17, 24/07/17, and 30/08/17)'* (planning reference: 20533/059), granted permission December 2018.
  - RGP prepared a Transport Assessment (COGC/16/3296/TA03) which was submitted to support this application. The proposal also includes the provision of a new signal-controlled access from the A325 to serve both Birdworld and Forest Lodge, shown on drawing 2016/3296/005, commensurate with the access design which was approved as part of application 20533/054.



### 1.3 Development Proposal

1.3.1 The development proposal comprises the redevelopment/enhancement of Birdworld and the redevelopment of Forest Lodge, alongside associated onsite parking, servicing and access arrangements. Plans showing the proposed development are included as **Appendix A**.

1.3.2 Birdworld was established in 1967 and the Garden Centre in 1981, from a former plant nursery. The previous Garden Centre owners purchased Birdworld in 1996 and since then the two businesses have been closely linked, with profits from the Garden Centre subsidising the running of Birdworld. Haskins Garden Centres acquired both businesses in 2020 and have committed to continue the Birdworld operation.

1.3.3 The main issues to resolve for Birdworld are, how to refresh the current offer within the Bird Park and retain a viable business throughout the year. The overall layout of the Birdworld site will change. Currently it wraps around the existing Garden Centre; this creates a single out and back route which results in a poor customer journey. There is also a wooded/landscaped area which is not accessed by the public. The proposal is to re-shape the site, utilise redundant areas and improve the overall visitor experience by introducing a Play Barn (which did feature in the 2018 approved scheme) and an Outdoor Adventure Area as well as improving the breeding and conservation facilities for the Bird Park.

1.3.4 Haskins Garden Centres operate four other garden centres in the south and two of these (Littlehampton and Snowhill /Cophthorne) have been re-developed in the last ten years in a similar manner. Haskins Garden Centres therefore know that the layout of the proposed garden centre area works for their customers and is operationally successful given that it has been refined across these other garden centres. The intention is to demolish all of the existing garden centre, and the adjoining Garden Style structures, and re-position the operation on the site.

### 1.4 Pre-Application Discussions with Hampshire County Council

1.4.1 The proposal has been subject to pre-application discussions with Hampshire County Council (HCC), as the local highway authority, at meetings on 26 July 2022, 6 October 2022 and 17 July 2023 following the submission of the following technical reports:

- A Transport Assessment Scoping Note (TASN) (*ref: ITB16329-005A TN*); and
- An Access Options Appraisal (*ref: ITB16329-006B TN*).

1.4.2 Further to the pre-application discussions with HCC the following matters were agreed:

- Access, in principle, via a new roundabout from the A325;

- Traffic assessment parameters (including traffic generation, distribution and assignment);
- The structure of a Transport Assessment (TA) to accompany a future planning application; and
- Further work on sustainable transport was to be undertaken.

1.4.3 Following the initial pre-application discussions in 2022, a revised TASN (*ref: ITB16329-005B TN*) was submitted to HCC in June 2023 to inform a third pre-application meeting with HCC on 17 July 2023. This pre-application submission presented updated site access arrangements and further information on sustainable travel.

1.4.4 Following the 2023 pre-application submission and meeting with HCC, the following matters were agreed with officers at HCC:

- The site access arrangements (a new 3-arm roundabout), subject to the submission of a Stage 1 Road Safety Audit (RSA);
- Agreement on the proposed infrastructure improvements to facilitate sustainable travel to comprise:
  - An improved A325 crossing and footway on the eastern side of the A325 to connect the site to Footpath 50 (i.e. the onward route to Alice Holt); and
  - Improvements to the Gravel Hill Road bus stops.
- Reaffirmed confirmation of the traffic assessment parameters (including traffic generation, distribution, assignment, study area, future year assessment and growth factors); and
- Reaffirmed confirmation of the structure of the TA.

1.4.5 All minutes of pre-application meetings with officers are included at **Appendix B** and all HCC formal pre-application responses are included in **Appendix C**.

#### **Public Consultation**

1.4.6 A public consultation was held on 9 and 10 November 2023 at Birdworld where the proposal was positively received overall. With specific regard to transport/highways, the proposed site access roundabout was viewed by attendees as a significant local benefit to reduce vehicle speeds on the A325.

## 1.5 **Scope and Structure**

1.5.1 The remainder of this report is structured as follows:

- Section 2 – Transport Policy Review
- Section 3 – Existing Transport Conditions
- Section 4 – Development Proposal
- Section 5 – Sustainable Transport Strategy
- Section 6 – Traffic Impact Assessment
- Section 7 – Multi-Modal Trip Generation Assessment
- Section 8 – Parking Assessment
- Section 9 – Development Phasing
- Section 10 – Summary and Conclusions

## SECTION 2 Transport Policy Review

### 2.1 National Policy

#### National Planning Policy Framework (NPPF) (December 2023):

2.1.1 The National Planning Policy Framework (NPPF) published in December 2023 sets out the Government's planning policies for England and how these are expected to be applied. It also constitutes as guidance for local planning authorities and decision makers in drawing up plans and as material considerations in determining applications.

2.1.2 The specific transport policies are contained within Section 9 of the NPPF, and paragraph 114 sets the following 'four tests' in relation to transport and highways matters:

***"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."***

2.1.3 Paragraph 115 of the NPPF 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."***

2.1.4 This is a very high bar for preventing development from coming forward for transport reasons – it is only where there will be severe impacts (i.e. very significant consequences) or an unacceptable impact on highway safety that development should be refused on transport grounds.

2.1.5 Paragraph 116, makes it clear that:

***“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.”***

2.1.6 Finally, Paragraph 117 states:

***“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.”***

#### **[National Planning Practice Guidance \(NPPG\) \(March 2014\)](#)**

2.1.7 The National Planning Practice Guidance (NPPG) is a government published web-based planning guidance resource that was launched in March 2014 and replaced a number of previous guidance documents, including the DfT’s ‘Guidance for Transport Assessment’ (2007). It provides guidance on how the policies within the NPPF should be applied.

2.1.8 This Transport Assessment has been prepared in accordance with the requirements of PPG, which states:

***“Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements”. (ID42 – 002);***

***“Transport Assessments and Statements can be used to establish whether the residual transport impacts of a proposed development are likely to be “severe”, which may be a reason for refusal, in accordance with the National Planning Policy Framework”. (ID42 – 005);***

## 2.2 Local Policy

### Hampshire County Council - Local Transport Plan 3 (LTP3) (2011 – 2031)

2.2.1 The HCC LTP sets the overarching transport strategy in Hampshire, identifying three key priorities for transport:

***“Main Priority 1: To support economic growth by ensuring the safety, soundness and efficiency of the transport network in Hampshire;***

***Main Priority 2: Provide a safe, well-maintained, and more resilient road network in Hampshire as the basic transport infrastructure of the county on which all forms of transport directly or indirectly depend, and the key to continued casualty reduction; and***

***Main Priority 3: Manage traffic to maximise the efficiency of existing network capacity, improving journey time reliability and reducing emissions, thereby supporting the efficient and sustainable movement of people and goods”.***

### Hampshire County Council - Draft Local Transport Plan 4 (LTP4) (2022)

2.2.2 HCC’s emerging transport policy is set out in the Draft Local Transport Plan 4, published in 2022 but not yet adopted. It sets out HCC’s vision for transport until 2050, which can be summarised as:

***“A carbon neutral, resilient and inclusive transport system designed around people, which: supports health, wellbeing and quality of life for all; supports a connected economy and creates successful and prosperous places; and respects and seeks to enhance Hampshire’s unique environment”.***

2.2.3 The LTP4 proposes transformational changes which:

- ***“Shift away from planning for vehicles, towards planning for people and places;***
- ***Meet national priorities to decarbonise the transport system;***
- ***Reduce reliance on private car travel; and***
- ***Support sustainable economic development and regeneration; and promote active lifestyles.”***

### East Hampshire District Local Plan: Joint Core Strategy – Adopted 2014

2.2.4 The East Hampshire District Council (EHDC) Local Plan (Part 1) was adopted in April 2014 to provide a policy framework for new development to deliver a vision that has been developed alongside the Sustainable Community Strategy. **Policy CP2** sets out the Spatial Strategy and notes:

*“New development growth in the period up to 2028 will be directed to the most sustainable and accessible locations in the District in accordance with the Spatial Strategy shown on the Key Diagram.”*

2.2.5 **Policy CP31** of the Local Plan focuses on transport, noting that through implementation of the HCC LTP3, *“the fullest possible use of sustainable modes of transport (including cycling, walking and public and community transport) and reduced dependence on the private car will be encouraged”*.

2.2.6 **Policy CP31** also notes that development proposals will include a range of mitigating measures and, where appropriate, will be required to:

- a) *“enhance the quality, viability, availability, accessibility and frequency of public transport and alternative community transport provision, especially in rural areas, to ensure that those without access to a private car have access to services and facilities necessary for their well-being;*
- b) *protect and provide safe and convenient cycle and pedestrian links that integrate with existing cycle and pedestrian networks, such as the South Downs Way and Shipwrights Way, and reflect the amenity and rural character of the area;*
- c) *ensure that highway design and associated signing meets the needs of vehicular traffic and the need for safety whilst also placing a high priority on meeting the needs of pedestrians, cyclists and public transport users and without detriment to the quality of the environment;*
- d) *plan for new highway infrastructure that will reduce congestion, improve highway safety, increase accessibility to the District’s town and district centres and enhance economic prosperity of the District;*
- e) *improve access to rail stations at Rowlands Castle, Petersfield, Liss, Liphook, Alton and Bentley Station by sustainable modes of transport and, where appropriate, provide additional car and cycle parking at rail stations;*
- f) *provide adequate, convenient and secure vehicle and cycle parking in accordance with adopted standards;*
- g) *ensure that the type and volume of traffic generated would not harm the countryside or the rural character of local roads;*

- h) protect sunken and rural/green lanes so that their convenience and safety are enhanced for their users, and their ecological, landscape and recreational value are enhanced;*
- i) improve access for people with impaired mobility to all forms of transport and to all developments to which the public will reasonably expect to have access; and*
- j) produce and implement transport assessments and travel plans for proposals that are likely to have significant transport implications;*
- k) include measures, to be funded by the developer, that address the impact of the new development so as to ensure the continued safe and efficient operation of the strategic and local road networks."*

## 2.3 Vehicle Parking Standards

2.3.1 EHDC Local Plan 'Vehicle Parking Standards' Supplementary Planning Document (July 2018) are summarised in **Table 2.1**. The 'A1 Shops (non-food retail and general retail)' land use class standards are deemed most relevant for the proposed Forest Lodge development. There are no parking standards applicable to the redevelopment of Birdworld.

**Table 2.1: EHDC Vehicle Parking Standards**

Minimum Car Parking Requirements	Minimum Cycle Parking Requirement		Minimum Requirement for Motorcycle /Mobility Scooters	Minimum Requirement for Disabled Parking spaces	Minimum Requirement for Parent and Child Parking Spaces	Electric Vehicle Charging Infrastructure
	Long Stay	Short Stay				
1 space per 20sqm covered areas	1 space per 6 staff or 1 space per 300sqm whichever is the greater	1 space per 200sqm	One space for every 25 car parking spaces. This is an additional space rather than a proportion of the provision	Allocated parking spaces should be provided in a ratio of 5% of the total provision. These are part of the car parking provision – not additional provision.	Allocated parking spaces should be provided in a ratio of 5% of the total provision. These are part of the car parking provision – not additional provision.	The Council will encourage the provision of electric vehicle charging infrastructure.
1 space per 30sqm uncovered area						

Source: East Hampshire District Council



## 2.4 Summary

2.4.1 The NPPF identifies four key transport tests for new development. These are reflected in local policy and can be summarised as follows:

- Will the opportunities for sustainable travel be taken up appropriately?
- Will safe and suitable access be provided?
- Will the design be acceptable in design terms?
- Will the traffic impacts be acceptable?

2.4.2 This TA assesses the development proposal against these tests.

## SECTION 3 Existing Transport Conditions

### 3.1 Introduction

3.1.1 This section of the TA sets out the existing transport conditions in the local area. This includes a review of the opportunities to use non-car modes, as well as the current operation of the existing highway network.

### 3.2 Existing Site

3.2.1 The site is located some 5km to the southeast of Farnham, situated between Gravel Hill Road and Fullers Road with the A325 forming the primary site frontage. Forest Lodge Garden Centre comprises the southern part of the site and Birdworld comprises the northern part of the site.

3.2.2 Vehicular access to Birdworld and Forest Lodge is taken via two separate simple priority junctions with the A325 (situated some 240m apart). The Birdworld access has sub-standard visibility in both directions (limited by vegetation and a 3<sup>rd</sup> party wall) as well as sub-standard vertical visibility to the north (limited by the vertical alignment of the A325).

3.2.3 Both Birdworld and Forest Lodge have their own car parking (including coach and overflow parking) and service areas. The current level of parking provision at each site is as follows:

- Birdworld – 271 spaces (includes 85 overflow spaces to the rear of the site); and
- Forest Lodge – 311 spaces (includes 90 overflow spaces located to the north of the main car park).

### 3.3 Local Highway Network

3.3.1 The A325 is a single carriageway road subject to a 50mph speed limit along the site frontage. The A325 provides routes northwards to Farnham and the A31. To the south, the A325 provides a route to Bordon before connecting with the A3 at Greatham. There are no streetlights in place. There are a number of level changes to the north and south of the site that restrict forward visibility along the mainline carriageway.

3.3.2 As detailed above, the sites are currently accessed via two separate priority junctions onto the A325. In addition to the visibility issues at the Birdworld access detailed at paragraph 3.2.2, there are bus stops located adjacent to this junction. It is noted that the northbound bus stop is situated in an area that partially functions as both a deceleration lane for the Birdworld access and a bus layby (see **Image 3.1** overleaf). The existing Forest Lodge access is shown at **Image 3.2** overleaf.

**Image 3.1: Existing Birdworld Site Access**



**Image 3.2: Existing Forest Lodge Garden Centre Site Access**



Source: Google Maps

## 3.4 Walking and Cycling

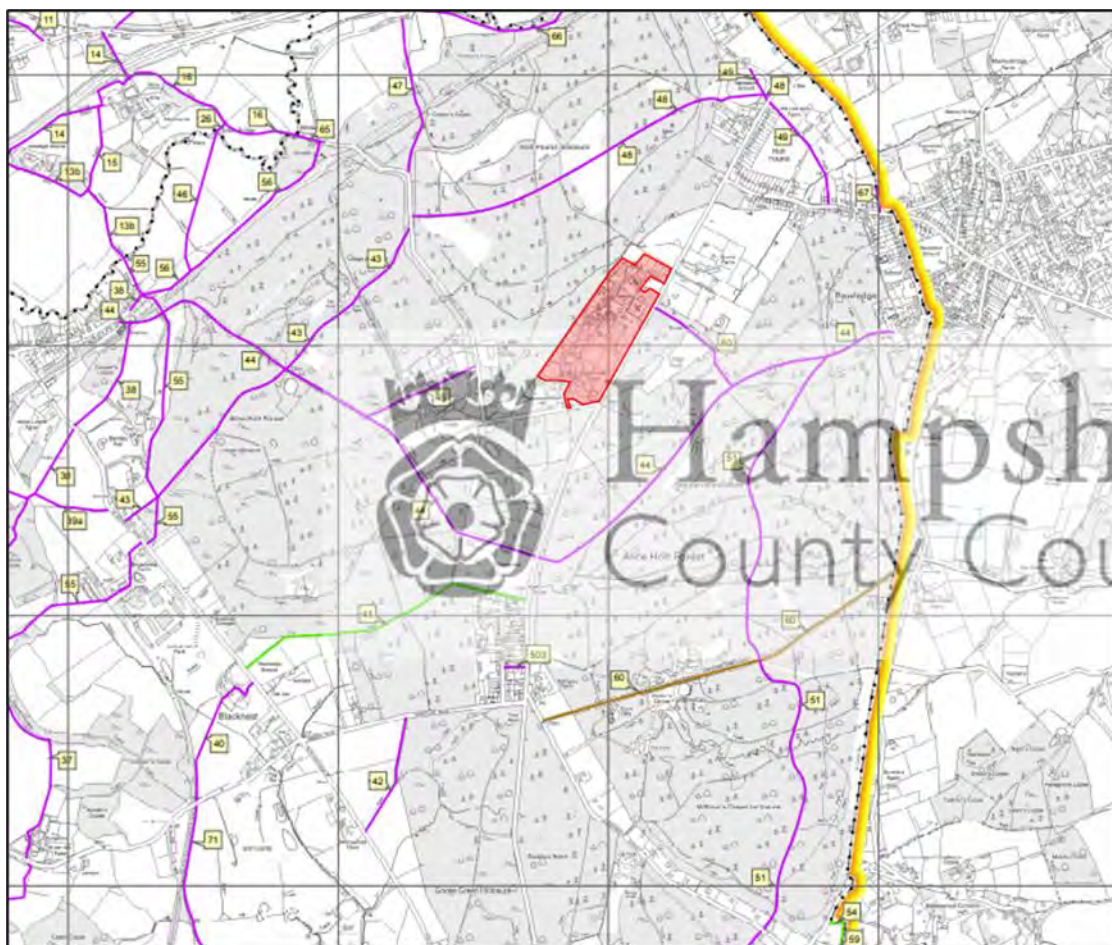
3.4.1 The nature of the uses on site and the type of purchases made at the garden centre, which are often delicate or bulky in nature, limit the potential for walking and cycling trips to the site. Therefore, at this site, with regard to walking, the important issues will be to review are pedestrian access to the bus stops, the surrounding recreational areas and Public Rights of Way (PROWs) and internally between the two sites. Cycling is most likely to be used either for staff travel to work during the summer months or when a visit to the site forms part of a leisure cycle trip.

3.4.2 Pedestrian access to the site is currently limited by a lack of footway provision along the A325. On the A325 to the north of Birdworld there are no footways. There is a short section of footway along the Birdworld frontage linking Birdworld to the northbound 'Birdworld' bus stop. Additional northbound and southbound 'Gravel Hill Road' bus stops are located to the south of the Forest Lodge access junction however, there are currently no footways linking the garden centre to these bus stops. There are no dedicated facilities for age-related requirements or mobility impaired requirements for existing users of Birdworld and Forest Lodge.

3.4.3 There is also a number of PROWs located in the vicinity of the proposed development which are shown in **Image 3.3**. These include:

- Footpath 50 which is located opposite on the eastern side of the A325. It heads east through Alice Holt Forest to meet Footpath 44.
- Footpath 44 routes through Alice Holt Forest, providing a car free route into Rowledge.
- Footpath 51 connects to Footpath 44 and heads southbound to meet Hardings Road.
- Footpath 44 routes west of the A325 providing a link to Bentley Railway Station.
- Footpath 45 connects Gravel Hill Road to Footpath 44.
- Footpath 48 connects Gravel Hill Road to the A325 to the northwest of the site.
- Footpath 43 connects Gravel Hill Road to the Blacknest Road.

**Image 3.3: PROW Map**



Source: Hampshire County Council

### [Review/Assessment of Principal Walking/Cycling Routes](#)

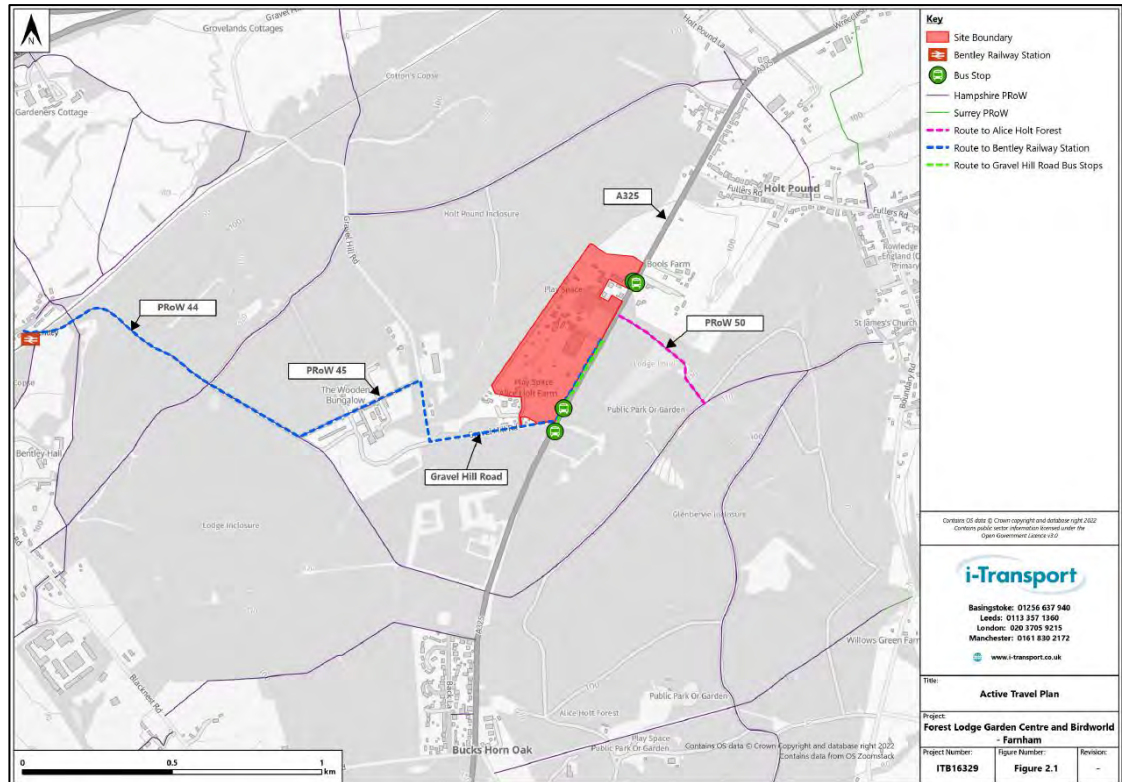
3.4.4 An in-depth review of the principal walking/cycling routes and facilities was undertaken and informed by a site visit carried out on 8 February 2023. This comprised reviewing:

- Pedestrian/cycle facilities along the site frontage (including the facilities in place at the Gravel Hill Road bus stops);
- The walking route to Bentley railway station via Gravel Hill Road, Footpath 45 and Footpath 44 (this section of Footpath 44 is also designated as NCN224<sup>1</sup>); and
- The walking route to Alice Holt (via Footpath 50).

3.4.5 The above routes are shown on **Figure 3.1** (an extract is provided overleaf).

<sup>1</sup> National Cycle Network 224

**Image 3.4: Principal Walking/Cycling Routes**



3.4.6 The detailed review of these routes is included at **Appendix D** (report reference: ITB16329-009 TN<sup>2</sup>), however the conclusions of the assessment are summarised below:

- The pedestrian facilities and Gravel Hill Road bus stops along the A325 site frontage are of poor quality and currently do not provide direct pedestrian access to the site from the bus stops. Improvements can be delivered as part of the site access works (further information is provided in Section 4);
- Bentley railway station is accessible from the site via Gravel Hill Road, Footpath 45 and Footpath 44 which provide a predominantly traffic-free route to Bentley railway station via good quality rural footpaths. Whilst there are no dedicated pedestrian/cycle facilities on Gravel Hill Road, it provides a suitable connection as it is wide, lightly trafficked, vehicle speeds are observed to be low and there is good pedestrian visibility. It is also part of the signed Forest Research Adaptation Trail walking route. Officers at HCC have confirmed agreement to this and that no improvements are necessary; and

<sup>2</sup> This Technical Note was also issued to officers at HCC as part of the pre-application discussions in Summer 2023

- Footpath 50 provides a pleasant recreational route to Alice Holt Forest, however there are no dedicated crossing facilities where the route meets the A325. Improved pedestrian footways and crossings can be provided as part of the site access works (further information is provided at Section 4).

3.4.7 Photographs of the above routes are also included at **Appendix D**.

### 3.5 Public Transport

#### Bus

3.5.1 The nearest bus stops to the sites are the 'Gravel Hill Road' bus stops located on the A325 to the south of the Forest Lodge access and the 'Birdworld' bus stops located adjacent to the Birdworld access. As noted at Section 3.4, the pedestrian connections at the bus stops are limited and there are opportunities to improve this as part of the site access arrangements.

3.5.2 The bus stops are served by the 17 and 18 bus services. The number 18 bus service provides the highest frequency of one service per hour, providing access to/from Aldershot and Bordon Camp hourly Monday – Saturday and every other hour on Sundays.

#### Rail

3.5.3 Bentley Railway Station is on the Pirbright and Alton Line, managed by South Western Railway and is located approximately 2km to the west of the site. Trains from Bentley Railway Station run to London Waterloo and Alton Stations twice an hour.

3.5.4 Bentley Railway Station is accessed on foot in a 32-minute walk or via an 11-minute from the site via Gravel Hill Road and the PROWs Footpath 45<sup>3</sup> and Footpath 44 (the route assessed in detail at **Appendix D**). Bentley Station has two platforms with 23 cycle parking spaces and 85 car parking spaces.

#### BREEAM Accessibility Index (AI)

3.5.5 The existing BREEAM Accessibility Index (AI) has been calculated at 2.49 for Birdworld and 2.46 for Forest Lodge, calculations are attached at **Appendix E**.

### 3.6 Road Safety

3.6.1 Personal Injury Accident (PIA) data has been obtained from Hampshire Constabulary for the most recent five-year period available between 01/03/2018 and 30/09/2023. Overall, 15

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<sup>3</sup> Also designated as National Cycle Route 224.

accidents were recorded with four recorded as 'serious' severity, with the remaining 10 as 'slight' accidents. One fatal accident was also recorded.

3.6.2 **Table 3.1** provides a detailed review of the recorded accidents and the full PIA data is attached at **Appendix F**.

**Table 3.1: PIA data summary**

Severity	Pedestrian / Cyclist	Description	Casualties
<b>A325 Farnham Road</b>			
Fatal	No	A northbound vehicle lost control and collided with an oncoming southbound vehicle (accident occurred circa 500m south of the Gravel Hill Road junction).	1 x Fatal. 1 x Serious. 1 x Slight
Slight	No	Loss of control	Driver
Serious	Pedestrian	Vehicle collided with a pedestrian walking in the carriageway	Pedestrian
Serious	No	Rear end shunt	2 drivers, 2 passengers
Serious	No	Poor manoeuvre when overtaking resulting in a multi vehicle collision	2 drivers
Slight	No	Loss of control and collision with a tree	1 driver
<b>A325 Farnham Road, Gravel Hill Road Junction</b>			
Slight	No	Failure to give way	Driver
Slight	Cyclist	Failure to give way	Cyclist
Slight	No	Failure to give way	Driver
<b>A325 Farnham Road, Dockenfield Road Junction</b>			
Serious	Cyclist	Failure to give way	1 Cyclist
Slight	No	Rear end shunt	Driver
<b>A325 Farnham Road, Forest Lodge Garden Centre Access</b>			
Slight	No	A rear end shunt where a bus failed collided with rear of a car turning into the garden centre	1 driver
Slight	No	Rear end shunt with multiple vehicles	Driver
<b>A325 Farnham Road, Birdworld Access</b>			
Slight	No	Failure to give way	3 passengers
<b>A325 Farnham Road, Fullers Road Junction</b>			
Slight	No	Rear end shunt	1 driver, 1 passenger

Source: Hampshire Constabulary



### Summary

3.6.3 A review of the accident data in the vicinity of the site for the latest five-year period available has been undertaken.

3.6.4 It is noted that there were three accidents recorded at the existing sub-standard access junctions to both Forest Lodge and Birdworld. However, the proposed access strategy of implementing a new 3-arm roundabout to access both sites will deliver a material safety benefit.

3.6.5 With regards to the remainder of the study area/highway network, whilst any accident is regrettable, the cause and locations of the accidents do not suggest a specific highway safety that the proposal may exacerbate.

### 3.7 **Traffic Surveys**

3.7.1 To establish existing traffic flows and speeds in the vicinity of the site, a suite of traffic surveys was commissioned and undertaken on a neutral weekday, Saturday and Bank holiday in May 2022, on the following days:

- Monday 2 May;
- Thursday 12 May; and
- Saturday 14 May.

3.7.2 The scope of traffic surveys included:

- Classified turning counts and queue lengths 0700 – 1900 at the Forest Lodge and Birdworld accesses; and
- Two Automatic Traffic Count (ATC) surveys were undertaken on the A325, north and south of the proposed site access for a week-long period in May 2022 (8 May – 14 May).

### Traffic Flows

3.7.3 The classified turning counts have been analysed to obtain the following peak hours:

- The highway network morning and evening peak hours on a weekday (0715 – 0815 and 1630 – 1730);
- A Saturday peak hour (1300 – 1400) – this is equivalent to a ‘Weekend Peak Hour’; and
- A Bank Holiday peak hour (1115 – 1215).

3.7.4 The surveyed traffic is presented on the following figures:

- **Figure TF1** – 2022 Observed Traffic Flows Weekday AM Peak Hour (0715 – 0815)
- **Figure TF2** – 2022 Observed Traffic Flows Weekday PM Peak Hour (1630 – 1730)
- **Figure TF3** – 2022 Observed Traffic Flows Weekend Peak Hour (1300 – 1400)
- **Figure TF4** – 2022 Observed Traffic Flows Bank Holiday Peak Hour (1115 – 1215)

### Vehicle Speeds

3.7.5 **Table 3.2** summarises the recorded 85<sup>th</sup> percentile vehicle speeds on the A325 obtained from the ATCs.

3.7.6 **Table 3.2** also summarises the visibility requirements based on the recorded vehicle speeds (derived from DMRB<sup>4</sup> calculations and HCC TG3<sup>5</sup>). For robustness, it has been assumed that the recorded vehicle speeds were in 'wet' conditions and therefore these have been 'uplifted' to dry speeds.

**Table 3.2: 85<sup>th</sup> Percentile Recorded Speeds and Required Visibility**

Direction	Recorded 85 <sup>th</sup> Percentile Speed	85 <sup>th</sup> Percentile Dry Weather Speed	Stopping Sight Distance
Northbound	50.2mph	52.7mph	160m
Southbound	49.5mph	52.0mph	157m

Source: ATC.

## 3.8 Local Facilities

3.8.1 In line with Table 7.1 of the BREEAM guidance<sup>6</sup>, **Table 3.3** summarises the site's proximity to key local facilities and services.

<sup>4</sup> Design Manual for Roads and Bridges

<sup>5</sup> HCC Technical Guidance Note 3 – Stopping Sight Distances and Visibility Splays

<sup>6</sup> BREEAM UK New Construction Version 6.0

**Table 3.3: Local Facilities**

Purpose	Destination	Distance from site (m)	Walking Time (mins)	Cycling Time (mins)
Food Outlet	Forest Lodge Cafe	0	0	0
	Birdworld Food Outlets	0	0	0
	Ball & Wicket Pub	850	10	3
Access to Cash	The Co-operative Rowledge (Post Office)	1,500	18	6
Outdoor Open Space	Rowland Playground	1,400	17	6
Leisure Facility	Alice Holt Activity Centre	2,300	27	9
Postal Facility	The Co-operative Rowledge	1,500	18	6
Community Facility	Rowledge Village Club	1,300	15	5
Pharmacy	Avicenna Pharmacy Farnham	4,200	50	17
GP Surgery	Holly Tree Surgery	2,700	32	11
School	Rowledge C Of E School	1,400	17	6
	Little Fishes Nursery School	1,600	19	6

Source: Consultant

	800m – A 'comfortable' walking distance <sup>7</sup>
	1.6km – A 'reasonable' walking distance <sup>8</sup>
	3.2km – A 'maximum' walking distance <sup>9</sup>

3.8.2 **Table 3.3** details a range of facilities and services in the vicinity of the site. However, the only BREEAM complaint facilities, within 500m of the site, are provided on-site.

<sup>7</sup> A walkable neighbourhood as defined by Manual for Streets (MfS).

<sup>8</sup> As set out in the 2019 National Travel Survey, 80% of all journeys are made on foot for a distance of up to 1.6km or 1 mile.

<sup>9</sup> As set out in the 2019 National Travel Survey, some 31% of people are prepared to travel on foot for journeys of up to 3.2km or 2 miles.

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## SECTION 4 Development Proposal

### 4.1 Development Proposal

4.1.1 Birdworld Ltd and Haskins Garden Centres Ltd is proposing to redevelop the Birdworld visitor attraction ('Birdworld') and their adjacent existing Forest Lodge Garden Centre site 'Forest Lodge'. The redeveloped Birdworld site will also include a new indoor play area known as the 'Play Barn' and an outdoor adventure play area.

4.1.2 The majority of the existing buildings on the site are in poor condition and are approaching the end of their effective lifespan. It was decided that the most appropriate solution was to demolish the existing Garden Centre and rebuild it to meet modern building standards of building efficiency and levels of insulation.

4.1.3 In Birdworld a new Entrance Building is proposed which will include ticket sales, staff and office accommodation and the relocated gift shop.

4.1.4 The new timber clad Play Barn will have an internal play area (800sqm), primarily geared for children up to 12 years old; four separate 'party rooms' (60sqm) and a café (180sqm). The purpose of the Play Barn is to create year-round activity on site as well as helping draw in new visitors to Birdworld. The previous re-development scheme approved in 2018 also provided a 'Play Area' / party rooms located within their Visitor Centre and of a similar size.

4.1.5 The other new feature on the Park is the Outdoor Adventure Play area which utilises an existing landscaped area which contains a number of conifer trees. The intention is to create an adventure play area as illustrated in the Design and Access Statement.

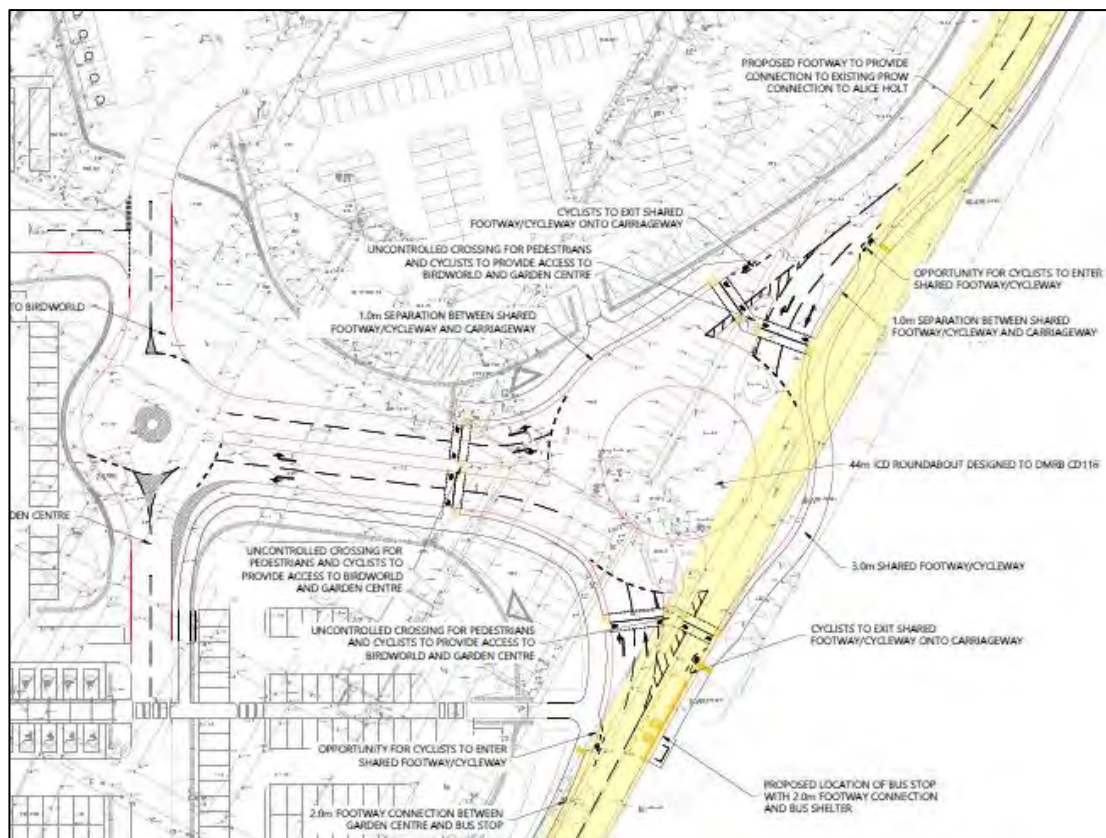
4.1.6 Site plans showing the proposed development are included at **Appendix A**.

### 4.2 Proposed Access

#### Arrangement

4.2.1 Access to the development is proposed via a new 3-arm roundabout from the A325, with dedicated access arms for the Forest Lodge and Birdworld sites. The proposed roundabout is shown on **Drawing ITB16329-GA-106E** with an extract shown at **Image 4.1**.

**Image 4.1: Proposed Site Access Arrangement**



- 4.2.2 The proposed roundabout has been designed in accordance with Design Manual for Roads and Bridges (DMRB) CD116 with a 44m ICD and adequate entry path deflections for each arm.
- 4.2.3 The access will serve both the Birdworld and Forest Lodge sites. The existing Forest Lodge access will be removed and the existing Birdworld access will be closed to general use (albeit retained for very occasional servicing or emergency vehicle access). This will result in a net reduction in junctions in regular operation on the A325 along the site frontage providing a betterment to the current situation (both the current Forest Lodge and Birdworld accesses are sub-standard and as noted at Section 3.6 a number of accidents were recorded at these locations). The bus stops adjacent to the exiting Birdworld access are proposed to be retained, albeit it is proposed to rename the bus stops so that they no longer refer to Birdworld.
- 4.2.4 Swept path analysis included in **Appendix G** demonstrates that vehicles can safely circumnavigate the proposed roundabout.
- 4.2.5 Plans showing the drainage arrangements at the roundabout have been prepared by Scott, White and Hookins (SWH) and have been submitted as part of the planning application. The drainage arrangements should be viewed in conjunction with these plans where relevant.

## Visibility

4.2.6 **Table 4.1** summarises the A325 visibility requirements based on the recorded vehicle speeds set out in Section 3 of this TA. For robustness, it has been assumed that the recorded vehicle speeds were in 'wet' conditions and therefore these have been 'uplifted' to dry speeds.

**Table 4.1: Visibility Requirements**

Direction	Recorded 85 <sup>th</sup> Percentile Speeds	85 <sup>th</sup> Percentile 'Dry' Speed	Stopping Sight Distance
Northbound	50.2mph	52.7mph	160m
Southbound	49.5mph	52.0mph	157m

Source: ATC. Note: Stopping sight distances derived from DMRB and Manual for Streets 2

4.2.7 The visibility requirements set out in **Table 4.1** are shown on the following drawings:

- **Drawing ITB16329-GA-106E** – Shows forward visibility for each arm of the roundabout (please note that the site access arm visibility has been provided for an internal design speed of 30mph);
- **Drawing ITB16329-GA-101E** – Shows circulatory visibility at the proposed roundabout;
- **Drawing ITB16329-GA-103D** – Shows 1.5 x Stopping Sight Distance forward visibility on each approach to the junction;
- **Drawing ITB16329-GA-104D** – Shows northbound vertical visibility splays to 1.05m eye height and 0.26m object height (at 1.5 x Stopping Sight Distance); and
- **Drawing ITB16329-GA-105D** – Shows southbound vertical visibility splays to 1.05m eye height and 0.26m object height (at 1.5 x Stopping Sight Distance).

## Capacity

4.2.8 Operational assessments of the proposed site access have been undertaken (see Section 6). These demonstrate that the proposed junction is predicted to operate efficiently and to adequately accommodate the traffic demands of the proposed development.

## Road Safety Audit

4.2.9 An independent Stage 1 Road Safety Audit (RSA) has been undertaken of the proposed access arrangements and is included at **Appendix H** of this TA<sup>10</sup>.

<sup>10</sup> The Stage 1 RSA brief that informed the RSA (*report reference: ITB16329-016 TN*) can be provided digitally on request.

4.2.10 All comments raised in the RSA have been addressed where appropriate and a Designer's Response has been prepared (also included in **Appendix H**).

4.2.11 As noted at Section 3.6 of this TA, a number of accidents were recorded at both the existing Birdworld and Forest Lodge access junctions. The delivery of a new 3-arm roundabout will provide a material highway safety benefit by:

- Providing a junction with adequate visibility;
- Being designed to standard;
- Reducing the number of operational junctions on the A325; and
- Reducing vehicle speeds.

#### **Hampshire County Council Position / Comments**

4.2.12 The proposed access arrangements have been agreed with HCC through the pre-application process and discussions.

4.2.13 Pre-application comments from HCC have requested that a reduction in the speed limit from 50mph to 40mph on the A325 is considered as part of the application proposal. Whilst the proposed site access has been designed in line with the recorded vehicle speeds, and therefore is not reliant on a reduction in speed limit, the Applicant is willing to provide a financial contribution to fund a Traffic Regulation Order (TRO) to reduce the speed limit.

4.2.14 In addition, it should be noted that the proposed roundabout will act as a traffic calming feature and reduce vehicle speeds on the A325 in any case. The proposed roundabout will therefore deliver a material highway safety benefit.

#### **South Downs National Park (SDNP) Comments**

4.2.15 The South Downs National Park (SDNP) issued pre-application comments regarding the development proposals and requested that the roundabout should be designed to avoid an urban appearance.

4.2.16 The design of the roundabout to maintain the rural character of the area will be explored where possible with HCC (as the local highway authority) through the application process. Design options to minimise an urban appearance could include:

- Increasing tree planting and vegetation;
- Providing sensitive signage;
- Providing lighting that is appropriate for the rural area; and

- Introducing a softer material for the proposed footway connection to Footpath 50.

#### 4.3 **Pedestrian / Cycle Access, Connections and Improvements**

4.3.1 Footways and pedestrian crossings are to be provided on all arms which will enable direct pedestrian access to both the Forest Lodge and Birdworld sites.

4.3.2 The crossings will also be suitable for cyclists to enable them to circumnavigate the roundabout safely without remaining in the carriageway. 3m shared footway/cycleways are therefore provided around the roundabout to connect the crossings.

4.3.3 In addition, the following improvements are also proposed as part of the site access arrangements:

- Improved A325 crossing to Footpath 50; and
- Improvements to the Gravel Hill Road bus stops.

4.3.4 Further information on these improvements is summarised below.

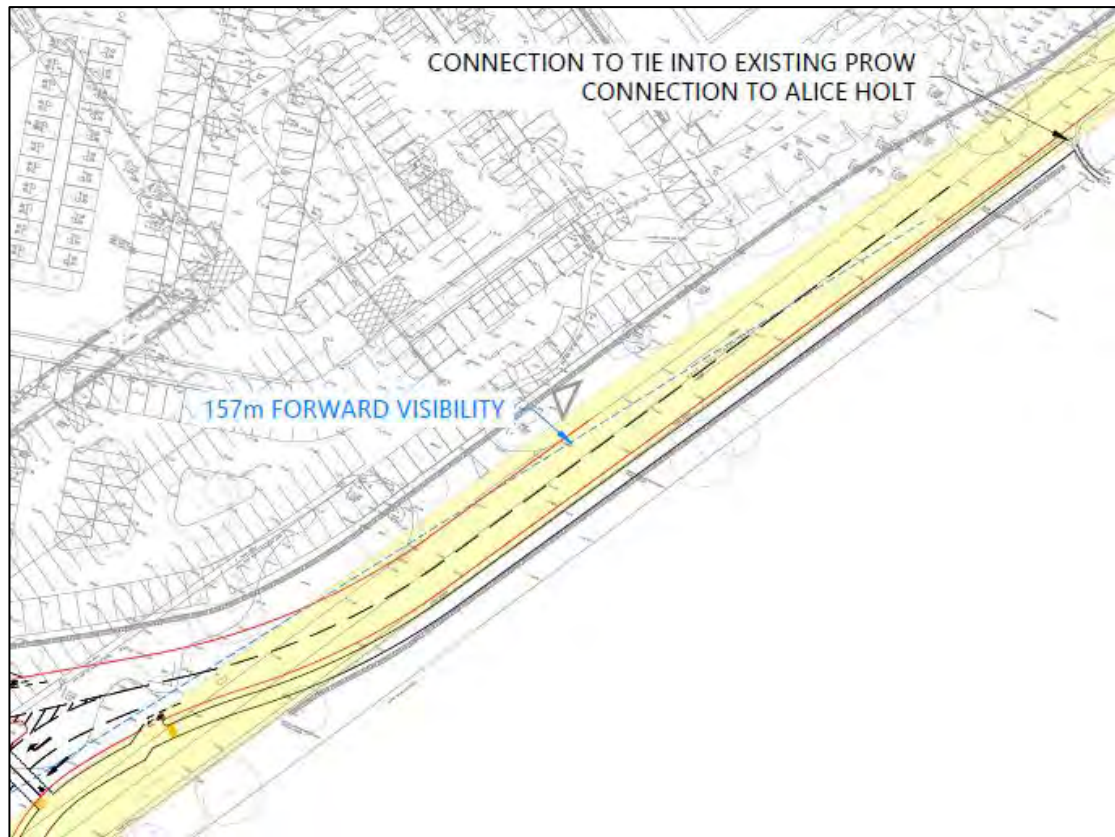
##### **Improved A325 Crossing to Footpath 50**

4.3.5 To improve pedestrian access to Footpath 50, as part of the site access arrangements, a new footway will be provided on the eastern side of the A325 within land controlled by the Applicant. This will provide a direct connection between the site and Footpath 50 and is shown on **Drawing ITB16329-GA-106E** with an extract provided at **Image 4.2**.

4.3.6 The provision of pedestrian crossing points at the new roundabout in conjunction with the new footway on the eastern side of the A325 will mean that pedestrians will no longer need to cross the A325 at the existing sub-standard connection. The crossings are also suitable for cyclists in order to enable cyclists to circumnavigate the roundabout without entering into the carriageway.



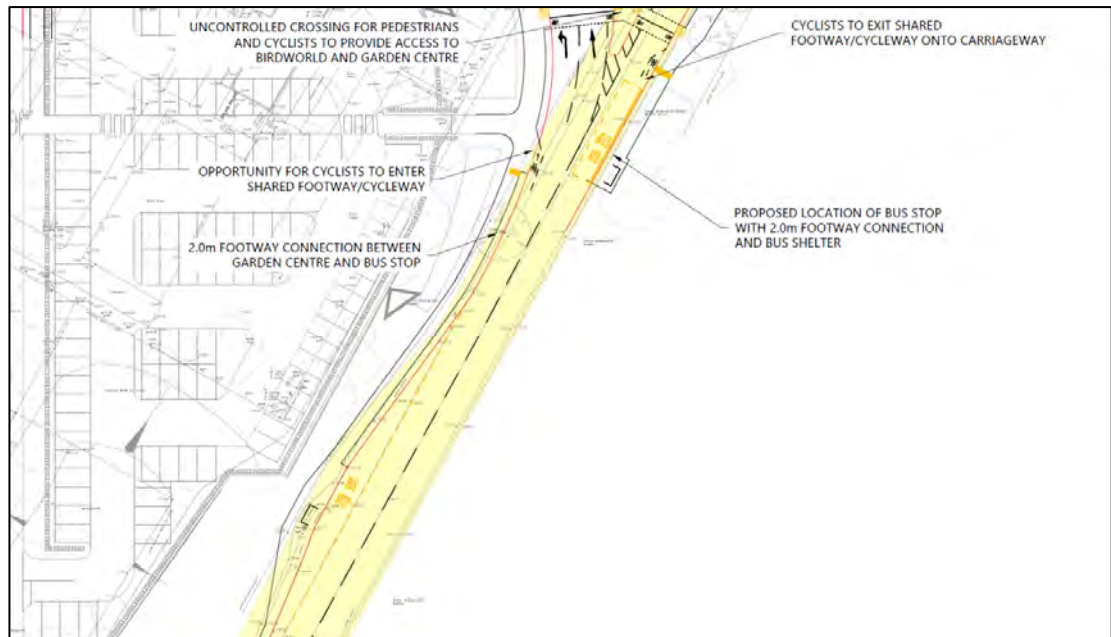
**Image 4.2: Proposed Footway Connection to Footpath 50**



#### **Improvements to the Gravel Hill Road Bus Stops**

- 4.3.7 The proposed access arrangements also will bring forward improved pedestrian facilities on the A325 and improved access to the Gravel Hill Road bus stops.
- 4.3.8 The northbound bus stop is proposed to be marginally realigned with a new footway connection to the north to provide direct access into the site. The existing footway behind the bus layby that routes southward can also be resurfaced and a replacement bus shelter will be provided.
- 4.3.9 As requested for consideration by HCC during pre-application discussions, the southbound bus stop on the A325 is proposed to be relocated to the north closer to the site to improve bus access for site users. This will be delivered in conjunction with a new bus shelter. No issues were raised by the Stage 1 RSA regarding the relocation of the bus stop.
- 4.3.10 These improvements are shown on **Drawing ITB16329-GA-106E** and on the extract at **Image 4.3**.

**Image 4.3: Improvements to the Gravel Hill Road Bus Stops**



4.3.11 Real time bus service information will be provided at the bus stops. This can be secured via an appropriate financial contribution.

#### 4.4 **Accessibility Index (AI) – Proposed Development**

4.4.1 As a result of the proposed development and site access arrangements, the site's Accessibility Index (AI) has been re-calculated at 2.53 for Birdworld and Forest Lodge combined. Calculations are attached at **Appendix E**.

#### 4.5 **Walking, Cycling and Horse-Riding Assessment (WCHAR)**

4.5.1 A WCHAR has been undertaken in line with HCC Technical Guidance Note 19 (TG19). This is included at **Appendix I**. It was also provided to the safety auditor for review as part of the Stage 1 RSA.

4.5.2 The WCHAR concludes that there are opportunities to:

- Improve the pedestrian connectivity between the site and the nearby bus stops on the A325;
- Improve the pedestrian connectivity between Footpath 45 and Footpath 50;
- Improve crossing facilities on the A325 for pedestrians and cyclists; and
- Improve cycle access to the site and deliver adequate cycle parking on-site.

4.5.3 The above opportunities are delivered through the proposed site access strategy detailed at Section 4.3.

4.5.4 The WCHAR did not identify any existing equestrian demands in the vicinity of the site and no additional equestrian trips will be generated by the site. No equestrian improvements or measures are therefore necessary.

## 4.6 Internal Layout

4.6.1 The internal layout is included at **Appendix A**. This shows:

- An internal roundabout to separate the Birdworld and Forest Lodge sites – clear internal signage will be provided for drivers;
- Dedicated parking areas for both Birdworld and Forest Lodge (including car parking, cycle parking and coach parking) – further detail is provided at Section 4.7;
- Dedicated servicing areas for both Birdworld and Forest Lodge – further detail is provided at Section 4.8;
- Two main separate routes for cars accessing Birdworld or Forest Lodge; and
- Two principal pedestrian access routes to the main building entrances from the A325 and numerous other pedestrian routes through the site and between Forest Lodge and Birdworld.

4.6.2 Swept path analysis included at **Appendix G** shows that all necessary vehicles can navigate site with ease, including cars, servicing vehicles and a fire tender.

4.6.3 Drawing **ITB16329-GA-020F** shows that adequate forward visibility and adequate visibility at internal junctions can be achieved for an internal speed limit of 10mph.

4.6.4 Drawing **ITB16329-GA-029E** shows that adequate pedestrian visibility splays can be achieved at internal crossings for a speed limit of 10mph.

## 4.7 Parking

### Car Parking

4.7.1 A total of 840 car parking spaces are to be provided across the site as follows:

- 418 spaces for Birdworld (including 26 accessible spaces); and
- 422 spaces for Forest Lodge (including 18 accessible spaces). This provision is in line with EHDC's parking standards.

- 
- 4.7.2 A parking assessment is provided at Section 8 of this TA which demonstrates that the proposed level of parking is sufficient to accommodate the necessary demands of the proposed development.
- 4.7.3 44 accessible car parking spaces are provided across the site. This is in line with EHDC's parking standards. These are located conveniently in close proximity to the building entrances with clear walkways for mobility impaired users. Visually impaired users have a direct and traffic free walking route to the building entrances.
- 4.7.4 44 parent and child car parking spaces are provided across the site. This is in line with EHDC's parking standards. These are located conveniently in close proximity to the building entrances.
- 4.7.5 44 designated car sharing spaces are provided across the site. This is in line with BREEAM standards.
- 4.7.6 36 motorcycle parking spaces are provided across the site. This is in line with EHDC's parking standards.
- 4.7.7 16 parking spaces are to be provided with active electric vehicle charging points. This is in line with EHDC's parking standards.

#### **Cycle Parking**

- 4.7.8 90 covered and secure cycle parking spaces are provided across the site in two cycle stores located near the entrances to the buildings.
- 4.7.9 Shower and changing facilities are also provided within the buildings.

#### **Coach Parking**

- 4.7.10 Three coach parking spaces are to be provided. Swept path analysis included at **Appendix G** demonstrates that coaches can access these spaces with ease.

## 4.8 Servicing Vehicle Access

### Birdworld

#### Main Service Yard

- 4.8.1 A service yard for Birdworld is provided in the centre of the site to receive large deliveries of equipment. These can then be unloaded, sorted and then distributed throughout Birdworld using golf buggies routing along the access track to the rear of the site. Swept path analysis included at **Appendix G** demonstrates that a rigid HGV (the largest vehicle required to access the Birdworld servicing yard) can enter/exit the servicing yard safely and that a golf buggy can safely travel along the servicing track to the rear of the site.
- 4.8.2 All deliveries will be appropriately managed by on-site staff to ensure that these are received safely and efficiently. Where possible, deliveries will be at a pre-booked time which will be outside of the peak operating hours.

#### Play Barn and Catering

- 4.8.3 In car park servicing is proposed within the site for the Birdworld Play Barn (and its accompanying catering facilities) at the area adjacent to the Plan Barn.
- 4.8.4 Information provided by the Applicant indicates that circa five catering deliveries per day are expected. These deliveries will typically occur in transit vans, with the occasional delivery undertaken by a rigid HGV. Swept path analysis included at **Appendix G** demonstrates that rigid HGVs and refuse vehicles can access this location and turn safely.
- 4.8.5 All deliveries are expected to occur within the site opening hours with the receipt of goods to be managed safely and efficiently by on-site staff. On-site management will ensure that the parking spaces in the vicinity of the Play Barn are closed to the public during servicing periods (through the use of appropriate signage and cones). Where possible, deliveries will be at a pre-booked time which will be outside of the peak operating hours.

#### Gift Shop

- 4.8.6 A layby outside the Birdworld entrance building is proposed in order to serve the gift shop within the Birdworld entrance building.

4.8.7 Data provided by the Applicant indicates that the gift shop is to be served by circa 5 – 10 deliveries per week. These deliveries will typically occur in transit vans, with the occasional delivery undertaken by a rigid HGV. Swept path analysis included at **Appendix G** also demonstrates that rigid HGVs can safely access the layby outside the Birdworld entrance building to serve the gift shop.

4.8.8 All deliveries to the gift shop are expected to occur within the site opening hours with the receipt of goods will be managed by on-site staff to ensure that these are received safely and efficiently. Where possible, deliveries will be at a pre-booked time which will be outside of the peak operating hours.

### **Forest Lodge**

#### **Main Service Yard**

4.8.9 The main service yard for Forest Lodge is provided at the rear of the garden centre building. The Applicant has advised that 8 – 10 deliveries are to be expected on a typical day. The majority of these deliveries are expected to be in vans or rigid HGVs, however articulated HGVs are used on occasion. Swept path analysis included at **Appendix G** demonstrates that articulated HGVs can enter/exit the servicing yard safely.

4.8.10 All deliveries will be appropriately managed by on-site staff to ensure that these are received safely and efficiently. Where possible, deliveries will be at a pre-booked time which will be outside of the peak operating hours.

#### **Restaurant**

4.8.11 The Forest Lodge restaurant is proposed to be serviced by a loading bay located adjacent to the restaurant. Swept path analysis included at **Appendix G** demonstrates that rigid HGVs and refuse vehicles can access this loading bay with ease (no vehicles larger than this are expected). The Applicant has advised that up to five deliveries a day could serve the restaurant.

4.8.12 All deliveries to the restaurant are expected to occur within the site opening hours, with the receipt of goods will be managed by on-site staff to ensure that these are received safely and efficiently. Where possible, deliveries will be at a pre-booked time which will be outside of the peak operating hours.

#### 4.9 **Emergency Vehicle Access**

- 4.9.1 Swept path analysis included at **Appendix G** shows a fire tender can access all required areas of the site safely. This includes entering/exiting the site via the current Birdworld entrance if necessary.

## SECTION 5 Sustainable Transport Strategy

### 5.1 Introduction

5.1.1 This section of the TA considers the promotion of sustainable transport to and from the development proposal. The Sustainable Transport Strategy includes:

- Improvements to local footway connections and the bus stops on the A325; and
- Robust Travel Plans for both Birdworld and Forest Lodge to set out a number of sustainable travel initiatives for staff and visitors.

### 5.2 A325 Infrastructure Improvements (Footway and Bus Stop Upgrades)

5.2.1 Footways and pedestrian crossings are to be provided on all arms which will enable direct pedestrian access to both the Forest Lodge and Birdworld sites.

5.2.2 The crossings will also be suitable for cyclists to enable them to circumnavigate the roundabout safely without remaining in the carriageway. 3m shared footway/cycleways are therefore provided around the roundabout to connect the crossings.

5.2.3 In addition, the following improvements are also proposed as part of the site access arrangements:

- Improved A325 crossing to Footpath 50; and
- Improvements to the Gravel Hill Road bus stops.

5.2.4 Further information on these improvements is summarised below.

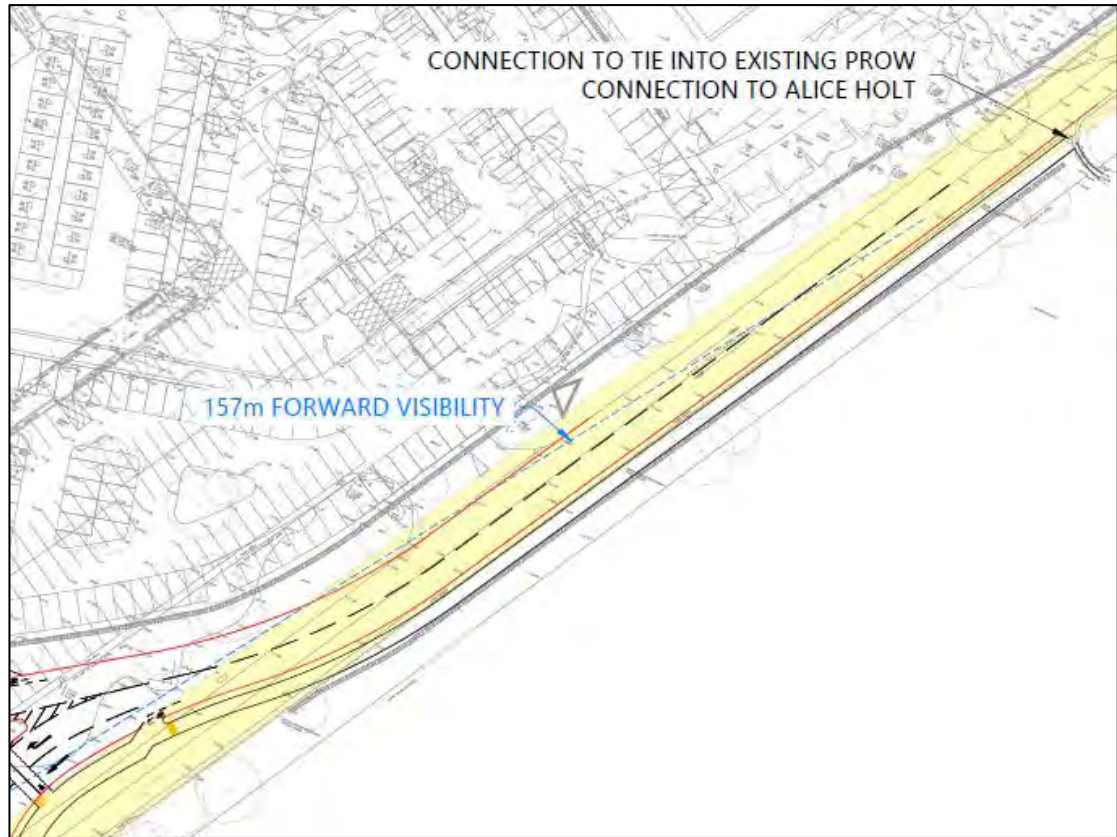
#### Improved A325 Crossing to Footpath 50

5.2.5 To improve pedestrian access to Footpath 50, as part of the site access arrangements, a new footway will be provided on the eastern side of the A325 within land controlled by the Applicant. This will provide a direct connection between the site and Footpath 50 and is shown on **Drawing ITB16329-GA-106E** with an extract provided at **Image 5.1**.

5.2.6 The provision of pedestrian crossing points at the new roundabout in conjunction with the new footway on the eastern side of the A325 will mean that pedestrians will no longer need to cross the A325 at the existing sub-standard connection. The crossings are also suitable for cyclists in order to enable cyclists to circumnavigate the roundabout without entering into the carriageway.

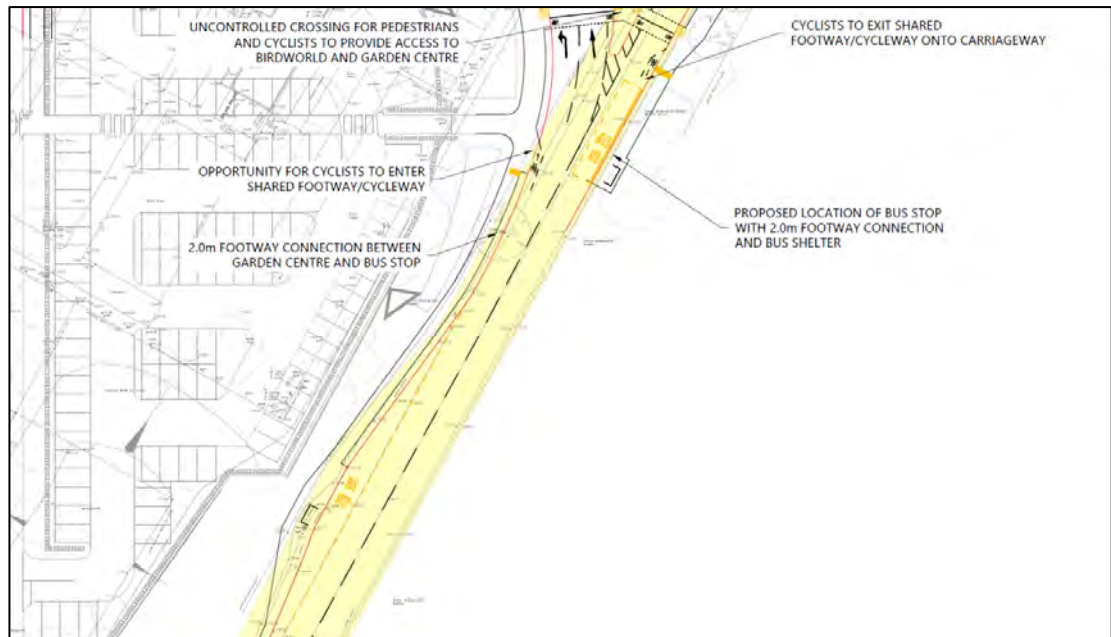


**Image 5.1: Proposed Footway Connection to Footpath 50**



### **Improvements to the Gravel Hill Road Bus Stops**

- 5.2.7 The proposed access arrangements also will bring forward improved pedestrian facilities on the A325 and improved access to the Gravel Hill Road bus stops. These will be the primary bus stops that serve the site once the development is complete.
- 5.2.8 The northbound bus stop is proposed to be marginally realigned with a new footway connection to the north to provide direct access into the site. The existing footway behind the bus layby that routes southward can also resurfaced and a replacement bus shelter will be provided.
- 5.2.9 As requested for consideration by HCC during pre-application discussions, the southbound bus stop on the A325 is proposed to be relocated to the north closer to the site to improve bus access for site users. This will be delivered in conjunction with a new bus shelter.
- 5.2.10 These improvements are shown on **Drawing ITB16329-GA-106E** and on the extract at **Image 5.2**.

**Image 5.2: Improvements to the Gravel Hill Road Bus Stops**

5.2.11 Real time bus service information will be provided at the bus stops. This can be secured via an appropriate financial contribution.

### 5.3 Travel Plans

5.3.1 Separate Travel Plans have been prepared (*report references: ITB16329-014 R & ITB16329-015 R*) for each component of the development (Forest Lodge and Birdworld). These Travel Plans sit alongside this TA.

5.3.2 The primary purpose of these Travel Plans is to identify opportunities for the effective promotion and delivery of sustainable transport initiatives (e.g., walking, cycling and public transport) in connection with the proposed development and through this to thereby reduce the demand for travel by less sustainable modes. The Travel Plans are proposed to be secured via an appropriately worded planning Condition.

5.3.3 The Travel Plans for each part of the site are summarised below in Sections 5.3 and 5.4.

### 5.4 Birdworld Travel Plan (*ref: ITB16329-015 R*)

#### Aims and Objectives

5.4.1 The headline aims of the Travel Plan is as follows:

- To reduce the number of single occupancy car journeys to Birdworld; and
- To improve accessibility to Birdworld by non-car modes of transport.

5.4.2 The following objectives have also been set:

- 1 Reduce the number of single occupancy (drive alone) vehicle trips made by staff to/from Birdworld;
- 2 Reduce the number of vehicle trips made by visitors to/from the site and/or increase vehicle occupancy;
- 3 Increase the use of low emission vehicles where appropriate;
- 4 Increase the number of linked trips between Birdworld, Forest Lodge and other local businesses/attractions (e.g. Alice Holt);
- 5 Promote 'healthy travel' to Birdworld (i.e. walking and cycling) and increase the number of staff and visitors travelling by these modes. This should be supported by the provision of appropriate on-site facilities;
- 6 Implement a range of measures that will encourage and support the use of alternative modes of transport other than travelling as a car driver (i.e. public transport);
- 7 Ensure that the allocation of parking spaces is efficiently managed and in support of the Travel Plan objectives;
- 8 Promote car sharing initiatives to be used as an effective way of reducing parking and improving environmental conditions;
- 9 Sustain the Travel Plan through suitable management strategies and financial investment;
- 10 Monitor the performance of the Travel Plan against its targets by regularly collecting accurate travel information; and
- 11 Reduce the impacts of car-based travel to/from the site on the local and strategic highway networks and on the environment.

### **Targets**

5.4.3 The Travel Plan sets out mode split targets that have been informed by modal split surveys carried out at Birdworld. These surveys capture the bespoke operation of the site as a family visitor attraction that the majority of people travel to as car sharers with high vehicle occupancy.

5.4.4 The targets also reflect the rural location of the site and the existing travel characteristics identified by the surveys. In addition to the modal split targets, the Travel Plan seeks to:

- Increase the number of linked trips to/from Birdworld and Forest Lodge, as well as other nearby locations (e.g. Alice Holt); and
- Increase the number of trips using low emission vehicles.

5.4.5 The targets are as follows:

#### **Visitor Targets**

- Reduce the number of car trips by three percentage points over five years from 100% to 97% (i.e. trips by both car drivers and car passengers combined);
- Increase the number of active travel trips to the site by one percentage points over five years; and
- Increase the number of public transport trips to the site by two percentage points over five years.

#### **Staff Targets**

- Reduce the total number of single-occupancy vehicle trips to and from the site by five percentage points over a five-year period from 91.7% to 86.7%;
- Increase the number of shared car trips to the site by three percentage points over five years;;
- Increase the number of active travel trips to the site by 0.5 percentage points over five years; and
- Increase the number of public transport trips to the site by 1.5 percentage points over five years.

#### **Management and Action Plan**

5.4.6 The management team at Birdworld will nominate an individual(s) to act as the Travel Plan Co-Ordinator (TPC) to manage the implementation of the plan. The TPC will be appointed at least one month prior to occupation of the first phase of the redeveloped Birdworld site and the contact details of the TPC will be supplied to HCC within five working days of appointment.

5.4.7 An action plan has been produced. This summarises the measures that will be implemented as well as how the Travel Plan will be monitored and reviewed. It is reproduced as **Table 5.1**.

**Table 5.1: Birdworld Action Plan**

Measures	Summary of Measures	Responsibility	Timescale
<b>Management</b>			
Travel Plan Co-Ordinator	Nominate Travel Plan Co-Ordinator	Birdworld / Haskins	Prior to occupation
Forest Lodge Liaison / Co-ordination	Liaison with adjacent Forest Lodge site to ensure Travel Plan measures are communicated effectively between both sites to enhance sustainable transport uptake.	TPC	Ongoing
<b>Infrastructure Measures</b>			
Cycle Facilities	Provision of secure and covered cycle parking on site, as well as providing shower / changing facilities.	Birdworld / Haskins	Prior to occupation
Pedestrian Facilities	Provision of improved crossing to PROW 50, footways to site access and improved A325 footways.	Birdworld / Haskins	On completion of site access arrangements.
Public Transport Facilities	Provision of improved Gravel Hill bus stops (including real time information secured by a financial contribution)	Birdworld / Haskins	Within 3 months of complete of the site access
EV Charging Points	Install EV charging points.	Birdworld / Haskins	Prior to occupation
Trip Linking	Install footways connecting Birdworld and Forest Lodge	Birdworld / Haskins	On completion of full site.
<b>Visitor Travel Plan Measures</b>			
Promoting Public Transport	Promote public transport options to/from the site on the Birdworld website	TPC	Ongoing
	Investigate the potential for reduced admission tickets for those who travel by public transport.	Birdworld / Haskins / TPC	Annually
	Investigate the potential for café/restaurant vouchers for visitors who travel by public transport.	Birdworld / Haskins / TPC	Annually
	Prepare a nature trail/wildlife walk for the route from Bentley Railway Station to the site to encourage travel to the site by train from Bentley station.	Birdworld / Haskins / TPC	Within three months of first occupation and update seasonally.

Measures	Summary of Measures	Responsibility	Timescale
Promoting Active Travel	Promote active travel connections to/from the site on the Birdworld website and update as necessary. This should include the proposed connections to Alice Holt.	TPC	Ongoing
	Investigate the potential for reduced admission tickets for those who travel by active travel.	Birdworld / Haskins / TPC	Annually
	Investigate the potential for café/restaurant vouchers for visitors who travel by active travel.	Birdworld / Haskins / TPC	Annually
Promote Sustainable Vehicle Use	Promote EV charging points on-site.	TPC	Ongoing
	Investigate the potential for reduced admission tickets for those who travel in high occupancy car shares (4 persons or greater).	Birdworld / Haskins / TPC	Annually
	Investigate the potential for café/restaurant vouchers for those who travel in high occupancy car shares (4 persons or greater).	Birdworld / Haskins / TPC	Annually
Promoting Linked Trips	Promotion of linked trips to Birdworld and other local businesses through appropriate signage and website information.	TPC	Ongoing
<b>Staff Travel Plan Measures</b>			
Promoting Public Transport	Information on public transport routes and timetables to be made available on a staff Information Board and within Travel Plan pack	TPC	Within one month of first occupation and update as required.
	Investigate Season Ticket Loans for Staff	TPC	Within one month of first occupation and review annually.
Promoting Active Travel	Obtain up to date walking / cycle maps and provide information on local cycle routes to staff.	TPC	Within one month of first occupation and update as required.
	Investigate Membership of Cycle to Work Scheme	TPC	Within one month of first occupation and review annually.
	Promotion of cycle training courses for staff with dates and contact details to book sessions	Birdworld / Haskins / TPC	Within six months of first occupation

Measures	Summary of Measures	Responsibility	Timescale
	Provide cycle training courses for staff with dates and contact details to book sessions. Arrange annual 'bike doctor' visits. This is free of charge.	TPC	Within three months of first occupation and review annually.
Promote Sustainable Vehicle Use	Information on car sharing and Liftshare website to be made available within the Travel Plan Information Pack and Information Points.	Birdworld / Haskins / TPC	Within three months of occupation and update as appropriate
	Set up a site-specific car share scheme for employees.	Birdworld / Haskins / TPC	Within 3 months of occupation and update as appropriate
	Promote Car Sharing	TPC	Ongoing
	Promote EV charging points on-site.	TPC	Ongoing
Promotion of National and Local Events	Information to be made available about upcoming national and local events such as 'Bike Week'	TPC	Introduced within three months of occupation and updated regularly (at least every three months)
<b>Delivery and Servicing Measures</b>			
	Pre-book site deliveries where possible to ensure certain arrival / departure times to maximise delivery efficiency and minimise dwell time.	Birdworld / Haskins / TPC	Ongoing
	Arrange site deliveries where possible to ensure these occur outside of peak operating/trading times to minimise impact on visitors/car park operation.	Birdworld / Haskins / TPC	Ongoing
	Ensure appropriate safety and management measures (e.g. cones, high-vis clothing) are in place for all deliveries.	Birdworld / Haskins / TPC	Ongoing
<b>Travel Plan Promotion / Marketing</b>			
Travel Plan Promotion	Information pack about Travel Plan and relevant travel information to staff	TPC	Within one month of first occupation
	Electronic copies of the Travel Plan available to staff	TPC	Within one month of first occupation
	Information about the Travel Plan and local and national transport events and options available on a staff Information Board	TPC	Within one month of first occupation
	Deliver Personalised Journey Planning to new Staff	TPC	Within one month of Employment

Measures	Summary of Measures	Responsibility	Timescale
	Promotion of visitor travel information and offers on the Birdworld website	TPC	Within three months of first occupation
<b>Monitoring</b>			
Travel Plan Monitoring and Review	Undertake monitoring surveys of staff and visitor travel patterns (to be undertaken using questionnaire surveys)	Birdworld / Haskins / TPC	On the anniversary of first occupation and then every two years afterwards.
	Prepare a monitoring report in light of survey results	TPC	Within two months of receipt of survey results
	Report the results of the surveys and the review of the Travel Plan to HCC as appropriate	TPC	Within three months of receipt of survey results

## 5.5 Forest Lodge Travel Plan (ref: ITB16329-014 R)

### Aims and Objectives

5.5.1 The headline aims of the Travel Plan is as follows:

- To reduce the number of single occupancy car journeys to Forest Lodge; and
- To improve accessibility to Forest Lodge by non-car modes of transport

5.5.2 The following objectives have also been set:

- 1 Reduce the number of single occupancy (drive alone) vehicle trips made by staff and visitors to/from Forest Lodge and increase vehicle occupancy;
- 2 Reduce the number of vehicle trips made by visitors to/from Forest Lodge;
- 3 Increase the use of low emission vehicles where appropriate;
- 4 Increase the number of linked trips between Forest Lodge, Birdworld and other local businesses/attractions (e.g. Alice Holt);
- 5 Promote 'healthy travel' to Forest Lodge (i.e. walking and cycling) and increase the number of staff and visitors travelling by these modes. This will be supported by the provision of appropriate on-site facilities;



- 6 Implement a range of measures that will encourage and support the use of alternative modes of transport other than travelling as a car driver (i.e. public transport);
- 7 Ensure that the allocation of parking spaces is efficiently managed and in support of the Travel Plan objectives;
- 8 Promote car sharing initiatives to be used as an effective way of reducing parking and improving environmental conditions;
- 9 Sustain the Travel Plan through suitable management strategies and financial investment;
- 10 Monitor the performance of the Travel Plan against its targets by regularly collecting accurate travel information; and
- 11 Reduce the impacts of car-based travel to/from the site on the local and strategic highway networks and on the environment.

### **Targets**

5.5.3 The Travel Plan sets out mode split targets that have been informed by modal split surveys carried out at Forest Lodge. These surveys capture the bespoke operation of the site as a destination retail business that:

- Provides a high-end restaurant/catering option; and
- Sells bulky goods that often require the use of a car to transport these goods.

5.5.4 The targets also reflect the rural location of the site and the existing travel characteristics identified by the surveys. In addition to the modal split targets, the Travel Plan seeks to:

- Increase the number of linked trips to/from Birdworld and Forest Lodge, as well as other nearby locations (e.g. Alice Holt); and
- Increase the number of trips using low emission vehicles.

5.5.5 The targets are as follows:

**Visitor (Customer) Targets**

- Reduce the number of single occupancy vehicle trips by three percentage points over five years from 11.8% to 8.8%; and
- Increase the number of shared car trips to the site by three percentage points over five years from 88.2% to 91.2%.

**Staff Targets**

- Reduce the total number of single-occupancy vehicle trips to and from the site by three percentage points over a five-year period from 92.9% to 89.9%;
- Increase the number of shared car trips to the site by two percentage points over five years from 7.1% to 9.1%;
- Increase the number of active travel trips to the site by 0.5 percentage points over five years; and
- Increase the number of public transport trips to the site by 0.5 percentage points over five years.

**Management and Action Plan**

5.5.6 The management team at Forest Lodge will nominate an individual(s) to act as the Travel Plan Co-Ordinator (TPC) to manage the implementation of the plan. The TPC will be appointed at least one month prior to occupation of the redeveloped Forest Lodge site and the contact details of the TPC will be supplied to HCC within five working days of appointment.

5.5.7 An action plan has been produced. This summarises the measures that will be implemented as well as how the Travel Plan will be monitored and reviewed. It is reproduced as **Table 5.2**.

**Table 5.2: Action Plan**

Measures	Summary of Measures	Responsibility	Timescale
<b>Management</b>			
Travel Plan Co-Ordinator	Nominate Travel Plan Co-Ordinator	Birdworld / Haskins	Prior to occupation
Birdworld Liaison / Co-ordination	Liaison with adjacent Birdworld site to ensure Travel Plan measures are communicated effectively between both sites to enhance sustainable transport uptake.	TPC	Ongoing

Measures	Summary of Measures	Responsibility	Timescale
<b>Infrastructure Measures</b>			
Cycle Facilities	Provision of secure and covered cycle parking on site, as well as providing shower / changing facilities.	Birdworld / Haskins	Prior to occupation
Pedestrian Facilities	Provision of improved crossing to PROW 50, footways to site access and improved A325 footways.	Birdworld / Haskins	On completion of site access arrangements.
Public Transport Facilities	Provision of improved Gravel Hill bus stops (including real time information secured by a financial contribution)	Birdworld / Haskins	Within 3 months of complete of the site access
EV Charging Points	Install EV charging points.	Birdworld / Haskins	Prior to occupation
Trip Linking	Install footways connecting Forest Lodge and Birdworld	Birdworld / Haskins	On completion of full site.
<b>Visitor Travel Plan Measures</b>			
Promoting Public Transport	Promote public transport options to/from the site on the Birdworld website	TPC	Ongoing
	Investigate the potential for café/restaurant vouchers for visitors who travel by public transport.	Birdworld / Haskins / TPC	Annually
Promoting Active Travel	Promote active travel connections to/from the site on the Birdworld website and update as necessary. This should include the proposed connections to Alice Holt.	TPC	Ongoing
	Investigate the potential for café/restaurant vouchers for visitors who travel by active travel.	Birdworld / Haskins / TPC	Annually
Promote Sustainable Vehicle Use	Promote EV charging points on-site.	TPC	Ongoing
	Investigate the potential for café/restaurant vouchers for those who travel in high occupancy car shares (4 persons or greater).	Birdworld / Haskins / TPC	Annually
Promoting Linked Trips	Promotion of linked trips to Birdworld and other local businesses through appropriate signage and website information.	TPC	Ongoing
Home Deliveries	Review the option for home delivery of goods to prevent the need to travel.	Birdworld / Haskins / TPC	Annually

Measures	Summary of Measures	Responsibility	Timescale
<b>Staff Travel Plan Measures</b>			
Promoting Public Transport	Information on public transport routes and timetables to be made available on a staff Information Board	TPC	Within one month of first occupation and update as required.
	Investigate Season Ticket Loans for Staff	TPC	Within one month of first occupation and review annually.
Promoting Cycling	Obtain up to date cycle maps and provide information on local cycle routes to staff.	TPC	Within one month of first occupation and update as required.
	Investigate Membership of Cycle to Work Scheme	TPC	Within one month of first occupation and review annually.
	Promotion of cycle training courses for staff with dates and contact details to book sessions	Birdworld / Haskins / TPC	Within six months of first occupation
	Provide cycle training courses for staff with dates and contact details to book sessions. Arrange annual 'bike doctor' visits. This is free of charge.	TPC	Within three months of first occupation and review annually.
Promote Sustainable Vehicle Use	Information on car sharing and Liftshare website to be made available within the Travel Plan Information Pack and Information Points.	Birdworld / Haskins / TPC	Within three months of occupation and update as appropriate
	Set up a site-specific car share scheme for employees.	Birdworld / Haskins / TPC	Within three months of occupation and update as appropriate
	Promote Car Sharing	TPC	Ongoing
	Promote EV charging points on-site.	TPC	Ongoing
Promotion of National and Local Events	Information to be made available about upcoming national and local events such as 'Bike Week'	TPC	Introduced within three months of occupation and updated regularly (at least every three months)
<b>Delivery and Servicing Measures</b>			
	Pre-book site deliveries where possible to ensure certain arrival / departure times to maximise delivery efficiency and minimise dwell time.	Birdworld / Haskins / TPC	Ongoing

Measures	Summary of Measures	Responsibility	Timescale
	Arrange site deliveries where possible to ensure these occur outside of peak operating/trading times to minimise impact on visitors/car park operation.	Birdworld / Haskins / TPC	Ongoing
	Ensure appropriate safety and management measures (e.g. cones, high-vis clothing) are in place for all deliveries.	Birdworld / Haskins / TPC	Ongoing
<b>Travel Plan Promotion / Marketing</b>			
Travel Plan Promotion	Information pack about Travel Plan and relevant travel information to staff	TPC	Within one month of first occupation
	Electronic copies of the Travel Plan available to staff	TPC	Within one month of first occupation
	Information about the Travel Plan and local and national transport events and options available on a staff Information Board	TPC	Within one month of first occupation
	Deliver Personalised Journey Planning to new Staff	TPC	Within one month of Employment
	Promotion of visitor travel information and offers on the Forest Lodge website	TPC	Within three months of first occupation
<b>Monitoring</b>			
Travel Plan Monitoring and Review	Undertake monitoring surveys of staff and visitor travel patterns (to be undertaken using questionnaire surveys)	Birdworld / Haskins / TPC	On the anniversary of first occupation and then every two years afterwards up to Year 5..
	Prepare a monitoring report in light of survey results	TPC	Within two months of receipt of survey results
	Report the results of the surveys and the review of the Travel Plan to HCC as appropriate	TPC	Within three months of receipt of survey results

## 5.6 Summary

5.6.1 A Sustainable Transport Strategy is proposed for the proposed development which includes:

- Robust Travel Plans for both Birdworld and Forest Lodge to set out a number of sustainable travel initiatives for staff and visitors; and
- Improvements to local footway connections and the bus stops on the A325.

5.6.2 The Sustainable Transport Strategy will promote the uptake of non-car modes of travel effectively, taking into account the location and proposed use of the development. The sustainability test of the NPPF is therefore passed.

## SECTION 6 Traffic Impact Assessment

### 6.1 Introduction

6.1.1 This section of the TA sets out the proposed traffic generation and impact of the proposed development. Much of this information was previously presented to HCC through the pre-application discussions and officers at HCC has confirmed agreement to:

- The overall assessment methodology;
- The extent of the study area;
- The assessment scenarios;
- A future assessment year and traffic growth factors;
- Traffic generation; and
- Traffic distribution and assignment.

6.1.2 This section should be read in conjunction with **Technical Note ITB16329-007 TN** which is included as **Appendix J** of this TA. This note provides full calculations regarding the traffic generation of the proposed development.

### 6.2 Study Area

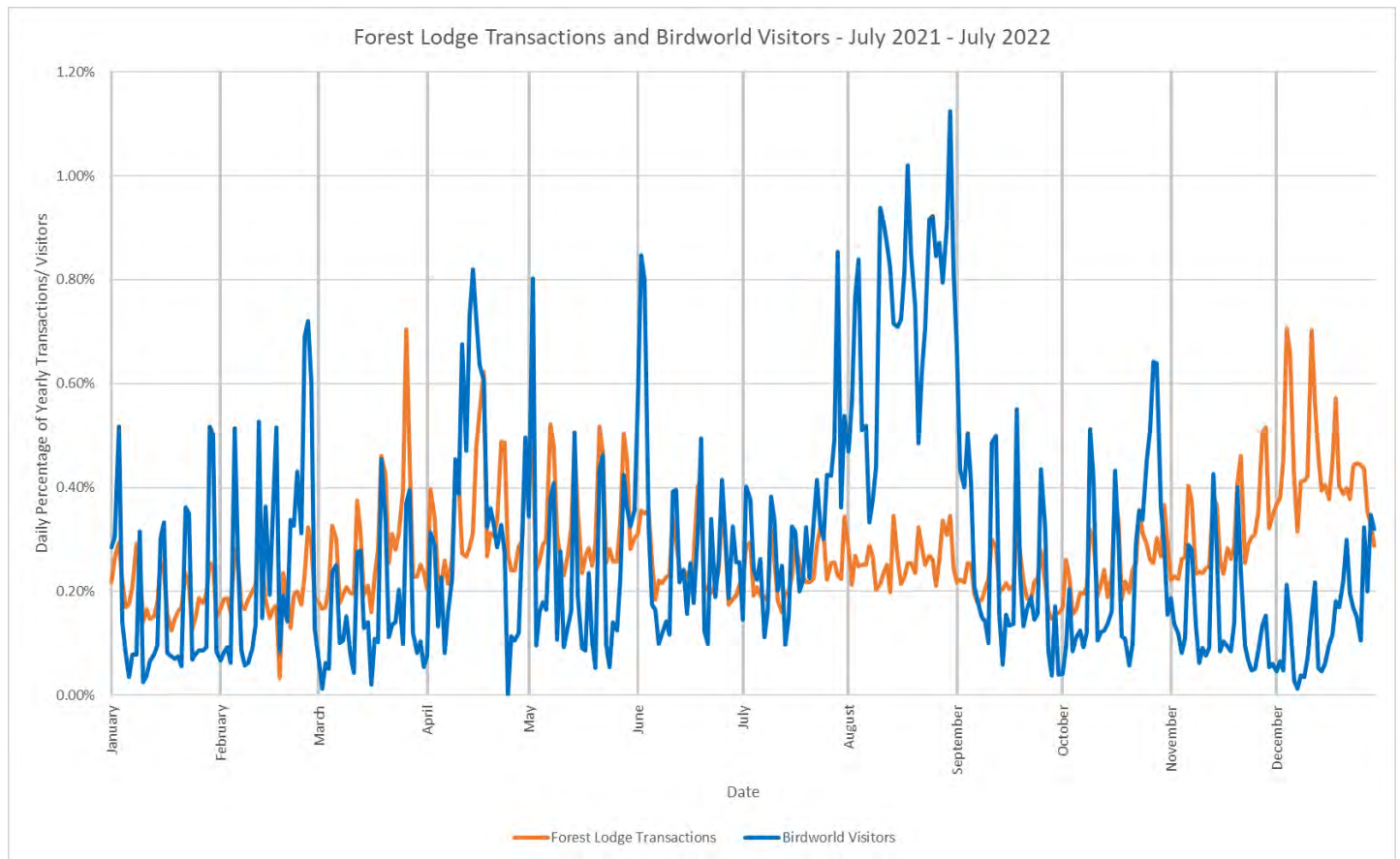
6.2.1 The study area for the assessment comprises the site frontage along the A325 and the proposed site access junction. This approach is consistent with the technical work submitted in support of previous planning applications at the site and has been agreed with HCC through pre-application discussions.

### 6.3 Seasonality and Data Collection

6.3.1 Both Birdworld and Forest Lodge are subject to seasonal variations in their operation due to the nature of the site uses. Any traffic generation assessment of both site uses must therefore take account of their seasonal variations throughout the year, considering the implications of traffic generation during 'typical' weekday peak hours on the local highway network as well as traffic generation at busy operational times of either/both uses (e.g. at Bank Holidays and Weekends).

6.3.2 The Applicant has provided recorded transaction data for Forest Lodge and recorded visitor number data for Birdworld from July 2021 to July 2022 which demonstrates the seasonality of the uses. This is presented at **Graph 6.1** as proportions (actual transaction/visitor number data is confidential).

**Graph 6.1: Forest Lodge Transaction and Birdworld Visitor Data**



6.3.3 Based on the seasonal variation detailed at **Graph 6.1**, traffic surveys were commissioned to be undertaken in May which is a busy month for both uses (and is also a neutral month within school term time).

6.3.4 Further detail on seasonality is set out in **Technical Note ITB16329-007 TN**.

## 6.4 Traffic Surveys

6.4.1 A suite of traffic surveys was undertaken by an independent data collection company (Advanced Transport Research) in May 2022 on the following days:

- **Monday 2 May 2022** – A Bank Holiday (i.e. a busy operational day for both uses<sup>11</sup>);
- **Thursday 12 May 2022** – A 'Typical' Weekday in a busy month for both uses, but within school term time in a 'neutral' month; and

<sup>11</sup> This date was the 19<sup>th</sup> busiest day at Forest Lodge for 2021/2022 and the 19<sup>th</sup> busiest day at Birdworld for 2021/2022.



- **Saturday 14 May 2022** – A ‘Typical’ Weekend Day in a busy month for both uses, but again within school term time in a ‘neutral’ month.

6.4.2 The surveys included 12-hour (0700-1900) Classified Traffic Counts (CTC) undertaken at the existing Forest Lodge and Birdworld accesses on the above days.

6.4.3 **Table 6.1** and **Table 6.2** summarise the surveyed traffic generation of Birdworld and Forest Lodge for:

- The highway network morning and evening peak hours on a weekday (0715 – 0815 and 1630 – 1730);
- A Saturday peak hour (1300 – 1400);
- A Bank Holiday peak hour (1115 – 1215); and
- Daily trip generation for all surveyed days between 0700 – 1900.

**Table 6.1: Birdworld Surveyed Peak Traffic Generation**

Birdworld	Weekday			Weekend			Bank Holiday		
	Arr.	Dep.	Two-way	Arr.	Dep.	Two-way	Arr.	Dep.	Two-way
Weekday AM Peak (0715-0815)	2	1	3	-	-	-	-	-	-
Weekday PM Peak (1630-1730)	1	5	6	-	-	-	-	-	-
Saturday Peak (1300-1400)	-	-	-	29	32	61	-	-	-
Bank Holiday Peak (1115-1215)	-	-	-	-	-	-	76	11	87
<b>12hr Daily (0700-1900)</b>	<b>94</b>	<b>94</b>	<b>188</b>	<b>242</b>	<b>242</b>	<b>484</b>	<b>355</b>	<b>355</b>	<b>710</b>

Source: A-T-R Traffic Surveys, May 2022

**Table 6.2: Forest Lodge Surveyed Peak Traffic Generation**

Forest Lodge	Weekday			Weekend			Bank Holiday		
	Arr.	Dep.	Two-way	Arr.	Dep.	Two-way	Arr.	Dep.	Two-way
Weekday AM Peak (0715-0815)	28	0	28	-	-	-	-	-	-
Weekday PM Peak (1630-1730)	27	50	77	-	-	-	-	-	-
Saturday Peak (1300-1400)	-	-	-	118	130	248	-	-	-
Bank Holiday Peak (1115-1215)	-	-	-	-	-	-	171	134	305
<b>12hr Daily (0700-1900)</b>	<b>584</b>	<b>567</b>	<b>1,151</b>	<b>851</b>	<b>855</b>	<b>1,706</b>	<b>934</b>	<b>933</b>	<b>1,867</b>

Source: A-T-R Traffic Surveys, May 2022

6.4.4 The surveyed traffic is presented on the following figures:

- **Figure TF1** – 2022 Observed Traffic Flows Weekday AM Peak Hour (0715 – 0815)
- **Figure TF2** – 2022 Observed Traffic Flows Weekday PM Peak Hour (1630 – 1730)
- **Figure TF3** – 2022 Observed Traffic Flows Weekend Peak Hour (1300 – 1400)
- **Figure TF4** – 2022 Observed Traffic Flows Bank Holiday Peak Hour (1115 – 1215)

## 6.5 Traffic Generation Assessment Scenarios

6.5.1 Detail on the trip generation assessment scenarios is set out in **Technical Note ITB16329-007 TN**. It has been agreed with HCC that the traffic generation of the proposed development is to be assessed for the following scenarios:

- **Scenario 1:** A typical/average weekday during the morning and evening peak hours (based on the recorded survey data at Birdworld and Forest Lodge). This is equivalent to a 75<sup>th</sup> percentile operational weekday at Forest Lodge and a 48<sup>th</sup> percentile operational weekday at Birdworld;
- **Scenario 2:** A busy/typical Saturday peak hour (based on the recorded survey data at Birdworld and Forest Lodge). This is equivalent to an 86<sup>th</sup> percentile operational weekend day at both Birdworld and Forest Lodge;
- **Scenario 3:** A busy Bank Holiday at both Forest Lodge and Birdworld (based on the recorded survey data at Birdworld and Forest Lodge);
- **Scenario 4:** A 90<sup>th</sup> percentile operational weekday sensitivity test at both sites during the morning and evening peak hours (derived from factoring traffic data to a 90<sup>th</sup> percentile operational weekday based on visitor/transaction numbers); and
- **Scenario 5:** A 90<sup>th</sup> percentile operational weekend day sensitivity test at both sites during the Saturday peak hour (derived from factoring traffic data to a 90<sup>th</sup> percentile operational weekend day based on visitor/transaction numbers).

6.5.2 The above scenarios provide a robust assessment of seasonality taking account of:

- Surveyed typical and busy days at Birdworld and Forest Lodge (Scenarios 1, 2 and 3); and
- Additional busy days at both Birdworld and Forest Lodge as sensitivity tests (Scenarios 4 and 5), derived from uplifting traffic numbers based on recorded transaction numbers and visitor data. These scenarios are very onerous as they will not occur in practice due to the different temporal distributions of each site.

6.5.3 This approach has been agreed with officers at HCC.

## 6.6 Traffic Generation

6.6.1 Full detail on the traffic generation of the proposed development is set out in **Technical Note ITB16329-007 TN**, and this is summarised in **Tables 6.3 – 6.5** below. The trip generation of redeveloped and expanded site has been derived by:

- Uplifting the current trip generation of Birdworld by the predicted maximum increase in visitor numbers (a 114% increase). This is a worst-case assessment; and
- Uplifting the current trip generation of the Forest Lodge site by the predicted increase in transactions (a 78% increase).

6.6.2 This assessment is a very onerous worst case as it does not allow for pass-by trips or cross-visitation between the uses. The methodology has also been agreed with officers at HCC.

**Table 6.3: Total Trip Generation – Proposed Birdworld Expansion**

Scenario		AM Peak (0715 – 0815)	PM Peak (1630 – 1730)	Saturday Peak (1300 – 1400)	Bank Holiday Peak (1115 – 1215)	Daily (0700 – 1900)
Typical Average Weekday (Scenario 1)	Arr	4	2	-	-	201
	Dep	2	11	-	-	201
	<b>TOTAL</b>	6	13	-	-	402
Typical Busy Saturday (Scenario 2)	Arr	-	-	62	-	518
	Dep	-	-	69	-	518
	<b>TOTAL</b>	-	-	131	-	1,036
Bank Holiday (Scenario 3)	Arr	-	-	-	163	760
	Dep	-	-	-	24	760
	<b>TOTAL</b>	-	-	-	187	1,519
90 <sup>th</sup> Percentile Weekday Sensitivity Test (Scenario 4)	Arr	18	9	-	-	855
	Dep	9	46	-	-	855
	<b>TOTAL</b>	27	55	-	-	1,710
90 <sup>th</sup> Percentile Weekend Sensitivity Test (Scenario 5)	Arr	-	-	65	-	539
	Dep	-	-	71	-	539
	<b>TOTAL</b>	-	-	136	-	1,078

Source: Survey Data and Consultant's Calculations (see **Technical Note ITB16329-007 TN**)

**Table 6.4: Total Trip Generation – Proposed Forest Lodge Expansion**

Scenario		AM Peak (0715 – 0815)	PM Peak (1630 – 1730)	Saturday Peak (1300 – 1400)	Bank Holiday Peak (1115 – 1215)	Daily (0700 – 1900)
Typical Average Weekday (Scenario 1)	Arr	50	48	-	-	1,040
	Dep	0	89	-	-	1,009
	<b>TOTAL</b>	50	137	-	-	2,049
Typical Busy Saturday (Scenario 2)	Arr	-	-	210	-	1,515
	Dep	-	-	231	-	1,522
	<b>TOTAL</b>	-	-	441	-	3,037
Bank Holiday (Scenario 3)	Arr	-	-	-	304	1,663
	Dep	-	-	-	239	1,661
	<b>TOTAL</b>	-	-	-	543	3,324
90 <sup>th</sup> Percentile Weekday Sensitivity Test (Scenario 4)	Arr	61	58	-	-	1,263
	Dep	0	108	-	-	1,227
	<b>TOTAL</b>	61	166	-	-	2,490
90 <sup>th</sup> Percentile Weekend Sensitivity Test (Scenario 5)	Arr	-	-	221	-	1,593
	Dep	-	-	243	-	1,600
	<b>TOTAL</b>	-	-	464	-	3,193

 Source: Survey Data and Consultant's Calculations (see **Technical Note ITB16329-007 TN**)

**Table 6.5: Total Trip Generation – Proposed Forest Lodge and Birdworld Expansion**

Scenario		AM Peak (0715 – 0815)	PM Peak (1630 – 1730)	Saturday Peak (1300 – 1400)	Bank Holiday Peak (1115 – 1215)	Daily (0700 – 1900)
Typical Average Weekday (Scenario 1)	Arr	54	50	-	-	1,241
	Dep	2	100	-	-	1,210
	<b>TOTAL</b>	56	150	-	-	2,451
Typical Busy Saturday (Scenario 2)	Arr	-	-	272	-	2,033
	Dep	-	-	300	-	2,040
	<b>TOTAL</b>	-	-	572	-	4,073
Bank Holiday (Scenario 3)	Arr	-	-	-	467	2,423
	Dep	-	-	-	262	2,421
	<b>TOTAL</b>	-	-	-	729	4,844
90 <sup>th</sup> Percentile Weekday Sensitivity Test (Scenario 4)	Arr	79	67	-	-	2,118
	Dep	9	154	-	-	2,082
	<b>TOTAL</b>	88	220	-	-	4,200
	Arr	-	-	286	-	2,132
	Dep	-	-	314	-	2,139

Scenario		AM Peak (0715 – 0815)	PM Peak (1630 – 1730)	Saturday Peak (1300 – 1400)	Bank Holiday Peak (1115 – 1215)	Daily (0700 – 1900)
90 <sup>th</sup> Percentile Weekend Sensitivity Test (Scenario 5)	<b>TOTAL</b>	-	-	600	-	4,271

Source: Survey Data and Consultant's Calculations (see **Technical Note ITB16329-007 TN**)

## 6.7 Traffic Distribution and Assignment

6.7.1 It has been agreed with officers at HCC that the trips from the proposed development are to be distributed and assigned in line with the observed turning movements surveyed. The traffic distribution of Birdworld and Forest Lodge traffic is shown on the following figures:

- **Figure TF5** – Birdworld Distribution Weekday AM Peak Hour (0715 – 0815)
- **Figure TF6** – Birdworld Distribution Weekday PM Peak Hour (1630 – 1730)
- **Figure TF7** – Birdworld Distribution Saturday Peak (1300 – 1400)
- **Figure TF8** – Birdworld Distribution Bank Holiday Peak (1115 – 1215)
- **Figure TF9** – Forest Lodge Distribution Weekday AM Peak Hour (0715 – 0815)
- **Figure TF10** – Forest Lodge Distribution Weekday PM Peak Hour (1630 – 1730)
- **Figure TF11** – Forest Lodge Distribution Weekend Peak Hour (1300 – 1400)
- **Figure TF12** – Forest Lodge Distribution Bank Holiday Peak Hour (1115 – 1215)

The distributions detailed on **Figures TF5 – TF12** are shown based on accessing the site via a proposed 3-arm roundabout for consistency, although the distributions are as per the surveyed traffic at the existing priority junctions.

6.7.2 The trips detailed in **Tables 6.3 – 6.5** have been assigned to the network using the above distributions and are shown on the following figures:

- **Figure TF13** – Proposed Development Traffic Assignment (Scenario 1) Weekday AM Peak Hour (0715 – 0815)
- **Figure TF14** – Proposed Development Traffic Assignment (Scenario 1) Weekday PM Peak Hour (1630 – 1730)
- **Figure TF15** – Proposed Development Traffic Assignment (Scenario 2) Saturday Peak Hour (1300 – 1400)

- **Figure TF16** – Proposed Development Traffic Assignment (Scenario 3) Bank Holiday Peak Hour (1115 – 1215)
- **Figure TF17** – Proposed Development Traffic Assignment (Scenario 4 – Sensitivity Test) Weekday AM Peak Hour (0715 – 0815)
- **Figure TF18** – Proposed Development Traffic Assignment (Scenario 4 – Sensitivity Test) Weekday PM Peak Hour (1630 – 1730)
- **Figure TF19** – Proposed Development Traffic Assignment (Scenario 5 – Sensitivity Test) Saturday Peak Hour (1300 – 1400)

## 6.8 Future Year Traffic Flows (2026)

6.8.1 At the time of writing, the opening year of the proposed development has not been determined. However, to ensure a robust assessment, it is assumed that the development will come forward in 2026 and therefore it is proposed to assess the traffic generation of the development for this future year.

6.8.2 Factors to derive background traffic growth to 2026 have been obtained using the TEMPro V.7.2.c dataset and have been applied to the surveyed traffic flows detailed at **Figures TF1 – TF4** (excluding the recorded site trips). The growth factors are summarised at **Table 6.6** (the Saturday growth factors have been applied to the Bank Holiday traffic flows as a suitable proxy).

**Table 6.6: Traffic Growth Factors**

Growth Period	Time Period	Growth Rate
2022 – 2026	AM Peak	1.0345
	PM Peak	1.0361
	Sat Peak	1.0421

Source: TEMPRO (version 7.2C)

6.8.3 The 'growthed' traffic flows (equivalent to a 2026 'Baseline') are shown on the following traffic figures:

- **Figure TF20** – 2026 'Baseline' Weekday AM Peak Hour (0715 – 0815)
- **Figure TF21** – 2026 'Baseline' Weekday PM Peak Hour (1630 – 1730)
- **Figure TF22** – 2026 'Baseline' Weekend Peak Hour (1300 – 1400)
- **Figure TF23** – 2026 'Baseline' Bank Holiday Peak Hour (1115 – 1215)

The above traffic flows are shown for a proposed 3-arm roundabout access at the site but with no site traffic (i.e. the surveyed site traffic has been removed and it is assumed on the above figures that there is no development on the site).

6.8.4 The proposed development traffic flows (detailed at **Figures TF13 – TF19**) have been added to the 2026 'Baseline' traffic flows for their respective time periods. 2026 'with development' traffic flows are shown on the following figures:

- **Figure TF24** – 2026 'With Development' (Scenario 1) Weekday AM Peak Hour (0715 – 0815)
- **Figure TF25** – 2026 'With Development' (Scenario 1) Weekday PM Peak Hour (1630 – 1730)
- **Figure TF26** – 2026 'With Development' (Scenario 2) Saturday Peak Hour (1300 – 1400)
- **Figure TF27** – 2026 'With Development' (Scenario 3) Bank Holiday Peak Hour (1115 – 1215)
- **Figure TF28** – 2026 'With Development' (Scenario 4 – Sensitivity Test) Weekday AM Peak Hour (0715 – 0815)
- **Figure TF29** – 2026 'With Development' (Scenario 4 – Sensitivity Test) Weekday PM Peak Hour (1630 – 1730)
- **Figure TF30** – 2026 'With Development' (Scenario 5 – Sensitivity Test) Saturday Peak Hour (1300 – 1400)

6.8.5 **Figures TF24 – TF30** therefore provide traffic flows for which the operation of the site access has been tested.

#### **Committed Developments**

6.8.6 Officers at HCC confirmed through pre-application discussions that there was no requirement to include any committed developments within the traffic assessments.

### **Traffic Impact**

6.9.1 **Table 6.7** presents the results of capacity testing of the proposed site access arrangements using the TRL Junctions 10 software. The assessments demonstrate that the junction will operate well within capacity with minimal queuing and delay in all situations.

**Table 6.7: Roundabout Site Access Modelling Results (2026)**

	AM Peak Hour (0715-0815)			PM Peak Hour (1630-1730)			Weekend Peak Hour (1300-1400)			Bank Holiday Peak Hour (1115-1215)		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
<b>2026 + Development (Scenarios 1, 2 and 3)</b>												
A325 (N)	0.32	1	3	0.46	1	4	0.50	1	4	0.52	1	4
A325 (S)	0.51	1	4	0.38	1	3	0.38	1	3	0.55	1	4
Site Access	0.00	<1	<1	0.07	<1	3	0.21	<1	3	0.19	<1	3
<b>2026 + Development (Scenario 4 – Sensitivity Test)</b>												
A325 (N)	0.33	1	3	0.47	1	4	-	-	-	-	-	-
A325 (S)	0.52	1	4	0.38	1	3	-	-	-	-	-	-
Site Access	0.01	<1	3	0.11	<1	3	-	-	-	-	-	-
<b>2026 + Development (Scenario 5 – Sensitivity Test)</b>												
A325 (N)	-	-	-	-	-	-	0.50	1	4	-	-	-
A325 (S)	-	-	-	-	-	-	0.39	1	3	-	-	-
Site Access	-	-	-	-	-	-	0.22	<1	3	-	-	-

Source: Junctions 10

6.9.2 The operational assessment outputs are included as **Appendix K** (including the junction geometry).

## 6.10 2031 Future Year Sensitivity Test

6.10.1 Whilst the assessment outputs set out at Section 6.9 test an assumed opening year of 2026, through pre-applications officers at HCC have requested that a future year of 2031 is also assessed. This section provides this assessment as a sensitivity test.

6.10.2 Factors to derive background traffic growth to 2031 have been obtained using the TEMPro V.7.2.c dataset and have been applied to the surveyed traffic flows detailed at **Figures TF1 – TF4** (excluding the recorded site trips). The growth factors are summarised at **Table 6.8**. Again, the Saturday growth factors have been applied to the Bank Holiday traffic flows as a suitable proxy.

**Table 6.8: Traffic Growth Factors – 2031 Sensitivity Test**

Growth Period	Time Period	Growth Rate
2022 – 2031	AM Peak	1.0734
	PM Peak	1.0770
	Sat Peak	1.0892

Source: TEMPRO (version 7.2C)



6.10.3 The 'growthed' traffic flows (equivalent to a 2031 'Baseline') are shown on the following traffic figures:

- **Figure TF31** – 2031 'Baseline' Weekday AM Peak Hour (0715 – 0815)
- **Figure TF32** – 2031 'Baseline' Weekday PM Peak Hour (1630 – 1730)
- **Figure TF33** – 2031 'Baseline' Weekend Peak Hour (1300 – 1400)
- **Figure TF34** – 2031 'Baseline' Bank Holiday Peak Hour (1115 – 1215)

The above traffic flows are shown for a proposed 3-arm roundabout access at the site but with no site traffic (i.e., the surveyed site traffic has been removed and it is assumed on the above figures that there is no development on the site).

6.10.4 The proposed development traffic flows (detailed at **Figures TF13 – TF19**) have been added to the 2031 'Baseline' traffic flows for their respective time periods. 2031 'with development' traffic flows are shown on the following figures:

- **Figure TF35** – 2031 Sensitivity Test 'With Development' (Scenario 1) Weekday AM Peak Hour (0715 – 0815)
- **Figure TF36** – 2031 Sensitivity Test 'With Development' (Scenario 1) Weekday PM Peak Hour (1630 – 1730)
- **Figure TF37** – 2031 Sensitivity Test 'With Development' (Scenario 2) Saturday Peak Hour (1300 – 1400)
- **Figure TF38** – 2031 Sensitivity Test 'With Development' (Scenario 3) Bank Holiday Peak Hour (1115 – 1215)
- **Figure TF39** – 2031 Sensitivity Test 'With Development' (Scenario 4 – Sensitivity Test) Weekday AM Peak Hour (0715 – 0815)
- **Figure TF40** – 2031 Sensitivity Test 'With Development' (Scenario 4 – Sensitivity Test) Weekday PM Peak Hour (1630 – 1730)
- **Figure TF41** – 2031 Sensitivity Test 'With Development' (Scenario 5 – Sensitivity Test) Saturday Peak Hour (1300 – 1400)

6.10.5 **Figures TF35 – TF41** therefore provide traffic flows for which the operation of the site access has been tested for the 2031 Sensitivity Tests.

6.10.6 Operational assessments have been undertaken of the site access roundabout and are summarised at **Table 6.9** (again using the Junctions 10 TRL software). As with the previous assessments, the results demonstrate that the junction will operate well within capacity with minimal queuing and delay in all situations.

**Table 6.9: Roundabout Site Access Modelling Results (2031 – Sensitivity Test)**

	AM Peak Hour (0715-0815)			PM Peak Hour (1630-1730)			Weekend Peak Hour (1300-1400)			Bank Holiday Peak Hour (1115-1215)		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
<b>2031 Sensitivity Test + Development (Scenarios 1, 2 and 3)</b>												
A325 (N)	0.33	1	3	0.48	1	4	0.52	1	4	0.54	1	4
A325 (S)	0.53	1	4	0.39	1	3	0.40	1	3	0.56	1	5
Site Access	0.00	<1	<1	0.07	<1	3	0.21	<1	3	0.20	<1	3
<b>2031 Sensitivity Test + Development (Scenario 4 – Sensitivity Test)</b>												
A325 (N)	0.34	1	3	0.49	1	4	-	-	-	-	-	-
A325 (S)	0.53	1	4	0.40	1	3	-	-	-	-	-	-
Site Access	0.01	<1	3	0.11	<1	3	-	-	-	-	-	-
<b>2031 Sensitivity Test + Development (Scenario 5 – Sensitivity Test)</b>												
A325 (N)	-	-	-	-	-	-	0.52	1	4	-	-	-
A325 (S)	-	-	-	-	-	-	0.40	1	3	-	-	-
Site Access	-	-	-	-	-	-	0.22	<1	3	-	-	-

Source: Junctions 10

6.10.7 The operational assessment outputs are also included in **Appendix K**.

## 6.11 Summary

6.11.1 The trip generation of the proposed development has been derived from:

- Traffic data collected at the site access at days during a typical/busy operational month at both Forest Lodge and Birdworld;
- Transaction data and visitor numbers taking account of the seasonal variation in operation at both Forest Lodge and Birdworld (five trip assessment scenarios are presented to account for seasonality); and
- The predicted proportional uplift in transactions and visitor numbers has been applied to the traffic data to derive the traffic generation of the proposed development.

- 6.11.1 This trip assessment is a very onerous 'worst case' as it does not allow for pass-by trips or cross-visitation between the uses. It also assesses very extreme scenarios in the sensitivity tests that will not occur in practice.
- 6.11.2 The traffic generation, distribution and assignment from the proposed development has been agreed with HCC.
- 6.11.3 The trip generation for the proposed development (for all scenarios) has then been added to estimated future year flows for 2026 to set out predicted 'With Development' traffic flows for which the site access junction will need to accommodate. These flows are shown on the following figures:
- **Figure TF24** – 2026 'With Development' (Scenario 1) Weekday AM Peak Hour (0715 – 0815)
  - **Figure TF25** – 2026 'With Development' (Scenario 1) Weekday PM Peak Hour (1630 – 1730)
  - **Figure TF26** – 2026 'With Development' (Scenario 2) Saturday Peak Hour (1300 – 1400)
  - **Figure TF27** – 2026 'With Development' (Scenario 3) Bank Holiday Peak Hour (1115 – 1215)
  - **Figure TF28** – 2026 'With Development' (Scenario 4 – Sensitivity Test) Weekday AM Peak Hour (0715 – 0815)
  - **Figure TF29** – 2026 'With Development' (Scenario 4 – Sensitivity Test) Weekday PM Peak Hour (1630 – 1730)
  - **Figure TF30** – 2026 'With Development' (Scenario 5 – Sensitivity Test) Saturday Peak Hour (1300 – 1400)
- 6.11.4 Operational assessments of the proposed site access demonstrate that it is expected to operate comfortably within capacity in all scenarios with minimal queueing and delay.
- 6.11.5 A further sensitivity test assuming a future year of 2031 has also been undertaken which also demonstrates that the site access junction will operate satisfactorily.

## SECTION 7 Multi-Modal Trip Generation Assessment

### 7.1 Overview

7.1.1 This section of the TA presents a multi-modal trip generation<sup>12</sup> assessment of the proposed development based on staff and visitor travel data collected at Birdworld and Forest Lodge in November and December 2023. The raw data and analyses are included at **Appendix L**.

### 7.2 Modal Split – Staff and Visitor Travel Surveys

7.2.1 Visitor and staff travel surveys were undertaken at Birdworld and Forest Lodge by the Applicant on the following dates<sup>13</sup>:

- Birdworld:
  - Staff – Saturday 9 December 2023
  - Visitors – Saturday 25 November 2023
- Forest Lodge:
  - Staff – Monday 4 December 2023
  - Visitors – Saturday 25 November 2023

7.2.2 The data collected included:

- The mode of transport taken to each site; and
- The number of people in each party (i.e. to identify car sharers).

7.2.3 The data has been analysed and the recorded mode share for staff and visitors at both sites is summarised at **Table 7.1** overleaf.

7.2.4 The data also enabled disaggregation of single occupancy car driver trips (i.e. Car Driver (Solo)) and those persons who travelled by car sharing (i.e. car drivers with passengers and car passengers combined). This is summarised at **Table 7.2**.

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<sup>12</sup> It should be noted that Active Travel England (ATE) guidance states that a multi-modal trip generation assessment be included within a Transport Assessment.

<sup>13</sup> It was not possible to conduct all surveys on the same date due to the need to manage the surveys effectively and to record accurate data by on-site staff.

**Table 7.1: Existing Mode Split Travel Patterns (Surveyed)**

Mode	Birdworld		Forest Lodge	
	Staff	Visitor	Staff	Visitor
Car Driver	91.7%	28.8%	96.4%	46.2%
Car Passenger	0.0%	71.2%	3.6%	53.8%
Active Travel (Walking / Cycling)	0.0%	0.0%	0.0%	0.0%
Public Transport (Bus / Rail)	8.3% <sup>14</sup>	0.0%	0.0%	0.0%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: Survey Data and Consultant's Calculations (**Appendix L**)

**Table 7.2: Existing Mode Split of Car Person Trips (Surveyed)**

Mode	Birdworld		Forest Lodge	
	Staff	Visitor	Staff	Visitor
Car Driver (Solo)	91.7%	0.6%	92.9%	11.8%
Car Share	0.0%	99.4%	7.1%	88.2%

Source: Survey Data and Consultant's Calculations (**Appendix L**). Note: Car share trips comprise car drivers with passengers and car passengers.

7.2.5 The average car occupancy was also recorded as follows:

- Birdworld Staff – 1.0 occupants per vehicle
- Birdworld Visitors – 3.5 occupants per vehicle
- Forest Lodge Staff – 1.0 occupants per vehicle
- Forest Lodge Visitors – 2.2 occupants per vehicle

7.2.6 The data shows that nearly all staff for both Birdworld and Forest Lodge travel to the site by the private car, with little use of car sharing or public transport. No active travel trips were recorded.

7.2.7 All visitor trips to both Forest Lodge and Birdworld are by the private car, however there is a high level of car sharing. This is expected given the nature of both businesses as:

- A family visitor attraction; and
- A destination retail attraction supplying bulky goods with a high-end catering offer.

<sup>14</sup> Trips were all recorded as bus trips.

### 7.3 Existing Multi-Modal Trip Generation – Daily (0700 – 1900)

7.3.1 The following paragraphs/tables summarise the existing multi-modal trip generation of Birdworld and Forest Lodge based on the mode split data detailed at **Table 7.1** and the recorded vehicle trip generation set out at Section 6.

7.3.2 As per the vehicle trip generation detailed at Section 6, this is presented for the following scenarios:

- **Scenario 1:** A typical/average weekday during the morning and evening peak hours (based on the recorded survey data at Birdworld and Forest Lodge). This is equivalent to a 75<sup>th</sup> percentile operational weekday at Forest Lodge and a 48<sup>th</sup> percentile operational weekday at Birdworld;
- **Scenario 2:** A busy/typical Saturday peak hour (based on the recorded survey data at Birdworld and Forest Lodge). This is equivalent to an 86<sup>th</sup> percentile operational weekend day at both Birdworld and Forest Lodge; and
- **Scenario 3:** A busy Bank Holiday at both Forest Lodge and Birdworld (based on the recorded survey data at Birdworld and Forest Lodge).

7.3.3 The recorded trip generation does not distinguish between staff and visitors. This has therefore been disaggregated based on information provided by the Applicant detailing the approximate proportion of staff and visitors on site for the above scenarios. This information is presented at **Table 7.3**.

**Table 7.3: Proportion of Staff and Vistors – Daily Persons on Site**

Scenario / Day	Birdworld			Forest Lodge		
	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL
Scenario 1 (Typical Weekday)	12%	88%	100%	3%	97%	3%
Scenario 2 (Busy Saturday)	4%	96%	100%	2%	98%	2%
Scenario 3 (Bank Holiday)	3%	97%	100%	2%	98%	2%

Source: Birdworld and Haskins Garden Centre / Consultant's Calculations

7.3.4 The mode split data detailed at **Tables 7.1** and **7.2**, combined with the staff/visitor proportions detailed at **Table 7.3**, have been applied to the recorded daily vehicle trip generation presented at **Tables 6.1** and **6.2**. This information is presented in **Tables 7.4 – 7.6** with the full analysis included in **Appendix L**.

7.3.5 The calculations also assume a number of servicing and ‘ad hoc’ vehicle trips to both Birdworld and Forest Lodge for each scenario which are discounted from the vehicle trips before the mode split is applied. This is to allow for deliveries, maintenance vehicles, post services, couriers and so on. The assumed discounted vehicles are:

- Birdworld – 30 vehicles per day (all scenarios)
- Forest Lodge – 35 vehicles per day (all scenarios)

**Table 7.4: Existing Birdworld Multi-Modal Trip Generation – Daily (0700 – 1900)**

Mode	Scenario 1 (Typical Weekday)			Scenario 2 (Busy Saturday)			Scenario 3 (Bank Holiday)		
	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL
Car Driver	48	110	158	53	401	454	61	619	680
Car Passenger	0	272	272	0	990	990	0	1,529	1,529
Active Travel	0	0	0	0	0	0	0	0	0
Public Transport	4	0	4	5	0	5	6	0	6
<b>TOTAL</b>	<b>52</b>	<b>382</b>	<b>434</b>	<b>58</b>	<b>1,391</b>	<b>1,449</b>	<b>67</b>	<b>2,148</b>	<b>2,215</b>
<b>Mode Split of Car Person Trips</b>									
Car Driver (Solo)	48	2	50	53	8	61	61	13	74
Car Share	0	379	379	0	1,383	1,383	0	2,135	2,135

Source: Consultant’s Calculations / **Appendix L**. Note: Delivery/servicing trips excluded.

**Table 7.5: Existing Forest Lodge Multi-Modal Trip Generation – Daily (0700 – 1900)**

Mode	Scenario 1 (Typical Weekday)			Scenario 2 (Busy Saturday)			Scenario 3 (Bank Holiday)		
	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL
Car Driver	68	1,048	1,116	68	1,603	1,671	75	1,757	1,832
Car Passenger	3	1,223	1,226	3	1,870	1,873	3	2,050	2,053
Active Travel	0	0	0	0	0	0	0	0	0
Public Transport	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>71</b>	<b>2,271</b>	<b>2,342</b>	<b>71</b>	<b>3,473</b>	<b>3,544</b>	<b>78</b>	<b>3,807</b>	<b>3,885</b>
<b>Mode Split of Car Person Trips</b>									
Car Driver (Solo)	65	269	334	65	411	476	61	13	74
Car Share	5	2,002	2,007	5	3,062	3,067	0	2,135	2,135

Source: Consultant's Calculations / **Appendix L**. Note: Delivery/servicing trips excluded.

**Table 7.6: Total Existing Multi-Modal Trip Generation – Daily (0700 – 1900)**

Mode	Scenario 1 (Typical Weekday)			Scenario 2 (Busy Saturday)			Scenario 3 (Bank Holiday)		
	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL
Car Driver	116	1,158	1,274	121	2,004	2,125	136	2,376	2,512
Car Passenger	3	1,495	1,498	3	2,860	2,863	3	3,579	3,582
Active Travel	0	0	0	0	0	0	0	0	0
Public Transport	4	0	4	5	0	5	6	0	6
<b>TOTAL</b>	<b>123</b>	<b>2,653</b>	<b>2,776</b>	<b>129</b>	<b>4,864</b>	<b>4,993</b>	<b>145</b>	<b>5,955</b>	<b>6,100</b>
<b>Mode Split of Car Person Trips</b>									
Car Driver (Solo)	113	271	384	118	419	537	133	464	597
Car Share	5	2,381	2,386	5	4,445	4,450	6	5,491	5,497

Source: Consultant's Calculations / **Appendix L**. Note: Delivery/servicing trips excluded.

## 7.4 Proposed Development Multi-Modal Trip Generation – Daily (0700 – 1900)

7.4.1 The following paragraphs/tables summarise the multi-modal trip generation of the proposed development of Birdworld and Forest Lodge based on the mode split data detailed at **Tables 7.1** and **7.2** combined with the recorded vehicle trip generation set out at Section 6.

7.4.2 This is presented for the same scenarios as per the existing trip generation in Section 7.3 and has been undertaken using the same methodology (albeit applied to the vehicle trip generation of the proposed development detailed at **Tables 6.3** and **6.4**). This is detailed in **Tables 7.7 – 7.9**. The full analysis is included in **Appendix L**.



**Table 7.7: Proposed Birdworld Multi-Modal Trip Generation – Daily (0700 – 1900)**

Mode	Scenario 1 (Typical Weekday)			Scenario 2 (Busy Saturday)			Scenario 3 (Bank Holiday)		
	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL
Car Driver	113	259	372	118	888	1,006	133	1,356	1,489
Car Passenger	0	640	640	0	2,193	2,193	0	3,348	3,348
Active Travel	0	0	0	0	0	0	0	0	0
Public Transport	10	0	10	11	0	11	12	0	12
<b>TOTAL</b>	<b>123</b>	<b>899</b>	<b>1,022</b>	<b>129</b>	<b>3,081</b>	<b>3,210</b>	<b>145</b>	<b>4,704</b>	<b>4,849</b>
<b>Mode Split of Car Person Trips</b>									
Car Driver (Solo)	113	5	118	118	18	136	133	28	161
Car Share	0	893	893	0	3,063	3,063	0	4,677	4,677

Source: Consultant's Calculations / **Appendix L**. Note: Delivery/servicing trips excluded.

**Table 7.8: Proposed Forest Lodge Multi-Modal Trip Generation – Daily (0700 – 1900)**

Mode	Scenario 1 (Typical Weekday)			Scenario 2 (Busy Saturday)			Scenario 3 (Bank Holiday)		
	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL
Car Driver	122	1,892	2,014	123	2,879	3,002	135	3,154	3,289
Car Passenger	5	2,207	2,212	5	3,359	3,364	5	3,680	3,685
Active Travel	0	0	0	0	0	0	0	0	0
Public Transport	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>127</b>	<b>4,099</b>	<b>4,226</b>	<b>128</b>	<b>6,238</b>	<b>6,366</b>	<b>140</b>	<b>6,834</b>	<b>6,974</b>
<b>Mode Split of Car Person Trips</b>									
Car Driver (Solo)	117	485	602	118	738	856	130	809	939
Car Share	9	3,614	3,623	9	5,500	5,509	10	6,025	6,035

Source: Consultant's Calculations / **Appendix L**. Note: Delivery/servicing trips excluded.

**Table 7.9: Proposed Development Multi-Modal Trip Generation – Daily (0700 – 1900)**

Mode	Scenario 1 (Typical Weekday)			Scenario 2 (Busy Saturday)			Scenario 3 (Bank Holiday)		
	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL	Staff	Visitors	TOTAL
Car Driver	235	2,151	2,386	241	3,767	4,008	268	4,510	4,778
Car Passenger	5	2,847	2,852	5	5,552	5,557	5	7,028	7,033
Active Travel	0	0	0	0	0	0	0	0	0
Public Transport	10	0	10	11	0	11	12	0	12
<b>TOTAL</b>	<b>250</b>	<b>4,998</b>	<b>5,248</b>	<b>257</b>	<b>9,319</b>	<b>9,576</b>	<b>285</b>	<b>11,538</b>	<b>11,823</b>
<b>Mode Split of Car Person Trips</b>									
Car Driver (Solo)	230	490	720	236	756	992	263	837	1,100
Car Share	9	4,507	4,516	9	8,563	8,572	10	10,702	10,712

Source: Consultant's Calculations / **Appendix L**. Note: Delivery/servicing trips excluded.

## 7.5 Summary

- 7.5.1 A multi-modal trip generation assessment of the proposed development has been undertaken based on staff and visitor travel data collected at Birdworld and Forest Lodge in November and December 2023. This assessment has been used to inform the targets detailed in the Birdworld and Forest Lodge Travel Plans summarised at Section 5 of this report.

## SECTION 8 Parking Assessment

### 8.1 Introduction

8.1.1 This section of the TA provides a parking assessment of the Forest Lodge and Birdworld sites and demonstrates that the proposed development provides adequate parking to accommodate the necessary demand. This is based on empirical parking survey data collected at the sites in May 2022.

### 8.2 Parking Surveys

8.2.1 In addition to the traffic surveys detailed in Section 3, to establish the existing parking demands of Birdworld and Forest Lodge, a suite of parking surveys was undertaken on a neutral weekday, Saturday and Bank holiday in May 2022 as follows:

- **Monday 2 May 2022** – A Bank Holiday (i.e., a busy operational day for both uses<sup>15</sup>);
- **Thursday 12 May 2022** – A ‘Typical’ Weekday in a busy month for both uses, but within school term time in a ‘neutral’ month; and
- **Saturday 14 May 2022** – A ‘Typical’ Weekend Day in a busy month for both uses, but again within school term time in a ‘neutral’ month.

8.2.2 The surveys recorded parking accumulation and duration of stay. The parking survey data is included at **Appendix M**.

8.2.3 This data provides a suitable baseline to assess the parking demands of the proposal as it corresponds to Scenarios 1 – 3 of the traffic assessment detailed at Section 6.5 of this report as follows:

- **Scenario 1:** A typical/average weekday during the morning and evening peak hours (based on the recorded survey data at Birdworld and Forest Lodge). This is equivalent to a 75<sup>th</sup> percentile operational weekday at Forest Lodge and a 48<sup>th</sup> percentile operational weekday at Birdworld;
- **Scenario 2:** A busy/typical Saturday peak hour (based on the recorded survey data at Birdworld and Forest Lodge). This is equivalent to an 86<sup>th</sup> percentile operational weekend day at both Birdworld and Forest Lodge; and

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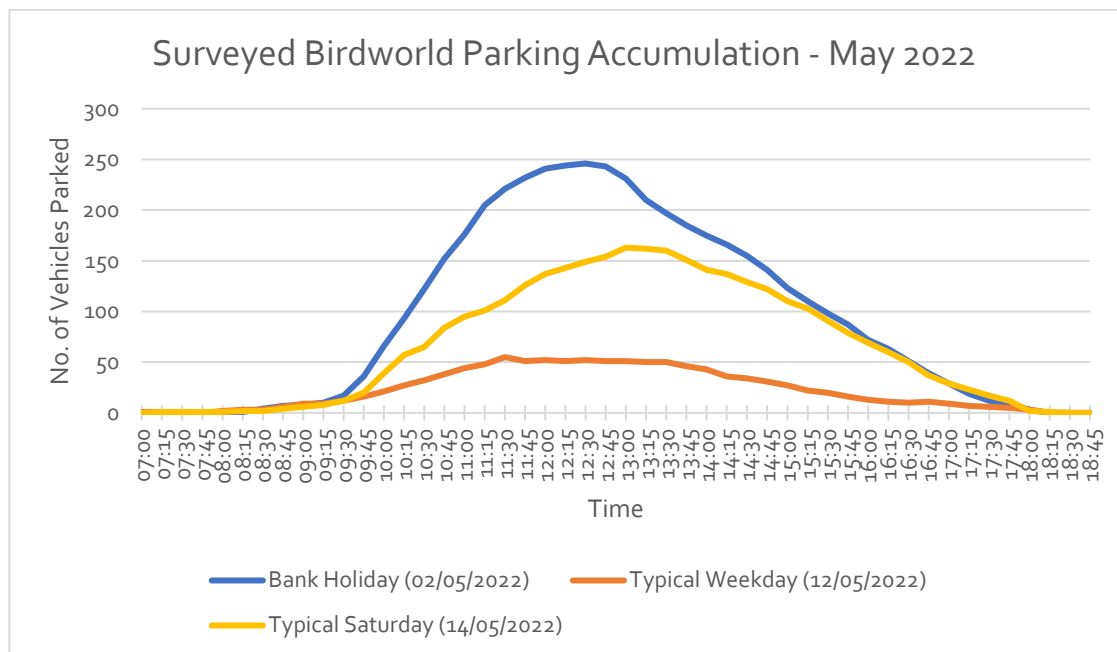
<sup>15</sup> This date was the 19<sup>th</sup> busiest day at Forest Lodge for 2021/2022 and the 19<sup>th</sup> busiest day at Birdworld for 2021/2022.

- **Scenario 3:** A busy Bank Holiday at both Forest Lodge and Birdworld (based on the recorded survey data at Birdworld and Forest Lodge).

### 8.3 Birdworld Current Parking Demand

8.3.1 The current parking demand of Birdworld is detailed in **Graph 8.1** and summarised in **Appendix M**.

**Graph 8.1: Existing Birdworld Car Parking Demand and Capacity**



8.3.2 The existing 'typical' weekday car parking demand at Birdworld peaks at 1130 at 55 spaces occupied. The average duration of stay on a 'typical' weekday is 2 hours, 50 minutes.

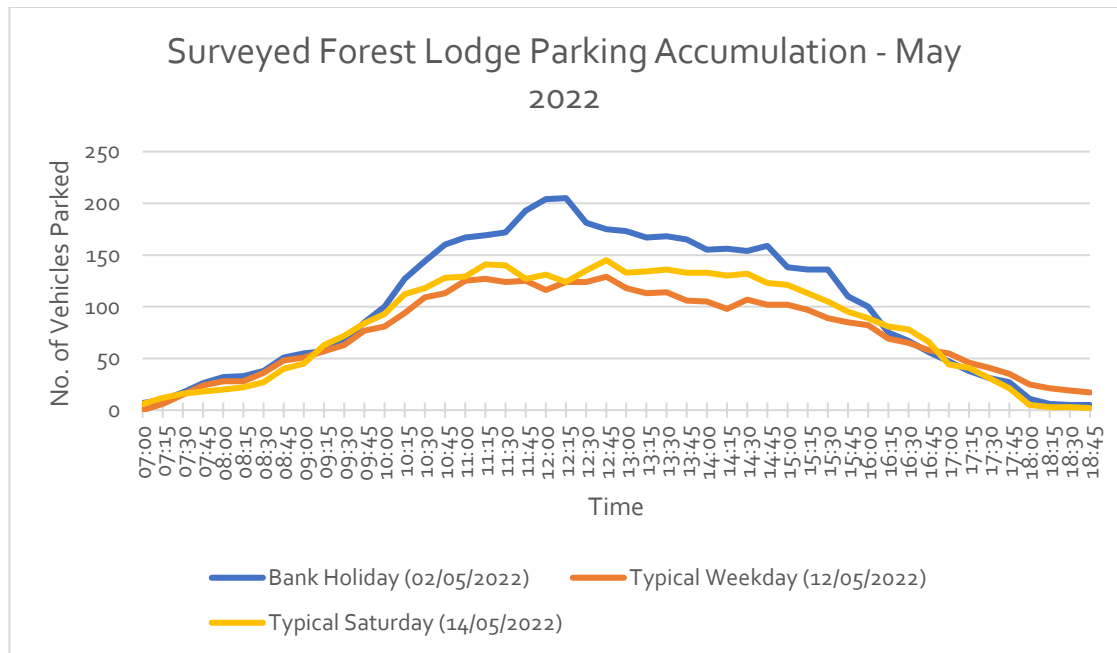
8.3.3 The existing 'typical' weekend day car parking demand at Birdworld peaks at 1300 at 163 spaces occupied. The average duration of stay on a 'typical' weekend day is 3 hours, 17 minutes.

8.3.4 The existing bank holiday day car parking demand at Birdworld peaks at 1230 at 246 spaces occupied. The average duration of stay on a bank holiday day is 3 hours, 12 minutes.

### 8.4 Forest Lodge Current Parking Demand

8.4.1 The existing parking demand of Forest Lodge is detailed at **Graph 8.2** and summarised in **Appendix M**.

**Graph 8.2: Existing Forest Lodge Car Parking Demand and Capacity**



- 8.4.2 The existing 'typical' weekday car parking demand at Forest Lodge peaks at 1245 at 127 spaces occupied. The average duration of stay on a 'typical' weekday is 1 hour, 8 minutes.
- 8.4.3 The existing 'typical' weekend day car parking demand at Forest Lodge peaks at 1245 at 145 spaces occupied. The average duration of stay on a 'typical' weekend day is 58 minutes.
- 8.4.4 The existing bank holiday day car parking demand at Forest Lodge peaks at 1215 at 204 spaces occupied. The average duration of stay on a bank holiday day is 1 hour, 12 minutes.

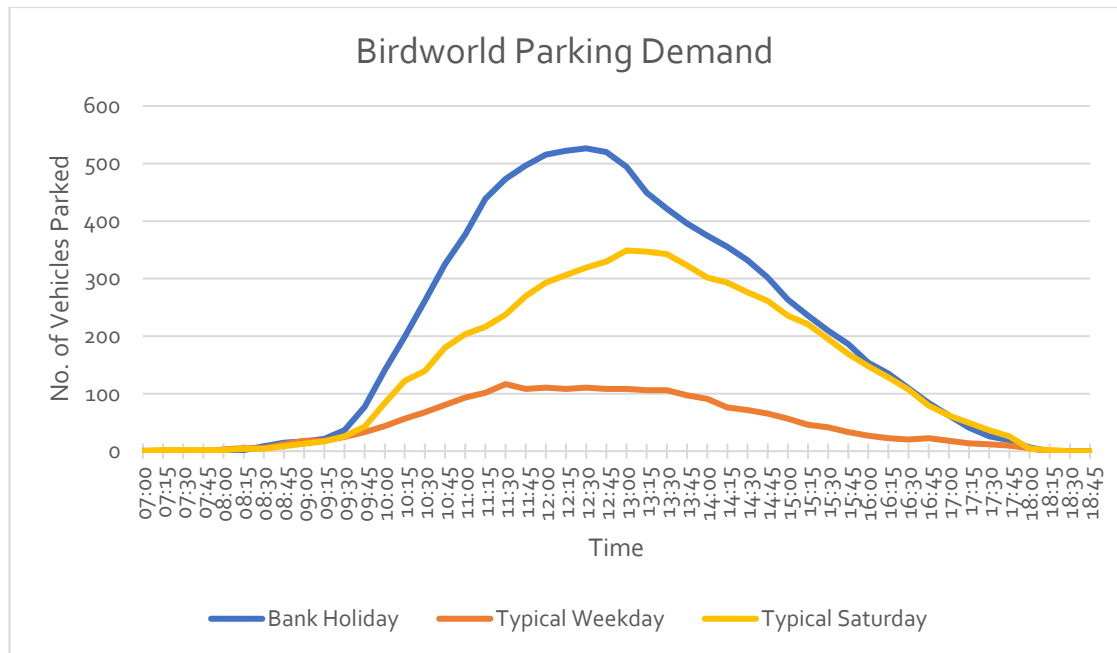
### 8.5 Proposed Parking Provision

- 8.5.1 The proposed development will provide 840 car parking spaces across both Birdworld and Forest Lodge as detailed at Section 4 of this TA.

### 8.6 Redeveloped Birdworld Parking Demand

- 8.6.1 As a result of the proposed development, data provided by the Applicant predicts that the annual number of Birdworld visitors will increase by 114% (this is a maximum predicted increase). The existing parking demands have therefore been uplifted by this amount to determine the predicted parking demand of the redeveloped Forest Lodge.
- 8.6.2 The predicted parking demand of the redeveloped Birdworld is detailed in **Graph 8.3**.

**Graph 8.3: Proposed Birdworld Car Parking Demand**



8.6.3 The Birdworld parking demand calculations are provided at **Appendix M**.

8.6.4 **Graph 8.3** shows:

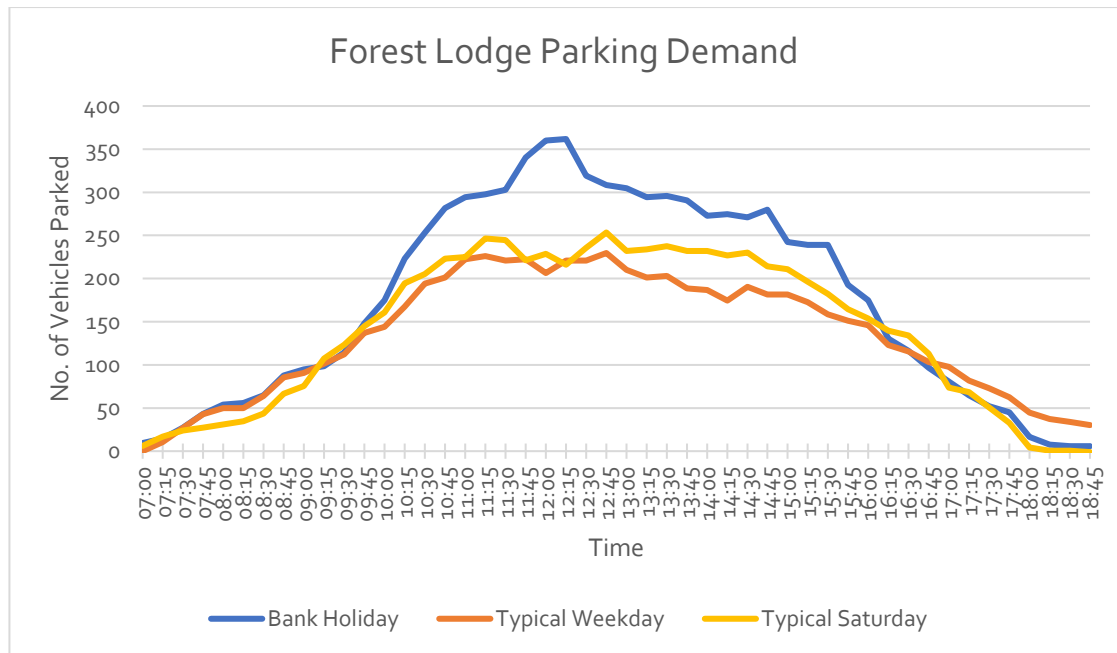
- The 'typical' weekday car parking demand at Birdworld is predicted to peak at 1130 with 117 spaces occupied.
- The predicted 'typical' weekend day car parking demand at Birdworld peaks at 1300 with 349 spaces occupied.
- The bank holiday day car parking demand at Birdworld is predicted to peak at 1230 with 526 spaces occupied.

## 8.7 Redeveloped Forest Lodge Parking Demand

8.7.1 As a result of the proposed expansion, data provided by the Applicant predicts that the number of customer transactions at Forest Lodge will increase by 78%. The existing parking demands have therefore been uplifted by this amount to determine the predicted parking demand of the redeveloped Forest Lodge.

8.7.2 The predicted parking demand of the redeveloped Forest Lodge is detailed in **Graph 8.4**.

**Graph 8.4: Proposed Forest Lodge Car Parking Demand**



8.7.3 The Forest Lodge parking demand calculations are provided at **Appendix M**.

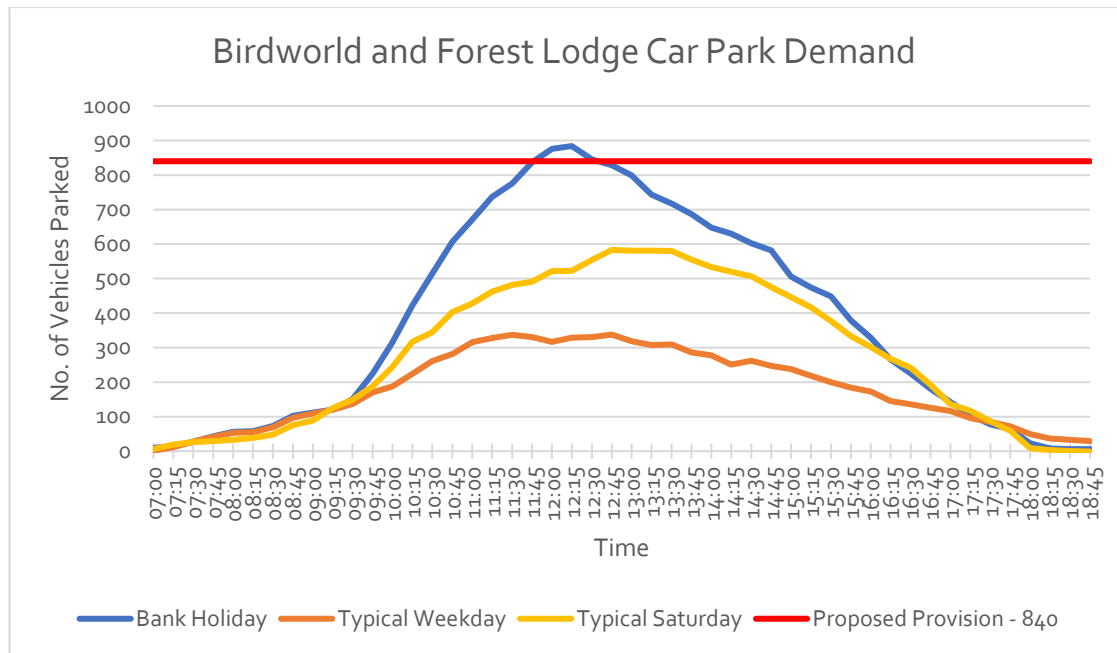
8.7.4 **Graph 8.4** shows:

- The 'typical' weekday car parking demand at Forest Lodge is predicted to peak at 1245 at 230 spaces occupied.
- The 'typical' weekend day car parking demand at Forest Lodge is predicted to peak at 1245 at 253 spaces.
- The bank holiday day car parking demand at Forest Lodge is predicted to peak at 1215 at 362 spaces.

## 8.8 Combined Development Expected Parking Demand and Capacity

8.8.1 **Graph 8.5** summarises the combined parking demand of the redeveloped Forest Lodge and Birdworld sites, and details this against the proposed parking provision.

**Image 8.5: Proposed Combined Development Car Parking Demand and Capacity**



**8.8.2 Graph 8.5 shows:**

- The combined 'typical' weekday car parking demand at the proposed development site is predicted to peak at 1245 at 338 spaces.
- The combined 'typical' weekend day car parking demand at the proposed development site is predicted to peak at 1245 at 583 spaces.
- The combined Bank Holiday car parking demand at the proposed development site is predicted to peak at 1215 at 884 spaces.

**8.8.3 Graph 8.5** demonstrates that the proposed 840 parking spaces at the proposed development can easily accommodate the maximum parking demands of the proposed development on a typical weekday and a busy/typical Saturday.

**8.8.4** With regards to the Bank Holiday analysis, it is noted that there is a very short period in the middle of the day where the demand slightly exceeds capacity. However, this is only for a short period of 30 minutes and the remainder of the day is well within capacity.



8.8.5 It should also be noted the Bank Holiday analysis is based on:

- The maximum predicted increase in Birdworld visitors (i.e. an overly robust assessment); and
- A very busy operational day at both Forest Lodge and Birdworld – for both sites there were only 18 other days across the year that were busier than the Early May Bank Holiday.

8.8.6 In addition, as detailed at **Graph 6.1**, both Forest Lodge and Birdworld have different peak days throughout the year and the Early May Bank Holiday is one of the very few operational days where both Forest Lodge and Birdworld are busy at the same time.

8.8.7 The peak occurrence on a Bank Holiday is therefore an exceptional case of an absolute maximum demand and will only occur a handful of times per year for a short period of time (30 minutes). It is not appropriate to provide for this maximum level as for the vast majority of time throughout the year this level of car parking would be unused. The analysis demonstrates that the proposed parking provision is more than adequate for other busy days throughout the year.

8.8.8 The parking analysis demonstrates that the proposed level of parking is satisfactory to serve the proposed development.

## 8.9 Summary

8.9.1 The proposed development will provide 840 parking spaces across both Birdworld and Forest Lodge.

8.9.2 An assessment of the parking demands of the proposed development has been undertaken based on:

- Empirical data collected at the site in May 2022 (a busy month for both Forest Lodge and Birdworld) for a typical weekday, a typical/busy Saturday and a Bank Holiday (this corresponds with the traffic analysis in Section 6); and
- The predicted increase in visitors at Birdworld and increase in customer transactions at Forest Lodge (again corresponding to the traffic analysis in Section 6).

8.9.3 The assessment demonstrates that the proposed 840 spaces is more than sufficient to accommodate the parking demands of both Birdworld and Forest Lodge on a typical weekday and a typical/busy Saturday. Whilst the parking demand of a peak Bank Holiday operational at both sites marginally exceeds the proposed 840 spaces, this is only for a short period of time (30 minutes) which will only occur a handful of times per year. The proposed parking provision at the site is therefore acceptable.

## SECTION 9 Development Phasing

### 9.1 Overview

9.1.1 It is proposed that the redevelopment of Birdworld and Forest Lodge comes forward in three phases to enable both businesses to keep operating whilst construction takes place. The phasing will also enable early development to come forward at Birdworld in the first instance to secure the long-term redevelopment of the site.

9.1.2 This section of the TA presents a summary of how the development phasing is proposed to come forward, including how each phase is proposed to be accessed. Plans showing the development phasing are included at **Appendix N**.

### 9.2 Phase 1

9.2.1 Phase 1 of the development will comprise the construction of the Birdworld Play Barn and the development of the Adventure Play attractions. This is shown at **Image 9.1**.

**Image 9.1: Development Phase 1**



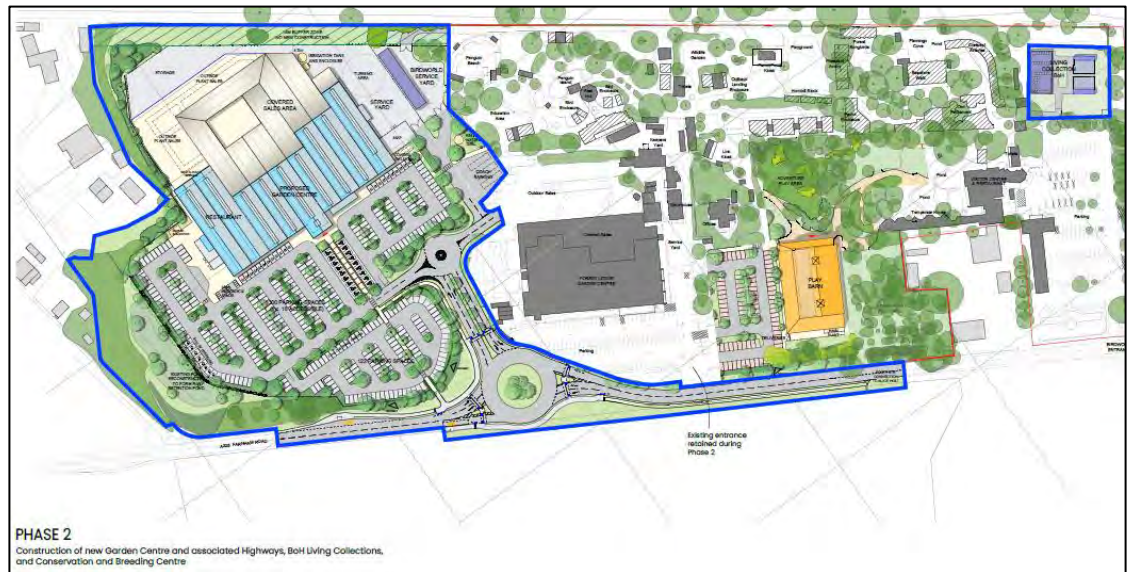
9.2.2 During Phase 1:

- The existing Forest Lodge garden centre will remain open and will continue to be accessed via its existing junction from the A325 (although parking numbers will be slightly reduced to 206 spaces due to construction of the Play Barn); and
- Birdworld will remain open and will continue to be accessed via its existing junction from the A325. Parking numbers remain unchanged.

### 9.3 Phase 2

9.3.1 Phase 2 of the development will comprise the construction of the new Forest Lodge Garden Centre and the associated roundabout access works. It also includes works to the Birdworld Back of House (BoH) facilities and the Conservation/Breeding Centre. This is shown at **Image 9.2**.

**Image 9.2: Development Phase 2**



9.3.2 During Phase 2:

- The existing Forest Lodge garden centre will remain open and will continue to be accessed via its existing junction from the A325. Parking numbers are slightly reduced at 204 spaces; and
- Birdworld will remain open and will continue to be accessed via its existing junction from the A325. Parking numbers are to be reduced to 186 spaces to allow the construction of the new BoH and Conversation/Breeding Centre.

### 9.4 Phase 3

9.4.1 Phase 3 of the development will comprise the demolition of the existing garden centre and the construction of the new Birdworld entrance building and parking. This is shown at **Image 9.3**.

**Image 9.3: Development Phase 3**



#### 9.4.2 During Phase 3:

- The existing Forest Lodge garden centre will be closed and demolished (including the access junction);
- The new Forest Lodge garden centre will be opened, fully operational and served via the new access junction from the A325; and
- Birdworld will remain open and will continue to be accessed via its existing junction from the A325. Parking numbers remain at 186 spaces (as per Phase 2) due to the construction of the new BoH and Conversation/Breeding Centre.

9.4.3 Once the construction of the new Birdworld entrance building is complete in Phase 3, the existing Birdworld visitor centre and entrance will be closed. Birdworld will then be fully operational from the new entrance and buildings.

## 9.5 Summary

9.5.1 It is proposed that the redevelopment of Birdworld and Forest Lodge comes forward in three phases to enable both businesses to keep operating whilst construction takes place. The phasing will also enable early development to come forward at Birdworld in the first instance to secure the long-term redevelopment of the site.

9.5.2 The three development phases are summarised in **Table 9.1**.

9.5.3 A Construction Traffic Management Plan (CTPM) has been prepared by Barnwood Ltd which sets out how construction traffic will be managed for each phase and has been submitted as part of the planning application. This will be secured via a planning condition.

**Table 9.1: Birdworld and Forest Lodge Development Phasing**

Phase	Forest Lodge		Birdworld		Notes
	Access	Parking	Access	Parking	
Existing Site	Existing	311 spaces (including 90 overflow)	Existing	271 spaces (including 85 overflow)	
Phase 1	Existing	206 spaces	Existing	271 spaces (including 85 overflow)	Construction of Birdworld Play Barn and development of Adventure Play attractions.
Phase 2	Existing	206 spaces	Existing	186 spaces	Construction of new Garden Centre and site access. Existing Forest Lodge to remain open.  Undertake construction of Birdworld Back of House (BoH) Living Collections and Conservation / Breeding centre
Phase 3	New Roundabout	422 spaces	Existing	186 spaces	New Garden Centre open. Existing garden centre to be demolished.  Construction of new Birdworld entrance building and parking.
Site Complete	New Roundabout	422 spaces	New Roundabout	418 spaces	Final construction complete and full site open.

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## SECTION 10 Summary and Conclusions

### 10.1 Summary

10.1.1 Birdworld Ltd and Haskins Garden Centres Ltd ('the Applicant') is proposing to redevelop the Birdworld visitor attraction ('Birdworld') and their adjacent existing Forest Lodge Garden Centre site ('Forest Lodge'). The development proposal comprises the redevelopment/enhancement of Birdworld and the redevelopment of Forest Lodge, alongside associated onsite parking, servicing and access.

10.1.2 The main objective for Birdworld is to ensure a profitable, secure future and create a leisure destination that has unique and repeatable year-round offers and experiences, for all ages. The ongoing support of the Garden Centre business will remain important, and it too requires new investment to maintain its position as a key business and employer in the area.

10.1.3 This Transport Assessment (TA) has been prepared to accompany the planning application and to assess the development proposal against the 'key transport tests' set out in paragraph 114 of the National Planning Policy Framework (NPPF), i.e.:

- Can the opportunities for sustainable travel modes be appropriately taken up?
- Can safe and suitable access be provided?
- Will the transport elements of the proposal reflect current national guidance?
- Will the traffic impacts be acceptable?

10.1.4 The proposal has been subject to extensive pre-application discussions with Hampshire County Council (HCC), as the local highway authority, at meetings on 26 July 2022, 6 October 2022 and 17 July 2023. These discussions have enabled this TA to be progressed on an agreed basis. A public consultation was also held on 9 and 10 November 2023 at Birdworld where the proposal was positively received overall.

#### Site Location and Existing Conditions

10.1.5 The site is located some 5km to the southeast of Farnham, situated between Gravel Hill Road and Fullers Road with the A325 forming the primary site frontage. Forest Lodge Garden Centre comprises the southern part of the site and Birdworld comprises the northern part of the site. Existing vehicular access to Birdworld and Forest Lodge is taken via two separate simple priority junctions with the A325. These junctions are sub-standard in terms of visibility and arrangement given the 50mph speed limit in place on the A325.

- 10.1.6 There is limited pedestrian and cycle infrastructure in the vicinity of the site on the A325, although the site is located close to a number of Public Rights of Way (PROWs) which provide pleasant walking/cycling routes to Bentley Railway Station and Alice Holt Forest. However, the connectivity between these routes is limited due to the lack of crossing facilities on the A325. The proposed site access arrangements provide an opportunity to improve the pedestrian and cycle environment.
- 10.1.7 The nearest bus stops to the sites are the 'Gravel Hill Road' bus stops located on the A325 to the south of the Forest Lodge access and the 'Birdworld' bus stops located adjacent to the Birdworld access which are served by the hourly 18 bus route. However, the pedestrian connections at the bus stops are limited and there are opportunities to improve this as part of the site access arrangements.
- 10.1.8 A review of Personal Injury Accident (PIA) data for most recent five-year period available (01/03/2018 - 30/09/2023) was undertaken. Whilst this showed that there were a small number of accidents recorded at the existing sub-standard access junctions, the cause/location of accidents on the remainder of the highway network do not suggest a specific highway safety that the proposal may exacerbate.

### Access

- 10.1.9 Access to the development is proposed via a new 3-arm roundabout from the A325, with dedicated access arms for the Forest Lodge and Birdworld sites. Has been designed in accordance with Design Manual for Roads and Bridges (DMRB) CD116 with a 44m ICD and adequate entry path deflections for each arm. All horizontal and vertical visibility requirements in line with the recorded speeds on the A325 can be achieved. The junction has been subject to an independent road safety audit and capacity testing has demonstrated that it can easily accommodate the traffic demands of the development.
- 10.1.10 The access will serve both the Birdworld and Forest Lodge sites. The existing Forest Lodge access will be removed and the existing Birdworld access will be closed to general traffic. Both existing junctions are sub-standard, and the proposed roundabout will provide a material highway safety benefit by:
- Providing a junction with adequate visibility;
  - Being designed to standard;
  - Reducing the number of operational junctions on the A325;



- Reducing vehicle speeds; and
- Providing improved pedestrian and cycle crossings on all arms.

10.1.11 The proposed access arrangements have been agreed with HCC through the pre-application process and discussions.

### **Parking**

10.1.12 A total of 840 car parking spaces are to be provided across the site as follows:

- 418 spaces for Birdworld (including 26 accessible spaces); and
- 422 spaces for Forest Lodge (including 18 accessible spaces).

10.1.13 A parking assessment has been undertaken which demonstrates that the proposed parking provision is sufficient to accommodate the parking demands of both Birdworld and Forest Lodge. The proposed parking provision is therefore acceptable.

10.1.14 Accessible parking spaces, electric vehicle charging points, motorcycle parking spaces and parent/child parking spaces have all been provided in accordance with local standards. 90 covered and secure cycle parking spaces are also provided, as well as shower/changing facilities within the buildings.

### **Servicing**

10.1.15 The site layout has been designed to adequately accommodate all delivery, servicing and emergency vehicles. Swept path analysis has demonstrated that all necessary vehicles can access the site safely.

### **Sustainable Transport Strategy**

10.1.16 A Sustainable Transport Strategy is proposed for the proposed development which includes:

- Robust Travel Plans for both Birdworld and Forest Lodge to set out several sustainable travel initiatives for staff and visitors. The Travel Plans also detailed modal split targets to monitor the uptake of sustainable modes which have been derived using empirical modal split data; and
- Improvements to local footway connections and the bus stops on the A325 to be delivered in conjunction with the site access arrangements. These comprise:
  - An improved A325 crossing to Footpath 50 which will improve pedestrian connectivity across the A325; and

- Improvements to the Gravel Hill Road bus stops, including providing shelters and real time information.

10.1.17 The Sustainable Transport Strategy will promote the uptake of non-car modes of travel effectively, taking into account the location and proposed use of the development.

#### **Traffic Impact and Trip Generation**

10.1.18 A comprehensive and 'worst case' traffic generation assessment has been undertaken and has been agreed with HCC. This was based on:

- Traffic data collected on the A325 and at the site access at days during a typical/busy operational month at both Forest Lodge and Birdworld in May 2022;
- Transaction data and visitor numbers taking account of the seasonal variation in operation at both Forest Lodge and Birdworld; and
- The predicted proportional uplift in transactions and visitor numbers has been applied to the traffic data to derive the traffic generation of the proposed development.

10.1.19 The impact of the traffic generation for the proposed development has been tested on the local highway network for a future year of 2026. This assessment demonstrates that the local highway network is expected to continue to operate well within capacity with the addition of the proposed development. Officers at HCC have confirmed this position.

10.1.20 A multi-modal trip generation assessment of the proposed development has also been undertaken based on staff and visitor travel data collected at Birdworld and Forest Lodge. This assessment has been used to inform the targets detailed in the Birdworld and Forest Lodge Travel Plans.

#### **Development Phasing**

10.1.21 It is proposed that the redevelopment of Birdworld and Forest Lodge comes forward in three phases to enable both businesses to keep operating whilst construction takes place. The phasing will also enable early development to come forward at Birdworld in the first instance to secure the long-term redevelopment of the site.

10.1.22 The construction traffic during the development phasing will be managed by a comprehensive Construction Traffic Management Plan (CTMP) to be secured via a planning condition.

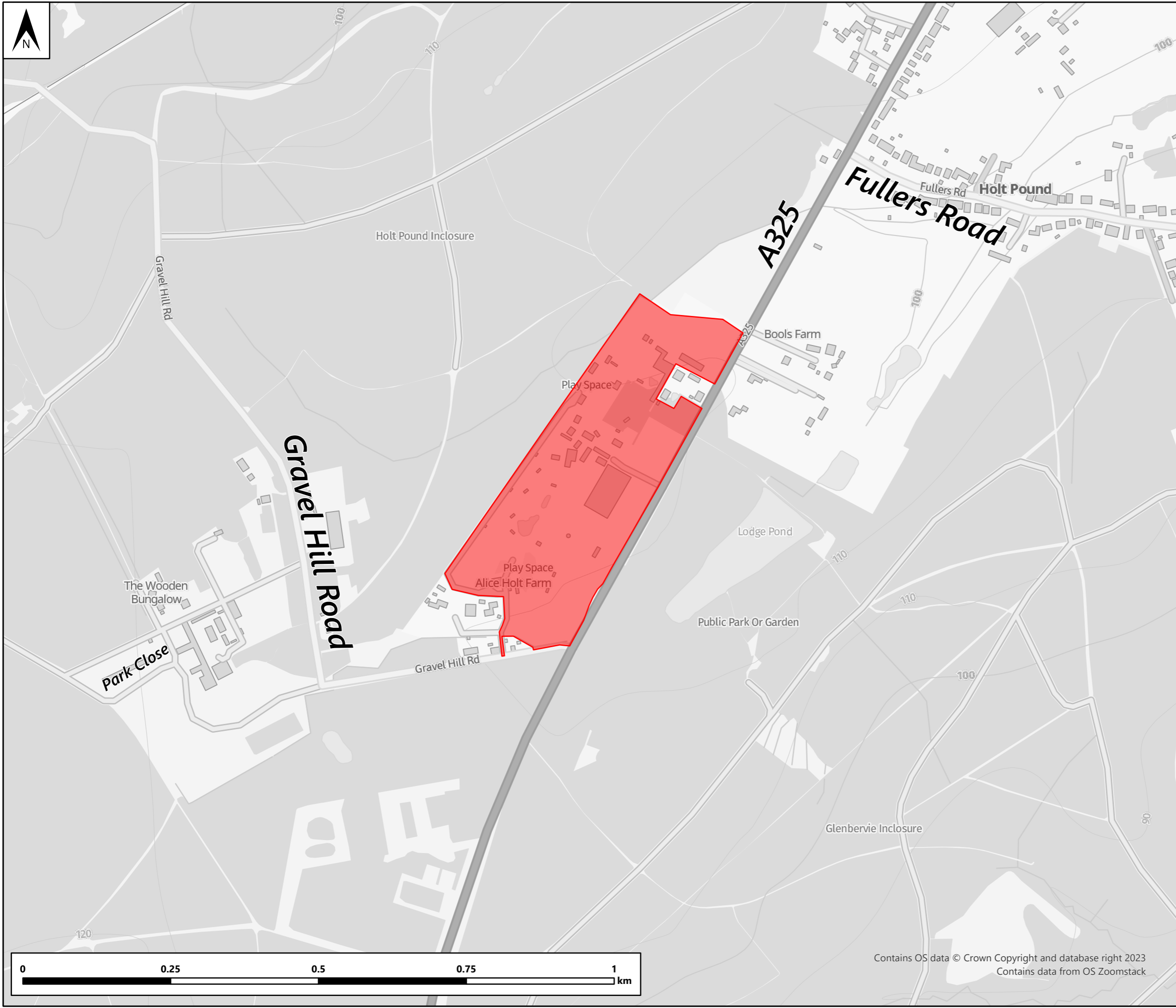
## 10.2 Conclusions

10.2.1 The proposed development therefore accords with national/local transport policy and meetings the four NPPF 'tests':

- The site will take up and promote the opportunities for sustainable travel modes using Travel Plans and will deliver sustainable travel infrastructure improvements on the A325;
- Safe and suitable access can be achieved from the A325;
- The site layout will come forward in line with design guidance and local policy; and
- The local highway network will continue to operate acceptably and within capacity with the proposed development.

10.2.2 The proposed development is therefore acceptable in transport/highways terms.

## FIGURES



**Key**

■ Site Boundary

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**Basingstoke: 01256 637 940**  
**Leeds: 0113 357 1360**  
**London: 020 3705 9215**  
**Manchester: 0161 830 2172**



Title:

**Site Location Plan**

Project:

**Birdworld and Haskins Forest Lodge  
Garden Centre**

Project Number:

**ITB16329**

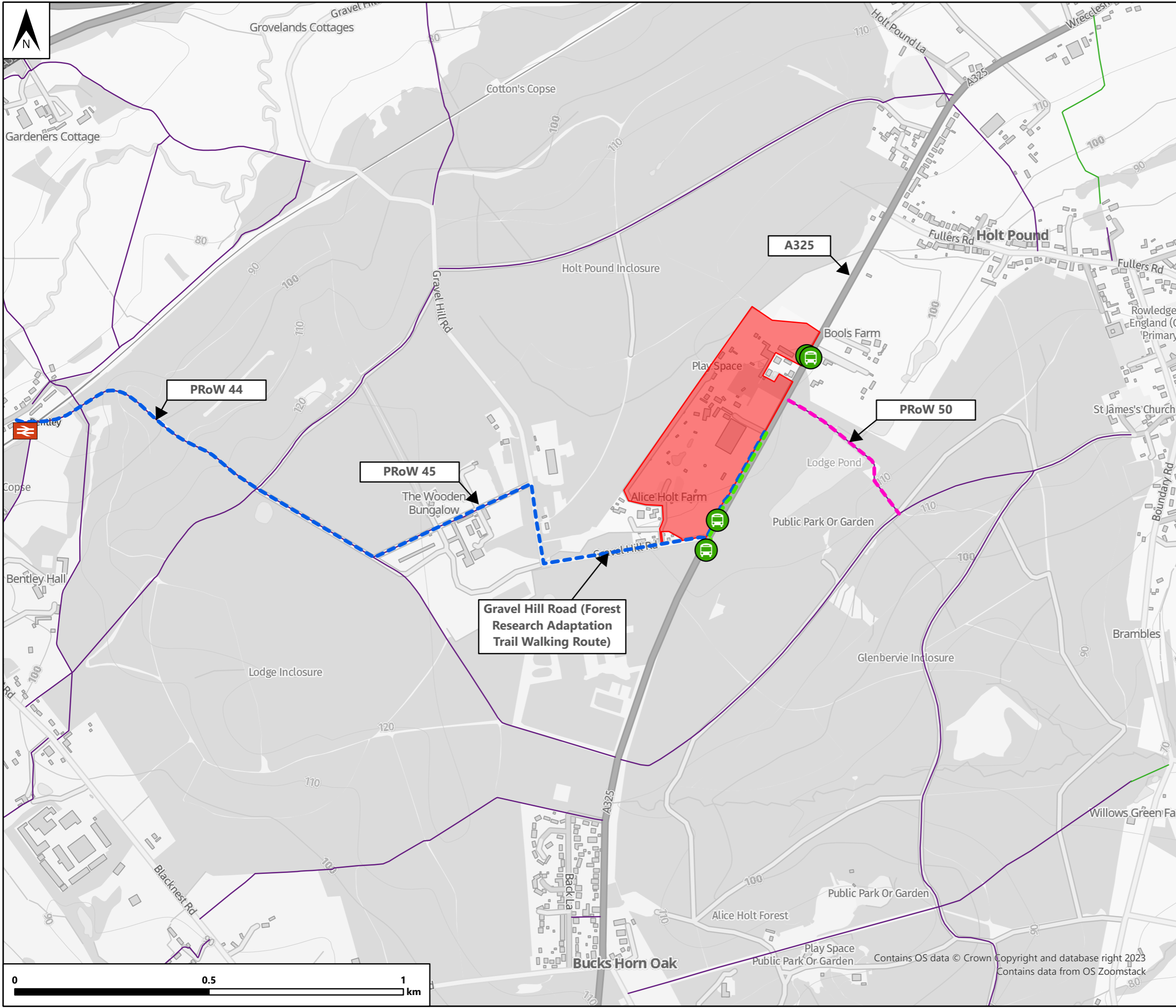
Figure Number:

**Figure 1.1**

Revision:

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- Key**
- Site Boundary
  - Bentley Railway Station
  - Bus Stop
  - Hampshire PRoW
  - Surrey PRoW
  - Route to Alice Holt Forest
  - Route to Bentley Railway Station
  - Route to Gravel Hill Road Bus Stops

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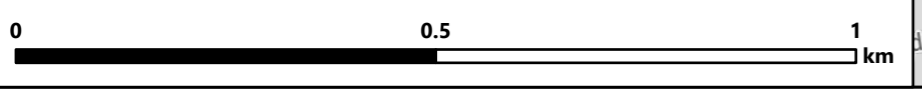
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Title: **Active Travel Plan**

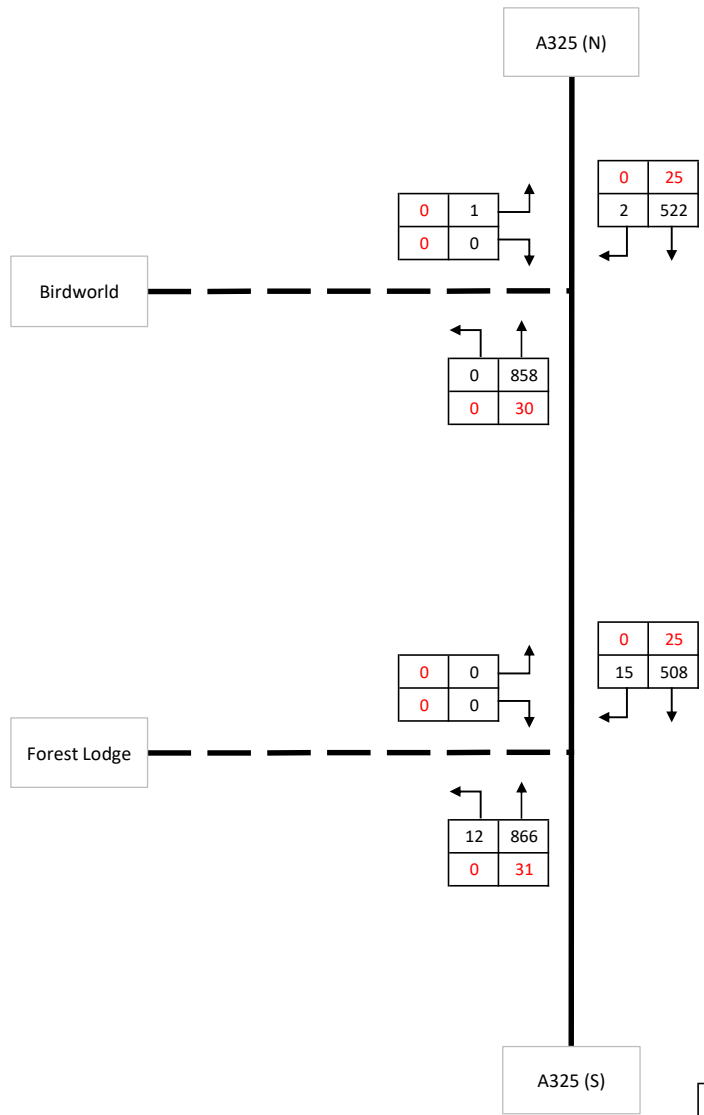
Project: **Birdworld and Haskins Forest Lodge Garden Centre**


Project Number: <b>ITB16329</b>	Figure Number: <b>Figure 3.1</b>	Revision: <b>-</b>
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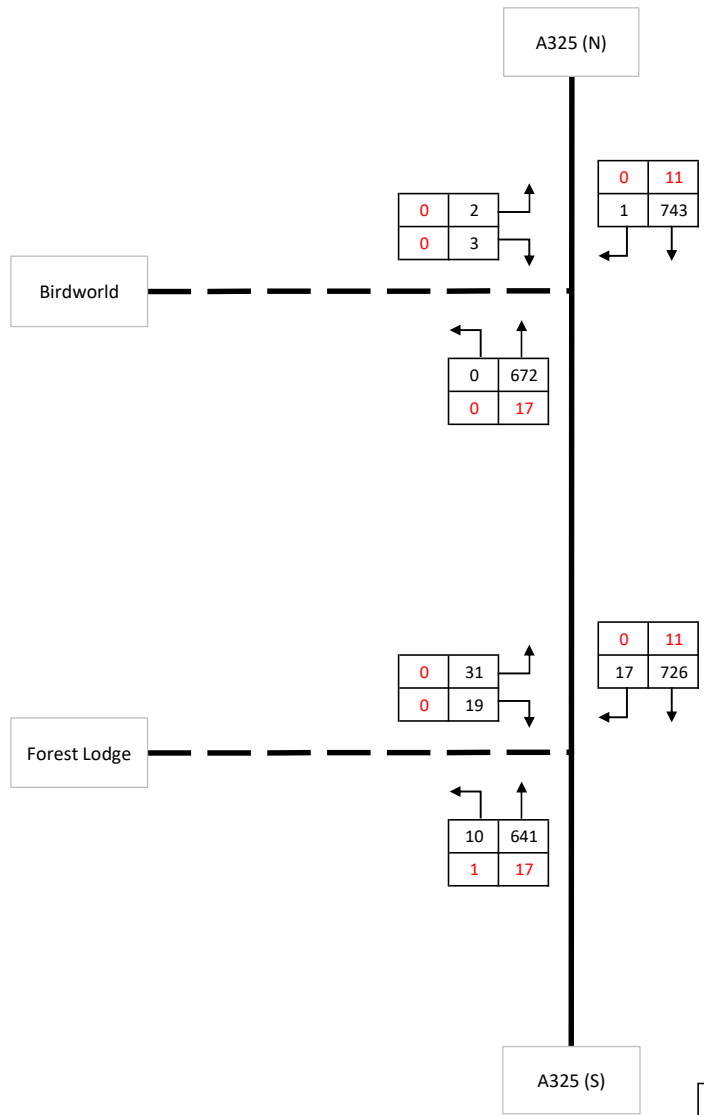
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 Contains data from OS Zoomstack


## TRAFFIC FIGURES

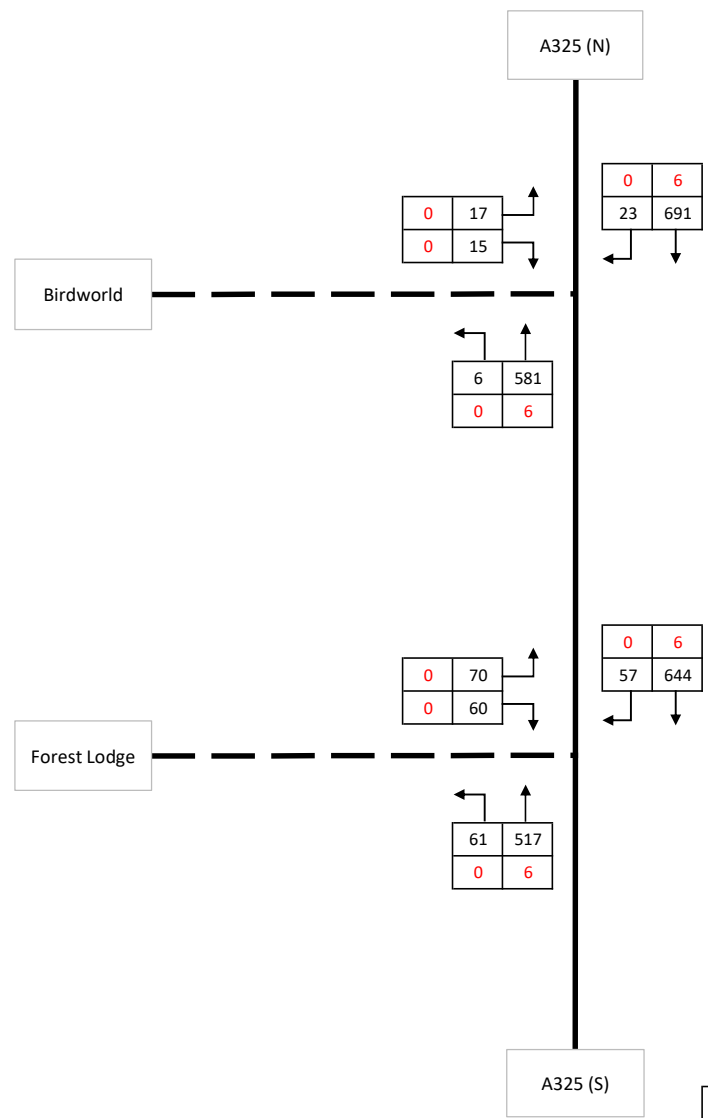


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld Observed Flows	
	Figure TF1	
	2022 Observed Weekday AM Peak Hour (0715-0815)	

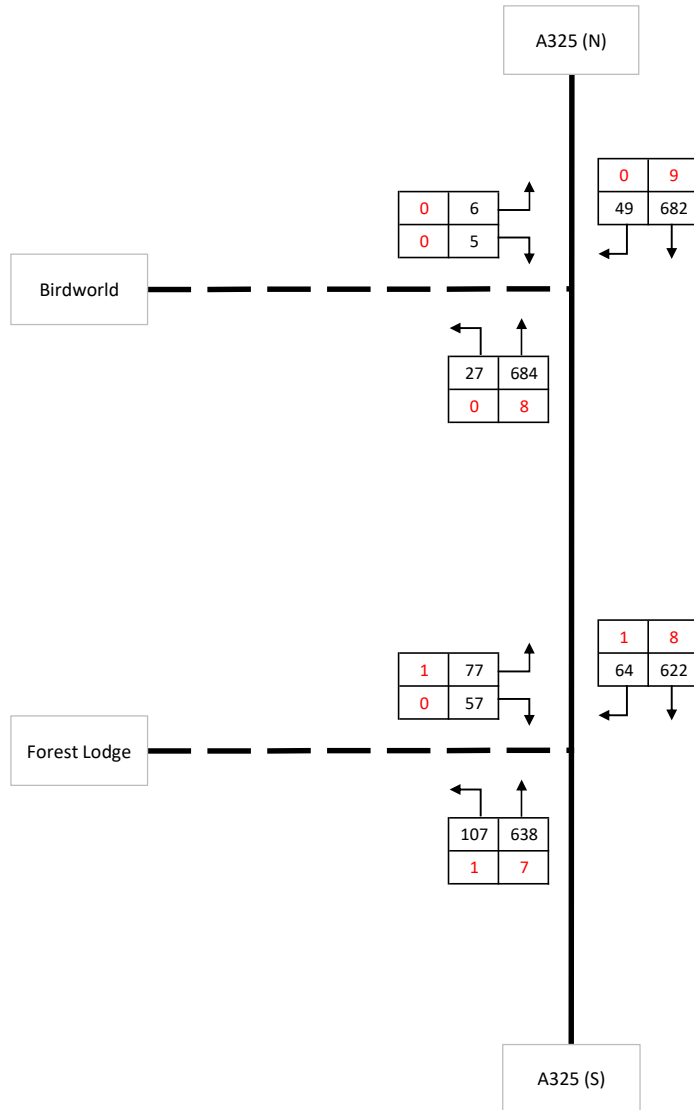





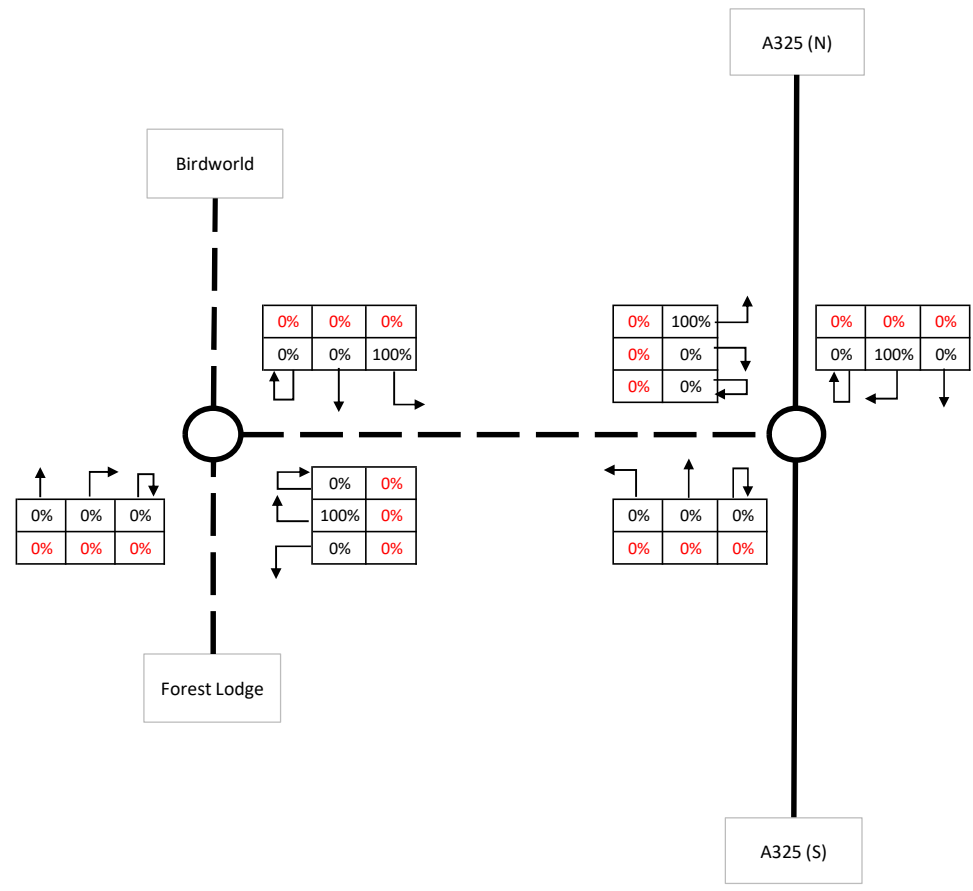
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld Observed Flows	
	Figure TF2	
	2022 Observed Weekday PM Peak Hour (1630-1730)	



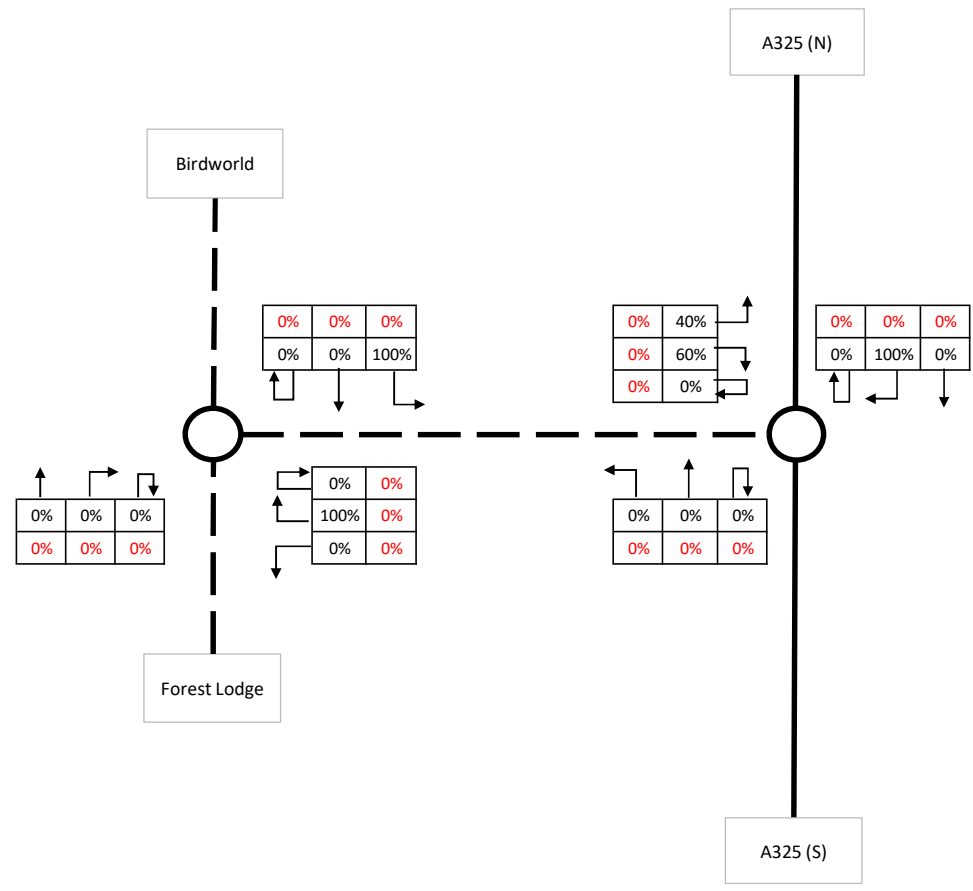
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld Observed Flows	
	Figure TF3	
	2022 Observed Saturday Peak Hour (1300-1400)	



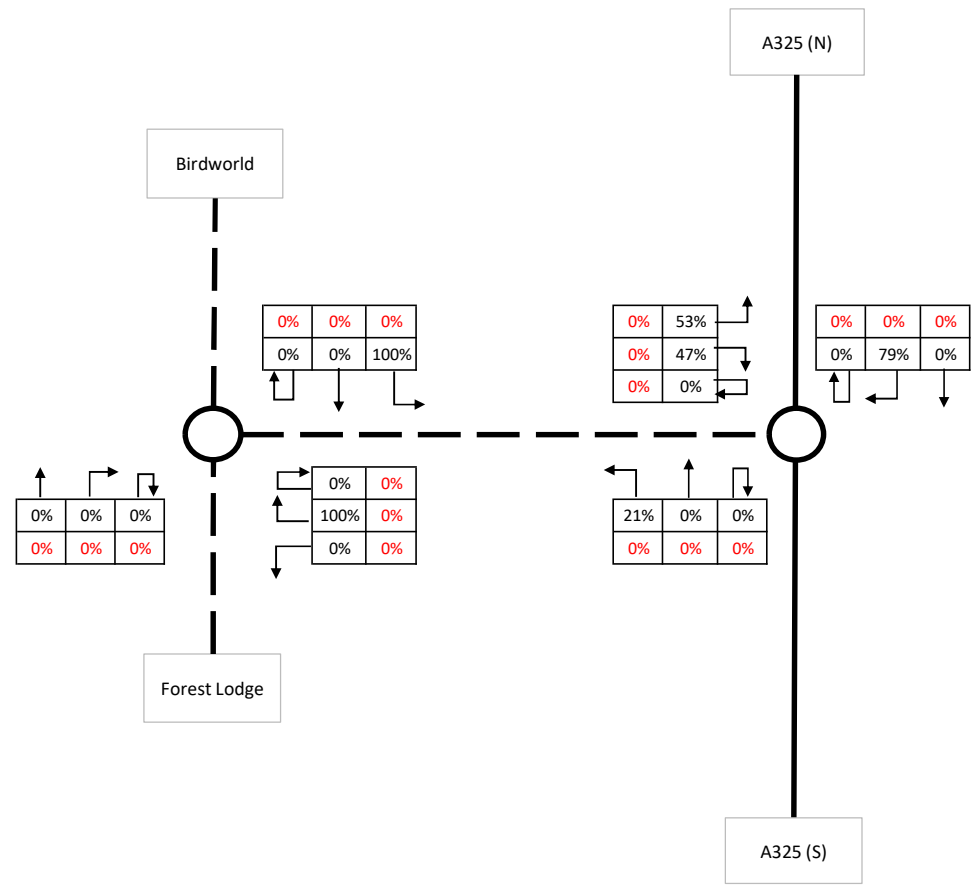
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		<p>The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk</p>
	<p>Forest Lodge Garden Centre and Birdworld Observed Flows</p>	
	<p>Figure TF4</p>	
	<p>2022 Observed Bank Holiday Peak Hour (1115 - 1215)</p>	




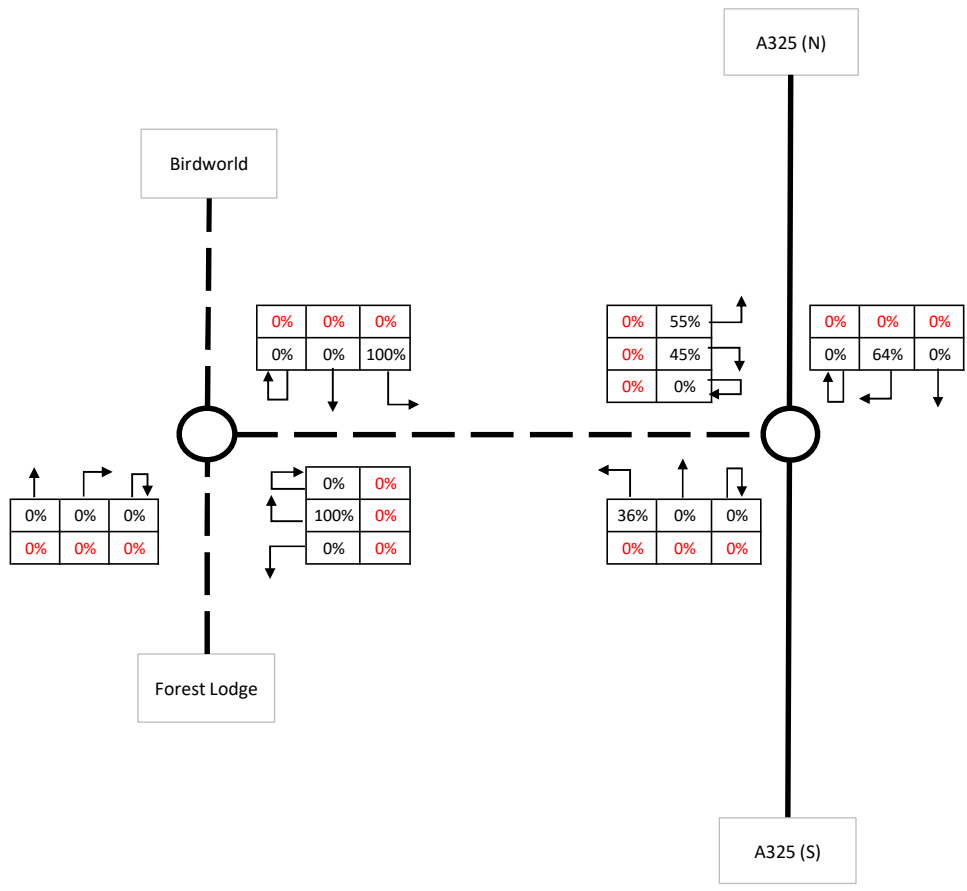
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Birdworld	
	Figure TF5	
	Birdworld Distribution Weekday AM Peak Hour (0715 – 0815)	



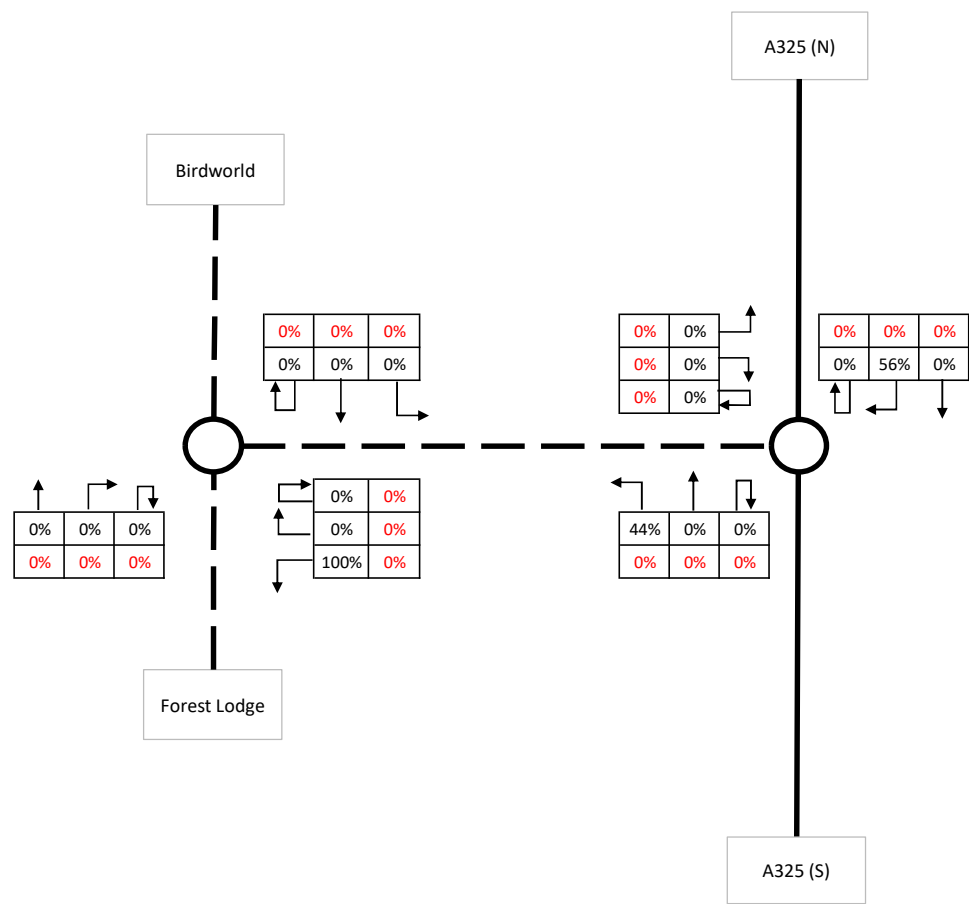
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Birdworld	
	Figure TF6	
	Birdworld Distribution Weekday PM Peak Hour (1630 – 1730)	




<p><b>KEY</b></p> <p><span style="border: 1px solid black; padding: 2px;">500</span> = TOTAL VEHICLES</p> <p><span style="border: 1px solid black; padding: 2px; color: red;">25</span> = HGVs</p>		<p>The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk</p>
	Birdworld	
	Figure TF7	
	Birdworld Distribution Weekend Peak Hour (1300 – 1400)	

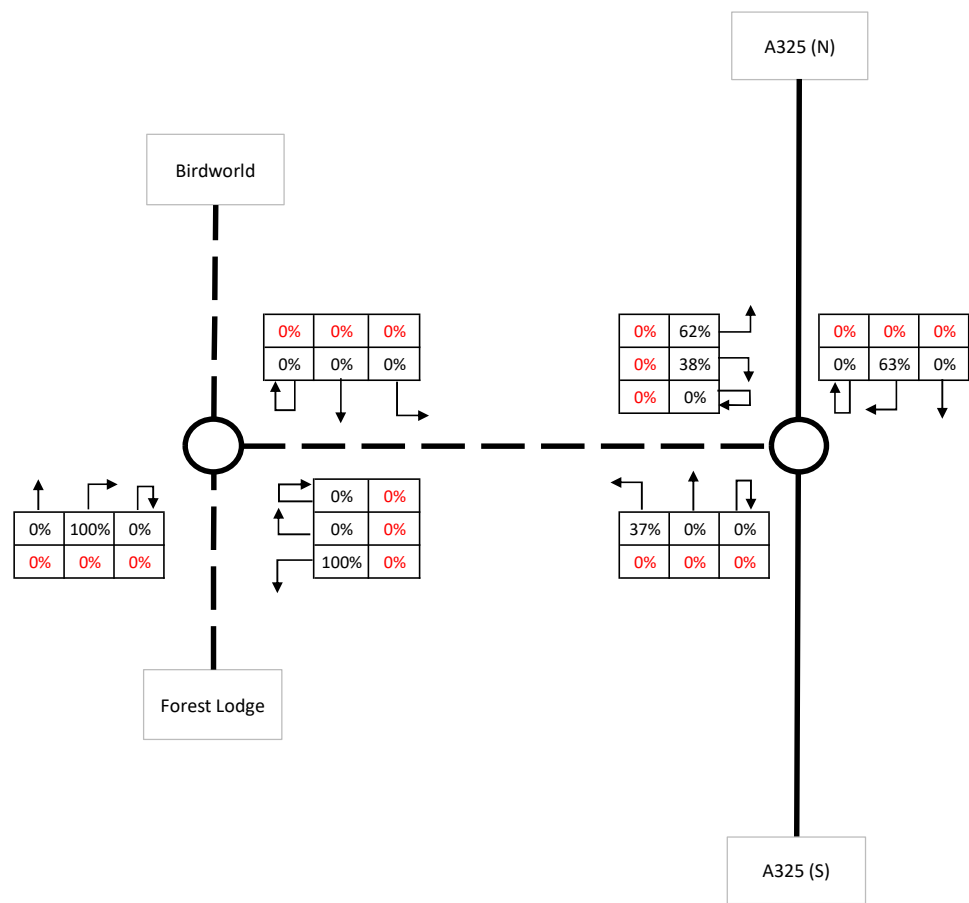


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Birdworld	
	Figure TF8	
	Birdworld Distribution Bank Holiday Peak Hour (1115 – 1215)	

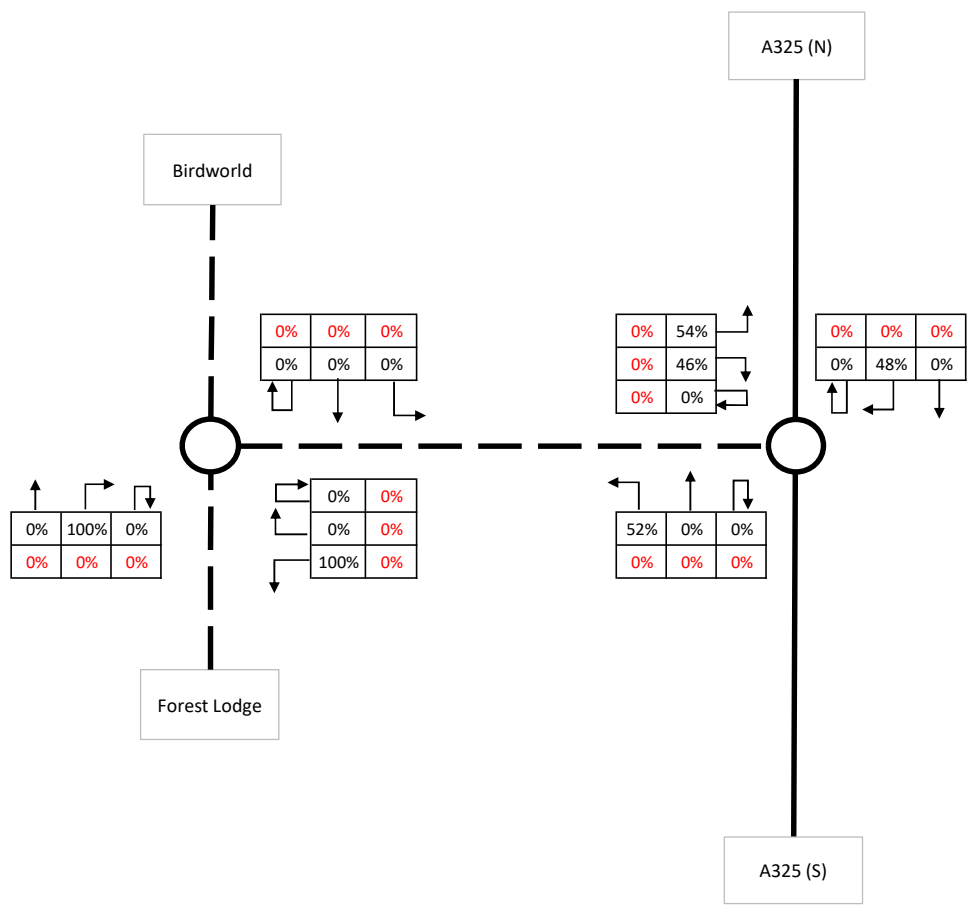


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre	
	Figure TF9	
	Forest Lodge Distribution Weekday AM Peak Hour (0715 – 0815)	

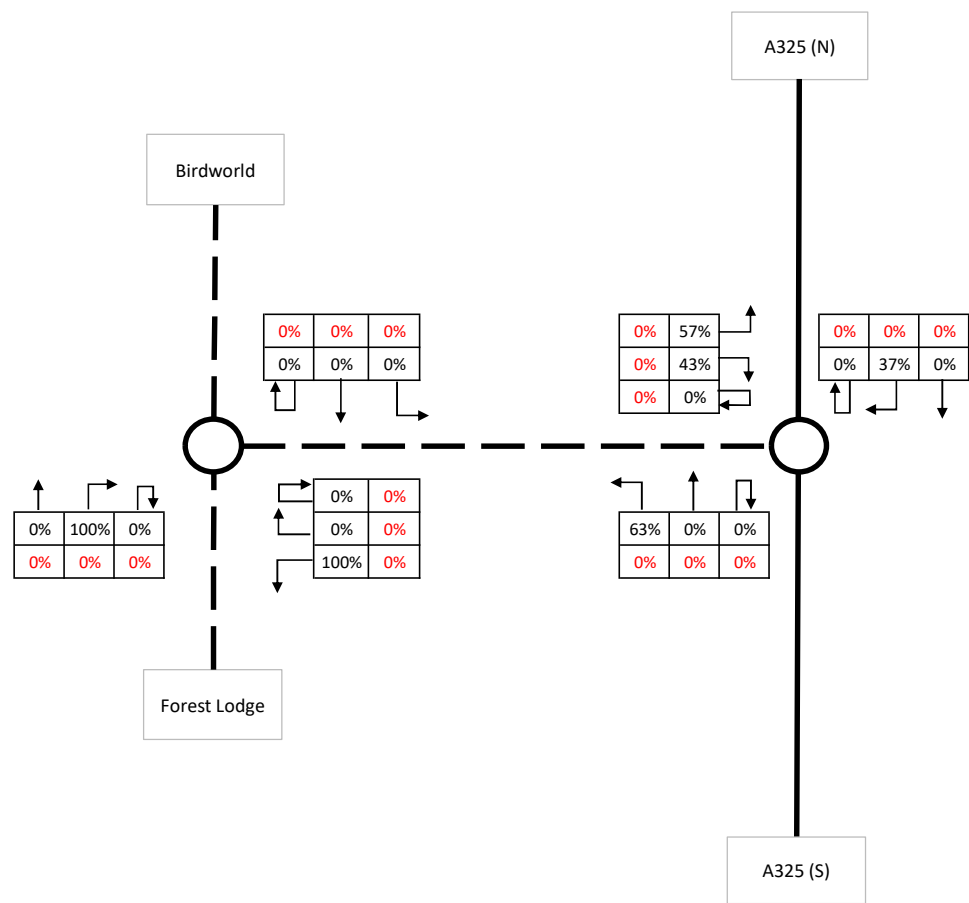




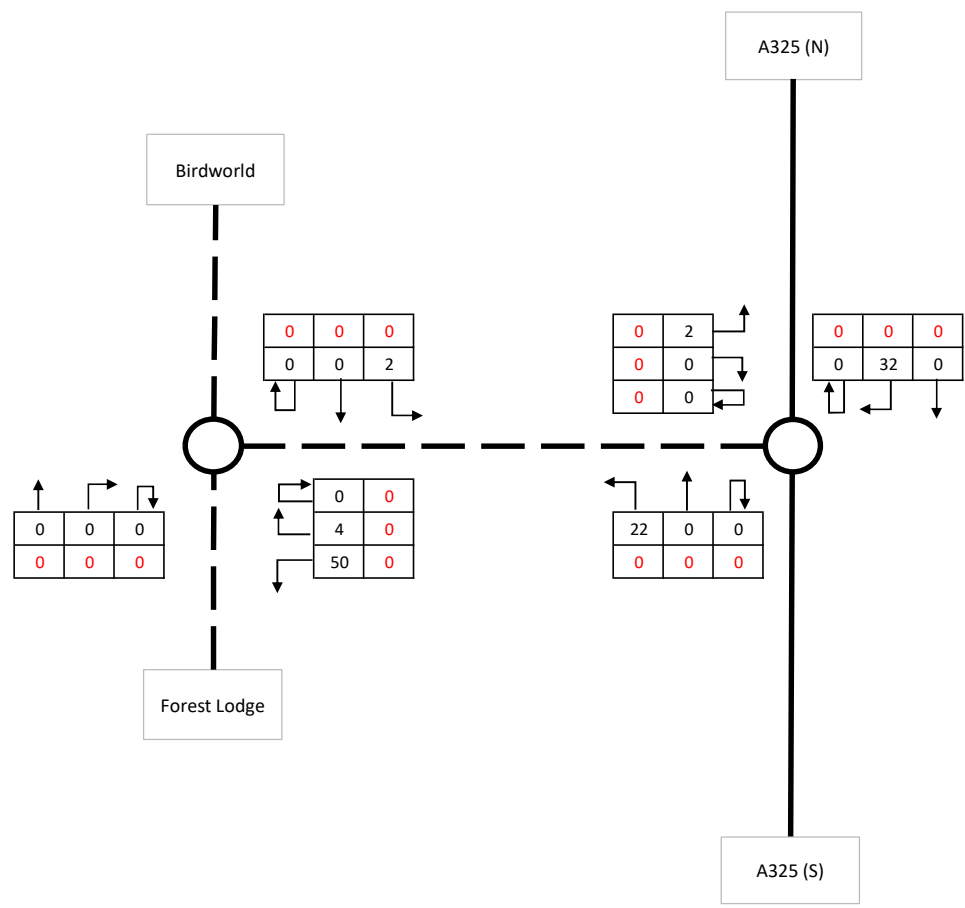
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre	
	Figure TF10	
	Forest Lodge Distribution Weekday PM Peak Hour (1630 – 1730)	



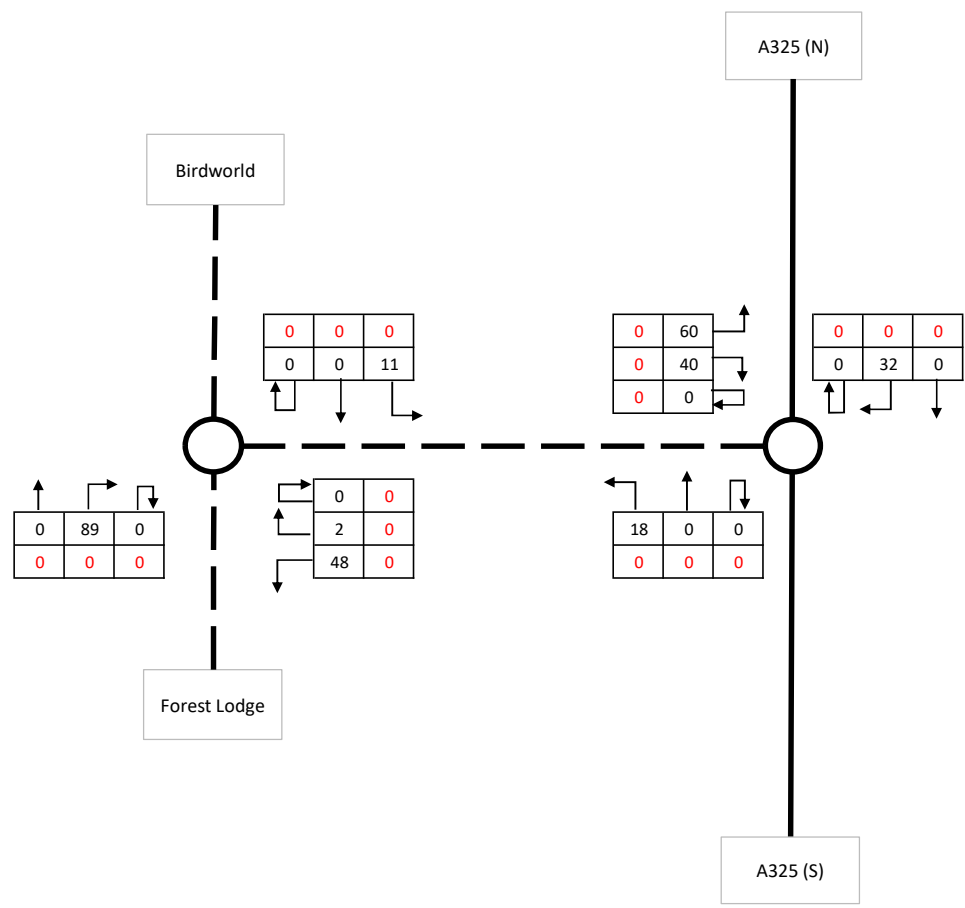
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre	
	Figure TF11	
	Forest Lodge Distribution Weekend Peak Hour (1300 – 1400)	



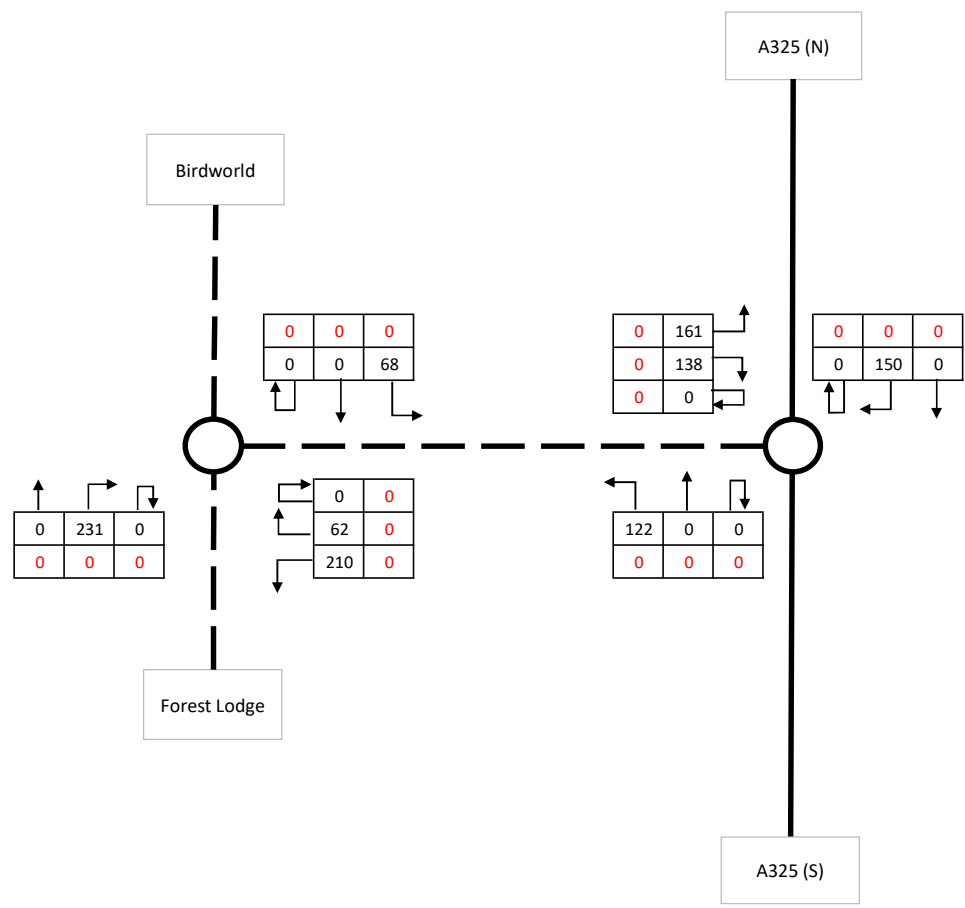
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre	
	Figure TF12	
	Forest Lodge Distribution Bank Holiday Peak Hour (1115 – 1215)	



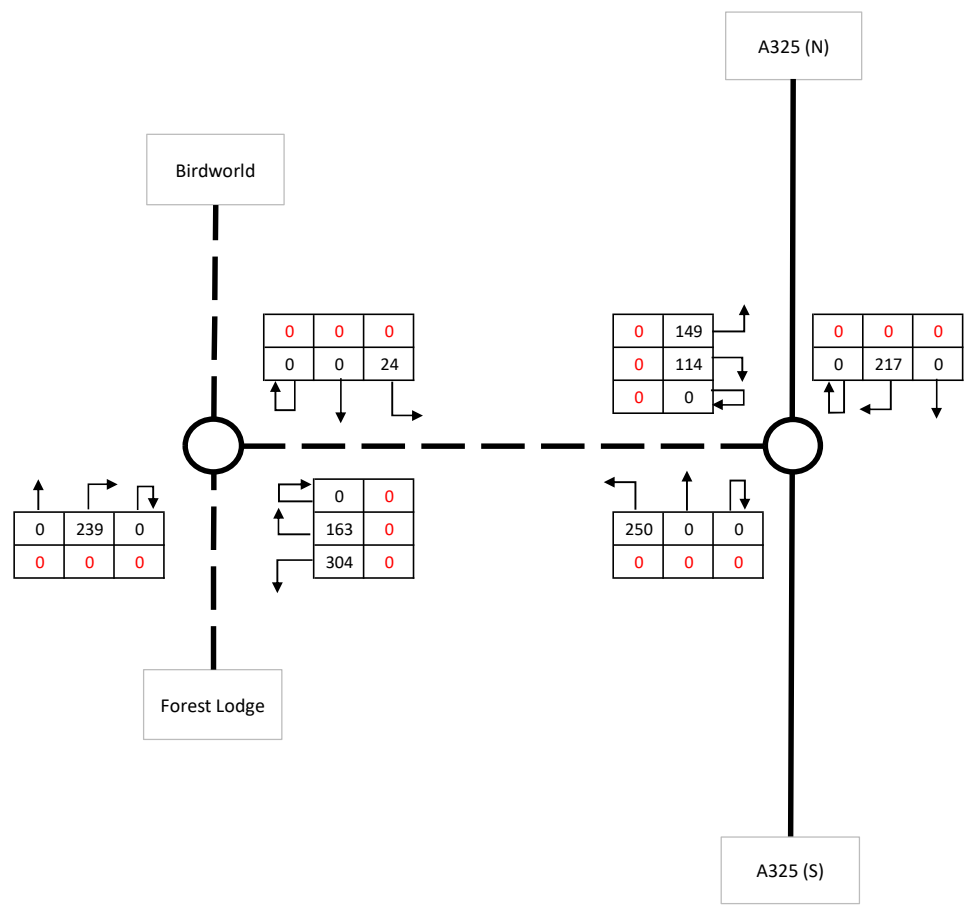
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF13	
	Proposed Development Traffic Assignment (Scenario 1) Weekday AM Peak Hour (0715 – 0815)	



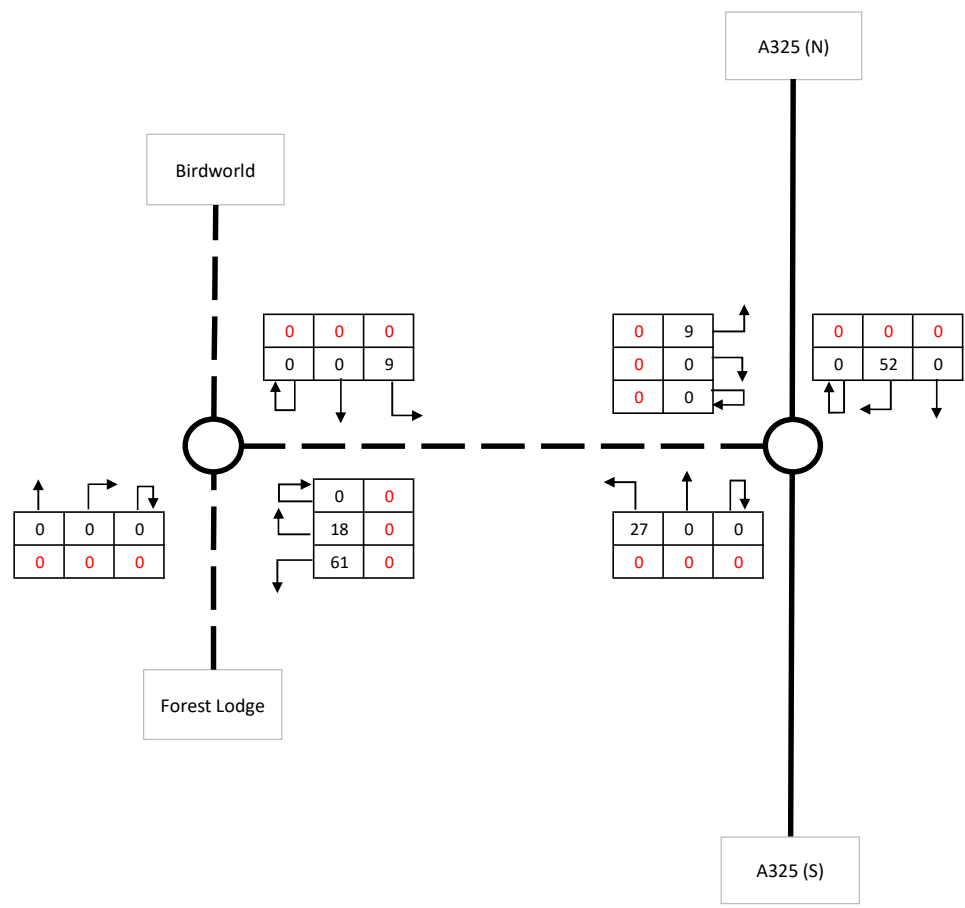
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF14	
	Proposed Development Traffic Assignment (Scenario 1) Weekday PM Peak Hour (1630 – 1730)	



<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF15	
	Proposed Development Traffic Assignment (Scenario 2) Saturday Peak Hour (1300 – 1400)	

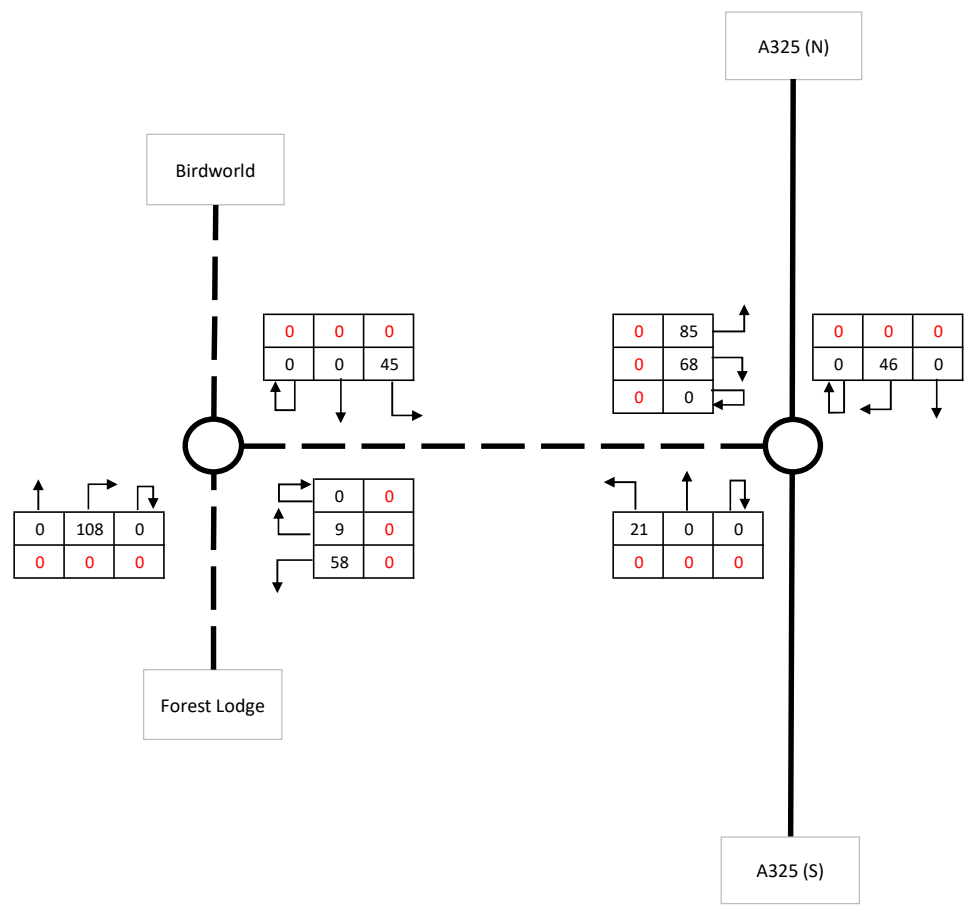


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF16	
	Proposed Development Traffic Assignment (Scenario 3) Bank Holiday Peak Hour (1115 – 1215)	

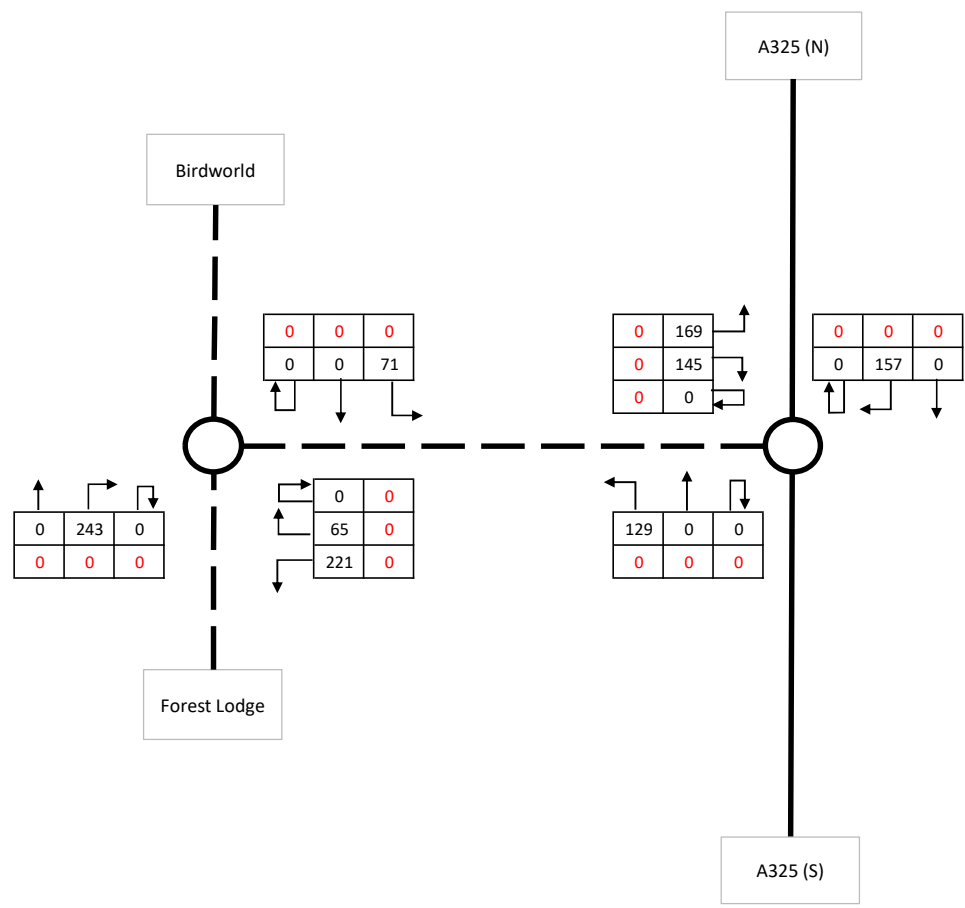


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF17	
	Proposed Development Traffic Assignment (Scenario 4 - Sensitivity Test) Weekday AM Peak Hour (0715 – 0815)	

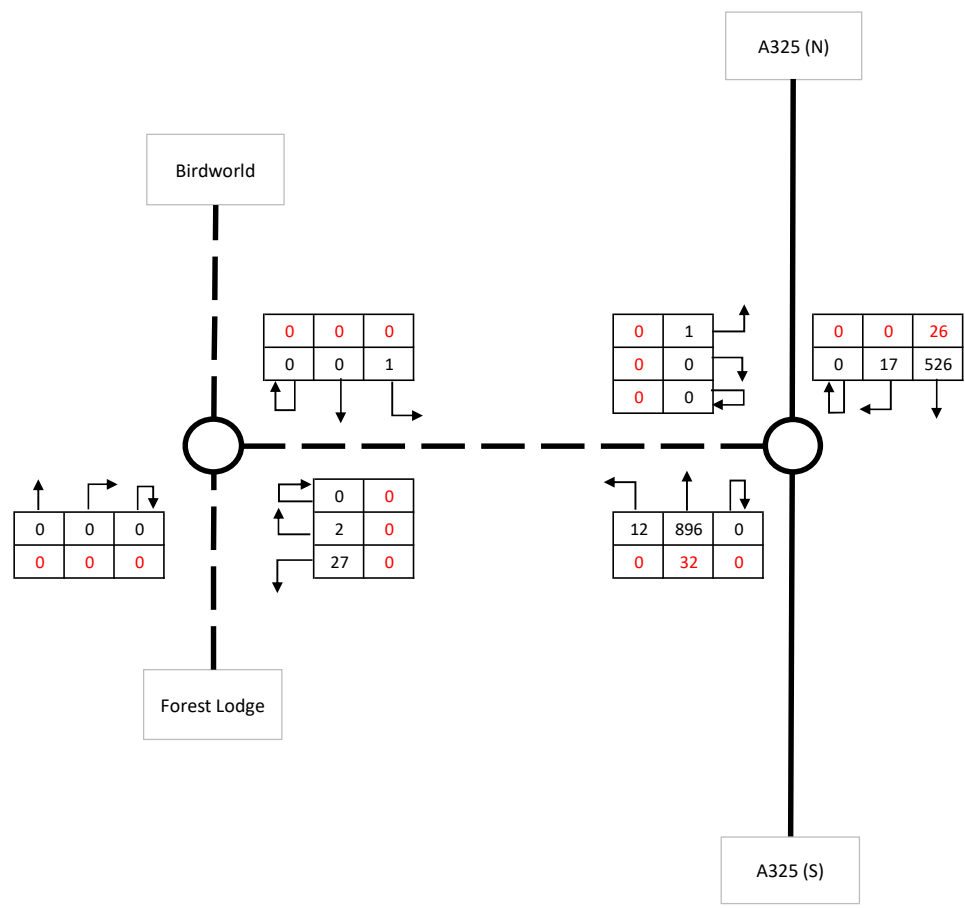




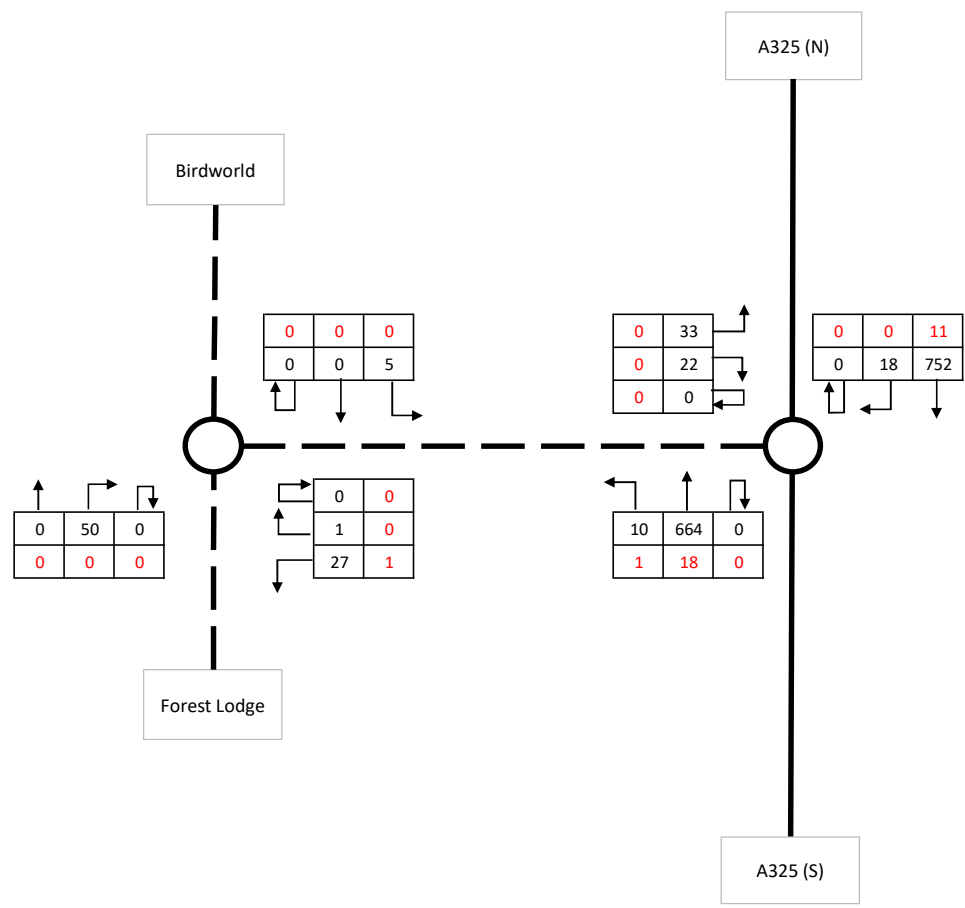
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF18	
	Proposed Development Traffic Assignment (Scenario 4 - Sensitivity Test) Weekday PM Peak Hour (1630 – 1730)	



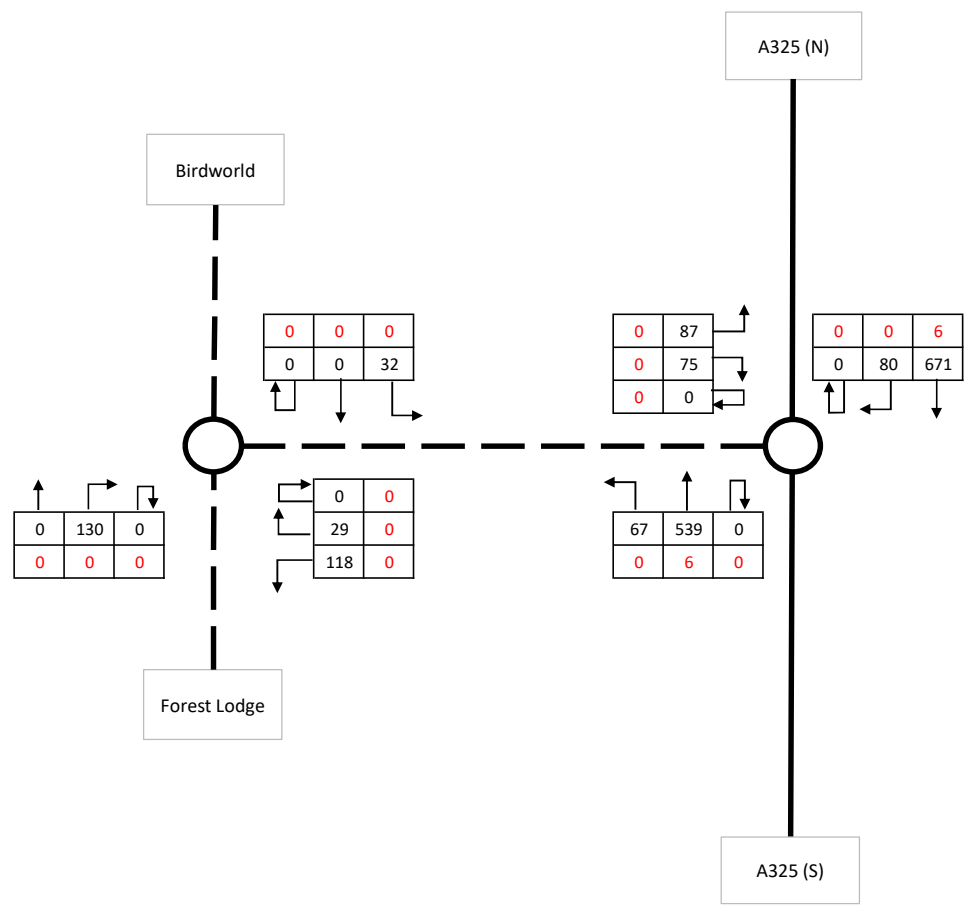
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF19	
	Proposed Development Traffic Assignment (Scenario 5 - Sensitivity Test) Saturday Peak Hour (1300 – 1400)	



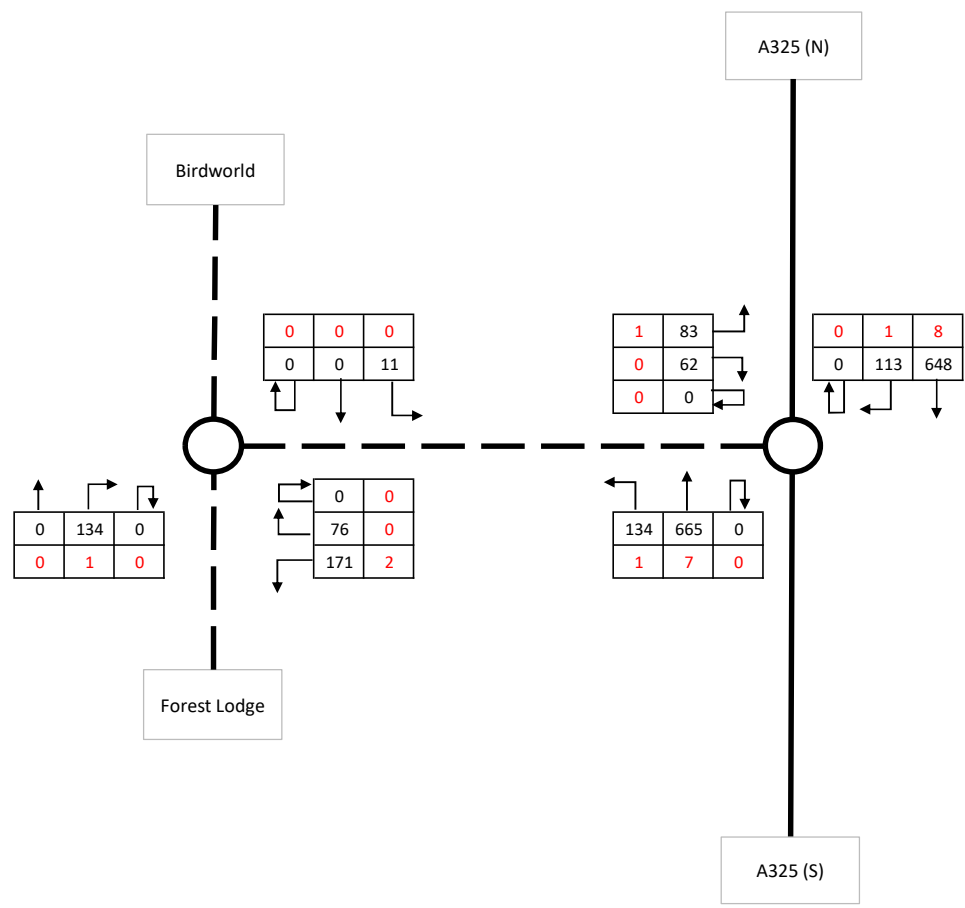
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF20	
	2026 'Baseline' Weekday AM Peak Hour (0715 – 0815)	



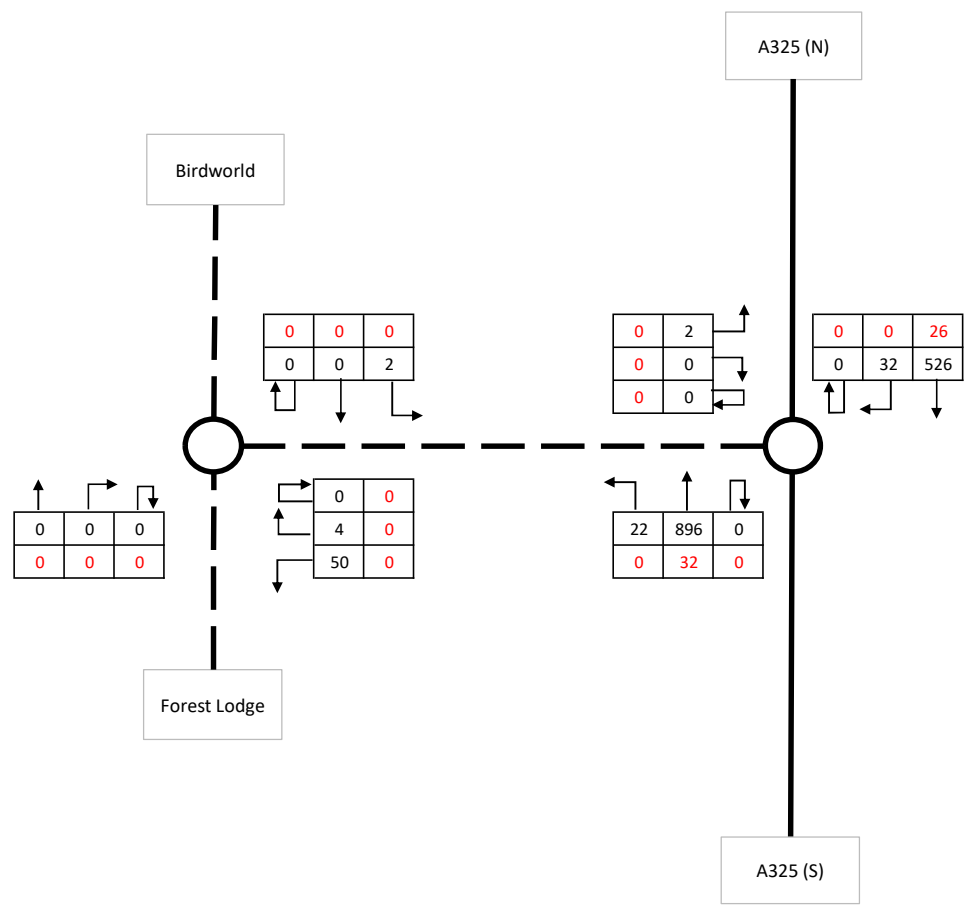
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF21	
	2026 'Baseline' Weekday PM Peak Hour (1630 – 1730)	



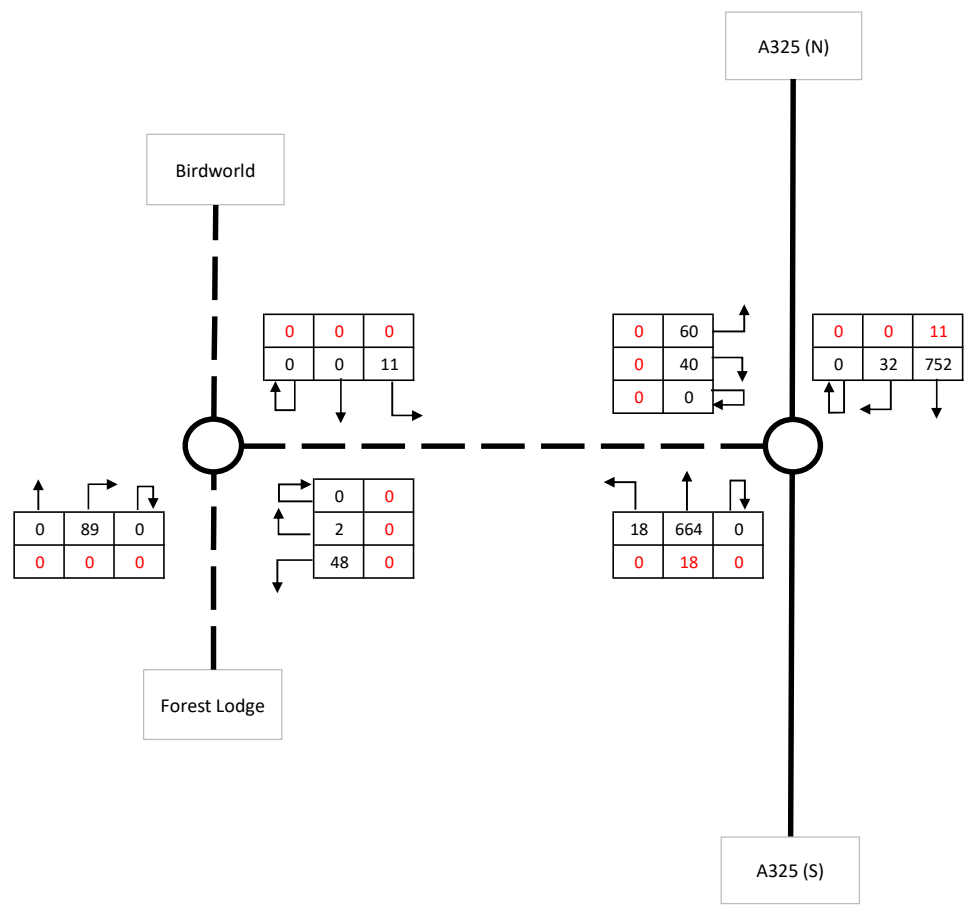
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF22	
	2026 'Baseline' Saturday Peak Hour (1300 – 1400)	



<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF23	
	2026 'Baseline' Bank Holiday Peak Hour (1115 – 1215)	

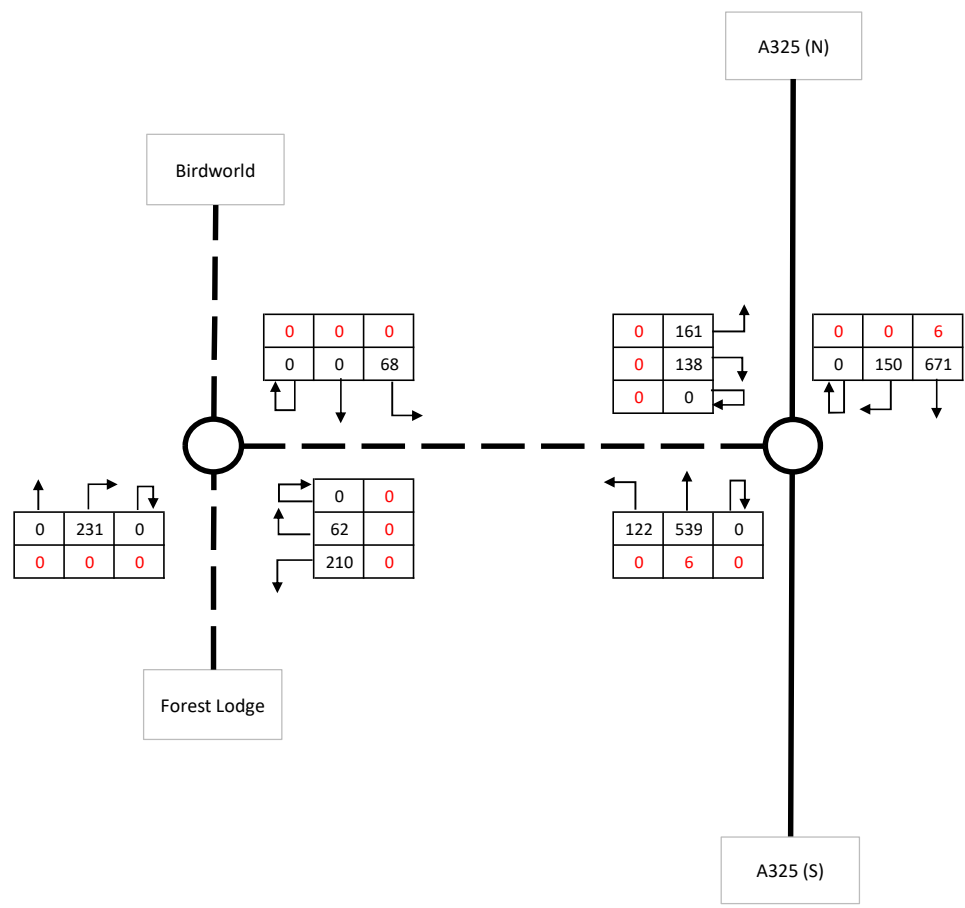


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF24	
	2026 'With Development' (Scenario 1) Weekday AM Peak Hour (0715 – 0815)	

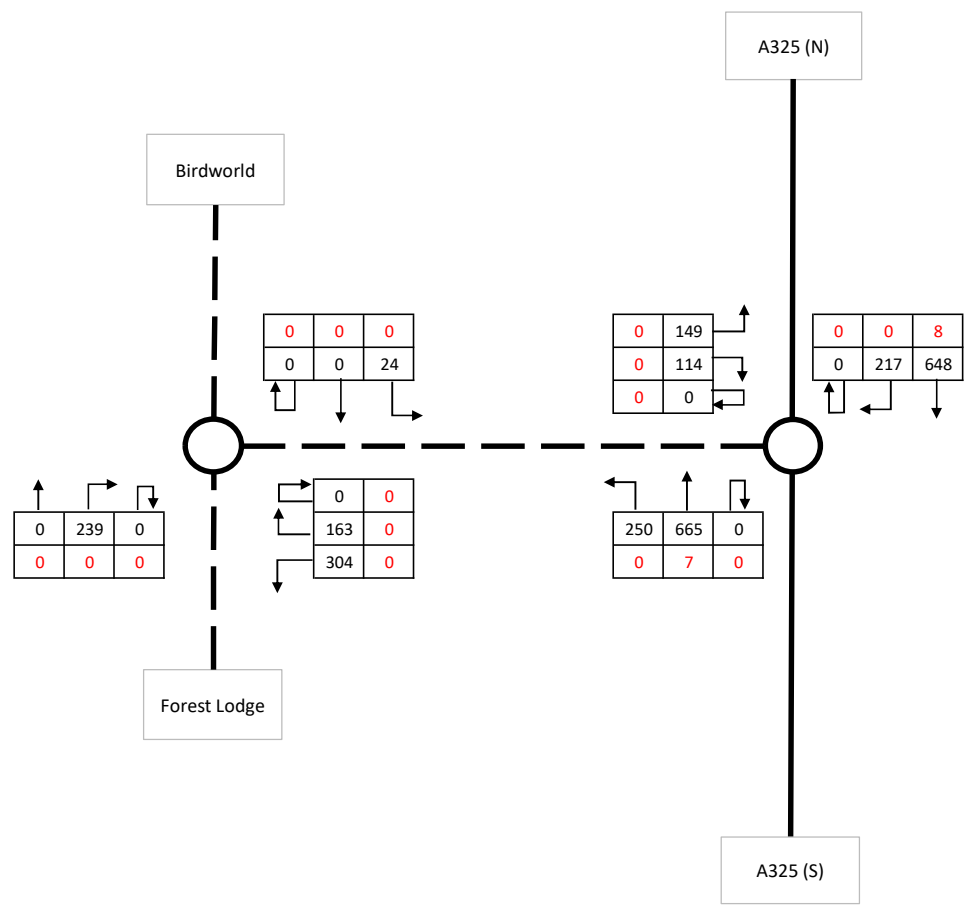


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF25	
	2026 'With Development' (Scenario 1) Weekday PM Peak Hour (1630 – 1730)	

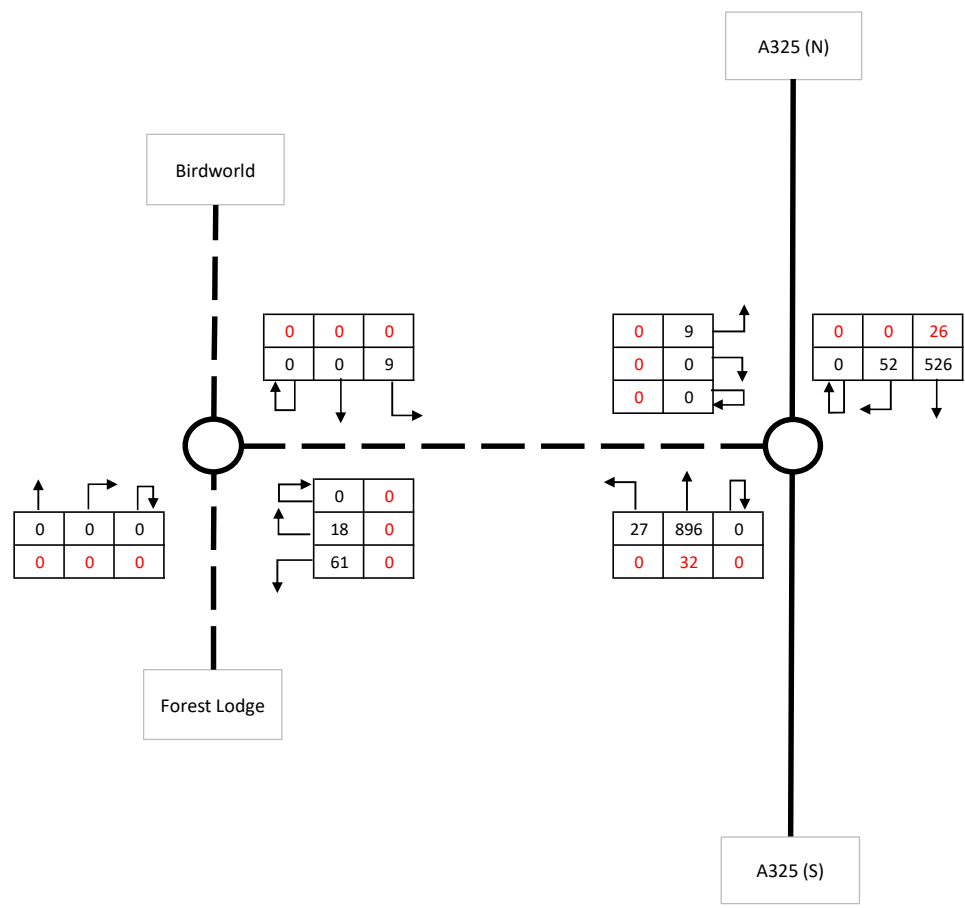




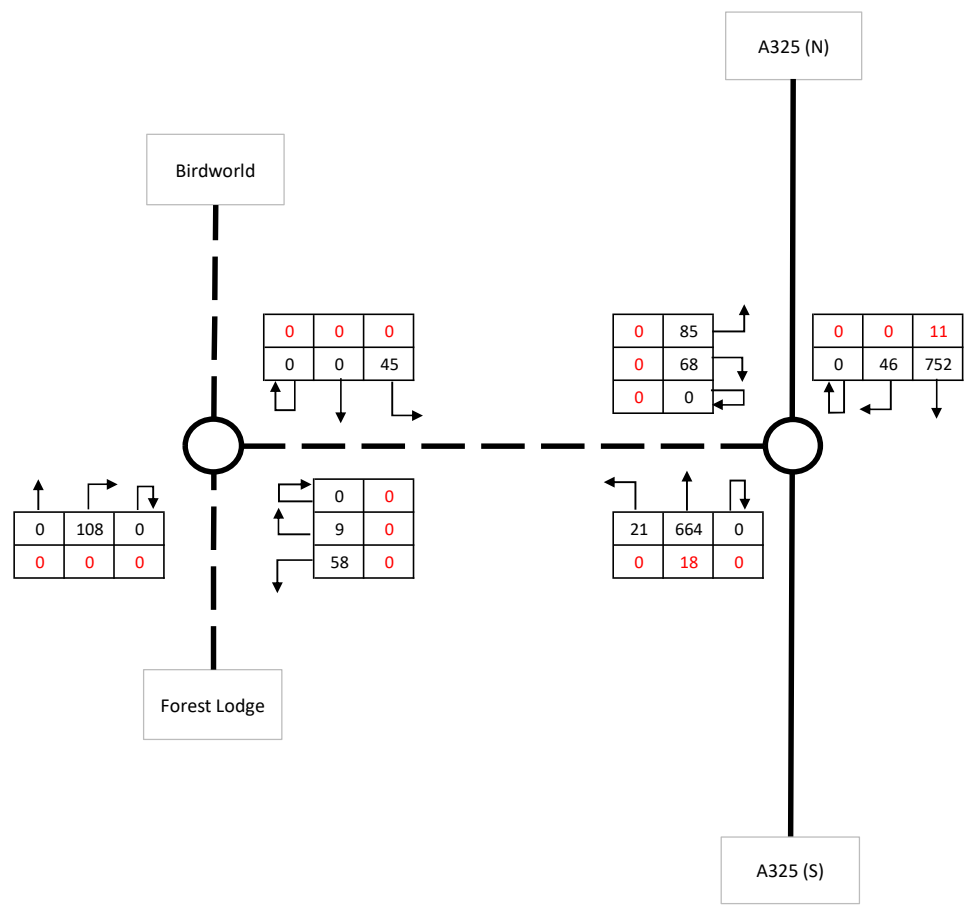
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF26	
	2026 'With Development' (Scenario 2) Saturday Peak Hour (1300 – 1400)	



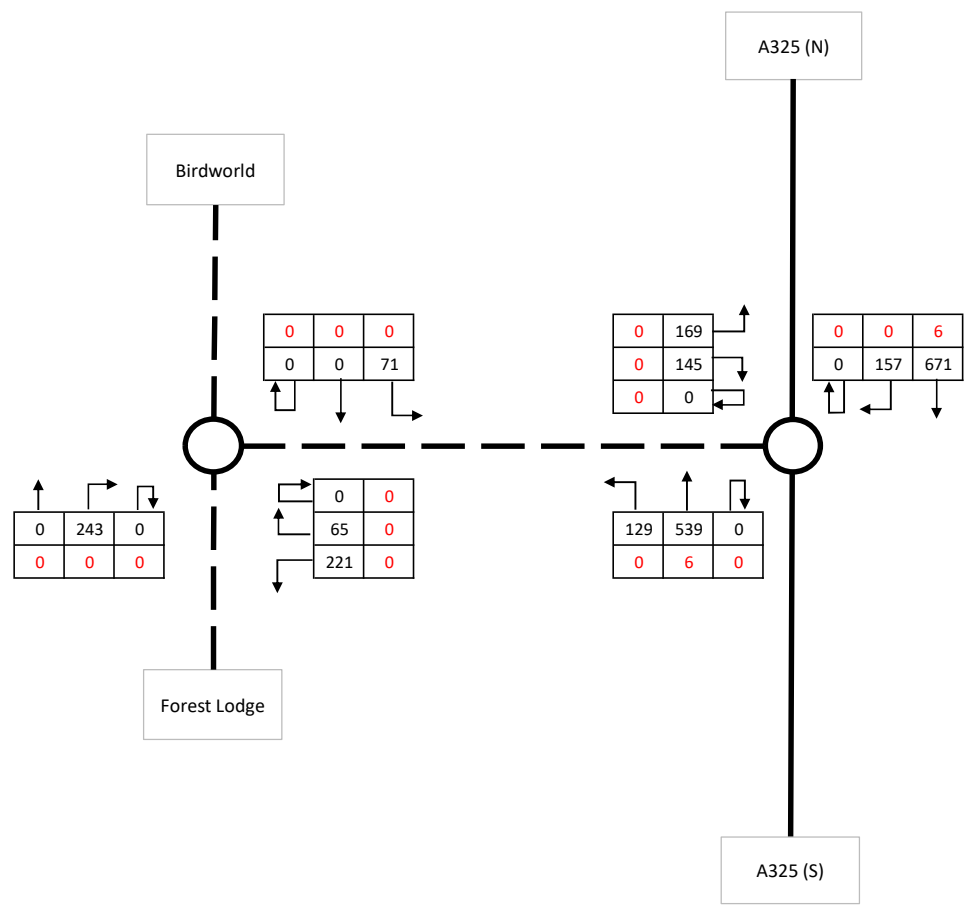
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF27	
	2026 'With Development' (Scenario 3) Bank Holiday Peak Hour (1115 – 1215)	



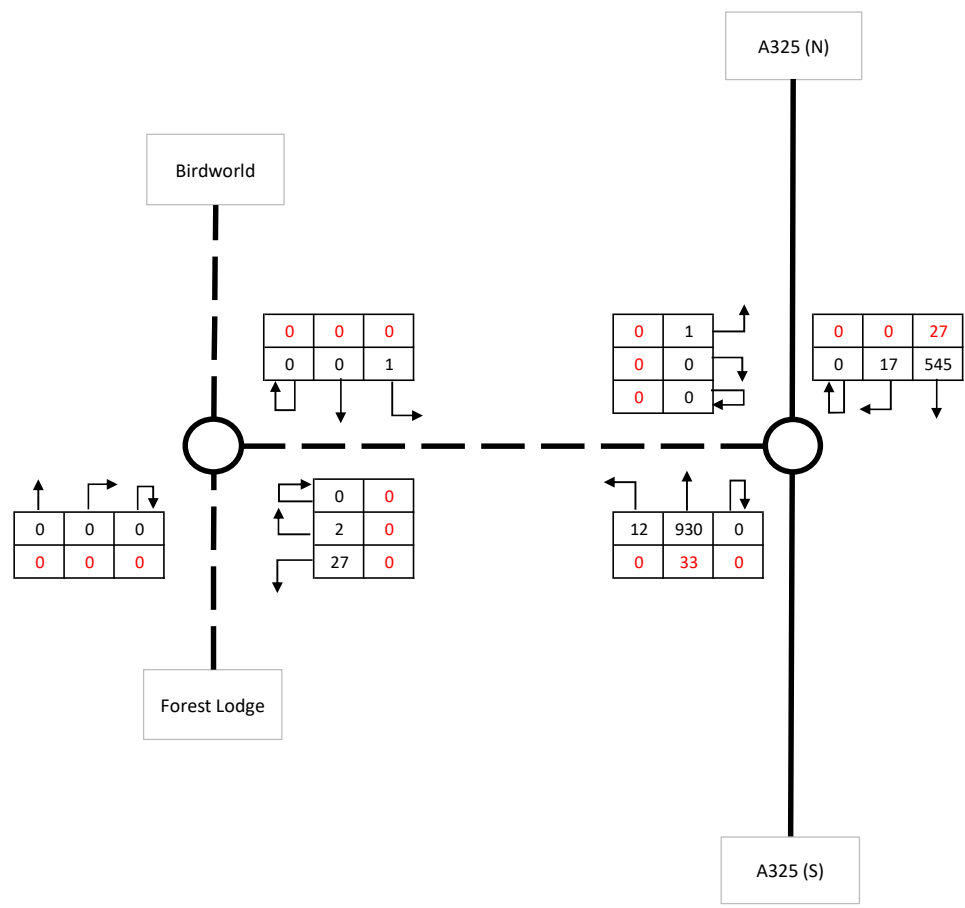
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF28	
	2026 'With Development' (Scenario 4 - Sensitivity Test) Weekday AM Peak Hour (0715 – 0815)	



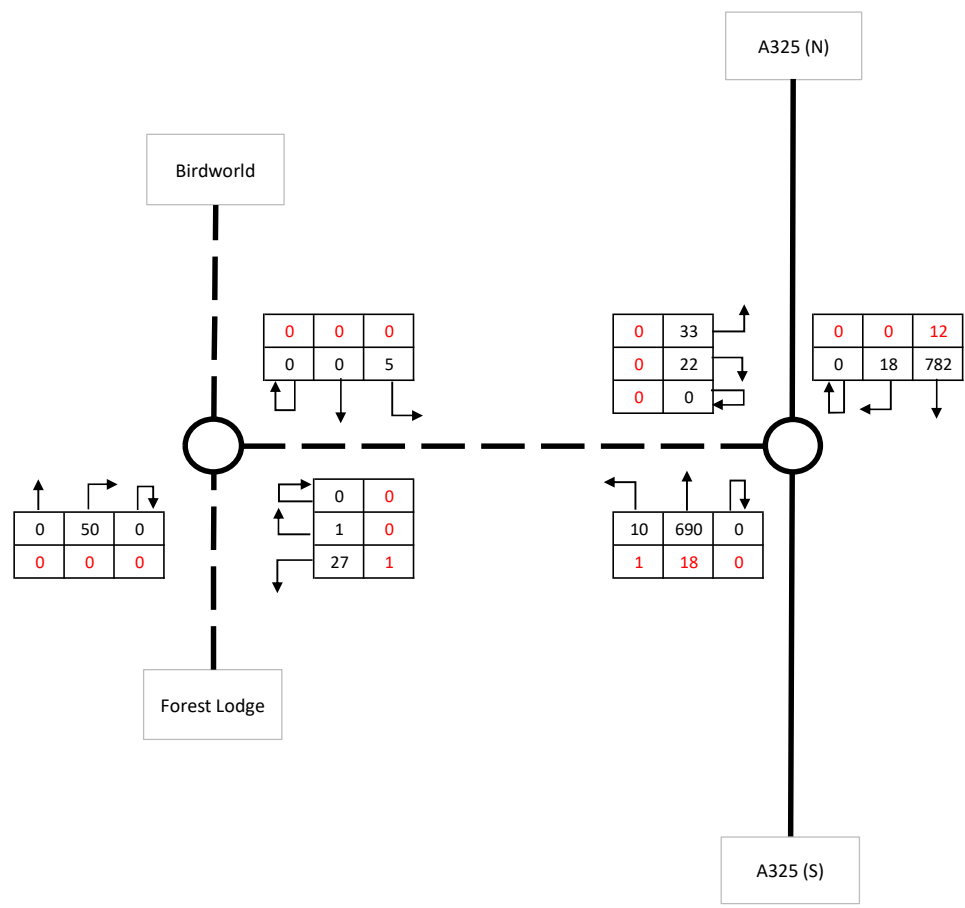
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF29	
	2026 'With Development' (Scenario 4 - Sensitivity Test) Weekday PM Peak Hour (1630 – 1730)	



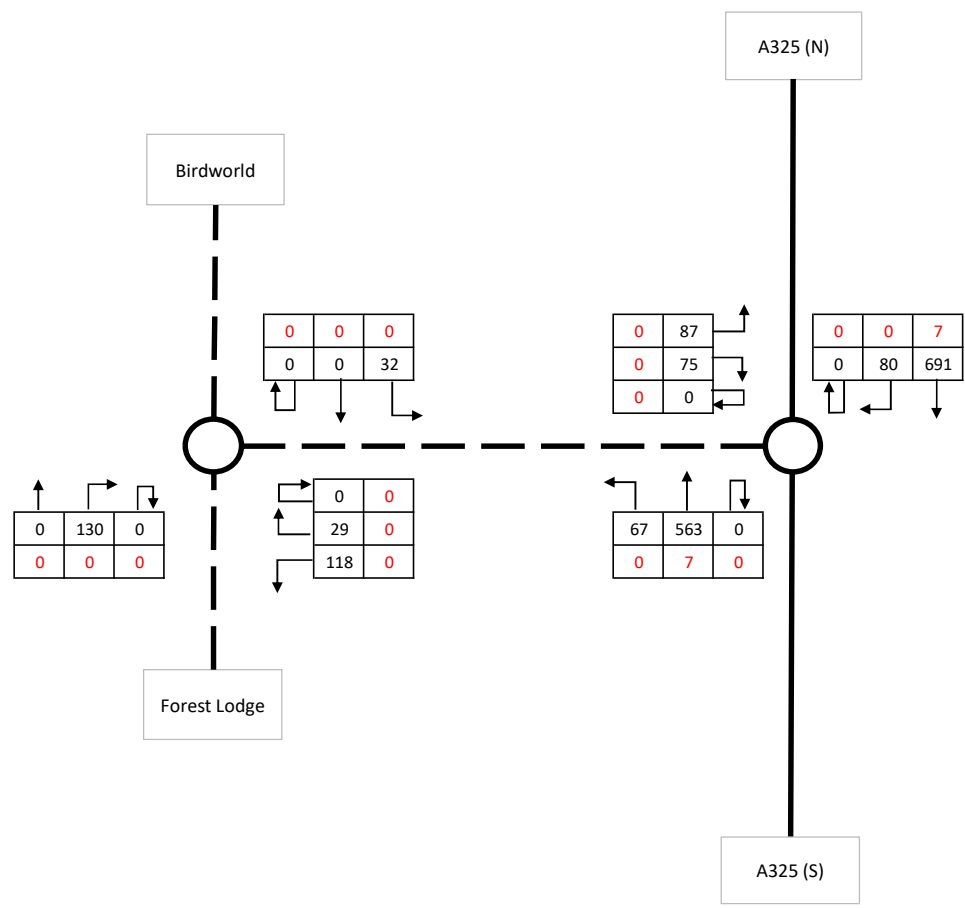
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF30	
	2026 'With Development' (Scenario 5 - Sensitivity Test) Saturday Peak Hour (1300 – 1400)	



<p><b>KEY</b></p> <p><table border="1"><tr><td>500</td></tr></table> = TOTAL VEHICLES</p> <p><table border="1"><tr><td>25</td></tr></table> = HGVs</p>	500	25		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	500			
	25			
	Forest Lodge Garden Centre and Birdworld			
Figure TF31				
2031 Weekday AM Peak Hour (0715-0815)				

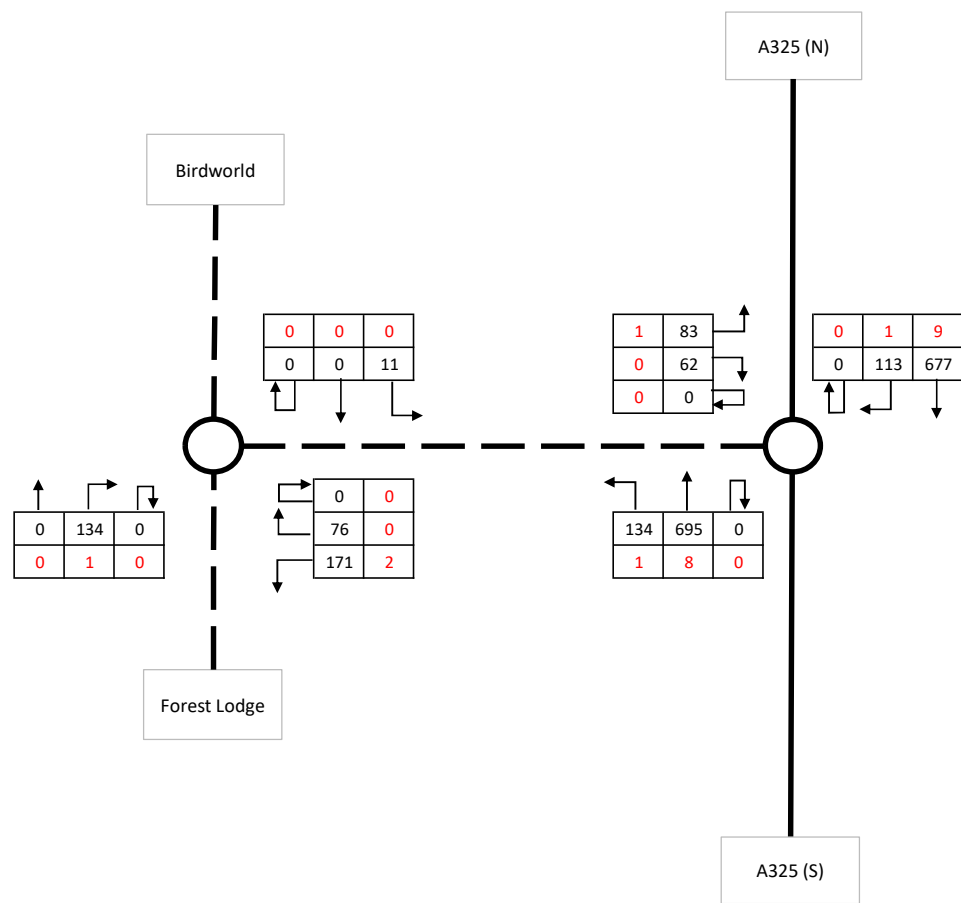


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF32	
	2031 Weekday PM Peak Hour (1630-1730)	

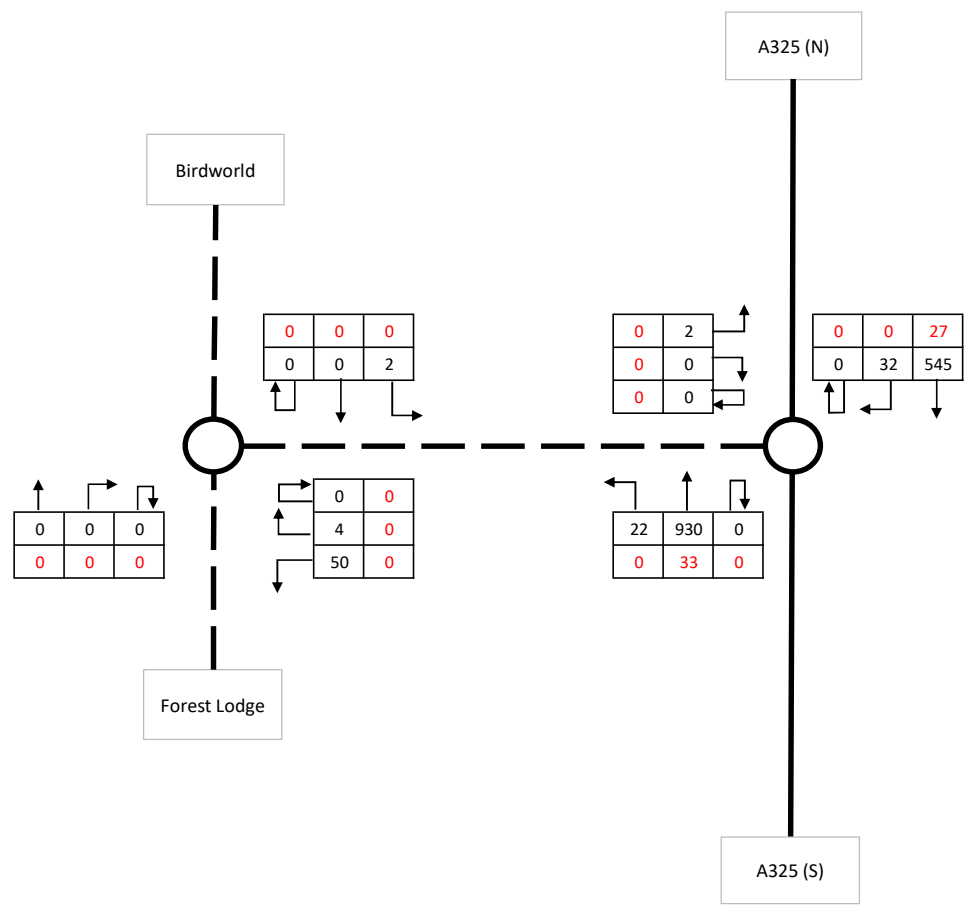


<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF33	
	2031 Saturday Peak Hour (1300-1400)	

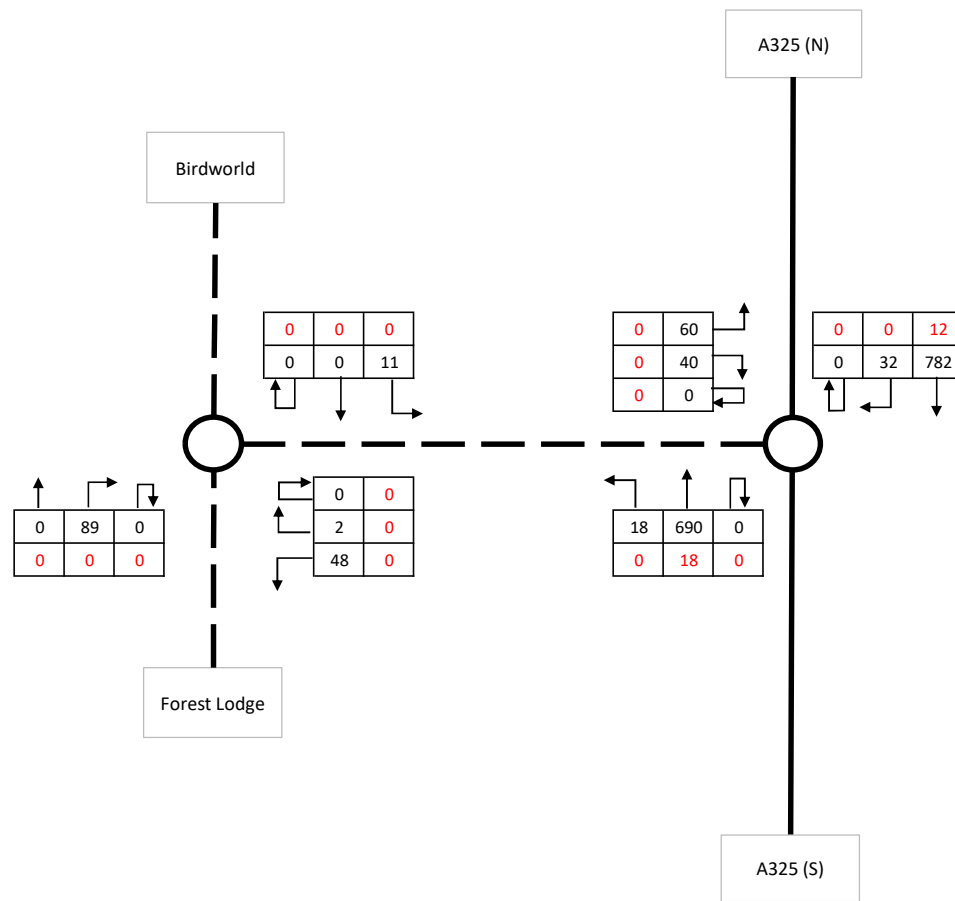




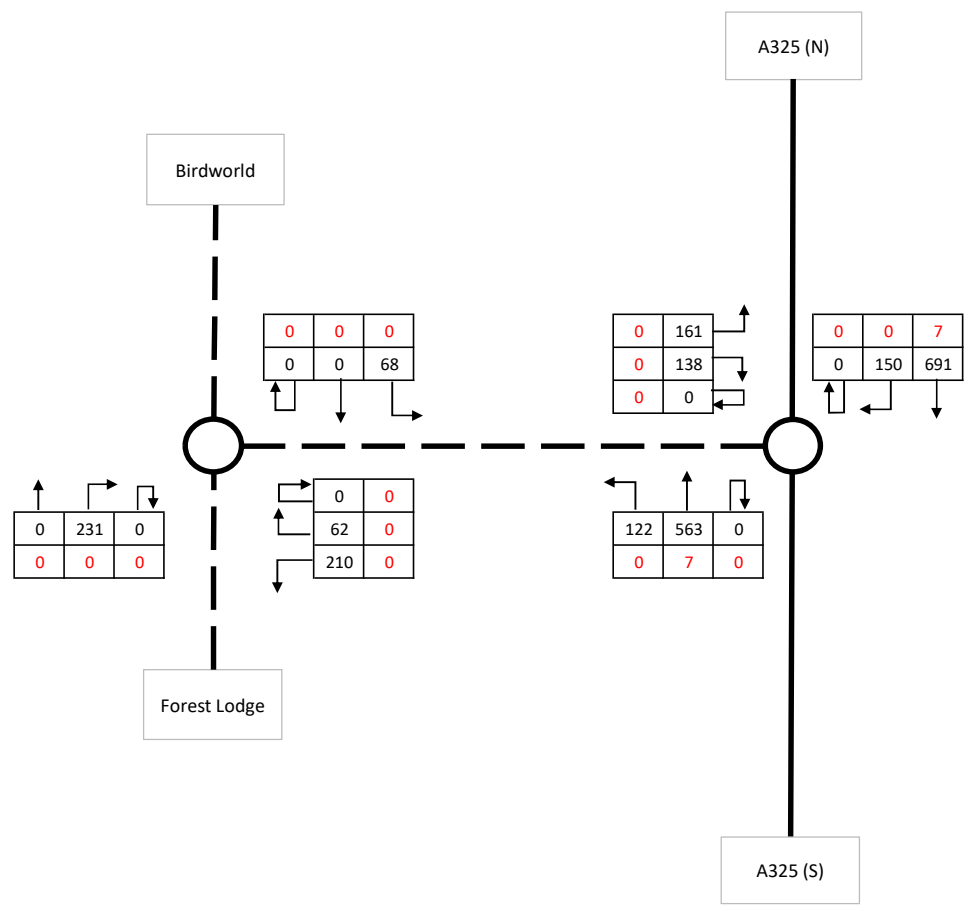
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF34	
	2031 Bank Holiday Peak Hour (1115 - 1215)	



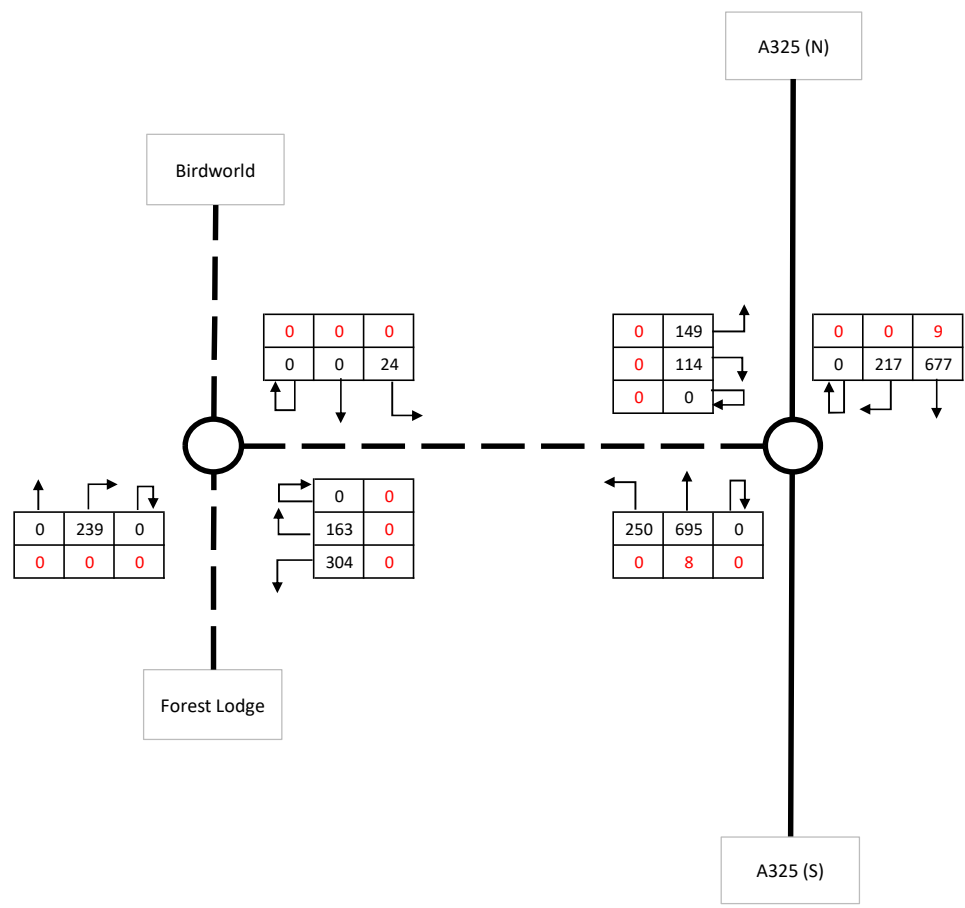
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF35	
	2031 'With Development' (Scenario 1) Weekday AM Peak Hour (0715 – 0815)	



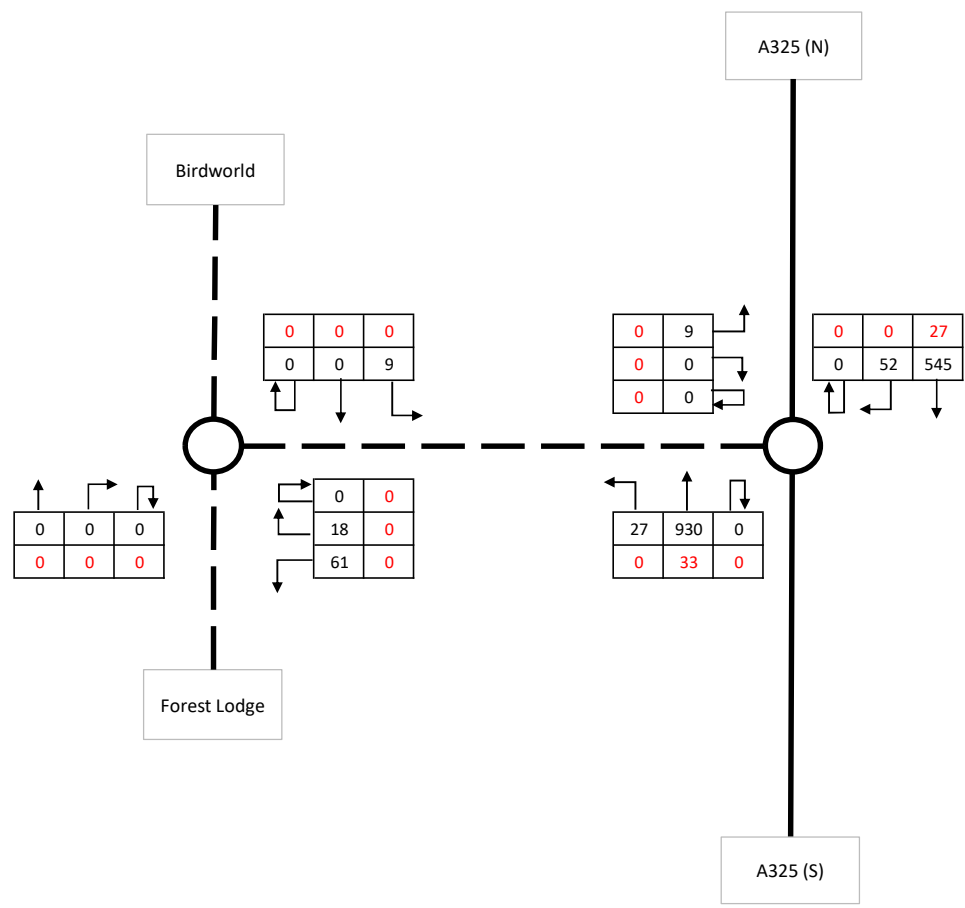
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF36	
	2031 'With Development' (Scenario 1) Weekday PM Peak Hour (1630 – 1730)	



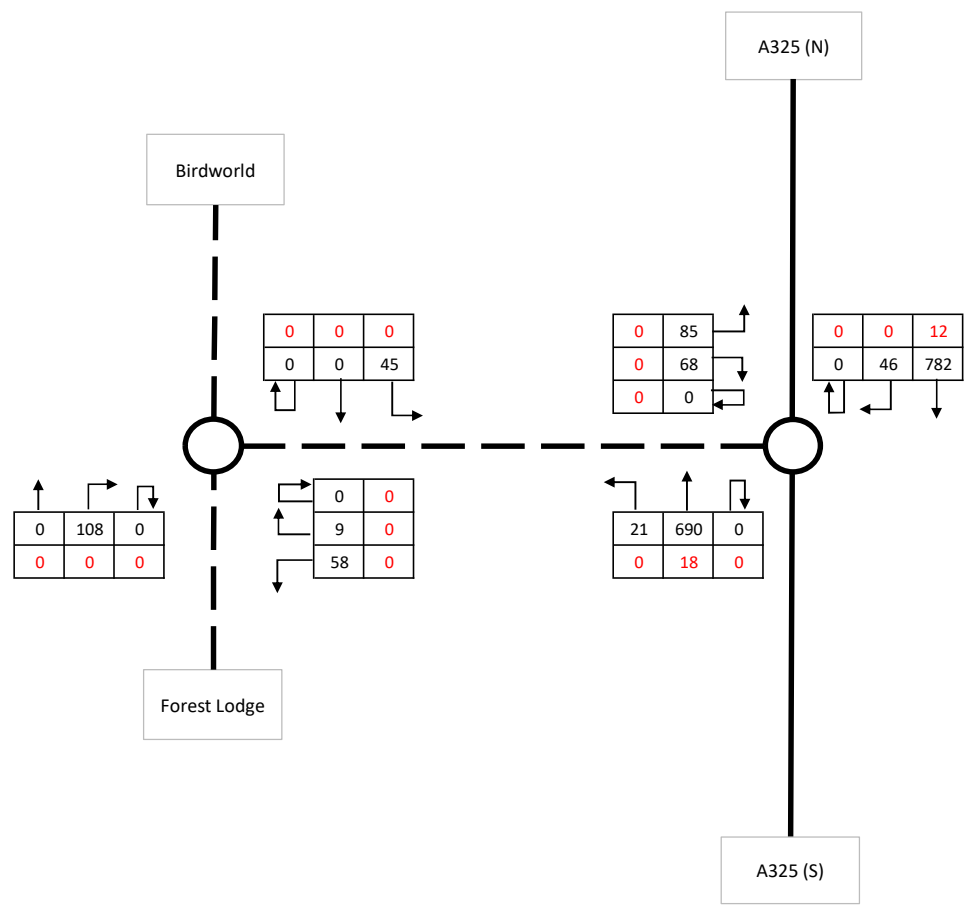
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	Forest Lodge Garden Centre and Birdworld	
	Figure TF37	
	2031 'With Development' (Scenario 2) Saturday Peak Hour (1300 – 1400)	



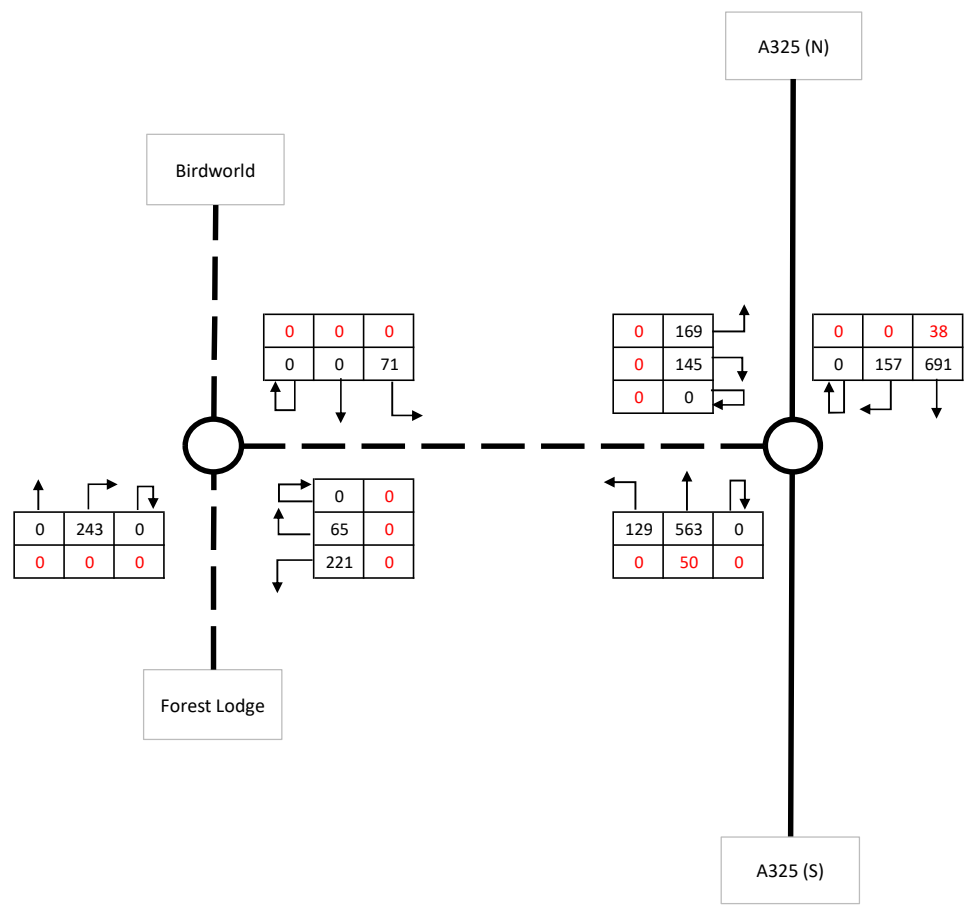
<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF38	
	2031 'With Development' (Scenario 3) Bank Holiday Peak Hour (1115 – 1215)	



<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF39	
	2031 'With Development' (Scenario 4 - Sensitivity Test) Weekday AM Peak Hour (0715 – 0815)	



<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF40	
	2031 'With Development' (Scenario 4 - Sensitivity Test) Weekday PM Peak Hour (1630 – 1730)	



<p><b>KEY</b></p> <p>500 = TOTAL VEHICLES</p> <p>25 = HGVs</p>		The Square, Basing View, Basingstoke, RG21 4EB Tel: 01256 637940 www.i-transport.co.uk
	Forest Lodge Garden Centre and Birdworld	
	Figure TF41	
	2031 'With Development' (Scenario 5 - Sensitivity Test) Saturday Peak Hour (1300 – 1400)	