Planning Application
by Puy du Fou UK
Land North-West of Bicester

TRANSPORT ASSESSMENT

Steer

Document reference: Transport Assessment
Revision: A

August 2025

PUY DU FOU
UNITED KINGDOM

Transport Assessment
August 2025

Land North West of Bicester

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Executive Summary

The Transport Assessment supports an outline planning application for a major new tourism development north west of Bicester, Oxfordshire. The Proposed Development comprises a large-scale, phased leisure destination inspired by the successful Puy du Fou parks in France and Spain, including outdoor and indoor theatres, hotels, restaurants, conference facilities, and supporting infrastructure.

The Site benefits from strong connectivity to the Strategic Road Network (SRN), proximity to two mainline railway stations (Bicester North and Bicester Village), and is well-placed to encourage sustainable travel from both local and regional catchments. The applicant has engaged with all relevant stakeholders and local residents, to inform the transport strategy.

The Proposed Development is vision-led, prioritising sustainable modes of travel and limiting car parking to encourage walking, cycling, and public transport use. The Proposed Development will be delivered in eight phases over approximately ten years, with a comprehensive package of infrastructure improvements and mitigation measures proposed to address both on-Site and off-Site impacts. These include improvements to local Public Rights of Way, a new pedestrian / cycle link between the Site and Bicester adjacent to the B4100, a shuttle bus service between Bicester North, Bicester Village, Bicester Park and Ride and the Site, enhancements to both stations within Bicester and improvements to local bus services including the 500 service between Bicester and Banbury. These sustainable interventions are accompanied by a traffic management plan and targeted highway improvements at key junctions, such as the M40 Junction 9 and 10, and localised improvements aimed at minimising impacts on the local road network.

Traffic modelling has been undertaken using the Bicester Traffic Model (BTM), validated by Oxfordshire County Council (OCC), and represents a robust scenario by assessing the anticipated demand in Year 10 of operation. The assessment demonstrates that the Proposed Development can be accommodated on the local and SRN, with mitigation measures in place, to address identified impacts during the peak season in year 10. The Park's seasonal operating profile, with it only being fully open on 176 days of the year and a build-up in visitor numbers during the year, with peak activity during school holidays and summer months, when traffic is generally lower than typical months, and opening hours outside of the typical peak hours further limits traffic impacts on the network, utilising off peak capacity.

In addition to the identified mitigation package, A Travel Plan and a 'Monitor and Manage' approach, with traffic management plan, will be secured through the S106 agreement. This will be supported by a Sustainable Transport Fund. This will ensure that sustainable transport measures are embedded from the outset and regularly monitored, with agreed trigger points for further intervention if required.

The proposals are fully compliant with local, regional, and national policy, and there are no transport-related reasons to withhold planning permission.

1 Introduction

Introduction

1.1 Steer has been appointed by Puy du Fou United Kingdom Limited (referred to as 'The Applicant') to provide transport and highways advice to support the delivery of a tourism development. This Transport Assessment (TA) has been produced to accompany the outline planning application for the Proposed Development, at land to the north and east of Manor Farm, Bainton Road, Bucknell ('the Site').

Proposed Development

1.2 The development description is as follows:

"Tourism development, including outdoor and indoor theatres, restaurants, hotels, conference facilities, offices, warehousing and storage, security control centre, medical centre, animal facilities (including stables, aviary, animal sheds), laundry facility and workshops, and supporting infrastructure including recycling centre, wastewater treatment facility, energy centre and sub-stations, photovoltaic (PV) solar panels, water storage tanks and pumps, lakes and water management systems, structural landscaping, internal footpaths, internal vehicular routes, active travel routes, parking and access (Outline Masterplan)."

Site Context

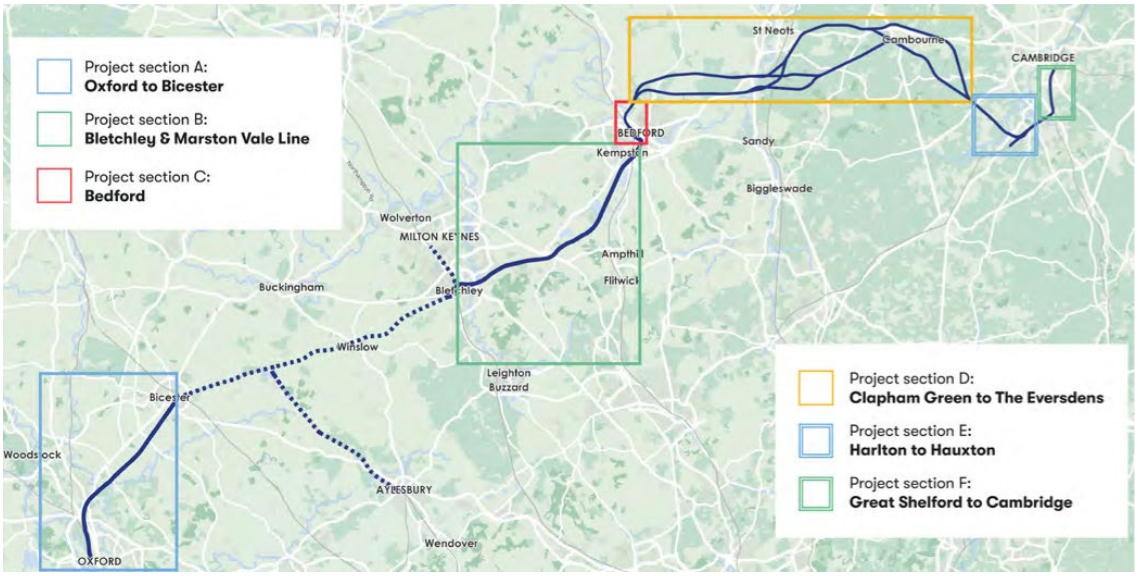
1.3 The Site is approximately 158ha in size and comprises agricultural land and various agricultural buildings at the north-western boundary and on the southern part of the Site. The Site also comprises small areas of woodland situated adjacent to the B4100 and on the south and south-eastern parts of the Site. The Site boundary extends to incorporate a section of the B4100, where highway works are proposed.

1.4 It is located to the north of the village of Bucknell and approximately 3.5km north of Bicester, Oxfordshire. The Site's eastern boundary aligns with the eastern side of the B4100, with agricultural land predominantly running alongside this edge. Approximately 1 kilometre west of the Site's western boundary lies the M40 motorway, which provides strategic road links to Birmingham in the north and London in the south.

1.5 The Site is well connected to existing transport infrastructures including Junction 10 of the M40 (approx. 1km north) providing links to London (approx. 110km south) and Birmingham (approx. 100km north). The Site is well positioned with two train stations, Bicester North Station (approx. 3.5km south-east) and Bicester Village Station (approx. 4.5km south) providing rail links to London Marylebone Station and train stations in Birmingham City Centre. The nearest city to the Site is Oxford which is approximately 20km south-west and easily reached by the surrounding road network, rail services from Bicester Village Station and local bus services.

1.6 There is also the East West Rail (EWR) project, which is a major UK infrastructure initiative aimed at re-establishing a strategic rail link between Oxford and Cambridge, via key locations such as Bicester, Milton Keynes, and Bedford. The Site will benefit from this as Bicester is a key location on the EWR route. The proposal route can be seen in **Figure 1.1**.

Figure 1.1: EWR Proposal



1.7 It is located to the north of the village of Bucknell and approximately 3.5km north of Bicester, Oxfordshire. The eastern boundary of the Site abuts the B4100 and the M40 is located approximately 1km west of the Site's western boundary. The M40 provides road links to Birmingham to the north and London to the south.

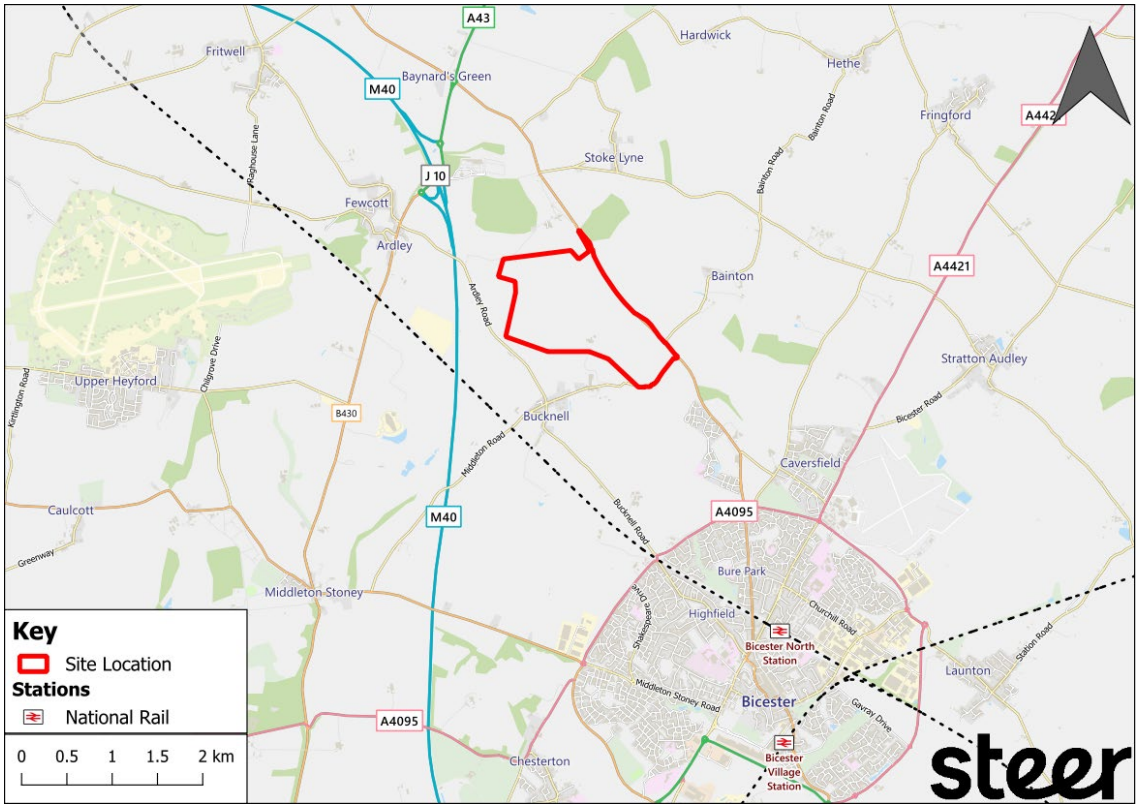
1.8 The Site is located within an area predominantly characterised by farmland which immediately surrounds the Site to the north, south, west and east.

1.9 A large area of woodland, Stoke Wood, is located to the north of the Site with Moto Cherwell Valley services located beyond at Junction 10 of the M40. Ardley Road and the M40 are located to the west. Bucknell village is located to the south and comprises predominantly residential dwellings alongside a small number of services and businesses including Bicester Midwives Hospital, St Peter's Church, a public house and several holiday homes. Open countryside comprising parcels of farmland and areas of woodland extend east of the Site.

1.10 The Site sits wholly within Cherwell District Council (CDC) jurisdiction and the highway authority is Oxfordshire County Council (OCC).

1.11 A Site location plan is provided in **Figure 1.2** and the proposed illustrative masterplan is presented in **Appendix A** (drawing ref. PDF_UK-TCA-DR-AR-01-0101 Rev A).

Figure 1.2: Site Location



Puy du Fou

1.12 Puy du Fou is a globally renowned immersive cultural and historical attraction, first established in western France in 1977. It has since pioneered a distinctive artistic model within the entertainment industry, demonstrated by Puy du Fou France being one of the most popular tourist attractions in France.

1.13 After success with Puy du Fou in France, a second park was opened in 2021 near Toledo in Spain, Puy du Fou España. Following continued success in Spain, Puy du Fou is now seeking to develop a number of sites across the world, and the UK is one of the key destinations as a result of Britain's extensive and interesting history on which the shows will be based.

Vision

1.14 The 'decide and provide' approach to transport planning decides on a preferred vision of the future and then provides the means to work towards that whilst also accommodating uncertainty about the future.

1.15 In line with Vision Led Decide and Provide development principles, and as required by National Highways circular 01/2022, the transport vision for the Site has been set out below.

The Site is well located close to large, and accessible population areas allowing for both visitors and employees to easily access the Site via sustainable travel modes from both the local area and further afield, via Bicester Village and Bicester North railway stations. The transport strategy has been developed to deliver an exemplar mode share, with the promotion of a public transport and cycling mode share in excess of other similar leisure facilities, whilst also being close to the SRN for longer distance visitors. Its close proximity to key SRN junctions, will limit any highways impacts on local roads.

Measures both on and off Site will improve facilities for pedestrians and cyclists, while a comprehensive public transport package is in place, alignment with incentives and continual monitoring and promotion of sustainable travel opportunities which will help to minimise vehicular traffic to and from the Site and also assisting the authorities and National Highways aims of reducing car-based tips within the immediate vicinity of the Site and on the SRN.

The Applicant supports the national, regional and local guidance and best practice which seeks to shift away from planning for vehicles, towards planning for people and places, e.g. a Vision Led approach based on Decide and Provide principles, rather than an outdated approach of predict and provide which is no longer supported by policy.

1.16 Transport considerations have been embedded in the design process from the outset and have informed the evolution of the Proposed Development at each stage. The layout, access arrangements, and supporting infrastructure have been shaped by the findings of transport studies and ongoing discussions with stakeholders, ensuring that the scheme responds appropriately to forecast travel demand and network capacity. This iterative approach has enabled transport matters to be fully integrated into the Proposed Development's overall design, ensuring a comprehensive and sustainable solution.

Pre-Application Engagement and Consultation

1.17 Since early 2024, Steer has regularly engaged with CDC, OCC, and National Highway (NH) and other key stakeholders such as Chiltern Rail, East West Rail, Oxford Bus, Stagecoach, and Bicester Bug to discuss the Proposed Development and detailed matters relating to sustainable transport and modelling. This is in addition to numerous meetings with local interest groups, Parishes and resident group, and regional and national bodies such as the Department for Transport and England's Economic Heartland.

1.18 Thematic transport-specific meetings have been held with OCC and NH since June 2024. These were informed by a Transport Scoping Report, and written advice was provided by OCC and NH.

1.19 Feedback was also received from local residents and key stakeholders at two public consultations (July 2024 and February 2025), and from consultees as part of the Environmental Impact Assessment (EIA) Scoping Opinion.

1.20 The feedback and advice received has been considered as part of this Transport Assessment and in the design of the Proposed Development.

Report Structure

1.21 The remainder of this Transport Assessment is structured as follows:

- **Chapter 2 – Policy and Guidance Context**: Summarises local, regional, and national planning policies and guidance which have informed the design of the Proposed Development and the Transport Assessment approach.
- **Chapter 3 – Baseline Conditions**: Reviews existing transport networks with a focus on accessibility by non-car modes.
- **Chapter 4 – Development Proposals**: Details the development proposals, associated access arrangements and car parking.
- **Chapter 5 – Visitor and Staff Numbers**: Summarises the visitor and staff trip generation.
- **Chapter 6 – Visitor and Staff Trip Distribution**: Summarises the distribution of visitor and staff trips.
- **Chapter 7 – Mode Share Analysis**: Presents the future mobility baseline mode shares and the proposed travel demand management strategy that would be in place to monitor and manage transport-related impacts of the Proposed Development.
- **Chapter 8 – Arrival and Departure Profiles**: Summarises expected arrival and departure patterns for visitors and staff across different times and days.
- **Chapter 9 – Traffic Assessment Methodology**: Details the development flows and the modelling methodology.
- **Chapter 10 – Public Transport Strategy**: Sets out the public transport strategy, including the rail and bus strategies.
- **Chapter 11 – Walking and Cycling Strategy**: Summarises the walking and cycling strategy including planned and proposed infrastructure improvements.
- **Chapter 12 – Vehicle Access Strategy:** Sets out the access strategy.
- **Chapter 13 – Parking Strategy**: Details the parking strategy with regard to car parking, bus and coach parking, and off-Site parking.
- **Chapter 14 – Highway Impact**: Presents the highway impact assessment, including local junction modelling, and strategic modelling assessments.
- **Chapter 15 – Travel Demand Strategy**: Sets out the transport challenges and opportunities, along with the travel demand management measures.
- **Chapter 16 – Construction Traffic Management Plan**: Summarises how construction traffic will be managed throughout the construction period.
- **Chapter 17 – Delivery and Servicing Plan**: Summarises the delivery and servicing strategy proposed at the Site.
- **Chapter 18 – Travel Plan:** Summarises measures to promote sustainable travel and monitor transport impacts.
- **Chapter 19 – Mitigation Strategy:** Summarises the adopted mitigation strategy.
- **Chapter 20 – Summary and Conclusion:** Summarises and concludes the Transport Assessment.

2 Policy Context

Overview

2.1 This chapter provides a summary of transport-related national, regional and local planning policy and guidance relevant to the Planning Application and which has informed the preparation of this report and the design of the Proposed Development.

National Policy and Guidance

National Planning Policy Framework (2024)

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

2.3 The specific transport policies are contained within Section 9 of the NPPF. The transport objectives include promoting walking, cycling and public transport and addressing the potential impacts of development on the transport network. These objectives should be managed with development *"focused on locations which are or can be made sustainable ... offering a genuine choice of transport modes"* (paragraph 110). Whilst acknowledging that *"opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making" (paragraph 110)*.

2.4 In terms of land-use planning, the NPPF encourages the effective use of land by reusing land that has been previously developed (provided it is not of high environmental value). It also explains that land use planning should actively manage patterns of growth to make the fullest use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.

2.5 Paragraph 109 states that transport issues should be considered from the earliest stages of development proposals, using a "vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places".

2.6 The NPPF glossary defines a 'vision-led approach' as "an approach to transport planning based on setting outcomes for a development based on achieving well-designed, sustainable and popular places, and providing the transport solutions to deliver those outcomes as opposed to predicting future demand to provide capacity (often referred to as 'predict and provide')."

2.8 Paragraph 115 states:

a. *"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*
b. *sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;*
c. *safe and suitable access to the site can be achieved for all users;*
d. *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*
e. *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 through a vision-led approach"*

2.9 Paragraph 116 continues:

"Development should only be prevented or refuse on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe, taking into account all reasonable future scenarios"

2.10 Within the above context, Paragraph 117 states that planning applications 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 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; and*
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."*

2.11 Paragraph 118 states the need for Travel Plans and Transport Statements / Assessments for all developments which will generate significant amounts of movement.

2.12 Paragraph 58 confirms that, planning obligations must only be sought where they meet all of the following tests:

a. *necessary to make the development acceptable in planning terms;*
b. *directly related to the development; and*
c. *fairly and reasonably related in scale and kind to the development."*

Planning Practice Guidance 'Travel Plans, Transport Assessments and Statements in Decision-Making' (2017)

2.13 Planning Practice Guidance (PPG) provides advice on when Travel Plans, Transport Assessments and Statements are required, and what they should contain. The Guidance is regularly updated, with the latest update being in July 2017.

2.14 Transport Assessments and Statements are a means of assessing the potential transport impacts of developments, and they propose mitigation measures to promote sustainable developments. Transport Assessments are thorough assessments of the transport implications of development, and Transport Statements are a 'lighter touch' evaluation to be used where this would be more proportionate to the potential impact of the development.

2.15 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 NPPF.

Department for Transport Circular 01/2022: Strategic Road Network and the Delivery of Sustainable Development (2022)

2.16 The DfT Circular 01/2022 "sets out the way in which the DfT will engage with the development industry, public bodies and communities to assist the delivery of sustainable development".

2.17 In particular, Circular 01/2022 states a "*new development should be facilitating a reduction in the need to travel by private car and focused on locations that are or can be made sustainable. In this regard, recent research on the location of development found that walking times between new homes and a range of key amenities regularly exceeded 30 minutes, reinforcing car dependency. Developments in the right places and served by the right sustainable infrastructure delivered alongside or ahead of occupancy must be a key consideration when planning for growth in all local authority areas*".

2.18 Transport assessments "*should start with a vision of what the development is seeking to achieve and then test a set of scenarios to determine the optimum design and transport infrastructure to realise this vision. Where such development has not been identified in an up-to-date development plan (or an emerging plan that is at an advanced stage), developers should demonstrate that the development would be located in an area of high accessibility by sustainable transport modes and would not create a significant constraint to the delivery of any planned improvements to the transport network or allocated sites*".

2.19 The circular goes on to set out requirements in relation to network traffic assessments, which have been followed, as set out later in this Transport Assessment.

Decarbonising Transport (2021)

2.20 The DfT published 'Decarbonising Transport' in 2021. The plan sets out how the UK's transport system will need to change to achieve the net zero emissions target by 2050.

2.21 The strategic priorities of the plan are:

- *"Accelerating modal shift to public and active transport*
- *Decarbonising road transport*
- *Decarbonising how we get our goods*
- *UK as a hub for green transport technology and innovation*
- *Place-based solutions to emissions reduction*
- *Reducing carbon in a global economy"*
- The aims for modal shift set out in the plan include:
  - Half of all journeys in towns and cities to be walked or cycled by 2023
  - England will have a world-class cycling and walking network by 2040
  - Double cycling stages (from 2013 baseline) by 2025
  - Modernise fare ticketing and retail to encourage a shift to rail and cleaner and greener transport journeys
  - Improve rail journey connectivity with walking, cycling and other modes of transport
  - Support demand for zero-emission vehicles through a package of financial and non-financial incentive
  - Ensure that the UK's charging infrastructure network meets the demands of its users
  - Transforming 'last mile' deliveries
  - Increase average road vehicle occupancy by 2030
  - Support car clubs to go fully zero-emission

Active Design (2023)

2.22 From 1 June 2023, Active Travel England (ATE) became a statutory consultee for planning applications of more than 150 residential units, 7,500 sqm of office or 5 hectares of development land (outside of London).

2.23 Sport England, alongside ATE and the Office for Health Improvement and Disparities, published 'Active Design' which provides applicable guidance on how development proposals should be designed to encourage more physically active and healthy lives through creating active environments. The document sets out ten principles of active design, as follows:

1. Activity for all – design should support all ages, ethnicities, genders and abilities
2. Walkable communities – essential and recreational facilities should be within walking distance of the development
3. Providing connected active travel routes – active travel networks should be continuous and easy to use
4. Mixing uses and co-locating facilities – places with multiple land uses are more likely to attract linked active travel trips
5. Network of multi-functional open spaces – provision of open spaces should be made across cities, towns and villages

6. High-quality streets and spaces – streets and outdoor public spaces should be safe, attractive, functional, prioritise people and able to host a mix of uses, with durable, high-quality materials, street furniture in the right places and easy-to-use signage
7. Providing activity infrastructure – infrastructure should enable sport, recreation and physical activity
8. Active buildings, inside and out – buildings should be designed with physical activity at the forefront
9. Maintaining high-quality flexible spaces – spaces and facilities should be managed and maintained to support physical activity
10. Activating spaces – encouraging the use of spaces and facilities should be an active commitment

Local Transport Note 1/20 'Cycle Infrastructure Design' (LTN 1/20) (2020)

2.24 The Government's Gear Change and Local Transport Note 1/20 'Cycle Infrastructure Design' (LTN 1/20) set out a step-change in the expectations for the quality of walking and cycling infrastructure across England.

2.25 It will be critical for the masterplan to provide appropriate, high-quality walking and cycling infrastructure internally within each parcel, between the parcels and externally to the local area.

2.26 LTN 1/20 sets out that cycling networks and routes should be coherent, direct, safe, comfortable and attractive. Cycles must be treated as vehicles, not sharing space with pedestrians, and segregated from motorised traffic were dictated by traffic speeds and flows.

2.27 Cycle parking should be high-quality, secure and convenient at each trip origin and destination. It should cater for a range of journey purposes and types of cycles.

Regional Policy and Guidance

Cherwell Local Plan Review 2042 – Proposed Submission Plan (Regulation 19) (December 2024)

2.28 The Cherwell Local Plan is a land use/spatial plan that outlines a vision and strategy to address Cherwell's needs, protect its environment, and promote sustainable development.

2.29 The Cherwell Local Plan sets to ensure a series of visions including:

"The Plan has supported a sustainable, flexible and resilient economy that is vibrant, inclusive with good transport links and sound infrastructure, supported by excellent educational facilities to foster the workforce skills required for the future. The economy has grown to provide more diverse employment for our increasing population and reduce the need for our residents to travel outside the district for work."

2.30 The Plan sets out three overarching themes: Meeting the challenge of Climate Change and Ensuring Sustainable Development; Maintaining and Developing a Sustainable Local Economy; and Building Healthy and Sustainable Communities. As part of these themes, strategic objectives related to transport include:

- SO6: Prioritise active travel and increase the attraction of, and opportunities for public transport, ensuring high standards of connectivity and accessibility to services for all. Reduce dependency on the private car as a mode of travel, facilitating the creation of a net-zero-carbon transport network.
- SO8: Increase education, training and skills, and encourage investment in the local workforce; improve and enhance digital connectivity and infrastructure, to support a sustainable and resilient economy, reduce inequality and help to reduce unnecessary transport.
- SO9: Strengthen the role of Cherwell's urban centres, redevelopment and renewal where appropriate to maintain and enhance their vitality, viability, distinctiveness and safety.
- SO12: Create sustainable, well-designed, safe, distinctive places where healthy behaviours (being active, having opportunities to access a healthy diet, and having good social connections) are the norm and which provide a sense of belonging, safety, and community.
- SO15: Provide sufficient accessible, well maintained good quality services, facilities and infrastructure, to meet healthcare, education, transport, open space, sport, recreation, cultural, social and other community needs.

2.31 The scheme refers to Bicester whereby there are distinct spatial strategies proposed. These state that the Local Plan will:

- Deliver committed development and be the focus for additional development reflecting the town's on-going growth and transformation as a sustainable Garden Town and its regional and sub-regional location on the Oxford-Cambridge Corridor and East-West Rail route
- Continue to maximise the benefits of having key international and national
- destinations and economic activity to support further business investment
- Support the continued improvement of the town's centre, its facilities, its public realm and 'green' environment
- Resolve transport connectivity and infrastructure challenges and encourage active travel

Local Policy and Guidance

Oxfordshire Local Transport and Connectivity Plan 4 (LTCP5) (2022)

2.32 The Oxfordshire Local Transport and Connectivity Plan 5 was adopted by OCC in July 2022. It is their version of a Local Transport Plan and superseded the previous LTP4. It outlines OCC's long-term vision for transport and travel in the county and identifies key themes which transport policy and intervention should target:

- The environment: reduce emissions and enhance the natural and historic landscape
- Public health and wellbeing: promote active travel and improve road safety
- Healthy place shaping: create communities where healthy behaviours are the norm
- Productivity: develop a world-leading sustainable business base that has new jobs and is supported by a net-zero transport network
- Connectivity: improve mobility across all communities, enabling greater choice and seamless interchange between sustainable modes
- Inclusivity: remove barriers to access for all, increasing independence, choice and control

2.33 To help ensure these target themes are met, the LTCP5 has identified a set of headline targets:

2.34 By 2030 their targets are to:

- Replace or remove 1 out of every 4 current car trips in Oxfordshire
  - Reduce car vehicle miles driven in Oxfordshire by 20%
  - Increase the number of cycle trips in Oxfordshire from 600,000 to 1 million cycle trips per week
  - Reduce road fatalities or serious injuries by 50%
- By 2040 their targets are to:
  - Deliver a net-zero transport network
  - Replace or remove an additional 1 out of 3 car trips in Oxfordshire
- By 2050 their targets are to:
  - Have zero, or as close as possible, road fatalities or serious injuries
  - Deliver a transport network that contributes to a climate positive future

2.35 OCC seek to achieve this by plan to achieve this by; reducing the need to travel, discouraging individual private vehicle journeys and making walking, cycling, public and shared transport the natural first choice.

2.36 These targets will be implemented through a series of avenues including, the delivery of physical infrastructure and services, influencing development, changes to the Council's decision-making processes and incorporation with other highway works.

2.37 As set out in the LTCP, one of the significant elements of realising these aims will be to make the shift from an approach to transport planning characterised as 'predict and provide' towards adopting a 'decide and provide' approach instead.

Oxfordshire Bus Service Improvement Plan (June 2024)

2.38 The OCC Bus Service Improvement Plan (BSIP), first published in October 2021, sets out key long-term ambitions for improving the local bus network and how these will be achieved. The latest version of the BSIP was approved by Cabinet on 18 June 2024.

2.39 The BSIP outlines OCC's bus vision of:

"a transformed, modern, and environmentally friendly bus network, which supports high quality economic growth across Oxfordshire, reduces congestion and emissions, and makes our county a better place to live for a growing population."

2.40 OCC's key BSIP goals for buses are to:

1. keep buses at the heart of decision-making
2. make buses faster and more reliable
3. upgrade and improve bus infrastructure; transform the image of buses
4. make buses easier to access and understand

2.41 The identified improvements include:

- Bus priority infrastructure; traffic filters and bus gates; bus priority lanes; signal and junction improvements/re-prioritisation
- Other bus infrastructure; countywide RTPI displays; zero emission buses; autonomous bus trials; improvements to stops and shelters
- Bus service support; increased funding support especially for new and improved routes

- Fares and ticketing support; park & ride combined ticket; discounted youth ticket; £1 Sunday tickets; free staff travel

Bicester Local Cycling and Walking Infrastructure Plan (LCWIP) (2020)

2.42 The Bicester Local Cycling and Walking Infrastructure Plan (LCWIP) was adopted in 2020, and is a 10-year plan to improve and increase walking and cycling. The year 2031 aligns with the adopted Cherwell Local Plan which establishes the development framework for Bicester's expansion, and forms the basis for the LCWIP targets.

2.43 The LCWIP identifies five key factors for promoting and increasing cycling:

1. *"A high-density urban realm with accessible destinations which creates and encourages short journeys*
2. *A cycle network which is identifiable, visible, high quality, comprehensive and town-wide*
3. *Traffic management measures such as road closures, restricted road capacity and the cost of parking which gives comparative advantage to cycling*
4. *A cultural norm among the local population which supports and promotes cycling so that people increasingly build their lives round cycling for local journeys*
5. *Council commitment at all levels to increase cycling as a policy priority."*

Oxford Local Cycling and Walking Infrastructure Plan (LCWIP) (2020)

2.44 OCC's Local Cycling and Walking Infrastructure Plan (LCWIP) was adopted in 2020 and sets out a series of measures and programmes to achieve a transformational change in levels of cycling and the attractiveness of walking in Oxford.

2.45 The LCWIP aims to enhance active travel across the county by developing a comprehensive network of cycling and walking routes. The plan focuses on improving safety, connectivity, and accessibility for cyclists and pedestrians, promoting healthier and more sustainable travel options. Key objectives include reducing car dependency, increasing the number of people walking and cycling, and integrating active travel with public transport.

2.46 The LCWIP sets out 8 pillars of change which are fundamental to achieving a step change in cycling levels and improvements in walking. These are:

- Comprehensive Cycle Network: Develop a dual choice network of 'Quick' and 'Quiet' routes to cater to different cycling preferences
- Low Traffic Neighbourhoods: Implement measures to reduce traffic in residential areas, encouraging walking and cycling
- City Centre Control Points: Introduce control points to manage traffic flow and promote cycling in the city centre
- Workplace Levy Charge: Implement a levy charge for businesses to incentivize reduced car use and fund cycling improvements
- Traffic Speed Enforcement: Enforce speed limits to improve safety for cyclists and pedestrians
- City Centre Public Realm Improvements: Enhance the public realm in the city centre to make it more pedestrian-friendly
- Controlled Parking Zones (CPZs): Extend CPZs to remove obstructive parking and improve walking routes

- Quality Pedestrian Corridors: Develop corridors along main roads with improved road crossings and pedestrian priority measures

Oxfordshire Mobility Hub Strategy

2.47 The Oxfordshire Mobility Hub Strategy, first published in July 2023, outlines the development of a network of mobility hubs to improve multi-modal travel. This strategy is key to implementing the Local Transport and Connectivity Plan (LTCP), particularly policies 22 and 23, which propose making multi-modal travel a central option for transport planning.

2.48 The Oxfordshire Mobility Hub Strategy outlines some essential criteria for all mobility hubs in Oxfordshire. These state that mobility hubs must:

- facilitate transport interchange between at least two transport mode options
- have at least one element from each of the 4 element groups
- have visual, social and community appeal
- accessible and understandable to all

2.49 The key benefits of the mobility hubs are that they will:

- Support Sustainable Transport Modes: Prioritizing sustainable transport modes to improve health and well-being of residents
- Integrated Public Transport Network: Supporting the development of an integrated and inclusive public transport network
- Affordable and Flexible Transport System: Developing an inclusive, affordable, and flexible transport system

EV Infrastructure Strategy

2.50 The Oxfordshire Electric Vehicle Infrastructure Strategy (OEVIS), published in Jully 2022, sets out the policies and plans to realise the vision for EV charging in Oxfordshire. It aims to ensure that residents, businesses, and visitors have access to convenient and reliable EV charging infrastructure.

2.51 The OEVIS's will provide an operational approach to enabling and deploying charging infrastructure in Oxfordshire. In the short-term (2020-2025), the objectives are to:

- Enable and deliver public EV charging across Oxfordshire
- Adopt a common approach to managing EV charging in Council car parks
- Enable residents without access to private off-road parking to access a range of options for EV charging
- Encourage new developments to include high quality EV charging infrastructure
- Set standards for the quality of public EV charging in Oxfordshire which supports development of a network which is high quality, open and accessible

Oxford Transport Strategy

2.52 The Oxford Transport Strategy is a detailed plan aimed at improving transportation in Oxford and the surrounding areas. It focuses on enhancing public transport services, promoting active travel, and reducing car dependency.

2.53 Key elements include the development of new bus routes, the integration of various transport modes, and the implementation of demand-responsive services to better serve rural and underserved areas.

2.54 The strategy emphasizes the importance of decarbonizing transport, improving connectivity, and supporting sustainable economic growth.

2.55 The Strategy aims to:

- Support economic growth by connecting people and jobs
- Ensure business sectors are well connected to each other
- Provide effective travel choices for all movements into and within the city
- Promote low congestion transport modes
- Focus development in locations to minimise travel needs and encourage sustainable modes
- Provide a fully accessible transport network for all users
- Provide an accessible city centre with a world class experience
- Tackle the causes of transport related noise and poor air quality

Active Travel Strategy

2.56 The Oxfordshire Active Travel Strategy was published in July 2022 and aims to promote walking, wheeling, and cycling as primary modes of transport across the county.

2.57 The strategy focuses on improving safety, connectivity, and accessibility for active travel, reducing car dependency, and integrating active travel with public transport. It also emphasizes the importance of supporting health and wellbeing, addressing the climate crisis, and enhancing the public realm.

2.58 In order to achieve this, the Council identified 5 priorities:

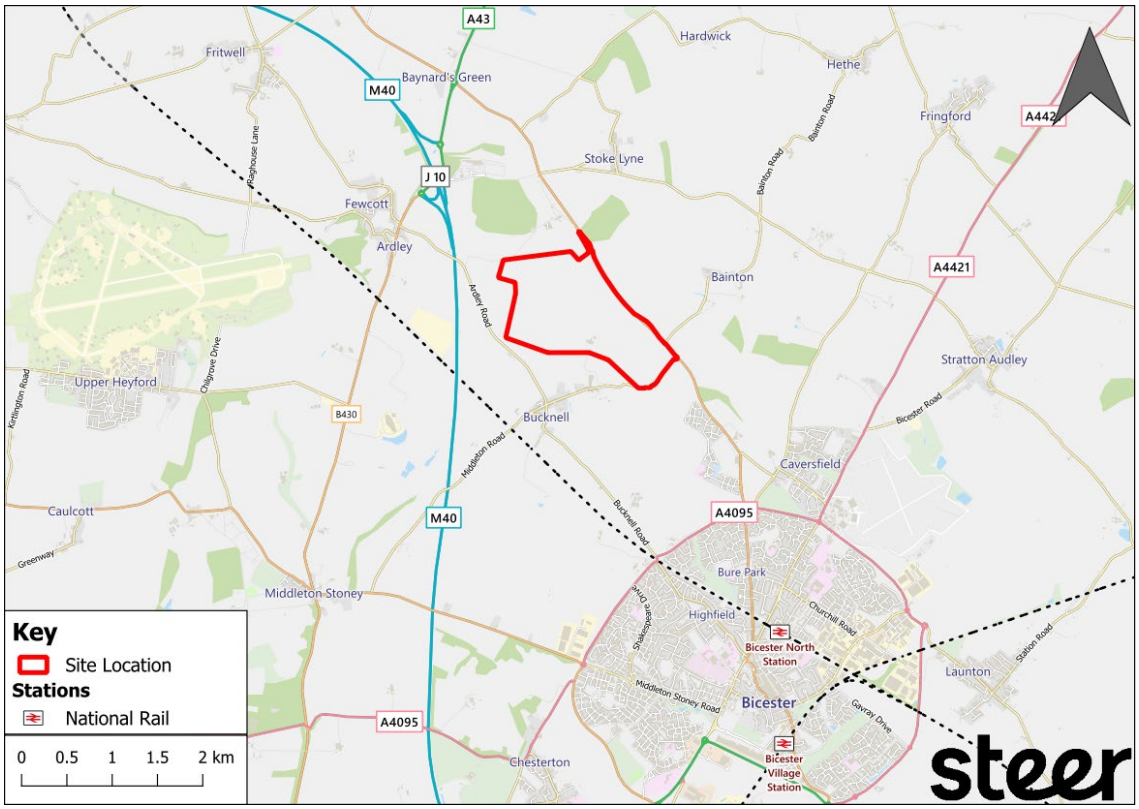
- Commitment and governance – a clear promise at all levels across the council to treat walking and cycling as a policy priority
- Walkable communities – a compact urban realm with easy to reach destinations on foot and by cycle
- Inclusive cycle networks – that are safe, identifiable, visible, comprehensive and of high quality, including links across towns and villages
- Managing motor traffic – through measures such as modal filters, reducing traffic speeds, reducing road capacity and increasing the cost of parking
- Building the cultural norm – a local social consensus and practice that supports and promotes walking and cycling and enables residents build their lives around active travel modes for local journey

3 Baseline Conditions

Site Description

3.1 The location of the Site and its surrounding context are presented in **Figure 3.1**. The Site is circa 3km north of Bicester, near the village of Bucknell.

Figure 3.1: Site Location



3.2 The Site is approximately 158ha in size and comprises agricultural land and various agricultural buildings at the north-western boundary and on the southern part of the Site. The Site also comprises small areas of woodland situated adjacent to the B4100 and on the south and south-eastern parts of the Site. The Site boundary extends to incorporate a section of the B4100, where highway works are proposed.

3.3 It is located to the north of the village of Bucknell and approximately 3.5km north of Bicester, Oxfordshire. The Site's eastern boundary aligns with the eastern side of the B4100, with agricultural land predominantly running alongside this edge. Approximately 1 kilometre west of the Site's western boundary lies the M40 motorway, which provides strategic road links to Birmingham in the north and London in the south.

3.4 The Site is well connected to existing transport infrastructures including Junction 10 of the M40 (approx. 1km north) providing links to London (approx. 110km south) and Birmingham (approx. 100km north). The Site is well positioned with two train stations, Bicester North Station (approx. 3.5km south-east) and Bicester Village Station (approx. 4.5km south) providing rail links to London Marylebone Station and train stations in Birmingham City Centre. The nearest city to the Site is Oxford which is approximately 20km south-west and easily reached by the surrounding road network, rail services from Bicester Village Station and local bus services.

3.5 The Site is well connected to existing transport infrastructures including Junction 10 of the M40 (approx. 1km north) providing links to London (approx. 110km south) and Birmingham (approx. 100km north). The Site is well positioned with two train stations, Bicester North Station (approx. 3.5km south-east) and Bicester Village Station (approx. 4.5km south) providing rail links to London Marylebone Station and train stations in Birmingham City Centre. The nearest city to the Site is Oxford which is approximately 20km south-west and easily reached by the surrounding road network, rail services from Bicester Village Station and local bus services.

3.6 The Site is located within an area predominantly characterised by farmland which immediately surrounds the Site to the north, south, west and east.

3.7 A large area of woodland, Stoke Wood, is located to the north of the Site with Moto Cherwell Valley services located beyond at Junction 10 of the M40. Ardley Road and the M40 are located to the west. Bucknell village is located to the south and comprises predominantly residential dwellings alongside a small number of services and businesses including Bicester Midwives Hospital, St Peter's Church, a public house and several holiday homes. Open countryside comprising parcels of farmland and areas of woodland extend east of the Site.

3.8 The Site benefits from good proximity to existing residences and local amenities at the Cherwell Valley service station, which includes a petrol station (ESSO), and a host of restaurants and shops, and a Travelodge hotel.

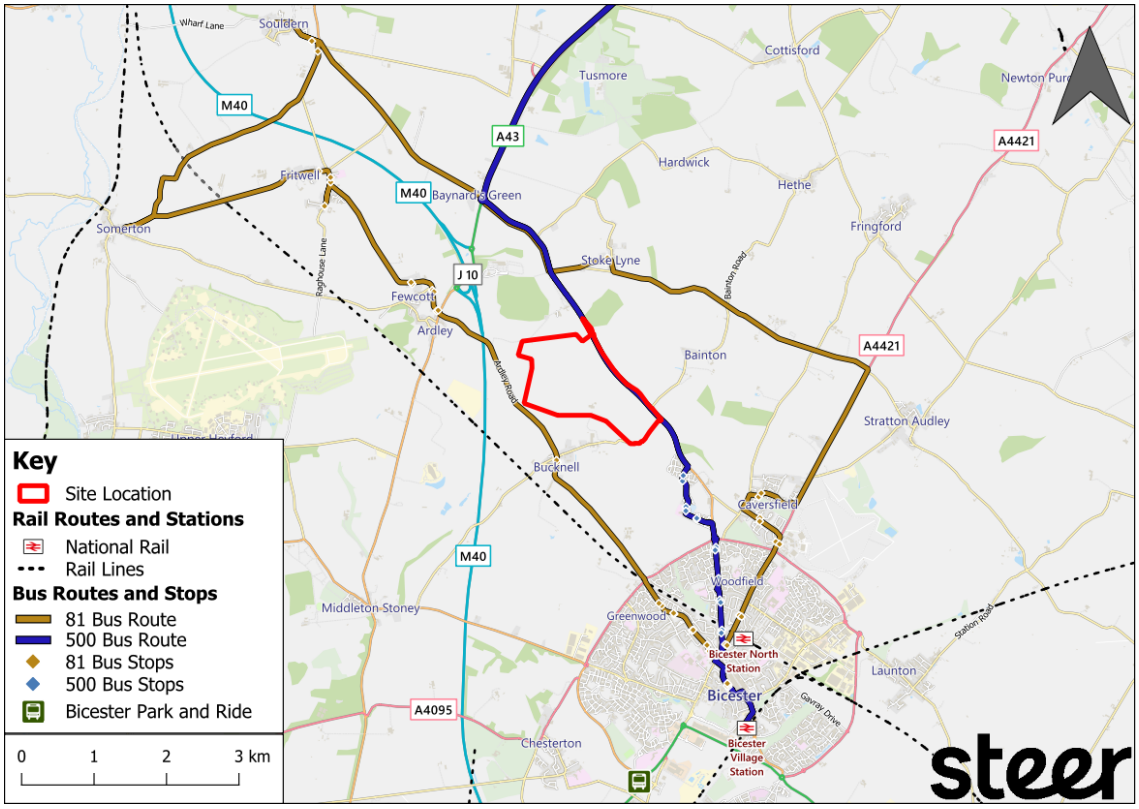
Existing Site Uses

3.9 The Site currently consists of predominantly undeveloped farmland, with small areas of woodland. The woodland areas are Great Copse, Nettle Copse, Twelve Acre Copse, and Kilby's Copse which only partly sits within the red line boundary. There are two small farm-related sites, consisting of barns and other various outbuildings.

Existing Public Transport Network

3.10 A public transport network map can be seen in **Figure 3.2**.

Figure 3.2: Existing Public Transport Network



Bus

3.11 The Site has limited accessibility to public bus services. The 500 service, run by Stagecoach, runs between Banbury and Bicester via Brackley, with part of the route travelling on the B4100 in the vicinity of the Site. However, the nearest stop is at Braeburn Avenue, some 2.5km to the south of the Site. The service generally runs on an hourly basis between 05:50 (leaving Banbury) and 18:40 (last bus into Bicester), and less frequently thereafter, with the last service between Banbury and Brackley at 23:00.

3.12 Bus route 81, provides a circular route between Bicester and Souldern, with stops in Bucknell, some 3km from the Site as well as in Ardley. There are two services in the morning and three in the afternoon. Morning services route southbound towards Bucknell and afternoon services route northbound towards Souldern.

3.13 Other services are available from further afield, including a range of buses that serve Bicester.

3.14 Key services and routes are presented in **Table 3.1**. The bus route map is shown in **Figure 10.2**.

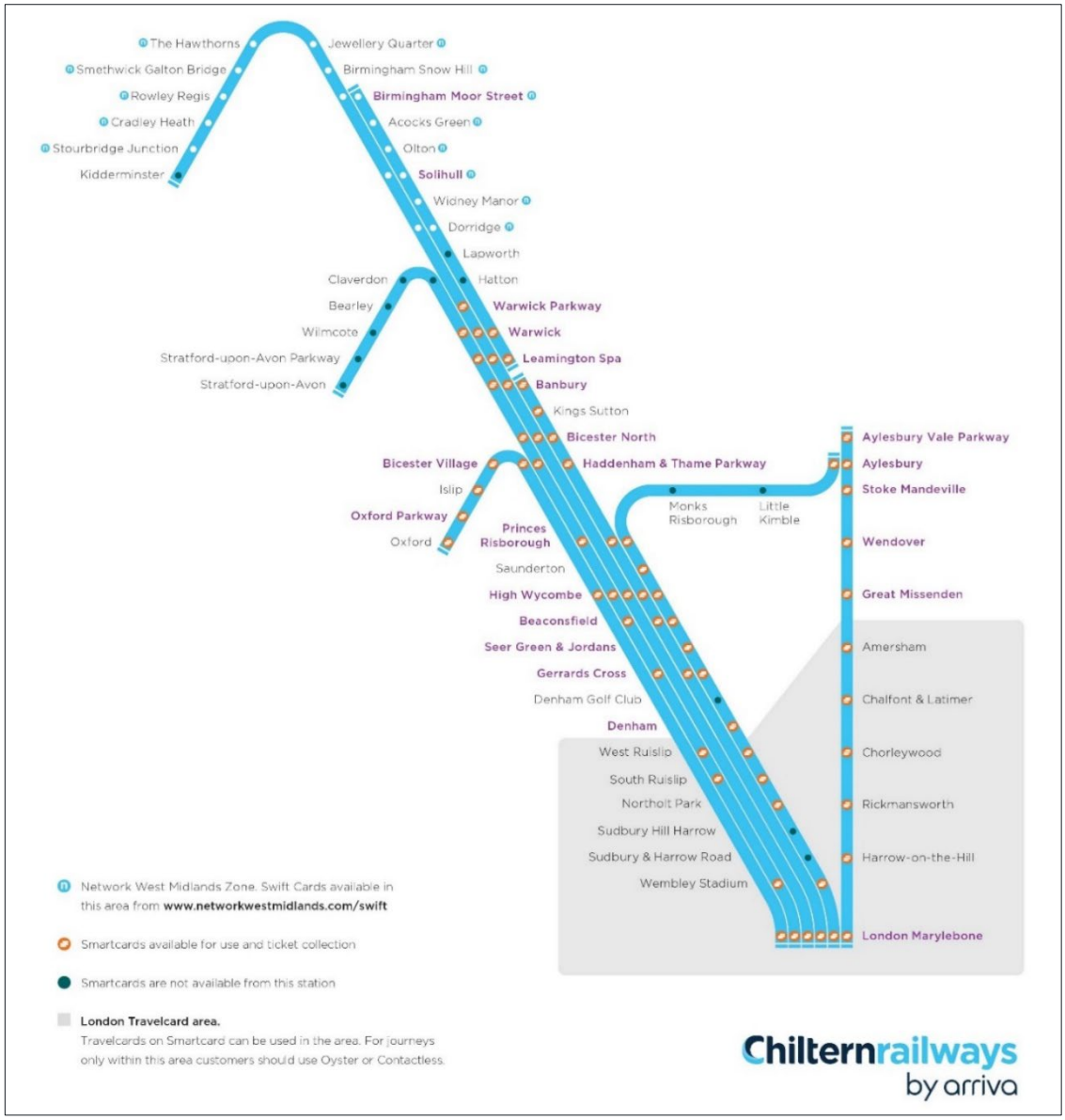
Table 3.1: Existing Bus Services

Service	Route	Typical Frequency		
		Mon - Fri	Sat	Sun
X5	Bedford – Oxford	Every 30 minutes	Every 1 hour	Every 1 hour
17	Aylesbury – Bicester	Every 2 hours	Every 2 hours	No service
18	Buckingham – Bicester	Every 2-3 hours	Every 2-3 hours	No service
24	Bicester – Oxford	Every 2-3 hours	Every 2-3 hours	No service
25	Lower Heyford – Bicester	Every 1 hour	Every 1 hour	No service
26	Kingsmere – Bicester	Every 30 minutes	Every 30 minutes	No service
107	Oddington – Bicester	1 per day (Fridays only)	No service	No service
108	Oxford – Bicester	2 per day	2 per day	No service
500	Banbury – Bicester	Every 1 hour	Every 1 hour	No service
S5	Oxford – Bicester	Every 30 minutes	Every 30 minutes	Every 30 minutes

Rail

3.15 The nearest stations are Bicester North Station (approx. 3.5km southeast) and Bicester Village Station (approx. 4.5km south). These can each be reached within an 8 to 11-minute drive.

Figure 3.3: Chiltern Railways Network Map



3.16 Chiltern Railways operate services to both stations. Bicester Village is located on the London-Oxford branch and Bicester North is located on the London-Birmingham branch.

3.17 The full set of timetable and capacity data is available in **Appendix B**, with a summary of the number of services set out in **Table 3.2** for Bicester North and **Table 3.3** for Bicester Village.

3.18 As mentioned, Bicester Village station is a key destination on the EWR route. Sections of the route are forecast to be operational in 2025. This route will be a key aspect of the baseline capacity.

Table 3.2: Summary of Chiltern Railways' timetabled services at Bicester North (as of January 2025)

	Number of Northbound Services towards Birmingham			Number of Southbound Services towards London		
	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
00:00-01:00	-	2	1	-	-	-
01:00-02:00	1	1	-	-	-	-
02:00-07:00	2	1	-	4	2	-
07:00-08:00	2	1	-	2	2	-
08:00-09:00	2	1	1	2	2	2
09:00-10:00	2	1	1	2	2	1
10:00-11:00	2	2	1	2	2	2
11:00-12:00	2	1	1	2	1	2
12:00-13:00	2	1	1	2	1	2
13:00-14:00	2	2	2	2	2	1
14:00-15:00	2	1	1	2	1	1
15:00-16:00	2	1	1	2	1	1
16:00-17:00	2	2	1	2	2	2
17:00-18:00	2	2	1	2	1	1
18:00-19:00	2	2	2	2	1	1
19:00-20:00	2	2	2	1	2	1
20:00-21:00	2	2	1	1	2	-
21:00-22:00	2	2	1	1	1	1
22:00-23:00	1	1	1	2	1	1
23:00-00:00	2	1	1	-	-	-
Total	**36**	**29**	**20**	**33**	**26**	**19**

Table 3.3: Summary of Chiltern Railways' timetabled services at Bicester Village (as of January 2025)

	Number of North/Westbound Services towards Oxford			Number of Southbound Services towards London		
	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
00:00-01:00	2	2	1	-	-	-
01:00-02:00	-	-	-	-	-	-
02:00-07:00	2	-	-	3	1	-
07:00-08:00	2	2	1	1	2	1
08:00-09:00	2	2	1	4	2	2
09:00-10:00	2	2	2	1	2	2
10:00-11:00	2	2	2	2	2	2
11:00-12:00	2	2	2	2	2	2
12:00-13:00	2	2	2	2	2	2
13:00-14:00	2	2	2	2	2	2
14:00-15:00	2	2	2	2	2	2
15:00-16:00	2	2	2	2	2	2
16:00-17:00	2	2	2	2	2	2
17:00-18:00	2	2	2	2	2	2
18:00-19:00	2	2	2	2	2	2
19:00-20:00	2	2	2	2	2	2
20:00-21:00	2	2	2	2	2	2
21:00-22:00	2	2	2	2	2	2
22:00-23:00	2	2	2	2	1	1
23:00-00:00	2	1	1	2	-	-
Total	**38**	**35**	**32**	**37**	**32**	**30**

3.19 As is shown in these tables, there is a continuous frequent service throughout the day, from early in the morning through to very late evening.

East West Rail

3.20 East West Rail is a nationally significant railway project which will deliver transport connections for communities between Oxford and Cambridge by:

- Upgrading an existing section of railway between Oxford and Bicester
- Bringing back a section of railway between Bicester and Bletchley
- Refurbishing existing railway between Bletchley and Bedford and
- Building brand new railway infrastructure between Bedford and Cambridge

3.21 The first phase of the western section, Oxford to Bletchley/ Milton Keynes, is expected to open in the latter half of 2025, and the central section, Bletchley to Cambridge via Bedford, is targeted for completion by 2030. This timeline is subject to securing the necessary statutory planning powers and consents.

Future Station at Ardley

3.22 Ardley Railway Station is listed as Core Policy 85 of Cherwell District Council's Local Plan Review 2042. There was originally a station at Ardley on the Chiltern main line that runs between Birmingham and London, which closed in 1963. Land is safeguarded for a railway station at Ardley on the railway line to the south of the settlement of Ardley. At this stage, no further studies have been undertaken to determine the feasibility of reinstating the station. If there are changes to the network such as this, the Transport Working Group will work out how best to serve the station.

Park and Ride

3.23 Bicester is served by a dedicated Park & Ride facility located at Vendee Drive, on the southwestern edge of the town, adjacent to the A41. The Site provides approximately 580 car parking spaces, cycle parking, and step-free pedestrian access to bus stops. It offers frequent bus services to Oxford city centre via the A41 and A34 corridor, with typical weekday daytime frequencies of every 15–20 minutes and journey times of around 30–35 minutes.

3.24 Services operate seven days a week, with reduced frequencies in the evenings and on Sundays. The facility is well-connected to the local highway network, allowing easy access from surrounding towns and villages, and reduces the need for private vehicle trips into Oxford, supporting congestion management and air quality objectives.

Existing Public Rights of Way Network

3.25 The roads directly surrounding the Site have limited pedestrian and cycle facilities. There are no footways on the B4100, Ardley Road, or Bainton Road.

3.26 Public Rights of Way (PRoW) are present within the Site boundary and connect to the surrounding PRoW network. All PRoW within the masterplan area of the Site are classified as bridleways, therefore pedestrians, cyclists, and horse riders have right of way.

3.27 **Figure 3.4** shows the PRoW that intersect the Site, including:

- Bridleway - Path Ref. 367/12/10 which enters the Site from the north at Kilby's Barn in a north-south direction for the first part and then travels east to connect to Path Ref. 367/11/10.
- Bridleway - Path Ref. 367/11/10 intersects the Site in an east-west direction connecting to the B4100
- Bridleway - Path Ref. 148/1/20 intersects the Site's southern boundary, bypasses Great Copse, and connects centrally to Path Ref. 367/12/10 and Ref. 367/12/10
- Footpath - Path Ref. 148/8/10 crosses the southern area of the of the Site in an east-west direction, linking the Bainton Road to the B4100

3.28 The two PRoW that cross the Site and terminate at the B4100 do not have direct and interconnecting paths of footways on the eastern side of the B4100.

3.29 On the highway network, there is no existing cycle infrastructure in the proximity of the Site.

3.30 Photographs of the existing PRoW can be seen in **Figure 3.5**.

Figure 3.4: Existing PRoW and Site Boundary

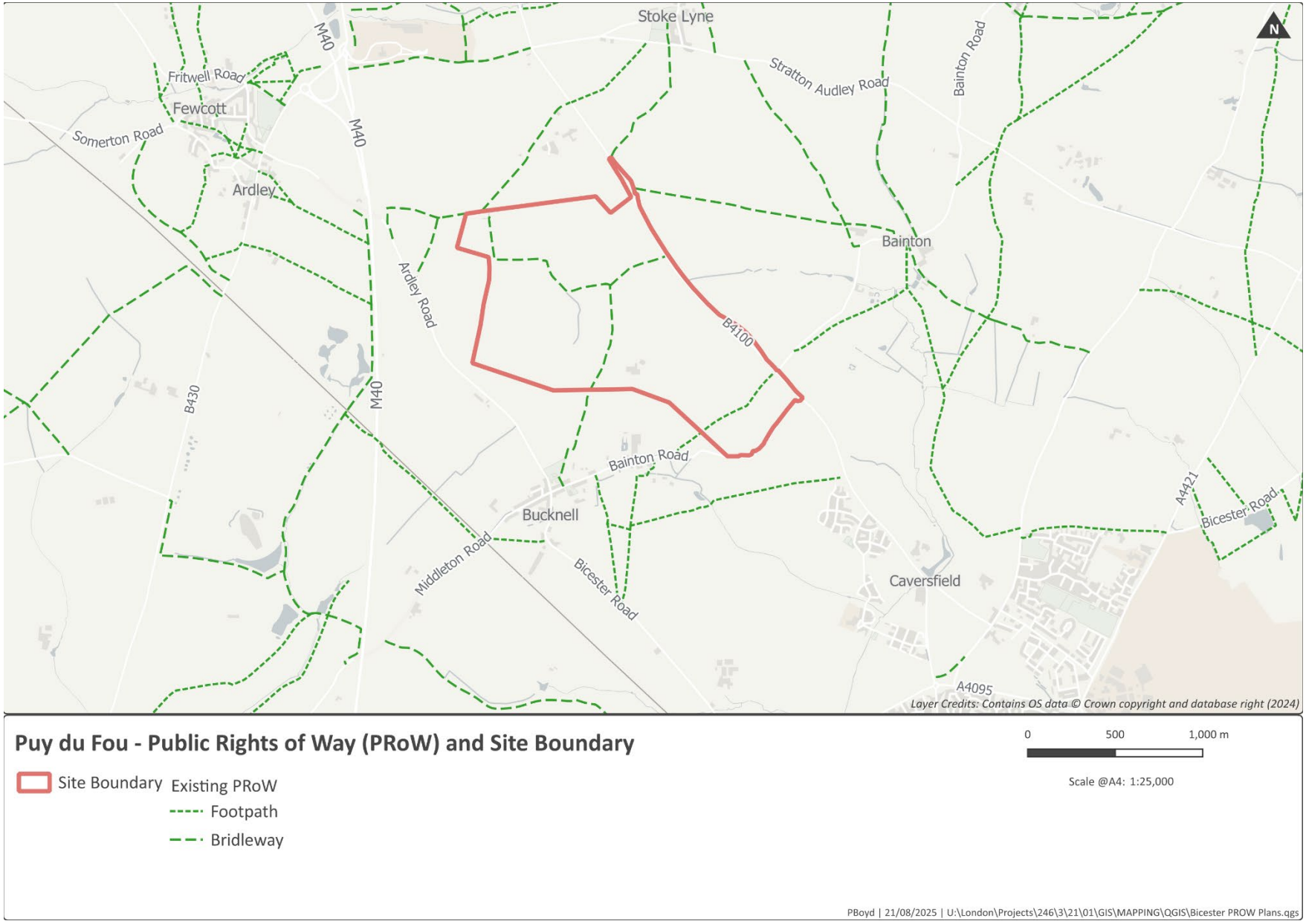


Figure 3.5: Existing PRoW

Vehicle Access

3.31 The Site benefits from three existing access points for agricultural use as follows:

- From the south: Access extends from Bainton Road in Bucknell
- From the north west: Access extends from Ardley Road
- From the north east: Access extends from the B4100

3.32 A network of agricultural tracks is present within the Site providing access to all agricultural parcels that form the Site.

Existing Local Highway Network

3.33 The local highway network is presented in **Figure 3.6**, which also illustrates the existing accesses into to the Site and nearby amenities.

3.34 The B4100 runs along the eastern boundary of the Site, roughly north to south between Bicester to the south and Twyford to the north. In the vicinity of the Site, it is a single-carriageway road operating under a de-restricted speed limit (60mph).

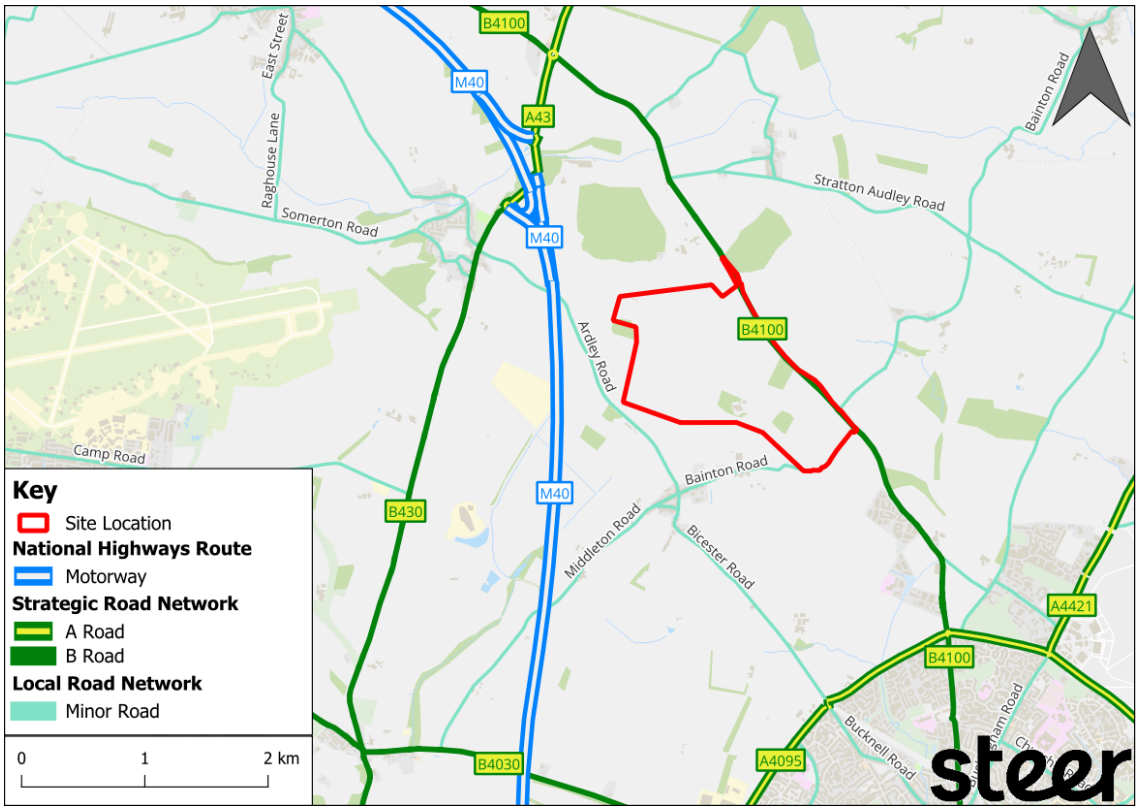
3.35 The B4100 was formally part of the A41, however it was downgraded to the B4100 when it was bypassed by the M40. While it was downgraded many of the geometric features, such as road width and forward visibility remain.

3.36 At the southern end of the B4110 is the A4095 / B4100 junction. This junction was recently (2025) converted by OCC from a roundabout into a signalised junction with traffic lights to improve traffic flow and encourage more walking and cycling.

3.37 To the west of the Site, Ardley Road is a minor single-carriageway road running between Bicester to the south and Ardley to the north. In the vicinity of the Site, it operates under a de-restricted speed limit (60mph).

3.38 To the south of the Site, Bainton Road is a minor single-carriageway road running between Bucknell to the west and B4100 to the east. Through Bucknell Village, there is a 20mph speed limit (where the southern agricultural access connects). Upon exiting the village to the east, the speed limit becomes de-restricted.

Figure 3.6: Local Highway Network



Existing Strategic Road Network

3.39 The M40 and its junctions are managed by National Highways (NH). The M40 Junction 10 is situated under a kilometre north west of the Site and provides an interchange between the M40, A43, and B430. Junction 9 is located less than 9km south of the Site and provides an interchange between the M40, A34 and A41.

3.40 The M40 motorway is a major route connecting London to Birmingham, facilitating north-south travel. The A43 provides a vital link between the M40 and the M1 motorway, serving as a key corridor for traffic between the East Midlands and the South of England. The convergence of these highways near Ardley makes the Cherwell Valley Services a crucial stopover for motorists navigating these routes.

Existing Travel Patterns

3.41 2011 Census data has been obtained to establish the existing travel patterns of employees working in the Cherwell 011 middle super output area (MSOA), within which the Site is situated. The MSOA is shown in **Figure 3.7** and a summary of the mode share in **Table 3.4.**

3.42 Although this dataset is now 14 years old, it remains a robust and reliable source of travel-to-work information at the MSOA level. More recent 2021 Census data reflects travel behaviour during and immediately after the Covid-19 pandemic, when working patterns were heavily disrupted, and is therefore not considered representative of longer-term trends. On this basis, the 2011 Census provides the most appropriate baseline against which to assess travel patterns in this context.

Figure 3.7: Cherwell 011 MSOA

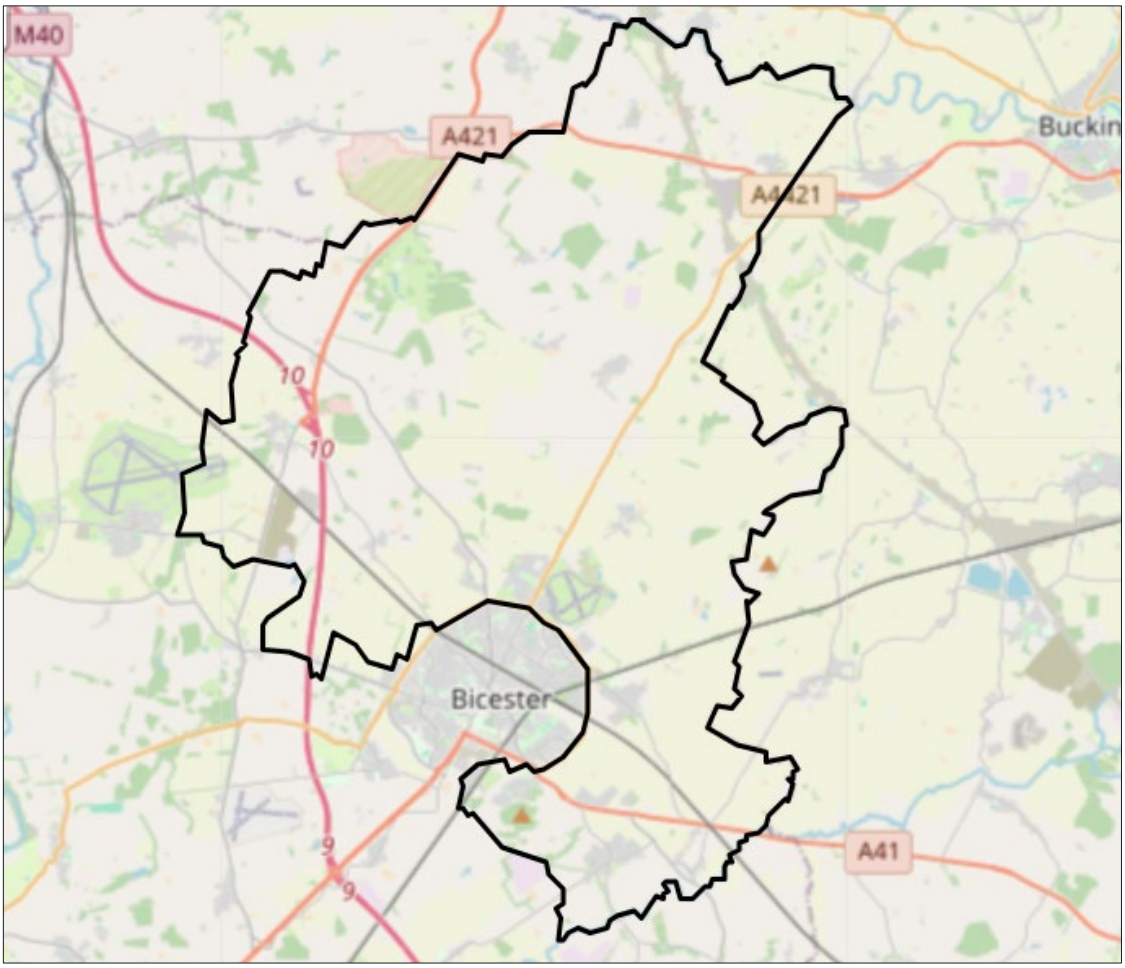


Table 3.4: Cherwell 011 MSA – Mode Share (Employees)

Mode	Number	%
Driving a car or van	1,681	66.0%
On foot	411	16.1%
Passenger in a car or van	201	7.9%
Bicycle	103	4.0%
Bus	59	2.3%
Train	27	1.1%
Other	27	1.1%
Motorcycle	25	1.0%
Taxi	8	0.3%
Underground	4	0.2%
Total	**2,546**	**100.0%**

3.43 **Table 3.4** demonstrates that of the employees who work in Cherwell 011 MSOA, 20.2% travel to work by active travel (walking and cycling) and 3.5% travel by public transport (bus, train or underground).

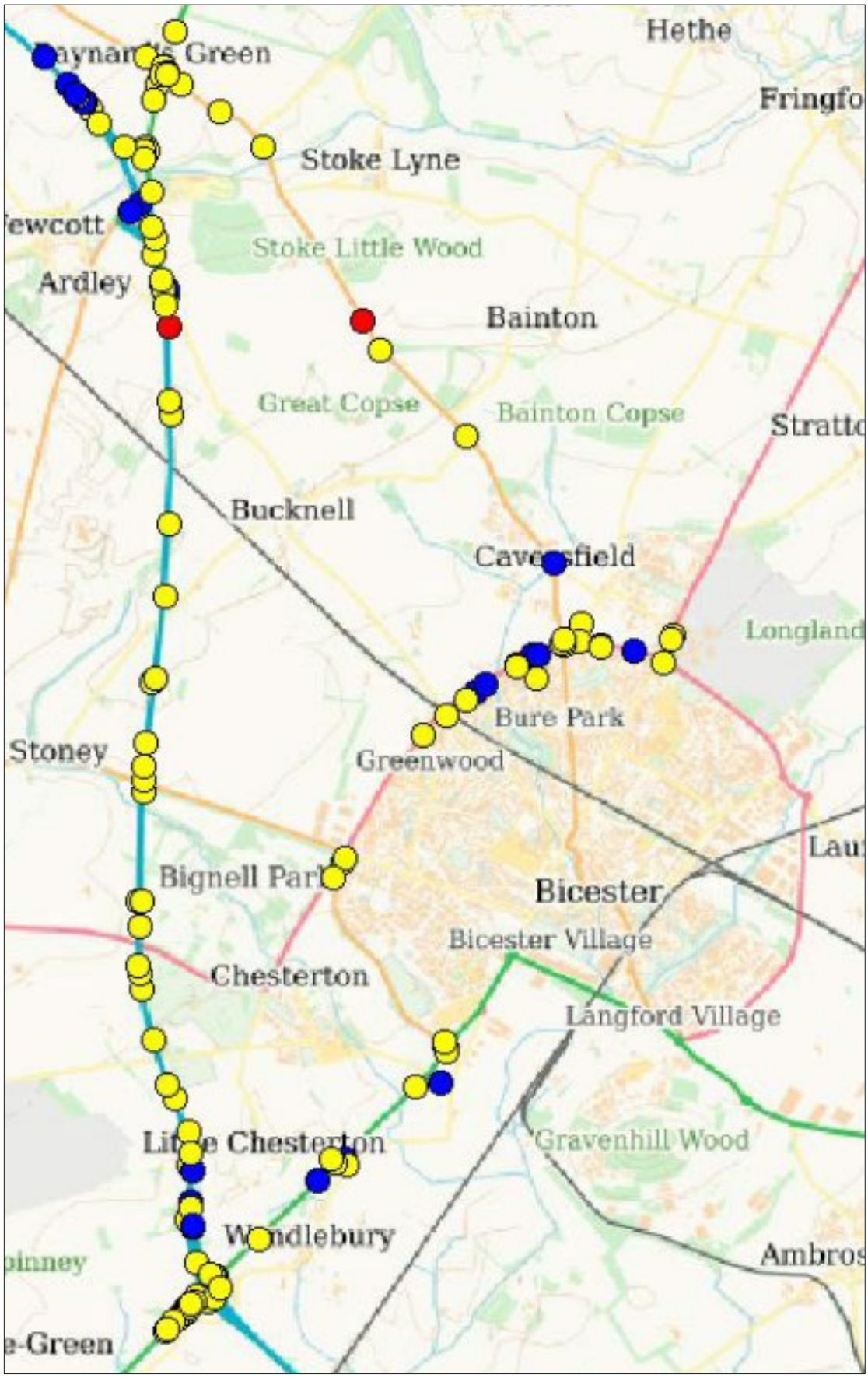
Personal Injury Accident Data

3.44 To establish whether there are any existing safety concerns associated with the highway network in the vicinity of the Site, Steer has obtained Personal Injury Accident (PIA) data from OCC who are the local highway authority. Data is taken from the most recent available 5-year period; 1 January 2019 – 31 December 2024.

3.45 In total, there were 159 PIA incidents which resulted in 238 casualties. There was a total of six fatalities, 32 serious injuries, and 200 slight injuries. Details are provided below of where there have been more than 10 accidents within the past 5 years, or are on the B4100 – the primary access route to the Proposed Development.

3.46 The study area and accident locations are provided at **Figure 3.8**, and the full incident summary is included at **Appendix C.** Full PIA data set can be provided on request.

Figure 3.8: PIA Locations



A34 (east of Wendlebury Interchange)

3.47 A total of 19 PIAs occurred on the A34 (east of Wendlebury Interchange), resulting in 30 injuries. All injuries were slight in nature. A summary of the causation factors is provided below:

- Two accidents resulted from a driver being distracted by the satnav.
- One accident resulted from a poor turn/ manoeuvre.
- Sixteen accidents resulted from drivers failing to judge the speed of the vehicle in front, and failing to look properly, resulting in a rear-end shunt. A number of these accidents involved drivers who were careless/ reckless/ in a hurry.

A41/ Vendee Drive/ Charles Shouler Way Roundabout

3.48 A total of 11 accidents occurred at this roundabout, resulting in 17 injuries. There were three fatalities, three serious injuries and 11 slight injuries.

- Two fatalities occurred when a car travelling at excess speed and driving poorly entered the roundabout, failed to give way and mounted the roundabout central island. The accident occurred in daylight, with rainy conditions.
- One fatality and one serious injury occurred when a driver, impaired by drugs and alcohol, collided with the roundabout whilst speeding.
- Two slight injuries occurred when a motorcyclist clipped the kerb and lost control,
- Four slight injuries occurred when a car stopped on the roundabout as the driver was unsure which exit to take, resulting in a rear-end shunt.
- A vehicle pulled over to allow an emergency vehicle to pass and the following vehicle failed to look and collided with the rear, resulting in slight injury.
- A driver was impaired with alcohol and lost control resulting in slight injury.
- A tractor clipped the kerb and overturned resulting in serious injury.
- An emergency vehicle, travelling fast in pursuit, failed to negotiate roundabout, resulting in slight injury.
- A car undertook a poor turn/ manoeuvre and lost control, resulting in serious injury.
- A car in the wrong lane changed lane without looking, resulting in slight injury.
- A speeding vehicle failed to slow down, resulting in a rear end shunt and slight injury.

M40

3.49 45 accidents occurred on the M40 within the latest five years of PIA data, resulting in 69 injuries. There were two fatalities, 13 serious injuries and 54 slight injuries. The causation factors are summarised below:

- A fatality occurred when a car, overloaded with passengers and luggage, lost control, hit the central refuge and left the carriageway. This accident also resulted in three serious injuries and one slight injury.
- A fatality occurred when a driver veered off the carriageway and hit a CCTV pole. It was likely due to fatigue or illness/disability.
- One accident occurred due to the driver being impaired with alcohol.
- Five accidents occurred because the driver fell asleep.
- Five accidents occurred because the driver failed to look properly before changing lanes.

- 24 accidents occurred whereby the driver failed to look properly, or judge the speed of the vehicle in front, resulting in a rear-end shunt (a driver was using their mobile phone, or was careless/in a hurry during several of these accidents).
- Three accidents occurred due to loss of control in wet conditions.
- One accident occurred because the tyres were illegal / defective / under inflated.
- One accident occurred because a nervous driver lost control.
- One accident occurred due to a driver skidding and hitting a tree (due to being careless/reckless/in a hurry).
- An HGV lost control and overturned due to a suspected medical reason.
- An HGV veered inside side of adjacent vehicle, possible due to a distraction in the vehicle / defective steering or suspension or overloaded /poorly loaded vehicle.

Wendlebury Interchange

3.50 A total of 14 accidents occurred at the Wendlebury Interchange, resulting in 21 injuries. Of the injuries, one was serious and 20 were slight in nature:

- One accident occurred due to defective traffic signals.
- Seven accidents occurred due to drivers undertaking a poor turn / manoeuvre and failing to look properly. One of these occurred because an HGV driver had inexperience with driving on the left.
- Six accidents occurred whereby the driver failed to look properly, or judge the speed of the vehicle in front, resulting in a rear-end shunt

B4100

3.51 One accident occurred on the B4100 link whereby a driver failed to judge the path and speed of the vehicle in front due to dazzling sun, resulting in two slight injuries.

B4100 Banbury Road/ A4095 Lords Lane

3.52 Five accidents occurred at this junction, resulting in seven slight injuries. All accidents resulted from cars failing to look properly and to give-way to oncoming traffic. Two of the accidents involved a pedal cyclist and one accident involved a motorcyclist.

PIA Summary

3.53 Along the B4100 – which serves as the key access point and primary route – recorded PIA data over the past five years are minimal to non-existent. This indicates that the corridor currently operates with a strong safety record, suggesting that the existing road layout, visibility, and traffic conditions are conducive to safe travel. As such, the proposed access arrangements are unlikely to introduce undue highway safety concerns and are consistent with maintaining a safe and efficient transport network.

3.54 Overall, the accidents are predominantly focussed on the locations of junctions, due to conflicting manoeuvres. The locations and causations factors of the accidents do not indicate a fundamental issue with highway safety issues related to the geometry of the highway.

Summary

3.55 The Site is well-placed to benefit from good vehicular access and connectivity to the SRN but is also well-placed to enable trips on foot and by cycle for people living in nearby villages, and is within a reasonable walk and cycle distance of Bicester, subject to improvements in active travel infrastructure.

3.56 While public transport provision in the immediate vicinity of the Site is currently limited – reflecting its rural context – a frequent bus service passes the Site, providing direct connections to nearby towns including Bicester, Buckley, and Banbury. Importantly, the Site benefits from its close proximity to two mainline railway stations: Bicester Village and Bicester North. Both offer excellent and improving rail services, with Bicester Village providing fast connections to Oxford and London, and Bicester North serving routes to Birmingham and beyond. These stations will also benefit further from the East West Rail (EWR) project, which will significantly enhance regional connectivity and enable greater opportunities for longer-distance, sustainable, non-car travel to and from the Site.

4 Development Proposals

Introduction

4.1 This chapter describes the development proposals in terms of use, walking and cycling, access arrangements for all modes, car and cycle parking provisions, and the public transport strategy. Each of these key areas are explained in further detail in later chapters.

4.2 The transport strategy applies vision-led (decide and provide) principles through restraining car parking and providing genuine alternatives to access the Site by sustainable transport modes, including walking, cycling and public transport.

4.3 This approach ensures that the Proposed Development is in conformity with the existing NPPF and DfT Circular 01/2022.

Development Proposal

4.4 The development description is as follows:

"Tourism development, including outdoor and indoor theatres, restaurants, hotels, conference facilities, offices, warehousing and storage, security control centre, medical centre, animal facilities (including stables, aviary, animal sheds), laundry facility and workshops, and supporting infrastructure including recycling centre, wastewater treatment facility, energy centre and sub-stations, photovoltaic (PV) solar panels, water storage tanks and pumps, lakes and water management systems, structural landscaping, internal footpaths, internal vehicular routes, active travel routes, parking and access (Outline Masterplan)."

4.5 The development will be delivered via eight phases over an estimated 10-year period.

4.6 The application for all elements of built-form and supporting infrastructure has been submitted with access proposals shown in detail. All other detailed elements will be delivered, subject to conditions, and the outline elements will be supported by reserved matters applications.

4.7 Parameter plans (included in **Appendix D**) show the indicative Site layout which has been iteratively refined with consultation from CDC.

4.8 The parameter plans consist of:

- Parameter Plan 01 – Proposed Land Use Plan (ref. PDF_UK-TCA-DR-AR-02-0101 Rev A)
- Parameter Plan 02 – Access and Movement (Vehicles and Service) (ref. PDF_UK-TCA-DR-AR-02-0102 Rev A)
- Parameter Plan 03 – Access and Movement (Footpaths, Footways and Cycle Routes) (ref. PDF_UK-TCA-DR-AR-02-0103 Rev A)

- Parameter Plan 04 – Proposed Scale and Massing Plan (ref. PDF_UK-TCA-DR- AR-02-0104 Rev A)

4.9 They reflect the nature of the Proposed Development being sought under the application and provide development envelopes which will be further defined through the detailed design process and presented as part of future reserved matters application.

4.10 The application encompasses the Applicant's ambitions for the Proposed Development. Typically, these large-scale tourism and leisure facilities are delivered in phases, as reflected by Puy du Fou France which grew over 20 or so years, and the more recent delivery of Puy du Fou Espana which opened in 2021.

4.11 Although the Application seeks permission for the entire project, it will be delivered over a phased approach anticipated as follows:

- Opening (Phase 1/ Year 1) – approx. 60%-70% of the Proposed Development is delivered
- Post-opening (Phase 2 to Phase 8) – remainder of the Proposed Development delivered

4.12 The phased approach to delivering the Proposed Development post-opening is heavily dependent upon commercial factors, on-Site construction/ disruption, and operational requirements, so is subject to change.

4.13 While the phasing is not intrinsically linked to years of operation, as the number of visitors is linked to how successful the Park is, for the purposes of the TA, it is assumed that the Park opening is in 2029 and impacts arising from the completion of Phase 8 would occur in Year 10, e.g. 2039.

4.14 The Proposed Development is supported by a comprehensive public transport strategy, as set out in chapter 10, that integrates multiple modes to maximise accessibility, reduce car dependency, and support sustainable travel choices for visitors and staff. The strategy includes rail access, shuttle access, local bus services and coach access.

Park Operation

4.15 The Park will operate seasonally, which is typically April to October (the same as Puy du Fou in France), with peak visitor numbers occurring during the summer months. The Park will be closed to the public between November and March, except for the conference centre which will be open all year round, and the hotels will be open during the corresponding period according to the demand.

4.16 During the open season, typical opening times are expected to be 10:00 on weekdays and 09:00 on weekends, with closure at 19:00. As such, visitor arrivals will occur outside of the weekday AM peak period (typically 07:30 – 08:30), which is generally the most critical time for the highway network. Therefore, the Proposed Development is not expected to result in any material impact on the highway network during this peak period.

4.17 For the night show, which requires a separate ticket to attend, there will be later closure times. The show starts after dusk, so varies dependent on the time of year, and the latest possible end time will be 23:00.

4.19 The characteristics of the various operating days, are outlined below:

- Closed season: Park closed to the public except for administrative and training uses, conference centre, and corresponding hotel where demand dictates.
- Peak Operating Days: Typically, peak periods correspond with the three traditional summer months (July, August, September) including school summer holidays.
- Medium Peak Operating Days: The medium season corresponds to the period between off season and peak season during the Spring and Autumn months.
- Off Season – Weekday: The off-season weekday period corresponds with the months outside of the traditional summer and school holidays. This is the period when visitors to the Park will be at its lowest
- Off season – Weekend: The low season weekend period corresponds with the low season weekday.

4.20 The number of days the Park is open will increase progressively through key phases. The specific number of open days for each phase are as follows:

- Phase 1 – 146 days of opening.
- Phase 4 – 170 days of opening.
- Phase 8 – 176 days of opening.

4.21 Phase 8 is the final phase, and corresponds with a Year 10 scenario.

4.22 In respect to visitor numbers, different terminology is used in different context. The following sets out the different terminology used:

- Visit: The total number of visits, and is based on ticket sales. As such, this is typically the highest figure stated but does not necessarily directly relate to the number of actual visitors attending. For example, someone may buy a day ticket and a night show ticket – this would be considered as two 'visits', even though it is only one 'visitor'.
- Visitor: The number of people arriving. It is used to determine the number of car trips, vehicles parked on Site, and the capacity requirements for rail and bus services. For example, someone may buy a day ticket and a night show ticket – this would be considered one 'visitor'.
- Unique Visitor: The number of unique individuals visiting the Park, irrespective of ticket sales. For example, if the same person visited on two consecutive days, this would be considered as one 'unique visitor'.

4.23 By way of an example, a family of four attending the Park on two days and going to a night show on their first night would be considered:

- Twelve visits – this is made up of four tickets for day one, four tickets for the night show, and four tickets for day two.
- Eight visitors – they each generate two trips/ arrivals on Site to visit the Park each day. If they were staying off Site this would equate to two trip arrivals, or eight spaces on train/ shuttle, while if they were staying on Site this would be one car trip, or four spaces on train/ shuttle.
- Four unique visitors – there are four unique individuals.

4.24 Staff trips are discussed in Chapter 5.

4.26 For the purpose of this TA the following references are made to the following types of operation:

- Day Only – Typically the Park would be open from 09:00 / 10:00 to 19:00 in the evening, Shows would commence at opening and finish ahead of the Park closing. There are no evening shows on these days.
- Night Show – Puy du Fou is famed for its nights shows. These typically start at dusk/ after sunset and have a duration of circa 1.5 hours.

4.27 The Applicant provided attendance figures for the years 2029, 2033, and 2038 corresponding to Opening Year (Year 1), Year 5, and Year 10, which is the estimate for delivering the full Park offer of shows and hotels (which follows the model of Puy du Fou Espana which opened in 2021). The years may be more practically referred to as Phase 1, Phase 4 and Phase 8 (see attached indicative Phasing Plan). The Phases/ Years relate to yearly total visitor forecasts of:

- Opening Year (Phase 1): 550,000 annual daily visitors
- Year 5 (Phase 4): 1,180,000 annual daily visitors
- Year 10 (Phase 8): 2,100,000 annual daily visitors

4.28 The phases relate to the anticipated growth of the Park with new shows coming on stream annually and a corresponding increase in attendance.

Masterplan

4.29 The design of the Park has been informed by a detailed analysis of the most successful elements of the Puy du Fou sites in France and Spain. At 158ha, the Site is comparable in scale to the Puy du Fou France Site, so there are many similar strategies to that are employed here to compose the masterplan arrangement.

4.30 The illustrative masterplan design combines the operational requirements of the Applicant with the Site's opportunities and constraints. This scheme has been tested in terms of visual impact, acoustics, lighting, water management, biodiversity and many more key technical influences.

4.31 The illustrative masterplan includes the following:

- Four period villages (comprising food and beverage outlets and retail)
- 13 live shows (six outdoor shows and seven indoor shows – including immersive shows)
- Three on-Site hotels (one with conference centre)
- Supporting 'back of house' facilities including:
  - Offices
  - Warehousing and storage
  - Security control centre
  - Medical centre
  - Animal facilities (including stables, aviary, animal sheds)
  - Laundry facility
  - Workshops
- Supporting infrastructure including:
  - Car parking for visitors, staff and campervans
  - Recycling centre
  - Wastewater treatment facility

- Energy centre and sub-stations
- Photovoltaic (PV) solar panels
- Water storage tanks and pumps
- Active travel routes
- Internal footpaths
- Internal vehicular routes
- Lakes and water management systems
- Structural landscaping

4.32 The illustrative masterplan can be seen at **Appendix A**. Overall, the illustrative masterplan demonstrates how an incredible new visitor experience can be created on this Site, whilst protecting the mature natural features, restoring biodiversity, promoting active travel, and allowing for a fossil fuel free energy strategy.

Mobility Hub

4.33 A mobility hub is located just off the main primary access, and can be accessed from either the primary or secondary access.

4.34 This will include provision for:

- Bus shuttle and public transport set down and pick up with an allowance for at least 6 buses
- Up to 440 cycles
- Cycle hire docking stations
- Taxi pick up and drop off
- Visitor pick up and drop off
- Fast EV car charging
- Cycle repair facilities

4.35 Adjacent to the mobility hub is the coach parking facility which has been designed to accommodate up to 150 coaches.

Public Transport Strategy

4.36 The Proposed Development is supported by a comprehensive public transport strategy that integrates multiple modes to maximise accessibility, reduce car dependency, and support sustainable travel choices for visitors and staff. The strategy includes:

- Rail access: Visitors will be encouraged to travel via nearby rail stations Bicester North and Bicester Village, which provide national connectivity. These stations serve as key public transport gateways to the Site. Connectivity from these stations is being enhanced with EWR east-west connection between Oxford and Cambridge.
- Shuttle services: A dedicated shuttle service will operate between key local rail stations and the Site, offering a seamless connection for visitors arriving by train, particularly during peak visitor periods.
- Local bus services: Existing local bus routes have been reviewed and, where feasible, enhanced to provide regular and reliable services connecting surrounding settlements to the development. This will cater to both daily staff travel and visitor movement.
- Coach access: Dedicated coach parking and drop-off facilities will be provided to support group and long-distance travel. This offers a high-capacity option for school groups, tour operators, and event attendees, reducing individual car trips.

4.37 This integrated approach provides a range of sustainable travel options to suit different user needs, while supporting the Site's wider environmental and transport objectives.

4.38 Further details of the public transport strategy are provided in Chapter 10.

Walking and Cycling Strategy

4.39 The Site is well located to take advantage of connectivity to both local villages and Bicester. The walking and cycling strategy include the following elements:

- Walking and cycle provision along the frontage of the Site.
- Improvements to Public Rights of Way which cross the Site.
- Connection to Bicester, via segregated footway / cycleway – discussed in more detail in later chapters.
- Localised improvements to off Site infrastructure (as set out in the mitigation strategy).

4.40 Bridleways ref.148/1/20, ref.367/12/10 and ref. 267/11/10 will all need to be diverted to accommodate the development proposal, as identified within the emerging masterplan. Routes will be built to modern standards, e.g. a 5m usable path, for use by horses, cyclists, and pedestrians.

4.41 To the north of the proposed Site access roundabout, a new equestrian crossing will be delivered as part of the Site access arrangements. This will connect the proposed pedestrian and cycle facilities and new PRoW with the existing bridleway 367/9/10 located on the eastern side of the B4100. There is a path on the eastern side of the B4100 between bridleway 367/9/10 and bridleway 367/5/20 along the western boundary of Stoke Little Wood which follows the alignment of the old road and is a permissive right of way.

4.42 Footpath 148/8/10 crosses the 'retained agricultural land' to the south, and as such is to be retained in its current location. There is however an opportunity for the footpath (148/8/10) to be upgraded from a footpath to a bridleway, albeit with no change to its current width.

4.43 An additional uncontrolled crossing of the B4100 will also be provided to the south of Bainton Road, connecting footpaths 148/8/10 and 153/3/10, again providing provision that does not currently exiting for users of the PRoW network.

4.44 Further details on the walking and cycling strategy can be found in Chapter 11.

Vehicle Access Strategy

4.45 A comprehensive review of potential vehicular access points to the Site was carried out. This included a high-level feasibility assessment of six access options, considering connections from both the M40 and the surrounding local road network.

4.46 Based on this review, the preferred access strategy proposed utilises the B4100 as the primary route. Three new vehicular access points are proposed from the B4100, as summarised below:

- Primary access for most visitors will be from a new roundabout near the northern edge of the Site, leading straight into the visitor car park. The B4100 will be widened at this point to avoid queuing causing any disruption on the road
- Secondary access further south on the B4100, also from a new roundabout, will serve the hotels and conference facilities, whilst also providing a secondary access to the visitor car park and mobility hub

- Staff/servicing access to the southern end of the Site, linked to the service route which runs around the boundary of the Site

4.47 Site access drawings are shown in **Appendix E**. These are as follows:

- Drawing ref. 24632101-STR-HGN-100-SK-D-02201 - REV A
- Drawing ref. 24632101-STR-HGN-100-SK-D-02202 - REV A
- Drawing ref. 24632101-STR-HGN-100-SK-D-02203 - REV A

4.48 Swept path analysis of the Site access are also shown in **Appendix E**. These are as follows:

- Drawing ref. 24632101-STR-HGN-100-SK-D-02401 - REV A
- Drawing ref. 24632101-STR-HGN-100-SK-D-02402 - REV A

4.49 As part of the proposed access arrangements, the existing layby on the B4100 adjacent to the Site will be removed. This layby is approximately 40 metres in length and has capacity for around eight vehicles. The layby is not related to any land use and appears only to provide an opportunity for vehicles to stop between Bicester and the A43. Observations made during Site visits indicate that the layby is not well utilised, and its removal is therefore considered justified. Any residual demand for informal stopping or waiting in this location can be accommodated within an existing layby located approximately 1 kilometre to the south, which offers better functionality and greater opportunity for vehicles to pull clear of the highway.

4.50 The primary and secondary accesses are linked so that if any queueing should occur, traffic can be routed and managed between the two points of access.

4.51 The primary objective is to ensure that vehicles clear the roundabout with the B4100 as swiftly as possible, minimising delays at the Site entrance/ exit. To achieve this, a payment system will be based on automatic number plate recognition (ANPR) and pre-booking, eliminating the need for barriers or manual checks at the entrance. This allows vehicles to flow seamlessly down the entrance spine road, which has been constructed with three lanes.

4.52 During peak arrival times, two lanes are dedicated to entry, enabling vehicles to quickly access the Site, while the third lane can be switched to support two-lane exit during peak departures.

4.53 For egress, the spine road can be reconfigured to provide two exit lanes, with a dedicated “jet lane” for northbound traffic onto the B4100 and two lanes for southbound departures. This arrangement creates three exit lanes in total, each with a capacity of approximately 700 vehicles per hour, i.e. 2,100 per hour. Given the anticipated peak demand, the design provides sufficient capacity to clear the Site efficiently, with a buffer to prevent queuing.

4.54 To further enhance operational efficiency, it is anticipated that an automated signing system will be deployed to direct drivers to available parking locations, supplemented by traffic marshals during peak periods. This combination of technology and human oversight will accelerate decision-making and parking operations, supporting the overall goal of a major event-standard, peak ingress and egress model. The design reflects a deliberate move away from the traditional “large open field” approach, instead delivering a carefully considered, efficient, and safe car park that supports both visitor experience and operational resilience.

4.55 The proposed footway and cycleway provision associated with the scheme which runs north south from the top of the Site, down the Site boundary at Bainton Road has been

designed into the access arrangements, which priority given to pedestrians and cyclists wherever possible.

Public Transport Access

4.56 In this context, 'Public Transport' includes public buses, bespoke bus shuttles from Bicester North station, and visitor coaches.

4.57 The primary and secondary accesses will be used by public transport services, with the internal link road between the accesses providing access to the bus stops and pick up and set down areas.

4.58 Bespoke bus shuttles would use the secondary access to enter and leave the Site and make use of the allocated pick-up drop-off area in the car park. Whilst at Outline, the area has been designed to accommodate people waiting for shuttle buses and allow them to easily ingress and egress, reducing waiting times.

4.59 Public buses will have the same operation but are able to undertake the journey in the opposite direction, entering from the north and existing from the south. This arrangement reduces journey times and ensures the commerciality of the existing and any future services.

4.60 Commercial coaches, such a National Express would operate in the same way as the local public transport, while visitor coaches would use the primary access to the Site and Park in the dedicated coach parking area. Site accesses are as seen in **Appendix E**.

Servicing Access

4.61 The staff and servicing access is to the southern end of the Site, linked to the service route which runs around the boundary of the Site. The internal service road is also linked to the primary access. Outside of Park operating hours, some service trips may utilise the primary and secondary access points.

4.62 Site accesses are as seen in **Appendix E**.

4.63 Further detail on the vehicle access strategy is included in Chapter 12.

Car Park Walking Infrastructure

4.64 The proposed layout ensures seamless connectivity between the car parks, main Park entrances, and the on-Site hotel and conference facilities. The pedestrian routes are designed with safety as a key priority. The illustrative masterplan has been carefully set out to ensure the visitor experience and routes are balanced against essential access requirements across the Site, both in terms of servicing and emergency access.

4.65 The design of the parking aisles allows vehicles in the nearside entry lane to efficiently turn off into the parking areas, while those wishing to access premium or quieter parking zones can continue further along the spine road. Each parking aisle features wider-than-standard bays, specifically to accommodate families and reduce the time spent manoeuvring vehicles – particularly important when children are present and doors need to be opened without risk of contact with adjacent cars. This not only speeds up the parking process but facilitates a smoother flow both on arrival and departure, and provides a better visitor experience.

4.66 Pedestrian safety and convenience have been prioritised through the inclusion of a central 2m width footpath running along each aisle. After parking, visitors can step directly onto this path and proceed south towards the main entrance gate, segregated from vehicle flows.

4.67 From the hotel/ conference car park, there is a pedestrian footway that runs along the western boundary of the car park, providing segregated access to entry points of the hotel reception, hotel, and conference centre.

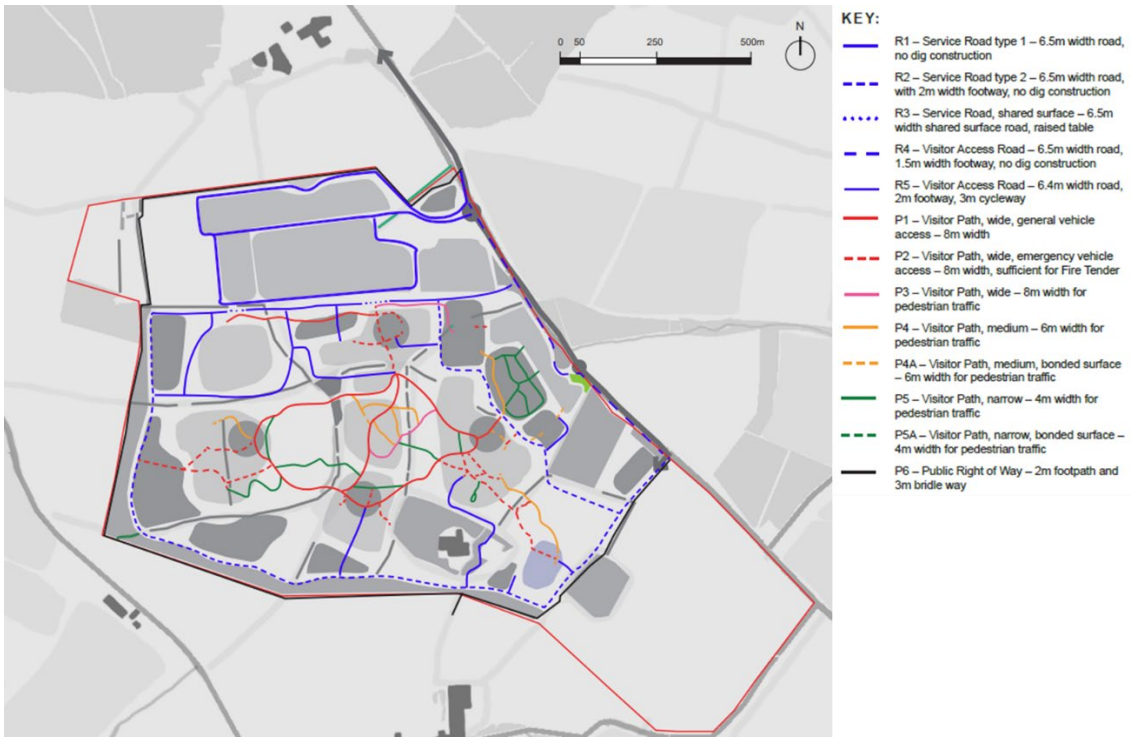
Internal Park Walking Infrastructure

4.68 The internal footpath network within the Park itself has been carefully designed to accommodate the expected volume of visitor movement associated with each show, while also supporting essential operational functions. These pathways are appropriately sized to ensure smooth spectator circulation throughout the Site, particularly during peak ingress and egress periods.

4.69 In addition to facilitating guest movement, the internal routes also provide critical access for back-of-house (BOH) servicing, including the delivery of supplies to restaurants and other facilities. Operational logistics may include restocking, maintenance, and waste collection.

4.70 The internal network can be seen in **Figure 4.1**.

Figure 4.1: Internal Road and Footpath Network



Parking Provision

Vehicular Parking

4.71 Vehicular parking is provided in five key areas:

- 4,217 spaces within the main car park accessed from the primary access
- 250 accessible spaces to the south of the main car park
- 147 coach parking spaces
- 705 spaces provided for the hotel and conference centre
- 1,179 back of house parking spaces

4.72 Further detail on the parking, its operation and management are included within Chapter 13 of the TA.

4.73 The total amount of parking and its layout will be finalised at Reserved Matters Stage.

4.74 The indicative car park layout can be seen alongside the parameter plans in **Appendix D**, drawing ref. 24632101-STR-HGN-100-SK-D-01901 - REV A.

Cycle Parking

4.75 Cycle parking will be provided for in three distinct areas:

- Up to 440 bicycle parking spaces will be provided in a dedicated area close to the Site access, located immediately off of the cycle route within the mobility hub area
- Within the conference and hotel buildings
- For staff in discreet parking locations associated with the back of house areas

4.76 The cycle parking can be seen within the indicative car park layout in **Appendix D,** drawing ref. 24632101-STR-HGN-100-SK-D-01901 - REV A.

4.77 Subject to legislation, it is proposed that a cycle/ scooter hire schemes will be available in the local area, with docking stations at the Site, offering flexible and sustainable transport options for both visitors and staff, and supporting broader active travel goals. Docking within the Site would be at the mobility hub, as well as the primary access point for staff. The location of corresponding off-Site docking stations would be agreed through the Transport Working Group, however it is anticipated that these would correlate to areas of highest demand, such as the rail stations, Park and Ride, Bicester town centre and facilities such as hotels.

Waste

4.78 The Site will provide sufficient facilities, storage and collection of segregated waste. It is proposed that 99% of all waste will be recycled and 100% of wastewater will be recycled on site.

4.79 A service access in the form of a simple ghost island priority junction is provided from the B4100 which is linked to the service route that runs around the boundary of the Site.

4.80 The service road provides direct access to the waste water treatment facility and the waste centre. The waste centre comprises a warehouse and open storage containers, and is located adjacent to the staff entrance.

4.81 A Waste Management and Recycling Document will be submitted to support the Application, which will contain further details about the relevant operations. The Site will promote waste collection services outside of peak hours.

Emergency Vehicles

4.82 The masterplan has been designed to ensure that an emergency vehicle can access all areas of the Site.

Summary

4.83 The development proposal comprises an outline application for the delivery of a tourism development, including outdoor and indoor theatres, restaurants, hotels, conference facilities, offices, warehousing and storage, security control centre, medical centre, animal facilities (including stables, aviary, animal sheds), laundry facility and workshops, and supporting infrastructure. The development will be delivered via eight phases over a 10-year period.

4.84 The Proposed Development applies vision-led principles through restraining car parking and providing genuine alternatives to access the Site by sustainable transport modes, including walking, cycling, and public transport. This approach ensures that the Proposed Development is in conformity with the existing NPPF, DfT Circular 01/2022 and the aspirations of OCC to promote the use of the 'decide and provide' approach in transport assessments and the mitigation strategy.

4.85 The design of the Park has been informed by a detailed analysis of the most successful elements of the Puy du Fou sites in France and Spain.

4.86 The Proposed Development is supported by a comprehensive public transport strategy that integrates multiple modes to maximise accessibility, reduce car dependency, and support sustainable travel choices for visitors and staff. The strategy includes rail access, shuttle access, local bus services and coach access.

4.87 The Site is well located to take advantage of connectivity to both local villages and Bicester, and the Site will deliver improvements to PRoW which cross the Site, as well as localised improvements to off-Site walking and cycling infrastructure.

4.88 The internal footpath network within the Park itself has been carefully designed to accommodate the expected volume of visitor movement associated with each show, while also supporting essential operational functions.

4.89 Three new vehicular access points are proposed from the B4100, consisting of a primary access (for most visitors), a secondary access (to serve the hotels and conference centre, as well as the visitor car park) and a staff/servicing access.

4.90 The primary and secondary accesses will be used by public transport services, with the internal link road between the accesses providing access to the bus stops and pick up and set down areas. Bespoke shuttle buses, public buses, and commercial coaches each have bespoke strategies to ensure that their operation is attractive to visitors, whilst also ensuring the commerciality of existing and future services.

4.91 Overall, the illustrative masterplan demonstrates how an incredible new visitor experience can be created on this Site, whilst protecting the mature natural features, restoring biodiversity, promoting active travel, and allowing for a fossil fuel free energy strategy.

5 Visitor and Staff Numbers

Introduction

5.1 This chapter considers the approach to determine expected visitor and staff trips to and from the Site for use in the assessment of impacts on the highway network, as well the demand to be accommodated on the public transport network.

Assumptions

5.2 As there are no precedents for existing trip generation figures to developments such as this, a first principles assessment has been undertaken to understand how visitor and staff trips to and from the Site may be generated. This is based on the existing parks in France and Spain, an understanding of the local environment, and Steer's experience.

5.3 The following summarises the key assumptions upon which the assessment is based:

Opening Times

- The Park would be open to the public from April to November, not necessarily every day, especially in earlier phases
- Weekday Park opening assumed as 10:00
- Weekend Park opening assumed as 09:00
- Typical daytime only closure is at 19:00
- Night shows typically start after sundown/ at dusk, the exact time of which is dependent on the time of year, with the latest finish till of 23:00
- Typically, visitors would attend the Site for the whole day, unless staying in hotels, attending a conference, or attending multiple days

Night Show Information

- Night show having a 1.25 to 1.5 hour duration
- Two thirds of evening show attendees are day ticketholders as well
- One third of evening show attendees are night ticket only holders, e.g. they will not access the Park during the day

Hotel

- 2028: 100 Rooms on Site – Occupancy of 2.9 per room e.g. 290 visitors
- 2032: 350 Rooms on Site – Occupancy of 2.9 per room e.g. 1,015 visitors
- 2038: 350 Rooms on Site – Occupancy of 2.9 per room e.g. 1,015 visitors
- Hotel occupancy rates based on experience in France

Campervan

- Campervan spaces to be provided on Site – e.g. area set aside with overnight facilities
- Campervan increases at weekend/school holidays
- Campervan occupancy of 2.2 persons per van
- Campervan numbers:
  - 2028:
    - → 25 vehicles weekday
    - → 50 vehicles weekend
  - 2032:
    - → 50 vehicles weekday
    - → 100 vehicles weekend
  - 2038:
    - → 100 vehicles weekday
    - → 200 vehicles weekend

Coaches

- Weekday will have higher proportion of coaches than weekend due to school trips
- Day Only tickets attract higher proportion of coaches, than a day/ night show ticket
- Some night only coach packages anticipated

Occupancy

- Weekday car occupancy 2.3 visitor per vehicle
- Weekend car occupancy 3.1 visitor per vehicle – this is due to a higher proportion of families
- Coach occupancy 50 passengers per coach
- Dedicated shuttle bus occupancy 65 passengers per vehicle
- Local Bus (scheduled services) occupancy 30 passengers, e.g. part used
- Park and Ride bus occupancy 50 passengers per vehicle

Shuttle Service

- Maximum shuttle occupancy of 82 passengers per shuttle
- Dedicated services to be provided to/from Bicester Stations (Bicester North and Bicester Village)
- Rail to Site shuttle time 30 minutes on weekdays
- Rail to Site shuttle time 25 minutes at weekends
- Shittle times include an allowance for ingress and egress

Arrival and Departure Profiles

- Weekday and weekend ingress and egress profile the same, albeit weekend is an hour later due to opening time
- High proportion of night-show attendees assumed to arrive by car, due to late finish time of night show

85th Percentile Methodology

5.4 The attendance figures provided by the Applicant were assessed under each scenario using both the 100th percentile (representing absolute peak attendance), and the 85th percentile. The 85th percentile has been adopted as a proxy for a typical busy day. It captures the majority of expected attendance levels, while excluding extreme outliners. This offers a more realistic basis for assessing day-to-day operational impacts without inflating the effect of rare high-demand days.

5.5 While it is useful to understand the visitor volumes during peak periods (those event days between 85-100th percentile), it is not appropriate to design off-Site mitigation solely to accommodate these peaks. This is particularly relevant as the highest attendance days typically fall during school holidays and bank holidays, when background traffic levels on the wider network are generally lower. Designing infrastructure based on these infrequent peaks, using typical weekday traffic conditions, would significantly overestimate the operational impacts that occur during most of the operating season. This would not be in line with a 'decide and provide' approach and could generate additional car-based traffic in the local environment.

5.6 Notwithstanding this, the approach is more onerous than using an average attendance figure, as it still captures high levels of activity while remaining realistic. **Table 5.1**, **Table 5.2**, and **Table 5.3** present the frequency with which various attendance thresholds are reached throughout the year, supporting the use of the 85th percentile assessment as robust. For event days where visitor numbers are anticipated to exceed the 85th percentile, specific operational interventions would be required. Further detail on this is provided later in the TA.

5.7 It is evident within **Table 5.1**, **Table 5.2**, and **Table 5.3** that the number and percentage of events within a higher attendance – where above the 85th percentile – are very few.

Table 5.1: Phase 1 – Number of Occurrences Versus Attendance

Attendees	Occurrence per Year	Percentage of Total
<1,000	1	0.7%
1-3,000	60	41.0%
3-5,000	47	32.2%
5-10,000 (maximum 9,389)	38	26.0%
Total Days Open	**146**	**100.0%**

Total errors may occur due to rounding

Table 5.2: Phase 4 – Number of Occurrences Versus Attendance

Attendees	Occurrence per Year	Percentage of Total
<5,000	62	36.5%
5-10,000	75	44.1%
10-15,000	31	18.2%
15-20,000 (maximum 18,386)	2	1.2%
Total Days Open	**170**	**100.0%**

Total errors may occur due to rounding

Table 5.3: Phase 8 – Number of Occurrences Versus Attendance

Attendees	Occurrence per Year	Percentage of Total
<5,000	6	3.4%
5-10,000	68	38.6%
10-15,000	55	31.3%
15-20,000	34	19.3%
20-25,000	10	5.%
25-30,000 (maximum 29,427)	3	1.7%
Total Days Open	**176**	**100.0%**

Total errors may occur due to rounding

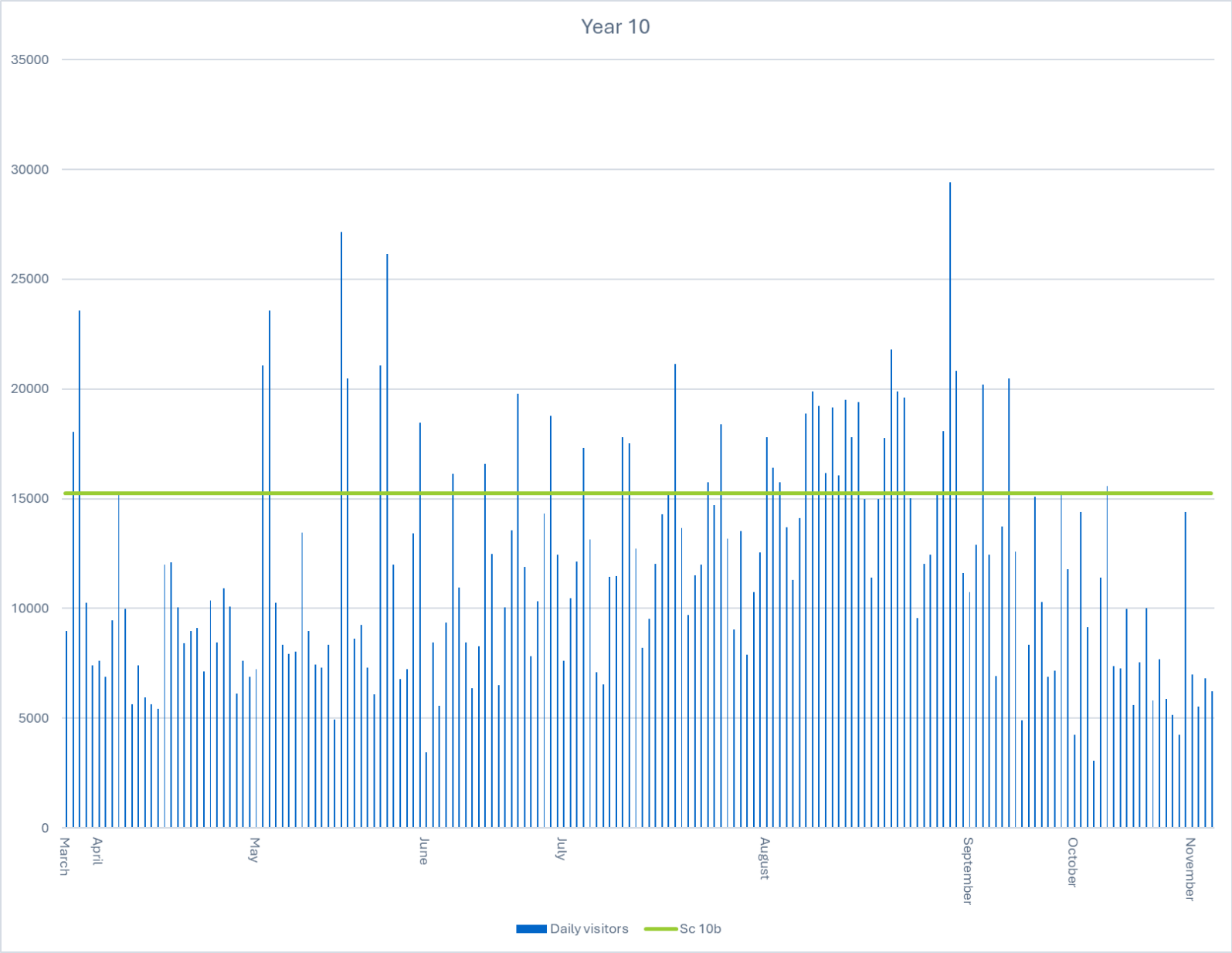
5.8 **Appendix F** shows where the 85th percentile sits in terms of daily visitors for each scenario, with a yearly summary that shows the lowest and highest attendance scenarios:

- Year 1 - Scenario 1 and Scenario 4
- Year 5 - Scenario 5 and Scenario 8
- Year 10 – Scenario 9 and Scenario 12

5.9 **Figure 5.1** shows daily visitors across the year when the Park is open (April to October). The green line represents the 85th percentile for Scenario 10b that was used for the traffic modelling. Details on Scenario 10b are provided in the Traffic Modelling chapter, Chapter 14.

5.10 It is evident that there are minimal event days above the 85th percentile in Year 10 – which the public transport infrastructure, car park infrastructure, and traffic modelling have been reviewed against.

Figure 5.1: Daily Visitors – Year 10



Visitor Numbers

5.11 As set out in Chapter 4, there is key terminology associated with 'visits', 'visitors', and 'unique visitor', and different ticket types, ('Day Only' 'Day and Night', and 'Night Only'). The terminology is as follows:

- Visit: The total number of visits, and is based on ticket sales. As such, this is typically the highest figure stated but does not necessarily directly relate to the number of actual visitors attending. For example, someone may buy a day ticket and a night show ticket – this would be considered as two 'visits', even though it is only one 'visitor'.
- Visitor: The number of people arriving. It is used to determine the number of car trips, vehicles parked on Site, and the capacity requirements for rail and bus services. For example, someone may buy a day ticket and a night show ticket – this would be considered one 'visitor'.
- Unique Visitor: The number of unique individuals visiting the Park, irrespective of ticket sales. For example, if the same person visited on two consecutive days, this would be considered as one 'unique visitor'.
- Day Only: Typically, the Park would be open from 09:00/ 10:00 to 19:00 in the evening, Shows would commence at opening and finish ahead of the Park closing. There are no evening shows on these days.
- Night Show: Puy du Fou is famed for its nights shows. These typically start at dusk/ after sunset and have a duration of circa 1.5 hours.

5.12 Therefore, a Day Only ticketholder would have tickets for just the daytime shows, a Day and Night ticketholder would have tickets for both the daytime and night-time shows, and a Night Only ticketholder would have a ticket for only the night-time show.

5.13 The data has been disaggregated by whether tickets are sold for Day Only, day and night, or night only basis (as per the above), whether it is a weekday or weekend, and whether it is school term time or school holidays/ bank holidays in England and Wales.

5.14 Figures identified above are 'Daily visitors' e.g. they represent the visit of a single person. Where any reference is made to higher figures relating to 'Total Visits' this is where a 'Visitor' may purchase different ticket types, e.g. one person may buy a day ticket and a night show ticket, which would be classed as 2 tickets and as such these tickets create a higher 'Total Daily Visitors' figure per annum.

5.15 Using this data, 4 scenarios were created which are then applied to each phase:

- Day Only – Weekday – School Term
- Day and Night – Weekday – School Term
- Day Only – Weekend – School Term/ School Holiday (also includes weekday school holidays)
- Day and Night – Weekend – School Term/ School Holiday (also includes weekday school holidays)

5.16 These scenarios and their references are shown in further detail in **Table 5.4**.

Table 5.4: Scenario References

Phase	Scenario	Reference	Day Only/ day and night	Weekday & Friday/ Weekend	School term/ School Holidays
1	SC1	DO – WD – ST	Day Only	Weekday & Friday	School term
	SC2	DN – WD – ST	Day and night	Weekday & Friday	School term
	SC3	DO – WE – ST/SH*	Day Only	Weekend	School term/ school holiday
	SC4	DN – WE – ST/SH*	Day and night	Weekend	School term/ school holiday
4	SC5	DO – WD – ST	Day Only	Weekday & Friday	School term
	SC6	DN – WD – ST	Day and night	Weekday & Friday	School term
	SC7	DO – WE – ST/SH*	Day Only	Weekend	School term/ school holiday
	SC8	DN – WE – ST/SH*	Day and night	Weekend	School term/ school holiday
8	SC9	DO – WD – ST	Day Only	Weekday & Friday	School term
	SC10	DN – WD – ST	Day and night	Weekday & Friday	School term
	SC11	DO – WE – ST/SH*	Day Only	Weekend	School term/ school holiday
	SC12	DN – WE – ST/SH*	Day and night	Weekend	School term/ school holiday

*These scenarios also include Weekday School Holidays, Day Only and Day and Night respectively.

5.17 The scenarios have been developed in order to classify Park impacts upon trip generation, parking demand, and public transport requirements, e.g. number of shuttle buses required to transport rail arrivals to the Site.

5.18 Weekday school holidays have been categorised within the weekend scenarios because, from a daily visitor and mode choice perspective, travel behaviour during school holidays more closely reflects weekend pattern. This is characterised by higher leisure demand, reduced commuting activity.

5.20 Total daily visitors are shown in **Table 5.5** for the 85th and 100th percentile.

Table 5.5: Daily Visitors

Phase	Scenario	Reference	Daily Visitors – 100th Percentile	Daily Visitors – 85th Percentile
1	SC1	DO – WD – ST	2,693	2,648
	SC2	DN – WD – ST	5,399	4,158
	SC3	DO – WE – ST/SH	6,895	3,756
	SC4	DN – WE – ST/SH	9,389	6,702
4	SC5	DO – WD – ST	4,999	4,328
	SC6	DN – WD – ST	10,280	7,612
	SC7	DO – WE – ST/SH	13,565	7,977
	SC8	DN – WE – ST/SH	18,386	12,260
8	SC9	DO – WD – ST	10,365	8,456
	SC10	DN – WD – ST	17,806	13,549
	SC11	DO – WE – ST/SH	23,556	14,385
	SC12	DN – WE – ST/SH	29,427	20,210

5.21 Attendance for Phase 1, 4, and 8, broken down by Day Only, Day and Night and Night Only are shown in **Table 5.6.** These figures do not include visitors staying on-Site, which includes hotel guests and visitors using the campervan/ camping site. These are removed as their arrival and departure profiles differ to the typical patterns of the remaining visitors, e.g. they are likely to arrive across the day, rather than directly related to opening and closing periods.

Table 5.6: Expected Attendance

Phase	Scenario	Reference	Day Only*	Day and Night	Night only	Day Only	Day and Night	Night only
			100th Percentile Attendance			85th Percentile Attendance		
1	SC1	DO – WD – ST	2,350	-	-	2,305	-	-
	SC2	DN – WD – ST	1,582	2,316	1,158	1,160	1,770	885
	SC3	DO – WE – ST/SH	6,497	-	-	3,358	-	-
	SC4	DN – WE – ST/SH	4,359	3,088	1,544	2,438	2,577	1,289
4	SC5	DO – WD – ST	3,881	-	-	3,210	-	-
	SC6	DN – WD – ST	3,354	3,872	1,936	2,055	2,959	1,480
	SC7	DO – WE – ST/SH	12,337	-	-	6,749	-	-
	SC8	DN – WE – ST/SH	8,307	5,901	2,950	6,250	3,188	1,594
8	SC9	DO – WD – ST	9,137	-	-	7,228	-	-
	SC10	DN – WD – ST	9,735	4,562	2,281	7,092	3,486	1,743
	SC11	DO – WE – ST/SH	22,108	-	-	12,937	-	-
	SC12	DN – WE – ST/SH	18,856	6,082	3,041	12,470	4,195	2,097

*The Day Only figures have been based on the same assumptions made by Steer for hotel occupancy and campervan numbers. These assumptions are detailed in the 'Parameter Assumptions' section of the report.

Staff Numbers

5.22 Expected staff numbers at the Proposed Development have been provided by Puy du Fou, for Phase 1, 5, and 8. Analysis on the existing staff numbers for the French Puy du Fou site highlighted that on average, during the high season (end of June to end of August), 50% of total staff were on Site at any one time. This 50% has therefore been applied to forecast 'Total Jobs' at the Site to determine on-Site staff numbers.

5.23 When the Park is closed, it is estimated that 25% of staff on average still access the Site. This is to fulfil management roles, maintenance, and to cover when hotels are open. **Table 5.7** shows the breakdown.

Table 5.7: Forecast Total Jobs and On-Site Staff for UK Proposed Development Site

Phase	Total Jobs	On Site at any one time (high season)	On Site at any one time (Park closed)
Phase 1	700	350	175
Phase 4	1,400	700	350
Phase 8	2,100	1,050	525

5.24 Therefore, it is evident that the Site will accommodate some 1,050 staff on-Site at any one time during the day within the peak season.

Summary

5.25 This chapter outlines the assumptions used to inform the visitor and staff numbers for the Proposed Development. Visitor numbers have been modelled using an 85th percentile methodology, a well-established and robust planning approach that accounts for demand on days with higher-than-average attendance, while avoiding the inefficiencies of designing for rare, extreme peaks.

5.26 In practical terms, this means the infrastructure is designed to comfortably accommodate attendance levels that are exceeded on only 15% of operational days, striking a balance between resilience and realism. Designing to the 100th percentile (i.e., the absolute maximum attendance ever recorded) would result in significant overprovision of infrastructure and parking that would go unused the vast majority of the time. By contrast, the 85th percentile provides a high level of confidence that the development can operate efficiently on all but the most exceptional days, which are both infrequent and manageable through operational measures.

5.27 To further support this approach, contingency planning and flexible event-day management strategies will be in place to ensure the Proposed Development can continue to operate effectively even during those very rare occasions when attendance exceeds the 85th percentile.

5.28 Staffing assumptions have been derived from data provided by Puy du Fou, based on operational benchmarks from the comparable French and Spanish sites. Together, these assumptions underpin the design of parking provision, internal circulation, servicing logistics, and traffic management strategies, ensuring that the development remains functional, efficient, and visitor-friendly throughout its phased delivery.

6 Visitor and Staff Trip Distribution

Introduction

6.1 This Chapter sets out the anticipated visitor and staff trip distribution by rail and road.

Distribution Methodology – Rail

6.2 Distribution analysis has been carried out to determine the split of daily rail demand between Bicester North and Bicester Village stations. The methodology set out in the following section and outputs (available in Chapter 10) has been shared and agreed with Chiltern Railways. The Origin Destination Matrix (ODM) forms the basis of this analysis; the ODM is a dataset which captures the number of rail trips between every station in the UK.

6.3 The analysis examines origin stations with existing propensity to travel to Bicester, and the population of their corresponding Local Authority District (LAD). The Origin-Destination station pairs for Bicester North and Bicester Village were extracted from the ODM. Of these pairs, the stations included in the analysis are those with over 1,000 trips recorded annually (Bicester North and Bicester Village combined).

6.4 There are several caveats to this methodology:

- London stations have been grouped together as one, as demand is based on trips made from mainline stations with a route to Bicester Village or Bicester North.
- Although more than 1,000 trips between Manchester Piccadilly and Bicester North/Bicester Village were recorded in the ODM, Manchester Piccadilly has been excluded from the analysis based on the journey time (>3 hours) making rail an unlikely method of travel for day-only visitors. Such visitors are factored in separately as overnight stays.
- As East West Rail services have not yet come online, stations along this route will not yet appear paired with Bicester North or Bicester Village in the ODM dataset as passengers would travel by other more direct/quicker modes. To account for the fact that EWR services will be operating by the time the Park opens, the following stations have been added to the dataset analysed:
  - Cambridge
  - Milton Keynes Central
  - Bedford
  - Bletchley
  - London (using East West Rail)

6.5 Each station is assigned an origin code (“North” or “South”) based on its geographic location compared to Bicester.

6.6 To calculate existing demand for each origin station, the population for the Local Authority District (LAD) a station sits within is divided by the number of stations within the trimmed dataset (>1,000 annual trips) that are located in the same LAD. For example, the trimmed dataset contains three stations in the LAD of Warwick (Warwick, Warwick Parkway, Leamington Spa). The population of Warwick LAD is therefore divided by three. The demand catchment areas for each station are added together to give the combined demand catchment. Of this total, the percentage split of demand is calculated for each origin station. This is then multiplied by the peak hour rail demand to determine what proportion of peak hour demand is coming from each station.

6.7 A percentage share of demand is subsequently proportioned to Bicester North and Bicester Village. Where it is only possible to travel from the origin station to either Bicester North or Bicester Village, all demand from this origin station is attributed to the applicable station. For example, all demand from Birmingham Moor Street is allocated to Bicester North, as there is no route to Bicester Village. In cases where it is possible to travel to both Bicester North and Bicester Village from an origin station, a reasonable assumption has been made as to what the split of demand would be and takes into account the implementation of a Travel Demand Management system which would be employed to influence passengers' choice of route and direct visitors to Bicester North where a reasonable route is available (more detail is provided in Chapter 15). For example, from Coventry it is possible to travel to Bicester North via Banbury/Leamington Spa and Bicester Village via Oxford.

6.8 The distribution of demand from the north and south is calculated by adding the number of passengers arriving at Bicester North/ Bicester Village in the peak hour from each origin station, according to their coding as either "North" or "South". This gives the number of passengers arriving in the peak hour at:

- Bicester North, on northbound services
- Bicester North, on southbound services
- Bicester Village, on northbound services
- Bicester Village, on southbound services

6.9 **Table 6.1** below sets out the origin stations and the corresponding origin code, origin split and the proportion of demand from the origin station arriving at Bicester North and Bicester Village stations.

Table 6.1: Coding and Demand Distribution of Origin Stations

Station name	LAD	Origin code	Origin split	Split of demand to Bicester North	Split of demand to Bicester Village
London	London	South	50.4%	80%	20%
Oxford	Oxford	South	1.2%	0%	100%
Banbury	Cherwell	North	0.6%	100%	0%
Haddenham and Thame Parkway	Buckinghamshire	South	0.6%	100%	0%
Birmingham Moor Street	Birmingham	North	4.1%	100%	0%
Oxford Parkway	Cherwell	South	0.6%	0%	100%
High Wycombe	Buckinghamshire	South	0.6%	0%	100%

Station name	LAD	Origin code	Origin split	Split of demand to Bicester North	Split of demand to Bicester Village
Reading	Reading	South	1.2%	0%	100%
Leamington Spa	Warwick	North	0.4%	100%	0%
Saunderton	Buckinghamshire	South	0.6%	0%	100%
Coventry	Coventry	North	2.5%	50%	50%
Princes Risborough	Buckinghamshire	South	0.6%	10%	90%
Didcot Parkway	South Oxfordshire	South	1.1%	0%	100%
Bristol Temple Meads	City of Bristol	South	3.4%	0%	100%
Birmingham New Street	Birmingham	North	4.1%	100%	0%
Bath Spa	Bath and North East Somerset	South	1.4%	0%	100%
Southampton Central	Southampton	South	1.8%	0%	100%
Beaconsfield	Buckinghamshire	South	0.6%	0%	100%
Swindon (Wilts)	Swindon	South	1.7%	0%	100%
Birmingham International	Solihull	North	0.8%	100%	0%
Basingstoke	Basingstoke and Deane	South	1.3%	0%	100%
Gerrards Cross	Buckinghamshire	South	0.6%	30%	70%
Warwick	Warwick	North	0.4%	100%	0%
Solihull	Solihull	North	0.8%	100%	0%
Guildford	Guildford	South	1.0%	0%	100%
Aylesbury	Buckinghamshire	South	0.6%	10%	90%
Warwick Parkway	Warwick	North	0.4%	10%	90%
Cambridge	Cambridge	North	1.0%	10%	90%
Milton Keynes Central	Milton Keynes	North	1.0%	10%	90%
Bedford	Bedford	North	1.3%	10%	90%
Bletchley	Milton Keynes	North	1.0%	10%	90%
London - East West Rail	East West Rail - London	North	12.6%	0%	100%

Trackside Capacity Analysis

6.10 Chiltern has undertaken trackside capacity analysis which has involved assessing forecast demand associated with the Site against confidential loading data. This analysis includes EWR.

6.11 To facilitate this analysis, the rail distribution methodology set out above was amended to include additional origin codes ("East" and "West") to better reflect the network and allow for demand to be plotted on each train service without double counting or confusing different flows. The amended origin codes are presented in **Table 6.2**, along with justification where a code has been amended for the purpose of this particular piece of analysis. There is no change to the origin split and the proportion of demand from the origin station arriving at Bicester North and Bicester Village stations.

6.12 Steer provided Chiltern with the Proposed Development rail demand in hourly intervals for the peak weekday and weekend scenarios in each phase. These scenarios are as follows:

- Day Only – Weekend – School Term / School Holiday (Scenarios 3, 7 and 11)
- Day Only – Weekday – School Term (Scenarios 1, 5 and 9)

Table 6.2: Origin Stations Amended Coding for Rail Capacity Analysis

Station name	LAD	Rail distribution analysis origin code	Rail capacity analysis origin code	Justification for change in origin code Bicester North
London	London	South	South	No change.
Oxford	Oxford	South	West	Recoding to "West" origin allows a more accurate attribution of passengers to trains from Oxford going in the direction of Milton Keynes or London Marylebone. Using "South" confuses demand with trains coming from London which is in the opposite direction for the purpose of this analysis. This allows a much more targeted analysis to take place.
Banbury	Cherwell	North	North	No change.
Haddenham and Thame Parkway	Buckinghamshire	South	South	No change.
Birmingham Moor Street	Birmingham	North	North	No change.
Oxford Parkway	Cherwell	South	West	Recoding to "West" origin allows a more accurate attribution of passengers to trains from Oxford Parkway going in the direction of Milton Keynes or London Marylebone. Using "South" confuses demand with trains coming from London which is in the opposite direction for the

Station name	LAD	Rail distribution analysis origin code	Rail capacity analysis origin code	Justification for change in origin code Bicester North
				purpose of this analysis. This allows a much more targeted analysis to take place.
High Wycombe	Buckinghamshire	South	South	No change.
Reading	Reading	South	West	As per Oxford/Oxford Parkway. Assumption is that passengers would travel Reading > Oxford > Bicester Village. This is backed up by the 100% demand allocation at Bicester Village.
Leamington Spa	Warwick	North	North	No change.
Saunderton	Buckinghamshire	South	South	No change.
Coventry	Coventry	North	North	No change.
Princes Risborough	Buckinghamshire	South	South	No change.
Didcot Parkway	South Oxfordshire	South	West	As per Oxford/Oxford Parkway. Assumption is that passengers would travel Didcot Parkway > Oxford > Bicester Village. This is backed up by the 100% demand allocation at Bicester Village.
Bristol Temple Meads	City of Bristol	South	West	As per Oxford/Oxford Parkway. Assumption is that passengers would travel Bristol > Oxford > Bicester Village. This is backed up by the 100% demand allocation at Bicester Village.
Birmingham New Street	Birmingham	North	North	No change.
Bath Spa	Bath and North East Somerset	South	West	As per Oxford/Oxford Parkway. Assumption is that passengers would travel Bath Spa > Oxford > Bicester Village. This is backed up by the 100% demand allocation at Bicester Village.
Southampton Central	Southampton	South	West	As per Oxford/Oxford Parkway. Assumption is that passengers would travel Southampton Central > Reading > Oxford > Bicester Village. This is backed up by the 100% demand allocation at Bicester Village.
Beaconsfield	Buckinghamshire	South	South	No change.
Swindon (Wilts)	Swindon	South	West	As per Oxford/Oxford Parkway. Assumption is that passengers would travel Swindon

Station name	LAD	Rail distribution analysis origin code	Rail capacity analysis origin code	Justification for change in origin code Bicester North
				>Oxford>Bicester Village. This is backed up by the 100% demand allocation at Bicester Village.
Birmingham International	Solihull	North	North	No change.
Basingstoke	Basingstoke and Deane	South	West	As per Oxford/Oxford Parkway. Assumption is that passengers would travel Basingstoke>Reading>Oxford>Bicester Village. This is backed up by the 100% demand allocation at Bicester Village.
Gerrards Cross	Buckinghamshire	South	South	No change.
Warwick	Warwick	North	North	No change.
Solihull	Solihull	North	North	No change.
Guildford	Guildford	South	South	No change.
Aylesbury	Buckinghamshire	South	South	No change.
Warwick Parkway	Warwick	North	North	No change.
Cambridge	Cambridge	North	East	Recoding to “East” origin allows a more accurate attribution of passengers to trains from Milton Keynes going in the direction of Oxford. Using “North” confuses demand with trains coming from Birmingham which is in a different direction for the purpose of this analysis. It is noted that 10% of journeys from this location would be through Bicester North, but 90% are via Bicester Village which strengthens the case.
Milton Keynes Central	Milton Keynes	North	East	
Bedford	Bedford	North	East	
Bletchley	Milton Keynes	North	East	
East West Rail - London	East West Rail - London	North	East	

Distribution Methodology – Car

Visitor

6.13 As the attraction is likely to see demand throughout the UK, a distribution model has been developed based on Local Authority District (LAD) areas, and assumptions on travel times to the Site.

6.14 The Applicant have analysed the location of visitors that attend their French and Spanish sites and have synthesised those against UK population areas. On this basis, they estimated the following split of visitors by drive time band:

- 60% within 1-hour
- 25% within 2-hours
- 15% within 3-hours or more

6.15 For traffic modelling purposes, it is assumed that visitors outside of a two-hour drive time would have an overnight stay in one of the on-Site hotels, or a hotel nearby. As such, all car-based trips have been attributed to the LADs within the two-hour catchment.

6.16 To account for this, trips over two hours have been reassigned and an element of the trips designated as being 'local trips'. For the assessment, local has been defined as Cherwell, Oxford, and Buckinghamshire. On this basis, the following revised percentages are used for the assessment:

- 15% local
- 55% within 1-hour
- 30% within 2-hours

6.17 The distribution is to be assigned to the number of car vehicles identified for each hour of the assessment.

6.18 There are 350 LADs throughout the UK. Using GIS, routes from each LAD to the Site has been calculated. As the Site sits centrally within the Cherwell Local Authority area, this area was split into 3 zones to account for local trips, arriving from different directions.

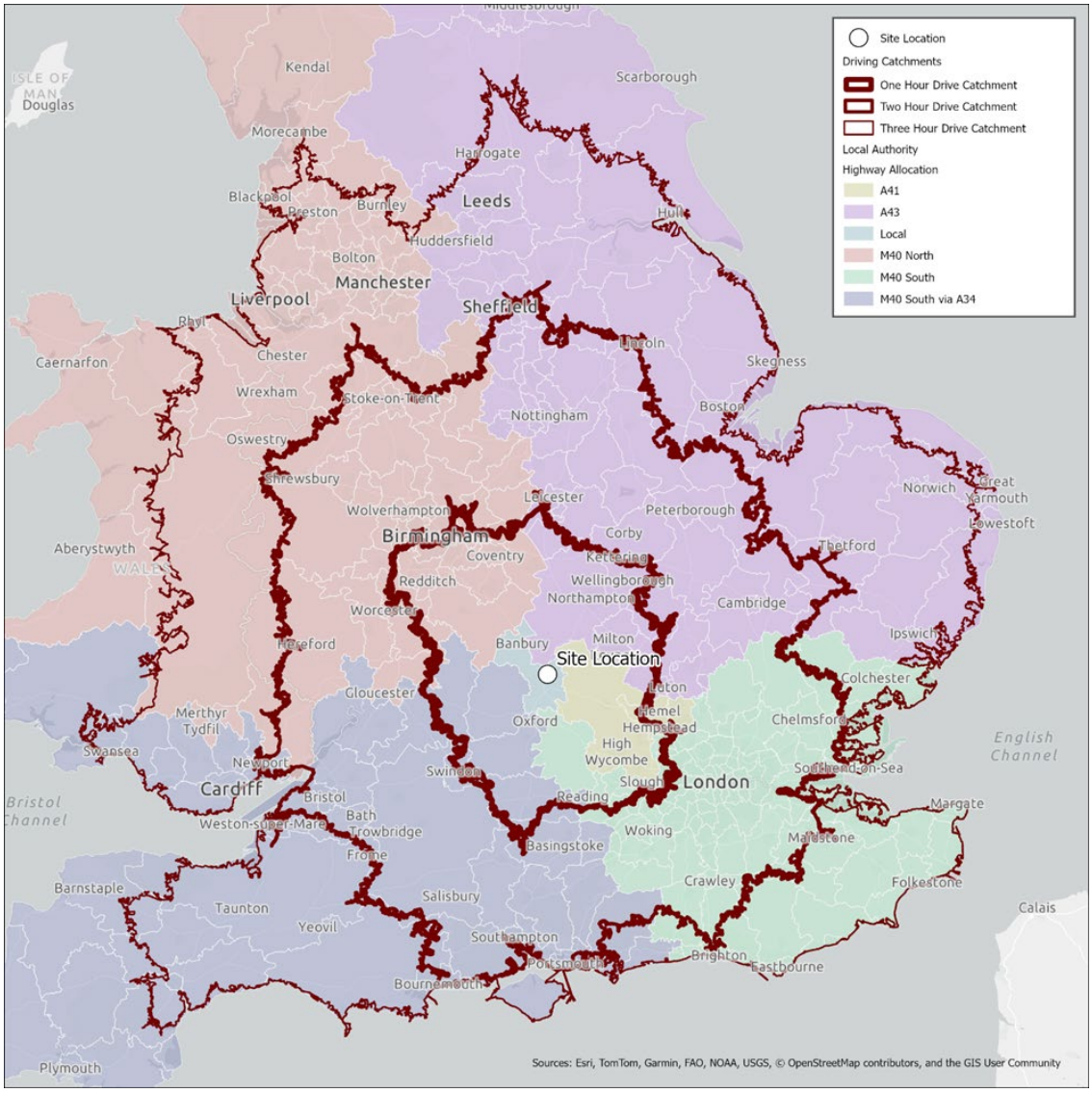
6.19 Highway allocation has been developed as follows:

- **Step 1:** Ascertained the population of each LAD from census data.
- **Step 2**: For each local LAD, a representative driving route to the Site has been calculated using ArcGIS Online to calculate the quickest route to the Site during the morning peak.
  - LADs have been grouped into travel time catchments; the following catchment areas were identified:
    - → Journey times less than 1-hour
    - → Journey times between 1- and 2-hours
    - → Journey times between 2- and 3-hours
    - → Journey times greater than 3-hours
- **Step 3:** A demand profile was applied to allocate the proportion of the total demand to the drive time catchments and distributes this demand on a weighted basis to the population within the LAD, within the travel catchment.
  - For day visitors, demand has only been allocated to local authorities within a two-hour drive time catchment. It is assumed that where there is a drive time in excess of 2-hours, this would result in an overnight stay.

- **Step 5:** Once the demand has been allocated to the LAD, a review of the final point of arrival to the Site has been assessed to identify which highway link the visitor will use to access the Site.

6.20 **Figure 6.1** shows how each LAD has been allocated to the highway.

Figure 6.1: Local Authority Highway Demand



Staff

6.21 The methodology for staff/ talent figures is more complex than visitor numbers as the network distribution will evolve between Year 1 (Phase 1), Year 5 (Phase 4), and Year 10 (Phase 8) as the Park develops. This is a result of there being a number of different key inputs:

- Percentage split between the type of staff employed
- Staff numbers (on-Site)
- Mode share

'Easy to Find' and 'Hard to Find' Talent (Staff)

6.22 Data has been reviewed for staff using both census data for journey to work trips associated with existing theme parks in the UK, and data from the parks in France and Spain. It is evident that while there is a general pool of local employment, certain job roles are harder to fill, and as such people travel much longer distances to take on these roles. This approach has been applied for staff (known as talent) and those associated with food and beverage (F&B).

6.23 The Applicant provided existing staff numbers at both the French and Spanish sites, with a breakdown of staff by category, and an associated ranking (1 to 5) of whether the talent (staff) occupying each role are 'easy to find', or 'hard to find' – in terms of recruiting for the roles. 1-3 have been considered 'easy to find', and 4-5 have been considered 'hard to find'. The 'easy to find' and 'hard to find' talent definitions are taken from the Applicant – the terms were coined based on experience from the sites in France and Spain, and the geographical distribution of their talent (staff). The Applicant are actively working with local centres of education to tailor courses to meet the likely demand for staff with specific skills. This should help increase the number of staff living locally who are able to apply and perform jobs with the required level of skill and training.

6.24 This ranking is important and has played a vital role in determining and dictating where talent (staff) are travelling from (their point of origin), and their predicted travel time. It is assumed that talent (staff) occupying 'easy to find' roles will be sourced more locally, and talent (staff) occupying 'hard to find' roles are more likely to cover a wider geographic area – fitting into local, 1-hour, or 2-hour catchment areas.

6.25 The approach therefore reviewed the French and Spanish talent (staff) figures and rankings from 2024 to understand the percentage split between 'easy to find' and 'hard to find', shown in **Table 6.3.**

Table 6.3: Percentage Split for Easy to Find and Hard to Find Staff/ Talent in France and Spain (2024)

Country	Easy to Find	Hard to Find
France	85.0%	15.0%
Spain	90.5%	9.5%

6.26 As Spain is a more recently developed site, the percentage split for this Site has been applied to Year 1 (Phase 1) of the Proposed Development, and as France is a well-established site, the percentage split for this Site has been applied to Year 10 (Phase 8). Summary

6.27 In terms of rail access, a distribution analysis was conducted to determine the likely split of demand between Bicester North and Bicester Village stations. This was based on existing travel propensities to Bicester and the population distribution across relevant LADs. Further analysis was also undertaken to assess trackside capacity, ensuring that projected rail demand can be accommodated without adverse impacts on station operations or passenger experience.

6.28 This chapter outlines the methodology and outcomes of the trip distribution analysis for both visitors and staff accessing the Proposed Development via car and rail.

6.29 For visitor car trips, a gravity-based distribution model was developed using data from existing sites in France and Spain, routing analysis, UK LADs, and population data. Existing

travel times/ distances from the existing sites were used and applied to the UK. A GIS tool was used to ensure realistic routing from LADs to the Site.

6.30 Population data for LADs was used to create a gravity model, so that demand distribution was weighted. This approach enabled a robust and evidence-based projection of where visitors are likely to travel from, reflecting distance and population density.

6.31 For staff travel, a different approach was adopted to reflect the nature of employment roles. Staff were categorised into “easy-to-find” and “hard-to-find” talent groups. Easy-to-find roles are expected to be sourced locally, with shorter commuting distances, while hard-to-find roles may be recruited from a wider geographic area. This segmentation was informed by data from Puy du Fou’s existing Park operations, and reflects realistic recruitment and travel patterns.

7 Mode Share Analysis

Introduction

7.1 This section presents the mode share analysis for the Proposed Development. The analysis draws on research from comparable tourism and leisure destinations, alongside professional experience and industry benchmarks, to inform a realistic and deliverable mode share strategy. It considers the nature of the attraction, expected visitor profiles, and likely travel behaviours.

7.2 The strategy aims to significantly reduce car dependency and promote sustainable travel. To support this, a car mode share target of 50% for Phase 1 (opening year) for day-only ticketholders has been set, recognising the unique opportunity to integrate sustainable transport from the outset and deliver a visitor experience aligned with environmental and operational goals.

7.3 This approach is in line with the Vision Led 'decide and provide' approach whereby active travel and public transport should be promoted and prioritised over car-based travel.

Researching Visitors and Staff Mode Shares

7.4 While there are no directly comparable attractions to Puy du Fou within the UK, a high-level review has been undertaken to assess other UK-based 'tourist attractions' for context. However, publicly available data on these sites is limited, and much of it is outdated and therefore not relevant for informing current planning.

7.5 It's important to recognise that most of these comparator sites are long-established parks, conceived and built at a time when sustainable transport was not a key planning consideration. As such, their infrastructure and operations were designed predominantly around private car access, with limited support for sustainable travel, and often without a Travel Plan in place, i.e. they were designed as part of the historic 'predict and provide' planning assessment.

7.6 Consequently, the mode shares observed at these legacy parks are not considered appropriate benchmarks for Puy du Fou. Instead, the Proposed Development presents a unique opportunity to embed sustainable transport principles from the outset, supported by a coordinated strategy that encourages mode shift and reduces reliance on private vehicles.

7.7 Notwithstanding this, the following summarises information found for visitor trips:

- Disneyland Paris – 54% arrival by individual car
- London Resort, Kent (not built) – 45.8% car mode share
- Universal Theme Park and Resort, Bedford (proposed) – the public consultation identified that initial studies estimate 10% of visitors would drive, with a further 25% as

passengers, 35-40% of visitors would arrive by train, and the remaining visitors would arrive by bus, taxi, or other modes.

7.8 Discussion have been held with Warner Brothers Studios in Leavesden, Hertfordshire, who operate high quality frequent shuttle buses from the local train station to their site, as well as a number of other sustainable travel options such as bus/ coach ticket packages from London. While the mode shares are not published and as such are not in the public domain it is understood that they achieved their Travel Plan target of 50% arriving by car and now regularly achieve a car mode share of just over 50%.

Adopted Approach

Visitor Mode Share

7.9 Mode share assumptions for Phase 1 are shown in **Table 7.1**, for Phase 4 in **Table 7.2**, and for Phase 8 in **Table 7.3**. Steer mode share assumptions are applied to the total visitor attendance figures provided by Puy du Fou.

7.10 Bike/ scooter mode share includes visitors whose journey has been entirely by bike, or they have accompanied their bike on public transport.

7.11 A blended 50% average car mode share for Day Only ticketholders is anticipated to be achievable on the basis of the assumptions set out earlier. Further narrative is provided on this within the chapter.

Table 7.1: Phase 1 – Mode Share Assumptions

Mode	Sc.1	Sc.2			Sc.3	Sc.4		
	Day Only	Day Only	Day and Night	Night Only	Day Only	Day Only	Day and Night	Night Only
Car	48%	48%	91%	92%	45%	45%	91%	92%
Coach	37%	37%	6%	6%	22%	22%	6%	6%
Local Bus	2%	2%	0%	0%	4%	4%	0%	0%
Rail (and shuttle)	10%	10%	0%	0%	22%	22%	0%	0%
Rail (and taxi)	1%	1%	0%	0%	5%	5%	0%	0%
Bicester P&R	0%	0%	0%	0%	0%	0%	0%	0%
Taxi	1%	1%	3%	2%	1%	1%	3%	2%
Bike/ Scooter	1%	1%	0%	0%	1%	1%	0%	0%

Table 7.2: Phase 4 – Mode Share Assumptions

Mode	Sc.5	Sc.6			Sc.7	Sc.8		
	Day Only	Day Only	Day and Night	Night Only	Day Only	Day Only	Day and Night	Night Only
Car	48%	48%	91%	92%	43%	43%	91%	92%
Coach	37%	37%	6%	6%	22%	22%	6%	6%
Local Bus	2%	2%	0%	0%	4%	4%	0%	0%
Rail (and shuttle)	10%	10%	0%	0%	24%	24%	0%	0%
Rail (and taxi)	1%	1%	0%	0%	5%	5%	0%	0%
Bicester P&R	0%	0%	0%	0%	0%	0%	0%	0%
Taxi	1%	1%	3%	2%	1%	1%	3%	2%
Bike/ Scooter	1%	1%	0%	0%	1%	1%	0%	0%

Table 7.3: Phase 8 – Mode Share Assumptions

Mode	Sc.9	Sc.10			Sc.11	Sc.12		
	Day Only	Day Only	Day and Night	Night Only	Day Only	Day Only	Day and Night	Night Only
Car	46%	46%	91%	92%	41%	41%	91%	92%
Coach	37%	37%	6%	6%	22%	22%	6%	6%
Local Bus	2%	2%	0%	0%	4%	4%	0%	0%
Rail (and shuttle)	10%	10%	0%	0%	24%	24%	0%	0%
Rail (and taxi)	1%	1%	0%	0%	5%	5%	0%	0%
Bicester P&R	2%	2%	0%	0%	2%	2%	0%	0%
Taxi	1%	1%	3%	2%	1%	1%	3%	2%
Bike/ Scooter	1%	1%	0%	0%	1%	1%	0%	0%

Combined Mode Share

7.12 Using the mode shares presented in **Table 7.1** to **Table 7.3**, a combined mode share breakdown is calculated for each scenario by taking total number of visitors by mode, divided by total on-the-day visitors, therefore combining Day Only, Day and Night and Night Only ticketholder mode shares.

7.13 These modes shares are then used to calculate a combined mode share for the phase, alongside total attendance per scenario for each phase, and number of occurrences of each scenario (scenarios as shown in Table 1). This combines scenarios 1-4 for Phase 1, scenarios 5-8 for Phase 4, and scenarios 9-12 Phase 8 to have a combined mode share for the year, as shown in **Table 7.4**. A breakdown of the tables can be found in **Appendix G**.

7.14 Public transport is a combination of coach, local bus, rail (and shuttle), rail (and taxi), rail (and cycle) and Bicester Park and Ride.

Table 7.4: Combined Mode Share by Phase (all trips)

Mode	Phase 1	Phase 4	Phase 8
Car (driver and passenger)	64.0%	66.2%	59.3%
Public Transport	33.8%	31.5%	38.5%
Taxi	1.7%	1.7%	1.5%
Active Travel	0.6%	0.6%	0.7%

7.15 It is evident that the overall combined mode shares are heavily influenced by Day and Night and Night Only mode shares where there is a much higher proportion of private cars. Therefore, **Table 7.5** presents the combined mode shares for Day Only, Day and Night, and Night Only for Phase 1, Phase 4, and Phase 8. The mode share is determined by the combined total number of visitors and combined number of visitors by mode.

Table 7.5: Combined Mode Share by Ticket Type

Ticket Type	Mode	Phase 1	Phase 4	Phase 8
Day Only	Car (driver and passenger)	46.1%	46.0%	45.4%
	Active Travel	1.0%	1.0%	1.0%
	Public Transport	51.9%	52.0%	52.6%
	Taxi	1.0%	1.0%	1.0%
Day and Night	Car (driver and passenger)	91.0%	91.0%	91.0%
	Active Travel	0.0%	0.0%	0.0%
	Public Transport	6.0%	6.0%	6.0%
	Taxi	3.0%	3.0%	3.0%
Night Only	Car (driver and passenger)	92.0%	92.0%	92.0%
	Active Travel	0.0%	0.0%	0.0%
	Public Transport	6.0%	6.0%	6.0%
	Taxi	2.0%	2.0%	2.0%

7.16 The average mode share across the year will be influenced by the number of Day Only and Night Show events which are held.

Mode Share Targets

7.17 It is difficult to achieve a high public transport mode share for Day and Night and Night Only ticketholders due to the lack of public transport provision at the time for night show egress, typically as late as 23:00 during July/ August. While there are trains which can accommodate some of the evening movements, the assessment considered the worst-case scenario based on current timetables. It is anticipated that in line with demand, public transport capacity will increase in the future, and as such there would be a higher percentage of public transport trips generated. Furthermore, as additional hotels come online in the area, there is greater opportunity for people to stay more locally and access the Site by sustainable modes, when attending night shows.

7.18 Considering **Table 7.4** and **Table 7.5**, proposed targets for Phase 1 Day Only ticketholders are shown in **Table 7.6**. This is a target, and recognition should be paid to initial behaviours not being as predicted. Monitoring and review will be required to reach the target, and a mechanism will be put in place through the mitigation strategy to address this.

Table 7.6: Phase 1 Mode Share Target (Annual Average Day Attendance Only)

Mode	Mode Share Target
Car Driver	20%
Car Passenger	30%
Public Transport (Rail / Bus / P&R / Coach/ Taxi)	49%
Active Travel (Cycling, Walking, Wheeling)*	1%

**This includes visitors whose journey has been entirely by bike, or they have accompanied their bike on public transport. It excludes any enhancements at either rail station for a bike-share/docking scheme.*

7.19 These are average targets across the year, and in some scenarios a greater percentage may be achieved (such as during school term time when there are more coaches) while during the peak summer periods, and at night shows, a higher car proportion will occur.

7.20 Whilst the mode share for Night Only or Day and Night ticketholders is untargeted, it is proposed to be monitored through a monitor and manage approach, based around the Travel Plan. As and when improvements to public transport are delivered, targets will be implemented.

Mode Share Differences due to Increased Attendance

7.21 Travel to the Site and thus mode share will be monitored annually. While there will be a bedding in period, as people start to understand the best way to reach the Site, given the lower visitor numbers, it should be easier to achieve a 50% car mode share in Phase 1 due to availability of non-car modes as a percentage of the overall Site attendance. Public transport availability for night show attendants in early years will be harder to achieve due to lack of services available, therefore it is expected that the mode share for night shows will be predominantly private vehicle movements (though for reasons set out in the traffic modelling technical notes, this is at a time when the adjoining road network is very quiet).

7.22 Growth of the Park will run in parallel to local growth identified in the Local Plan. This will include the delivery of new infrastructure and measures to promote sustainable travel which are to be delivered by OCC and others through developer contributions. In line with the LTCP this is expected to increase alternative options to the private car. This, combined with communications pushing demand to public transport will provide a viable alternative to private vehicle. However, the increased capacity threshold and attendance means the obligations on the Applicant to establish elevated numbers of bus shuttles and local bus services, as well as a target for increased attendance by active travel measures, will be increased proportionately.

7.23 As the capacity threshold and attendance further increases, there are more weekday events which have higher sustainable mode shares, but also a higher proportion of night shows per year, and as such here will be a greater need for initiatives to drive demand to public transport and active travel (which can be managed through Travel Plan coordination).

Staff Mode Share

7.24 A mode share target of 55% private car users has been set, informed by census data and the planned public transport strategy. 2011 'Journey to Work' census data shows that within urban areas, 63.85% of trips to work are as a car driver, 6% are as a car passenger, c.9% by public transport (rail and bus), and 19% on foot or by bike.

7.25 Additionally, the transport strategy proposes there will be shuttle services between the rail station and the Site, enhanced local services from neighbouring areas such as Bicester, Upper Heyford, Oxford, and Banbury, and improved infrastructure for walking and cycling – all of which can be utilised by staff.

Summary

7.26 This chapter presents the mode share analysis undertaken for the Proposed Development, combining insights from existing sites, professional judgement, and strategic planning targets.

7.27 Although there are no directly comparable attractions, a review of mode share data from similar destinations was conducted to inform assumptions. This was supplemented by professional judgement, drawing on experience with comparable transport contexts and visitor behaviours.

7.28 A key target emerging from the analysis is a 50% car mode share for Day Only ticketholders, reflecting a commitment to promoting sustainable travel options. Mode share projections have been developed to provide a comprehensive view of expected travel behaviours.

7.29 The analysis also recognises that Night Show attendees are likely to travel predominantly by car, due to the limited availability of sustainable transport options during late hours.

7.30 For staff travel, a mode share target of 55% car use has been set, informed by local journey-to-work data and the expected recruitment catchment. This reflects a realistic balance between sustainable travel promotion and the practicalities of staff commuting patterns.

7.31 To ensure accountability and adaptability, mode share will be monitored annually, allowing for responsive adjustments to the transport strategy as the development evolves.

8 Arrival and Departure Profiles

Introduction

8.1 This chapter reviews arrival and departure profiles for different modes, associated with the Proposed Development.

Park Opening Times

8.2 As mentioned in previous chapters, weekday Park opening is assumed as 10:00, weekend Park opening is assumed as 09:00, and typical daytime only closure is at 19:00.

8.3 Night-shows typically start after sundown/ at dusk, so varies dependent on the time of year, and will end at approximately 23:00. Typically, visitors would attend the Site for the whole day, unless staying in hotels, attending a conference, or attending multiple days.

Arrival and Departure Profiles – Visitor

Car

8.4 **Table 8.1** illustrates the expected car arrival and departure profiles for visitors (excluding staff), broken down by ticketholder type (Day Only, Day and Night, and Night Only). These profiles have been applied to the different scenarios for each phase and corresponding capacity threshold. The profiles are based on the Park opening at 10:00, and a night show running time finishing at approximately 23:00.

Table 8.1: Car Arrival and Departure Profiles

Time	Day Only		Day and Night		Night Only	
	Ingress	Egress	Ingress	Egress	Ingress	Egress
07:00 - 08:00	3.5%	-	-	-	-	-
08:00 - 09:00	5.0%	-	-	-	-	-
09:00 - 10:00	32.5%	-	-	-	-	-
10:00 - 11:00	27.5%	-	3.5%	-	-	-
11:00 - 12:00	22.5%	-	5.0%	-	-	-
12:00 - 13:00	5.0%	-	32.5%	-	-	-
13:00 - 14:00	2.5%	2.0%	27.5%	-	-	-
14:00 - 15:00	1.0%	5.0%	22.5%	-	-	-
15:00 - 16:00	0.5%	13.0%	5.0%	-	-	-
16:00 - 17:00	-	24.0%	2.5%	-	-	-
17:00 - 18:00	-	22.0%	1.0%	-	-	-
18:00 - 19:00	-	18.0%	0.5%	-	10.0%	-
19:00 - 20:00	-	12.0%	-	-	60.0%	-
20:00 - 21:00	-	4.0%	-	-	30.0%	-
21:00 - 22:00	-	-	-	-	-	
22:00 - 23:00	-	-	-	70.0%	-	70.0%
23:00 - 24:00	-	-	-	30.0%	-	30.0%

Day Only Ticketholders

8.5 The arrival profile is fairly flat, extending from the hourly periods of 07:00 to 16:00. This is a result of:

- Early arrivals for those attending an all-day timetable and ensuring arrival for opening of the Park
- Visitors who plan to attend on multiple days
  - Arrive early to avoid the 'typical' network peak hour and have breakfast / coffee prior to entering the Site
  - Arrive later in the afternoon to avoid the 'typical' network peak
  - Arrive later as a result of travelling from further afield and therefore have a longer journey time

8.6 Visitors with multi-day Site access account for the extending arrival profile, as suggested above, and still benefit from afternoon shows before attending their hotel and can return the next day to complete viewings of shows.

8.7 There is an expectation that Day Only events will end at 19:00, and therefore, the majority (64%) of departures occur between 16:00 – 19:00. However, restaurants will still be open for those wishing to dine prior to returning to hotels or their onward journey, justifying the further 16% remaining after 19:00.

8.8 There are guests staying overnight, both on Site or nearby who therefore have more 'flexibility' with arrival and departures, and less pressure to attend as many events as possible in one day. As this works to explain arrival profiles, the same can be applied for departure profiles. Visitors may have seen afternoon shows on day one of their visit, view morning shows the following day, and then depart for their onward journey home, providing explanation for departures beginning at 13:00. These journey types will be linked to origin/ destination assumptions for the trip generation analysis.

Day and Night Ticketholders

8.9 Day and night ticketholders are likely to have a slightly later arrival profile, accounted for by the fact they are on-Site for longer, and therefore peak arrival is expected to be later than Day Only tickets, between 10:00 – 14:00. Other patterns shown in **Table 8.1** for arrival profiles are the same as day ticketholders. Departures are concentrated to a hard egress when the night show has finished, approximately 2 hours after sunset.

Night Only Ticketholders

8.10 Profiles for night only ticketholders are fairly self-explanatory, with guests arriving for the start time of the night show around 21:00 and departing after the show has finished, which is a latest of approximately 23:00. Therefore there is then an expected mass departure from the 22:00 hour segment onwards – as this includes any time between 22:00-23:00.

Coach

8.11 **Table 8.2** sets out the typical arrival and departure profiles of ticketholders arriving by coach. This is based on a typical weekday.

8.12 The Park is assumed to open at 10:00 on weekdays and 09:00 on weekends, with typical Day Only closures at 19:00. Night shows start after dusk, so varies dependent on the time of year, and will end at approximately 23:00.

Table 8.2: Coach Arrival and Departure Profiles

Time	Day Only		Day and Night		Night Only	
	Ingress	Egress	Ingress	Egress	Ingress	Egress
07:00 - 08:00	-	-	-	-	-	-
08:00 - 09:00	1.0%	-	-	-	-	-
09:00 - 10:00	40.0%	-	-	-	-	-
10:00 - 11:00	27.5%	-	3.5%			
11:00 - 12:00	22.5%	-	5.0%			
12:00 - 13:00	5.0%	-	32.5%	-	-	-
13:00 - 14:00	2.5%	-	27.5%	-	-	-
14:00 - 15:00	1.0%	5.0%	22.5%	-	-	-
15:00 - 16:00	0.5%	35.0%	5.0%	-	-	-
16:00 - 17:00	-	40.0%	2.5%	-	-	-
17:00 - 18:00	-	20.0%	1.0%	-	-	-
18:00 - 19:00	-	-	0.5%	-	5.0%	-
19:00 - 20:00	-	-	-	-	90.0%	-
20:00 - 21:00	-	-	-	-	5.0%	-
21:00 - 22:00	-	-	-	5.0%	5.0%	5.0%
22:00 - 23:00	-	-	-	90.0%	-	90.0%
23:00 - 24:00	-	-	-	5.0%	-	5.0%

Rail and Shuttle

8.13 **Table 8.3** sets out the typical arrival and departure profiles of ticketholders arriving by rail and shuttle. This is based on a typical weekday.

8.14 The Park is assumed to open at 10:00 on weekdays and 09:00 on weekends, with typical Day Only closures at 19:00. Night shows start after dusk, so varies dependent on the time of year, and will end at approximately 23:00.

Table 8.3: Rail and Shuttle Arrival and Departure Profiles

Time	Day Only		Day and Night		Night Only	
	Ingress	Egress	Ingress	Egress	Ingress	Egress
07:00 - 08:00	12.0%	-	-	-	-	-
08:00 - 09:00	34.0%	-	-	-	-	-
09:00 - 10:00	34.0%	-	-	-	-	-
10:00 - 11:00	11.0%	-	3.5%	-	-	-
11:00 - 12:00	5.0%	-	5.0%	-	-	-
12:00 - 13:00	2.5%	-	32.5%	-	-	-
13:00 - 14:00	1.0%	-	27.5%	-	-	-
14:00 - 15:00	0.5%	-	22.5%	-	-	-
15:00 - 16:00	-	-	5.0%	-	-	-
16:00 - 17:00	-	2.0%	2.5%	-	-	-
17:00 - 18:00	-	14.0%	1.0%	-	-	-
18:00 - 19:00	-	24.0%	0.5%	-	5.0%	-
19:00 - 20:00	-	24.0%	-	-	90.0%	-
20:00 - 21:00	-	21.0%	-	-	5.0%	-
21:00 - 22:00	-	14.0%	-	5.0%	-	5.0%
22:00 - 23:00	-	1.0%	-	90.0%	-	90.0%
23:00 - 24:00	-	-	-	5.0%	-	5.0%

Rail and Taxi

8.15 **Table 8.4** sets out the typical arrival and departure profiles of ticketholders arriving by rail and taxi. This is based on a typical weekday.

8.16 The Park is assumed to open at 10:00 on weekdays and 09:00 on weekends, with typical Day Only closures at 19:00. Night shows start after dusk, so varies dependent on the time of year, and will end at approximately 23:00.

Table 8.4: Rail and Taxi Arrival and Departure Profiles

Time	Day Only		Day and Night		Night Only	
	Ingress	Egress	Ingress	Egress	Ingress	Egress
07:00 - 08:00	10.0%	-	-	-	-	-
08:00 - 09:00	40.0%	-	-	-	-	-
09:00 - 10:00	32.0%	-	-	-	-	-
10:00 - 11:00	9.0%	-	3.5%	-	-	-
11:00 - 12:00	5.0%	-	5.0%	-	-	-
12:00 - 13:00	2.5%	-	32.5%	-	-	-
13:00 - 14:00	1.0%	-	27.5%	-	-	-
14:00 - 15:00	0.5%	1.0%	22.5%	-	-	-
15:00 - 16:00	-	12.0%	5.0%	-	-	-
16:00 - 17:00	-	28.0%	2.5%	-	-	-
17:00 - 18:00	-	24.0%	1.0%	-	-	-
18:00 - 19:00	-	20.0%	0.5%	-	5.0%	-
19:00 - 20:00	-	14.0%	-	-	90.0%	-
20:00 - 21:00	-	1.0%	-	-	5.0%	-
21:00 - 22:00	-	-	-	5.0%	-	5.0%
22:00 - 23:00	-	-	-	90.0%	-	90.0%
23:00 - 24:00	-	-	-	5.0%	-	5.0%

Local Bus

8.17 **Table 8.5** sets out the typical arrival and departure profiles of ticketholders arriving by bus. This is based on a typical weekday.

8.18 The Park is assumed to open at 10:00 on weekdays and 09:00 on weekends, with typical Day Only closures at 19:00. Night shows start after dusk, so varies dependent on the time of year, and will end at approximately 23:00.

Table 8.5: Local Bus Arrival and Departure Profiles

Time	Day Only		Day and Night		Night Only	
	Ingress	Egress	Ingress	Egress	Ingress	Egress
07:00 - 08:00	-	-	-	-	-	-
08:00 - 09:00	10.0%	-	-	-	-	-
09:00 - 10:00	45.0%	-	-	-	-	-
10:00 - 11:00	30.0%	-	3.5%	-	-	-
11:00 - 12:00	11.0%	-	5.0%	-	-	-
12:00 - 13:00	2.5%	-	32.5%	-	-	-
13:00 - 14:00	1.0%	1.0%	27.5%	-	-	-
14:00 - 15:00	0.5%	5.0%	22.5%	-	-	-
15:00 - 16:00	-	13.0%	5.0%	-	-	-
16:00 - 17:00	-	20.0%	2.5%	-	-	-
17:00 - 18:00	-	24.0%	1.0%	-	-	-
18:00 - 19:00	-	22.0%	0.5%	-	5.0%	-
19:00 - 20:00	-	15.0%	-	-	90.0%	-
20:00 - 21:00	-	-	-	-	5.0%	-
21:00 - 22:00	-	-	-	5.0%	-	5.0%
22:00 - 23:00	-	-	-	90.0%	-	90.0%
23:00 - 24:00	-	-	-	5.0%	-	5.0%

Bicester Park and Ride

8.20 **Table 8.6** sets out the typical arrival and departure profiles of ticketholders arriving by Bicester Park and Ride.

8.21 The Park is assumed to open at 10:00 on weekdays and 09:00 on weekends, with typical Day Only closures at 19:00. Night shows start after dusk, so varies dependent on the time of year, and will end at approximately 23:00.

Table 8.6: Park and Ride Arrival and Departure Profiles

Time	Day Only		Day and Night		Night Only	
	Ingress	Egress	Ingress	Egress	Ingress	Egress
07:00 - 08:00	-	-	-	-	-	-
08:00 - 09:00	3.5%	-	-	-	-	-
09:00 - 10:00	5.0%	-	-	-	-	-
10:00 - 11:00	32.5%	-	3.5%	-	-	-
11:00 - 12:00	27.5%	-	5.0%	-	-	-
12:00 - 13:00	22.5%	-	32.5%	-	-	-
13:00 - 14:00	5.0%	-	27.5%	-	-	-
14:00 - 15:00	2.5%	1.0%	22.5%	-	-	-
15:00 - 16:00	1.0%	12.0%	5.0%	-	-	-
16:00 - 17:00	0.5%	28.0%	2.5%	-	-	-
17:00 - 18:00	-	24.0%	1.0%	-	-	-
18:00 - 19:00	-	20.0%	0.5%	-	5.0%	-
19:00 - 20:00	-	14.0%	-	-	90.0%	-
20:00 - 21:00	-	1.0%	-	-	5.0%	-
21:00 - 22:00	-	-	-	5.0%	-	5.0%
22:00 - 23:00	-	-	-	90.0%	-	90.0%
23:00 - 24:00	-	-	-	5.0%	-	5.0%

Taxi

8.22 **Table 8.7** sets out the typical arrival and departure profiles of ticketholders arriving by taxi. This is based on a typical weekday.

8.23 The Park is assumed to open at 10:00 on weekdays and 09:00 on weekends, with typical Day Only closures at 19:00. Night shows start after dusk, so varies dependent on the time of year, and will end at approximately 23:00.

Table 8.7: Taxi Arrival and Departure Profiles

Time	Day Only		Day and Night		Night Only	
	Ingress	Egress	Ingress	Egress	Ingress	Egress
07:00 - 08:00	-	-	-	-	-	-
08:00 - 09:00	-	-	-	-	-	-
09:00 - 10:00	5.0%	-	-	-	-	-
10:00 - 11:00	40.0%	-	3.5%	-	-	-
11:00 - 12:00	23.0%	-	5.0%	-	-	-
12:00 - 13:00	15.0%	-	32.5%	-	-	-
13:00 - 14:00	12.0%	-	27.5%	-	-	-
14:00 - 15:00	4.0%	1.0%	22.5%	-	-	-
15:00 - 16:00	1.0%	12.0%	5.0%	-	-	-
16:00 - 17:00	-	28.0%	2.5%	-	-	-
17:00 - 18:00	-	24.0%	1.0%	-	-	-
18:00 - 19:00	-	20.0%	0.5%	-	5.0%	-
19:00 - 20:00	-	14.0%	-	-	90.0%	-
20:00 - 21:00	-	1.0%	-	-	5.0%	-
21:00 - 22:00	-	-	-	5.0%	-	5.0%
22:00 - 23:00	-	-	-	90.0%	-	90.0%
23:00 - 24:00	-	-	-	5.0%	-	5.0%

Bike/ Scooter

8.24 **Table 8.8** sets out the typical arrival and departure profiles of ticketholders arriving by bike/ scooter. This is based on a typical weekday. The number of people arriving by foot will be negligible, and the arrival and departure profiles associated with trips made by foot are the same as those shown in **Table 8.8**.

8.25 The Park is assumed to open at 10:00 on weekdays and 09:00 on weekends, with typical Day Only closures at 19:00. Night shows start after dusk, so varies dependent on the time of year, and will end at approximately 23:00.

Table 8.8: Bike/ Scooter Arrival and Departure Profiles

Time	Day Only		Day and Night		Night Only	
	Ingress	Egress	Ingress	Egress	Ingress	Egress
07:00 - 08:00	-	-	-	-	-	-
08:00 - 09:00	-	-	-	-	-	-
09:00 - 10:00	32.0%	-	-	-	-	-
10:00 - 11:00	40.0%	-	3.5%	-	-	-
11:00 - 12:00	15.0%	-	5.0%	-	-	-
12:00 - 13:00	8.0%	-	32.5%	-	-	-
13:00 - 14:00	3.0%	-	27.5%	-	-	-
14:00 - 15:00	1.0%	1.0%	22.5%	-	-	-
15:00 - 16:00	1.0%	12.0%	5.0%	-	-	-
16:00 - 17:00	-	28.0%	2.5%	-	-	-
17:00 - 18:00	-	24.0%	1.0%	-	-	-
18:00 - 19:00	-	20.0%	0.5%	-	5.0%	-
19:00 - 20:00	-	14.0%	-	-	90.0%	-
20:00 - 21:00	-	1.0%	-	-	5.0%	-
21:00 - 22:00	-	-	-	5.0%	-	5.0%
22:00 - 23:00	-	-	-	90.0%	-	90.0%
23:00 - 24:00	-	-	-	5.0%	-	5.0%

Arrival and Departure Profiles – Staff

8.26 Arrival and departure profiles across the year for the French site have also been reviewed. Given operational hours will be similar in the UK, these have been used to apply the number of staff that are likely to be travelling within the peak hours. The percentage of staff predicted to arrive and depart during the typical peak periods are as follows:

- Arrivals
  - 10% arrive before 08:00
  - 20% arrive 08:00 – 09:00
  - 30% arrive 09:00 – 10:00
  - 12% arrive 10:00 – 11:00
  - 27% arrive 11:00 – 16:00
- Departures
  - 14% depart before 16:00
  - 9% depart 16:00 – 17:00
  - 20% depart 17:00 – 18:00
  - 18% depart 18:00 – 19:00
  - 12% depart 19:00 – 20:00
  - 27% depart 20:00 – 00:00

8.27 It is therefore evident that the majority of staff arrive and depart outside of the typical peak hours.

9 Traffic Assessment Methodology

Introduction

9.1 This section sets out the modelling methodology that has been undertaken to assess the impact of the development on the local highway network.

Traffic Surveys

Manual Classified Counts and Automatic Traffic Counts

9.2 Manual Classified Counts (MCCs) have been undertaken at key junctions (M40 Junction 9, Baynards Green and key points on Bicester Ring Road) for weekday and weekends, along with a set of Automatic Traffic Counts (ATCs) on links approaching junctions, to understand variations between time of day and weekend.

9.3 Locations of MCCs and ATCs are as follows:

- A43/ A3100 Baynards Green
- A41/ B4030 Vendee Drive/ Bicester Park and Ride
- B4030/ A4095 Middleton Stoney Road/ Vendee Drive/ Howles Lane
- Bucknell Road/ A4095/ Bucknell Road roundabout
- Howes Lane/ Bucknell Road
- A34/ M40/ A41 junction
- M40 junctions
- A43/ B4100 junction

9.4 In addition, data was obtained from OCC's Transport Monitoring team in October 2024 and analysed. The data includes information which is understood to have been used in OCC's current BTM 2026 future base year review. Additional data from independent collection Sites and publicly available data from WebTRIS have also been reviewed.

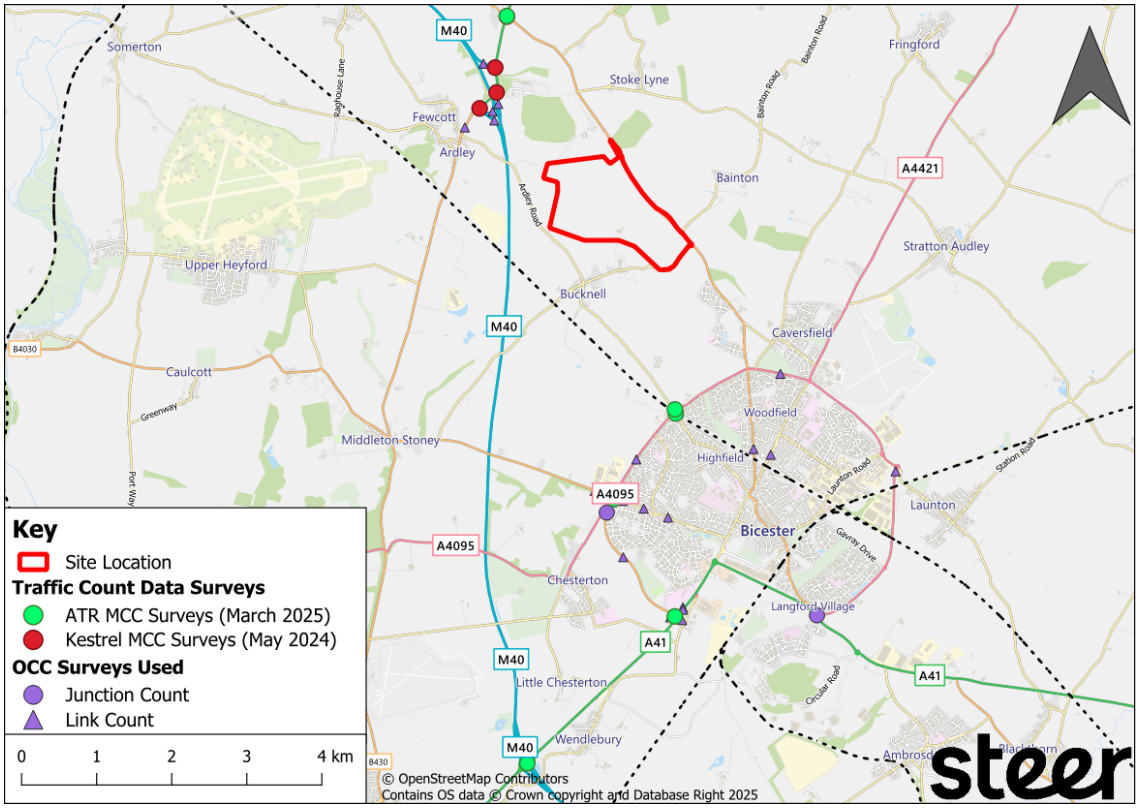
9.5 The assessment includes a summary of the following locations:

- A4095 Howes Lane: Shakespeare Drive (N) to Middleston Stoney Road (S), Surveyed 09/01/23
- A4095: From Heather Road (W) to Hornbeam Road (E), Surveyed 09/01/23
- A41 Oxford Road: From B4030 Vendee Drive (S) to Pioneer Way (N), Surveyed 26/09/22
- A41: From B4030 Vendee Drive (SW) to Wendlebury Road (NE), Surveyed 09/01/23
- A41: From Wendlebury Road (NE) to B4030 Vendee Drive (SW), Surveyed 09/01/23
- Access Road: From B4030 Vendee Drive (NE) to Bicester Park & Ride (SW), Surveyed 28/11/22

- Access Road: From Bicester Park & Ride (SW) to B4030 Vendee Drive (NE), Surveyed 28/11/22
- B4030 Vendee Drive: From Heaton Road (NW) to Whitelands Farm (SE), Surveyed 09/01/23
- B4030: From Empire Road (E) to Middleton Road (W), Surveyed 09/01/23
- B4100 Banbury Road: From Rowan Road (S) to Stable Road (N), Surveyed 02/10/23
- B430: From A43 (N) to Ardley Road (S), Surveyed 10/07/23
- Buckingham Road: From Cedar Drive (N) to Woodfield Road (S), Surveyed 02/10/23
- Charbridge Lane: From Bicester Road (N) to Gavray Drive (S), Surveyed 05/07/22
- Charles Shouler Way: From A41 Oxford Road (W) to Wendlebury Road (E), Surveyed 26/09/22
- Middleton Stoney Road: From A4095 Howes Lane (W) to Ludlow Road (E), Surveyed 30/10/23
- Middleton Stoney Road: From Goodwood Close (E) to Whitelands Way (W), Surveyed 30/10/23
- Middleton Stoney Road: From Ludlow Road (W) to Shakespeare Drive (E), Surveyed 30/10/23
- M40: From Off Sliproads to A43/B430
- M40: From A43/B430 to On Sliproads
- A43: From B430 to M40
- A43: From M40 to B430

9.6 The location of these sites can be seen in **Figure 9.1**.

Figure 9.1: Survey Locations



Bicester Traffic Model (BTM)

9.7 Following discussions with OCC Highways and NH, it was agreed that the most suitable tool for assessing the impacts of the development would be to use the Bicester Traffic Model.

9.8 The BTM is a strategic model that covers the Bicester area, therefore covering the Site assessment area. The model has an initial base year of 2016, and covers morning peak hour 07:30 to 08:30 and evening peak hour 17:00 to 18:00. The evening peak is identified as more critical for the Proposed Development.

9.9 A validation exercise was undertaken in 2024 by OCC, which reviewed the future 2026 base year against counts undertaken in 2022/2023 to determine whether the model is performing as expected, and as such can still be considered fit for purpose. The review confirmed that the model was within acceptable tolerances and that it remains the best tool for assessing traffic impacts across the wider network.

9.10 There are three versions of the BTM available for use:

- 2031 Future Year model – Relates to the existing Local Plan
- 2042 Local Plan model – this includes all committed and planned growth as set out in the emerging Local Plan.
- 2042 Local Plan model with mitigation – this is as above, but includes a mitigation scheme at Baynards Green, as it has become evident that an improvement scheme in that location is necessary for the quantum of development identified within the emerging Local Plan.

9.11 As set out earlier, while the phasing is not intrinsically linked to years of operation, as the number of visitors is linked to how successful the Park is, for the purposes of the TA, it is assumed that Park opening is in 2029 and that impacts arising from Phase 8 would occur in Year 10, e.g. 2039. It was agreed at the scoping stage that the opening year of 2029 and Phase 8 operational year of 2039 are sufficiently close to the 2031 and 2042 future years that are available for the BTM, and as such there is no need to amend those assessment years.

Weekend Modelling

9.12 Despite Bicester's significant growth over the past 15 years, no dedicated weekend traffic model currently exists. This is consistent with standard practice, as weekday peak periods typically drive capacity planning and network analysis. Steer has validated this approach by comparing weekday and weekend traffic data to ensure weekday modelling reflects the worst-case scenario.

9.13 Traffic data from OCC, collected across multiple key routes, shows that:

- Weekday morning peaks (07:00–08:00) consistently experience the highest traffic volumes
- Evening peaks (16:00–18:00) are more variable and generally lower than morning peaks
- Weekend peaks occur later (11:00–13:00), with Sunday flows being lower and shorter in duration than Saturday
- Overall, weekend traffic volumes are lower than weekday peaks

9.14 These patterns align with national travel trends and reflect typical behaviour: weekday traffic is dominated by commuting and school trips, while weekend traffic is driven by retail and leisure activities with shorter dwell times. To confirm these findings, additional junction surveys were conducted in March and April 2025. Results reaffirmed that weekend traffic remains below weekday peak levels across all surveyed locations.

9.15 Consequently, OCC and Steer agreed that a full weekend traffic model is not necessary. The existing weekday model sufficiently captures the maximum network impact and provides a robust basis for assessing the Proposed Development's effects. Should additional traffic arise, the network is expected to accommodate it without significant issues.

9.16 The full details of the weekend traffic flow analysis is provided in Technical Note *'Puy du Fou – Weekend Traffic Analysis'*, which is provided at **Appendix H**. The conclusions of the TN are summarised below:

- There is no weekend model at present, and the emerging Local Plan evidence base is not intending to include a weekend model
- As is normal practice for applications for leisure and retail uses, these have undertaken standalone junction modelling using observed traffic counts with committed development growth applied to assess weekends
- The access and mitigation strategy for the development is to minimise traffic impacts and improve walking, cycling and public transport access - these improvements to active travel and public transport will be beneficial to Bicester
- Weekend peak flows are later in the day than weekdays, typically between 11:00 and 13:00, and traffic volumes are less than either one of the morning and evening peak hours
- The weekend peak in Bicester is limited to a period in the late morning/ early afternoon associated with shopping – this does not correspond with the Proposed Development's peak trip generation, especially with a weekend opening time of 09:00;
- Peak egress operates well outside of the weekend peak as flows drop off earlier than weekday
- The traffic impacts within Bicester are likely to be minimal as the strategy is for traffic to use and access the Site via the M40 – largely avoiding Bicester
- It is possible to assess impacts at the weekend using junction count data and undertaking independent junction modelling
- Any mitigation put in place to deal with weekday impacts would provide benefits during the weekend, given that they are being designed to accommodate development traffic during the weekday peak periods, which have been shown to higher than the weekend

9.17 Furthermore, following a Vision Led decide and provide approach to assessing and mitigating the impacts of the Proposed Development, it would be inconsistent with this approach to provide specific capacity related mitigation for weekend scenarios, which may only occur during peak weekends when the Park is open, noting that the Park is closed for almost half of the year. Providing for the peak vehicular travel will only encourage additional vehicular travel, as has been shown with a predict and provide approach.

9.18 Based on the above and discussions with OCC, the following strategy has been adopted:

- Undertake additional focused MCCs at key junctions (Junction 10 M40, Baynards Green and key points on Bicester Ring Road) for weekday and weekends, along with a set of ATCs on links approaching junctions;

- Use the BTMLP (version 2031 and 2042) to test the morning and evening peak hour weekday impacts;
- Use a combination of data from the Local Plan Model and MCC and ATC data to assess how the shoulders vary either side of the peak hour, and consider against the Proposed Development peak operating periods, such as evening egress;
- Utilise traffic count data to highlight that the total traffic in the evening (that associated with egress and the night show) is no worse than peak periods when the junctions operate satisfactorily;
- Update the NH Microsimulation Model to include additional hours and weekend traffic flows; and
- Undertaken an Impact assessment and test mitigation options produced where necessary.

Local Junction Models

M40 Junction 10 VISSIM Microsimulation Model

9.19 A VISSIM microsimulation model has been developed by NH to assess the operation of the three junctions that make up M40 Junction 10, as well as the A43 Baynards Green junction. This model has already been used by developers at Baynards Green to assess development impacts and by consultants for the Oxford SRFI to test scenarios at the M40/A43 junction, in conjunction with the BTM.

Summary

9.20 Following discussions with OCC during the pre application period, it was agreed that:

- The Bicester Transport Model (BTM) (Cherwell Local Plan version) is the most suitable tool to assess the impact of the development in respect to determining the impact on the local and SRN.
- No strategic weekend model is available and one is not necessary to assess the impact of the Proposed Development given traffic flows are either similar or lower than the weekday on affected links.
- The BTM future years of 2031 and 2042 are close enough to represent the opening year (2029) and future year (2039) for modelling purposes.

9.21 In addition to the BTM modelling, the impact of the proposed scheme at Junction 10 of the M40 has been tested through the M40 Junction 10 VISSIM model.

10 Public Transport Strategy

Introduction

10.1 This Chapter sets out the Public Transport Strategy for the Proposed Development. The transport strategy aims to support access for 10-20,000 visitors by non-car modes, thereby significantly reducing car dependency. This will not only reduce the impact on the SRN and local road networks, but ensure sustainability goals are achieved.

10.2 As per **Table 7.6** in Chapter 7, a public transport mode share target of 49% for Phase 1 (opening year) for day-only ticket holders has been set, recognising the unique opportunity to integrate sustainable transport from the outset and deliver a visitor experience aligned with environmental and operational goals.

10.3 The potential for multi-modal transport opportunities was a key factor in the identification of the Site. Public transport is a combination of coach, local bus, rail (and shuttle), rail (and taxi), rail (and cycle) and Bicester Park and Ride.

10.4 This Chapter sets out the public transport strategy and underpinning distribution analysis before summarising what measures are required to deliver the expected mode share targets.

Rail Strategy (Including Rail Shuttle Bus)

10.5 Rail travel is a core component of the strategy. The Site's location near Bicester North and Bicester Village stations makes rail a natural choice for sustainable and scalable access. The Site can be reached from both stations within an 8-11-minute drive, making for efficient for bus shuttle trips. Chiltern Railways operate services to both stations. Bicester Village is located on the London-Oxford route and Bicester North is located on the London-Birmingham route, as per **Figure 3.3**.

10.6 In addition, Bicester will benefit from a direct connection to the EWR line, further strengthening regional rail accessibility and enhancing the Site's long-term sustainable transport options.

10.7 The daily rail demand for Day Only ticketholders, presented in **Table 10.1**, has been calculated for each scenario from the mode share (**Table 7.1** for Phase 1, **Table 7.2** for Phase 4 and **Table 7.3** for Phase 8) and expected daily attendance (as per Chapter 4). The daily rail demand has then been applied to the rail arrival and departure profile to indicate the number of Day Only ticketholders arriving by rail in hourly intervals across the twelve scenarios, as presented in **Table 10.2**.

Table 10.1: Number of day-only ticketholders arriving/departing by rail daily, by scenario

Phase	Scenario reference		85th percentile daily attendance (day-only tickets)	Rail mode share	Daily rail demand
1	SC1	DO – WD – ST	2305	11%	254
	SC2	DN – WD – ST	1160	11%	128
	SC3	DO – WE – ST/SH	3358	27%	907
	SC4	DN – WE – ST/SH	2438	27%	658
4	SC5	DO – WD – ST	3210	11%	353
	SC6	DN – WD – ST	2055	11%	227
	SC7	DO – WE – ST/SH	6749	29%	1957
	SC8	DN – WE – ST/SH	6250	29%	1813
8	SC9	DO – WD – ST	7228	11%	795
	SC10	DN – WD – ST	7092	11%	780
	SC11	DO – WE – ST/SH	12937	29%	3752
	SC12	DN – WE – ST/SH	12470	29%	3616

Table 10.2: Number of Day-only Ticketholders Arriving/Departing by Rail Hourly

Scenario	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12
	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH
Daily total:	254	128	907	658	353	227	1957	1813	795	780	3752	3616
Ingress												
00:00 - 07:00	-	-	-	-	-	-	-	-	-	-	-	-
07:00 - 08:00	30	15	105	77	42	27	228	211	94	92	437	421
08:00 - 09:00	88	44	318	231	122	78	686	635	275	269	1314	1267
09:00 - 10:00	86	43	305	221	119	77	659	610	269	264	1263	1217
10:00 - 11:00	27	14	96	70	38	25	209	193	86	84	400	385
11:00 - 12:00	13	6	45	33	18	11	98	91	40	39	188	181
12:00 - 13:00	6	3	23	16	9	6	49	45	20	20	94	90
13:00 - 14:00	3	1	9	7	4	2	20	18	8	8	38	36
14:00 - 15:00	1	1	5	3	2	1	10	9	4	4	19	18
15:00 - 00:00	-	-	-	-	-	-	-	-	-	-	-	-
Egress												
00:00 – 14:00	-	-	-	-	-	-	-	-	-	-	-	-
14:00 - 15:00	0	0	2	1	0	0	3	3	1	1	6	66
15:00 - 16:00	3	1	20	15	4	3	40	38	9	9	78	75
16:00 - 17:00	11	6	62	45	15	10	127	118	35	34	243	234
17:00 - 18:00	38	19	144	104	53	34	308	285	119	116	590	569
18:00 - 19:00	60	30	211	153	83	54	456	423	188	184	875	843
19:00 - 20:00	59	30	201	146	82	52	436	404	184	180	836	806
20:00 - 21:00	49	24	157	114	68	43	344	318	153	150	658	635
21:00 - 22:00	32	16	103	75	45	29	227	210	101	99	435	419
22:00 - 23:00	2	1	7	5	3	2	16	15	7	7	31	30
23:00 – 00:00	-	-	-	-	-	-	-	-	-	-	-	-

Rail Distribution

10.8 Distribution analysis has been carried out to determine the split of daily rail demand between Bicester North and Bicester Village stations.

10.9 As referred to in Chapter 15, the Public Transport Strategy benefits from visitors being directed to their best travel options by utilising a Travel Demand Management tool to efficiently support the rail demand. From some origin stations, it is only possible to travel directly to Bicester North or Bicester Village. From other origin stations, however, there are routes available to both stations. The Travel Demand Management tool will provide the most effective route for visitors travelling by rail to Bicester North, where there is a feasible route from the point of origin. Where there is no direct or easily accessible route to Bicester North, visitors will be directed to Bicester Village Station. Further detail on Travel Demand Management is provided in Chapter 15.

10.10 Bicester North is a commuter station with the busiest periods being the AM and PM peak Tuesday – Thursday. Bicester Village, which caters more to leisure rail demand, is busiest over the weekend. Bicester North is located on the London-Birmingham route and Bicester Village is located on the London-Oxford route. Visitors travelling from London therefore have the option of travelling from London Marylebone for Bicester North and from London Paddington for Bicester Village. Following engagement with Chiltern Railways and a site visit to both stations, it was agreed Bicester North would be the primary railhead for the Site on the basis that:

- The Proposed Development rail demand profile better aligns with available capacity on Bicester North services, particularly from London, helping to avoid additional pressure on Bicester Village services - especially during weekends when peak periods for both sites are more likely to coincide
- There is opportunity to capitalise on space within the Bicester North station forecourt to deliver additional bus stops for the bus shuttle operation. Shuttles will also operate from Bicester Village, however the required number of vehicles to accommodate the Proposed Development's forecasted demand will be comparatively lower in number. This will prevent the station infrastructure (used by the Bicester Village shuttle and local buses) from becoming overloaded
- There are marketing opportunities for positioning Bicester North as the primary rail gateway to the Site, helping to avoid potential confusion that may arise from directing visitors to Bicester Village station, which is strongly associated with the adjacent retail park

10.11 The split of demand between Bicester North and Bicester village is calculated by applying the demand distribution set out in **Table 6.1** to the Proposed Developments daily rail demand. In order to demonstrate the proportional split of demand between stations, the daily rail demand for the Day Only – Weekend – School Term/Holiday scenarios in each phase have been used. This is indicative of the split of demand between the stations and will be applicable to all scenarios across the phases. The resulting split of the Proposed Development rail demand across Bicester North and Bicester Village stations for these scenarios is presented below in **Table 10.3**. The distribution of demand will see 54% of the Proposed Development daily rail demand using Bicester North and 46% using Bicester Village.

Table 10.3: Split of Proposed Development Daily Rail Demand for the Day Only – Weekend – School Term/Holiday scenarios in each phase

Scenario / Phase	Bicester North	Bicester Village	Daily Rail Demand
Scenario 3 (Phase 1)	489	418	907
Scenario 7 (Phase 4)	1,056	901	1,957
Scenario 11 (Phase 8)	2,025	1,728	3,752

Trackside Capacity Analysis

10.12 Chiltern Railways have assessed trackside capacity to determine whether there is sufficient capacity and identify the level of reinforcement required where necessary to accommodate the Proposed Development demand on Chiltern's services. The analysis has been undertaken on ingress and egress demand for peak weekday and weekend scenarios in each Phase, using outputs from Steer's demand forecasting which presents the number of visitors arriving/ departing in hourly intervals at both stations by each origin ("North", "South", "East" and "West"). This data is available in **Appendix I** and is summarised for the peak ingress hour in **Table 10.4** and for the peak egress hour in **Table 10.5** overleaf.

Table 10.4: Summary of Rail Demand (trackside) Distribution in the Peak Ingress Hour (08:00 – 09:00)

Phase / Scenario	Origin	Weekday (WD)		Weekend (WE)	
		Bicester North	Bicester Village	Bicester North	Bicester Village
Phase 1: WD: Scenario 1 WE: Scenario 3	North	11	1	39	5
	South	36	13	131	45
	East	0	15	1	53
	West	0	12	0	43
Phase 4: WD: Scenario 5 WE: Scenario 7	North	15	2	85	11
	South	50	17	282	98
	East	1	20	3	114
	West	0	17	0	94
Phase 8: WD: Scenario 9 WE: Scenario 11	North	34	4	162	21
	South	113	39	541	187
	East	1	46	6	218
	West	0	38	0	179

Table 10.5: Summary of Rail Demand (trackside) Distribution in the Peak Egress Hour (18:00 – 19:00)

Phase / Scenario	Origin	Weekday		Weekend	
		Bicester North	Bicester Village	Bicester North	Bicester Village
Phase 1: WD: Scenario 1 WE: Scenario 3	North	7	1	26	3
	South	25	9	87	30
	East	0	10	1	35
	West	0	8	0	29
Phase 4: WD: Scenario 5 WE: Scenario 7	North	10	1	56	7
	South	34	12	188	65
	East	0	14	2	76
	West	0	11	0	62
Phase 8: WD: Scenario 9 WE: Scenario 11	North	23	3	108	14
	South	77	27	360	125
	East	1	31	4	145
	West	0	26	0	199

10.13 Chiltern Railways has assessed these model outputs against service timetables and their own confidential (not for publication) loading data. The Proposed Development demand has primarily been assessed against the current published May 2025 timetable, with the inclusion of two East West Rail services per hour. East West Rail services will call at Bicester Village enroute between Oxford and Milton Keynes. This provides an uplift to available rail capacity with services expected to run half-hourly Monday-Sunday by the time the Proposed Development opens. From engagement with East West Rail, it is understood that the trains will have a maximum of 2-carriages.

10.14 Delivery of the East West Rail network is phased. Services have been operating on the Oxford to Bicester section of the East West Rail network since 2016 following line upgrades. Delivery of the remainder of the network is phased:

- Phase 1 (CS1) between Bicester and Bletchley/Milton Keynes has been rebuilt and testing is ongoing. Passenger services are expected to start in the next six months on this leg of the network.
- Phase 2 (CS2) between Bletchley and Bedford is a committed railway scheme with delivery anticipated for 2030.
- Phase 3 (CS3) between Bedford to Cambridge is under development and designs will be consulted on in early 2026. The target completion date is 2035/2036.

10.15 Chiltern has been working on the business case for newer and more trains for over a year and on 5th August 2025 received approval from the Department for Transport. Chiltern has secured 13 newer, modern trains for the intercity route between London and the West Midlands. These trains will provide more capacity across the Chiltern network and will serve Bicester North station. This announcement also increases Chiltern's overall carriage numbers, enabling some longer services to run between London Marylebone and Bicester Village. With this announcement, Chiltern will now begin mobilising the newer trains with the expectation they will be introduced gradually over the next 12 months, with the first of them operating from early 2026. Chiltern will publish details of additional timetabled

services once the finalised. Chiltern recognise that this will add seating capacity and additional services to the rail network for the Proposed Development demand. Chiltern expect, however, that due to general demand growth from housing and other related developments (e.g. Bicester Village growth, Oxford United Stadium and Universal Studios) additional rolling stock will be needed to serve the Proposed Development from the early 2030s.

10.16 Chiltern are working closely with Network Rail to build a future business case for new battery-electric trains to meet the significant growth in leisure demand projected in the region from the early 2030s. This will take into account our business-as-usual growth and other interrelated projects including the Oxford United Stadium, Bicester Village growth and the Universal Studio's development.

10.17 Chiltern has assessed the Proposed Development demand against the May 2025 timetable, which includes the addition East West Rail services at a frequency of two trains per hour. This scenario does not take account of the anticipated uplift in December 2026.

10.18 From this initial analysis, Chiltern Railways has concluded that targeted interventions will be required for peak flows in certain hours in Phase 1.

10.19 The analysis suggests there is sufficient capacity to accommodate Phase 1 Proposed Development demand on existing services with current carriage numbers, with the exception of the following periods during which reinforcement (including the addition of carriages/services) will be required:

- Bicester North
  - Weekdays: services from the north in the AM peak hours, and services to the north in the PM peak hours
  - Saturday: services from the north between 09:00-09:59 and from the south between 10:00-10:50. Services to the north between 19:00-19:59
  - Sunday: services from the north between 07:00-09:59 and from the south between 07:00-07:59 and 10:00-10:59. Services to the north between 16:00-16:59 and to the south 17:00-17:59
- Bicester Village
  - Weekdays: services from the East in the AM peak hours, and services to the East in the PM peak hours. Services to the south between 17:00-17:59
  - Saturday: services from the East in the AM peak hours, and services to the East in the PM peak hours. Services to the south between 17:00-17:59
  - Sunday: services from the East in the AM peak hours, and services to the East in the PM peak hours. Services from the south between 07:00-07:50 and those going to the south between 16:00-17:59

10.20 The Travel Demand Management tool will be utilised to influence visitor travel to account for services with higher levels of background demand. On Sunday mornings, for example, travel advice will account for the rail service beginning later due to the scheduling of routine maintenance works during Saturday night/Sunday morning.

10.21 It is noted that the introduction of additional rolling stock in the December 2026 timetable through the fleet cascade will offer notable improvements in capacity across key periods. Once the stock plans are finalised, Chiltern will repeat the analysis using the December 2026 weekday and weekend timetables.

10.22 Subject to having the available rolling stock and colleague resources, Chiltern will review what strategic interventions need to be made to increase capacity for Proposed Development demand. This could include adding additional carriages or stops to existing services at peak times.

10.23 For Phases 4 and 8, additional rolling stock will be required to accommodate forecast rail demand. Chiltern continue to assess overall growth in demand across the network, related to projects such as Bicester Village, the Oxford United Football Club stadium, Universal Studios and ongoing housing development. Chiltern has advised that forecast rail demand in Phases 4 and 8 will be fed into future cases presented to the Department for Transport for additional rolling stock, along with demand arising from other Sites requiring capacity on the network.

10.24 Chiltern has advised that, on the basis of the rail demand analysis, the organisation is supportive of the scheme, subject to:

- EWR operating two trains per hour, which is understood to be part of the EWR delivery package.
- Additional rolling stock and colleague resources will be required from the early 2030s as customer numbers rise, and other large volume trip generators in the region come online.
- Approval of the fleet cascade Business Case which will provide additional capacity. The capacity analysis will be finalised once the stock diagrams are confirmed for the December 2026 timetable.
- Additional rolling stock and colleague resources are made available by the Department for Transport for later Phases (4 and 8), in line with Chiltern's business case for new battery/electric trains to account for the cumulative housing growth in the region, and from large volume trip generators in the region, notably Oxford United Football Club, Wembley Stadium, Bicester Village and Universal Studios.

Rail Shuttle Bus

10.25 Upon arrival at Bicester North and Bicester Village, visitors have a choice to modes to reach the site. The trackside rail demand has been disaggregated between bus shuttle and taxi for onward connectivity with the Site. Whilst it is acknowledged that some visitors may take advantage of enhanced local bus services or cycle hire schemes brought forward as a result of the Proposed Development, a worst-case approach has been adopted whereby all rail demand is assume to complete the journey to the Park via either the shuttle bus operation – expected to accommodate the majority of visitors – or by taxi.

10.26 Trackside rail demand is disaggregated between Rail and Shuttle and Rail and Taxi by applying the modal splits set out in **Table 7.1**, **Table 7.2** and **Table 7.3** of Chapter 7. The ticketing product will facilitate visitors arriving by Rail to use the shuttle services free of charge. Opportunities to provide a joint ticketing offer between Chiltern and the Park will be explored and will require the Department for Transport's Commercial approval.

10.27 The daily number of Day Only ticketholders using Rail and Shuttle by scenario is presented in **Table 10.6,** alongside the distribution of the total daily Rail and Shuttle demand between Bicester North and Bicester Village. The methodology for calculating the split of Rail and Shuttle demand between stations follows that for the overall distribution of rail demand, as set out in Chapter 6.

Table 10.6: Number of day-only ticketholders arriving/departing by rail and shuttle daily, by scenario

Phase	Scenario reference		Bicester North Daily Rail & Shuttle Demand	Bicester Village Daily Rail & Shuttle Demand	Total Daily Rail & Shuttle Demand
1	SC1	DO – WD – ST	125	106	231
	SC2	DN – WD – ST	63	53	116
	SC3	DO – WE – ST/SH	399	340	739
	SC4	DN – WE – ST/SH	289	247	536
4	SC5	DO – WD – ST	173	148	321
	SC6	DN – WD – ST	111	95	206
	SC7	DO – WE – ST/SH	874	746	1620
	SC8	DN – WE – ST/SH	809	691	1500
8	SC9	DO – WD – ST	390	333	723
	SC10	DN – WD – ST	383	327	709
	SC11	DO – WE – ST/SH	1675	1430	3105
	SC12	DN – WE – ST/SH	1615	1378	2993

10.28 Rail and Shuttle daily demand has subsequently been applied to the respective arrival and departure profile (**Table 8.3** for Rail and Shuttle) to indicate the number of visitors arriving/departing in hourly intervals at each station. The arrival and departure profile for visitors arriving by Rail and Shuttle at Bicester North is presented in **Table 10.7**, and in **Table 10.8** for Bicester Village.

Table 10.7: Number of Day-only Ticketholders Arriving/Departing by Rail and Shuttle Hourly, Bicester North

Scenario	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12
	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH
Daily total:	125	63	399	289	173	111	874	809	390	383	1675	1615
Ingress												
00:00 – 07:00	-	-	-	-	-	-	-	-	-	-	-	-
07:00 - 08:00	15	8	48	35	21	13	105	97	47	46	201	194
08:00 - 09:00	43	21	136	98	59	38	297	275	133	130	570	549
09:00 - 10:00	43	21	136	98	59	38	297	275	133	130	570	549
10:00 - 11:00	14	7	44	32	19	12	96	89	43	42	184	178
11:00 - 12:00	6	3	20	14	9	6	44	40	20	19	84	81
12:00 - 13:00	3	2	10	7	4	3	22	20	10	10	42	40
13:00 - 14:00	1	1	4	3	2	1	9	8	4	4	17	16
14:00 - 15:00	1	-	2	1	1	1	4	4	2	2	8	8
15:00 – 00:00	-	-	-	-	-	-	-	-	-	-	-	-
Egress												
00:00 - 16:00	-	-	-	-	-	-	-	-	-	-	-	-
16:00 - 17:00	3	1	8	6	3	2	17	16	8	8	34	32
17:00 - 18:00	18	9	56	40	24	16	122	113	55	54	235	226
18:00 - 19:00	30	15	96	69	42	27	210	194	94	92	402	388
19:00 - 20:00	30	15	96	69	42	27	210	194	94	92	402	388
20:00 - 21:00	26	13	84	61	36	23	184	170	82	80	352	339
21:00 - 22:00	18	9	56	40	24	16	122	113	55	54	235	226
22:00 - 23:00	1	1	4	3	2	1	9	8	4	4	17	16
23:00 – 00:00	-	-	-	-	-	-	-	-	-	-	-	-

Table 10.8: Number of Day-only Ticketholders Arriving/Departing by Rail and Shuttle Hourly, Bicester Village

Scenario	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12
	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH
Daily total:	106	53	340	247	148	95	746	691	333	327	1430	1378
Ingress												
00:00 – 07:00	-	-	-	-	-	-	-	-	-	-	-	-
07:00 - 08:00	13	6	41	30	18	11	90	83	40	39	172	165
08:00 - 09:00	36	18	116	84	50	32	254	235	113	111	486	469
09:00 - 10:00	36	18	116	84	50	32	254	235	113	111	486	469
10:00 - 11:00	12	6	37	27	16	10	82	76	37	36	157	152
11:00 - 12:00	5	3	17	12	7	5	37	35	17	16	72	69
12:00 - 13:00	3	1	9	6	4	2	19	17	8	8	36	34
13:00 - 14:00	1	1	3	2	1	1	7	7	3	3	14	14
14:00 - 15:00	1	-	2	1	1	-	4	3	2	2	7	7
15:00 – 00:00	-	-	-	-	-	-	-	-	-	-	-	-
Egress												
00:00 - 16:00	-	-	-	-	-	-	-	-	-	-	-	-
16:00 - 17:00	2	1	7	5	3	2	15	14	7	7	29	28
17:00 - 18:00	15	7	48	35	21	13	104	97	47	46	200	193
18:00 - 19:00	25	13	82	59	36	23	179	166	80	78	343	331
19:00 - 20:00	25	13	82	59	36	23	179	166	80	78	343	331
20:00 - 21:00	22	11	71	52	31	20	157	145	70	69	300	289
21:00 - 22:00	15	7	48	35	21	13	104	97	47	46	200	193
22:00 - 23:00	1	1	3	2	1	1	7	7	3	3	14	14
23:00 – 00:00	-	-	-	-	-	-	-	-	-	-	-	-

10.29 It has been agreed with Chiltern that the bus shuttle operation to transport visitors between Bicester North and the Site will initially start at 09:00 Monday – Friday. This is to discourage visitors of the Proposed Development from using Chiltern's morning peak services which have limited spare capacity due to high commuting demand. Whilst it is believed that this measure will effectively curtail rail demand pre-09:00, it is noted that some visitors will choose to travel to Bicester North pre-09:00. In these instances, the visitors must either hire a taxi or use a local bus to complete their journey to the Site. The level of demand will be reviewed by the Transport Working Group as part of the Monitor and Manage approach to the transport strategy.

10.30 The Travel Demand Management tool will direct visitors wishing to arrive to the area by rail before 09:00 to Bicester Village (where a viable route is available). The forecasted Rail and Shuttle demand at Bicester North prior to 09:00 can be accommodated within the bus shuttle operation at Bicester Village.

10.31 Analysis of the Rail and Shuttle arrival and departure profiles has been undertaken to determine:

- The number of shuttle buses required to transfer the forecast peak hour demand
- The improvements to station infrastructure required to accommodate the peak bus shuttle operation

10.32 The number of shuttle buses required to accommodate the Proposed Development demand is calculated from the number of visitors arriving by "Rail and Shuttle" in the peak hour and the number of rail services. The former is divided by the latter to provide the number of visitors arriving on each rail service wishing to use the shuttle. The resulting number of vehicles required to accommodate demand on rail services in the peak hour is set out below in **Table 10.9** for each scenario.

Table 10.9: Number of Shuttle Buses Required by Scenario

Phase	Scenario	Scenario Reference	Number of Shuttle Buses (vehicles) Required		
			Bicester North	Bicester Village	Total
1	1	DO – WD – ST	1	1	2
	2	DN – WD – ST	1	1	2
	3	**DO – WE – ST/SH**	**1**	**1**	**2**
	4	DN – WE – ST/SH	1	1	2
4	5	DO – WD – ST	1	1	2
	6	DN – WD – ST	1	1	2
	7	**DO – WE – ST/SH**	**2**	**1**	**3**
	8	DN – WE – ST/SH	2	1	3
8	9	DO – WD – ST	1	1	2
	10	DN – WD – ST	1	1	2
	11	**DO – WE – ST/SH**	**4**	**2**	**6**
	12	DN – WE – ST/SH	3	2	5

Bus Shuttle Operation

10.33 OxfordBus has been engaged as a potential operator of this service. The proposed vehicles for the shuttle service are fully electric Wrightbus Electroliner GB Kite single deck buses. These vehicles are currently used for the Bicester Village retail park shuttle bus service. These vehicles have:

- A maximum capacity of 82 passengers (37 seated, 45 standing) and can accommodate 2 wheelchair users
- Two doors which will allow for quicker loading and unloading and provides flexibility around whether the bus is fully unloaded prior to loading, or if loading and unloading occur simultaneously (each bus should reasonably load/unload in 2-3 minutes)
- A 454kwh battery pack enabling an operational range in summer months of approximately 260 miles
- On-board visual passenger information systems which, while the shuttle bus is in motion, can display information such as live rail departure times. Audio announcements can also be deployed in conjunction with the visual displays
- A hearing loop system to support guests with auditory impairments
- Advanced safety systems including:
  - AVAS warning system to allow the bus to be heard when operating at low speeds in busy areas
  - CMS camera mirror system to improve driver visibility, particularly in hours of darkness
  - Tyre pressure monitoring system

10.34 The two proposed routes are as follows:

1. Bicester North – the Site
2. Bicester Village – Bicester Town Centre (Manorsfield Road) – the Site

10.35 Providing two distinct routes from each station facilitates each vehicle to do two trips to Site per hour. Visitor experience is a key priority, shuttle journey times on both routes will be monitored to ensure the desired visitor experience is maintained.

10.36 The shuttle buses to and from Bicester Village station will call at Bicester's main bus terminus at Manorsfield Road to facilitate connections with other local buses in the area. These additional connections may be valued by staff, or those choosing to travel by rail and stay overnight in Bicester area hotels.

10.37 The shuttle bus will be free of charge to visitors and employees of the Site. The intention is to align shuttle departures with train arrivals as closely as possible so the bus services will therefore not be timetabled services.

10.38 It is proposed that when the Park is not operational out of season, the shuttle buses will be operated elsewhere on the bus operator's wider network of local bus services in Oxfordshire, including providing peak support for Bicester Village. If there is demand for staff travel, appropriate shuttle services will be implemented.

10.39 It is recognised that there may be opportunities to integrate bus shuttle services into a combined, new provision in order to avoid overprovision through duplicative services. Such opportunities to streamline provision will continue to be explored, however it is recognised that a strategy tailored specifically to this scheme is required at this stage.

Station Improvements

10.40 When considering the extent of improvements required at Bicester North and Bicester Village stations, the morning peak hour demand for the Day Only – Weekend – School Term/Holiday scenarios in each phase (Scenarios 3, 7 and 11) has been assessed. Demand is highest in these scenarios meaning this selection ensures the greatest demand can be accommodated in each phase and determines the highest number of vehicles and space required in station designs.

10.41 Chiltern Railways has been engaged to discuss the necessary station improvements which focus on:

- accommodating the required number of shuttle vehicles
- improving customer experience of the stations

10.42 The station improvements proposed at Bicester North and Bicester Village are presented in **Table 10.10** (prior to the Site opening, Phase 1), and **Table 10.11** (from Phase 4). These will be planned and delivered by Chiltern, and supported by the Proposed Development.

10.43 The number of shuttle vehicles required to accommodate "Rail and Shuttle" demand at Bicester Village can be accommodated within the existing infrastructure for all scenarios across the phases. The shuttles will use the two existing bus stops which have adequate cover and live information systems. The improvements proposed for Bicester Village are therefore more focused on ensuring customers have a pleasant experience when using the station. These improvements will be delivered for opening.

10.44 At Bicester North, the existing infrastructure accommodates three buses. One bay will continue to be used by the Bicester Village bus shuttle. The remaining two bays will accommodate the shuttles for Phases 1 and 4. Whilst the bus bays are currently marked, it is understood that the lines are often ignored by cars completing short stay drop up pick up causing delays to the existing bus operations. It has therefore been agreed that the existing bus bays will be relined to ensure it is clear that the bus bays should not be used for short stay pick up drop off.

10.45 In Phase 8, the number of shuttles required to accommodate peak hour Rail and Shuttle demand per rail service at Bicester North increases to 4. Improvements to the station forecourt will therefore be required to increase the number of bus bays. The concept design for these improvements is shown in **Figure 10.1** and **Appendix J** (drawing ref. 24632101-STR-HGN-100-SK-D-02801 - REV A). It has been agreed with Chiltern Railways that they will be able to trigger the implementation of the Bicester North forecourt improvements via the Transport Working Group once sufficient demand has been demonstrated. This allows delivery of the improvements to be responsive to the success of the Site, reserving the possibility of bringing the works forward if necessary.

10.46 Signage and wayfinding will provide clear signposting to shuttle facilities for business-as-usual operations. For days with heightened attendance, the Applicant will deploy staff to both Bicester North and Bicester Village stations to manage queues and load shuttle buses efficiently. The Transport Working Group will agree when staff should be deployed.

10.47 The Applicant will support Chiltern with the delivery of the proposed improvements, with Chiltern Railways appointing an Interface Project Manager to oversee the permissions and delivery of the works in line with railway standards.

Table 10.10: Proposed Station Improvements at Bicester North and Bicester Village for Phase 1

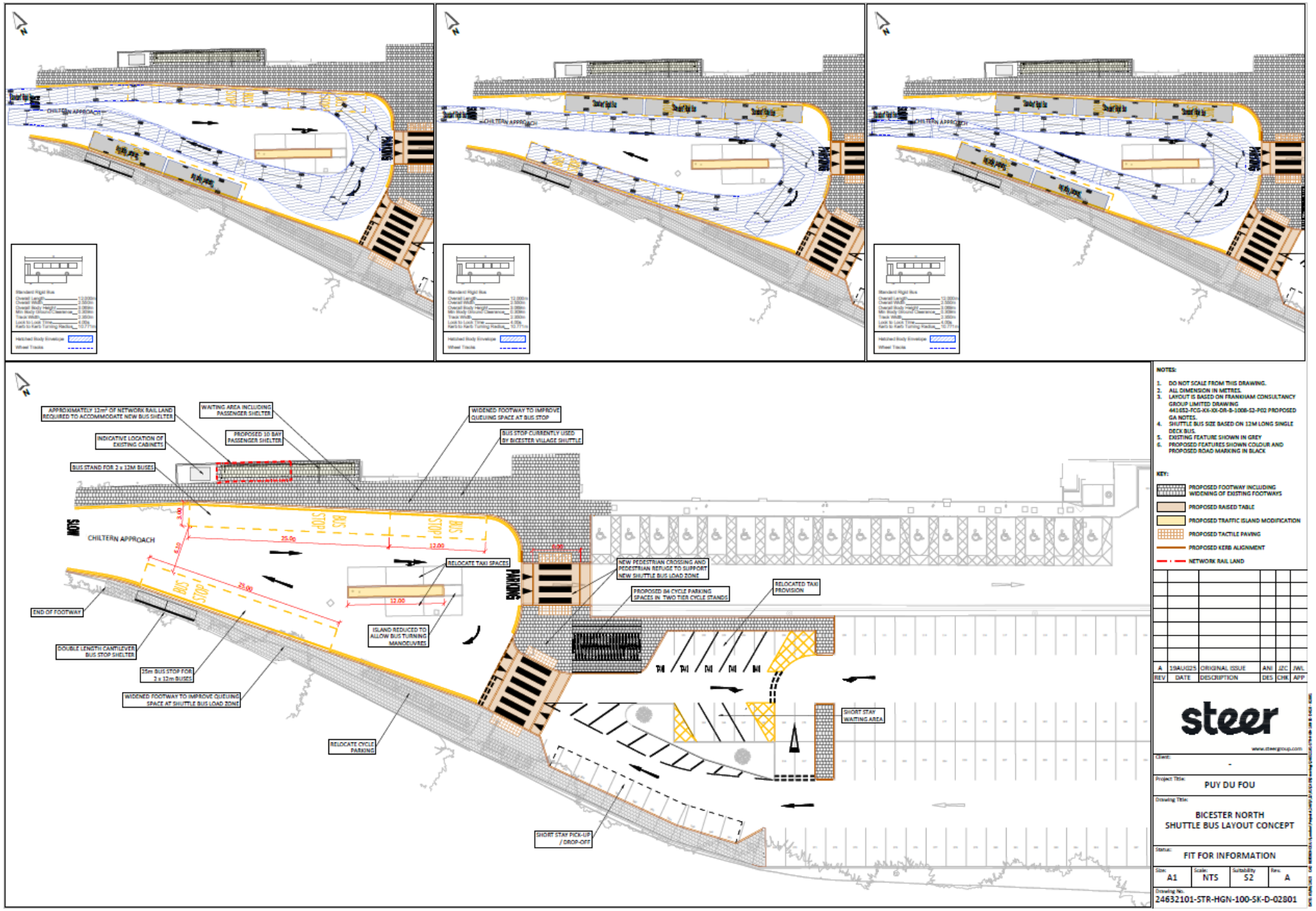
Station	Proposed Improvements
Bicester North	Re-lining of existing bus stops
	Delivery of two additional bus stops on the station side as per the concept design shown in **Figure 10.1** which includes: • table pedestrian crossing and widened footway/queuing areas • relocation of cycle parking • accompanying shelters and DMI screens The additional bus stops would mirror the existing bus stop in place and be set back from the road to provide more waiting capacity.
	Improved wayfinding to guide people to bus loading zones
	Toilet enhancements
	Creation of 2 new platform waiting shelters on the London-bound platform
	Deployment of staff to manage bus shuttle operation and provide customer information at peak times (the Transport Working Group will agree when staff are required)
Bicester Village	Shuttle departures to be included in the live customer information screens already in place at the existing bus stops.
	Toilet enhancements
	Deployment of staff to manage bus shuttle operation and provide customer information at peak times (the Transport Working Group will agree when staff are required)

Table 10.11: Proposed Station Improvements at Bicester North and Bicester Village for Phase 4

Station	Proposed Improvements
Bicester North	Delivery of two additional bus stops to the south as per the concept design shown in **Figure 10.1**, and accompanying shelters and DMI screens

10.48 East West Rail CS3 proposals may result in the closure of the London Road level crossing. From discussions with OCC it is understood that, should these proposals come forward, local buses will need to continue to operate from the bus stops on the station forecourt as they currently do, due to the route requirements. Should the proposals to close the crossing come forward, it is recognised that changes to the bus shuttle operation at Bicester Village may be necessary. The operation associated with the Proposed Development could operate from the land opposite the Shell garage on London Road however as the requirement would arise from East West Rail's plans, this would need to be resolved by East West Rail in conjunction with Network Rail and OCC.

Figure 10.1: Concept design for station forecourt improvements at Bicester North



Local Bus

10.49 Opportunities to improve and strengthen local bus services have been explored. The 500 service, operated by Stagecoach and subsidised by OCC, will be enhanced to cater for demand generated by the Proposed Development. Opportunities to enhance further local bus services, namely services 25, 81/82, were explored however it was concluded that benefits would be extremely limited given the routes.

10.50 The bus strategy is based on the current network of routes and service provision, and the current situation is subject to change by the time the Park opens. Other schemes in the area have proposed new bus routes; if these schemes come forward there is opportunity to extend these routes to serve the site. Planning Application 21/04275/OUT is a Mixed Use Development of up to 3,100 dwellings, mixed use local centre and employment area, education uses, community and leisure facilities currently under consideration. The scheme seeks to establish a bus route connecting the site with Bicester and the railways station via Banbury Road. Such opportunities will be monitored and relevant operators engaged. If required, amendments and support for service reinforcement can be made via the Transport Working Group as a means of agreeing new opportunities to support rural buses and visitor attendance.

10.51 The Travel Demand Management tool, linked into the digital tickets which visitors will require, will provide personalised travel planning to ticket purchasers. Where visitors are staying in local holiday accommodation in nearby rural villages, such as Airbnb's, the Travel Demand Management tool will be used to encourage visitors to use rural bus services rather than drive to the Site.

10.52 Stagecoach currently has a number of Demand Responsive Transport services running throughout the UK covering business-to-business and NHS contracts. The concept and technology is available for Stagecoach to contract such a service to Puy du Fou.

10.53 There is an opportunity to develop an integrated ticketing product that combines bus travel and Site entry. Stagecoach has confirmed they are willing to work with the Applicant to look at solutions for digital ticketing direct from the website and work through the requirements. Stagecoach is currently working on their own digital journey for 2027, which includes digital ticketing, and would be able to work through the requirements during the transition towards the launch date. Solutions involving weekly passes for the Site which include onward travel on other Stagecoach services can also be explored.

10.54 The opportunity to combine digital tickets with other attractions in the local area or transport modes will be further explored with relevant parties. From engagement with Stagecoach, such packaged integrated ticketing products are feasible subject to commercial agreements with relevant parties. These opportunities will be explored further via the Transport Working Group and, as far as possible, engagement will be aligned with Stagecoach's current digital programme.

10.55 Simplifying access to public transportation, especially buses, is important for promoting their use. It is therefore proposed that identified services are diverted to stop on Site at the public transport area in the northeast corner of the Site (as shown in the illustrative Masterplan in **Appendix A**, and in more detail in the indicative car park layout in **Appendix D,** drawing ref. 24632101-STR-HGN-100-SK-D-01901 - REV A), which has an allowance for a total of six service buses. The primary and secondary accesses will be used, with the internal link road between them providing access to the bus stops and pick up and set down

areas. Stagecoach has provided in principle agreement with the routing access proposed, noting the importance of priority for buses when arriving at/leaving the Site, particularly during peak periods at the primary access. The Site accesses have been designed to accommodate bringing bus services into the Site to stop at the public transport hub, with a dedicated bus lane on entry to the Site. For instances where buses are exiting the Site from the primary access during peak periods, bus movements will be prioritised through traffic management measures to avoid delays to services.

10.56 The number of day-only ticketholders who are anticipated to arrive via bus are applied to the day-only arrival and departure profiles as per **Table 8.5**. This indicates the number of day-only visitors arriving by bus hourly, as shown overleaf in **Table 10.12**.

Table 10.12: Number of day-only ticketholders arriving/departing by bus hourly

Scenario	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12
	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH	DO – WD – ST	DN – WD – ST	DO – WE – ST/SH	DN – WE – ST/SH
Daily total:	46*	23	134	98	64	41*	270	250	145	142	517	499
Ingress												
00:00 - 08:00	-	-	-	-	-	-	-	-	-	-	-	-
08:00 - 09:00	5	2	13	10	6	4	27	25	15	14	52	50
09:00 - 10:00	21	10	60	44	29	18	122	113	65	64	233	225
10:00 - 11:00	14	7	40	29	19	12	81	75	44	43	155	150
11:00 - 12:00	5	3	15	11	7	5	30	28	16	16	57	55
12:00 - 13:00	1	1	3	2	2	1	7	6	4	4	13	12
13:00 - 14:00	-	-	1	1	1	-	3	3	1	1	5	5
14:00 - 15:00	-	-	1	-	-	-	1	1	1	1	3	2
15:00 - 00:00	-	-	-	-	-	-	-	-	-	-	-	-
Egress												
00:00 - 13:00	-	-	-	-	-	-	-	-	-	-	-	-
13:00 - 14:00	-	-	1	1	1	-	3	3	1	1	5	5
14:00 - 15:00	2	1	7	5	3	2	14	13	7	7	26	25
15:00 - 16:00	6	3	17	13	8	5	35	33	19	18	67	65
16:00 - 17:00	9	5	27	20	13	8	54	50	29	28	103	100
17:00 - 18:00	11	6	32	24	15	10	65	60	35	34	124	120
18:00 - 19:00	10	5	29	22	14	9	59	55	32	31	114	110
19:00 - 20:00	7	3	20	15	10	6	41	38	22	21	78	75
20:00 - 00:00	-	-	-	-	-	-	-	-	-	-	-	-

500 Bus Service

10.57 The 500-bus service, operated by Stagecoach, connects Bicester and Banbury via the B4100 making it the route nearest to the site. The full route is depicted in lime green in **Figure 10.2** overleaf, and the existing public transport network can be referenced in **Figure 3.2**, which shows both the 500 and 81 service in comparison to the Site. The current timetable is available in **Appendix K**.

10.58 Although the 500 service is routed along the B4100 there are no stops. The nearest stop is Elmsbrook, Braeburn Avenue within the eco-village to the south of the site. It is proposed that the service is diverted onto the Site to stop at the public transport hub. Stagecoach has confirmed it is feasible to stop services within the public transport hub on Site given priority access for buses at the Site accesses. There will be a time penalty for bringing the service onto Site which will need to be offset elsewhere to mitigate the end-to-end journey time being impacted.

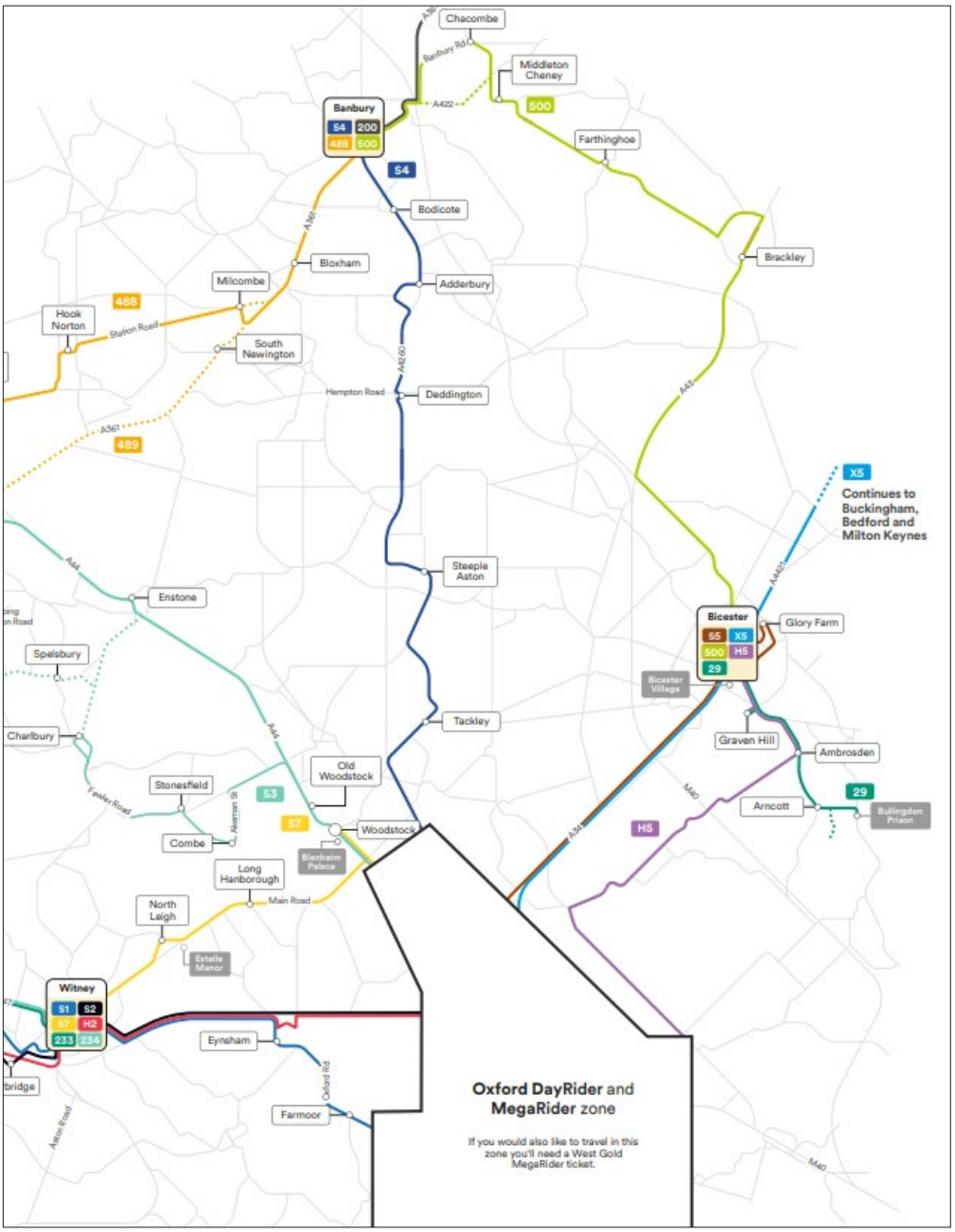
10.59 The OCC Public Transport team has assessed the demand forecasting outputs (**Table 10.12**) to determine the number of additional services required to accommodate demand associated with the Proposed Development. The conclusions of the assessment are summarised by Phase in **Table 10.13** and have in principle agreement from Stagecoach.

10.60 Additional X500 services will operate a shorter route to accommodate the required service frequency. The X500 will take the shortest possible route between Banbury town centre and Brackley town centre, not serving Banbury Gateway, Chacombe, Middleton Stoney or the northern end of Brackley. The X500 will serve all the usual stops on the shorter route taken.

Table 10.13: Summary of 500-service enhancements by phase

Phase	Service enhancement required
1	• Hourly evening service (extending existing hours of operation to midnight, seven days per week) • Extending existing hourly Sunday service to Bicester (within current hours of operation) • Additional X500 journey from Banbury to Bicester at 09:30 (weekends and school holidays). Forecast demand does not warrant additional capacity on weekdays.
4	• Continuation of evening and Sunday services, as per Phase 1. • Additional X500 journeys from: – Banbury to Bicester at 09:30 and 10:30 (weekends and school holidays) – Bicester to Banbury at 16:15, 17:20 and 18:20 (weekends and school holidays)
8	• Continuation of evening and Sunday services, as per Phase 1. • Additional X500 journeys from: – Banbury to Bicester at 09:30 (seven days per week) – Banbury to Bicester at 08:30 and 09:15 (weekends and school holidays) – Bicester to Banbury at 16:15, 17:00 and 18:20 (weekends and school holidays)

Figure 10.2: Stagecoach Service Map of Existing Services



Coach

10.61 The Site is expected to attract a wide range of group visitors - including clubs, schools, and special interest groups - due to its unique blend of immersive theatrical performances and historically themed experiences. Unlike traditional theme parks, the Site offers educational and cultural value through large-scale, live-action shows that bring history to life in a captivating and accessible way. This makes it particularly appealing to history clubs, drama societies, U3A (University of the Third Age) groups, heritage and re-enactment enthusiasts, and local community groups with an interest in culture and the arts. These groups are likely to travel by coach as it offers a convenient, cost-effective, and coordinated mode of transport for larger parties, allowing them to arrive and depart together while minimising logistical complexity.

10.62 For schools, the Site offers a highly engaging educational experience that aligns subjects such as history, drama, and English. The attraction is well-suited for enrichment days, cross-curricular trips, and drama-focused excursions. Coach travel is the preferred mode for most schools, providing a safe, cost-effective, and logistically simple way to move large groups of students and staff together.

10.63 Coach travel is therefore expected to form a significant part of the public transport mode share. Coach travel for school trips will be concentrated on weekdays during school term times. The coach mode share for school trips will fall off over weekends and during school holidays during which time demand from families travelling by car or other public transport modes will increase. This is reflected in the coach mode shares set out in **Table 7.1** for Phase 1, **Table 7.2** for Phase 4 and **Table 7.3** for Phase 8. The resulting daily number of coaches forecast for each scenario is presented in **Table 10.14**.

Table 10.14: Number of Coaches (Daily) by Scenario

Phase	Scenario	Scenario Reference	Number of Coaches
1	1	DO – WD – ST	21
	2	DN – WD – ST	31
	3	DO – WE – ST/SH	20
	4	DN – WE – ST/SH	24
4	5	DO – WD – ST	29
	6	DN – WD – ST	29
	7	DO – WE – ST/SH	12
	8	DN – WE – ST/SH	11
8	9	DO – WD – ST	58
	10	DN – WD – ST	51
	11	DO – WE – ST/SH	60
	12	DN – WE – ST/SH	71

10.64 Operators have been engaged to better understand what opportunities exist to provide direct coach services. National Express currently operate a route from London to Legoland (702) via Slough and Windsor. To provide a similar such service to the Site, National Express advised efficient access to and from the Site is paramount for scheduled services, as this provides the option of offering the location as an intermediate stop on a longer service between key cities e.g. London to Birmingham. Efficient access to and from the Site for public transport services has been a key consideration in the Site access design and location of the public transport hub.

10.65 Oxford Bus is a major coach operator in Oxfordshire and Gloucestershire with a large fleet of low-emission coaches that are typically utilised during late evening periods. Currently, visitors wishing to attend the night show would be unlikely to travel by rail due to the limited availability of rail services once the show finishes. Oxford Bus has proposed utilising their fleet to provide coach transfers for guests back to major points of origin for visitors attending the Site by rail, enabling them to stay longer at the Park and enjoy more of the shows and attractions on offer. Key destinations could include Oxford, London and Birmingham.

10.66 Prior to the COVID-19 pandemic, bespoke coach operations were laid on between Bicester Village and various hotels in West London. This “Shopper Express” service catered to high spend tourists who were based in London for the extent of their trip. Operators will respond to opportunities to provide visitors with a similar service when sufficient levels of demand are achieved. Packaged coach travel could also assist with promoting linked trips with the other attractions in the area, such as Blenheim Palace, Silverstone and Warwick Castle. Similar linked packages are offered by operators on behalf of Warner Brothers Studios, who achieve a high non car mode share.

Park and Ride

10.67 There are six Park and Ride sites located near Oxford and Bicester and operated by OCC. The Bicester Park and Ride site - located near Bicester Shopping Village off the A41 on B4030, Vendee Drive roundabout, Kingsmere - is the nearest to the Site. It is owned by OCC who operate it as a free car park (up to 24 hours with no return within 4 hours). The site is underutilised at present with approximately 50-60 of 580 spaces used day-to-day.

10.68 The Bicester Park and Ride site is used as an overspill car park for Bicester Village who made S106 contributions towards it with shuttles to the retail park. The Park and Ride services which operate from the site are adjusted according to demand forecasts. Whilst the service is used by reasonable numbers over the Summer on Fridays, Saturdays and Sundays, the period of peak demand runs from Black Friday at the end of November until New Year’s Day. During this peak period the service is operational 7-days a week.

10.69 It is proposed that this facility is used for days with peak demand only (e.g. peak summer days or special events with attendance greater than the 85th percentile). Requirement to use this site is expected from Phase 4 onwards, with frequency of use increasing in line with the number of days with high levels of attendance. It is not envisaged that this additional capacity will be required as part of business-as-usual operations.

10.70 The Transport Working Group would agree when the Park and Ride service should be implemented. For days the Park and Ride operation is implemented, the Travel Demand Management tool will direct specific visitors to the dedicated Park and Ride site for free parking. The shuttle bus between the Site and the Park and Ride site will be free of charge.

10.71 The focus should primarily be on the Bicester Park and Ride site given its current spare capacity and its proximity to the Site however there should be scope to explore the use of additional Park and Ride sites in future years should there be significant demand.

Summary

10.72 The Public Transport Strategy for the Proposed Development aims to support access for visitors by non-car modes, significantly reducing car dependency. This will help reduce the impact on road networks and achieve sustainability goals. A public transport mode share target of 50% for day-only ticket holders has been set, recognizing the opportunity to integrate sustainable transport from the outset.

10.73 Rail travel is a core component of the strategy. The Site's location near Bicester North and Bicester Village stations makes rail a natural choice for sustainable access. The Site can be reached from both stations within an 8-11 minute drive, making for efficient bus shuttle trips. Chiltern Railways operates services to both stations. The daily rail demand for day-

only ticketholders has been calculated for each scenario and applied to the rail arrival and departure profile to indicate the number of ticketholders arriving by rail in hourly intervals.

10.74 Chiltern Railways has assessed trackside capacity to determine if there is sufficient capacity and identify necessary reinforcements to accommodate demand associated with the Proposed Development. The analysis suggests there is sufficient capacity for Phase 1 demand with current carriage numbers, with targeted interventions required for peak flows. Additional rolling stock, provided by Chiltern Ralways, will be needed for Phases 4 and 8 to accommodate forecast rail demand.

10.75 Upon arrival at Bicester North and Bicester Village, visitors can use shuttle buses or taxis to reach the Site. The shuttle buses will be fully electric and free of charge for visitors and employees. The number of shuttle buses required has been calculated based on peak hour demand. Station improvements will be made to accommodate the required number of shuttle vehicles and improve customer experience.

10.76 Opportunities to improve local bus services have been explored. The 500 service, operated by Stagecoach, will be enhanced to cater for demand associated with the Proposed Development. The Travel Demand Management tool will encourage visitors to use rural bus services. An integrated ticketing product combining bus travel and Site entry will be explored.

10.77 The Site is expected to attract group visitors, including schools and special interest groups, who will travel by coach. Coach travel will form a significant part of the public transport mode share. Operators have been engaged to provide direct coach services, and opportunities for packaged coach travel will be explored.

10.78 The Bicester Park and Ride site will be used for peak demand days, with shuttle buses providing free transport to the Site. The Transport Working Group will agree when the Park and Ride service should be implemented.

11 Walking and Cycling Strategy

Introduction

11.1 The Applicant is committed to promoting local employment and to ensure that those living closest can travel actively to the Site. The Applicant has captured OCC's proposed LCWIP measures in this active travel strategy. The approach has also been discussed at a pre-application meeting with OCC officers.

11.2 The parameter plans (see **Appendix D**) and illustrative masterplan (see **Appendix A**) establish a robust foundation for prioritising pedestrian and cycle movement, fostering seamless connectivity within the Proposed Development and with surrounding areas.

11.3 This approach places people – rather than vehicles – at the forefront of the movement hierarchy. Active travel modes, including walking, cycling, and wheeling, will take precedence over all other forms of transport, supported by a permeable, fine-grain network of high-quality routes designed to enhance accessibility and convenience.

11.4 All routes will be designed in accordance with LTN 1/20, with segregation from motorised traffic where appropriate, and ensuring that they are well-lit, hard surfaced and well-drained so that they are useable at all times and seasons.

11.5 Cycle parking will be of high quality and secure. It will cater for a range of journey purposes and types of cycles, including larger and adapted cycles. Cycle parking will be provided in line with policy requirements. Supporting facilities such as showers, lockers and changing facilities will be provided to a high standard to encourage take-up.

11.6 The following sets out the strategy in terms of:

- Improvements to the PRoW network on-Site
- Improvements to the PRoW network off-Site
- Delivering a connection between the Site and Bicester
- Improvements within Bicester and the Site

Walking, Cycling, and Wheeling Strategy

11.7 The primary objective of the walking, cycling and wheeling strategy is to establish an integrated and resilient network of routes that offer active travel access options to visitors and workforce for the Proposed Development, local residents, and other users in the wider Bicester area.

11.8 For reference, it has been developed on the basis that:

- Any PRoW that crosses the Site will need to be diverted, as they will no longer always be accessible to the public. This will include during construction, e.g. alternative routes need to be provided prior to construction.

- A continuous route between the Site and Bicester for pedestrians and cyclists is necessary prior to operation commencing. This is critical to deliver mode shares for staff and visitors.
- Where possible The Applicant should improve accessibility into Bucknell and provide dedicated pedestrian and cycle provision, with connections to the existing and proposed network of footways and cycleways.

11.9 Figures in this chapter show the following:

- The existing PRoW network overlain with the Site boundary
- Required diversions as a result of the Site position
- Proposed PRoW cross section design for the Site periphery
- Planned and Proposed Development PRoW improvements
- Wider network proposed improvements suggested to achieve Site access and provide benefit locally to users

11.10 This TA makes references to footpaths, footways, cycleways and bridleways in the following context:

- Footpath: This is a PRoW as defined on OCC's definitive map, which is only usable by those on foot.
- Footway: This includes paths that run concurrently with the carriageway. They would typically be adopted highway maintainable at the public expense, but do not carry the same legal weight as a PRoW.
- Cycleway: Usable predominantly, but not exclusively by those on a bicycle.
- Cycle Lane: Dedicated section of carriageway adjoining a public highway which is for the use exclusively by cyclists.
- Bridleway: Usable by those on foot, bicycle, and horseback, but cyclists are obliged to give way to other users.

On Site Improvements

11.11 **Figure 11.1** shows the PRoW that are required to be diverted, and where they have been re-routed as part of the scheme being brought forward. The bridleways being diverted are ref.148/1/20, ref.367/12/10 and ref. 267/11/10. The PRoW diversion is within the red line boundary but will be located outside of the Park area. Therefore, ensuring these are publicly accessible.

11.12 Following discussions with OCC, it was advised that any PRoW being stopped up and diverted be replaced with 5m bridleways (apart from alongside the B4100 to the north of the Site entrance where a smaller bridleway will be sufficient to connect into the wider network at 3m). A typical cross section of the PRoW is shown in **Figure 11.2,** and drawing ref. 24632101-STR-HGN-100-SK-D-03101 - REV A in **Appendix L**.

11.13 The diverted route replacements will therefore provide a 5m bridleway, (notionally 2.5m bridleway and 2.5m cycleway). The surface for these will be tailored to the user, e.g. a suitable surface for horses and for bicycles, both suitable and accessible for pedestrians, and a gap of at least 0.5m should be provided between any route and a fence, but 1m is more preferable given the likelihood of vegetation to grow up around the PRoW. The re-routed PRoW will run around the boundary of the Site, as shown on the Site masterplan.

11.14 Footpath 148/8/10 crosses the land outside of the masterplan area, and as such is to be retained in its current location, albeit it is proposed that the route be upgraded from a

Footpath to a Bridleway. As this crosses farmland, no changes to the surfacing or alignment of the route would be made.

Figure 11.1: Proposed Diversions and Additional PRoW

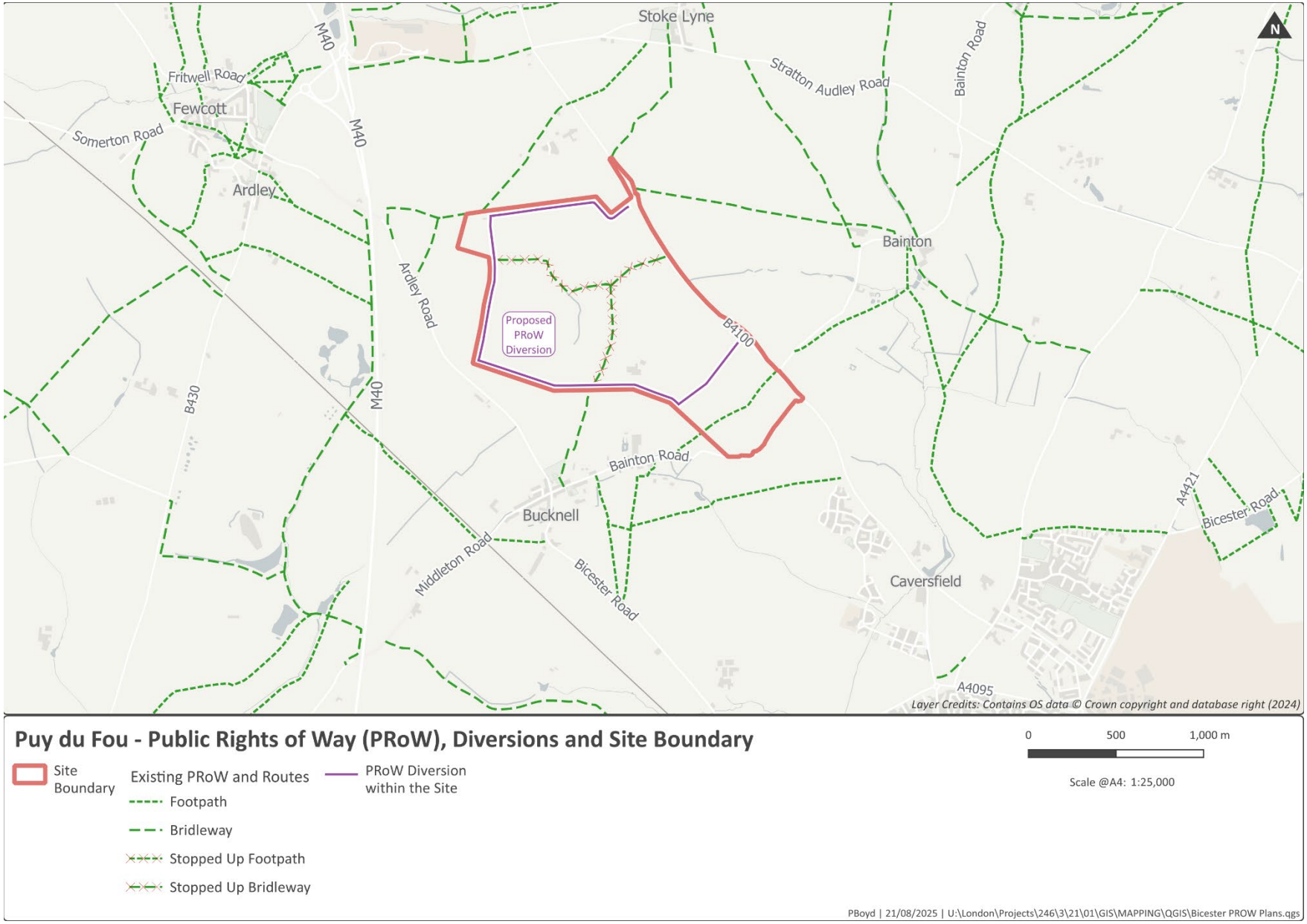
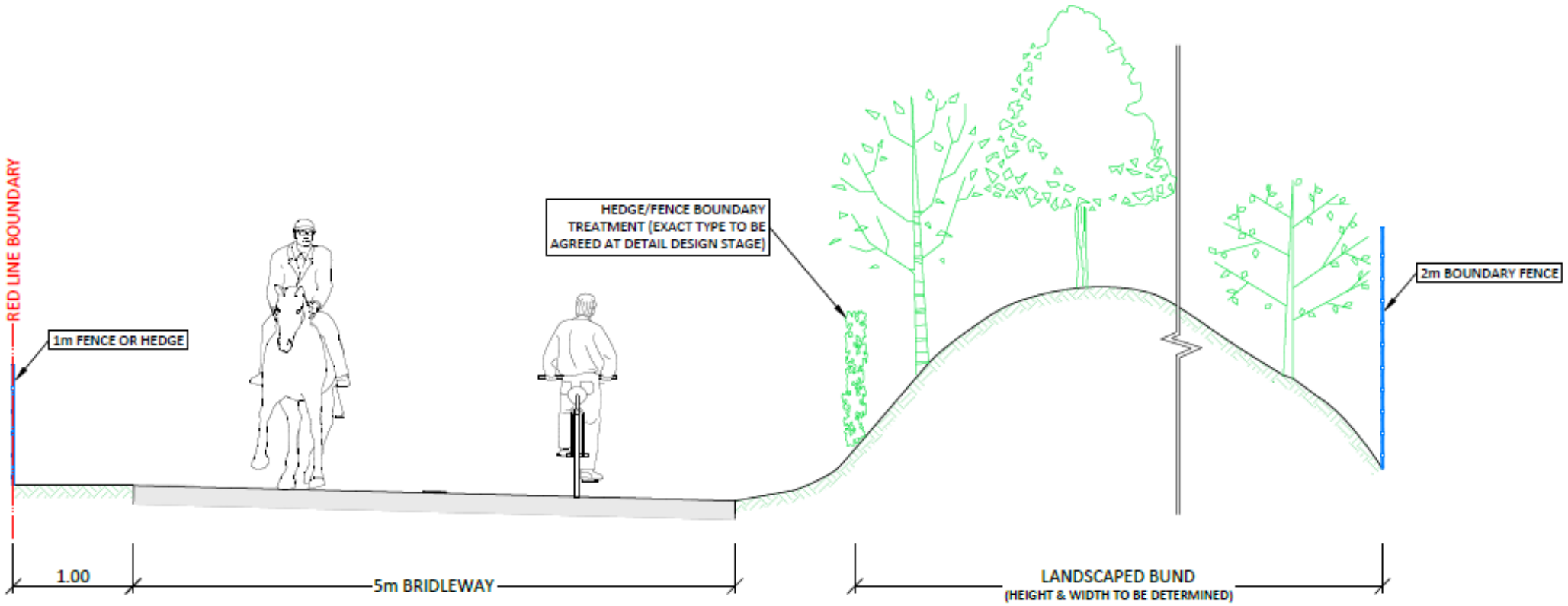


Figure 11.2: PRoW Cross Section



Off-Site Improvements

11.15 The two PRoW that cross the Site and terminate at the B4100 do not have direct and interconnecting paths of footways on the eastern side of the B4100.

11.16 To the north of the proposed Site access roundabout, a new equestrian crossing will be delivered as part of the Site access arrangements. This will connect the proposed pedestrian and cycle facilities and new PRoW with the existing bridleway 367/9/10 located on the eastern side of the B4100. There is a path on the eastern side of the B4100 between bridleway 367/9/10 and bridleway 367/5/20 along the western boundary of Stoke Little Wood which follows the alignment of the old road and is a permissive right of way.

11.17 An additional uncontrolled crossing of the B4100 will also be provided to the south of Bainton Road, connecting footpaths 148/8/10 and 153/3/10, again providing provision that does not currently exits for users of the PRoW network.

11.18 A financial contribution will also be made to OCC to fund further improvements to off-Site PRoW, in terms of upgrading surfaces and improving infrastructure. These include, but are not limited to:

- Bridleway 148/1/20 from Bucknell to the Site
- Bridleway 367/9/10 Stoke Little Wood to Bainton
- Footpath 153/3/10 from Watergate Lodge to Bainton
- Bridleway 367/1/10 Kilby Barn towards Ardley Road
- Bridleway 367/1/20 Kilby Barn towards Ardley Road
- Bridleway 367/1/30 Kilby Barn towards Woodbine Cottage
- Bridleway 109/31/10 along Ardley Road.

B4100 Route Option

11.19 A continuous segregated footway/ cycleway will be provided along the B4100, from the northern part of the Site down to Braeburn Avenue, at which point the route would go via the existing EcoTown, where pedestrian and cycle facilities have already been provided. This will provide a dedicated link between the Site and the Bicester Ring Road.

11.20 There are three key sections to the cycleway:

- Along the Site frontage of the master planned area – This section is provided along the boundary of the route and has been designed with priority crossings over the Site access arms.
- Between the service access and the Bainton Road – the footway / cycleway is located behind the existing hedgerow, so as to retain the hedge and create a pleasant cycling environment
- Between Bainton Road and Braeburn Avenue the route is provided within the adopted highway. At the junction of Braeburn Avenue, two options have been considered, one of which includes narrowing the access junction to provide enhanced provision and a safer environment for pedestrians and cyclists, as seen in **Appendix M** (drawing ref. 24632101-STR-HGN-100-SK-D-02701-REV A and drawing ref. 24632101-STR-HGN-100-SK-D-02601-REV A).

11.21 Drawings of the proposed footway/ cycleway on the B4100 can be seen in drawing ref. 24632101-STR-HGN-100-SK-D-02203 and 01504 - REV A in **Appendix M**.

Bicester Network

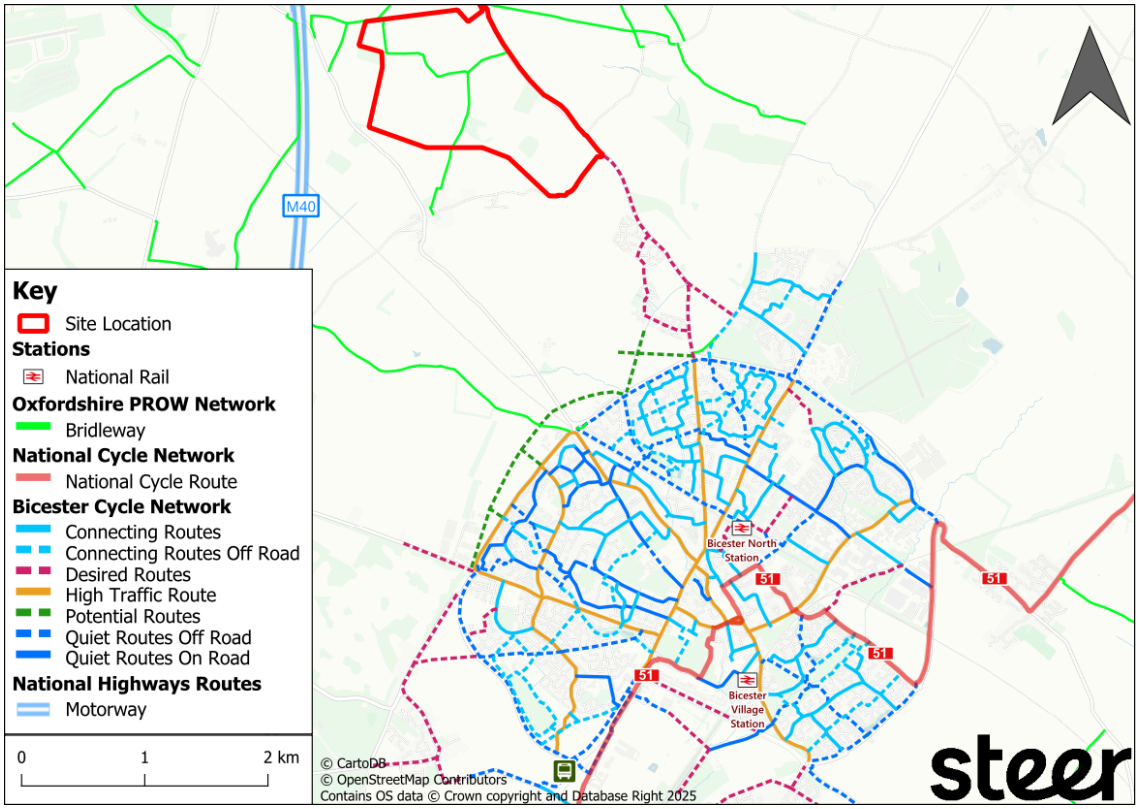
11.22 As shown in **Figure 11.3**, there is an expansive network of pedestrian and cycle routes within Bicester, with a route being provided between the Bicester North Station and the edge of Bicester (Braeburn Avenue).

11.23 Furthermore, there are a number of planned improvements as shown in the Local Cycling and Walking Infrastructure Plan (LCWIP).

11.24 The Bicester LCWIP is a 10-year plan (2020 to 2031) to improve and increase cycling and walking in the town and links to nearby villages. The LCWIP highlights that currently levels of cycling in Bicester are relatively low, around 5-6%. The overall scheme approach is set under three different categories according to the Commitment to Active Travel Scale CAT scale) where category C is considered essential and the current priority, category B is more ambitious, and category A is the most ambitious. It is recognised that behaviour change is essential, and providing safe cycling and walking routes is paramount to this. Measures include creating:

- Quietway paths (filling in gaps in the network; widening shared paths to 3.5m; resurfaced pathways; adequate lighting; directional signage; priority passage)
- Quietway residential roads (signage to create cycle streets; traffic calming; road restrictions to reduce or redirect traffic)
- Quickways along main roads (off-road cycle tracks 3.5m minimum; on-road cycle lane 1.5m minimum; traffic calming measures; junction review; surface signage)

Figure 11.3: Existing Cycle Routes and LCWIP Improvements



11.26 There is currently a well-used pedestrian / cycle route between Bicester North Station and the A4095, with onward connection to the Eco Village, via the new signal junction at the end of the B4100. Following discussions with Bicester Bug and OCC an improvement to current provision in the vicinity of Bure Farm has been identified, which is considered to be a weak link in the route. Currently users have to divert through the Bure Farm local centre car park, then traverse a narrow ramp, and join a footway / cycleway through the Park. It is proposed to remove this diversion by:

- Improving crossing facilities over Lucerne Avenue with either a parallel crossing or improvements to the two existing crossing islands
- Widening the footway between Lucerne Avenue and the traffic signal crossing adjacent to the Park, to deliver a shared footway / cycleway

11.27 This improvement would create a more legible and direct route, increasing the attractiveness of this already well used route.

Planned and Emerging Improvements

11.28 **Figure 11.4** shows walking, cycling and PRoW amendments that are associated with planned and Proposed Developments in the area which the Applicant's strategy is aware of, and that the Site can tie into to create a wider network of benefits. These include:

- Proposed employment sites at Baynards Green (one site has a resolution to grant while the other was refused)
- Residential development at Hawkwell Village (currently a live application)
- Oxfordshire Strategic Rail Freight Interchange (SRFI) (DCO application anticipated late 2025 / early 2026)

Baynards Green Employment Sites

11.29 At the request of OCC Highways, the promoters of the two employment sites have identified how a new cycleway could be delivered along the B4100 between Baynards Green and Braeburn Avenue.

11.30 The route is broadly a 3m cycle track provided at carriageway level, separated from the B4100 by a small buffer with protection in the form of bollards. In places, the provision necessitates the narrowing of the carriageway through white lining. The alignment of the route is shown in **Figure 11.4**. Should this development come forward first, then parts of the proposed route from the Site down to Braeburn Avenue would be delivered, ahead of the Proposed Development. However, it is considered that given the Site frontage afforded to the scheme, a better arrangement can be delivered by Puy du Fou.

Hawkwell Village

11.31 This is a proposed residential led mixed-use development on land north east of the railway line in north west Bicester, looking to provide up to 3,100 dwellings, commercial, care, employment and educational land uses, alongside green infrastructure and cycle and pedestrian improvements.

11.32 The development proposals suggest cycle and pedestrian route access from the highway network, bringing forward high-quality cycling and walking routes to be provided across north west Bicester to maximise permeability and accessibility by active travel modes to and from the development site.

11.33 There are proposals for segregated cycleways, traffic free routes, shared paths, and roadside provision. The routes would join with the existing active travel provision in the surrounding area, facilitating continuous pedestrian and cycling connections to the local villages and into Bicester. These are shown in **Figure 11.4**.

11.34 The Applicant has integrated the proposals from Oxfordshire SFRI and Hawkwell Village into the PRoW strategy, and further advance the network in the area, ensuring a well-connected and accessible network.

Oxfordshire SRFI

11.35 The Oxfordshire SRFI is a proposed development east of the former Upper Heyford air base, near the Chiltern railway and M40 Junction 10. It supports the national strategy to shift freight from road to rail, promoting a more sustainable and efficient economy. As part of the scheme, the development proposes the following changes to the PRoW network, as shown on **Figure 11.4**:

- Stopping up of public bridleways 109/28, 109/29 and 109/30 that are contained within the Main Site and replacing with a new bridleway route around the perimeter.
- Upgrading public footpath 297/8 between bridleway 297/6 and the proposed Middleton Stoney Relief Road (MSRR) to become a public bridleway. The redundant section of the public footpath 297/8 would be stopped up.
- Stopping up and diversion of a short section of public footpath 148/5 to cross the MSRR using the proposed underpass.
- Provision of a shared footway/cycleway alongside HPLR and MSRR between Camp Road and the B4030.
- Provision of a new off-road shared footway/cycleway facility to be provided along the B4030 between the new MSRR roundabout junction and the new infrastructure provided as part of the Himley Village development on the western edge of Bicester.
- Provision of a shared footway/cycleway on the western side of the B430.
- A further footway/ cycleway link from the Principal Access to the section on the B430 that would be stopped up for vehicular traffic.
- Stopping up and diverting public bridleway 109/26 that runs alongside the M1 from the Chiltern Main Line railway and Ardley Road.
- Stopping up of public footpath 109/24, which is replaced by the provision described above.
- Stopping up and diversion of the, now redundant, section of public footpath 109/22 from the Ardley Bypass to the stopped-up bridleway 109/26, to be replaced by a new public footpath link connecting with Ardley Road.
- Provision of a shared footway/cycleway on the new Ardley Road bridge over the Ardley Bypass.
- Stopping up of bridleway 109/32 to the north of the Ardley Roundabout at M40 Junction 10 and the replacement of this facility with a new shared footway/cycleway.
- New signal-controlled crossings on the M40 overbridge at Ardley Roundabout, and the provision of a short section of footway linking the existing footway on the southern side of the M40 overbridge with public bridleway 367/20, providing access to Stoke Wood.
- Provision of a new public bridleway to the east of the M40 southbound on slip, linking public bridleway 367/20 at Stoke Wood with public bridleways 367/1 and 109/31 to the south.
- Provision of new permissive footpaths and cycle routes within the main site.

11.36 **Figure 11.5** shows the Existing PRoW, proposed re-routing, planned and Proposed Development Improvements, and off-Site proposed improvements.

Figure 11.4: Planned and Proposed Development Improvements

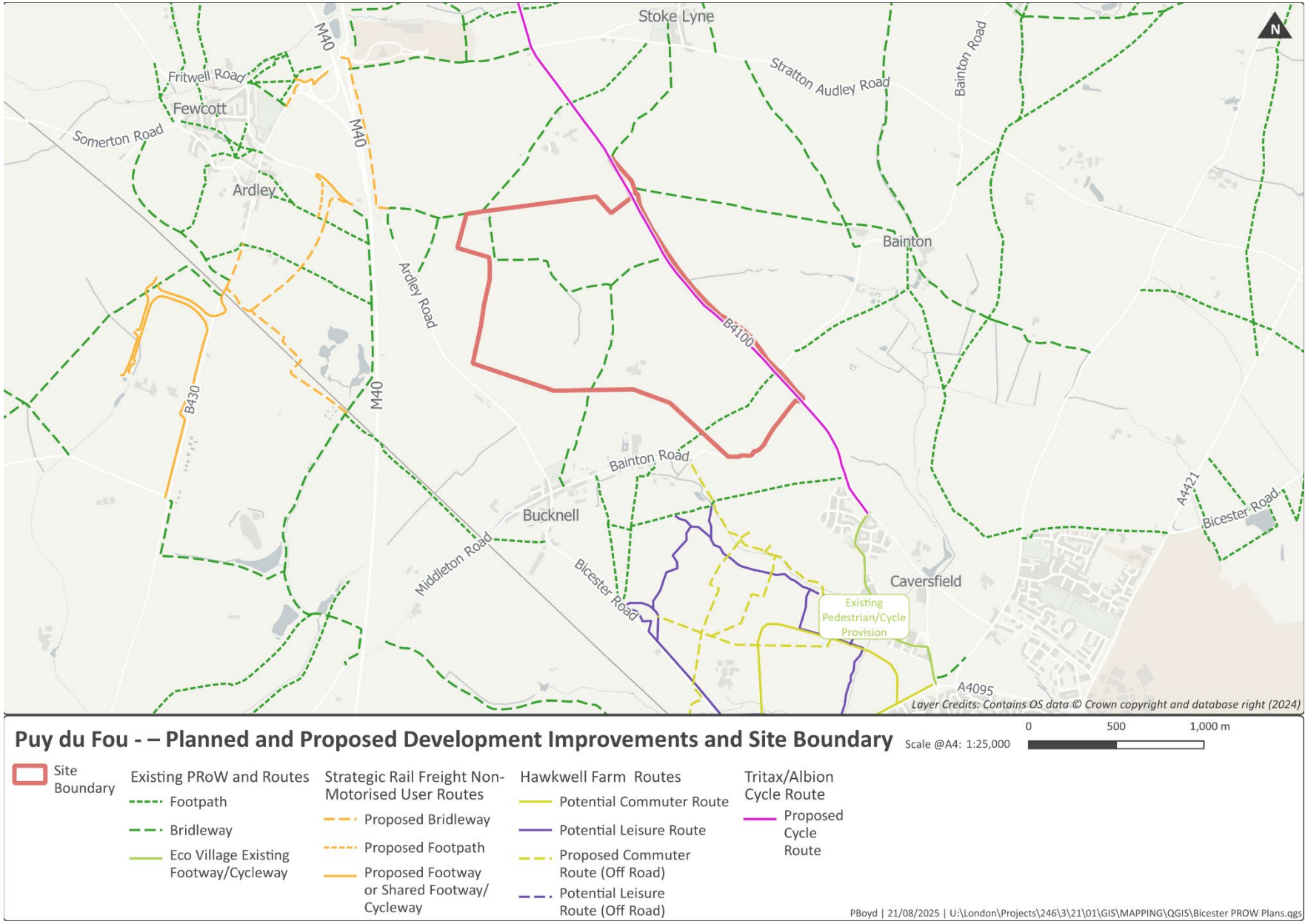
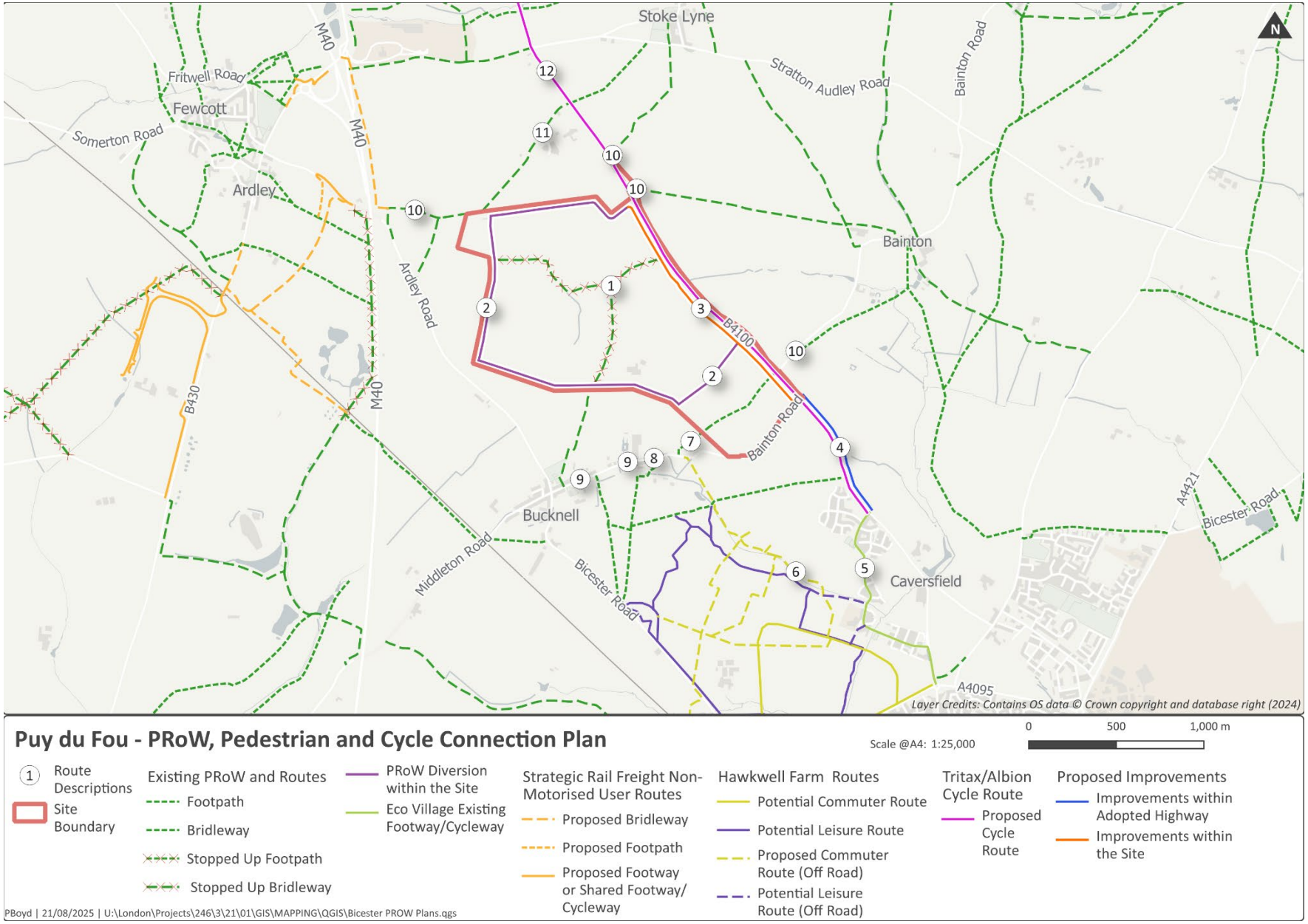


Figure 11.5: Existing PRoW, Planned and Proposed Development Infrastructure, and Proposed Improvements associated with the Proposed Development



Summary

11.37 **Table 11.1** summarises the proposals set out in **Figure 11.5**. The Applicant will provide the funding for these proposals, while their planning and delivery will be managed by the relevant responsible parties.

Table 11.1: Proposed PRoW Improvements

Reference	Description
1	Existing bridleway (ref.367/12/10, ref.367/11/10 and ref.148/1/20) that cross the Site to be diverted.
2	New bridleway and footpath to replace existing routes.
3	New footway and cycleway provision within the Site connecting the PRoW network and providing pedestrian and cycle access to hotels and Park entrance.
4	Provide footway and cycleway improvements between boundary of Site and existing network (via Eco Village). This will be designed in parallel to Albion land proposals.
5	Existing footway and cycleway within Eco Village to be utilised.
6	Proposed pedestrian and cycle provision within north west Bicester to be utilised once operational.
7	Exiting Footpath to be upgraded from a footpath to bridleway.
8	Improve connection over Bainton Road between existing PRoW and diverted PRoW and proposed potential commuter route.
9	Consider the opportunity to improve connection via Bainton Road.
10	Connect improved PRoW on west of B4100 with provision on the eastern side of B4100
11	There is no connection from the existing PRoW (ref.367/1/20) into Stoke Wood, which has an existing network of paths that connect to the PRoW network (ref.367/20/10, ref.267/20/20 and ref.267/21/30) north of the woodland and around M40 Moto Services. Providing a permissive PRoW would enable connections from the Site both north and south, opening up a wider connected network in the local area.
12	Cycle Improvements to be delivered by development at Baynards Green

11.38 These proposals are to provide an improved local PRoW network to support and benefit local residents, as well as visitors and workforce/ talent at the Site, with a more robust and interconnected PRoW network. The suggested improvements advised for the Proposed Development to connect with the improvements within the planned and Proposed Development infrastructure shown in **Figure 11.5**, and the Bicester LCWIP.

11.39 In addition, the Heyford Park Area Strategy, Chapter 7 of the Cherwell Local Plan Review 2040, has two relevant core policies focusing on transport:

- *Core Policy 83: Delivery of Strategic Transport Infrastructure within the Heyford Area*
- *Core Policy 84: Safeguarding of Land for Strategic Transport Improvements within the Heyford Area*

11.40 These policies include transport infrastructure providing extended walking and cycling provision and connections, commuter cycle routes to Bicester, mobility hubs with cycling provision, and improved bridleways.

11.41 The suggested improvements shown in **Figure 11.5** and **Table 11.1** would support and work in conjunction with the LCWIP and Heyford Park Area Strategy in achieving a larger, more interconnected, accessible and safe option for active travel.

Cycle Hire Scheme

11.42 It is proposed that a cycle hire scheme be delivered as part of the scheme to support sustainable and active travel to and from the Site. Docking stations will be provided at key transport hubs, including the local rail stations, as well as the Park and Ride, within the town centre and potentially at, or within close proximity to hotels. This will help facilitate first- and last-mile connections for those arriving by train or with a local origin. Additional docking stations will also be installed on-Site at prominent, easily accessible locations. The Applicant will fund the scheme, while its planning and delivery will be managed by the responsible parties.

11.43 Cycle hire will benefit both staff and visitors, providing a flexible and accessible travel option, and this could provide a catalyst for additional bikes and infrastructure to be delivered across Bicester.

11.44 The scheme will operate alongside dedicated cycle parking and improved cycle infrastructure, forming part of a wider sustainable transport strategy that reduces reliance on private vehicles and promotes active travel modes.

Active Travel England Assessment and Walking, Cycling, and Horse Riding Assessment and Review

Introduction

11.45 The Town and Country Planning (Development Management Procedure) (England) (Amendment) Order 2023 (DMPO) identifies Active Travel England (ATE) as a statutory consultee for planning applications with effect from 1st June 2023. As the quantum of development proposed meets the criteria for an ATE assessment the following summarises the Transport Assessment against the ATE toolkit criteria.

11.46 It is understood that as part of a planning application, that the “ATE Planning Application Assessment Toolkit” will be used by ATE as part of any development management consultation. The purpose of the toolkit is to ensure that development proposals embed high quality, safe and inclusive active travel infrastructure for all users and in all proposed elements of design. ATE encourages design and transport consultants to use the toolkit and submit a completed version with future planning application submissions.

11.47 A Walking, Cycling and Horse-Riding Assessment (WCHAR) is undertaken to evaluate the suitability, safety, and connectivity of active travel routes in relation to the Proposed Development. The assessment considers the needs of all non-motorised users including pedestrians, cyclists, and equestrians, and is aligned with national and local policy objectives to promote sustainable and inclusive travel. Particular attention is given to the quality of footways, cycle routes, crossing facilities, lighting, and signage, as well as the integration of the Site with wider strategic networks.

11.48 For this project, the ATE toolkit assessment has been integrated with the WCHAR to form a combined methodology. This approach allows a single, coordinated analysis of active

travel infrastructure, reviewing both policy compliance and the suitability, safety, and connectivity of routes for pedestrians, cyclists, and equestrians.

11.49 The combined assessment covers existing conditions, identifies opportunities for improvement, and aligns proposals with national and local policy objectives for sustainable and inclusive travel. Particular attention is given to the quality of footways, cycle routes, crossing facilities, lighting, signage, and the integration of the Site with wider strategic networks.

Methodology

11.50 The toolkit comprises of six columns:

- The cells in the first three columns contain pre-populated text identifying the 10 assessment criteria, a brief description of each criteria and the common shortfalls found in planning application submissions to date.
- The cells in the fourth column allow the appraiser to apply a rating (exemplar, pass, condition/obligation to make acceptable, concern, critical issue or not applicable) against each criteria.
- The cells in the fifth and sixth columns enable comments and relevant local policies and guidance to be entered.

11.51 ATE sets out that there are six seven possible outcomes from a development management consultation as follows:

- **Exemplar**: The proposal exceeds the standards in policy and guidance and represents an example of best practice.
- **Pass**: The proposal meets standards in policy and guidance. Where there are shortfalls, these are minor and do not affect the overall position.
- **Condition/ obligation to make acceptable**: The proposal does not adhere to standards in policy and guidance, however a planning condition / obligation can address any shortfalls.
- **Concern**: The proposal does not adhere to standards in policy and guidance and more detail is needed to inform the assessment of the proposal. This may include reasonable amendments, improvements to infrastructure and/or additional information.
- **Critical issue**: The proposal represents a significant departure from standards in policy and guidance. Either comprehensive amendments or the delivery of new infrastructure would be required, or it is unlikely that the deficiency can be addressed.
- **Not applicable**: This criteria is not a material consideration.

11.52 The remainder of this chapter provides the input to each of the 10 criterion that are to be assessed which include:

- Trip Generation and Assignment
- Active Travel Route Audit
- Pedestrian Access to Local Amenities
- Cycling Accessibility
- Access to Public Transport
- Off-Site Transport Infrastructure
- Site Permeability
- Placemaking

- Cycle Parking and Trip-End Facilities
- Travel Planning

Trip Generation and Assignment

ATE criteria: *"Does the application appropriately forecast all day trips to, from and within the Site by walking, wheeling and cycling?"*

11.53 Chapter 10 of the TA sets out the total trips by public transport (rail, shuttle, local bus, coach), and Chapter 14 sets out total vehicle trips that are expected to be generated by the Proposed Development. The mode share split for the trip generation assessment is part of a Vision Led approach and the strategy to encourage walking, cycling, wheeling, and public transport is fully integrated into the proposals.

11.54 The assignment to walk and cycle modes has been assessed and agreed upon with the local authorities.

11.55 While the ATE Corporate Plan 2023-2025, sets out that by 2030, 50% of all short journeys in towns and cities should be walked, wheeled or cycled, this a holistic area wide figure and is only related to 'short journeys' not all journeys. The mode share identified is for all journeys assessed. The provision of new infrastructure and the possibility of a new strategic route from Bishopstoke to Wide Lane, with the opening up of the tunnel under the railway line will help towards meeting these aspirations.

Active Travel Route Audit

ATE criteria: "*Has an appropriate assessment on the design and accessibility of existing active travel routes in the locality of the Site been presented?"*

11.56 ATE advise that a qualitative analysis of local pedestrian, cycling and public transport infrastructure should be presented to inform any necessary improvements that would be compliant with current design standards. This should include maps, photographs and comments that have regard to the following national guidance and tools in the assessment of key routes:

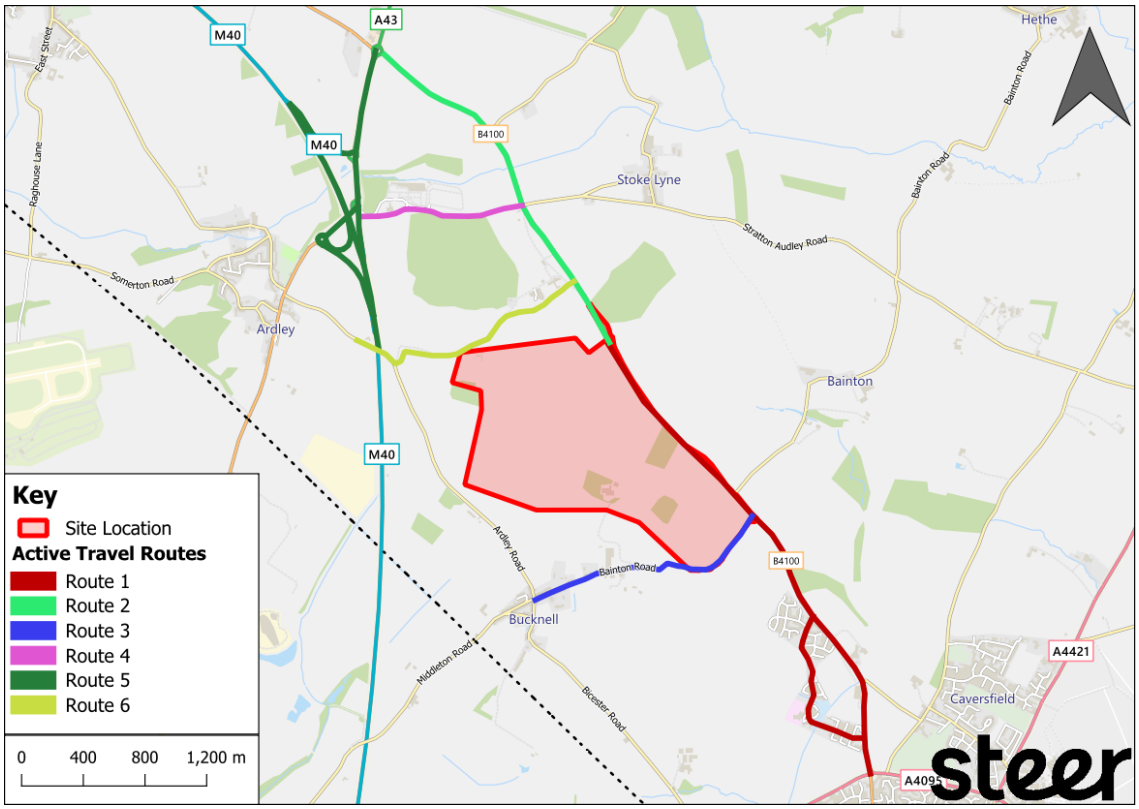
- Inclusive Mobility (Chapters 3, 4, 6, 7 and 15; and sections 5.2, 5.7, 9.1, 9.3, 9.4 and 9.7 as appropriate)
- PAS 6463: Design for the Mind (sections 5.2.1, 5.2.3, 6.4, 7.6.2, 7.6.3, 7.7 and 11.12)
- LTN 1/20: Cycle Infrastructure Design (including Appendix A: Cycling Level of Service Tool; and Appendix B: Junction Assessment Tool)
- The government's Walking Route Audit Tool
- Adopted or emerging LCWIPs

11.57 Five routes were determined based on key routes external to the Site that will likely be utilised by visitors and employees of the Proposed Development. The routes are as follows:

- Route 1: Site access to A4095
  - 1a: B4100
  - 1b: Braeburn Avenue and Charlotte Avenue
- Route 2: Site access to Baynards Green
- Route 3: Bainton Road from Ardley Road/ Bicester Road junction to B4100
- Route 4: Stokewood Lane
- Route 5: Baynards Green and J10
- Route 6: Ardley Road

11.58 The routes can be seen in **Figure 11.6**.

Figure 11.6: ATE Routes



11.59 A Site visit was completed on Friday 21st March 2025, during which photos were taken following the routes. The routes were then assessed against the national guidance and tools set out above. A detailed description of each route and its compliance with the national guidance and tools is set out below.

11.60 The audit should be considered against the fact that, as set out, the Site is in a rural location, and there are minimal dedicated pedestrian or cycle facilities in the immediate vicinity of the Site. There is a network of PRoW routes as summarised earlier in this chapter. As identified in Chapter 3 and Chapter 10, there are local bus services that run past the Site, but there are no local stops.

Route 1: Site Access to A4095

11.61 Two routing options were evaluated from the proposed Site access to the junction with the A4095:

- 1a – B4100
- 1b – Braeburn Avenue and Charlotte Avenue

11.62 Relevant to both, from the Site access to Braeburn Avenue, there is no dedicated cycling or walking infrastructure.

11.63 1a – B4100: A footway emerges from Orchard Walk within Elmsbrook eco village, just south of Braeburn Avenue on the B4100 where it becomes a shared footway and cycleway, on the western side of the B4100. Approximately 35m south of the shared path on the western side, a shared footway and cycleway emerges on the eastern side of the B4100.

11.64 This infrastructure is wide and even and provides a consistent and safe access for pedestrian and cyclists along the B4100 to the roundabout with the A4095 and Banbury Road.

11.65 Crossings are supported by signalised crossings, with appropriate tactile paving and dropped kerbs.

Figure 11.7: ATE – Route 1a

11.66 1b – Braeburn Avenue and Charlotte Avenue: On Braeburn Avenue there are footways on both sides of the carriageway. Crossings are supported by dropped kerbs and tactile paving, making them sufficient and accessible for all users, including those with visual or mobility impairments. The footways are wide and even, and the presence of trees adds visual enhancement without creating clutter or obstructing movement.

Figure 11.8: ATE – Route 1b

Route 2: Site access to Baynards Green

11.67 There is currently no real demand along this route and as such no infrastructure has been provided by OCC for pedestrians or cyclists between the proposed Site access to Baynards Green roundabout.

11.68 There is also unlikely to be any material demand as part of the scheme. Should the development at Baynards Green come forward, and thus create demand, then that scheme would deliver improvements.

Figure 11.9: ATE – Route 2

Route 3: Bainton Road from Ardley Road/ Bicester Road junction to B4100

11.69 The majority of the Bainton Road from Ardley Road/ Bicester Road junction to the B4100 has no provision of infrastructure for pedestrians or cyclists. There is approximately 70m of footway on the southern side of Bainton Road from the junction with Ardley Road to St Peter's Church access road. However, the lane is very lightly trafficked and as such pedestrians and cyclist mix with vehicular traffic.

Figure 11.10: ATE – Route 3

Route 4: Stoke Wood Lane

11.70 There is currently no infrastructure for pedestrians or cyclists provided on Stoke Wood Lane between the B4100 and the Loverose Lane car park. This is unsurprising given the lack of existing connections onwards on the B4100. However, the lane is very lightly trafficked and as such pedestrians and cyclist mix with vehicular traffic.

Route 5: Baynards Green and J10

11.71 This route is dominated by the SRN, comprising the M40 motorway, associated slip roads, and the A43 dual carriageway. These are designed for high-speed vehicular traffic and are not suitable for pedestrian or cycle use. The carriageways are wide, with limited crossing opportunities and no segregated facilities for non-motorised users.

11.72 Existing non-motorised user provision is extremely limited. The only notable facility is a short section of pedestrian footway on the northern side of the B430, between Ardley Roundabout and Cherwell Roundabout. This short segment does not connect to a wider walking or cycling network and offers no safe means of negotiating the motorway slip roads or high-speed junction arms.

11.73 Interaction between non-motorised user and vehicles is particularly constrained in this location due to the function of the SRN. Slip road merges and diverges create multiple conflict points for potential crossing movements between pedestrians/ cyclists and vehicles. High approach speed further increases the risk for any pedestrians or cyclists attempting to navigate the corridor.

11.74 Signage, carriageway markings, and verge treatments are entirely vehicle-oriented, with no provision for safe waiting or refuge for non-motorised users. The absence of controlled crossing points or grade-separated links effectively severs active travel movement across the SRN in this location.

11.75 Any enhancement to active travel in this corridor would require significant intervention, such as new segregated paths, signal-controlled crossings, or bridge /underpass provision, to provide safe, continuous, and accessible connectivity.

Figure 11.11: ATE – Route 5

Route 6: Ardley Road and Bridleway 367/1/10, 367/1/20, and 367/1/30

11.76 There is a short section of footway on both sides of the carriageway on Ardley Road as it crosses the M40, but this provision is limited exclusively to the bridge. There is no pedestrian or cycling infrastructure before or after the bridge, making it an isolated segment that does not support continuous or safe access for non-motorised users.

11.77 The bridleway 367/1/10, 367/1/20, 367/1/30 offers a well-maintained surface suitable for horses, pedestrians, and cyclists, providing a safe connection between Ardley Road and the B4100. This route enhances accessibility for non-motorised users.

Figure 11.12: ATE – Route 6

Pedestrian and Cycle Access to Local Amenities

ATE criteria: *"Are most buildings within 800m from a range of amenities (such as primary schools, parks, play areas, food shops, cafes and community buildings) using well-designed routes?"*

11.78 There are limited local facilities in the immediate vicinity of the Site, however given the nature of the Site, it is not dependent on these local facilities. The Site is well located to a number of small villages as well as being close to Bicester, Oxford, and Banbury.

11.79 The proposed cycleway along the B4100 will provide a connection to Bicester. The proposed shuttle bus and local bus provision will also link the Site to Bicester, Brackley, and Banbury town centres, rail stations, residential areas, and the National Cycle Network, with well-designed dedicated routes.

Access to Public Transport

ATE criteria: *"Are all buildings within 400m of a high-frequency bus stop or 800m of a rail/light rail station or tram stop, with appropriate facilities, using well-designed routes?"*

11.80 Given its current agricultural status, it is not unusual that the Site is not currently within 400m of a high-frequency bus stop or 800m of a rail/ light rail station or tram stop. However, the Proposed Development will bring forward new infrastructure, including a mobility hub, which is integrated into the Site and in close proximity to the main entrance. The existing 500 bus service which routes along the B4100 will be timetabled to stop at the Site.

11.81 As identified there will be regular shuttle buses provided between the Site and Bicester North and Bicester Village rail stations.

Off-Site Transport Contributions

ATE criteria: *"Does the application include proposals to enhance local active travel and public transport infrastructure?"*

11.82 The ATE toolkit considers whether the application include proposals to enhance local active travel and public transport infrastructure.

11.83 The Site has been designed to put active travel modes first and there will be a comprehensive, permeable network of walking and cycling routes throughout the development. Off-Site improvements can be found in respective chapters:

- Public Transport – Chapter 10
- PRoW – Chapter 11
- Highways – Chapter 14
- Mitigations Strategy – Chapter 19

Site Permeability

ATE criteria: "*Does the development prioritise pedestrian and cycle movements within the Site?"*

11.84 The Site is bounded on all four sides by dedicated pedestrian/ cycle facilities in the form of the diverted PRoW or the new footway/ cycleway provision parallel to the B4100. This connects into the network of PRoW locally as well as the existing network of pedestrian and cycle facilities, once the urban areas are reached. Within the Park, all routes are traffic free.

Placemaking

ATE criteria: *"Does the development establish a strong sense of place with well-designed streets, public spaces that feel safe and key amenities provided?"*

11.85 Outside of the Park, the scheme will be subject to strong landscaping and key public spaces will be designed to a high quality. The car park has been designed to operate safely whilst delivering the key function as a car park.

11.86 Further details on the principles of placemaking and how the development will provide a strong sense of place (e.g. well-designed streets, public realm improvements, public spaces, etc) are set out in the Design and Access Statement (DAS) that supports this application.

Cycle Parking and Trip-End Facilities

ATE criteria: *"Does the application provide the requisite amount and quality of cycle parking and trip-end facilities?"*

11.87 High quality cycle parking for both visitors and staff will be provided across the Site and can be seen in the illustrative masterplan in **Appendix A**. Trip-end facilities will also be provided within the hotel, conference centre, and within the back of house areas.

Travel Planning

ATE criteria: *"Does the travel plan outline ambitious mode share targets and measures to embed active travel, alongside appropriate monitoring and remedial strategies?"*

11.88 A full Travel Plan supports the application aimed at promoting active travel and sustainable travel on rail and bus while seeking to reduce access by the private car. The Monitor and

Manage strategy include measures embedding active travel, alongside appropriate monitoring, and remedial strategies.

11.89 A summary of the Travel Plan can be seen in **Chapter 18**.

ATE Summary

11.90 A summary of the ATE Assessment scoring for the development, is set out in **Table 11.2** below.

Table 11.2: Summary of Active Travel England Assessment Scoring

No.	Criterion	Description	Rating
1	Trip Generation and Assignment	Does the application appropriately forecast all day trips to, from and within the Site by walking, wheeling and cycling?	Exemplar
2	Active Travel Route Audit	Has an appropriate assessment on the design and accessibility of existing active travel routes in the locality of the Site been presented?	Pass
3	Pedestrian Access to Local Amenities	Are most buildings within 800m from a range of amenities (such as primary schools, parks, play areas, food shops, cafes and community buildings) using well-designed routes?	Pass
4	Cycling Accessibility	Are a range of local amenities, and town centres, rail stations, employment areas and the National Cycle Network as appropriate accessible for cyclists using well-designed routes?	Pass
5	Access to Public Transport	Are all buildings within 400m of a high-frequency bus stop or 800m of a rail/light rail station or tram stop, with appropriate facilities, using well-designed routes?	Pass
6	Off-Site Transport Infrastructure	Does the application include proposals to enhance local active travel and public transport infrastructure?	Exemplar
7	Site Permeability	Does the development prioritise pedestrian and cycle movements within the Site?	Exemplar
8	Placemaking	Does the development establish a strong sense of place with well-designed streets, public spaces that feel safe and key amenities provided?	Exemplar
9	Cycle Parking and Trip-End Facilities	Does the application provide the requisite amount and quality of cycle parking and trip-end facilities?	Exemplar
10	Travel Planning	Does the travel plan outline ambitious mode share targets and measures to embed active travel, alongside appropriate monitoring and remedial strategies?	Exemplar

Summary

11.91 This Chapter has summarised the existing PRoW conditions, the proposed changes essential in achieving access to the Site for workforce/ talent and visitors, and further off-Site suggested improvements that should be brought forward by the Applicant (to be secured via Section 278 and Section 106 funding), alongside other planned and proposed developments, in achieving access in the wider local area.

11.92 The improvements, are shown in **Table 11.1** and summarised below:

- Existing bridleway (ref.367/12/10, ref.367/11/10 and ref.148/1/20) that cross the Site to be diverted
- New bridleway and footpath to replace existing routes
- New footway and cycleway provision within the Site connecting the PRoW network and providing pedestrian and cycle access to hotels and Park entrance
- Provide footway and cycleway improvements between boundary of Site and existing network (via Eco Village)
- Existing footway and cycleway within Eco Village to be utilised
- Proposed pedestrian and cycle provision within north west Bicester to be utilised once operational
- Improve connection over Bainton Road between existing PRoW and diverted PRoW and proposed potential commuter route
- Improve connection to PRoW (bridleway 367/9/10) utilising existing farm track and crossing of B4100
- Enable the connection from PRoW ref.367/1/30 into Stoke Woodro to provide a connection from the Site both north and south, opening up a wider connected network in the local area

11.93 The proposals consider the value of an improved and robust PRoW, walking and cycling network in supporting active travel in the local area for residents.

11.94 The chapter also incorporates a WCHAR, and ATE, ensuring that proposals align with national standards for active travel and sustainable connectivity.

12 Vehicle Access Strategy

Introduction

12.1 A comprehensive review of potential vehicular access points to the Site was carried out. This included a high-level feasibility assessment of six access options, considering connections from both the M40 and the surrounding local road network.

12.2 Based on this review, the preferred access strategy proposes utilising the B4100 as the primary route. Three new vehicular access points are proposed from the B4100, as summarised below:

- Primary access for most visitors will be from a new roundabout near the northern edge of the Site, leading via a 3-lane tidal 'spine road' straight into the visitor car park. The B4100 will be widened at this point to avoid queuing causing any disruption on the road;
- Secondary access further south on the B4100, also from a new roundabout, will serve the hotels and conference facilities, whilst also providing a secondary access to the visitor car park and mobility hub; and
- Staff/servicing access to the southern end of the Site, linked to the service route which runs around the boundary of the Site.

12.3 The proposed footway and cycleway provision associated with the scheme has been designed into the access arrangements.

12.4 Access arrangement drawings are included within **Appendix E**. The proposed access arrangements have been subject to an independent Stage One Road Safety Audit, which identified minor changes to the original scheme. Where appropriate, these changes have been incorporated.

Primary Access

12.5 Primary access will be via a new roundabout into the carpark and Sustainable Transport Hub, close to the northern boundary of the Site. This includes local widening of the B4100 on the approaches to the junction to create lane width and additional lanes, which provides additional capacity and stacking space, to minimise delay on the B4100. All localised widening is within the adopted highway or land controlled by the client, with no third-party land required. A pedestrian/ cycle and equestrian crossing, controlled by the Applicant, has been designed into the access proposals, to link the Site to the existing PRoW. Primary access is shown in drawing ref. 24632101-STR-HGN-100-SK-D-02201 - REV A **in Appendix E**.

Secondary Access

12.6 A secondary access is proposed, primarily for the hotels and conference facilities, with access via a new roundabout. As shown on the masterplan (**Appendix A**), the access is linked to the primary access so that on high-capacity events, or where any incidents occur at the primary access, vehicles can be routed in and out from the south. This provides a level of resilience and assurance that incident related congestion, both on and off-Site, can be managed by active switching between access points if required.

12.7 The secondary access is shown in drawing ref. 24632101-STR-HGN-100-SK-D-02202 - REV A in **Appendix E**.

Staff/ Servicing Access

12.8 A service access priority junction with a simple ghost island supports the service route that runs around the boundary of the Site. A pedestrian/ cycle crossing has been designed into the access proposals (to the south, linking the Site to existing PRoW, either side of the B4100).

12.9 The two public accesses will accommodate buses and coaches and allow for access in both directions to reduce travel times and increase efficiency. The carpark and internal access roads have been designed in outline to accommodate the opportunities afforded by the three separate entrances. When the Site operates at its maximum attendance, the two public accesses can be utilised to support a segregated North/ South exit movement onto the wider transport network. This would operate off peak and be used to ensure that internal Site delays are minimised.

12.10 The staff/ servicing access is shown in drawing ref. 24632101-STR-HGN-100-SK-D-02203 - REV A in **Appendix E**.

Access Routing Strategy

12.11 A signing strategy will be implemented as part of the proposals with traffic to be signed and routed via the B4100 access junctions, based on origin, as set out below:

- Traffic from the north will come via the M40 via junction 10 and the A43 via Baynards Green
- Traffic from the north east predominantly via the A421 and A43
- Traffic from the south will come via the M40 – through Junction 9 up to Junction 10
- Traffic from the south west will come via the A34 through Junction 9 onto the M40 up to Junction 10
- Traffic from the south east will come via the A41, and route around the eastern side of Bicester and enter via the B4100 from the south.

12.12 It is acknowledged that some traffic may seek to take alternative routes, however any such traffic is likely to be limited. Other than traffic originating within Bicester, there would be no need or reason for visitor traffic to route through the centre of Bicester.

Traffic Management Plan

12.13 The purpose of a Traffic Management Plan (TMP) is to provide assurance that all eventualities, including exceptional event days where daily visitor numbers exceed the 85th percentile or coincide with events at nearby venues like Silverstone, are fully accounted for in the planning and operation of the Site. The Traffic Management Plan sets out the procedures and resources in place to manage days when attendance exceeds average levels, ensuring that the highway network is not adversely affected. The overarching aim is to maintain safe, efficient, and resilient Site access and egress at all times, with priority given to public transport users (shuttle services, local bus, park and ride), to provide optimal level of service with minimal impact on the wider highway network.

12.14 Crucially, with approximately 97% of tickets sold in advance, the Site will have a high level of certainty over daily visitor numbers, allowing for effective forward planning and targeted operational responses.

12.15 For the majority of the year, the Site will operate at attendance levels that are comfortably managed within the internal car park and approach lanes. However, on certain days, such as Bank Holidays, special events, or when attendance exceeds the 85th percentile, there is potential for higher demand. On these days, the risk of traffic delays, queuing, and congestion increases, particularly at the Site access from the B4100. The Traffic Management Plan is therefore essential to ensure that peak arrivals and departures are handled efficiently, minimising the risk of traffic backing up onto the public highway and maintaining the safety and experience of all road users.

12.16 Traffic modelling and arrival/ departure profiles have been used to identify key periods of high demand and areas prone to congestion. The main access spine road, extending 300 metres from the B4100 junction, is designed to bring traffic away from the public highway before vehicles enter the parking areas, creating an efficient load-in operation. The Site layout allows for substantial on-Site queueing, reducing the risk of tailbacks onto the B4100.

12.17 Automated systems (e.g. Variable Message Signs (VMS)) and stewards will be used to direct vehicles to available parking aisles, further enhancing flow and minimising delays. VMS signs will be introduced on the external highway network to support visitor management and provide the contingency and resilience which will be required at peak times.

Traffic Management Strategies

12.18 To address the challenges of peak days and special events, the following strategies will be implemented:

- Dynamic Lane Management: The three-lane spine road can be operated as a tidal system, with two lanes dedicated to entry during peak ingress and two lanes for exit during peak egress. This flexibility allows the Site to accommodate surges in traffic and clear vehicles efficiently after exceptional events.
- Contingency Routing: The Site design includes contingency routing options, allowing for the extension of queue lengths and alternative access/ egress routes if required. This ensures that even in the event of an incident or exceptionally high demand, traffic can be managed without impacting the public highway. This operation requires the use of VMS and stewards.

- Coach and Bus Management: Dedicated routing and drop-off areas for coaches and buses are provided, with separate access to minimise conflict with general traffic. These areas are supported by stewarding and clear signage.
- Overflow Activation: Grasscrete surfaced overflow areas will be opened when demand exceeds baseline capacity.
- Stewarding and Traffic Marshals: Additional stewards and traffic marshals will be deployed at key points, including the Site access, parking aisles, and pedestrian crossings, to manage flows, provide information, and respond to incidents.
- Automated and Staffed Aisle Access: Parking aisle access will be managed either through automated systems that monitor bay availability, supported by stewards who direct vehicles to secondary aisles with free spaces, ensuring efficient use of capacity.
- VMS: On-Site and highway verge VMS will be used to provide real-time information to drivers, including directions to available parking, warnings of congestion, and instructions during exceptional events.
- Signage: Static/ permanent signs will reinforce Site rules, and event-specific messaging/ temporary signs will be deployed with relevant messaging.

Communication Strategy

12.19 To ensure effective coordination and communication during high-attendance days or special events, the traffic management strategy for the Site includes robust stakeholder engagement and public communication protocols.

Stakeholder Engagement

12.20 OCC Traffic Management will have direct access to live camera feeds at the Site access, enabling real-time monitoring of traffic conditions and facilitating swift intervention if necessary.

12.21 In addition, a dedicated communication channel will be maintained between Puy du Fou's on-Site security team and OCC Traffic Management, allowing for immediate coordination in response to incidents or emerging congestion.

12.22 OCC and other relevant local stakeholders will also be notified in advance of any high-attendance days or special events, ensuring preparedness and alignment across agencies.

Public Communication

12.23 For the public, a comprehensive communication strategy will be implemented to support smooth travel and Site access. Visitors will receive pre-arrival travel guidance through booking confirmations, social media updates, and information published on the website.

12.24 On-Site, clear signage and steward instructions will guide vehicle movements and pedestrian flows, helping to maintain order and efficiency. Visitors will be encouraged to use the Bicester Park and Ride facility, with additional shuttle bus services provided to facilitate access to the Site.

Traffic Management and Conflicting Events

12.25 The Bicester area is sometimes subject to excessive demand from private car traffic. Most notably this occurs with an evet at Silverstone or Bicester Motion. Access to the Site by cars can be achieved by routing either through Junction 9 or 10 of the M40. Whilst the preferred route is via Junction 10, on occasions where Silverstone is in operation, routing can be achieved via Junction 9 or via a combination of the A41, A34 and A4095.

12.26 The Site will utilise digital tickets for all visitors which will support the use of push notifications to drivers advising them of expected delays as a result of Silverstone events. These notifications will explain preferred routing and offer real time updates in a similar manner to 'Waze' of expected delays. The use of journey planers will be supported by use of the existing variable message signs on the highway network which show pre planned preferred routing messages for both the Proposed Development and Silverstone in order to avoid conflict and congestion. Refinements to any messaging and signing provision will be managed via the Transport Working Group.

12.27 If peak attendance at the Site coincides with additional local events, then prior notification via the Transport Working Group, could also consider the activation of remote park and ride operations utilising existing sites. These would use additional shuttle buses to serve the Site and reduce the movement of private vehicles in the vicinity of Bicester.

Monitoring and Evaluation

12.28 The effectiveness of the TMP will be continuously monitored using a combination of on-Site observations, camera feeds, and data on arrival/ departure patterns.

12.29 Key performance metrics will include queue lengths, entry/ exit times, the incidence of traffic backing up onto the B4100, and wider highway impacts. Arrival and departure data, car occupancy, and traffic flow will be monitored using ANPR systems, booking systems, CCTV, manual counts, and steward reports.

12.30 The TMP will be reviewed and adapted throughout the phased delivery of the Proposed Development, with lessons learned from each event or peak day used to optimise future operations.

12.31 OCC will be involved in the ongoing evaluation, ensuring that the plan remains robust and responsive to changing conditions.

12.32 In summary, the TMP will provide a comprehensive framework to ensure that the Site can accommodate both typical and exceptional attendance levels, maintaining safe and efficient access for all users, and the Site is well-prepared to manage peak demand and minimise the risk of off-Site congestion or delays.

13 Parking Strategy

Introduction

13.1 This section outlines the proposed car parking strategy for the Site, developed to support the anticipated visitor, staff, and operational demands of the Proposed Development, while aligning with wider sustainable transport objectives. The strategy has been designed to provide sufficient capacity during peak periods, ensure efficient circulation and access, and maintain safe operations.

13.2 The approach and design reflect best practice in car park design, traffic management, and integration with other transport modes, including walking, cycling, and public transport.

13.3 The strategy also considers phased development, event-day requirements, and the long-term modal shift targets set for the Site. It includes provisions for accessible parking, electric vehicle charging, coach and shuttle parking, and operational logistics.

Phased Approach

13.4 The car parking strategy adopts a phased approach, aligned with the build-out of the development and projected visitor numbers. Rather than delivering the full extent of car parking infrastructure at the outset, parking provision will be scaled to match anticipated demand during each phase of operation.

13.5 In the opening year, only the parking necessary to support the forecast visitor and staff capacity will be made available. This approach avoids over-provision, reduces unnecessary land take, and helps promote early adoption of sustainable travel alternatives. It also ensures that infrastructure is delivered efficiently, in line with actual need.

13.6 To maintain operational flexibility, controlled overspill capacity will be identified and safeguarded for use if required during peak demand or special event days. This overspill provision will only be activated when justified by attendance levels, with a preference for managing demand through travel planning, communications, and public transport promotion.

13.7 This phased strategy supports the overall transport objectives of the Site – minimising reliance on the private car while ensuring that visitor experience and operational resilience are not compromised.

Parking Standards

13.8 OCC parking standards do not provide specific guidance for a land use suitable or relevant to the Proposed Development, or for conference centre land uses.

13.9 For the Park element of the Site, parking provision has been determined based on the highest attendance scenario, with a built-in contingency allowance to ensure sufficient capacity on peak days. The car park layout has been designed to include a main parking area, disabled bay area, and contingency/ overspill zones, allowing flexible expansion as needed. Parking provision will also be phased, as to not provide huge amounts of car parking spaces in advance of them being anticipated.

13.10 For the conference centre, it is anticipated that conference guests will be provided with complementary Park access, and therefore have been considered within Park visitor numbers, and the main car park provision. Alternatively, conference centre attendees are likely to stay overnight on the day before, or after the event, and therefore can utilise the hotel parking.

13.11 Where relevant OCC parking standards can be provided, they are set out in **Table 13.1**, and the equivalent maximum car parking and minimum cycle parking requirements are shown in **Table 13.2**.

Table 13.1: OCC Parking Standards

Land use	Max. car parking standards	Min. cycle parking standards
C1 Hotels	1 space per bedroom	1 cycle space per 5 car-parking spaces provided

Table 13.2: Maximum Car Parking and Minimum Cycle Parking Requirements

Land use	Number of bedrooms	Max. car parking requirement	Min. cycle parking requirement
C1 Hotels	350	350	70

"As part of any planning application submission, the staff and visitor ratio for each land use should be clearly identified as they are likely to be distinct to each land use class and may change over the life of the building, particularly if occupied by another business user. For example, land uses such as retail uses (E Commercial, Business and Services - shops) and health centres/leisure uses (E Commercial, Business and Services, Assembly and Leisure (indoor sport, recreation or fitness, gyms, and hospitals (class C2)) will generally have two user groups accessing those types of developments, staff/employees, and customers/ patients. Another example to consider, such as employment uses, (class B2-B8) will generally only be accessed by staff/employees with occasional visitors. In essence, each development proposal is assessed on its merits due to each land-use having its own unique characteristics."

Capacity and Provision

13.12 Vehicular parking is provided in five key areas:

- 4,217 spaces within the main car park accessed from the primary access
- 250 accessible spaces to the south of the main car park
- 147 coach parking spaces
- 705 spaces provided for the hotel and conference centre
- 1,179 back of house parking spaces

Main Visitor Car Park

13.13 The level of parking has been based on a parking accumulation analysis, based on the modal choice assumptions set out earlier and the arrival and departure profiles, associated with the morning and evening traffic flows. A contingency has then been applied to take account of any inefficiencies in parking e.g. spaces left unoccupied, poor parking as well as an allowance for additional people arriving by car above the anticipated level of mode share.

13.14 The application is in outline only and as such the final number of spaces may change at the reserve matters stage, however any change would not be materially different from those outlined above.

13.15 With regards to the primary car park, the space is split into three areas:

- Circa 2,233 spaces for day-to-day operation of the first phases. This part of the car park will be hard surfaced, and lit. A total of 250 accessible spaces are also shown within this part of the car park. These spaces will be provided close to the public entry/ exit points to the Park.
- Circa 732 spaces located to the west of this area. This serves to provide overflow capability in the early phases as well as an area for expansion as the Park grows. This area will be predominantly surfaced using grasscrete initially.
- Circa 1502 spaces to the north of the areas identified above. This will provide for additional overflow in phases 4 to 8 as well as providing the additional capacity to accommodate the peak days at the end of Phase 8.

13.16 This level of parking is based upon anticipated demand of the peak operating period, using a parking accumulation assessment.

Hotel Car Park

13.17 The hotel car parks have space for 705 cars. It is acknowledged that this is above the OCC standards, however this is necessary for operational reasons. This is because people staying in the hotel are able to visit the Park on the day they arrive and the day that they may leave, e.g. one family may check out of the hotel in the morning, but will stay at the Park all day, while another family may arrive at the Park in the morning and then stay that evening, thus there is twice the amount of demand that there would be for a typical hotel. This arrangement is taken account of when sizing the main car park, e.g. the equivalent number of spaces associated with this demand, is not double counted within the main car park.

13.18 The size of the hotel car park also allows for provision associated with the conference centre, whereby there will be guests attending conferences who are not staying within the hotel.

13.19 There is no dedicated cycle parking area specifically for hotel guests, however, hotel users will be accommodated within the wider Sites cycle parking provision, which is designed to serve multiple user groups across the Proposed Development.

13.20 Dedicated cycle parking for hotel staff will be provided within back-of-house operational areas. As this is an outline application, the detailed design and exact provision will be addressed at later stages of the planning process.

Staff Parking

13.21 For the Proposed Development, a total of 1,179 back-of-house staff parking spaces are proposed. This provision has been determined based on operational requirements and anticipated staffing levels, ensuring that sufficient capacity is available to accommodate staff during peak periods without adversely impacting visitor parking or Site operations. As the application is in outline only, the final number of staff parking spaces may be subject to refinement at the reserved matters stage. However, any changes at that stage are not expected to be materially different from the numbers outlined, and will continue to be guided by OCC's principles of providing appropriate, flexible, and clearly justified parking provision for staff in line with the evolving needs of the development.

Coach and Bus

13.22 The coach and bus areas have been designed to accommodate the anticipated demand with contingency allowance.

13.23 The design of the coach and bus parking areas reflects a commitment to supporting sustainable travel choices and meeting the 50% car travel mode share target for Day Only ticketholders.

Coach

13.24 There are 147 coach parking spaces provided. These spaces are strategically located to ensure efficient ingress and egress for larger vehicles, minimising conflict with general traffic and allowing for smooth movements. The coach bays are located south east of the internal spine road in the main car park, and are accessed from the primary Site access. There is a 'Bus Only' corridor that leads to the coach parking and bus set-down and pick-up area. Coaches will exit via the primary Site access. In the instance of heavy congestion, coaches can also access and egress the coach parking area via the secondary access.

13.25 The level of parking has been based on a parking accumulation analysis, drawing on the modal choice assumptions and visitor arrival/ departure profiles outlined earlier in Chapter 4. This analysis reflects the 85th percentile attendance, ensuring that the parking provision, particularly for coaches, is robust enough to accommodate higher-than-average operational days without being over-designed for rare extremes. A contingency has been applied to provide additional flexibility, which is especially important during weekday daytime scenarios when a large proportion of visitors are expected to arrive in school groups or as part of other organised parties.

13.26 Although the trip generation analysis indicates a lower number of coaches, the proposed coach parking provision has been deliberately set higher to ensure resilience during peak periods, allow for variability in group travel demand, and minimise any risk of overspill or operational pressure on the local road network. This proactive approach is also critical in supporting the Site's sustainable travel strategy, particularly the aim to achieve a 50% car

mode share for Day Only ticketholders by facilitating and encouraging high-capacity group travel by coach.

13.27 For those exceptional event days where demand may exceed the 85th percentile – such as special performances or seasonal peaks – the strategy will focus on actively promoting coach travel packages and group bookings, reducing the number of individual car trips and making best use of the available coach parking infrastructure. In addition, coach parking bays have flexibility to be used to provide additional parking bays, or pick-up drop off areas for taxis and buses. This flexible and scalable approach ensures the development remains functional, efficient, and aligned with its sustainable transport objectives throughout a wide range of operating scenarios.

13.28 The application is in outline only and as such the final number of spaces may change at the reserved matters stage, however any change would not be materially different from those outlined above.

Bus

13.29 Bus refers to shuttle services, local buses, and park and ride services.

13.30 There are 6 dedicated set-down/ pick-up areas that will be utilised by shuttle services, local bus, and park and ride services. These are located adjacent to the coach parking area, south east of the main internal spine road within the main car park, and can be accessed from the primary and secondary Site access depending on direction of travel. If buses are travelling northbound on the B4100, they would access from the secondary access and into the set-down/ pick-up area, and exit via the primary access and continue northbound. If buses are travelling southbound, they would access the Site via the primary access utilisting the 'Bus Only' priority lane, into the set-down/ pick-up area, and exit via the secondary access.

13.31 The requirement for the bays is based on the demand forecasts for a Phase 8/ Year 10 operation, factoring in the projected number of shuttle services per hour needed to service visitors arriving by rail.

13.32 This area has been specifically designed to accommodate the operational needs of shuttle services and local buses, with its location and access routes optimised to provide an efficient and high-quality level of service for users, supporting the goal of achieving a 50% car mode share target for Day Only ticketholders.

13.33 The application is in outline only and as such the final number of spaces may change at the reserve matters stage, however any change would not be materially different from those outlined above.

13.34 The indicative car park layout can be seen in **Appendix D**, drawing ref. 24632101-STR-HGN-100-SK-D-01901 - REV A.

Parking Control

13.35 The parking charge system for the Site has been designed not only as a means of managing on-Site parking, but also as a proactive mechanism to support sustainable transport initiatives. A key feature of this system is that a percentage of every parking fee collected will be allocated directly into a dedicated sustainable transport fund. This fund will be held separately by the Applicant and will be overseen by the Transport Working Group, ensuring transparency and accountability in its use.

13.36 The primary purpose of the sustainable transport fund is to finance improvements to off-Site transport infrastructure that support the Proposed Development and its wider community. This could include contributions towards enhancements at Bicester North and Bicester Village stations, the provision of additional cycle infrastructure such as secure cycle parking and new cycle lanes, or any other sustainable transport measures identified as priorities by the Transport Working Group. The fund is structured to be flexible and responsive, allowing it to address emerging issues and opportunities as they arise, provided they are aligned with the goal of promoting sustainable travel.

13.37 Importantly, the revenue stream generated from parking charges is ring-fenced exclusively for sustainable transport improvements and cannot be diverted to other uses, such as expanding car parking provision. The intention is to ensure that the benefits of the fund are directed towards initiatives that will be monitored, managed, and evaluated by OCC, supporting the ongoing improvement of sustainable transport options for visitors and the local community.

13.38 While the exact amount to be allocated per vehicle will be formalised within the Section 106 agreement. The fund will be managed by Puy du Fou, who may retain any interest accrued, but strict ring-fencing will ensure that all monies are used solely for sustainable transport improvements.

Off-Site Parking Strategy

13.39 As set out above the car park has been designed to accommodate estimated demand, along with a contingency to allow for inefficient parking and higher demand than predicted. The overall parking area has been sized for predicted numbers associated with Phase 8.

13.40 As such there is no expectation that any parking will need to occur off Site.

13.41 Parking demand will be monitored with data collected on arrival and departure patterns and car park occupancy as part of the day-to-day management of the Park. If parking demand is expected to exceed capacity for any reason, e.g. there are issues with public transport or other events which mean car demand is likely to be higher, then people will be advised to park at the Bicester Park and Ride, and additional shuttle bus services will be put in place.

13.42 Should it become evident that anti-social parking is occurring off Site, then this will be dealt with via the Applicant through the Transport Working Group.

Summary

13.43 This chapter has set out the car parking strategy for the Proposed Development, detailing how parking provision has been designed to meet the anticipated needs of visitors, staff, and operational requirements, while supporting sustainable transport objectives. The strategy adopts a phased approach, aligning parking delivery with the build-out of the development and projected demand, and includes contingency for peak periods and special events.

13.44 Parking is provided across four main areas: the primary visitor car park, accessible parking, hotel and conference centre parking, and back-of-house staff parking. In addition, a dedicated coach and bus set-down pick-up area is included to support group travel and public transport arrivals. Coach parking capacity has been informed by demand forecasts and modal shift targets, with provision aligned to the 85th percentile of attendance to ensure resilience during high demand periods and further supported by operational strategies for special events.

13.45 The parking charge system is structured to fund sustainable transport improvements, and off-Site parking is not anticipated under normal operation. The overall approach ensures efficient, flexible, and future-proofed parking provision, supporting both operational resilience and the Site's long-term transport and sustainability goals.

14 Highway Impact

Introduction

14.1 This chapter sets out the highways impact of the Proposed Development, based on the transport assessment methodology set out in Section 9 of this Transport Assessment.

14.2 The methodology utilises flows from the Bicester Traffic Model (BTM), which was validated by OCC in 2024.

14.3 This chapter provides the results of the strategic highways impact assessment, the localised junction assessments utilising Junction 10 software, and the M40 Junction 10 Vissim model.

Trip Distribution

Visitor

14.4 Based on the assessment, the network distribution (direction and route) output for visitor car trips is shown in **Table 14.1**, and **Figure 6.1** should be referenced for the representation of this. **Table 14.1** also shows the outputs in terms of visitor vehicle trips in the AM peak, PM peak, and after the night show – a worst-case scenario is being considered for the AM peak.

Table 14.1: Assumed Distribution and Routing Assignment – Visitors

Ref	Distribution	Route	Percentage Assignment	Vehicle Trips		
				Arrivals AM Peak (09:00-10:00)	Departures PM Peak (17:00-18:00)	Departures After Night Show (22:00-23:00)
1	M40 north	B4100 north	24.46%	113	77	356
2	A43	B4100 north	19.27%	119	81	377
3	M40 south	B4100 north	25.92%	82	55	257
4	A34 south	B4100 north	17.70%	89	60	280
5	A41 south	A4421 and B4100 south	11.73%	4	3	13
6	B4100 south	B4100 south	0.92%	54	37	171
Total				**461**	**461**	**1,454**

14.5 For the purposes of the initial assessment, it is assumed that circa 10% of the trips originating from A34 South head into Bicester from the M40 J9, rather than turning left and joining the M40 northbound via J10. These trips would then route northbound via Vendee Drive, around the ring road, and join the B4100 heading north.

14.6 Visitor arrival and departure pattens are inputted into the traffic model described later and the traffic model assigns them to the traffic network, based on typical network conditions.

14.7 As a robust assessment, trips associated with the Park in the morning peak hour i.e. 09:00 to 10:00 have been overlaid onto the 08:00 to 09:00 model base. This therefore allows for some flexibility in terms of arrival profiles, and the impacts likely to arise on the SRN.

14.8 The assessment is also the Phase 8 (Year 10) attendance and trip generation figures for the 85th percentile day. As such traffic impacts in earlier years, and on days with a lower attendance than the 85th percentile, will have a significantly smaller impact, and during the closed period, traffic impacts will be even less.

Staff

14.9 **Table 14.2** and **Table 14.3** show the key outputs in terms of network distribution and staff vehicle trips in the AM peak, PM peak, and after the night show – a worst-case scenario is being considered for the AM peak. **Table 14.2** shows network distribution for Year 1 (Phase 1), and **Table 14.3** shows network distribution for Year 10 (Phase 8).

Table 14.2: Assumed Distribution, Routing Assignment and Vehicle Trips (AM Peak, PM Peak, and after night show) – Year 1 (Phase 1)

Ref	Distribution	Route	Percentage Assignment	Vehicle Trips		
				Arrivals AM Peak (09:00-10:00)	Departures PM Peak (17:00-18:00)	Departures After Night Show (22:00-23:00)
1	M40 north	B4100 north	24.46%	14	10	3
2	A43	B4100 north	19.27%	15	10	3
3	M40 south	B4100 north	25.92%	10	7	2
4	A34 south	B4100 north	17.70%	11	8	3
5	A41 south	A4421 and B4100 south	11.73%	1	0	0
6	B4100 south	B4100 south	0.92%	7	5	2
Total				**49**	**39**	**13**

Table 14.3: Assumed Distribution, Routing Assignment and Vehicle Trips (AM Peak, PM Peak, and after night show) – Year 10 (Phase 8)

Ref	Distribution	Route	Percentage Assignment	Vehicle Trips		
				Arrivals AM Peak (09:00-10:00)	Departures PM Peak (17:00-18:00)	Departures After Night Show (22:00-23:00)
1	M40 north	B4100 north	24.46%	43	29	10
2	A43	B4100 north	19.27%	45	30	11
3	M40 south	B4100 north	25.92%	31	21	7
4	A34 south	B4100 north	17.70%	34	23	8
5	A41 south	A4421 and B4100 south	11.73%	2	1	0
6	B4100 south	B4100 south	0.92%	21	14	5
Total				**175**	**117**	**41**

Trip Generation

14.10 This section summarises the trip generation which the Proposed Developments transport impact is assessed upon. This has been informed by extensive pre-application discussions with OCC and NH on the trip generation and methodology and assessments.

Park Trip Generation

14.11 The calculation of hourly trip generation is derived by applying forecast visitor numbers (as shown in Chapter 5), to the mode share assumptions (as shown in Chapter 7), and the arrival and departure profiles (as shown in Chapter 8) for the Site. The mode share identifies the proportion of visitors expected to travel by each mode. For modes involving vehicles, the forecast number of visitors is converted into vehicle trips using agreed average occupancies; for example, car trips are calculated by dividing the number of visitors travelling by car by the average number of occupants per vehicle.

14.12 The arrival and departure profiles set out the distribution of trips across the day, expressed as a percentage of the daily total occurring in each hour. Applying these profiles to the mode share-adjusted visitor totals provides the number of people and vehicles arriving or departing in any given hour. The resulting figures for car, expressed as hourly arrivals and departures, are then used as inputs to the traffic modelling alongside staff trip generation, enabling the assessment of network performance during peak demand periods.

14.13 The approach agreed with OCC for the assessment was to undertake weekday modelling only, with no requirement for weekend modelling. To represent the worst-case scenario, Scenario 10 was adopted. This scenario assumes weekday operations with both daytime and evening shows during Phase 8 of the development (Year 10). A further variation, Scenario 10b, was also assessed to provide a more rigorous test. Scenario 10b includes all weekdays other than bank holidays, even when those days fall within school holiday periods.

14.15 The Park's peak arrival period occurs between 09:00 – 10:00, while the modelled network peak is 07:30 – 08:30. In order to create a robust worst-case assessment, the Park's 09:00 – 10:00 trip generation figures were applied to the network's 07:30 – 08:30 peak period within the traffic model.

Hotel Trip Generation

14.16 The hotel element of the Proposed Development is not expected to generate significant traffic during the traditional AM and PM network peak hours. Hotel arrivals and departures typically occur outside of these peak periods, with most check-ins taking place in the afternoon and check-outs during mid-morning, after the morning commuter peak (08:00–09:00) and before the evening peak (17:00–18:00).

14.17 As such, hotel-related trips are spread more evenly throughout the day and do not coincide with the critical periods on the local highway network. This travel behaviour is considered to have minimal impact on network capacity or performance during peak times.

14.18 During the Park's closed season, the hotel is expected to continue operating at a reduced occupancy level, catering to conference delegates. As the Park will not be generating visitor flows during this period, hotel arrivals and departures will remain modest in scale and will continue to occur largely outside the highway network's peak periods. Consequently, hotel trips in the closed season are anticipated to have a negligible impact on network capacity.

Conference Trip Generation

14.19 The conference centre is not anticipated to result in additional standalone impact beyond that already assessed by the Proposed Development. Conference attendees are expected to receive complimentary access to the Park as part of their event package. As such, these trips are already captured within the overall Park visitor trip generation forecasts and have been assessed accordingly in the highway modelling.

14.20 As noted in the hotel trip generation section, the conference centre may host events during the Park's closed season. In such instances, trips will be limited to conference attendees and staff. Attendees are expected to stay at the hotel, meaning their travel is likely to occur outside peak hours. As a result, conference-related trips during the closed season are not anticipated to have a significant impact on the highway network and certainly no greater than the total traffic volumes assessed in the traffic modelling.

Assessment Scenarios

14.21 The assessment scenarios that have been considered as part of this assessment are summarised below:

- Future Baseline 2031
- Future Baseline 2042 (with Local Plan mitigation) without the Proposed Development – this includes all committed and planned growth as set out in the emerging Local Plan
- Future Baseline 2024 + Proposed Development - This represents the impacts of the 2042 Future Baseline (with Local Plan mitigation) plus the Proposed Operational Development

14.22 The scenarios are further detailed in the following sections.

Strategic Highway Impact Assessment

14.23 The strategic highway impact assessment has been done using the Bicester Transport Model SATURN highway assignment models reflecting the assessment scenarios described above. The assessment is made by comparing the Proposed Development scenarios for 2031 and 2041 to a Do Minimum scenario reflecting OCC's local development plan without the Proposed Development included.

14.24 The Traffic Modelling has been undertaken by Sweco on behalf of OCC under instruction of the Applicant. A full copy of the Sweco output report is included as **Appendix N**.

2031 Proposed Development Scenario

14.25 In the AM Peak, the key traffic flow impacts is an increase in motorway traffic travelling northbound from south of Bicester. This traffic exits the motorway at M40 Junction 10, and travels to the Site along the B4100.

14.26 There are reductions in flow along the B4100 due to north-south trips to and from Bicester (not related to Puy du Fou) which experience additional delay on the B4100 corridor due to traffic associated with the Proposed Development. These trips move to other routes such as Hethe Road and the A4421. Rat-running through Bucknell can be seen which is largely attributed to Proposed Development trips accessing the Site by bypassing Baynards Green junction and other delay hotspots around M40 Junction 10.

14.27 In the PM, a similar pattern is seen, with the addition of routing by Proposed Development traffic through Middleton Stoney and along the B430. This traffic also uses Bucknell as a rat-run.

14.28 The changes in traffic flow due to the Proposed Development causes increases in delays at some locations with existing capacity constraints. For example, there is large increase in delay on the northern arm approaching Baynards Green roundabout and Middleton Stoney (in southbound direction).

14.29 A decrease in delay is seen on the B4100 either side of the development Site access points. This is caused by a reduction in through traffic (non-Puy du Fou) on B4100, due to existing users avoiding the corridor due to the reduction in speed limit and additional delay on the corridor caused by Proposed Development traffic.

14.30 A similar pattern is seen in the PM as in the AM, with the addition of increased delays at the M40 Junction 10 on and off slips on the southern side of the junction.

2042 CLPR Mitigation

14.31 Flow changes in 2042 models are more substantial than in 2031 due to the overall level of background demand being higher and the addition of a larger number of trips for the Park.

14.32 In the AM Peak there are increases in traffic along the M40 from the south. There is also significant rat-running in the villages of Middleton Stoney and Bucknell. Compared to 2031 there is a rerouting of local traffic along less desirable routes spread across a wider area. However, the reduction in local traffic away from the B4100 is similar to 2031, with similar increases in traffic on Hethe Road.

14.33 In addition, traffic leaves the motorway at earlier junctions, such as Junction 11, using alternative routes to access Bicester to avoid the large delays seen at M40 Junction 9 and 10.

14.34 The PM peak shows a similar pattern as the AM, but impacts are less significant due to the available capacity on the network and different pressures on the network.

14.35 There are additional major delay hotspots due to Proposed Development traffic. This includes:

- The approaches to the A43/A421 Barleymow roundabout in AM and PM peaks
- M40 Junction 9 and Junction 10 in AM and PM peaks
- Southbound on-slips to the M40 at Junction 10 as Proposed Development traffic joins the motorway in the PM peak
- The section of Oxford Road that runs alongside the A41 in AM and PM peaks

14.36 In addition, there are concerns of rat-running traffic avoiding the M40 Junction 9 roundabout by leaving and rejoining at the smaller access points either side of the roundabout.

Proposed Development Mitigation Scenario

14.37 While the network peak hour is defined by the BTM as 07:30–08:30, the peak hour for trip generation associated with the Proposed Development occurs between 09:00 and 10:00. To provide a robust and conservative assessment, the impact of the Development's 09:00–10:00 peak hour has been layered on top of the 07:30–08:30 highway network peak. This represents an over estimation of the traffic impacts representing a worst-case scenario, i.e should there be some variation in trip arrivals or a higher car mode shift then the traffic modelling allows for this. A highways mitigation package has been developed to address any impacts arising from this assessment. This includes:

- Signalisation of Ardley M40 off slip junction.
- Optimisation of the Local Plan signal scheme at Baynards Green (Optimised via SigOpt in Saturn)
- Optimisation of the signals at Cherwell junction / M40 southbound off slip (Optimised via SigOpt in Saturn).
- Closure of Bainton Road between B4100 and Ardley Road to through traffic. Due to the zoning arrangements in the area, and not being able to code the link as access only, this results in no traffic being able to use Bainton Road and is therefore a worst case scenario as all traffic redistributes.
- Addition of a flare at the A43 / Barley Mow roundabout on the A421 approach for c100m. (Not completed in the model as the model already has two lanes on this approach which is not representative of current situation).
- Update of M40 J9 to reflect the inclusion of smart signals to better manage demand. This cannot be modelled in Saturn and so was not included in the modelling test, and as such the modelling is considered worst case.
- Minor kerb realignment of the Cherwell Services access from the A43 South. This is to address queueing vehicles blocking back towards the A43 and impeding the through flow of traffic. Given this is a minor geometric change it could not be represented in the traffic model.

14.38 The mitigation proposed addresses the impact of the scheme in 2042 with the Park fully operational and all Local Plan traffic included (without any localised schemes which may come forward to support the Local Plan development sites). The Park will not operate at the level assessed on most days, given that it is only fully open for 176 days of the year and that attendance varies through the operational period. During the closed season, traffic

will be less than that assessed in the model, and the annual traffic forecasts have made an allowance for the closed season.

14.39 In the AM Peak the closure of Bainton Road to through traffic is effective at preventing traffic from using Bucknell as a shortcut, and results in the shifting of Proposed Development traffic onto the motorway and along the B4100. It also leads to an increase in traffic on Vendee drive to bypass Bicester town centre. There is a material decrease in traffic on the B430.

14.40 The PM peak also shows a similar effectiveness of the mitigation measures at deterring traffic from using Bucknell as a shortcut. There are increases in traffic seen at M40 Junction 10 going northbound, as well as increases in use of the bypass roads around the town centre. Some of these impacts are due to local traffic rerouting away from the B4100.

14.41 In the AM, the mitigations lead to increased delays at the Baynards Green junction and at M40 Junction 10. Baynards Green is due to adjusted signal timings giving more capacity to constrained movements identified in the non-mitigation scenario which leads to increased delays on other arms of the junction. In addition, other capacity changes have attracted additional traffic to this route, potentially causing greater congestion.

14.42 There are also delay increases at M40 Junction 10 at the Ardley roundabout due to the inclusion of signal controls. Constraining movements of the circulating traffic to allow specific green time for off-slip traffic to enter the roundabout means that delays are found on the circulatory movements.

14.43 In the PM, M40 Junction 10 remains an issue with delay increases because of the inclusion of signal controls. Delay increases are also seen in Middleton Stoney, likely due to local traffic rerouting through the area. This is also seen on the southbound off-slip at M40 Junction 10, caused by the increased access of Proposed Development traffic to the southbound motorway.

Conclusion

14.44 The proposed mitigation results in:

- Traffic routing on anticipated major routes, i.e. M40 (North and South), A43, and A41
- A reduction in rat running traffic on local roads and particularly through Bucknell, Middleton Stoney and Caversfield / Fringford Road
- Through traffic on Bainton Road is eliminated
- The impacts of the Proposed Development can be suitably accommodated on the local and SRN

14.45 The A43/ Baynards Green junction has been identified through the emerging Local Plan as requiring a significant upgrade. The 2042 Local Plan with Mitigation model includes a scheme to address existing issues with the junction and allow for future growth to 2042. The Baynards Green employment schemes, one of which now has a resolution to grant with the other being refused proposed the signalisation of the existing junction.

14.46 It is recommended that the Proposed Development makes a financial contribution towards to the Local Plan scheme, which will alleviate pressure at the junction.

14.47 The contribution towards improvements to Junction 9 are not included in the model. These would provide additional benefit to the operation of the junction, not captured in the modelling.

14.48 The emerging Local Plan has identified the need for land to be safeguarded around Junction 9 to allow for further capacity improvement, and as such it is identified that Local Plan development should also contribute towards improvements at this Junction. The contribution offered by the Applicant could therefore be used as part of a wider contribution to deliver an alternative scheme.

14.49 Additional pressure is put on Vendee Drive as a result of the closure of Bainton Road, and this should be monitored, as part of the monitor and manage approach.

Local Junction Impact Assessment

Methodology

14.50 The following section presents the summary outputs of the local junction modelling.

14.51 A total of three models were tested in the local junction modelling software Junctions 9. These included:

- J01 - Site Access (Visitors)
- J02 - Site Access (Staff)
- J03 - Site Access (Hotel / Shuttle / Public Transport)

14.52 As these are all proposed junctions dependent on the development of the Site, no baseline modelling has been undertaken. Only the 2042 with development AM and PM scenarios have been tested as a “worst-case” scenario. Demand data has been extracted from the BTM.

14.53 When assessing the performance of the junction, the following definitions are applicable to these models:

- Ratio of Flow to Capacity (RFC) – this is a measure of how close traffic flow on an approach arm is to the theoretical capacity of that approach. An RFC of 1.0 would mean flow is equal to the capacity. Non signalised junctions are generally considered to be operating satisfactorily if all arms of the junction are operating with an RFC of 0.85 or lower. Values higher than this can indicate the junction is operating at or over capacity. As a junction approaches capacity queues form, delays start to occur and the level of service falls.
- Queue Length – expressed in standard Passenger Car Units (PCUs), this shows the average number of vehicles in the queue on each arm. A PCU is equal to 5.75m.

Results

J01 – Site Access (Visitors)

14.54 The proposed vehicular access / B4100 junction for visitors has been tested using Junctions 9. **Table 14.4** provides a summary of the 2042 AM and PM scenarios.

Table 14.4: J01 – 2042 AM and PM model results

Movement	2042 AM Future Year + Development			2042 PM Future Year + Development		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
B4100 (S) left-turn	0.1	3.9	0.08	0	0	0
B4100 (S) straight	1.4	8.48	0.58	3.6	15.49	0.79
B4100 (N) straight	3.4	12.42	0.78	1.4	6.92	0.59
B4100 (N) right-turn	0.3	4.45	0.22	0	0	0
Site Access left- and right-turn	0	0	0	0.2	2.46	0.13

14.55 These results demonstrate that the proposed access will operate well within its design capacity with minimal delays in both time periods.

J02 – Site Access (Staff)

14.56 The proposed vehicular access / B4100 junction for staff has been tested using Junctions 9. **Table 14.5** provides a summary of the 2042 AM and PM scenarios.

Table 14.5: J02 – 2042 AM and PM model results

Movement	2042 AM Future Year + Development			2042 PM Future Year + Development		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Site Access left-turn	0	0	0	0.1	7.48	0.07
Site Access right-turn	0	0	0	0.4	14.24	0.27
B4100 (N) right-turn and straight	0	6.32	0.04	0	0	0

14.57 These results demonstrate that the proposed access will operate well within its design capacity with minimal delays in both time periods.

J03 – Site Access (Shuttle)

14.58 The proposed vehicular access / B4100 junction for staff has been tested using Junctions 9. **Table 14.6** provides a summary of the 2042 AM and PM scenarios.

Table 14.6: J03 – 2042 AM and PM model results

Movement	2042 AM Future Year + Development			2042 PM Future Year + Development		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
B4100 (S) left-turn	0	3.42	0.01	0	0	0
B4100 (S) straight	2	11.37	0.67	1.9	10.79	0.66
B4100 (N) straight	5.8	22.15	0.86	6.3	24.13	0.87
B4100 (N) right-turn	0.1	3.67	0.05	0	3.57	0.01
Site Access left- and right-turn	0	0	0	0.3	5.29	0.25

14.59 These results demonstrate that the straight-ahead lane on the B4100 (N) arm is approaching capacity in both time periods. However, all over arms operate well within the design capacity with minimal delays in both time periods.

14.60 It should be noted that the methodology to model individual lanes in Junctions 9 has highlighted this issue with the straight-ahead movements on B4100 (N). The performance of the arm across both lanes is still considered within capacity.

Summary

14.61 Three proposed Site access junctions have been modelled in Junctions 9 using the worst-case scenario demand outputted from the BTM.

14.62 Both the Visitor Site Access and Staff Site Access junctions perform well, with no arms exceeding 80% RFC in either time period. However, the Shuttle Site Access junction does show the B4100 (N) straight-ahead lane as approaching capacity. That said, the other arms do operate within capacity and the overall junction delay is low.

Microsimulation Assessment

14.63 Microsimulation modelling has been undertaken to better understand the impact of the Proposed Development on the local road network.

Methodology

14.64 The revalidated 2016 M40 J10 Vissim model, provided by National Highways, was used as a basis of the modelling exercise. However, it was agreed for the purpose of assessing the impact of Puy du Fou, no base revalidation was required. The version of the Vissim model was updated from v5.40.06 to v2025 SP03.

14.65 The extent of the modelled area was also extended on the B4100 S link down to the Bainton Road / B4100 S junction. The proposed Site accesses are located along this extended link.

14.66 Two forecast scenarios were assessed:

- 2042 CLPR Mitigation – AM and PM
- 2042 Proposed Development Mitigation – AM and PM

14.67 Peak hour flows from the strategic transport model for the corresponding scenarios were directly inputted into the Vissim model. It should be noted that these peak hours (0730-0830 and 1700-1800) differed to the original Vissim model peak hours of 0745-0845 and 1630-1730.

14.68 The original modelled periods, including warm up and cool down, amounted to 2.5 hours. However, the evaluation period is for only the peak hour. In order to maintain consistency with the original base model, the same periods were used when running the models. In this case, a flat profile of the strategic model peak flows was applied across the entire period.

14.69 The signalisation and reconfiguration of Baynard's Green roundabout was included in the 2042 CLPR Mitigation scenario and 2042 Proposed Development Mitigation scenario.

14.70 The proposed mitigation of signalising and reconfiguring Ardley Roundabout was included in the 2042 Proposed Development Mitigation scenario only.

Results

14.71 Queue data at each approach and end-to-end journey time data has been collected to measure the quantitative impact of the Proposed Development in the local transport network during the peak hours.

14.72 **Table 14.7** and **Table 14.8** summarise the queue lengths across both forecast scenarios for AM and PM, respectively.

Table 14.7: Average Queue Length – AM Peak

Arm	Junction	2042 CLPR Mitigation - Average Queue Length (m)	2042 Proposed Development Mitigation - Average Queue Length (m)
A43 N	Baynard's Green	79	93
B4100 E	Baynard's Green	29	27
A43 S	Baynard's Green	23	55
B4100 W	Baynard's Green	16	19
A43 N	Padbury Roundabout	33	37
Services SB	Services	9	8
M40 SB Offslip	Padbury Roundabout	15	12
A43 N	Services	48	29
Services NB	Services	18	16
A43 S	Services	10	11
A43 N	Ardley Roundabout	169	44
M40 NB	Ardley Roundabout	19	29
B430	Ardley Roundabout	4	28
A43 to M40 SB Onslip	Services	2	1
A43 SB	Services	9	0
Cut-through	Services	15	17

Table 14.8: Average Queue Length – PM Peak

Arm	Junction	2042 CLPR Mitigation - Average Queue Length (m)	2042 Proposed Development Mitigation - Average Queue Length (m)
A43 N	Baynard's Green	60	48
B4100 E	Baynard's Green	28	47
A43 S	Baynard's Green	30	32
B4100 W	Baynard's Green	15	21
A43 N	Padbury Roundabout	26	28
Services SB	Services	10	10
M40 SB Offslip	Padbury Roundabout	17	17
A43 N	Services	28	30
Services NB	Services	14	14
A43 S	Services	9	18
A43 N	Ardley Roundabout	20	43
M40 NB	Ardley Roundabout	11	30
B430	Ardley Roundabout	3	24
A43 to M40 SB Onslip	Services	0	0
A43 SB	Services	0	0
Cut-through	Services	12	16

14.73 In the 2042 CLPR Mitigation AM scenario, only one queue exceeds 100 m and in most approaches the queue lengths are manageable i.e. not blocking back to upstream junctions. However, the A43 N arm on Ardley Roundabout does frequently queue back to the A43 S exit at the Services junction.

14.74 In the 2042 Proposed Mitigation AM scenario, the queue lengths are mostly similar in length to the CLPR Mitigation scenario. Key differences are observed on the arms of the Ardley Roundabout where signalisation of the junction was deemed necessary to alleviate the congestion and blocking back of A43 N. This has had a knock-on effect on the other arms at this junction, which have increased in queue length as a result – albeit this is a manageable increase. There has been an increase in queue length on A43 approaches to Baynard's Green Roundabout, particularly the southern approach. This is most likely a result of re-routed traffic diverted due to the closure of Bainton Road as there is a 50% increase in right-turning traffic from A43 S to B4100 E.

14.75 In the 2042 CLPR Mitigation PM scenario, no queues exceed 100 m and in most approaches the queue lengths are manageable i.e. not blocking back to upstream junctions.

14.76 In the 2042 Proposed Mitigation PM scenario, the queue lengths are mostly similar in length to the CLPR Mitigation scenario. Notably, due to the signalisation of Ardley Roundabout, this junction now performs worse in the proposed scenario. There has also been an overall increase in queue length on approaches to Baynard's Green Roundabout. This is most likely a result of re-routed traffic diverted due to the closure of Bainton Road as there is a 40% increase in left-turning traffic from B4100 E to A43 S.

14.77 **Table 14.9** and **Table 14.10** summarise the end-to-end journey times across both forecast scenarios for AM and PM, respectively. Where zero trips have been modelled, the journey time has been labelled "N/A".

Table 14.9: Average End-to-end journey times – AM Peak

From Link	To Link	2042 CLPR Mitigation - Average Travel Time (mm:ss)	2042 Proposed Development Mitigation - Average Travel Time (mm:ss)
A43 North	B4100 South	04:23	05:07
A43 North	Cherwell Services	03:24	03:28
A43 North	M40 South	05:38	05:42
A43 North	Ardley Road	06:59	04:39
A43 North	M40 North	08:37	07:15
A43 North	B4100 North	02:37	02:19
B4100 South	A43 North	04:47	06:17
B4100 South	Cherwell Services	05:36	07:08
B4100 South	M40 South	07:49	09:23
B4100 South	Ardley Road	09:29	08:22
B4100 South	M40 North	11:06	10:53
B4100 South	B4100 North	04:34	06:04
Cherwell Services	A43 North	03:04	03:09
Cherwell Services	B4100 South	06:13	07:00
Cherwell Services	M40 South	03:26	03:26
Cherwell Services	Ardley Road	04:11	02:32
Cherwell Services	M40 North	06:27	05:29
Cherwell Services	B4100 North	N/A	N/A
M40 South	A43 North	05:16	05:43
M40 South	B4100 South	08:29	09:40
M40 South	Cherwell Services	04:09	04:22
M40 South	Ardley Road	03:11	03:18
M40 South	M40 North	05:02	05:03
M40 South	B4100 North	04:48	N/A
Ardley Road	A43 North	03:00	03:49
Ardley Road	B4100 South	06:17	07:44
Ardley Road	Cherwell Services	01:57	02:32
Ardley Road	M40 South	04:22	04:54
Ardley Road	M40 North	03:51	04:59
Ardley Road	B4100 North	N/A	N/A
M40 North	A43 North	04:56	05:03
M40 North	B4100 South	08:09	09:00

From Link	To Link	2042 CLPR Mitigation - Average Travel Time (mm:ss)	2042 Proposed Development Mitigation - Average Travel Time (mm:ss)
M40 North	Cherwell Services	04:42	04:35
M40 North	M40 South	05:20	05:21
M40 North	Ardley Road	08:22	05:41
M40 North	B4100 North	04:30	N/A
B4100 North	A43 North	01:31	01:36
B4100 North	B4100 South	04:30	05:15
B4100 North	Cherwell Services	03:30	03:17
B4100 North	M40 South	05:38	05:26
B4100 North	Ardley Road	07:13	04:20
B4100 North	M40 North	08:38	07:02

Table 14.10: Average End-to-end journey times – PM Peak

From Link	To Link	2042 CLPR Mitigation - Average Travel Time (mm:ss)	2042 Proposed Development Mitigation - Average Travel Time (mm:ss)
A43 North	B4100 South	04:22	05:20
A43 North	Cherwell Services	03:16	03:09
A43 North	M40 South	05:19	05:13
A43 North	Ardley Road	03:54	04:14
A43 North	M40 North	06:38	06:49
A43 North	B4100 North	02:29	02:29
B4100 South	A43 North	04:33	06:16
B4100 South	Cherwell Services	05:29	07:09
B4100 South	M40 South	07:33	09:13
B4100 South	Ardley Road	06:10	08:18
B4100 South	M40 North	08:56	11:05
B4100 South	B4100 North	04:23	06:04
Cherwell Services	A43 North	03:01	03:00
Cherwell Services	B4100 South	06:04	07:02
Cherwell Services	M40 South	03:18	03:20
Cherwell Services	Ardley Road	01:57	02:30
Cherwell Services	M40 North	04:53	05:14
Cherwell Services	B4100 North	N/A	N/A
M40 South	A43 North	05:13	05:24
M40 South	B4100 South	08:15	09:26
M40 South	Cherwell Services	04:07	04:27
M40 South	Ardley Road	03:09	03:18

From Link	To Link	2042 CLPR Mitigation - Average Travel Time (mm:ss)	2042 Proposed Development Mitigation - Average Travel Time (mm:ss)
M40 South	M40 North	05:12	05:13
M40 South	B4100 North	04:45	05:12
Ardley Road	A43 North	03:04	03:39
Ardley Road	B4100 South	06:07	07:48
Ardley Road	Cherwell Services	01:59	02:32
Ardley Road	M40 South	N/A	N/A
Ardley Road	M40 North	04:00	05:09
Ardley Road	B4100 North	N/A	N/A
M40 North	A43 North	04:45	04:55
M40 North	B4100 South	07:50	09:01
M40 North	Cherwell Services	04:49	04:43
M40 North	M40 South	05:08	05:08
M40 North	Ardley Road	05:23	05:45
M40 North	B4100 North	N/A	04:35
B4100 North	A43 North	01:45	02:16
B4100 North	B4100 South	04:40	06:12
B4100 North	Cherwell Services	03:47	N/A
B4100 North	M40 South	05:51	05:50
B4100 North	Ardley Road	04:31	04:46
B4100 North	M40 North	07:07	07:39

14.78 In the 2042 CLPR Mitigation AM scenario, the weighted average end-end journey time is 5 minutes 11 seconds compared to 5 minutes 15 seconds in the 2042 Proposed Mitigation AM scenario.

14.79 However, comparisons drawn at individual OD pairings inform key differences between the two scenarios. Firstly, the signalised mitigation at Ardley Roundabout significantly reduces congestion along the A43 North arm of this junction and therefore improves the journey times for most trips heading to Ardley Road and M40 North except for trips originating from M40 South, which remain at similar journey times. It should also be noted that trips originating from Ardley Road have generally increased by less than one minute. Secondly, the addition of three site accesses along B4100 South have created delays to and from this zone. Generally, journey times from B4100 South have increased by 1.5 minutes with exception of those going to Ardley Road or M40 North. Trips going to B4100 South have increased in journey time between 45 seconds and 1.5 minutes.

14.80 In the 2042 CLPR Mitigation PM scenario, the weighted average end-end journey time is 5 minutes 2 seconds compared to 5 minutes 16 seconds in the 2042 Proposed Mitigation PM scenario.

14.81 However, comparisons drawn at individual OD pairings inform key differences between the two scenarios. Firstly, the signalised mitigation at Ardley Roundabout has minimal impact

on journey times compared to the AM. Although, it should be noted that trips from Ardley Road going to M40 North have increased by approximately one minute. Secondly, the addition of three site accesses along B4100 South have created delays to and from this zone. Generally, journey times from B4100 South have increased by almost two minutes. Trips going to B4100 South have increased in journey time on average by 1.25 minutes.

Summary

14.82 Microsimulation modelling has been undertaken using Vissim to better understand the journey time and queuing impacts of the Proposed Development on the surrounding network.

14.83 The queue data at existing junctions remains broadly similar between the 2042 CLPR Mitigation and the 2042 Proposed Mitigation scenarios. However, the inclusion of mitigation measures at Ardley Roundabout helps alleviate congestion, particularly on the A43 North arm, in the AM but has little impact in the PM.

14.84 There is a very slight increase in journey times between the two scenarios in both time periods given the modest increase in vehicles. However, analysing individual OD pairs reveal greater differences for trips going to and from B4100 South. This is to be expected given the change in speed limits, and addition of the three site access junctions. In the AM period, considerable journey time benefits are also observed for trips heading to Ardley Road and M40 North because of the mitigation at Ardley Roundabout.

14.85 Overall, the microsimulation modelling has shown that the additional trips generated by the Proposed Development will not have a significant negative impact on the performance of the SRN or local road network. Conversely, when assigned with mitigation measures in place, the AM period presented significant positive impacts at Ardley Roundabout.

Weekend Assessment

14.86 At present there is no weekend model for Bicester, despite significant growth in the district over the last 15 years, and a regulatory local plan adopted and emerging. This is not unusual given that the weekday peak periods are the primary focus for capacity enhancements and understanding how networks operate – this approach is corroborated by Steer.

14.87 As such, Steer has assessed the differences in weekday and weekend traffic, to confirm that the weekday modelling that has been undertaken reflects the worst-case scenario experienced on the highway network.

Methodology

14.88 Data was obtained from OCC's Transport Monitoring team in October 2024 and analysed by Steer. The data includes information which is understood to have been used in OCC's current BTM 2026 future base year review.

14.89 The assessment included a summary of the following locations:

- A4095 Howes Lane: Shakespeare Drive (N) to Middleston Stoney Road (S), Surveyed 09/01/23
- A4095: From Heather Road (W) to Hornbeam Road (E), Surveyed 09/01/23
- A41 Oxford Road: From B4030 Vendee Drive (S) to Pioneer Way (N), Surveyed 26/09/22
- A41: From B4030 Vendee Drive (SW) to Wendlebury Road (NE), Surveyed 09/01/23
- A41: From Wendlebury Road (NE) to B4030 Vendee Drive (SW), Surveyed 09/01/23

- Access Road: From B4030 Vendee Drive (NE) to Bicester Park & Ride (SW), Surveyed 28/11/22
- Access Road: From Bicester Park & Ride (SW) to B4030 Vendee Drive (NE), Surveyed 28/11/22
- B4030 Vendee Drive: From Heaton Road (NW) to Whitelands Farm (SE), Surveyed 09/01/23
- B4030: From Empire Road (E) to Middleton Road (W), Surveyed 09/01/23
- B4100 Banbury Road: From Rowan Road (S) to Stable Road (N), Surveyed 02/10/23
- B430: From A43 (N) to Ardley Road (S), Surveyed 10/07/23
- Buckingham Road: From Cedar Drive (N) to Woodfield Road (S), Surveyed 02/10/23
- Charbridge Lane: From Bicester Road (N) to Gavray Drive (S), Surveyed 05/07/22
- Charles Shouler Way: From A41 Oxford Road (W) to Wendlebury Road (E), Surveyed 26/09/22
- Middleton Stoney Road: From A4095 Howes Lane (W) to Ludlow Road (E), Surveyed 30/10/23
- Middleton Stoney Road: From Goodwood Close (E) to Whitelands Way (W), Surveyed 30/10/23
- Middleton Stoney Road: From Ludlow Road (W) to Shakespeare Drive (E), Surveyed 30/10/23
- M40: From Off Sliproads to A43/B430
- M40: From A43/B430 to On Sliproads
- A43: From B430 to M40
- A43: From M40 to B430

Assessment

14.90 The following findings were evident:

- There are minimal differences between the average Monday to Friday and average Tuesday to Thursday traffic volumes
- The morning peak is between 07:00 and 08:00
- The evening peak is more variable and occurs between 16:00 and 18:00
- The peak period within the evening is lower than the morning peak
- The Saturday peak is between 11:00 and 13:00
- The Sunday peak is between 11:00 and 13:00, or in some circumstances an hour later
- The Sunday peak is lower than the Saturday peak, and the flows build up later and dissipate earlier
- The morning peak exhibits the highest flow at any time of the week
- Weekend flows are generally lower than any of the peak periods in the weekday (AM or PM)
- The Saturday peak period occurs later in the day than a weekday and is slightly more prolonged

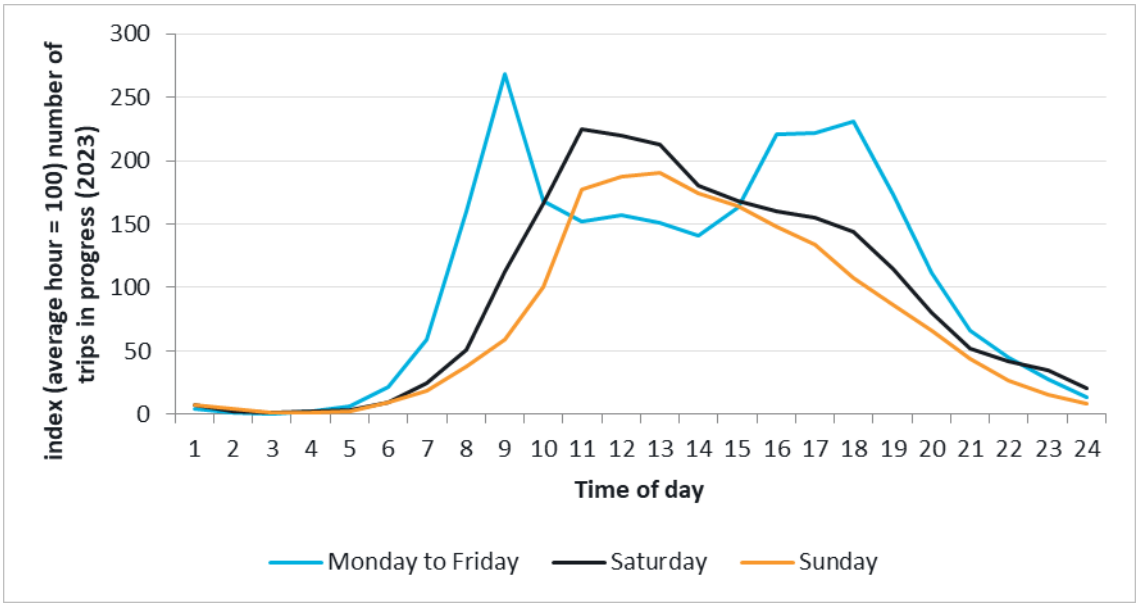
14.91 Despite the strong retail offering in Bicester, notably Bicester Village, these findings are generally consistent with typical network travel patterns. For example, commuting and school trips are predominantly undertaken in the morning peak, before 09:00, while commuting trips in the evening are typically after 17:30 and do not include as many education related trips.

14.92 Weekend trips, which include more retail and leisure movements, are predominantly focused around later arrival times. This is better aligned with shop opening times and

shorter dwell times compared to a typical working day. Arrival and departure profiles for Sunday reflect shorter opening hours of shops on Sundays.

14.93 The National Travel Survey dataset NTS0501 provides data on 'Trips in progress by time of day and day of week'. **Figure 14.1** below shows the typical profile of all car driver trips in 2023. The findings from the study area align with those shown below.

Figure 14.1: NTS0501 data on 'Trips in progress by time of day and day of week' (2023)

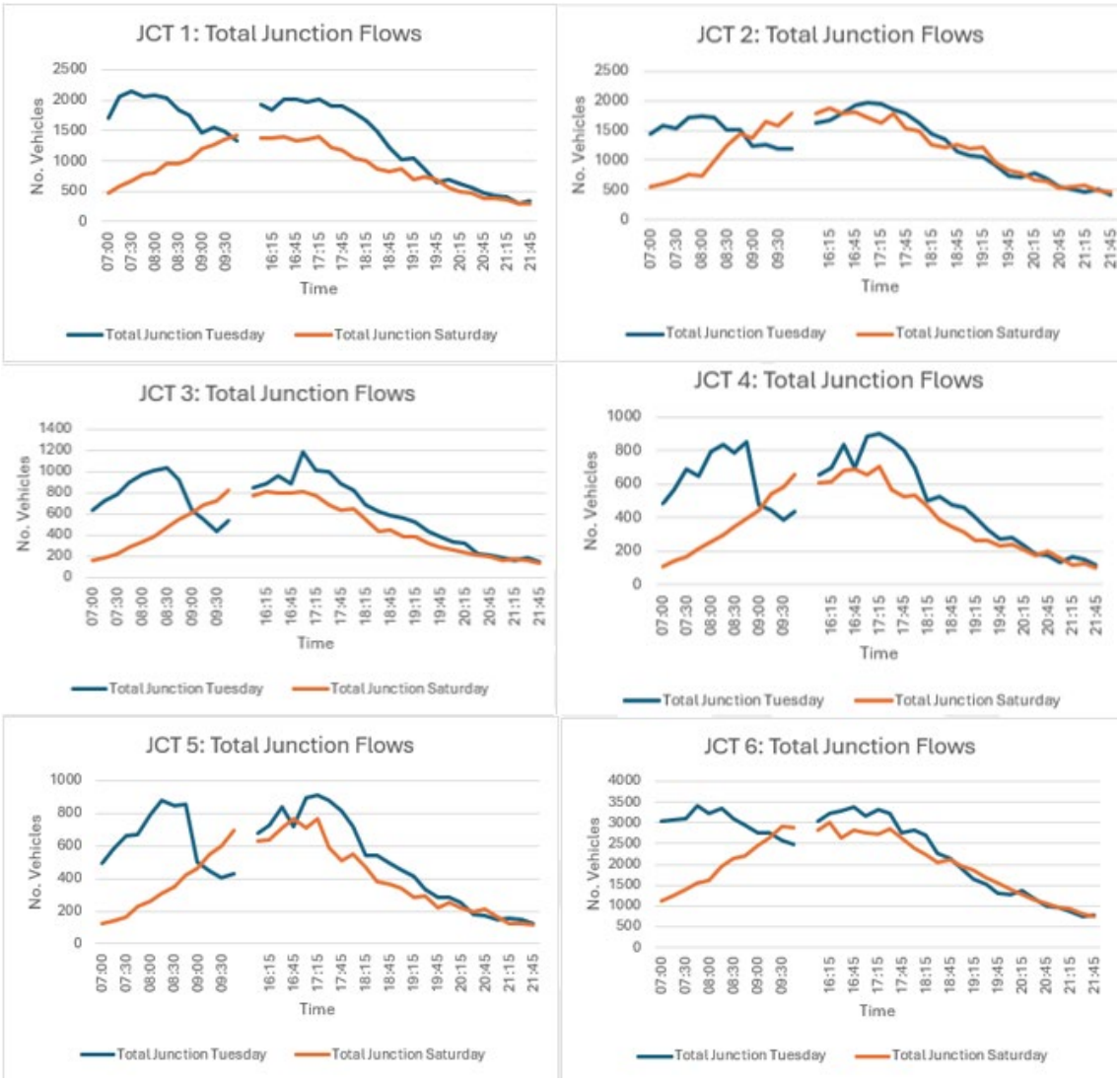


14.94 In order to confirm that the above conclusions were sound, a suite of traffic surveys were undertaken on Saturday 29 March and Saturday 1 April 2025 at the following locations:

1. A43 / B4100 Roundabout
2. A41/ Wendlebury Road / Park & Ride / Vendee Drive Roundabout
3. Howes Lane / Middleton Stoney Road Roundabout
4. Bucknell Road / A4095 Roundabout
5. Bucknell Road / Howes Lane Priority Junction
6. M40 / A41 / A34 Roundabout

14.95 The total junction flows at each junction are provided on **Figure 14.2**.

Figure 14.2: Weekend/ Weekend Analysis – Total Junction Flows



14.96 The 2025 traffic survey results confirm that weekend traffic flows are consistently lower than those recorded during the weekday AM and PM peak periods at all survey locations. Peak-hour volumes on weekends are notably below those observed during the weekday peaks, with correspondingly lower traffic movements through the key junctions in the study area.

14.97 Given that the weekday modelling already considers the highest observed traffic demands, the scenarios assessed represent a robust worst-case assessment of network performance. Any weekend operation of the network would therefore be expected to perform equal to or better than the modelled results, and as such, separate weekend modelling is not considered necessary.

14.98 Based on the above, it was agreed with OCC that it is not considered necessary or proportionate to develop a full-scale weekend model of Bicester. The weekday modelling undertaken reflects a worse-case scenario of highways impact and should additional traffic be generated during the morning and evening peak hours, this can be accommodated within the network, given the lower traffic flows observed.

Oxford Strategic Rail Freight Interchange

14.99 Oxfordshire Railfreight Limited is proposing a Strategic Rail Freight Interchange (SRFI), to be located on land east of the former Upper Heyford air base, south of the Chiltern railway line, and southwest of Junction 10 of the M40 motorway. The proposal would deliver a large multi-purpose freight interchange and distribution centre linked into both the rail and trunk road systems. It is anticipated that a public consultation will be held in late 2025 setting out the proposals, however, based on discussions with the project team, it is anticipated that any scheme would bring forward:

- Extensive works to Junction 10 of the M40, including realigned slip, a fundamentally improved Ardley Road M40 off slip configuration;
- Improvements to the A43 / Baynards Green junction, in line with the scheme promoted by OCC through the Local Plan
- Amendments to Junction 9 of the M40
- Reconfiguration of the local road network to minimise rat running through local villages
- Improvements to walking and cycling infrastructure, including amendments to PRoW network
- Flexible public transport strategy

14.100 It is evident that should the OxSRFI come forward, significant improvements to Junction 9 and 10 of the M40 would require improvement. This is likely to come forward ahead of the Phase 8 scenario tested for Puy du Fou. As such the strategy to mitigate the impacts of the Site through contributions towards strategic road infrastructure fits with delivering a holistic intervention to accommodate growth in this area of the SRN.

Summary

14.101 The strategic highway impact assessment has been undertaken using the Bicester Transport Model SATURN highway assignment models reflecting the assessment scenarios described above. The assessment compares the Proposed Developments scenarios for 2031 and 2042 to a Do Minimum scenario reflecting OCC's local development plan without the Proposed Development included.

14.102 An assessment of weekday and weekend traffic has been undertaken in the Bicester area. The results of the survey confirmed that the weekday peak periods experience a higher level of traffic than the maximum amount of traffic experienced on a weekend. As such, it is considered that the weekday modelling will present a robust assessment of the highways impact of the Proposed Development, and further weekend modelling is therefore not required.

15 Travel Demand Strategy

Introduction

15.1 Sustainable low-carbon transport options are crucial to the live entertainment, recreation, and tourism industries as they reduce environmental impact, promote local economic resilience, and enhance the appeal of destinations, venues, and events through eco-friendly travel experiences.

15.2 The Proposed Development presents a unique opportunity to deliver a world-class visitor experience while setting new standards for sustainable travel. Recognising the environmental, operational, and reputational benefits of effective Travel Demand Management (TDM), the Applicant will implement a comprehensive strategy to reduce car dependency, promote low-carbon travel, and ensure accessibility for all visitors.

15.3 This chapter outlines the vision, objectives, measures, implementation, and monitoring framework for TDM at Puy du Fou, drawing on best practice and innovative digital solutions.

What is Travel Demand Management

15.4 TDM is a strategic approach to influencing and optimising how visitors travel to and from a destination. At its core, TDM uses advanced data capture and analysis to model the impact of promoting low-carbon travel plans, personalized wayfinding, and sustainable transport choices.

15.5 For destinations such as the Proposed Development, TDM can provide powerful tools to align visitor travel behaviour with environmental objectives. By enabling precise first and last mile routing, TDM not only enhances accessibility and improves the overall visitor experience but also helps reduce congestion and pressure on local transportation networks. It captures valuable data on travel patterns and CO_2e emissions, supporting data-driven decision-making and continuous improvement.

15.6 Benefits of TDM over traditional journey planning apps:

- Integrated multi-model travel options, enabling the tailored integration of bus, rail, cycle-hire, micro mobility, and electric vehicle infrastructure and services.
- Maximising access to local amenities. For example strategically deployed Apps can promote tailored routes to local amenities.
- Improving access to employment. A key factor in job acceptance is travel distance. App deployment can promote viable alternatives to driving by featuring major employers and business parks as map pins with tailored routing.
- Eco-algorithms can promote low-carbon and active travel options, improving pathways to active travel and supporting social prescription initiatives.

- The ability to communicate ‘last mile’ routing options and integrate ‘Passenger Incentive Programmes’, including control over granular transit-based messaging to communities.
- Granular data capture, enabling the implementation of Environmental Social & Governance policies including visitor behaviour change and model shift, creating a valuable and growing asset that is otherwise lost to third party systems.

15.7 Through TDM, the Applicant can strengthen its leadership in sustainability by embedding responsible travel behaviour into every stage of the visitor journey.

15.8 ‘You. Smart. Thing. (YST)’ is an example of a cloud-based TDM platform which integrate data from sites, local authorities, national highways, and transport operators. This enables a business-to-consumer Travel Assistant interface for direct visitor engagement, supported by an intuitive configuration dashboard and a robust analytics suite.

15.9 The cloud-based platform, which is integrated into the ticket booking experience:

- improves travel experiences,
- mitigates risk and responds to changing circumstances, and
- reduces emissions by integrating destination, local authority, national highways, and transport operator datasets.

15.10 Some outputs from the YST are shown in **Figure 15.1** and **Figure 15.2**.

Figure 15.1: YST Outputs – Web, Mobile, CRM Integration, and Data Capture

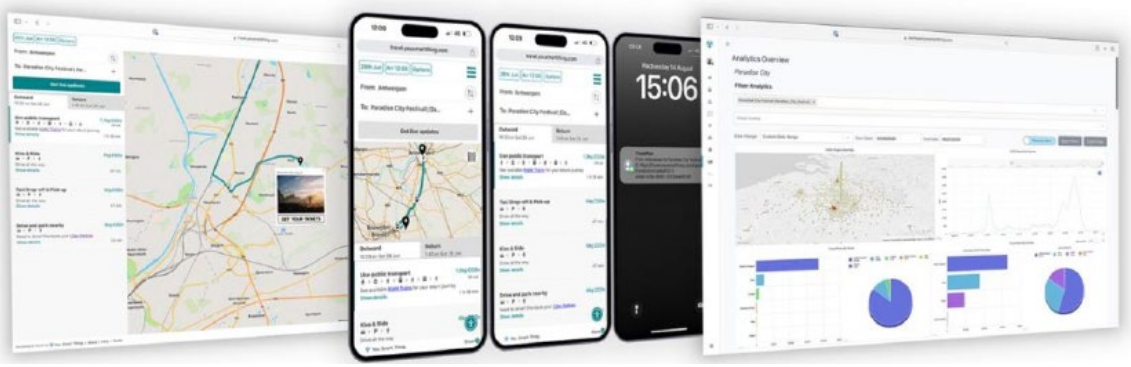
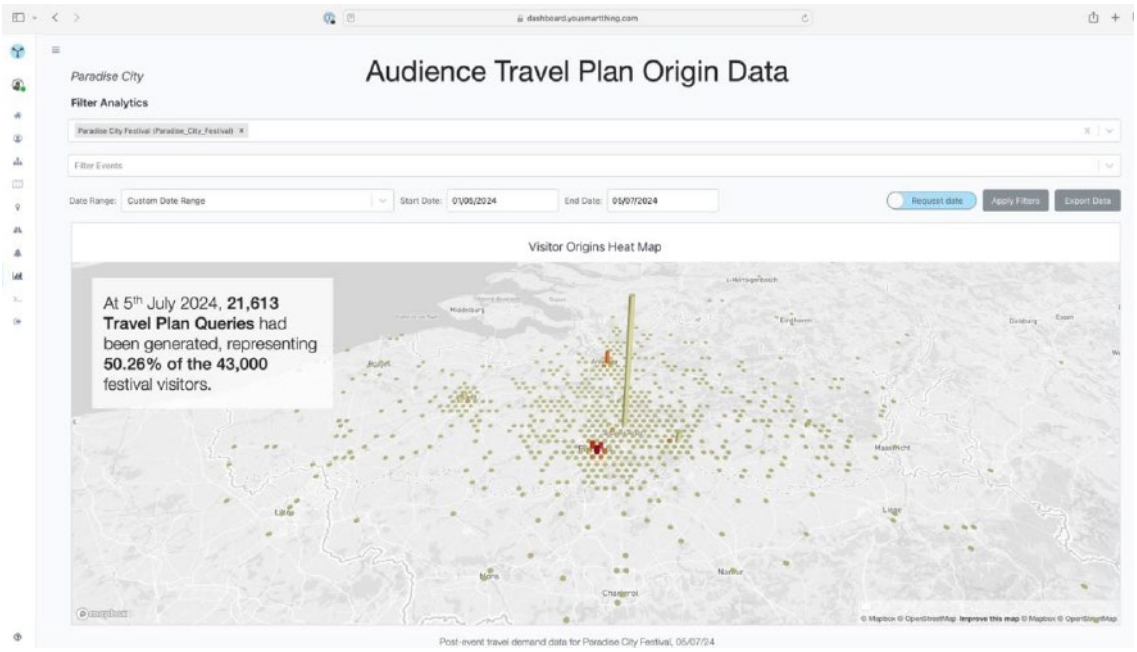


Figure 15.2: YST Outputs – Audience Travel Plan Origin Data



Vision and Objectives

15.11 The vision is to make the Site a benchmark for sustainable, accessible, and low-carbon visitor travel, supporting environmental commitments, and enhancing visitor experience.

15.12 The objectives are as follows:

- Achieve a significant modal shift from private car use to sustainable modes (public transport, active travel, shared mobility)
- Reduce visitor and staff travel-related carbon emissions (Scope 3 CO_2e)
- Improve accessibility for all, including those with additional needs
- Enhance operational efficiency and resilience to travel disruption
- Capture and use travel data to inform ongoing improvements and stakeholder engagement

Travel Demand Management Measures

15.13 A suite of TDM measures will be deployed, combining digital innovation, infrastructure, and stakeholder engagement. These are shown in **Table 15.1**.

Table 15.1: Travel Demand Management Measures

Measure	Description
Promotion of sustainable modes	• Prioritise public transport, shuttle bus services from key rail stations (e.g., Bicester Village, Bicester North), and active travel routes • Provide real-time updates and alternative options in case of disruption • Highlight and incentivise use of coach, rail, cycling, and walking options
Personalised travel planning	• Deploy a travel assistant, offering every visitor, supplier, and staff member a tailored, low-carbon travel plan via web, SMS, WhatsApp, or email at the time of booking • Integrate the assistant with ticketing and CRM systems for seamless journey planning and communication
Parking access management	• Implement strategic parking controls to discourage unnecessary car use, including pre-booked parking • Provide sufficient accessible parking and EV charging in line with best practice
Active travel and accessibility	• Ensure all travel information and infrastructure is fully accessible, with options for step-free access, assistance requests, and other needs
Data-driven management	• Use analytics dashboards to monitor modal split, carbon emissions, and visitor behaviour in real time • Share insights with local authorities, transport operators, and other stakeholders to optimise services and communications
Communications and behavioural change	• Embed travel planning prompts throughout the customer journey (pre-booking, confirmation, reminders) • Use targeted messaging to nudge visitors towards sustainable choices and inform them of benefits (cost, carbon, convenience) • Leverage partnerships with transport providers and local businesses for incentives and sponsorship

Implementation Plan

15.14 The TDM strategy for the Site will be implemented in phases through a collaborative approach. Phase one will establish a baseline and launch the core digital platform, including Travel Assistant configuration, postcode data analysis for visitor travel behaviour and modal split, and stakeholder training on the analytics dashboard.

15.15 Phase two will focus on integration and enhancement. The Travel Assistant will be linked with CRM and ticketing systems, and travel plans will be refined based on data and user feedback. Collaboration with local authorities and transport operators will support improved public transport and active travel access.

15.16 The third phase will focus on ongoing operation and optimisation. The platform will be maintained and updated, incorporating new data sources and user feedback to ensure continuous improvement. Periodic reviews will be held with key partners to assess progress, identify issues, and agree on necessary adjustments to the strategy. Additional

features such as carbon offsetting, sponsorship, and white-label integration will be explored as the service matures.

Monitoring and Review

15.17 Monitoring and review of the TDM strategy at the Site will be an ongoing, data-driven process, ensuring that the measures implemented remain effective and responsive to changing needs.

15.18 Key performance indicators such as modal split, reductions in CO_2e emissions, uptake of public transport and active travel, user engagement rates, and accessibility metrics will be tracked continuously through an analytics dashboard. Analytics dashboard platforms enable real-time collection and analysis of travel behaviour data, which would provide the Applicant and its partners with detailed insights into how visitors and staff are travelling to the Site. Regular reporting will be shared with stakeholders, including local authorities and transport operators, to inform collaborative decision-making and optimise services.

15.19 Review meetings will be held with key partners to assess progress against objectives, identify any emerging issues, and agree on necessary adjustments to the strategy. Feedback from visitors, staff, and stakeholders will be actively sought and incorporated, ensuring that the travel demand management measures remain relevant and effective.

15.20 This approach supports a culture of continuous improvement, allowing the Applicant to refine its communications, partnerships, and interventions based on robust evidence and real-world outcomes. In this way, the monitoring and review process will underpin the long-term success of the travel demand strategy, helping the Applicant to achieve its sustainability and accessibility goals while delivering an outstanding visitor experience.

Summary

15.21 The Sites TDM strategy leverages digital innovation, stakeholder collaboration, and best practice to deliver a sustainable, accessible, and resilient transport offer. By prioritising low-carbon travel, data-driven management, and visitor experience, the strategy will support the Applicant and OCC's environmental goals, and set a new standard for the sector. Ongoing monitoring and adaptive management will ensure the strategy remains effective and responsive to changing needs.

16 Construction Logistics Management Plan

Introduction

16.1 A construction contractor has yet to be formally appointed and therefore, the information included within this CLMP is indicative at this stage and will be updated in the final Detailed CLMP, which will be secured as a pre-commencement condition. No consultation has been undertaken with OCC at this stage and ongoing discussions will be required to ensure potential highway impacts are minimised. Detailed consultation will be undertaken at the point of producing the detailed CLMP.

16.2 Details of measures to protect the environment during the construction of the Proposed Development will be set out in a Construction Environmental Management Plan (CEMP) which will be a condition of any planning consent. Measures will address hours of working, noise, vibration, dust, light spill, wheel washing and control of runoff. It is anticipated that the implementation of the CEMP will be a condition of the planning permission and that it will be regularly monitored. Once finalised and approved by CDC, the CEMP would be held on-Site. All Site personnel would be made aware of its existence and undertake to adhere to the guidance.

16.3 The following section sets out the likely construction traffic to be generated by the Site, as well as the measures likely to be included in the Full CEMP.

What is a CLMP?

16.4 CLMPs provide a framework to better manage all types of freight vehicle movement to and from construction sites. A CLMP is broadly the equivalent to a Travel Plan (TP) in that it sets out a number of measures and targets that are designed to reduce the impact of the development upon the local highway network and encourage more sustainable construction traffic processes.

16.5 CLMPs are regarded as one of the key measures to improve freight and servicing in London. The other measures include the Freight Operator Recognition Scheme (FORS), and Delivery and Servicing Plans (DSPs).

Benefits of a CLMP

16.6 CLMPs minimise the impact of construction logistics on the road network. Well-planned construction logistics will reduce:

- **Environmental impact:** Lower vehicle emissions and noise levels.
- **Road risk:** Improving the safety of road users.
- **Congestion:** Reduced vehicle trips, particularly in peak periods.
- **Cost:** Efficient working practices and reduced deliveries.

CLMP Objectives

16.7 The overall objective of this CLMP is:

> "To minimise the impacts of construction related vehicle movements and facilitate sustainable construction travel to the development".

16.8 To support achieve this objective, several sub-objectives have been set out as follows:

- Encourage construction workers to travel to the Site by non-car modes
- Promote smarter operations that reduce the need for construction travel or that reduce or eliminate trips in peak periods
- Encourage greater use of sustainable freight modes
- Encourage the use of greener vehicles
- Manage the on-going development and delivery of the CLMP with construction contractors
- Communication of Site delivery and servicing facilities to workers and suppliers
- Encourage the most efficient use of construction freight vehicles

Policy Context

16.9 This section sets out the relevant national, regional and local policy documentation for the construction activity associated with the application Site.

National Policy Guidance

- National Planning Policy Framework (NPPF) (2024)
- The Traffic Management Act (2004)
- Designing for Deliveries, Freight Transport Association (2006)

Regional Policy Guidance

- Oxgfordshire County Council Network Management Plan 2023-2028 (including associated Annex Construction Management Plan document)

Construction Phasing

16.10 The approximate duration of the construction phase is outlined below:

- Construction to commence in late 2026
- Construction (Phase 1) to complete in 2029

Construction Traffic Generation

16.11 Four approaches have been considered to inform the level of estimated construction trips associated with the Site:

- Review of Construction Traffic Management plans for existing Puy du Fou sites
- Review of Construction Traffic Management plans for existing comparable sites
- Review of Construction Traffic Management plans to create a database of different land uses and associated trips
- TRICS cost-based analysis

16.12 Given that there is no available data from the existing sites in France and Spain and limited comparable information online for similar sites in the UK, it has been concluded that a cost-based methodology is the most appropriate.

16.13 This methodology utilises volume and classification of traffic associated with construction phases, estimated on the 'ready reckoner' methodology provided within the TRICS 'Construction Traffic – Researcher Report' (TRICS, 2008).

16.14 The report identifies a 'Ready Reckoner', based on data collected by Constructing Excellence to record 'Commercial Vehicle Movements KPI' as part of the 2007 UK Construction Industry Key Performance Indicators. The research indicates that the total recorded movements onto a construction Site per £100,000 of project value/capital expenditure equates to 29.4 one-way trips (58.8 two-way trips).

16.15 No pro-rata adjustment has been made to inflation and therefore this is considered to be a robust assessment.

16.16 The construction traffic trip rate outlined above includes all vehicle types visiting the construction Site. Based on the JMP report (2008), the breakdown of vehicle types assumed for the construction traffic assessment is shown below in **Table 16.1.**

Table 16.1: Indicative Construction Vehicle Proportions

Vehicle Type	Vehicles less than or equal to 7.5T (LGVs)		Vehicles greater than 7.5T (HGVs)				
	Car / Pick Up / 3.5T Van	7.5T Box / Panel Van	Low Loader and Artic	Ready Mix Concrete Truck	Mobile Crane	Skip Lorry	32T Tipper Truck
% of Trips	20%	36%	5%	15%	0%	1%	23%

16.18 This gives an overall breakdown of (consideration has been taken for rounding errors shown in **Table 16.1**):

- LGVs: 56%; and
- HGVs: 44%.

16.19 The phasing of development across the different land uses is not linear and varies across the build out period. To give further context, the indicative build-out schedule is summarised in **Table 16.2** below.

Table 16.2: Indicative Build Out Schedule

Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Off-Site Infrastructure	50%	40%	10%	0%	0%	0%	0%	0%	0%	0%
On-Site infrastructure	43%	43%	3%	3%	2%	2%	1%	1%	1%	1%
Enabling Works and Demolition	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%
On-Site Roadways	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Ground Works	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Car Parking	49%	49%	0%	0%	0%	1%	0%	0%	0%	1%
Public Realm Works	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Big Night Show	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Indoor Shows	19%	19%	27%	0%	0%	0%	8%	8%	0%	18%
Immersive Shows	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Outdoor Shows	19%	19%	0%	10%	13%	0%	0%	0%	40%	0%
Hotel	14%	14%	49%	0%	0%	23%	0%	0%	0%	0%
Villages	42%	42%	0%	0%	0%	0%	8%	8%	0%	0%
Conference Centre	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%
BOH Areas	46%	46%	0%	4%	0%	5%	0%	0%	0%	0%

16.20 An estimated construction traffic program has therefore been calculated using both the above one-way and two-way construction trip rates to the project value/capital expenditure per development land use, and taking into consideration the indicative construction and build-out programme.

16.21 The resulting estimated trip generation as a cumulative function of all the above elements of the Site are laid out in **Table 16.3**.

Table 16.3: Indicative Trip Generation

Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
One-Way AADT										
All Vehicles	140	138	104	8	8	30	10	10	20	17
HGVs Only	61	61	46	3	3	13	5	5	9	8
Two-Way AADT										
All Vehicles	278	275	207	15	15	61	21	21	39	35
HGVs Only	122	121	91	7	7	27	9	9	17	15

16.22 The above shows that the peak construction year would be 2027, during which an estimated 122 HGVs per day would be proceeding to and from the Site. This decreases slightly in 2029, before lowering significantly in 2030.

16.23 Although the construction will be a temporary state, it is suggested that additional mitigation is put in place to reduce the impact of the additional HGVs during the construction phase. This would be secured through the S106 with detail set out within the CEMP, but reasonable measures could include the restriction of vehicle movements through the peak hours to reduce the impact on sensitive receptors, maximising the use of consolidation centres and implementing a workforce travel plan to reduce vehicle trips. Abnormal loads would be programmed in advance and discussed with OCC. It is also suggested that there are controls on vehicle routing.

16.24 The full impact is assessed in the Transport & Accessibility Chapter of the ES submitted alongside this Outline Planning Application.

Construction Routes

16.25 The Site is located approximately 5km by driving from the M40 Junction 10, via the A43 which is located approximately 3km away. At this stage it is unknown which direction traffic will approach from. This will become clearer when the materials are better known and when contractors can place supply orders, and at the point where these details are known then they will be provided in the Detailed CLMP.

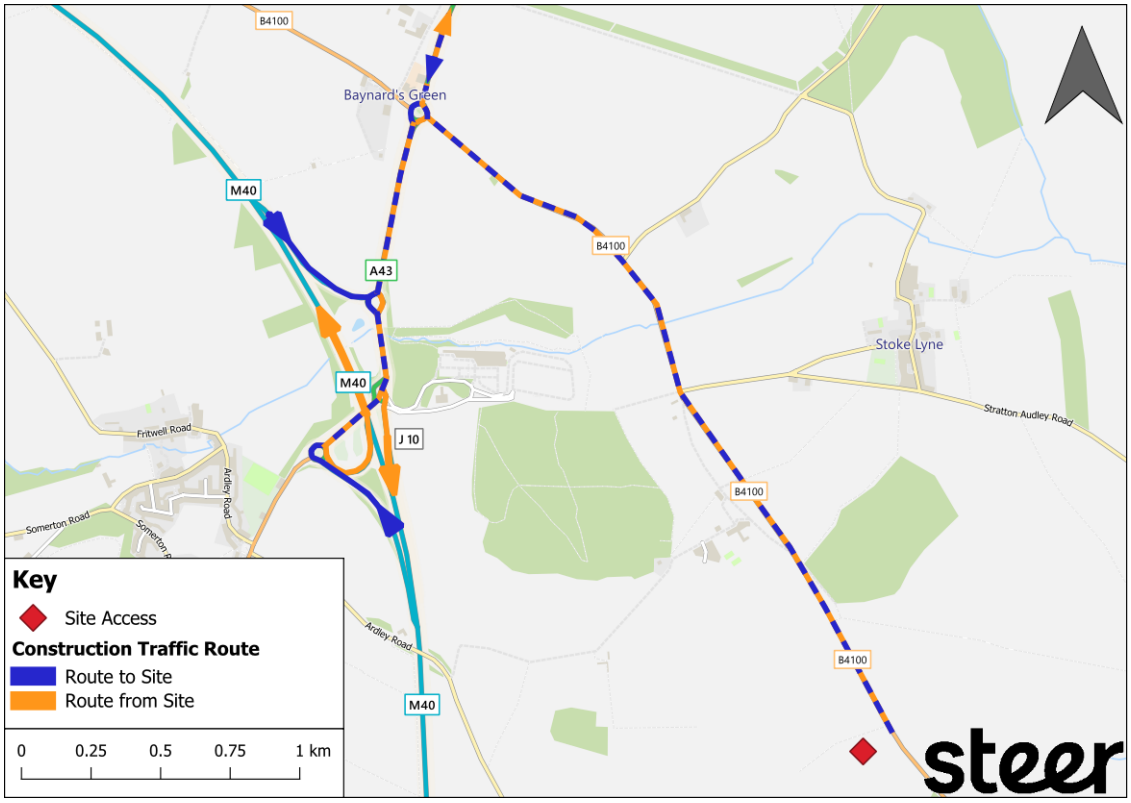
16.26 However, due to nature of the M40 and the surrounding road network, all construction traffic can be instructed to travel to/ from the Site via either the A43 or the M40.

16.27 It is proposed that, from the M40, vehicle will proceed northbound along the A43 before turning west onto the B4100 at Baynard's Green. Here they will meet any Site-bound traffic arriving from the northern arm of the A43. Vehicles will then proceed directly south to the Site. This routing avoids the need for drivers to route through any villages or along the Bicester Ring Road itself.

16.28 This will be formally agreed at the Detailed CLMP stage, following the consideration of the Site access requirements identified by the contractor (once appointed). Discussions will also be required with OCC / CDC to scope access arrangements.

16.29 **Figure 16.1** outlines the proposed construction routes to and from the Site.

Figure 16.1: Proposed Construction Routing



Construction Management Strategy

16.30 A robust Construction Traffic Management Strategy (CTMS) will be implemented to ensure the safe, efficient, and coordinated delivery of the Proposed Development. This strategy will set out clear principles and controls to manage the construction activities associated with the phased delivery of the Site, while minimising disruption to the surrounding community, road network, and environment.

16.31 Given the phased nature of the development, the CTMS will be aligned with the construction programme and will include:

- Designated construction vehicle access routes and entry/exit points
- Routing strategies to avoid sensitive areas and peak traffic times
- On-Site vehicle marshalling, waiting areas, and turning facilities
- Restrictions on delivery hours to avoid conflict with peak commuter and school times
- Controls on vehicle types, numbers, and frequencies
- Measures to prevent mud, dust, and debris tracking onto local roads
- Coordination with local stakeholders, including the highway authority and emergency services

16.32 Where possible, construction traffic will be directed away from residential areas and will use the SRN to reduce localised impacts. Traffic management measures will be kept under regular review, with monitoring and enforcement plans in place to ensure compliance and adapt to evolving Site demands.

16.33 A phased approach will be adopted, aligning construction logistics with the build-out programme to limit impacts on operational areas as the Site comes online. The CTMP will also embed best practices in sustainability, dust and noise control, and stakeholder communication to maintain a high standard of Site management throughout the construction lifecycle.

Summary

16.34 A detailed CLMP will be developed prior to construction commencing on Site. The CLMP will be secured via a suitably worded planning condition.

17 Delivery and Servicing Plan

Introduction

17.1 This section sets out an overview of the anticipated Delivery and Servicing Strategy (DSP) at the Site.

Purpose of Delivery and Servicing Plans

17.2 A DSP sets out how occupiers of buildings will manage, and monitor deliveries and servicing trips to and from their sites, ensuring safe, clean and efficient deliveries can be made.

17.3 The purpose of a DSP is to provide a framework to better manage all types of freight vehicle movements to and from a site. DSPs are intended to ensure that operational efficiency of buildings and/or sites is increased by reducing delivery and servicing impacts to premises, specifically in relation to CO2 emissions, congestion and collisions. DSPs aim to reduce delivery trips, particularly during network peak periods.

Aims, Objectives and Benefits

Aims

17.4 The two primary aims of the DSP are to:

- Identify a preferred routing strategy
- Reduce the impacts of delivery and servicing movements and facilitate sustainable freight travel to/from the development

Objectives

17.5 The objectives are to:

- Reduce inappropriate vehicle routing through nearby villages and towns
- Where possible, consolidate deliveries, to minimise volume of single delivery trips to the development
- Co-ordinate and manage delivery and servicing activities effectively
- Reduce CO2 emissions and congestion by improving relationships between building operators and their supply chain
- Employ sustainable freight practices

Benefits

17.6 The implementation of the DSP is intended to accrue the following benefits:

- Demonstrate that goods and services can be delivered, and that waste can be removed, in a safe, efficient and environmentally friendly way
- Identify deliveries that could be reduced, re-timed or consolidated
- Help cut congestion on the local highway network and lessen environment impacts
- Reduce the impact of freight activity on local residents and businesses
- Improve safety of delivery and servicing at the Site

Management

Responsibility

17.7 A Travel Plan Coordinator (TPC) will be appointed to oversee the implementation of the Travel Plan and the DSP. The TP surveys will also include the monitoring of servicing vehicles throughout the day, including timing of visit and duration of stay.

17.8 The day-to-day responsibility of the Site will be managed by the operational management. The operational management company will ensure that all servicing and delivery vehicles are aware of the location of the loading area and routing through the Site. The on-Site management team will be located on-Site.

Measures, Monitoring and Review

Measure

17.9 The detailed DSP measures for the Proposed Development will be developed for the full application. At this stage, it is anticipated that the Site will consider a combination of measures as outlined in **Table 17.1**.

Table 17.1: Draft Delivery and Servicing Plan Measures

Measure	Description
Management of the DSP	
Adopting of DSP	Early buy in from management will be essential to ensure the DSP is an active, living document
Assign responsibility of the DSP to the Travel Plan Coordinator (TPC)	TPC to be responsible for managing the on-going development, DSP promotion, and delivery of the DSP
Raising awareness and promote DSP initiatives	Provide Site information and promote DSP to tenants
Training of staff	All staff associated with DSP required to undertake training
Reducing Servicing and Delivery Trips	
Couriers	Adopt a Site-wide smart courier policy that could potentially reduce the number of motorised vehicle trips generated by the commercial land uses
Servicing and Delivery Operations	

Measure	Description
Fleet Operator Recognition Scheme (FORS)	Encourage the use of suppliers who are FORS members and encourage non-FORS members to sign up to the scheme
Vehicle Booking and Management System	Produce a delivery and servicing schedule to outline the most appropriate times for servicing vehicle movements

Monitoring

17.10 The Site management company will manage and operate the Site in accordance with this DSP, including taking on responsibility for the measures detailed above. The DSP will be regularly monitored, by the Site management company, to ensure that it reflects the changing requirements of the development and that it is kept up to date.

17.11 In addition, as part of the Travel Plan monitoring, regular surveys of vehicle movements at the Site will be recorded, which will include details on the number of servicing and deliveries trips to the Site. This will also include the timings of such trips.

Review

17.12 The results of the Travel Plan surveys, including delivery and servicing data, will be collated into a monitoring report which will be submitted to OCC. The monitoring report will also detail any issues identified by occupiers with regard to the delivery and servicing arrangements and provide any remedial actions.

18 Travel Plan

Introduction

18.1 This section sets out details of the Travel Plan that will be implemented at the Site to encourage and facilitate sustainable travel by staff and visitors. The full Travel Plan will be submitted alongside this TA.

Travel Plan Objectives

18.2 The main objective of the TP is:

> "to minimise car use and maximise active travel and the use of public transport for all trips."

18.3 An overview of the TP is provided in this sub-section.

18.4 To support the realisation of the overarching objectives, several sub-objectives have been set:

- To improve the health of employees and visitors of the development and minimise impacts on the environment;
- To ensure the Proposed Development is accessible to all users and that the needs of vulnerable groups, for example those with mobility problems, are met and respected;
- To promote and encourage users to travel by sustainable modes including walking and cycling as an alternative to private car, taxi or public transport use;
- To ensure maximum opportunities exist for collective travel, such as car sharing;
- To increase awareness of the TP and its constituent measures;
- To encourage the most efficient use of cars and a reduction in single occupancy car use;
- To improve the safety of persons travelling to and from the Proposed Development on foot or by cycle and provide relevant on-Site facilities; and
- To encourage the best use of taxis and private hire vehicles.

18.5 Interim travel surveys will be undertaken on an annual basis until the full development has been built out, following the baseline survey (to be completed within 6 months of occupation). The interim surveys will include multi-modal counts including delivery and servicing data together with staff and visitor questionnaires. The surveys will accommodate for both staff and visitors.

18.6 This interim survey will inform the development of this TP and assist in determining any Site-specific measures to reduce car use to / from the Site and encourage sustainable travel modes.

18.7 The results of the interim travel surveys will be used to form targets which can be measured against the achievement of the set objectives. Once the baseline data is collected there will be a better understanding of what is achievable and the most suitable measures.

18.8 The main aim of the Action Plan is to identify likely initiatives that can assist in meeting the targets. **Table 18.1** sets out the benefits of various measures and the timescale and responsibility for implementation.

Table 18.1: Travel Plan Action Plan

Measure	Initiative	Timescale for Implementation	Responsibility
Establish Baseline	Undertake baseline surveys and staff questionnaires	Within 6 months of first occupation	TPC
Managing the on-going development and delivery of the TP			
Appoint a TPC	Applicant to identify a TPC	Prior to occupation	The Applicant
Travel Plan Coordinator (TPC) meetings	Ad-hoc meetings hosted by the TPC to encourage staff to sign up and discuss matters with TPC	Upon occupancy	TPC
Increasing Awareness of the FTP			
Feedback to staff	Regular feedback to staff through meetings/ newsletters on progress of FTP measures and Site-wide transport issues	Within first year of occupation then annually	TPC
Site information/ Staff Information and Welcome Packs	TPC to provide information to staff such as access arrangements, walking, cycling, public transport, including maps, website links and real-time journey information	Upon occupation and ongoing	TPC
Health and financial benefits	Inform staff and visitors of the health and financial benefits of walking and cycling, through the website or marketing material. Information will include safe walking and cycling routes with distances and times and possibly discounts for local cycle shops.	Upon occupation and ongoing	TPC
Increasing Awareness for Visitors	Clear, detailed and engaging information about travelling via sustainable transport modes should be provided on the website, with this information prioritised over directions to arrive by car and parking information. The information provided should include details such as the location of pick-up and drop off areas and journey times from local transport hubs to ensure visitors are informed and capable of planning their journey confidently and seamlessly. Sustainable transport initiatives should also be actively promoted across communication channels.	Upon occupation and ongoing	TPC

Measure	Initiative	Timescale for Implementation	Responsibility
Encouraging Walking and Cycling			
Cycle parking and facilities	To provide cycle parking in line with standards and to ensure that they are covered and secure.	Prior to occupation	The Applicant
Pedestrian facilities	To develop a high-quality pedestrian environment within the Site and create links with the wider area	Prior to occupation	The Applicant
'Cycle to Work' Schemes	The TPC will publicise the possibilities and benefits of "Cycle to Work" schemes (e.g. CycleScheme UK) to tenants and encourage them to enrol their organisation. Such schemes are free to enrol in for both businesses and employees and represent a key low-cost means of reducing the cost of cycling equipment which can thus be used for commuting	Upon occupation and ongoing	TPC
Bicycle User Group	Establish a regular meeting to discuss cycle issues facilitated by the TPC and encourage the use of local services and facilities	Upon occupation and ongoing	TPC
E-bike loan/subsidy scheme/grant	Encourage uptake of the proposed UK Government e-bike grant	Upon Occupation	TPC
Cycle to Work Days	The TPC will encourage tenants to organise cycle-to-work days aimed at encouraging employees to either more regularly cycle or try cycling if they do not do so already	Ongoing	TPC
Promotion of Health and Financial Benefits	The TPC will publicise the health and financial benefits of walking and cycling via the promotional material given to prospective buyers and commercial unit tenants. Information will include: *safe walking and cycling routes to/from the Site and walking and cycling distances to/from local amenities and public transport interchanges*	Prior to occupation	TPC
Encouraging the use of Public Transport			

Measure	Initiative	Timescale for Implementation	Responsibility
Community Noticeboard	To provide details on key routes, maps and timetables to users of the Development	As part of Proposed Development	TPC
Extension of local bus route into the Site	It is proposed that bus routes are diverted to stop on Site at the public transport area in the northeast corner of the Site, which has an allowance for a total of six buses. The primary and secondary accesses will be used, with the internal link road between them providing access to the bus stops and pick up and set down areas.	Upon occupation	The Applicant
Rail Shuttle	A rail shuttle bus between Bicester rail station and the Site is proposed, in order to encourage rail travel.	Upon occupation and ongoing	The Applicant
Financial initiatives	Positive financial incentives reward travel by sustainable modes to Site, such as free rail shuttle travel, a discounted Park entry ticket when travelling by sustainable modes or a food and drink voucher.	Upon occupation and ongoing	The Applicant
Encouraging the best use of cars and servicing vehicles			
Car Parking	Car parking for visitors will be provided to accommodate anticipated demand. Car parking for staff will be based on OCC standards.	Upon occupation and ongoing	The Applicant
Car Sharing	Sign up to Lift Share Schemes (https://liftshare.com/uk) and provide details to staff.	Upon occupation	TPC
Launch Event	TPC to hold a launch event to advertise the TP and promote sustainable travel.	Three months after first occupation	TPC
Marketing			
Six Monthly Newsletter	Providing a brief marketing update for staff to maintain awareness of the TP and promote initiatives and events – to be delivered via email.	Upon occupation and ongoing	The Applicant

18.10 The Applicant will ensure suitable funding for the TP is provided for monitoring and review.

18.11 It is assumed that this sum of money will cover the costs for the monitoring and review of the TP in conjunction with OCC. The Applicant will seek agreement with OCC regarding how this sum of money can be best utilised to ensure the TP is most effective.

18.12 The interim surveys will be undertaken on an annual basis up until the full completion of the development during the construction period. The surveys will be undertaken during the main operation hours of the Site on a single typical day which is considered neutral transport conditions.

18.13 The full Travel Plan will be developed to promote sustainable travel amongst staff and visitors through reducing the need to travel by private car. It can be secured through a Section 106 Agreement or suitably worded condition.

19 Mitigation Strategy

Introduction

19.1 The following chapter provides a summary of the total mitigation package which is proposed to be brought forward to mitigate the impacts of the development proposals.

19.2 The mitigation package will bring forward improvements that will be available throughout the year, even though impacts are limited to the period that the Park is fully operation (e.g. April to October) and that during the open season, demand varies across the period, peaking in the summer months and at weekends, when traffic flows are typically lower that the remainder of the year.

Mitigation Package

19.3 This package has been designed on a decide and provide basis and is in line with OCC's aspirations, through the LTCP, as it:

- Considers the preferred vision of the future and then provides the means to work towards that whilst also accommodating uncertainty about the future
- Will help OCC work towards delivering a net zero transport system, with investment in low/ zero carbon vehicles, new pedestrian and cycle infrastructure, and the promotion of walking, cycling and wheeling
- Addresses connectivity with improved connections for walking, cycling, and public transport, as well as promoting the use of digital technology
- Provides improvements to the PRoW network and address missing gaps in provision, which will help connect rural communities
- Improvement to the local bus service between Banbury, Brackley, and Bicester will also improve conditions for rural communities
- Will deliver improvements at Bicester North station which will improve conditions for non-car users accessing the Station, with improved pedestrian and cycle facilities, improving inclusivity and reducing barriers of last mile trips to the station
- Has only considered road capacity schemes once other options have been explored

19.4 The following provides a summary of the total mitigation package associated with the Proposed Development. Where relevant, the Applicant will provide financial contributions toward specific measures, while their planning and delivery will be the responsibility of the relevant parties.

Station Improvements

- Improvements to Bicester North Station, including amendments to forecourt/ pick-up and drop-off area, additional bus stops and staging area, additional cycle storage, new bus shelters, improved on platform shelters, and real time information boards
- Improvements to Bicester Village Station, including new toilets to cater for additional patronage

Active Travel Improvements

- Construction of a cycle route adjacent to the B4100 between the Site and Bicester
- Improvement of PRoW crossing the Site, with a diversion and new 5m provision
- Signalised equestrian crossings over the B4100 to the north of the Site access of to improve bridleway connectivity
- Crossing with a refuge island for the Footpath over the B4100 south of the Site to connect into the PRoW
- Upgrade a section of existing footway (circa 100m) to a footway/ cycleway within Bicester and provision of a new crossing as part of the Bicester North to Site cycle route- as shown indicatively in **Appendix O**
- Contribution/ works towards other pedestrian and cycle improvements, including local PRoW to include Site boundary Bridleway to Ardley Road, upgrade of southern footpath to a Bridleway and improvements along Bainton Road (as shown in **Appendix O**)
- Reduced speeds on B4100, helping to tackle the dominance of motor vehicles and makes them less imposing to visitors, staff and residents walking and cycling. Reduced vehicle speeds also help to reduce the number of casualties and the severity of accidents

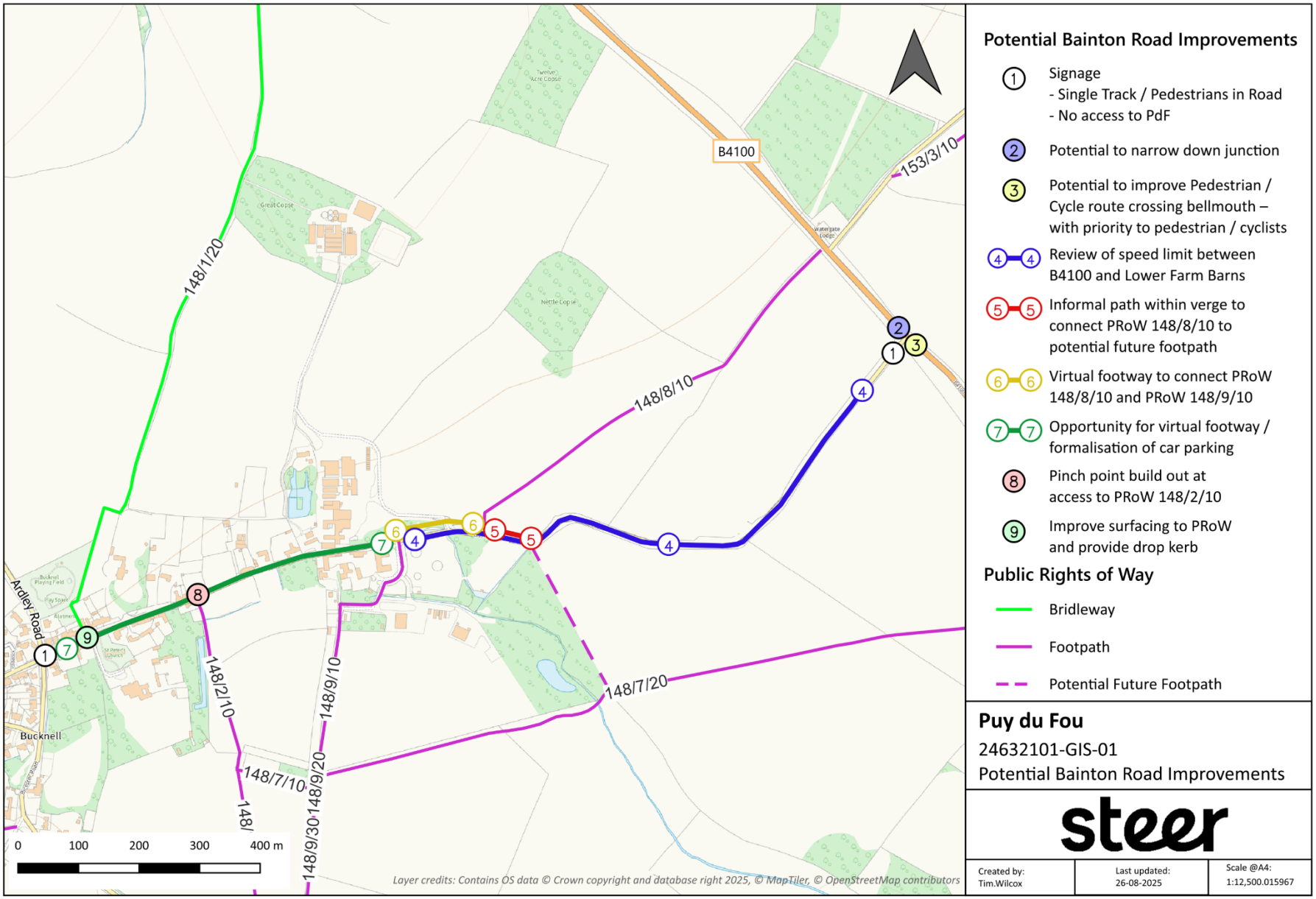
Highways Improvements

- A43/ B4100 Baynards Green Roundabout: Contribution towards enhancement, widening and signalisation of the existing junction, in line with the mitigation strategy envisaged in the emerging CDC Local Plan – as shown indicatively in **Appendix O**
- Cherwell Roundabout: Localised widening/ lane realignment to minimise delay through the junction - as shown indicatively in **Appendix O**
- M40 / Ardley off slip Roundabout: Signalisation of the existing roundabout as shown indicatively in **Appendix O**
- M40 junction 9: Contribution towards improvements the operation of the junction, which could include improved 'smart' signal infrastructure to assist with balancing traffic flows at peak times
- Measures to restrict vehicles along Bainton Road between the B4100 and Ardley Road, which could include a Traffic Regulation Order (TRO) limiting the link to be 'for access only' or an alternative scheme with similar benefits – this can be seen in **Figure 19.1** and drawing ref. 24632101-STR-HGN-100-SK-D-03101 - REV A in **Appendix O**

Monitoring and Managing

- Travel Plan
- Monitor and Manage Strategy
- Traffic Management Plan
- Sustainable Transport Fund

Figure 19.1: Potential Bainton Road Improvements



Monitor and Manage Strategy

19.5 A fundamental part of implementing the 'decide and provide' approach is the need to monitor the outcomes of the strategies put in place to provide alternatives to the private car. A Monitor and Manage Strategy (also known as a Monitoring and Evaluation Plan (MEP) will therefore be put in place and secured through the Section 106 agreement. The Monitor and Manage strategy will include:

- A Travel Plan aimed at promoting sustainable travel and reducing single/ low occupancy car vehicle trips (this is summarised in detail in Chapter 18)
- A mechanism to record how the trip generation and mode share at the Site changes throughout the year and evolves over time
- A mechanism to monitor the performance of specific junctions
- An agreement to cover monitoring costs and report to OCC on the findings of the monitoring
- An agreement to deliver a Transport Working Group which will meet periodically to assess the operation of the transport strategy and where necessary consider interventions aimed at ensuring predicted mode shares are on track
- The provision of a Sustainable Transport Fund which can be used to implement off-Site infrastructure improvements, support public transport and/ or deliver remedial measures should additional capacity improvements be necessary

20 Summary and Conclusions

Summary

20.1 This TA supports an outline planning application for a major new tourism destination on land north west of Bicester, Oxfordshire. The Proposed Development will be delivered in eight phases over approximately ten years and will include outdoor and indoor theatres, hotels, restaurants, conference facilities, and supporting infrastructure, associated with running a Park of this nature.

Development Overview and Vision

20.2 The Site is approximately 158ha and the Proposed Development will be phased, with approximately 60–70% delivered at opening (Phase 1, 2029) and the remainder in subsequent phases, reaching full build-out by Year 10 (Phase 8, 2039). The masterplan includes four period villages, 13 live shows, three hotels, and extensive back-of-house and supporting infrastructure.

20.3 It is strategically located near to Bicester and benefits from its proximity to two mainline railway stations: Bicester Village and Bicester North. Both offer excellent rail services, with Bicester Village providing fast connections to Oxford and London, and Bicester North serving routes to Birmingham and beyond. These stations will also benefit further from the EWR project, which will significantly enhance regional connectivity and enable greater opportunities for longer-distance, sustainable, non-car travel to and from the Site.

20.4 It is also located close to Junction 10 of the M40, providing excellent vehicular access to the SRN and is adjacent to a frequent bus service which connects the Site to nearby towns Bicester, Buckley, and Banbury.

20.5 The vision for the Site is underpinned by a ‘decide and provide’ approach, prioritising sustainable transport, minimising car dependency, and maximising accessibility for both visitors and staff via public transport, walking, and cycling. The strategy is fully aligned with the National Planning Policy Framework (NPPF), Oxfordshire’s Local Transport and Connectivity Plan (LTCP5), and the Cherwell Local Plan Review 2042.

Opening Hours and Operational Timetables

20.6 The Park will operate seasonally, typically from April to October, mirroring the operational model of the existing site in France. During the open season, weekday opening times are expected to be 10:00, with weekends opening at 09:00 and closing at 19:00. Night shows, a signature feature of Puy du Fou, will start after dusk, exact time is depending on the time of year, last approximately 1.25–1.5 hours, with the latest possible closure at 23:00. The Park will be closed between November and March, except for the conference centre (open year-round) and hotels (open as demand requires). The number of open days will increase as the Park is built out, from 146 days in Phase 1 to 176 days in Phase 8.

20.7 This operational profile is significant for transport planning: visitor arrivals are designed to occur outside the weekday AM peak period (07:30–08:30), which is typically the most critical time for the local highway network. Night show egress occurs well after the evening peak, further reducing the risk of congestion.

85th Percentile Methodology

20.8 A key feature of the assessment is the use of the 85th percentile methodology to model visitor and staff numbers. Rather than designing infrastructure for the absolute peak (100th percentile) attendance – which would result in significant overprovision and inefficiency – the 85th percentile is used as a proxy for a typical busy day. This approach captures the majority of expected attendance levels while excluding rare, extreme outliers. It ensures that infrastructure is robust and resilient for almost all operational days, while contingency planning and flexible event-day management strategies are in place for the very rare occasions when attendance exceeds this threshold.

20.9 For example, by Year 10, the Park is forecast to attract up to 2.1 million annual daily visitors, with daily attendance peaking at over 20,000 on the busiest days. Staff numbers will rise to over 2,100 jobs, with up to 1,050 on-Site during peak season. The 85th percentile methodology ensures that parking, public transport, and traffic management are appropriately scaled, balancing resilience with realism.

Transport Strategy

20.10 The transport strategy is comprehensive and multi-modal, with the following core elements:

- Public Transport: The Site is well-served by two mainline railway stations. The strategy includes dedicated shuttle services from Bicester North and Bicester Village stations, enhancements to local bus routes (notably the 500 service), and extensive coach parking to support group and school travel. The EWR project will further enhance regional connectivity.
- Active Travel Infrastructure: New and improved footways, cycleways, and bridleways will connect the Park to Bicester and surrounding villages. The walking and cycling strategy includes upgrades to PRoW, high-quality routes both on- and off-Site and a cycle hire scheme.
- Vehicle Access and Parking: Three new access points from the B4100 (primary for visitors, secondary for hotels/conference, and staff/servicing) are proposed, with advanced traffic management and ANPR-based entry systems to minimise queuing and delays. Parking is phased, with over 4,200 visitor spaces, 705 hotel / conference spaces, 1,179 staff spaces, and 147 coach bays, plus contingency for overspill and event-day demand.
- Travel Demand Management: A digital, data-driven approach is used to influence visitor and staff travel behaviour, with personalised travel planning, real-time information, and incentives for sustainable travel. A Sustainable Transport Fund, ring-fenced from parking revenues, supports ongoing improvements.

Traffic Assessment

20.11 Traffic modelling uses the BTM, validated by OCC, to assess the impact of the scheme in Phase 8 (Year 10) against a future year scenario of 2042 that includes planned growth associated with the emerging Local Plan. This provides a robust assessment of the new Site accesses and vehicle trips.

20.12 The modelling focuses on weekday peaks as the worst-case scenario. Weekend traffic is consistently lower, and separate weekend modelling is not required. The assessment demonstrates that, with proposed mitigation, the development can be accommodated on the local and SRN without severe residual impacts.

20.13 As is typical for a development of this nature, there are some local highway network impacts which will occur periodically throughout the year when the Park is operating and is at its busiest, i.e. at weekends and in the summer months.

20.14 Traffic impacts are expected to be most significant in Year 10, with significantly lower traffic volumes during the earlier phases. The traffic modelling represents a worst-case scenario, as it does not account for OCC's aspirations outlined in their LTCP. This plan aims to replace or remove one in every four car trips in Oxfordshire by 2030, increasing to one in three by 2040, and to reduce car vehicle miles driven in the county by 20%. The proposed improvements are anticipated to support a rise in cycling activity, with the number of weekly cycle trips in Oxfordshire projected to grow from 600,000 to 1 million.

20.15 The transport strategy and proposed infrastructure improvements are designed to accommodate fluctuating demand, ensuring that peak season operations do not place undue pressure on the local or SRN. Outside peak months, demand will fall significantly, reducing cumulative transport impacts.

Mitigation

20.16 A comprehensive package of mitigation measures has been proposed to address these. These include:

- New pedestrian and cycle infrastructure between the Site and Bicester
- Improved Public Rights of Way, creating new opportunities for rural accessibility
- Improved local bus provision
- Improvements to Bicester North and Bicester Village Rail Stations
- Improvements to M40 Junction 9 and junction 10
- Local highway interventions to improve capacity and deter rat running.

Monitor and Manage

20.17 A robust 'Monitor and Manage' approach is embedded in the strategy, secured through the S106 agreement. This ensures that mode share, trip generation, and network performance are continuously tracked, with trigger points for further intervention as needed. The Sustainable Transport Fund provides a flexible resource for ongoing improvements, ensuring the strategy remains effective and responsive as the development evolves.

Policy Compliance

20.18 The proposals are in line with local, regional, and national policy.

20.19 The scheme is compliant with OCC's LTCP5, with regard to:

- Reducing emissions.
- Promoting active travel and improving road safety.
- Creating communities where healthy behaviours are the norm.
- Developing a world-leading sustainable business base that has new jobs and is supported by a net-zero transport network.
- Improving mobility including enabling greater choice and seamless interchange between sustainable modes, and
- Remove barriers to access for all, increasing independence, choice and control.

20.20 With regard to the NPPF the proposal is in line with paragraph 115 on the following basis:

- Through the masterplan proposals and the proposed mitigation strategy sustainable transport modes are prioritised, taking account of the vision for the Site, the type of development and its location.
- Through the access and movement strategy, safe and suitable access to the Site can be achieved for all users, and also provides benefits to existing users.
- While in outline the masterplan has been designed in line with best practice and guidance. The Site access is designed to meet the requirements of the Site, with segregated pedestrian and cycle facilities where possible. Provision has been made for parking areas, and other transport elements such as public transport and active modes.
- The impacts arising from the Proposed Development, in terms of capacity and congestion have been identified and where necessary, suitable mitigation identified to either directly address them, or to provide alternative mitigation options designed to promote pedestrian, cycle and public transport use which will off-set the impacts of the scheme. It has been shown that in terms of capacity, congestion and highway safety any impacts can be cost effectively mitigated to an acceptable degree through a vision-led approach, commensurate the scale and type of development proposed.

20.21 Paragraph 116 of the NPPF states "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, following mitigation, would be severe, taking into account all reasonable future scenarios."

20.22 The TA has clearly demonstrated that a vision led approach has been undertaken, prioritising sustainable modes, and developing an exceptionally high-quality package of mitigation measures, that will be continuously monitored, and funds put in place to ensure continued investment in sustainable travel invectives, ensuring that the resulting impact of the scheme would not be severe.

20.23 The proposals are in compliance with Paragraph 115 and 116 of the NPPF, the impacts on highway safety have been shown to be acceptable and any residual cumulative impact is certainly not severe.

Conclusion

20.24 The Proposed Development sets a new benchmark for sustainable leisure destinations, demonstrating how ambitious mode share targets, integrated transport strategies, and robust monitoring can deliver operational success and community benefits. The TA identifies a range of scenarios, testing the impact of development when fully built out. In the interim years, traffic impacts will be less.

20.25 The TA provides an evidence-based framework prioritising sustainable transport, reducing car dependency, and showing the scheme can be accommodated on the local and SRN without adverse impacts. The proposals align with national, regional, and local policy objectives, with no transport-related grounds for refusal.

20.26 This TA confirms the development's feasibility and resilience, a seasonal operational profile, and a robust mitigation package, ensuring adaptability to future needs.

20.27 The Park will operate seasonally, with peak demand in summer when wider network traffic flows are typically lower – an important factor in the modelling and mitigation strategy.

20.28 The TA concludes it is acceptable in transport and highways terms and should be supported from a planning and policy perspective. The Proposed Development meets all relevant transport and highways standards, will not severely affect the surrounding network, and complies with paragraphs 115 and 116 of the NPPF. There are no transport-related reasons to withhold planning permission.

Appendices

A Illustrative Masterplan

NOTES:

1. Do not scale from this drawing for construction purposes.
2. All dimensions are to be checked on site.
3. This drawing is to be read in conjunction with all other Tate + Co and relevant consultants' drawings and information.
4. This drawing is copyright.

KEY:

- Site Application Boundary
- Hotel
- Indoor Show
- Outdoor Show
- Village
- Other Building
- Utilities
- Parking
- Public Right of Way
- Service Road
- Path
- Control Access Point
- Vehicular Access Point
- Visitor Access Point
- Ancient Woodland (Retained)
- Ancient Woodland 15m Buffer Zone
- Retained Hedgerows, Trees & Woodland
- Woodland / Woodland Edge
- Mixed Native Hedgerow (Informal)
- Mixed Scrub
- Screening and Spatial Separation
- Wildflower / Species-Rich Meadow
- Themed Gardens
- Amenity Grass Mix
- Retained Agricultural Land
- Aquatics, Emergents and Floating
- Lake
- Dry Basin
- Photovoltaics

rev	date	amendment	by	approved
A	2025.08.20	For Information		

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SCALE: 1:2500 @ A0

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drawing title
Illustrative Masterplan

scale	1 : 2500 @ A0		A0
status	Planning	**job no.** PDF_UK	
drawing no.			**revision**
PDF_UK-TCA-DR-AR-01-0101			A

B Chiltern Timetable Bicester North and Bicester Village

steer

Puy du Fou UK
Public Transport Strategy
Appendix A

Chiltern Railways - Compiled Timetable and Capacity Data for Bicester North and Bicester Village Stations

Check that all trains are feeding through: OK

Day	Bicester station	Time at station	Direction	Train origin	Time at origin	Train destination	Time at destination	Seat capacity	Standing capacity	Total capacity
Weekday	Bicester North	01:06	Northbound	Marylebone	00:05	Banbury	01:26	440	170	610
Weekday	Bicester North	05:32	Southbound	Banbury	05:17	Marylebone	06:34	264	102	366
Weekday	Bicester North	05:50	Northbound	Bicester North	05:50	Birmingham Moor Street	07:03	176	68	244
Weekday	Bicester North	06:17	Southbound	Birmingham Moor Street	05:15	Marylebone	07:10	340	240	580
Weekday	Bicester North	06:29	Southbound	Bicester North	06:29	Marylebone	07:42	352	136	488
Weekday	Bicester North	06:52	Southbound	Birmingham Moor Street	05:45	Marylebone	07:46	272	192	464
Weekday	Bicester North	06:55	Northbound	Marylebone	06:04	Birmingham Snow Hill	08:09	272	192	464
Weekday	Bicester North	07:17	Southbound	Birmingham Moor Street	06:15	Marylebone	08:10	340	240	580
Weekday	Bicester North	07:24	Northbound	Marylebone	06:31	Birmingham Snow Hill	08:39	272	192	464
Weekday	Bicester North	07:50	Southbound	Stourbridge Junction	06:14	Marylebone	08:42	360	75	435
Weekday	Bicester North	07:56	Northbound	Marylebone	07:07	Birmingham Moor Street	09:05	272	192	464
Weekday	Bicester North	08:21	Southbound	Birmingham Moor Street	07:15	Marylebone	09:13	360	75	435
Weekday	Bicester North	08:23	Northbound	Marylebone	07:35	Birmingham Snow Hill	09:38	340	240	580
Weekday	Bicester North	08:54	Southbound	Birmingham Moor Street	07:45	Marylebone	09:45	204	144	348
Weekday	Bicester North	08:57	Northbound	Marylebone	08:07	Birmingham Moor Street	10:05	272	192	464
Weekday	Bicester North	09:29	Southbound	Birmingham Moor Street	08:15	Marylebone	10:22	272	192	464
Weekday	Bicester North	09:33	Northbound	Marylebone	08:35	Banbury	09:51	440	170	610
Weekday	Bicester North	09:51	Southbound	Birmingham Moor Street	08:45	Marylebone	10:45	272	192	464
Weekday	Bicester North	09:53	Northbound	Marylebone	09:02	Birmingham Moor Street	11:05	360	75	435
Weekday	Bicester North	10:22	Southbound	Birmingham Snow Hill	09:11	Marylebone	11:20	272	192	464
Weekday	Bicester North	10:26	Northbound	Marylebone	09:36	Birmingham Snow Hill	11:37	272	192	464
Weekday	Bicester North	10:53	Southbound	Birmingham Moor Street	09:45	Marylebone	11:45	272	192	464
Weekday	Bicester North	10:53	Northbound	Marylebone	10:02	Birmingham Moor Street	12:05	360	75	435
Weekday	Bicester North	11:20	Southbound	Birmingham Snow Hill	10:11	Marylebone	12:19	340	240	580
Weekday	Bicester North	11:30	Northbound	Marylebone	10:36	Banbury	11:48	264	102	366
Weekday	Bicester North	11:51	Southbound	Birmingham Moor Street	10:45	Marylebone	12:43	272	192	464
Weekday	Bicester North	11:53	Northbound	Marylebone	11:02	Birmingham Moor Street	13:05	272	192	464
Weekday	Bicester North	12:21	Southbound	Banbury	12:05	Marylebone	13:23	264	102	366
Weekday	Bicester North	12:26	Northbound	Marylebone	11:36	Birmingham Snow Hill	13:37	272	192	464
Weekday	Bicester North	12:53	Northbound	Marylebone	12:02	Birmingham Moor Street	14:05	272	192	464
Weekday	Bicester North	12:54	Southbound	Birmingham Moor Street	11:45	Marylebone	13:43	360	75	435
Weekday	Bicester North	13:20	Southbound	Birmingham Snow Hill	12:11	Marylebone	14:19	272	192	464
Weekday	Bicester North	13:30	Northbound	Marylebone	12:36	Banbury	13:46	264	102	366
Weekday	Bicester North	13:51	Southbound	Birmingham Moor Street	12:45	Marylebone	14:43	360	75	435
Weekday	Bicester North	13:52	Northbound	Marylebone	13:02	Birmingham Moor Street	15:05	272	192	464
Weekday	Bicester North	14:21	Southbound	Banbury	14:05	Marylebone	15:24	264	102	366

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Weekday	Bicester North	14:26	Northbound	Marylebone	13:36	Birmingham Snow Hill	15:37	340	240	580
Weekday	Bicester North	14:50	Southbound	Birmingham Moor Street	13:45	Marylebone	15:43	272	192	464
Weekday	Bicester North	14:53	Northbound	Marylebone	14:02	Birmingham Moor Street	16:05	272	192	464
Weekday	Bicester North	15:19	Southbound	Birmingham Snow Hill	14:11	Marylebone	16:19	272	192	464
Weekday	Bicester North	15:26	Northbound	Marylebone	14:36	Birmingham Snow Hill	16:37	272	192	464
Weekday	Bicester North	15:53	Southbound	Birmingham Moor Street	14:45	Marylebone	16:48	272	192	464
Weekday	Bicester North	15:53	Northbound	Marylebone	15:02	Birmingham Moor Street	17:05	272	192	464
Weekday	Bicester North	16:20	Southbound	Banbury	16:04	Marylebone	17:26	440	170	610
Weekday	Bicester North	16:25	Northbound	Marylebone	15:36	Birmingham Snow Hill	17:37	272	192	464
Weekday	Bicester North	16:51	Southbound	Birmingham Moor Street	15:45	Marylebone	17:44	272	192	464
Weekday	Bicester North	16:55	Northbound	Marylebone	16:07	Birmingham Moor Street	18:04	272	192	464
Weekday	Bicester North	17:23	Northbound	Marylebone	16:37	Birmingham Moor Street	18:35	272	192	464
Weekday	Bicester North	17:24	Southbound	Birmingham Snow Hill	16:11	Marylebone	18:26	340	240	580
Weekday	Bicester North	17:52	Southbound	Birmingham Moor Street	16:45	Marylebone	18:44	272	192	464
Weekday	Bicester North	17:55	Northbound	Marylebone	17:07	Stourbridge Junction	19:35	360	75	435
Weekday	Bicester North	18:25	Southbound	Birmingham Snow Hill	17:11	Marylebone	19:28	272	192	464
Weekday	Bicester North	18:26	Northbound	Marylebone	17:33	Birmingham Snow Hill	19:39	340	240	580
Weekday	Bicester North	18:53	Southbound	Birmingham Moor Street	17:45	Marylebone	19:43	272	192	464
Weekday	Bicester North	18:55	Northbound	Marylebone	18:07	Stourbridge Junction	20:37	360	75	435
Weekday	Bicester North	19:21	Southbound	Birmingham Snow Hill	18:11	Marylebone	20:26	272	192	464
Weekday	Bicester North	19:26	Northbound	Marylebone	18:37	Birmingham Snow Hill	20:47	272	192	464
Weekday	Bicester North	19:53	Northbound	Marylebone	19:06	Birmingham Moor Street	21:05	340	240	580
Weekday	Bicester North	20:25	Northbound	Marylebone	19:36	Birmingham Snow Hill	21:37	272	192	464
Weekday	Bicester North	20:28	Southbound	Birmingham Moor Street	19:15	Marylebone	21:30	272	192	464
Weekday	Bicester North	20:56	Northbound	Marylebone	20:02	Birmingham Moor Street	22:05	204	144	348
Weekday	Bicester North	21:25	Southbound	Birmingham Snow Hill	20:11	Marylebone	22:27	340	240	580
Weekday	Bicester North	21:26	Northbound	Marylebone	20:36	Birmingham Snow Hill	22:37	340	240	580
Weekday	Bicester North	21:54	Northbound	Marylebone	21:02	Stourbridge Junction	23:49	204	144	348
Weekday	Bicester North	22:20	Southbound	Birmingham Snow Hill	21:11	Marylebone	23:15	272	192	464
Weekday	Bicester North	22:49	Southbound	Stratford-upon-Avon	21:33	Marylebone	23:56	136	96	232
Weekday	Bicester North	22:54	Northbound	Marylebone	22:02	Birmingham Moor Street	00:04	272	192	464
Weekday	Bicester North	23:29	Northbound	Marylebone	22:30	Birmingham Moor Street	00:36	272	192	464
Weekday	Bicester North	23:50	Northbound	Marylebone	23:07	Birmingham Moor Street	00:55	204	144	348
Weekday	Bicester Village	00:17	Northbound	Marylebone	23:11	Banbury	01:07	352	136	488
Weekday	Bicester Village	00:56	Northbound	Marylebone	00:01	Oxford	01:16	272	192	464
Weekday	Bicester Village	05:51	Southbound	Oxford	05:35	Marylebone	07:02	264	102	366
Weekday	Bicester Village	06:03	Northbound	Bicester Village	06:03	Oxford	06:21	528	204	732
Weekday	Bicester Village	06:22	Southbound	Oxford	06:05	Marylebone	07:34	352	136	488
Weekday	Bicester Village	06:43	Northbound	Bicester Village	06:43	Oxford	06:58	340	240	580
Weekday	Bicester Village	06:56	Southbound	Oxford	06:37	Marylebone	08:03	544	384	928
Weekday	Bicester Village	07:17	Northbound	Marylebone	06:08	Oxford	07:37	176	68	244
Weekday	Bicester Village	07:22	Southbound	Oxford	07:05	Marylebone	08:34	528	204	732
Weekday	Bicester Village	07:51	Northbound	Marylebone	06:47	Oxford	08:10	176	68	244
Weekday	Bicester Village	08:02	Southbound	Oxford	07:45	Marylebone	09:09	440	170	610
Weekday	Bicester Village	08:17	Northbound	Marylebone	07:11	Oxford	08:37	204	144	348
Weekday	Bicester Village	08:23	Southbound	Oxford	08:02	Marylebone	09:34	176	68	244
Weekday	Bicester Village	08:33	Northbound	Marylebone	07:39	Oxford	08:53	272	192	464

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Weekday	Bicester Village	08:36	Southbound	Oxford	08:20	Marylebone	09:40	176	68	244
Weekday	Bicester Village	08:59	Southbound	Oxford	08:45	Marylebone	09:59	204	144	348
Weekday	Bicester Village	09:18	Northbound	Marylebone	08:11	Oxford	09:35	352	136	488
Weekday	Bicester Village	09:19	Southbound	Oxford	09:04	Marylebone	10:18	272	192	464
Weekday	Bicester Village	09:38	Northbound	Marylebone	08:39	Oxford	09:57	272	192	464
Weekday	Bicester Village	10:07	Southbound	Oxford	09:49	Marylebone	11:17	352	136	488
Weekday	Bicester Village	10:10	Northbound	Marylebone	09:06	Oxford	10:28	352	136	488
Weekday	Bicester Village	10:34	Southbound	Oxford	10:19	Marylebone	11:42	272	192	464
Weekday	Bicester Village	10:41	Northbound	Marylebone	09:40	Oxford	11:00	340	240	580
Weekday	Bicester Village	11:06	Southbound	Oxford	10:49	Marylebone	12:16	352	136	488
Weekday	Bicester Village	11:10	Northbound	Marylebone	10:06	Oxford	11:28	204	144	348
Weekday	Bicester Village	11:33	Southbound	Oxford	11:19	Marylebone	12:39	440	170	610
Weekday	Bicester Village	11:41	Northbound	Marylebone	10:40	Oxford	11:58	272	192	464
Weekday	Bicester Village	12:07	Southbound	Oxford	11:49	Marylebone	13:15	204	144	348
Weekday	Bicester Village	12:10	Northbound	Marylebone	11:06	Oxford	12:28	352	136	488
Weekday	Bicester Village	12:33	Southbound	Oxford	12:19	Marylebone	13:39	272	192	464
Weekday	Bicester Village	12:41	Northbound	Marylebone	11:40	Oxford	13:00	204	144	348
Weekday	Bicester Village	13:06	Southbound	Oxford	12:49	Marylebone	14:16	352	136	488
Weekday	Bicester Village	13:10	Northbound	Marylebone	12:06	Oxford	13:28	352	136	488
Weekday	Bicester Village	13:33	Southbound	Oxford	13:19	Marylebone	14:39	204	144	348
Weekday	Bicester Village	13:41	Northbound	Marylebone	12:40	Oxford	13:59	204	144	348
Weekday	Bicester Village	14:07	Southbound	Oxford	13:49	Marylebone	15:17	352	136	488
Weekday	Bicester Village	14:10	Northbound	Marylebone	13:06	Oxford	14:28	352	136	488
Weekday	Bicester Village	14:33	Southbound	Oxford	14:19	Marylebone	15:39	204	144	348
Weekday	Bicester Village	14:41	Northbound	Marylebone	13:40	Oxford	14:59	340	240	580
Weekday	Bicester Village	15:06	Southbound	Oxford	14:49	Marylebone	16:15	352	136	488
Weekday	Bicester Village	15:10	Northbound	Marylebone	14:06	Oxford	15:28	264	102	366
Weekday	Bicester Village	15:33	Southbound	Oxford	15:19	Marylebone	16:40	440	170	610
Weekday	Bicester Village	15:41	Northbound	Marylebone	14:40	Oxford	15:58	204	144	348
Weekday	Bicester Village	16:06	Southbound	Oxford	15:49	Marylebone	17:14	264	102	366
Weekday	Bicester Village	16:10	Northbound	Marylebone	15:06	Oxford	16:29	264	102	366
Weekday	Bicester Village	16:33	Southbound	Oxford	16:19	Marylebone	17:40	204	144	348
Weekday	Bicester Village	16:38	Northbound	Marylebone	15:40	Oxford	16:58	440	170	610
Weekday	Bicester Village	17:05	Southbound	Oxford	16:49	Marylebone	18:14	264	102	366
Weekday	Bicester Village	17:19	Northbound	Marylebone	16:15	Oxford	17:36	352	136	488
Weekday	Bicester Village	17:36	Southbound	Oxford	17:19	Marylebone	18:40	340	240	580
Weekday	Bicester Village	17:38	Northbound	Marylebone	16:45	Oxford	17:57	408	288	696
Weekday	Bicester Village	18:06	Southbound	Oxford	17:49	Marylebone	19:13	352	136	488
Weekday	Bicester Village	18:19	Northbound	Marylebone	17:15	Oxford	18:36	440	170	610
Weekday	Bicester Village	18:37	Southbound	Oxford	18:21	Marylebone	19:39	408	288	696
Weekday	Bicester Village	18:47	Northbound	Marylebone	17:45	Oxford	19:06	440	170	610
Weekday	Bicester Village	19:06	Southbound	Oxford	18:49	Marylebone	20:14	440	170	610
Weekday	Bicester Village	19:18	Northbound	Marylebone	18:15	Oxford	19:35	528	204	732
Weekday	Bicester Village	19:35	Southbound	Oxford	19:19	Marylebone	20:43	440	170	610
Weekday	Bicester Village	19:47	Northbound	Marylebone	18:45	Oxford	20:04	352	136	488
Weekday	Bicester Village	20:07	Southbound	Oxford	19:51	Marylebone	21:13	528	204	732
Weekday	Bicester Village	20:18	Northbound	Marylebone	19:10	Oxford	20:35	272	192	464

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Weekday	Bicester Village	20:36	Southbound	Oxford	20:19	Marylebone	21:47	352	136	488
Weekday	Bicester Village	20:47	Northbound	Marylebone	19:40	Oxford	21:08	352	136	488
Weekday	Bicester Village	21:06	Southbound	Oxford	20:49	Marylebone	22:10	272	192	464
Weekday	Bicester Village	21:10	Northbound	Marylebone	20:06	Oxford	21:28	264	102	366
Weekday	Bicester Village	21:35	Southbound	Oxford	21:19	Marylebone	22:45	352	136	488
Weekday	Bicester Village	21:40	Northbound	Marylebone	20:40	Oxford	21:57	272	192	464
Weekday	Bicester Village	22:07	Southbound	Oxford	21:49	Marylebone	23:10	264	102	366
Weekday	Bicester Village	22:10	Northbound	Marylebone	21:06	Oxford	22:28	352	136	488
Weekday	Bicester Village	22:33	Southbound	Oxford	22:19	Marylebone	23:39	272	192	464
Weekday	Bicester Village	22:38	Northbound	Marylebone	21:35	Oxford	22:57	264	102	366
Weekday	Bicester Village	23:00	Southbound	Oxford	22:44	Marylebone	00:16	352	136	488
Weekday	Bicester Village	23:12	Northbound	Marylebone	22:06	Oxford	23:33	352	136	488
Weekday	Bicester Village	23:41	Southbound	Oxford	23:24	High Wycombe	00:16	264	102	366
Weekday	Bicester Village	23:45	Northbound	Marylebone	22:34	Oxford	00:04	264	102	366
Saturday	Bicester North	00:19	Northbound	Marylebone	23:12	Banbury	00:34	272	192	464
Saturday	Bicester North	00:50	Northbound	Marylebone	23:42	Banbury	01:08	264	102	366
Saturday	Bicester North	01:06	Northbound	Marylebone	00:05	Banbury	01:26	272	192	464
Saturday	Bicester North	05:56	Southbound	Banbury	05:38	Marylebone	07:00	440	170	610
Saturday	Bicester North	06:38	Southbound	Banbury	06:23	Marylebone	07:47	440	170	610
Saturday	Bicester North	06:46	Northbound	High Wycombe	06:13	Birmingham Moor Street	08:06	340	240	580
Saturday	Bicester North	07:25	Southbound	Birmingham Moor Street	06:13	Marylebone	08:15	340	240	580
Saturday	Bicester North	07:53	Southbound	Birmingham Moor Street	06:43	Marylebone	08:45	340	240	580
Saturday	Bicester North	07:54	Northbound	Marylebone	07:02	Birmingham Moor Street	09:06	408	288	696
Saturday	Bicester North	08:22	Southbound	Birmingham Moor Street	07:14	Marylebone	09:17	360	75	435
Saturday	Bicester North	08:49	Northbound	Marylebone	08:02	Birmingham Moor Street	10:06	272	192	464
Saturday	Bicester North	08:53	Southbound	Birmingham Moor Street	07:43	Marylebone	09:46	340	240	580
Saturday	Bicester North	09:23	Southbound	Birmingham Moor Street	08:13	Marylebone	10:15	340	240	580
Saturday	Bicester North	09:53	Southbound	Stourbridge Junction	08:19	Marylebone	10:45	360	75	435
Saturday	Bicester North	09:54	Northbound	Marylebone	09:02	Birmingham Moor Street	11:05	476	336	812
Saturday	Bicester North	10:21	Northbound	Marylebone	09:32	Birmingham Moor Street	11:36	272	192	464
Saturday	Bicester North	10:25	Southbound	Birmingham Moor Street	09:13	Marylebone	11:25	340	240	580
Saturday	Bicester North	10:53	Southbound	Birmingham Moor Street	09:43	Marylebone	11:45	340	240	580
Saturday	Bicester North	10:54	Northbound	Marylebone	10:02	Birmingham Moor Street	12:05	476	336	812
Saturday	Bicester North	11:53	Southbound	Birmingham Moor Street	10:43	Marylebone	12:45	340	240	580
Saturday	Bicester North	11:53	Northbound	Marylebone	11:02	Birmingham Moor Street	13:06	408	288	696
Saturday	Bicester North	12:53	Southbound	Birmingham Moor Street	11:43	Marylebone	13:45	340	240	580
Saturday	Bicester North	12:54	Northbound	Marylebone	12:02	Birmingham Moor Street	14:05	360	75	435
Saturday	Bicester North	13:21	Northbound	Marylebone	12:32	Birmingham Moor Street	14:36	340	240	580
Saturday	Bicester North	13:25	Southbound	Birmingham Moor Street	12:13	Marylebone	14:15	272	192	464
Saturday	Bicester North	13:53	Southbound	Birmingham Moor Street	12:43	Marylebone	14:45	340	240	580
Saturday	Bicester North	13:54	Northbound	Marylebone	13:02	Birmingham Moor Street	15:05	408	288	696
Saturday	Bicester North	14:53	Southbound	Birmingham Moor Street	13:43	Marylebone	15:45	340	240	580
Saturday	Bicester North	14:54	Northbound	Marylebone	14:02	Birmingham Moor Street	16:05	408	288	696
Saturday	Bicester North	15:53	Southbound	Birmingham Moor Street	14:43	Marylebone	16:45	360	75	435
Saturday	Bicester North	15:54	Northbound	Marylebone	15:02	Birmingham Moor Street	17:05	476	336	812
Saturday	Bicester North	16:21	Northbound	Marylebone	15:32	Birmingham Moor Street	17:36	340	240	580
Saturday	Bicester North	16:25	Southbound	Birmingham Moor Street	15:13	Marylebone	17:15	340	240	580

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Saturday	Bicester North	16:53	Southbound	Birmingham Moor Street	15:43	Marylebone	17:45	340	240	580
Saturday	Bicester North	16:54	Northbound	Marylebone	16:02	Birmingham Moor Street	18:05	476	336	812
Saturday	Bicester North	17:24	Northbound	Marylebone	16:32	Birmingham Moor Street	18:35	408	288	696
Saturday	Bicester North	17:53	Southbound	Birmingham Moor Street	16:43	Marylebone	18:45	340	240	580
Saturday	Bicester North	17:54	Northbound	Marylebone	17:02	Birmingham Moor Street	19:05	476	336	812
Saturday	Bicester North	18:24	Northbound	Marylebone	17:32	Birmingham Moor Street	19:35	340	240	580
Saturday	Bicester North	18:53	Southbound	Birmingham Moor Street	17:43	Marylebone	19:45	340	240	580
Saturday	Bicester North	18:54	Northbound	Marylebone	18:02	Stourbridge Junction	20:35	360	75	435
Saturday	Bicester North	19:21	Northbound	Marylebone	18:32	Birmingham Moor Street	20:36	340	240	580
Saturday	Bicester North	19:25	Southbound	Birmingham Moor Street	18:13	Marylebone	20:15	340	240	580
Saturday	Bicester North	19:53	Southbound	Birmingham Moor Street	18:43	Marylebone	20:45	340	240	580
Saturday	Bicester North	19:54	Northbound	Marylebone	19:02	Birmingham Moor Street	21:05	408	288	696
Saturday	Bicester North	20:23	Southbound	Birmingham Moor Street	19:13	Marylebone	21:15	340	240	580
Saturday	Bicester North	20:24	Northbound	Marylebone	19:32	Stourbridge Junction	22:05	360	75	435
Saturday	Bicester North	20:53	Southbound	Birmingham Moor Street	19:43	Marylebone	21:45	272	192	464
Saturday	Bicester North	20:54	Northbound	Marylebone	20:02	Birmingham Moor Street	22:05	408	288	696
Saturday	Bicester North	21:21	Northbound	Marylebone	20:32	Birmingham Moor Street	22:34	340	240	580
Saturday	Bicester North	21:23	Southbound	Birmingham Moor Street	20:13	Marylebone	22:15	408	288	696
Saturday	Bicester North	21:54	Northbound	Marylebone	21:02	Birmingham Moor Street	23:08	476	336	812
Saturday	Bicester North	22:33	Southbound	Birmingham Moor Street	21:13	Marylebone	23:55	340	240	580
Saturday	Bicester North	22:53	Northbound	Marylebone	22:02	Birmingham Moor Street	00:01	408	288	696
Saturday	Bicester North	23:49	Northbound	Marylebone	22:42	Banbury	00:04	352	136	488
Saturday	Bicester Village	00:08	Northbound	Marylebone	23:07	Oxford	00:27	264	102	366
Saturday	Bicester Village	00:56	Northbound	Marylebone	00:01	Oxford	01:16	272	192	464
Saturday	Bicester Village	06:27	Southbound	Oxford	06:10	Marylebone	07:36	264	102	366
Saturday	Bicester Village	07:03	Northbound	Marylebone	05:52	Oxford	07:20	272	192	464
Saturday	Bicester Village	07:03	Southbound	Oxford	06:45	Marylebone	08:10	352	136	488
Saturday	Bicester Village	07:29	Southbound	Oxford	07:12	Marylebone	08:40	352	136	488
Saturday	Bicester Village	07:42	Northbound	Marylebone	06:37	Oxford	08:02	440	170	610
Saturday	Bicester Village	08:02	Southbound	Oxford	07:45	Marylebone	09:10	272	192	464
Saturday	Bicester Village	08:18	Northbound	Marylebone	07:07	Oxford	08:35	352	136	488
Saturday	Bicester Village	08:29	Southbound	Oxford	08:12	Marylebone	09:40	440	170	610
Saturday	Bicester Village	08:43	Northbound	Marylebone	07:37	Oxford	09:02	440	170	610
Saturday	Bicester Village	09:03	Southbound	Oxford	08:45	Marylebone	10:10	352	136	488
Saturday	Bicester Village	09:18	Northbound	Marylebone	08:07	Oxford	09:35	352	136	488
Saturday	Bicester Village	09:29	Southbound	Oxford	09:12	Marylebone	10:40	440	170	610
Saturday	Bicester Village	09:42	Northbound	Marylebone	08:37	Oxford	10:02	440	170	610
Saturday	Bicester Village	10:06	Southbound	Oxford	09:45	Marylebone	11:15	352	136	488
Saturday	Bicester Village	10:18	Northbound	Marylebone	09:07	Oxford	10:35	352	136	488
Saturday	Bicester Village	10:29	Southbound	Oxford	10:12	Marylebone	11:40	440	170	610
Saturday	Bicester Village	10:43	Northbound	Marylebone	09:37	Oxford	11:02	440	170	610
Saturday	Bicester Village	11:03	Southbound	Oxford	10:45	Marylebone	12:10	352	136	488
Saturday	Bicester Village	11:18	Northbound	Marylebone	10:07	Oxford	11:35	440	170	610
Saturday	Bicester Village	11:29	Southbound	Oxford	11:12	Marylebone	12:40	440	170	610
Saturday	Bicester Village	11:42	Northbound	Marylebone	10:37	Oxford	12:02	352	136	488
Saturday	Bicester Village	12:02	Southbound	Oxford	11:45	Marylebone	13:10	440	170	610
Saturday	Bicester Village	12:18	Northbound	Marylebone	11:07	Oxford	12:35	440	170	610

Saturday	Bicester Village	12:29	Southbound	Oxford	12:12	Marylebone	13:40	352	136	488
Saturday	Bicester Village	12:43	Northbound	Marylebone	11:37	Oxford	13:02	352	136	488
Saturday	Bicester Village	13:03	Southbound	Oxford	12:45	Marylebone	14:10	440	170	610
Saturday	Bicester Village	13:18	Northbound	Marylebone	12:07	Oxford	13:35	440	170	610
Saturday	Bicester Village	13:29	Southbound	Oxford	13:12	Marylebone	14:40	352	136	488
Saturday	Bicester Village	13:42	Northbound	Marylebone	12:37	Oxford	14:02	352	136	488
Saturday	Bicester Village	14:02	Southbound	Oxford	13:45	Marylebone	15:10	440	170	610
Saturday	Bicester Village	14:18	Northbound	Marylebone	13:07	Oxford	14:35	440	170	610
Saturday	Bicester Village	14:29	Southbound	Oxford	14:12	Marylebone	15:40	352	136	488
Saturday	Bicester Village	14:43	Northbound	Marylebone	13:37	Oxford	15:02	440	170	610
Saturday	Bicester Village	15:03	Southbound	Oxford	14:45	Marylebone	16:10	440	170	610
Saturday	Bicester Village	15:18	Northbound	Marylebone	14:07	Oxford	15:35	352	136	488
Saturday	Bicester Village	15:29	Southbound	Oxford	15:12	Marylebone	16:40	440	170	610
Saturday	Bicester Village	15:42	Northbound	Marylebone	14:37	Oxford	16:02	440	170	610
Saturday	Bicester Village	16:02	Southbound	Oxford	15:45	Marylebone	17:10	352	136	488
Saturday	Bicester Village	16:18	Northbound	Marylebone	15:07	Oxford	16:35	352	136	488
Saturday	Bicester Village	16:29	Southbound	Oxford	16:12	Marylebone	17:40	440	170	610
Saturday	Bicester Village	16:43	Northbound	Marylebone	15:37	Oxford	17:02	440	170	610
Saturday	Bicester Village	17:03	Southbound	Oxford	16:45	Marylebone	18:10	352	136	488
Saturday	Bicester Village	17:18	Northbound	Marylebone	16:07	Oxford	17:35	352	136	488
Saturday	Bicester Village	17:29	Southbound	Oxford	17:12	Marylebone	18:40	440	170	610
Saturday	Bicester Village	17:42	Northbound	Marylebone	16:37	Oxford	18:02	440	170	610
Saturday	Bicester Village	18:02	Southbound	Oxford	17:45	Marylebone	19:10	352	136	488
Saturday	Bicester Village	18:18	Northbound	Marylebone	17:07	Oxford	18:35	440	170	610
Saturday	Bicester Village	18:29	Southbound	Oxford	18:12	Marylebone	19:40	440	170	610
Saturday	Bicester Village	18:43	Northbound	Marylebone	17:37	Oxford	19:02	352	136	488
Saturday	Bicester Village	19:03	Southbound	Oxford	18:45	Marylebone	20:10	440	170	610
Saturday	Bicester Village	19:18	Northbound	Marylebone	18:07	Oxford	19:35	440	170	610
Saturday	Bicester Village	19:29	Southbound	Oxford	19:12	Marylebone	20:40	352	136	488
Saturday	Bicester Village	19:42	Northbound	Marylebone	18:37	Oxford	20:02	352	136	488
Saturday	Bicester Village	20:02	Southbound	Oxford	19:45	Marylebone	21:10	440	170	610
Saturday	Bicester Village	20:18	Northbound	Marylebone	19:07	Oxford	20:35	440	170	610
Saturday	Bicester Village	20:29	Southbound	Oxford	20:12	Marylebone	21:40	352	136	488
Saturday	Bicester Village	20:43	Northbound	Marylebone	19:37	Oxford	21:02	352	136	488
Saturday	Bicester Village	21:03	Southbound	Oxford	20:45	Marylebone	22:10	440	170	610
Saturday	Bicester Village	21:18	Northbound	Marylebone	20:07	Oxford	21:35	440	170	610
Saturday	Bicester Village	21:29	Southbound	Oxford	21:12	Marylebone	22:40	352	136	488
Saturday	Bicester Village	21:42	Northbound	Marylebone	20:37	Oxford	22:02	264	102	366
Saturday	Bicester Village	22:18	Northbound	Marylebone	21:07	Oxford	22:35	204	144	348
Saturday	Bicester Village	22:27	Southbound	Oxford	22:10	Marylebone	23:40	440	170	610
Saturday	Bicester Village	22:43	Northbound	Marylebone	21:37	Oxford	23:02	352	136	488
Saturday	Bicester Village	23:18	Northbound	Marylebone	22:07	Oxford	23:37	272	192	464
Saturday	Bicester Village	23:44	-	Oxford	23:27	Bicester Village	23:44	352	136	488
Sunday	Bicester North	00:20	Northbound	Marylebone	23:15	Banbury	00:35	448	260	708
Sunday	Bicester North	08:03	Southbound	Banbury	07:50	Marylebone	09:09	340	240	580
Sunday	Bicester North	08:48	Southbound	Banbury	08:34	Marylebone	09:52	528	204	732
Sunday	Bicester North	08:52	Northbound	Marylebone	08:00	Birmingham Moor Street	10:10	340	240	580

steer

Sunday	Bicester North	09:52	Northbound	Marylebone	09:00	Birmingham Moor Street	11:10	408	288	696
Sunday	Bicester North	09:56	Southbound	Birmingham Moor Street	08:47	Marylebone	10:52	340	240	580
Sunday	Bicester North	10:19	Southbound	Birmingham Moor Street	09:12	Marylebone	11:10	340	240	580
Sunday	Bicester North	10:52	Northbound	Marylebone	10:00	Birmingham Moor Street	12:07	340	240	580
Sunday	Bicester North	10:53	Southbound	Birmingham Moor Street	09:42	Marylebone	11:48	544	384	928
Sunday	Bicester North	11:20	Southbound	Stourbridge Junction	09:38	Marylebone	12:10	360	75	435
Sunday	Bicester North	11:50	Southbound	Birmingham Moor Street	10:35	Marylebone	12:48	340	240	580
Sunday	Bicester North	11:52	Northbound	Marylebone	11:00	Birmingham Moor Street	13:10	408	288	696
Sunday	Bicester North	12:20	Southbound	Stourbridge Junction	10:42	Marylebone	13:10	360	75	435
Sunday	Bicester North	12:47	Southbound	Birmingham Moor Street	11:37	Marylebone	13:48	340	240	580
Sunday	Bicester North	12:52	Northbound	Marylebone	12:00	Birmingham Moor Street	14:07	340	240	580
Sunday	Bicester North	13:25	Northbound	Marylebone	12:38	Birmingham Moor Street	14:30	272	192	464
Sunday	Bicester North	13:54	Southbound	Birmingham Moor Street	12:37	Marylebone	14:47	340	240	580
Sunday	Bicester North	13:55	Northbound	Marylebone	13:00	Birmingham Moor Street	15:10	272	192	464
Sunday	Bicester North	14:48	Southbound	Birmingham Moor Street	13:40	Marylebone	15:47	340	240	580
Sunday	Bicester North	14:52	Northbound	Marylebone	14:00	Birmingham Moor Street	16:07	340	240	580
Sunday	Bicester North	15:52	Northbound	Marylebone	15:00	Birmingham Moor Street	17:10	408	288	696
Sunday	Bicester North	15:54	Southbound	Birmingham Moor Street	14:37	Marylebone	16:47	340	240	580
Sunday	Bicester North	16:21	Southbound	Birmingham Moor Street	15:12	Marylebone	17:15	272	192	464
Sunday	Bicester North	16:52	Northbound	Marylebone	16:00	Birmingham Moor Street	18:07	340	240	580
Sunday	Bicester North	16:48	Southbound	Birmingham Moor Street	15:40	Marylebone	17:47	272	192	464
Sunday	Bicester North	17:52	Northbound	Marylebone	17:00	Birmingham Moor Street	19:05	476	336	812
Sunday	Bicester North	17:54	Southbound	Birmingham Moor Street	16:37	Marylebone	18:48	340	240	580
Sunday	Bicester North	18:26	Northbound	Marylebone	17:38	Stourbridge Junction	20:02	360	75	435
Sunday	Bicester North	18:47	Southbound	Birmingham Moor Street	17:37	Marylebone	19:47	340	240	580
Sunday	Bicester North	18:52	Northbound	Marylebone	18:00	Birmingham Moor Street	20:07	340	240	580
Sunday	Bicester North	19:26	Northbound	Marylebone	18:38	Stourbridge Junction	21:02	360	75	435
Sunday	Bicester North	19:52	Northbound	Marylebone	19:00	Birmingham Moor Street	21:07	476	336	812
Sunday	Bicester North	19:54	Southbound	Birmingham Moor Street	18:37	Marylebone	20:47	340	240	580
Sunday	Bicester North	20:52	Northbound	Marylebone	20:00	Birmingham Moor Street	22:12	340	240	580
Sunday	Bicester North	21:22	Southbound	Birmingham Moor Street	20:17	Marylebone	22:11	340	240	580
Sunday	Bicester North	21:52	Northbound	Marylebone	21:00	Birmingham Moor Street	23:04	272	192	464
Sunday	Bicester North	22:33	Southbound	Birmingham Moor Street	21:18	Marylebone	23:52	204	144	348
Sunday	Bicester North	22:56	Northbound	Marylebone	22:08	Birmingham Moor Street	00:02	340	240	580
Sunday	Bicester North	23:45	Northbound	Marylebone	22:40	Banbury	00:01	440	170	610
Sunday	Bicester Village	00:09	Northbound	Marylebone	23:10	Oxford	00:26	264	102	366
Sunday	Bicester Village	07:49	Northbound	Princes Risborough	07:30	Oxford	08:04	352	136	488
Sunday	Bicester Village	07:57	Southbound	Oxford	07:41	Marylebone	08:49	264	102	366
Sunday	Bicester Village	08:28	Southbound	Oxford	08:12	Marylebone	09:37	352	136	488
Sunday	Bicester Village	08:47	Northbound	Marylebone	07:42	Oxford	09:09	440	170	610
Sunday	Bicester Village	08:59	Southbound	Oxford	08:41	Marylebone	10:07	440	170	610
Sunday	Bicester Village	09:21	Northbound	Marylebone	08:12	Oxford	09:39	352	136	488
Sunday	Bicester Village	09:29	Southbound	Oxford	09:11	Marylebone	10:40	352	136	488
Sunday	Bicester Village	09:47	Northbound	Marylebone	08:42	Oxford	10:06	440	170	610
Sunday	Bicester Village	09:58	Southbound	Oxford	09:41	Marylebone	11:07	440	170	610
Sunday	Bicester Village	10:21	Northbound	Marylebone	09:12	Oxford	10:39	352	136	488
Sunday	Bicester Village	10:27	Southbound	Oxford	10:11	Marylebone	11:37	352	136	488

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Sunday	Bicester Village	10:47	Northbound	Marylebone	09:42	Oxford	11:09	440	170	610
Sunday	Bicester Village	10:58	Southbound	Oxford	10:41	Marylebone	12:07	440	170	610
Sunday	Bicester Village	11:21	Northbound	Marylebone	10:12	Oxford	11:39	352	136	488
Sunday	Bicester Village	11:27	Southbound	Oxford	11:11	Marylebone	12:37	352	136	488
Sunday	Bicester Village	11:47	Northbound	Marylebone	10:42	Oxford	12:06	440	170	610
Sunday	Bicester Village	11:58	Southbound	Oxford	11:41	Marylebone	13:07	440	170	610
Sunday	Bicester Village	12:21	Northbound	Marylebone	11:12	Oxford	12:39	352	136	488
Sunday	Bicester Village	12:27	Southbound	Oxford	12:11	Marylebone	13:37	352	136	488
Sunday	Bicester Village	12:47	Northbound	Marylebone	11:42	Oxford	13:09	440	170	610
Sunday	Bicester Village	12:58	Southbound	Oxford	12:41	Marylebone	14:07	440	170	610
Sunday	Bicester Village	13:21	Northbound	Marylebone	12:12	Oxford	13:39	352	136	488
Sunday	Bicester Village	13:27	Southbound	Oxford	13:11	Marylebone	14:37	352	136	488
Sunday	Bicester Village	13:47	Northbound	Marylebone	12:42	Oxford	14:06	440	170	610
Sunday	Bicester Village	13:58	Southbound	Oxford	13:41	Marylebone	15:07	440	170	610
Sunday	Bicester Village	14:21	Northbound	Marylebone	13:12	Oxford	14:39	352	136	488
Sunday	Bicester Village	14:27	Southbound	Oxford	14:11	Marylebone	15:37	352	136	488
Sunday	Bicester Village	14:47	Northbound	Marylebone	13:42	Oxford	15:09	440	170	610
Sunday	Bicester Village	14:58	Southbound	Oxford	14:41	Marylebone	16:07	440	170	610
Sunday	Bicester Village	15:21	Northbound	Marylebone	14:12	Oxford	15:39	352	136	488
Sunday	Bicester Village	15:27	Southbound	Oxford	15:11	Marylebone	16:37	352	136	488
Sunday	Bicester Village	15:47	Northbound	Marylebone	14:42	Oxford	16:06	440	170	610
Sunday	Bicester Village	15:58	Southbound	Oxford	15:41	Marylebone	17:07	440	170	610
Sunday	Bicester Village	16:21	Northbound	Marylebone	15:12	Oxford	16:39	352	136	488
Sunday	Bicester Village	16:27	Southbound	Oxford	16:11	Marylebone	17:37	352	136	488
Sunday	Bicester Village	16:47	Northbound	Marylebone	15:42	Oxford	17:09	440	170	610
Sunday	Bicester Village	16:58	Southbound	Oxford	16:41	Marylebone	18:07	440	170	610
Sunday	Bicester Village	17:21	Northbound	Marylebone	16:12	Oxford	17:39	408	288	696
Sunday	Bicester Village	17:27	Southbound	Oxford	17:11	Marylebone	18:37	352	136	488
Sunday	Bicester Village	17:47	Northbound	Marylebone	16:42	Oxford	18:06	440	170	610
Sunday	Bicester Village	17:58	Southbound	Oxford	17:41	Marylebone	19:07	440	170	610
Sunday	Bicester Village	18:21	Northbound	Marylebone	17:12	Oxford	18:39	352	136	488
Sunday	Bicester Village	18:27	Southbound	Oxford	18:11	Marylebone	19:37	440	170	610
Sunday	Bicester Village	18:47	Northbound	Marylebone	17:42	Oxford	19:09	440	170	610
Sunday	Bicester Village	18:58	Southbound	Oxford	18:41	Marylebone	20:07	440	170	610
Sunday	Bicester Village	19:21	Northbound	Marylebone	18:12	Oxford	19:39	352	136	488
Sunday	Bicester Village	19:27	Southbound	Oxford	19:11	Marylebone	20:37	352	136	488
Sunday	Bicester Village	19:47	Northbound	Marylebone	18:42	Oxford	20:06	440	170	610
Sunday	Bicester Village	19:58	Southbound	Oxford	19:41	Marylebone	21:07	440	170	610
Sunday	Bicester Village	20:21	Northbound	Marylebone	19:12	Oxford	20:39	352	136	488
Sunday	Bicester Village	20:27	Southbound	Oxford	20:11	Marylebone	21:37	352	136	488
Sunday	Bicester Village	20:47	Northbound	Marylebone	19:42	Oxford	21:09	352	136	488
Sunday	Bicester Village	20:58	Southbound	Oxford	20:41	Marylebone	22:07	440	170	610
Sunday	Bicester Village	21:21	Northbound	Marylebone	20:12	Oxford	21:39	352	136	488
Sunday	Bicester Village	21:27	Southbound	Oxford	21:11	Marylebone	22:37	352	136	488
Sunday	Bicester Village	21:47	Northbound	Marylebone	20:42	Oxford	22:06	408	288	696
Sunday	Bicester Village	21:58	Southbound	Oxford	21:41	Marylebone	23:07	352	136	488
Sunday	Bicester Village	22:21	Northbound	Marylebone	21:12	Oxford	22:39	264	102	366

Sunday	Bicester Village	22:27	Southbound	Oxford	22:11	Marylebone	23:35	352	136	488
Sunday	Bicester Village	22:47	Northbound	Marylebone	21:42	Oxford	23:09	264	102	366
Sunday	Bicester Village	23:21	Northbound	Marylebone	22:12	Oxford	23:39	264	102	366
Sunday	Bicester Village	23:44	-	Oxford	23:27	Bicester Village	23:44	264	102	366

C Personal Injury and Accident Incident Data Report

A34 (east of Wendlebury Interchange)

1.1 A total of 19 PIAs occurred on the A34 (east of Wendlebury Interchange), resulting in 30 injuries. All injuries were slight in nature. A summary of the causation factors is provided below:

- Two accidents resulted from a driver being distracted by the satnav.
- One accident resulted from a poor turn/ manoeuvre.
- Sixteen accidents resulted from drivers failing to judge the speed of the vehicle in front, and failing to look properly, resulting in a rear-end shunt. A number of these accidents involved drivers who were careless/ reckless/ in a hurry.

A34 (west of Wendlebury Interchange)

1.2 One accident occurred on the A34 (west of Wendlebury Avenue). The accident resulted from a driver failing to judge the speed of the vehicle in front, as well as being in a hurry, leading to a rear-end shunt. This resulted in slight injury.

A4095 Howes Lane

1.3 One accident occurred on A4095 Howes Lane, resulting in slight injuries. The collision was due to a driver being distracted by the satnav.

A4095 Lords Lane

1.4 Five accidents occurred along the A4095 Lords Lane, resulting in four serious injuries and one slight injury. A summary of the accidents is provided below:

- A driver failed to judge the speed of the vehicle in front resulting in a rear-end shunt and serious injury.
- A driver left the road, likely due to an illness, resulting in serious injury.
  A car failed to look properly, resulting in serious injury.
- On two occasions a car failed to see a cyclist, resulting in one slight injury and one serious injury.

A4095 Lords Lane/ Lucerne Avenue

1.5 Three accidents occurred at this junction, resulting in three slight injuries and one serious injury:

- A driver failed to look properly and judge another driver's path/ speed, resulting in slight injury.
- A mobility scooter driver who was impaired by alcohol and had defective eyesight entered the road and collided with a vehicle, resulting in one slight injury and one serious injury.
- A slight injury resulted from a poor turn / manoeuvre.

A4095 Southwold Lane

1.6 Three accidents occurred along the A4095 Southwold Lane:

- A car lost control (likely due to fatigue) and hit a cyclist crossing at the junction, resulting in slight jury.
- A cyclist failed to slow at the junction and overshot into the carriageway, resulting in slight injury.
- A motorcyclist turned at the junction at speed and lost control resulting in serious injury.

A4095 Southwold Lane/ Buckingham Road

1.7 Two accidents occurred at the A4095 Southwold Lane / Buckingham Road junction:

- A car passed too closely to a cyclist, resulting in slight injury.
- A driver failed to judge other persons path / speed resulting in slight injury.

A41 (north of Wendlebury Interchange)

1.8 Three accidents occurred in this location:

- Two accidents resulted from drivers failing to judge the speed of the car in front during slow moving traffic, resulting in slight injuries.
- One accident resulted from a pedestrian deliberately stepping out into the carriageway, resulting in serious injury.

A41/ Little Chesterton Track Road

1.9 Two accidents occurred in this location, each resulting in two slight injuries. Both accidents occurred due to the driver travelling too fast and driving aggressively.

A41/ Vendee Drive/ Charles Shouler Way Roundabout

1.10 A total of 11 accidents occurred at this roundabout, resulting in 17 injuries. There were three fatalities, three serious injuries and 11 slight injuries.

- Two fatalities occurred when a car travelling at excess speed and driving poorly entered the roundabout, failed to give way and mounted the roundabout central island. The accident occurred in daylight, with rainy conditions.
- One fatality and one serious injury occurred when a driver, impaired by drugs and alcohol, collided with the roundabout whilst speeding.
- Two slight injuries occurred when a motorcyclist clipped the kerb and lost control,
- Four slight injuries occurred when a car stopped on the roundabout as the driver was unsure which exit to take, resulting in a rear-end shunt.
- A vehicle pulled over to allow an emergency vehicle to pass and the following vehicle failed to look and collided with the rear, resulting in slight injury.
- A driver was impaired with alcohol and lost control resulting in slight injury.
- A tractor clipped the kerb and overturned resulting in serious injury.
- An emergency vehicle, travelling fast in pursuit, failed to negotiate roundabout, resulting in slight injury.
- A car undertook a poor turn/ manoeuvre and lost control, resulting in serious injury.
- A car in the wrong lane changed lane without looking, resulting in slight injury.
- A speeding vehicle failed to slow down, resulting in a rear end shunt and slight injury.

A43

1.11 Five accidents occurred on the A43 link, resulting in nine injuries:

- Three accidents resulted from drivers failing to judge the speed of the vehicle in front, and failing to look properly, resulting in a rear-end shunt. These accidents resulted in three slight injuries and one serious injury.
- A vehicle exceeding the speed limit and following too closely changed lane and collided with another vehicle, resulting in four slight injuries.
- A driver undertook a poor manoeuvre to change lanes, resulting in serious injury.

A43/ Banbury Road

1.12 Nine accidents occurred at this junction, resulting in 15 injuries:

- Three accidents resulted from drivers undertaking a poor turn/manoeuvre. One of these accidents resulted in three slight injuries, and the other two each resulted in one slight injury.
- Two accidents occurred whereby the driver was using their mobile phone and failed to look properly. One of these accidents resulted in four slight injuries and the other resulted in one serious injury.
- Three accidents resulted from drivers failing to judge the speed of the vehicle in front, and failing to look properly, resulting in a rear-end shunt. These accidents resulted in four slight injuries.
- One accident occurred when a driver fell asleep and hit a lamp column, resulting in a slight injury.

B4100

1.13 One accident occurred on the B4100 link whereby a driver failed to judge the path and speed of the vehicle in front due to dazzling sun, resulting in two slight injuries.

B4100 Banbury Road/ A4095 Lords Lane

1.14 Five accidents occurred at this junction, resulting in seven slight injuries. All accidents resulted from cars failing to look properly and to give-way to oncoming traffic. Two of the accidents involved a pedal cyclist and one accident involved a motorcyclist.

Banbury Road

1.15 Seven accidents occurred along Banbury Road, resulting in 12 injuries:

- One fatality occurred whereby a cyclist (no lights and wearing dark clothes) was hit by a car.
- Four slight injuries resulted from a car attempting to overtake with limited visibility, into the path of an oncoming vehicle.
- Two accidents occurred due to the drive being distracted (one by a mobile phone and one by an itch), both resulting in slight injury.
- Two accidents occurred due to a driver failing to judge the speed of the vehicle in front, resulting in a rear end shunt. One resulted in three slight injuries, and one resulted in one slight injury.
- A driver in a hurry lost control due to slippery road (wet weather), resulting in a serious injury.

Buckingham Road

1.16 Two accidents occurred on Buckingham Road:

- A cyclist crossed the road at a closed crossing and an oncoming car failed to give way, resulting in slight injury.
- A pedestrian jogging did not look at the crossing (which was on a red light) and ran into an oncoming car, resulting in serious injury.

Buckingham Road/ Skimmingdish Lane

1.17 Three accidents occurred at the Buckingham Road/ Skimmingdish Lane junction, resulting in six injuries, all slight in nature. The causation factors are summarised below:

- An emergency vehicle on call attempted to overtake a vehicle, which failed to give way.
- A car failed to look properly and changed lane into a motorcyclist.
- A rear end shunt due to sudden braking and following too closely.

Cranesbill Drive

1.18 One accident occurred on Cranesbill Drive, whereby a driver failed to look properly due to waving at a pedestrian, resulting in a rear-end shunt and slight injury.

Fringford Road

1.19 One accident occurred on Fringsford Road, whereby a car travelling around a bend skidded on black ice and lost control, resulting in slight injury.

Howes Lane/ Bucknell Road

1.20 One accident occurred at the Howes Lane/ Bucknell Road junction due to a car failing to give way to a motorcyclist, resulting in slight injury.

M40

1.21 45 accidents occurred on the M40 within the latest five years of PIA data, resulting in 69 injuries. There were two fatalities, 13 serious injuries and 54 slight injuries. The causation factors are summarised below:

- A fatality occurred when a car, overloaded with passengers and luggage, lost control, hit the central refuge and left the carriageway. This accident also resulted in three serious injuries and one slight injury.
- A fatality occurred when a driver veered off the carriageway and hit a CCTV pole. It was likely due to fatigue or illness/disability.
- One accident occurred due to the driver being impaired with alcohol.
- Five accidents occurred because the driver fell asleep.
- Five accidents occurred because the driver failed to look properly before changing lanes.
- 24 accidents occurred whereby the driver failed to look properly, or judge the speed of the vehicle in front, resulting in a rear-end shunt (a driver was using their mobile phone, or was careless/in a hurry during several of these accidents).
- Three accidents occurred due to loss of control in wet conditions.
- One accident occurred because the tyres were illegal / defective / under inflated.
- One accident occurred because a nervous driver lost control.

- One accident occurred due to a driver skidding and hitting a tree (due to being careless/reckless/in a hurry).
- An HGV lost control and overturned due to a suspected medical reason.
- An HGV veered inside side of adjacent vehicle, possible due to a distraction in the vehicle / defective steering or suspension or overloaded /poorly loaded vehicle.

M40 NB Off-Slip onto Ardley Roundabout

1.22 One accident occurred on the M40 off-slip onto Ardley roundabout, likely due to drugs (illicit or medical) and fatigue, resulting in slight injury.

M40 Off-Slip to A41

1.23 Two accidents occurred on the M40 off-slip to the A41. Both accidents were due to driver failure to judge the speed of the vehicle in front, resulting in rear-end shunts. One accident resulted in three slight injuries and the other resulted in one serious injury.

M40 On-Slip from A41

1.24 One accident occurred on the M40 on-slip from the A41, due to a driver failing to look properly and judge the speed of the vehicle in front, resulting in two slight injuries.

M40 SB Off-Slip/ A43

1.25 Four accidents occurred at the junction between the M40 southbound off-slip and the A43, all resulting in slight injuries:

- A driver lost control on a diesel spillage.
- A driver was distracted (suspected mobile phone use), resulting in a rear end shunt.
- An HGV overturned negotiating the roundabout, likely due to being careless/in a hurry.

M40 SB Off-slip on to A43

1.26 One accident occurred due to a slippery road (wet weather) and failure to look properly, resulting in rear end shunt and two slight injuries.

Vendee Drive/ A4095

1.27 One accident occurred at this junction whereby a driver failed to look properly and collided with a cyclist, resulting in slight injury.

Vendee Drive/ Middleton Stoney Road Roundabout

1.28 Two accidents occurred at this roundabout, both resulting in slight injury:

- The driver was careless/ reckless/ in a hurry, skidded and lost control.
- A driver failed to give way due to being careless/ reckless/ in a hurry.

Wendlebury Interchange

1.29 A total of 14 accidents occurred at the Wendlebury Interchange, resulting in 21 injuries. Of the injuries, one was serious and 20 were slight in nature:

- One accident occurred due to defective traffic signals.
- Seven accidents occurred due to drivers undertaking a poor turn / manoeuvre and failing to look properly. One of these occurred because an HGV driver had inexperience with driving on the left.
- Six accidents occurred whereby the driver failed to look properly, or judge the speed of the vehicle in front, resulting in a rear-end shunt

Wendlebury Road

1.30 One accident occurred on Wendlebury Road, whereby a cyclist was travelling too fast down the hill and lost control, resulting in serious injury.

Wendlebury Road/ A41

1.31 Two accidents occurred at the Wendlebury/ A41 junction:

- A driver made a left turn too fast and lost control (left carriageway and hit a tree), resulting in one slight injury and one serious injury.
- A driver failed to give way resulting in slight injury.

D Parameter Plans and Indicative Car Park Layout

NOTES:

1. Do not scale from this drawing for construction purposes.
2. All dimensions are to be checked on site.
3. This drawing is to be read in conjunction with all other Tate + Co and relevant consultants' drawings and information.
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KEY:

- Planning Application Boundary
- Hotels
- Show Park Area
- Transport Interchange and Car Park
- Amenity Grassland
- Structural Landscape Area
- Existing Ancient Woodlands (with buffer zone shown surrounding in white) **No Proposed Use.**
- Highways Works

rev	date	amendment	by	approved
A	2025.08.20	For Information		

N

0 50M 100M 250M 500M

SCALE: 1:5000 @ A1

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Owner

drawing title

Parameter Plan 01 - Proposed Land Use Plan

scale	As indicated @ A1		A1
status	Planning	**job no.** PDF_UK	
drawing no.			**revision**
PDF_UK-TCA-DR-AR-02-0101			A

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KEY:

- Planning Application Boundary
- Internal Road Network (All park vehicles)
- Service Road (Authorised access only)
- Visitor Parking Area
- Public Vehicular Access Point
- Service Vehicular Access Point

rev	date	amendment	by	approved
A	2025.08.20	For Information		

0 50M 100M 250M 500M

SCALE: 1:5000 @ A1

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E studio@tateandco.com

job title

Puy du Fou, UK

Owner

drawing title

Parameter Plan 02 - Access and Movement - Vehicles and Service

scale	As indicated @ A1		A1
status	Planning	**job no.** PDF_UK	
drawing no.			**revision**
PDF_UK-TCA-DR-AR-02-0102			A

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4. This drawing is copyright.

KEY:

- Planning Application Boundary
- Existing PROW
- Existing PROW to be Diverted
- Proposed Diverted PROW (Bridleway)
- New Footway / Cycleway

rev	date	amendment	by	approved
A	2025.08.20	For Information		

N

0 50M 100M 250M 500M

SCALE: 1:5000 @ A1

TATE + CO

Unit G1 B2 Stamford Works
3 Gillet Street
London N16 8JH

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E studio@tateandco.com

job title

Puy du Fou, UK

Owner

drawing title

Parameter Plan 03 - Access and Movement - Footpaths, Footways and Cycle Routes

scale	As indicated @ A1			A1
status	Planning	**job no.**	PDF_UK	
drawing no.				**revision**
PDF_UK-TCA-DR-AR-02-0103				A

NOTES:

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KEY:

- Planning Application Boundary
- Site Level
  Access Roads include 8 - 12m tall lighting poles which exceed the height datum
- Structural Landscape Bund (heights vary)
- 5m Above Ground Level
  Visitor Car Parking Areas include 8 - 12m tall lighting poles which exceed the height datum
- 12m Above Ground Level
- 15m Above Ground Level
- 18m Above Ground Level
- 20m Above Ground Level
- 25m Above Ground Level
- 27m Above Ground Level

rev	date	amendment	by	approved
A	2025.08.20	For Information		

N

0 25M 50M 125M 250M

SCALE: 1:2500 @ A1

TATE + CO

Unit G1 B2 Stamford Works
3 Gillet Street
London N16 8JH

T +44 (0)20 7241 7481
E studio@tateandco.com

job title

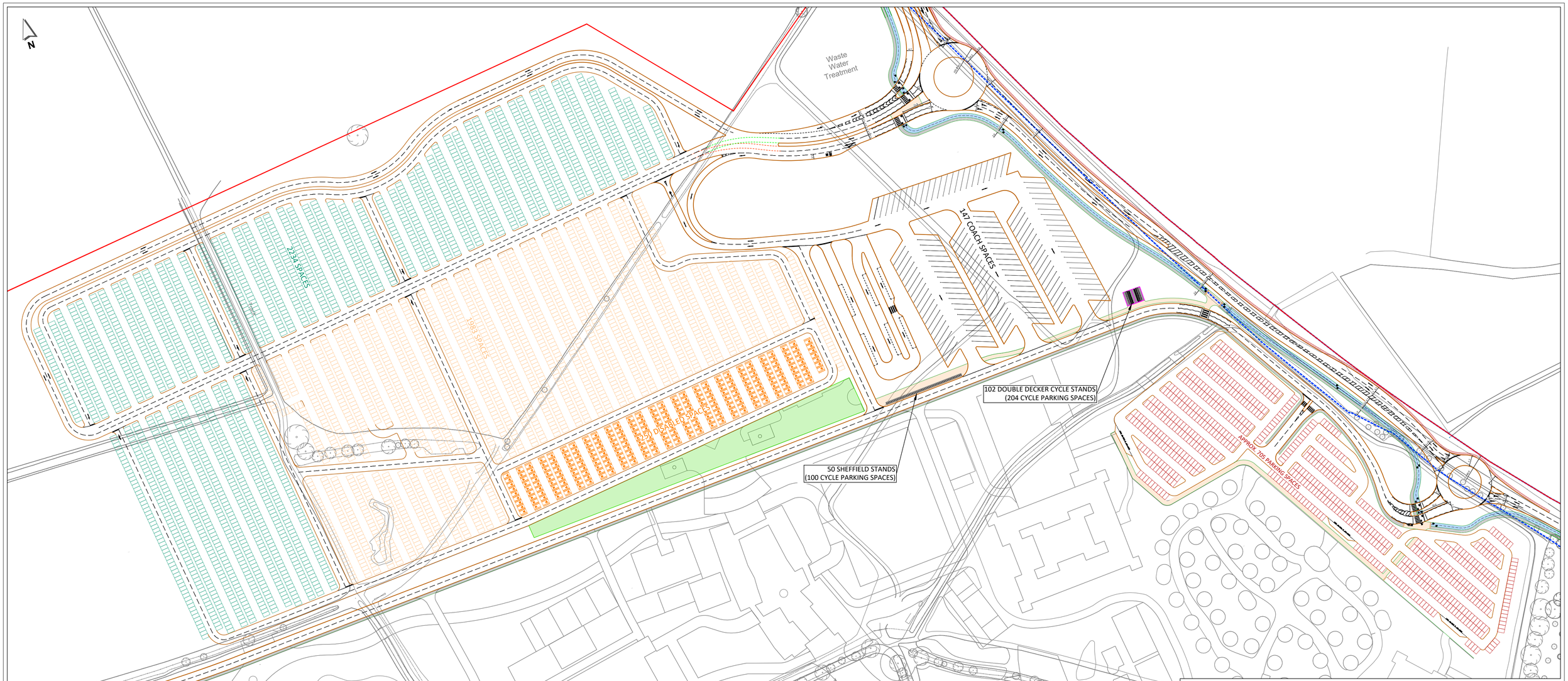
Puy du Fou, UK

Owner

drawing title

Parameter Plan 04 - Proposed Scale and Massing Plan

scale	As indicated @ A1		A1
status	Planning	**job no.** PDF_UK	
drawing no.			**revision**
PDF_UK-TCA-DR-AR-02-0104			A



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KEY:

- EXISTING TOPO SURVEY/OS MAPPING
- EXISTING HIGHWAY BOUNDARY
- PROPOSED SITE BOUNDARY
- PROPOSED KERBLINE
- PROPOSED EDGING
- EXISTING ROAD MARKINGS
- PROPOSED ROAD MARKINGS
- PROPOSED FOOTWAY
- PROPOSED HORSE-RIDING ROUTE
- PROPOSED CYCLE TRACK
- PROPOSED SHARED FOOTWAY
- PROPOSED EQUESTRIAN CROSSING HOLDING AREA FENCING
- EXISTING HEDGES
- INDICATIVE VERGE BUFFER ZONE

REV	DATE	DESCRIPTION	DES	CHK	APP
A	19AUG25	ORIGINAL ISSUE	ANI	JZC	JWL

steer

www.steergroup.com

Client: PUY DU FOU UK LIMITED

Project Title: PUY DU FOU UK

Drawing Title: INDICATIVE CAR PARKING LAYOUT

Status: FIT FOR INFORMATION

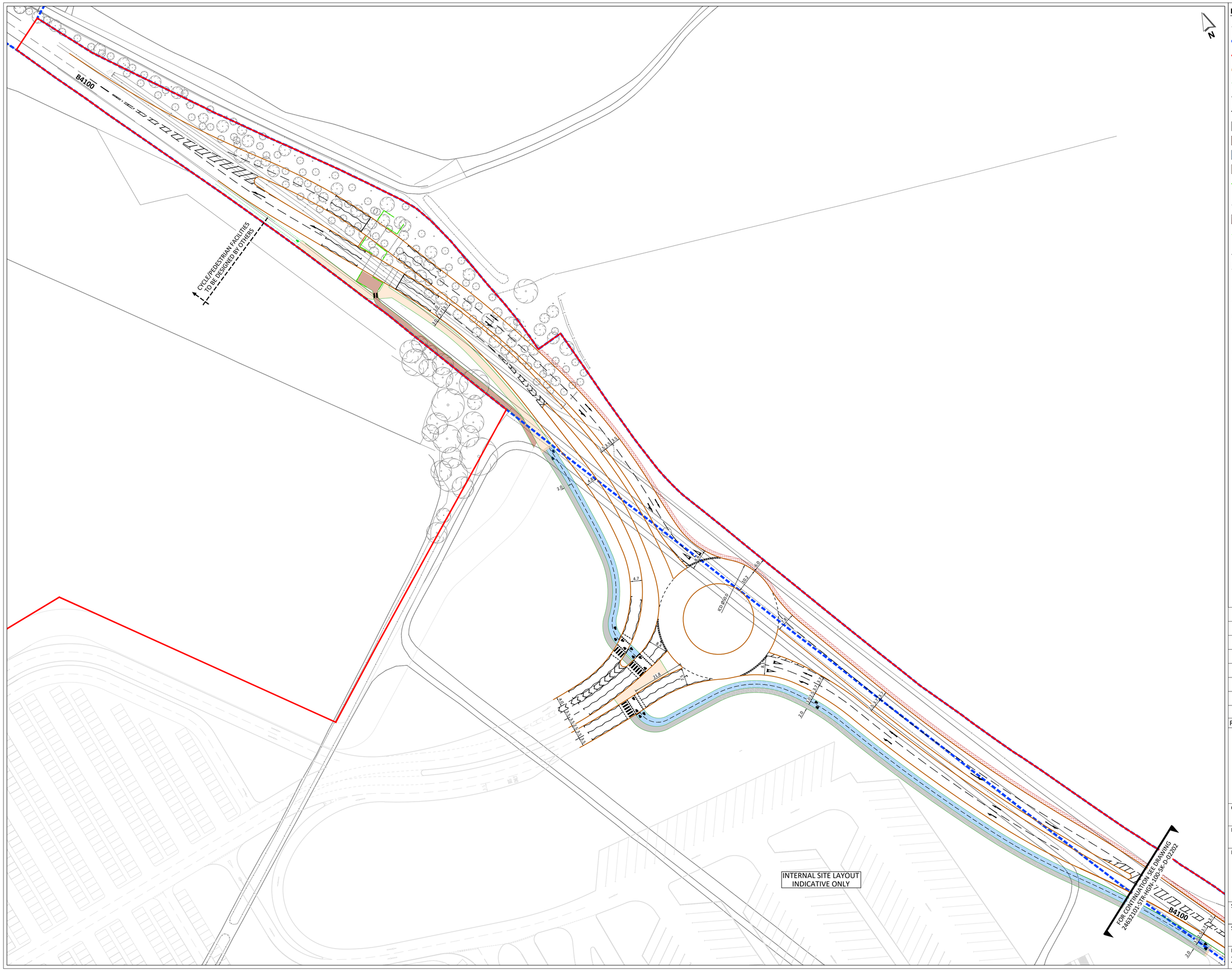
Size:	Scale:	Suitability	Rev.
A1	NTS	S2	A

Drawing No. 24632101-STR-HGN-100-SK-D-01901

CAD REFERENCE: U:\London\Projects\24632101\CAD\Drawings\24632101-STR-HGN-100-SK-D-019 - 01901

DATE: 15/OCT/2025

E Site Access Arrangements



KEY:

- EXISTING TOPO SURVEY/OS MAPPING
- EXISTING HIGHWAY BOUNDARY
- PROPOSED SITE BOUNDARY
- PROPOSED KERBLINE
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- PROPOSED SHARED FOOTWAY
- PROPOSED EQUESTRIAN CROSSING HOLDING AREA FENCING
- EXISTING HEDGES
- INDICATIVE VERGE BUFFER ZONE
- EXISTING TREES/PLANTING BASED ON ARBORICULTURAL SURVEY

NOTES:

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REV	DATE	DESCRIPTION	DES	CHK	APP
A	19AUG25	ORIGINAL ISSUE	ANI	CJM	JWL

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Client: PUY DU FOU UK LIMITED

Project Title: PUY DU FOU UK

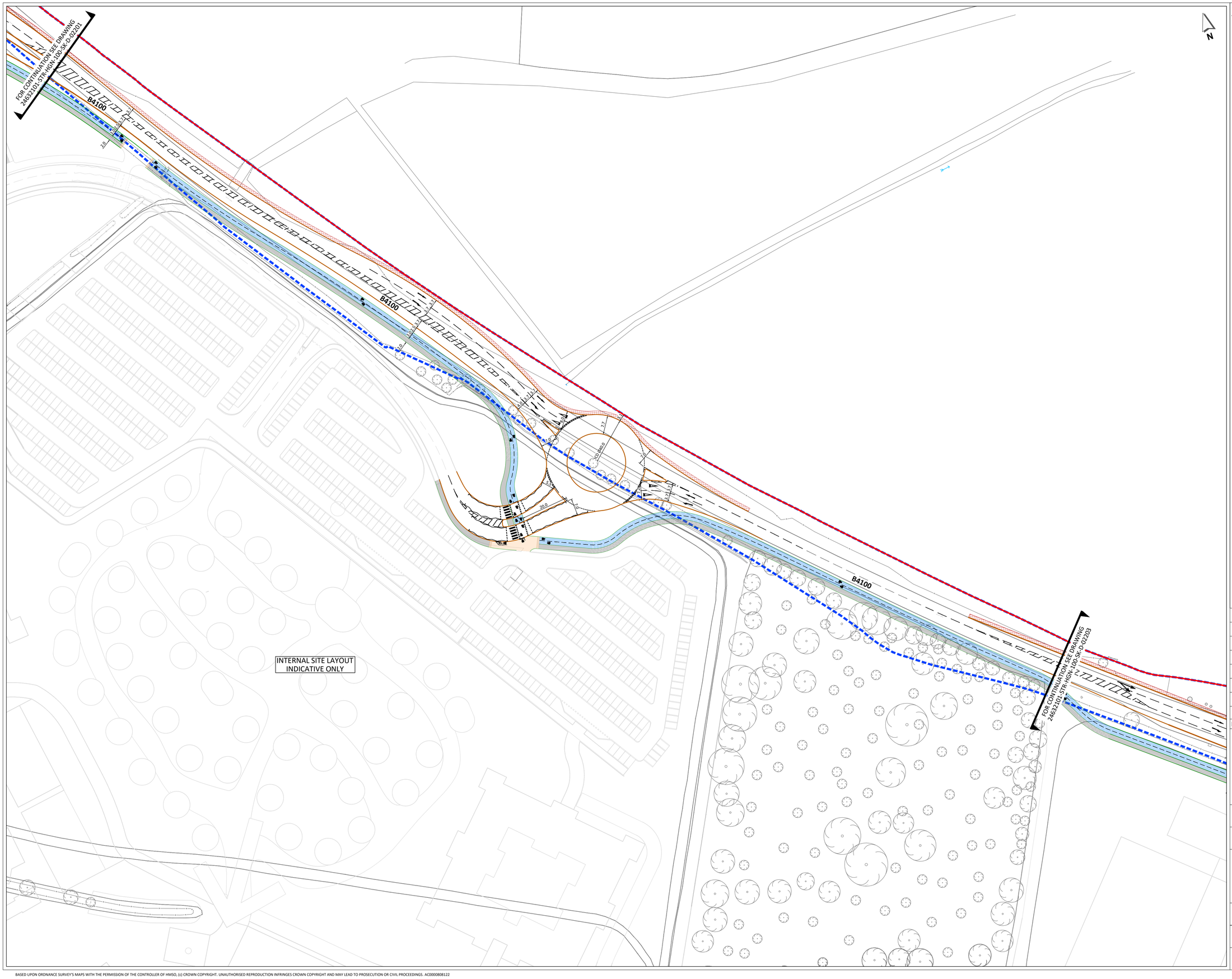
Drawing Title: PROPOSED SITE ACCESS LAYOUT SHEET 1 OF 3

Status: FIT FOR INFORMATION

Size:	Scale:	Suitability	Rev.
A1	NTS	S2	A

Drawing No. 24632101-STR-HGN-100-SK-D-02201

DATE: 19/08/2025 CAD REFERENCE: U:\London\Projects\249\5\21\DT\CAD\Drawings\24632101-STR-HGN-100-SK-D-022 - 02201



KEY:

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REV	DATE	DESCRIPTION	DES	CHK	APP
A	19AUG25	ORIGINAL ISSUE	ANI	CJM	JWL

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Client: PUY DU FOU UK LIMITED

Project Title: PUY DU FOU UK

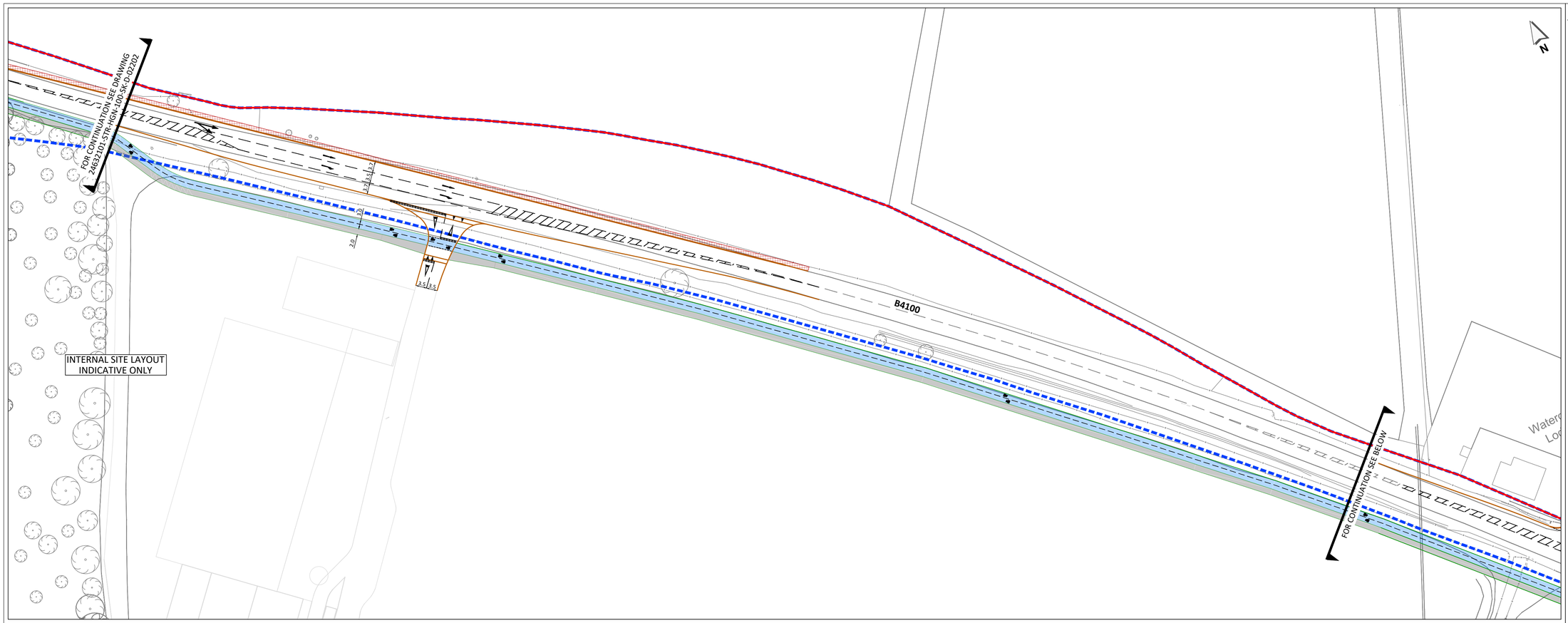
Drawing Title: PROPOSED SITE ACCESS LAYOUT SHEET 2 OF 3

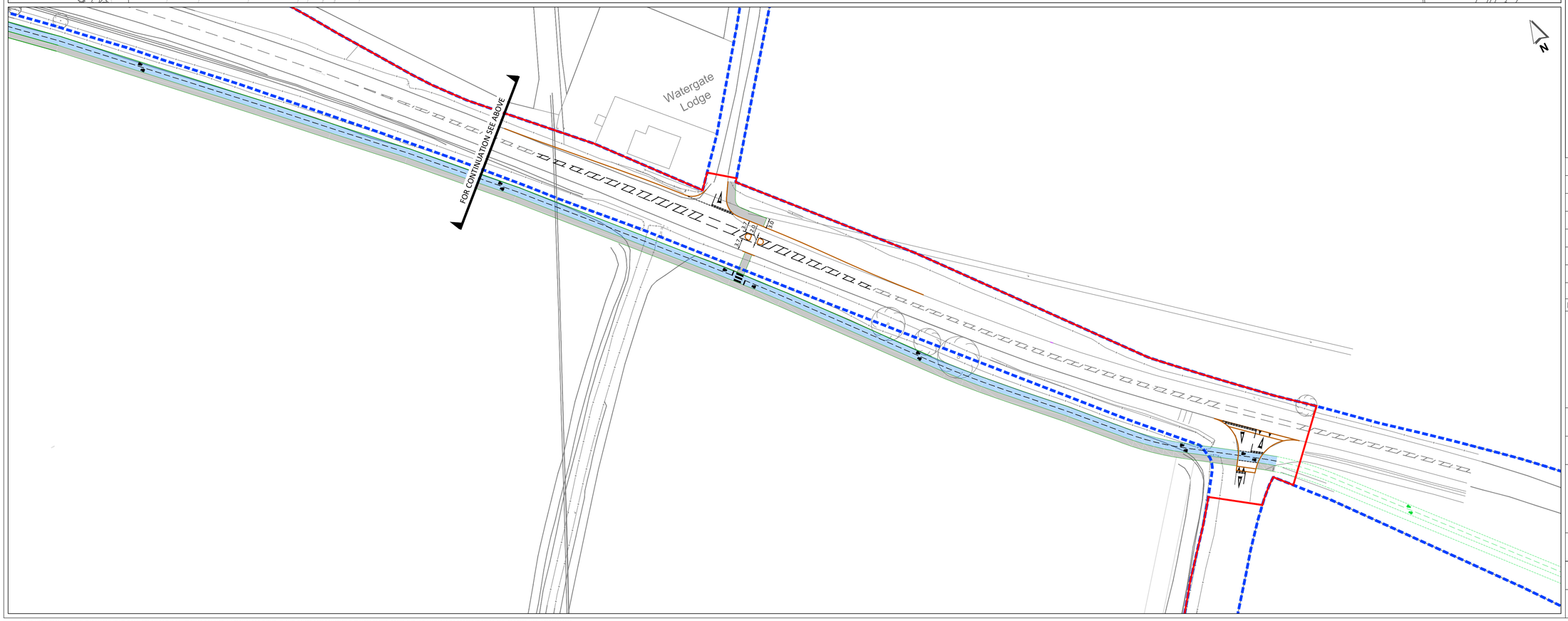
Status: FIT FOR INFORMATION

Size:	Scale:	Suitability	Rev.
A1	NTS	S2	A

Drawing No. 24632101-STR-HGN-100-SK-D-02202

DATE: 19/08/2025 CAD REFERENCE: U:\London\Projects\249\3\21\01\CAD\Drawings\24632101-STR-HGN-100-SK-D-022 - 02202





KEY:

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REV	DATE	DESCRIPTION	DES	CHK	APP
A	19AUG25	ORIGINAL ISSUE	ANI	CJM	JWL

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Client: PUY DU FOU UK LIMITED

Project Title: PUY DU FOU UK

Drawing Title: PROPOSED SITE ACCESS LAYOUT SHEET 3 OF 3

Status: FIT FOR INFORMATION

Size:	Scale:	Suitability	Rev.
A1	NTS	S2	A

Drawing No. 24632101-STR-HGN-100-SK-D-02203

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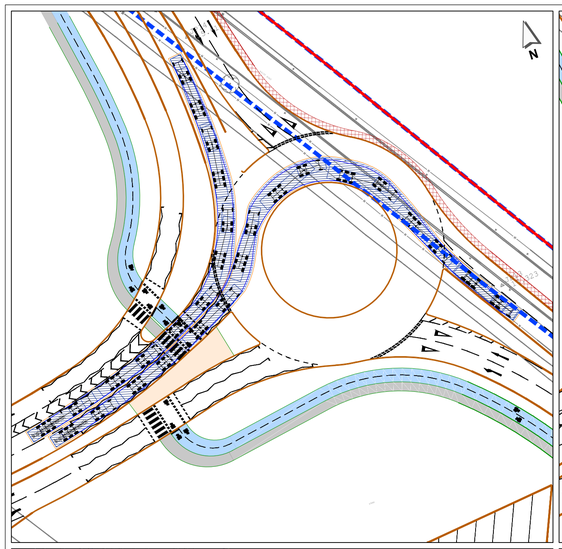
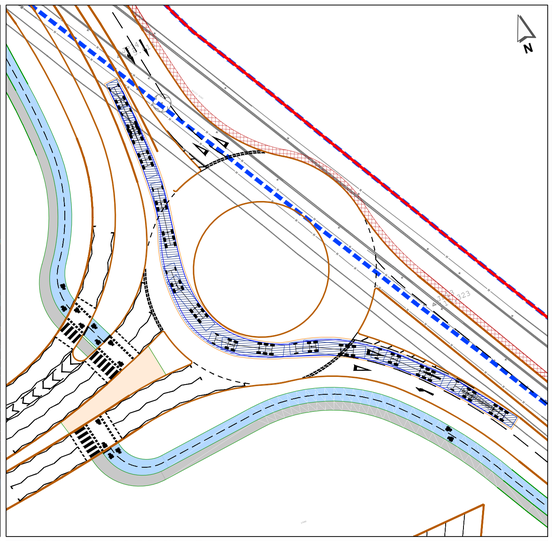
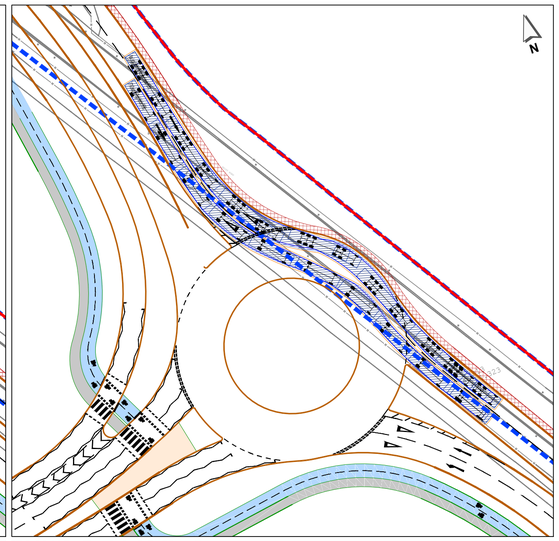
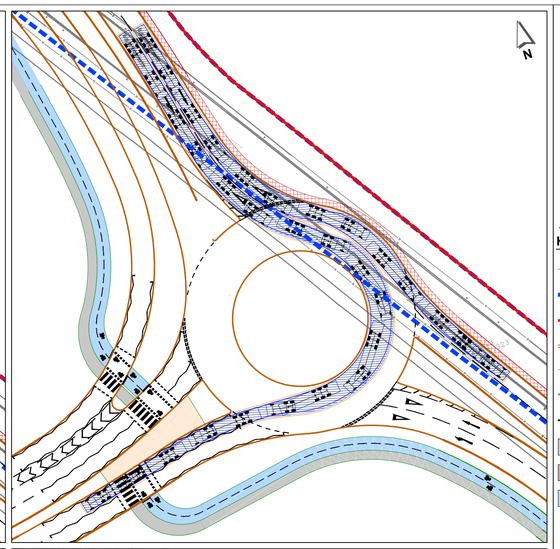
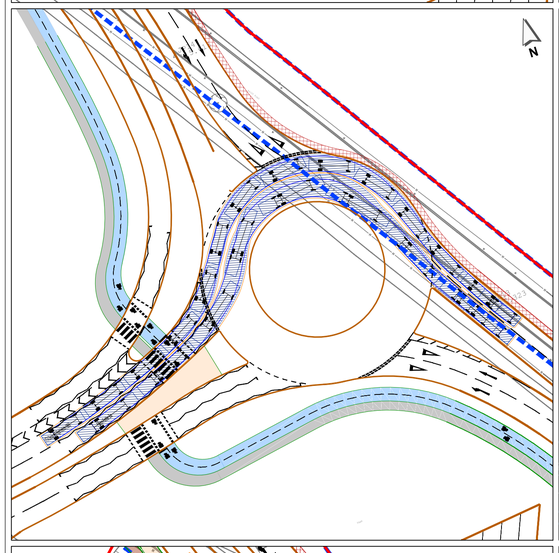
DATE: 19/08/2025

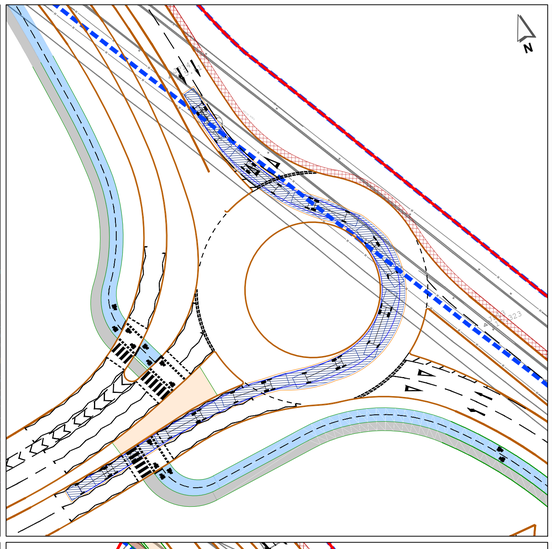


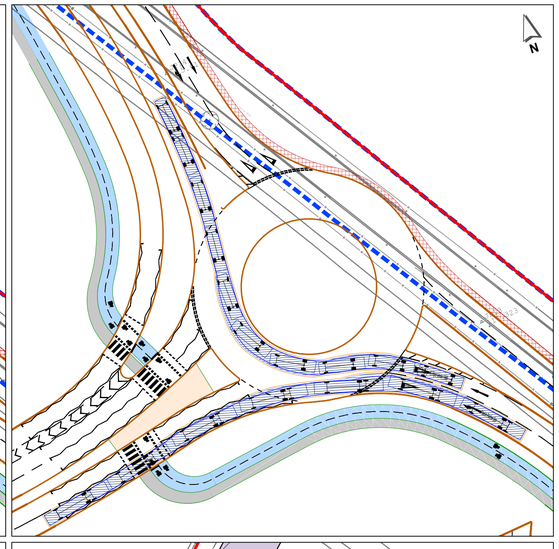


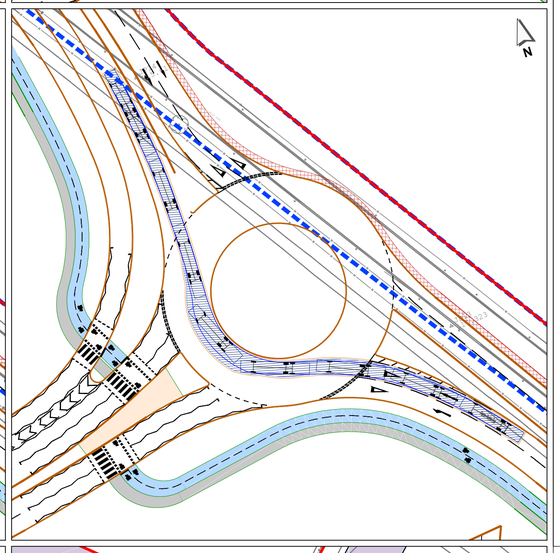


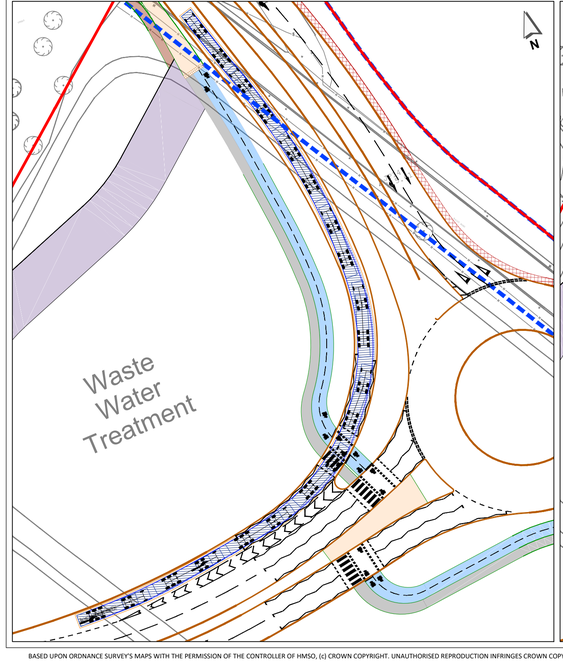


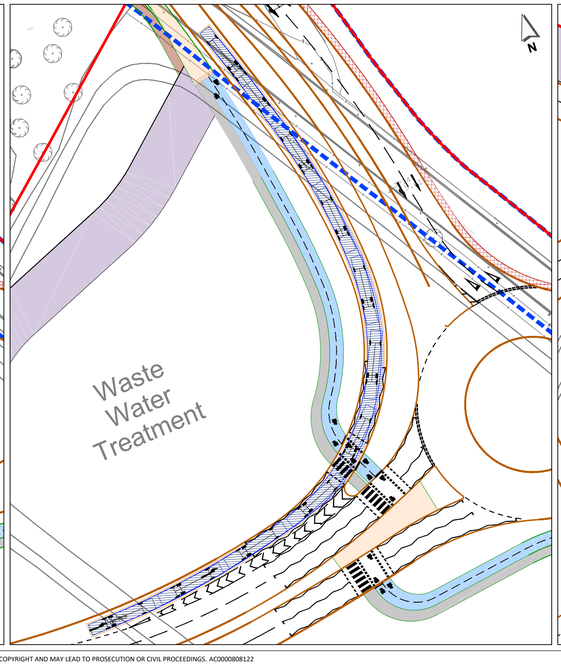


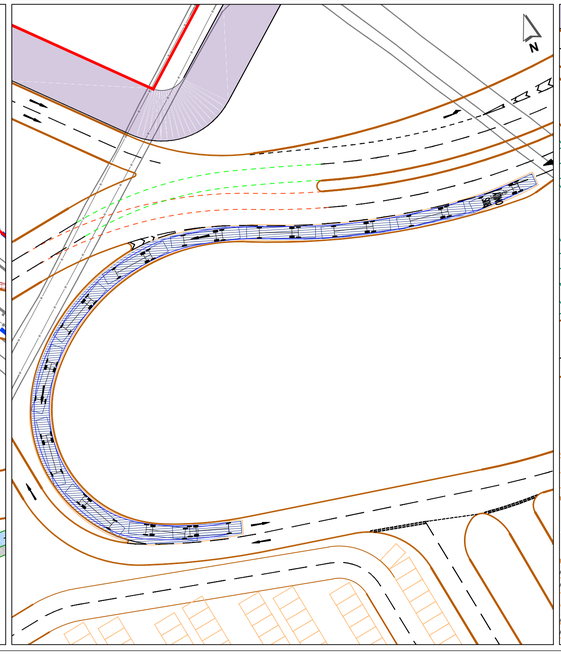


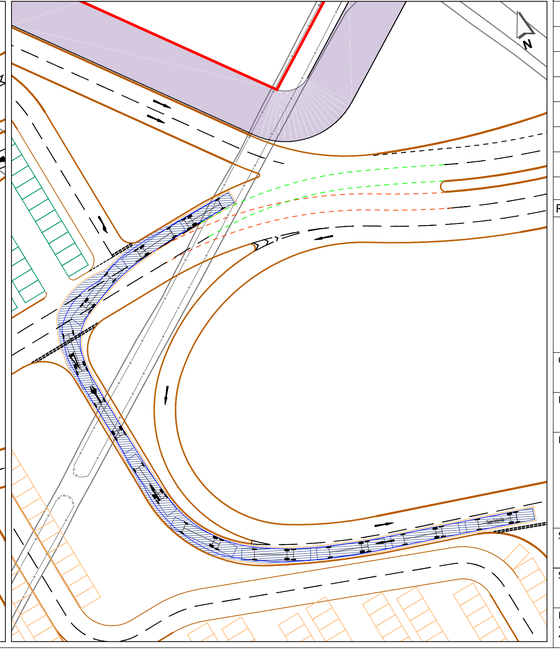












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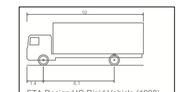
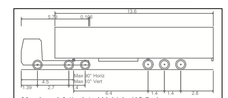
- PROPOSED HORSE-RIDING ROUTE
- PROPOSED CYCLE TRACK



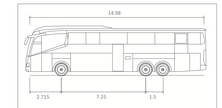
FTA Design HG Rigid Vehicle (1998)

Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to Lock Time	3.00s
Kerb to Kerb Turning Radius	11.000m



Max Legal Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.500m
Overall Body Height	3.632m
Min Body Ground Clearance	0.396m
Track Width	2.500m
Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	6.870m



Plaxton Panther Bus

Overall Length	15.000m
Overall Width	2.500m
Overall Body Height	4.157m
Min Body Ground Clearance	0.397m
Track Width	2.500m
Lock to Lock Time	5.00s
Wall to Wall Turning Radius	12.500m

REV	DATE	DESCRIPTION	DES	CHK	APP
A	19AUG25	ORIGINAL ISSUE	ANI	CJM	JWL

steer

www.steergroup.com

Client: PUY DU FOU UK LIMITED

Project Title: PUY DU FOU UK

Drawing Title: PROPOSED SWEPT PATH ANALYSIS

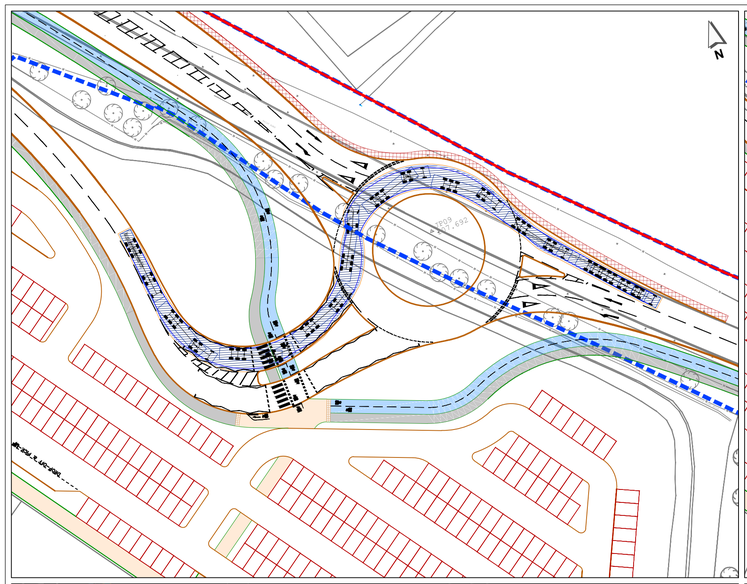
Status: FIT FOR INFORMATION

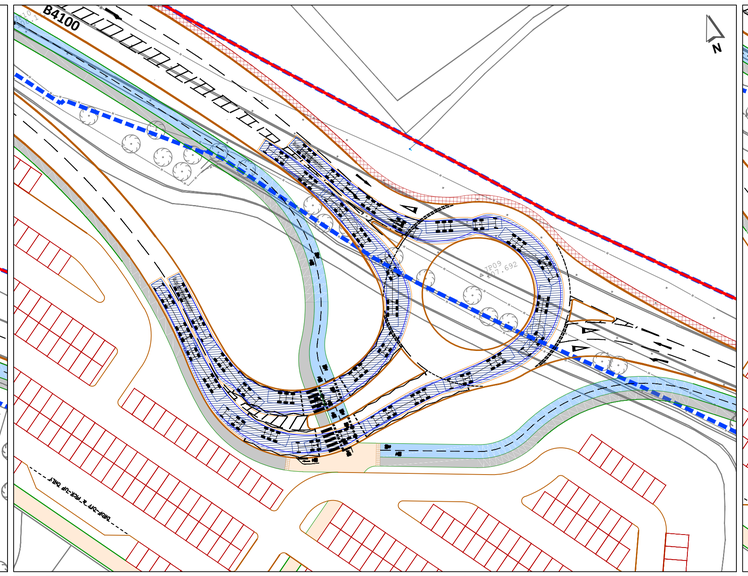
Size:	Scale:	Suitability	Rev.
A1	NTS	S2	A

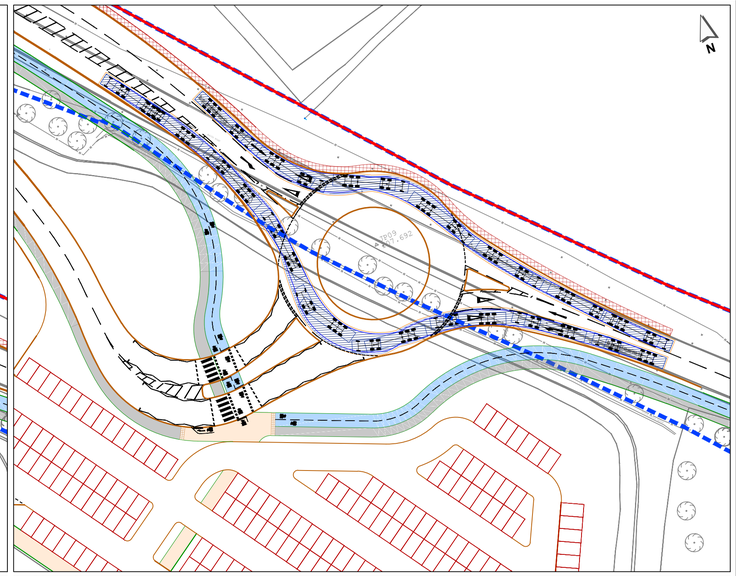
Drawing No. 24632101-STR-HGN-100-SK-D-02401

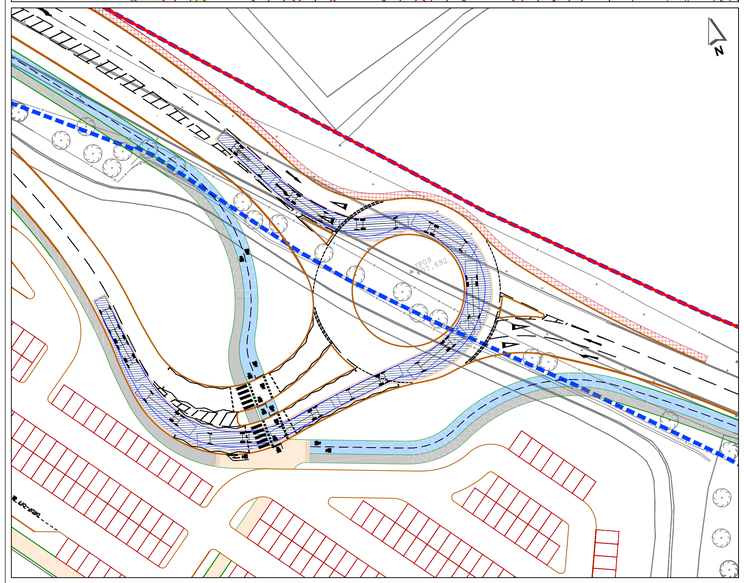
CAD REFERENCE: U:\London\Projects\24632101\CAD\Drawings\24632101-STR-HGN-100-SK-D-0224 - 02401

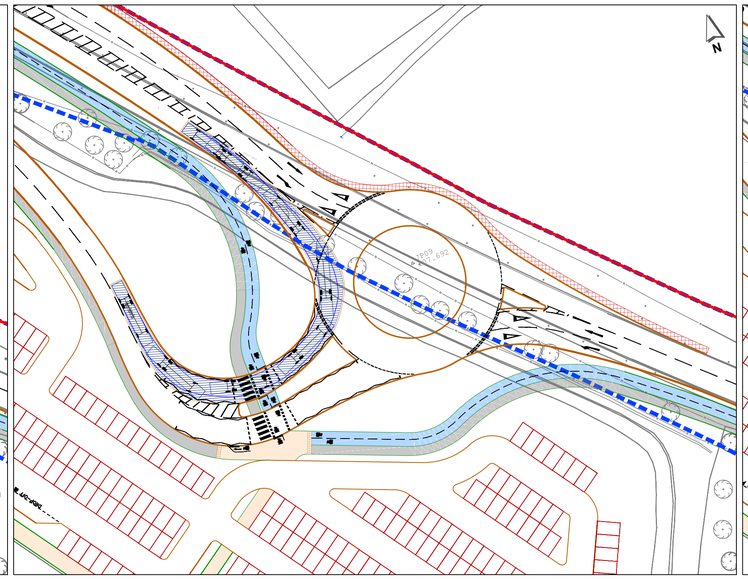
DATE: 26/08/2025

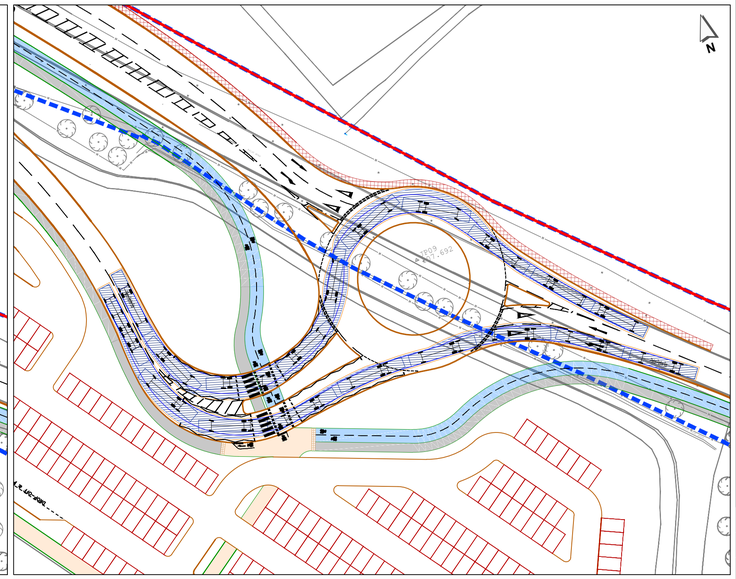


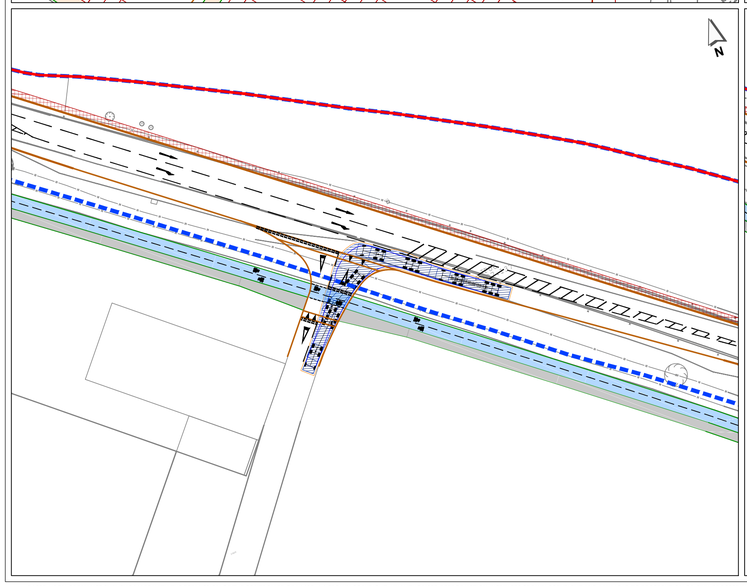


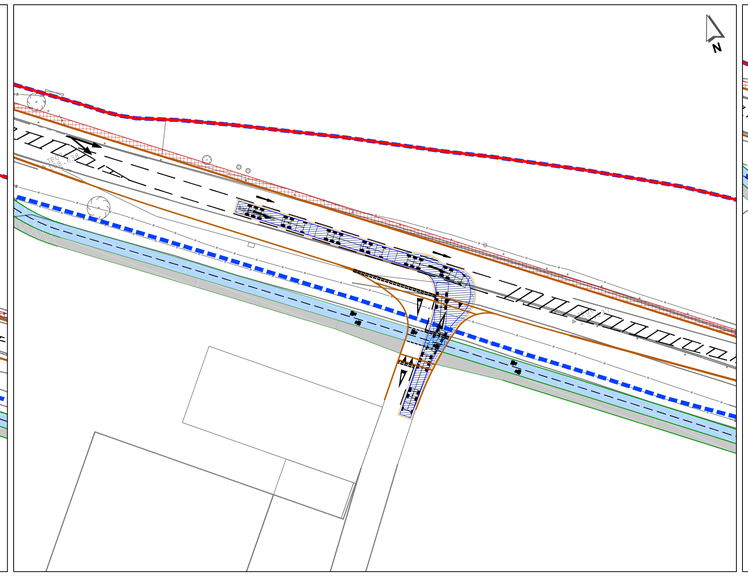


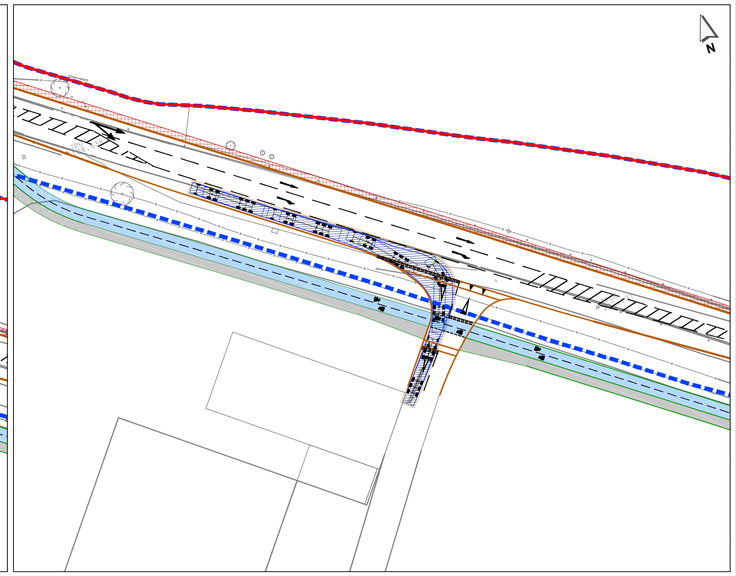












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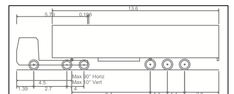
- PROPOSED EDGING
- EXISTING ROAD MARKINGS
- PROPOSED ROAD MARKINGS
- PROPOSED FOOTWAY
- PROPOSED HORSE-RIDING ROUTE
- PROPOSED CYCLE TRACK



Max Legal Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.500m
Overall Body Height	3.632m
Min Body Ground Clearance	0.396m
Track Width	2.500m
Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	6.870m

Plaxton Panther Bus

Overall Length	15.000m
Overall Width	2.500m
Overall Body Height	4.157m
Min Body Ground Clearance	0.397m
Track Width	2.500m
Lock to Lock Time	5.00s
Wall to Wall Turning Radius	12.500m

REV	DATE	DESCRIPTION	DES	CHK	APP
A	19AUG25	ORIGINAL ISSUE	ANI	CJM	JWL

steer

www.steergroup.com

Client: PUY DU FOU UK LIMITED

Project Title: PUY DU FOU UK

Drawing Title: PROPOSED SWEPT PATH ANALYSIS

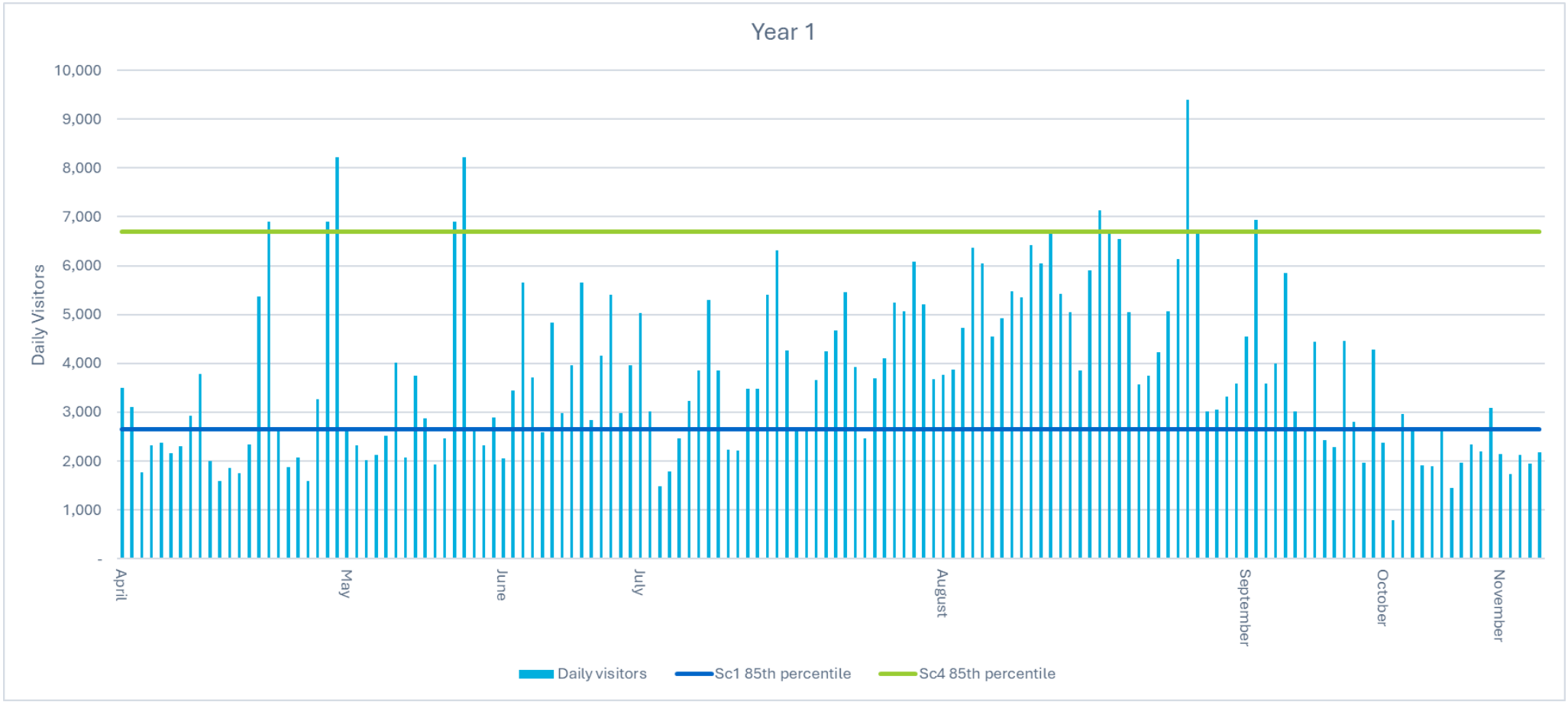
Status: FIT FOR INFORMATION

Size:	Scale:	Suitability	Rev.
A1	NTS	S2	A

Drawing No. 24632101-STR-HGN-100-SK-D-02402

DATE: 26/08/2025 CAD REFERENCE: I:\London\Projects\246\31\01\CAD\Drawings\24631101-STR-HGN-100-SK-D-024 - 02402

F Daily Visitors Above 85th Percentile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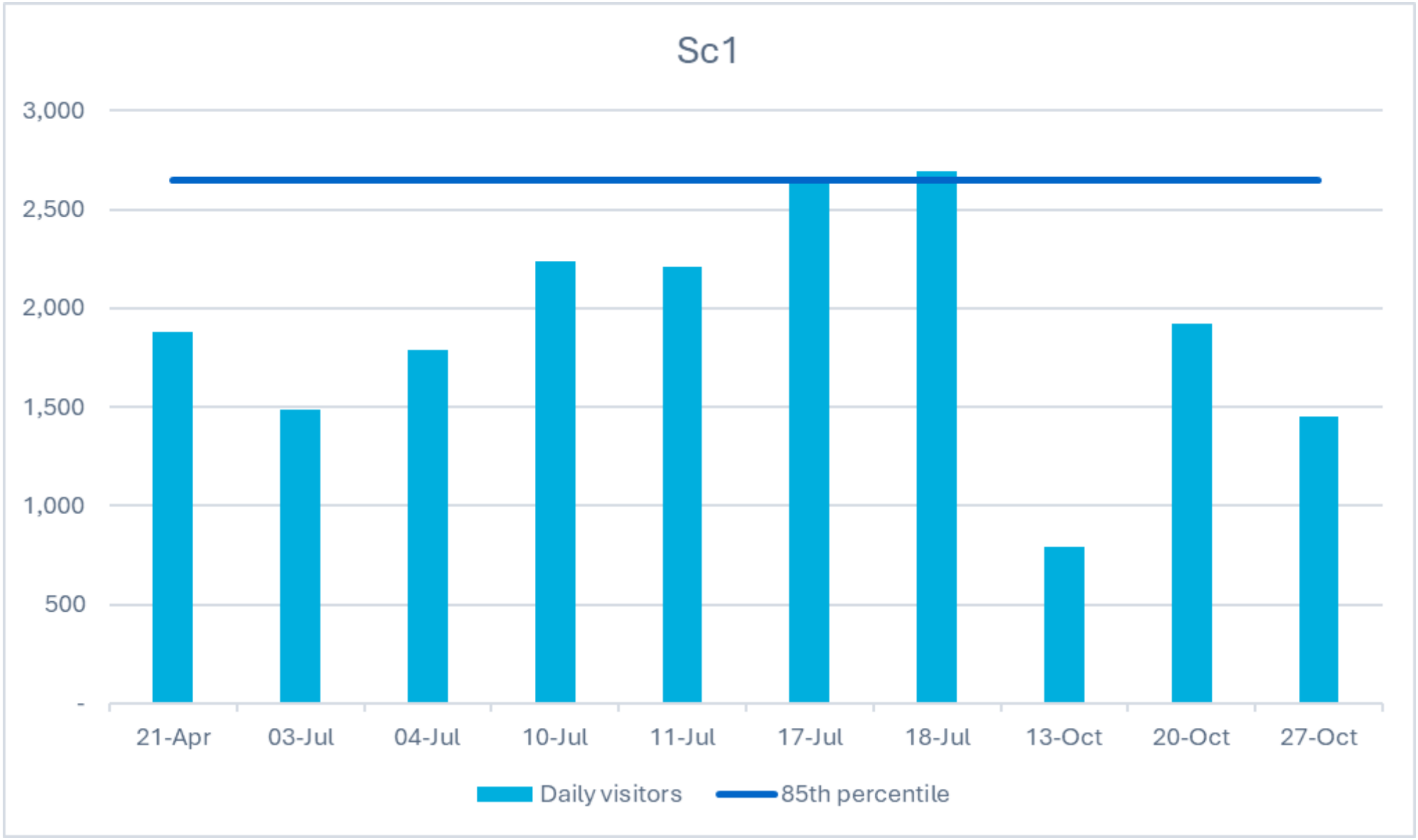
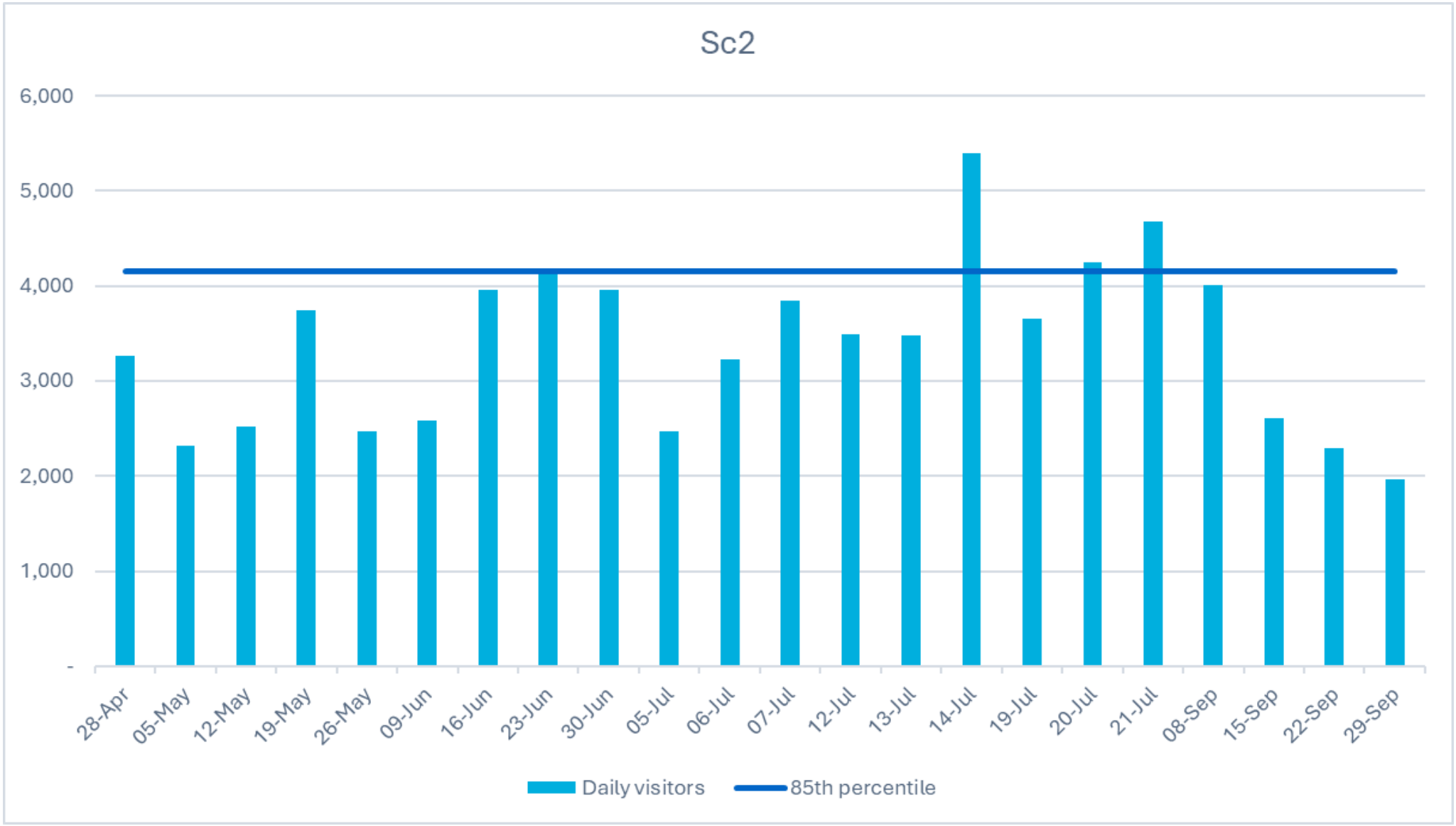
Daily Visitors
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
April
May
June
July
August
September
October
November
Daily visitors
Sc1 85th percentile
Sc4 85th percentile


Sc1
3,000
2,500
2,000
1,500
1,000
500
-
21-Apr
03-Jul
04-Jul
10-Jul
11-Jul
17-Jul
18-Jul
13-Oct
20-Oct
27-Oct
Daily visitors
85th percentile


Sc2
6,000
5,000
4,000
3,000
2,000
1,000
-
28-Apr
05-May
12-May
19-May
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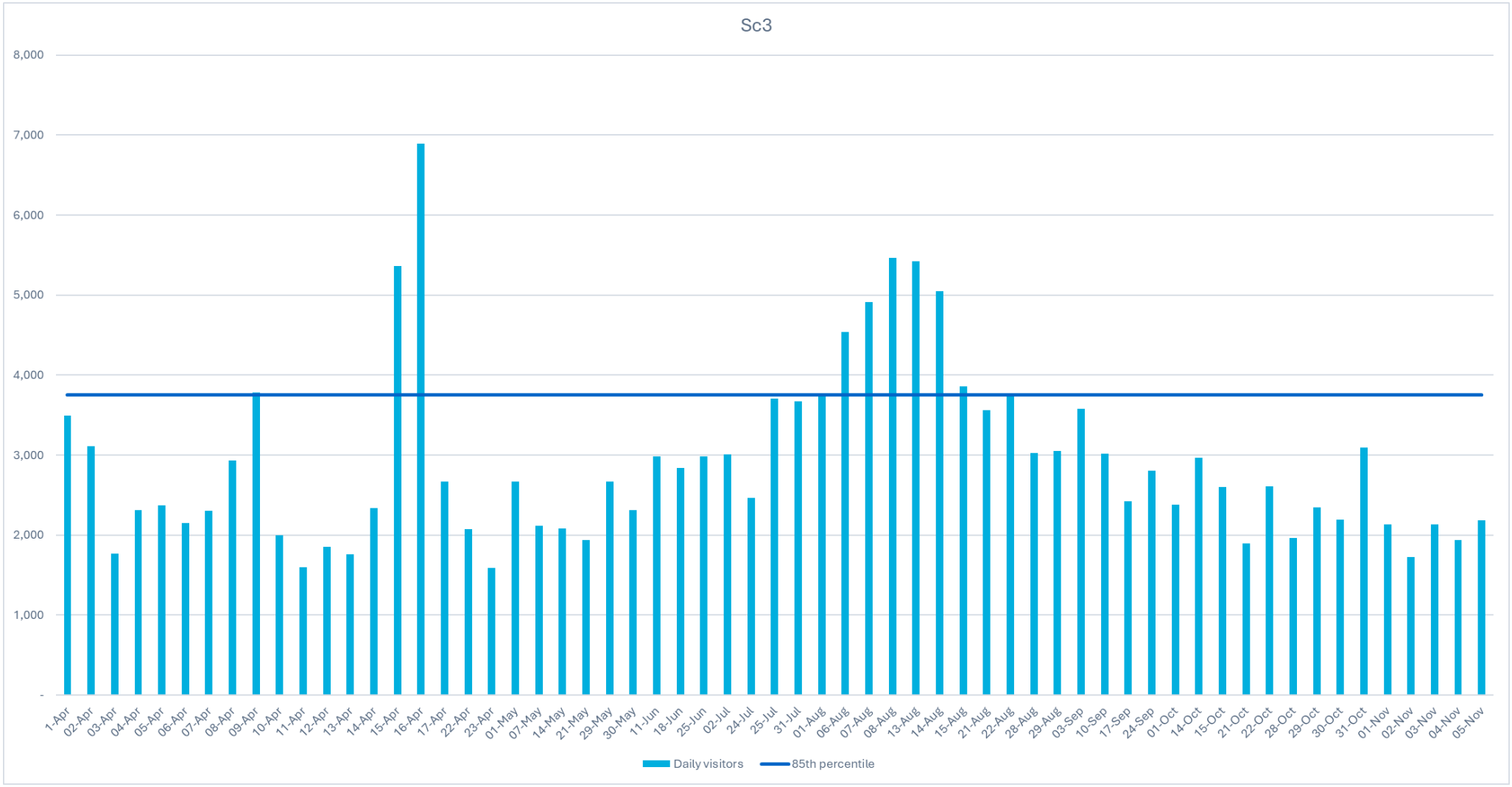
09-Jun
16-Jun
23-Jun
30-Jun
05-Jul
06-Jul
07-Jul
12-Jul
13-Jul
14-Jul
19-Jul
20-Jul
21-Jul
08-Sep
15-Sep
22-Sep
29-Sep
Daily visitors
85th percentile


Sc3
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
1-Apr
02-Apr
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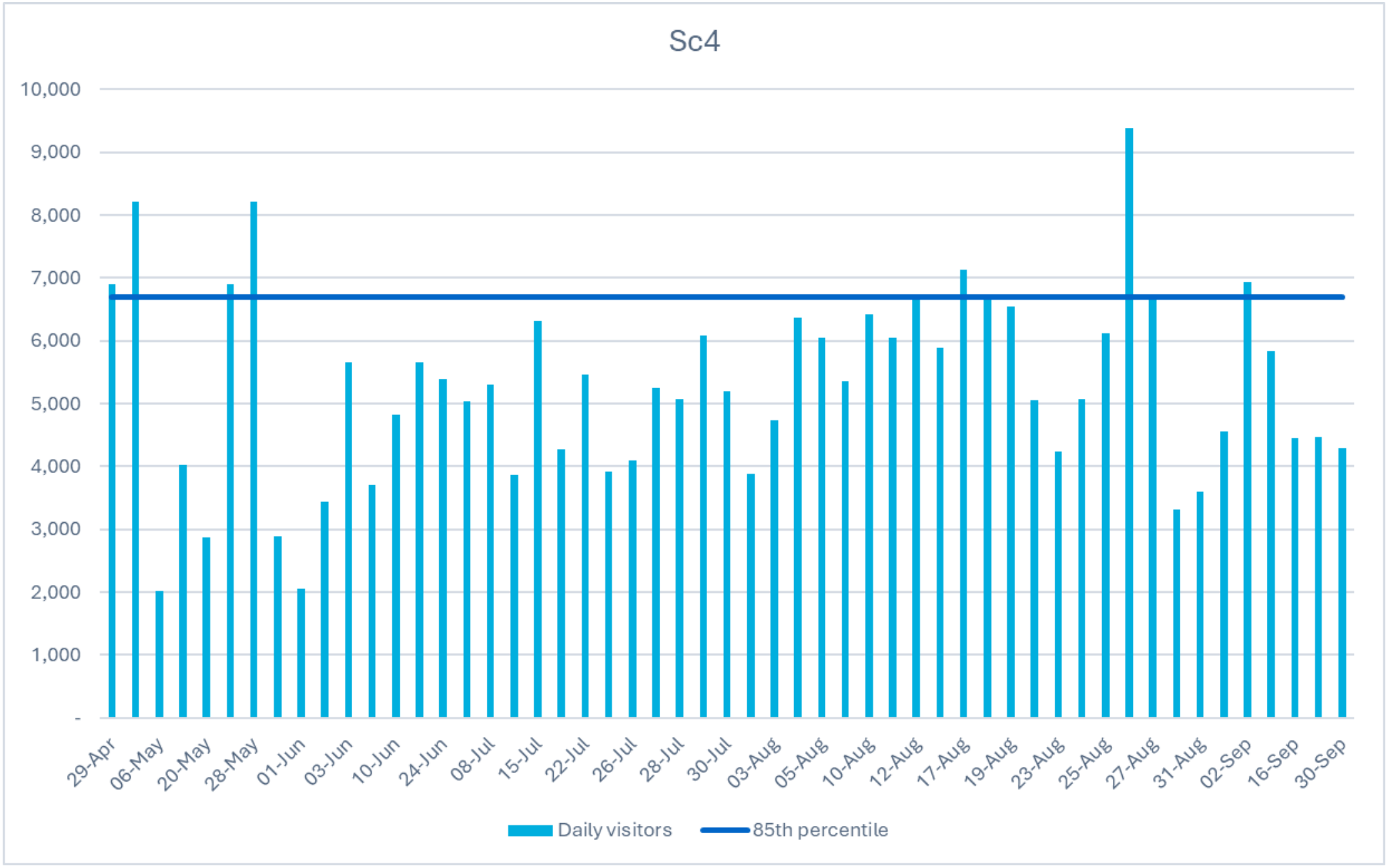
04-Apr
05-Apr
06-Apr
07-Apr
08-Apr
09-Apr
10-Apr
11-Apr
12-Apr
13-Apr
14-Apr
15-Apr
16-Apr
17-Apr
22-Apr
23-Apr
01-May
07-May
14-May
21-May
29-May
30-May
11-Jun
18-Jun
25-Jun
02-Jul
24-Jul
25-Jul
31-Jul
01-Aug
06-Aug
07-Aug
08-Aug
13-Aug
14-Aug
15-Aug
21-Aug
22-Aug
28-Aug
29-Aug
03-Sep
10-Sep
17-Sep
24-Sep
01-Oct
14-Oct
15-Oct
21-Oct
22-Oct
28-Oct
29-Oct
30-Oct
31-Oct
01-Nov
02-Nov
03-Nov
04-Nov
05-Nov
Daily visitors
85th percentile


Sc4
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
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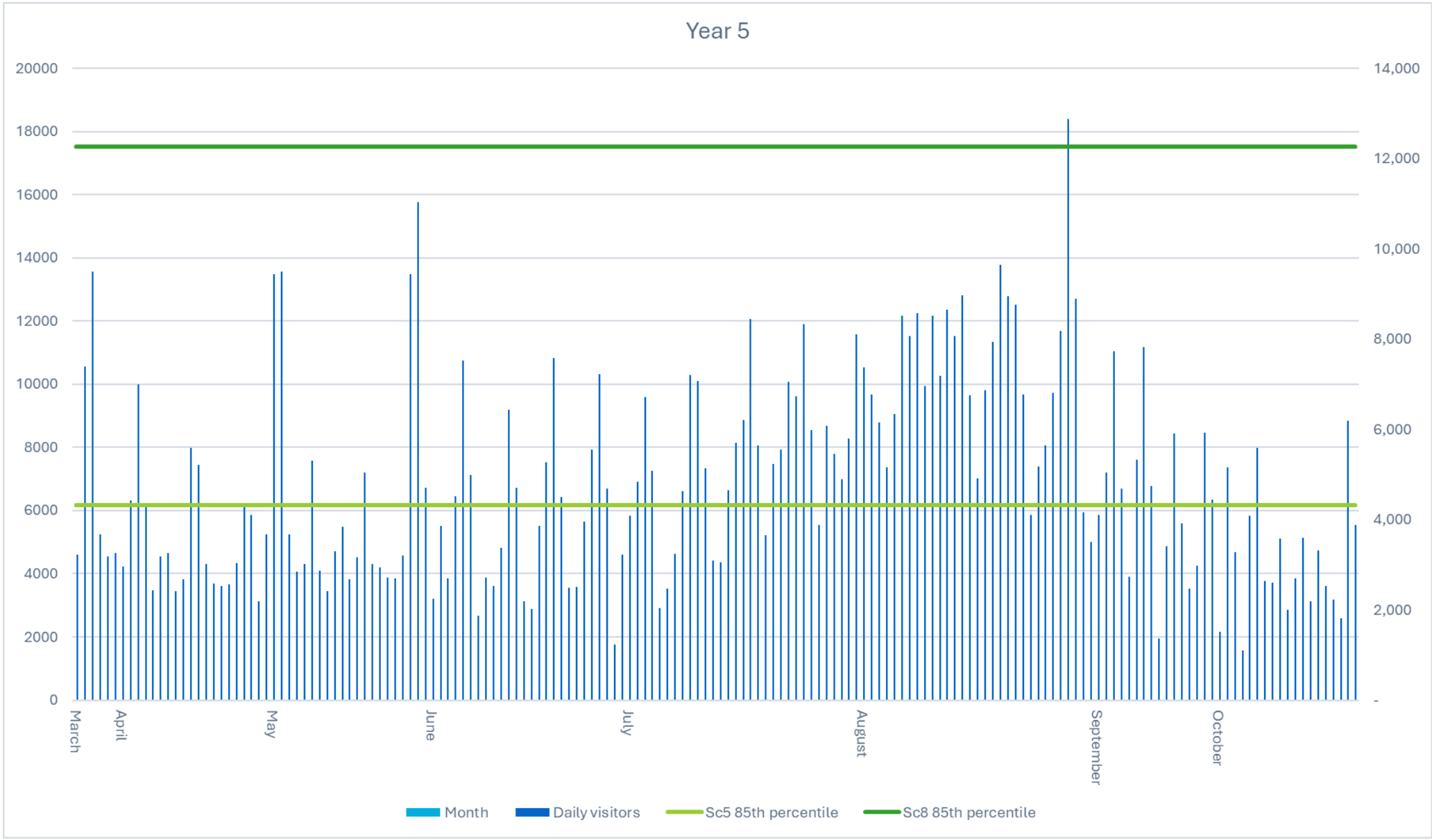
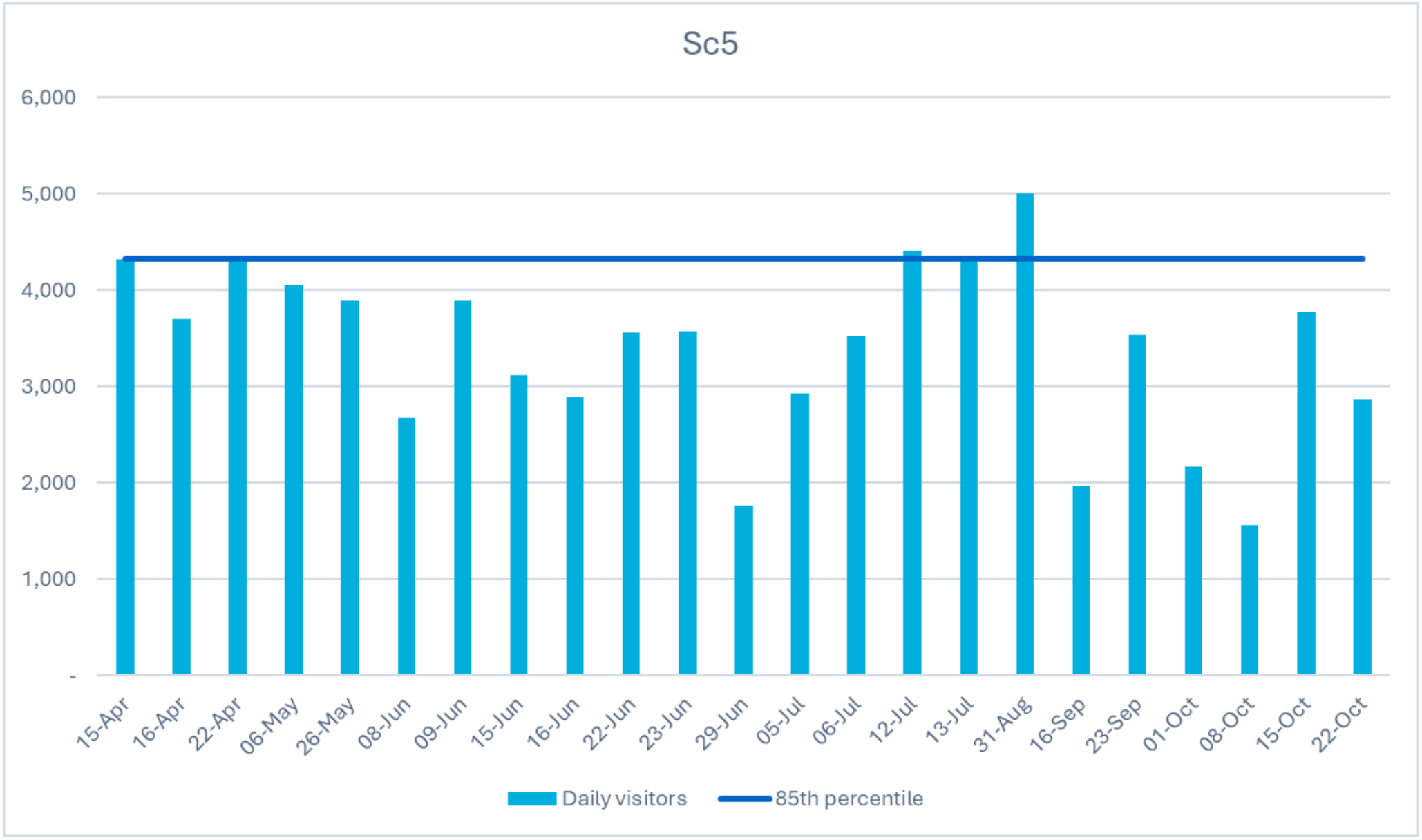
06-May
20-May
28-May
01-Jun
03-Jun
10-Jun
24-Jun
08-Jul
15-Jul
22-Jul
26-Jul
28-Jul
30-Jul
03-Aug
05-Aug
10-Aug
12-Aug
17-Aug
19-Aug
23-Aug
25-Aug
27-Aug
31-Aug
02-Sep
16-Sep
30-Sep
Daily visitors
85th percentile


Year 5
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
March
April
May
June
July
August
September
October
Month
Daily visitors
Sc5 85th percentile
Sc8 85th percentile


Sc5
6,000
5,000
4,000
3,000
2,000
1,000
-
15-Apr
16-Apr
22-Apr
06-May
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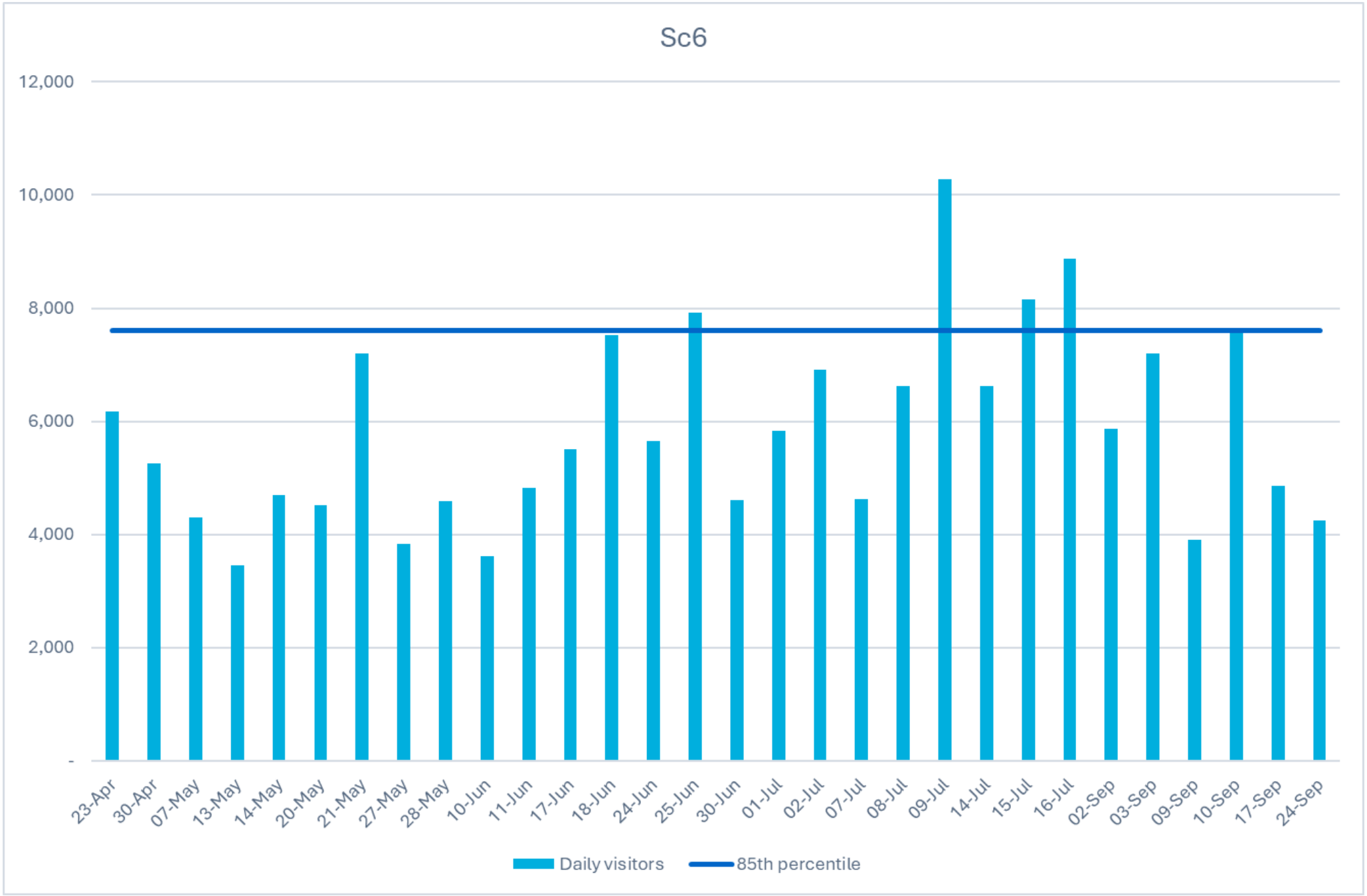
08-Jun
09-Jun
15-Jun
16-Jun
22-Jun
23-Jun
29-Jun
05-Jul
06-Jul
12-Jul
13-Jul
31-Aug
16-Sep
23-Sep
01-Oct
08-Oct
15-Oct
22-Oct
Daily visitors
85th percentile


Sc6
12,000
10,000
8,000
6,000
4,000
2,000
-
23-Apr
30-Apr
07-May
13-May
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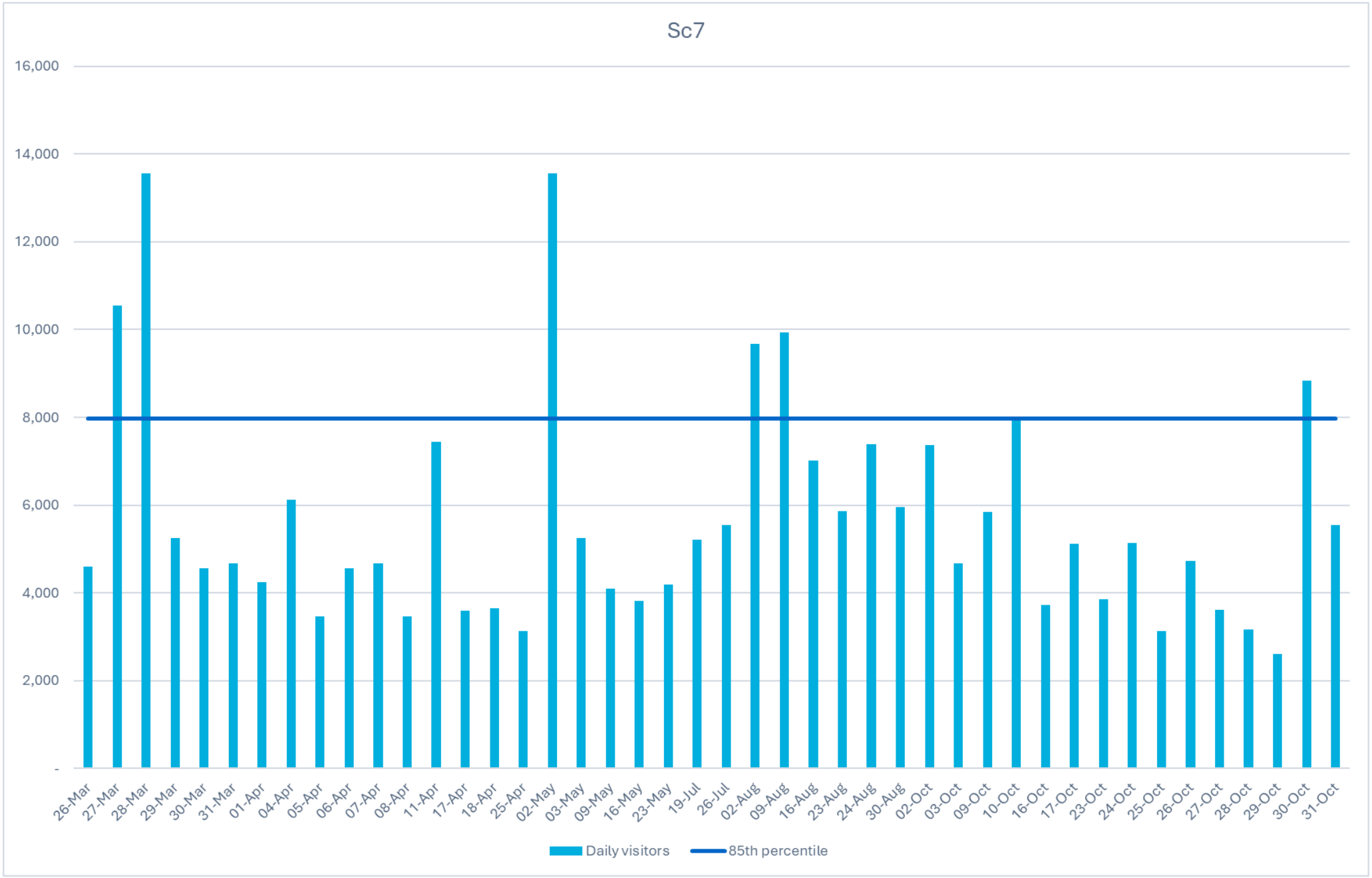
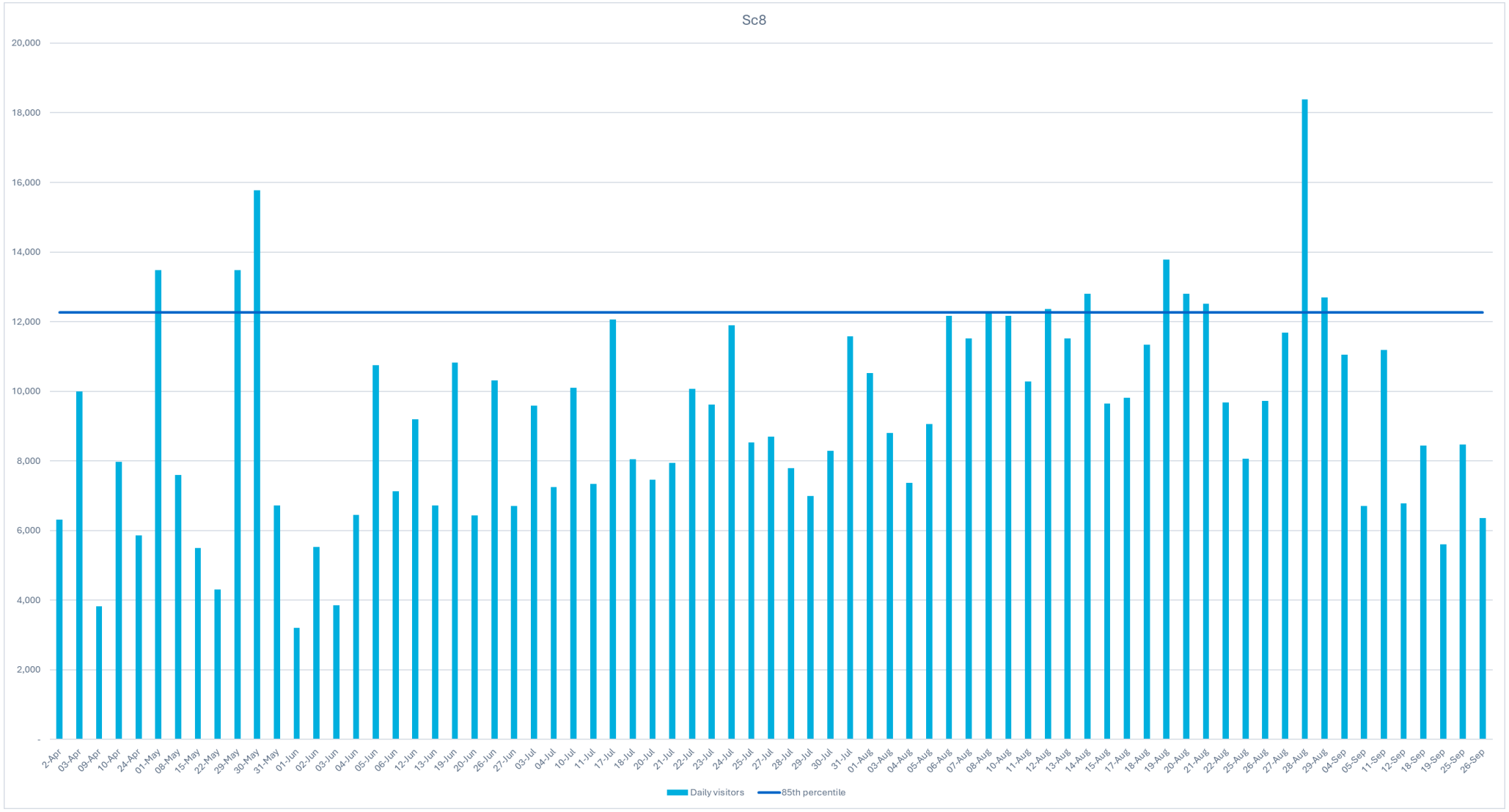
20-May
21-May
27-May
28-May
10-Jun
11-Jun
17-Jun
18-Jun
24-Jun
25-Jun
30-Jun
01-Jul
02-Jul
07-Jul
08-Jul
09-Jul
14-Jul
15-Jul
16-Jul
02-Sep
03-Sep
09-Sep
10-Sep
17-Sep
24-Sep
Daily visitors
85th percentile


Sc7
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
26-Mar
27-Mar
28-Mar
29-Mar
30-Mar
31-Mar
01-Apr
04-Apr
05-Apr
06-Apr
07-Apr
08-Apr
11-Apr
17-Apr
18-Apr
25-Apr
02-May
03-May
09-May
16-May
23-May
19-Jul
26-Jul
02-Aug
09-Aug
16-Aug
23-Aug
24-Aug
30-Aug
02-Oct
03-Oct
09-Oct
10-Oct
16-Oct
17-Oct
23-Oct
24-Oct
25-Oct
26-Oct
27-Oct
28-Oct
29-Oct
30-Oct
31-Oct
Daily visitors
85th percentile


Sc8
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
2-Apr
03-Apr
09-Apr
10-Apr
24-Apr
01-May
08-May
15-May
22-May
29-May
30-May
31-May
01-Jun
02-Jun
03-Jun
04-Jun
05-Jun
06-Jun
12-Jun
13-Jun
19-Jun
20-Jun
26-Jun
27-Jun
03-Jul
04-Jul
10-Jul
11-Jul
17-Jul
18-Jul
20-Jul
21-Jul
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23-Jul
24-Jul
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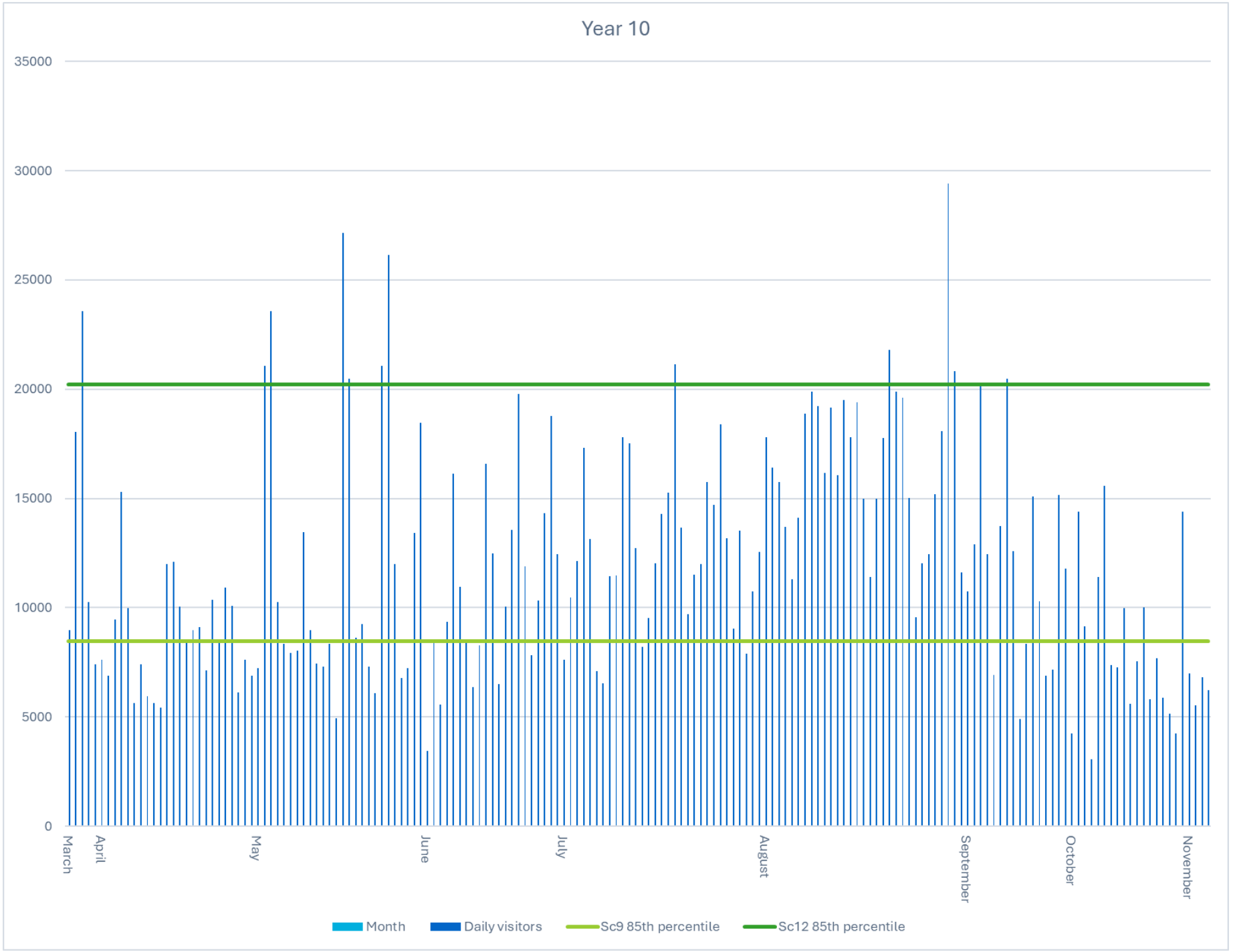
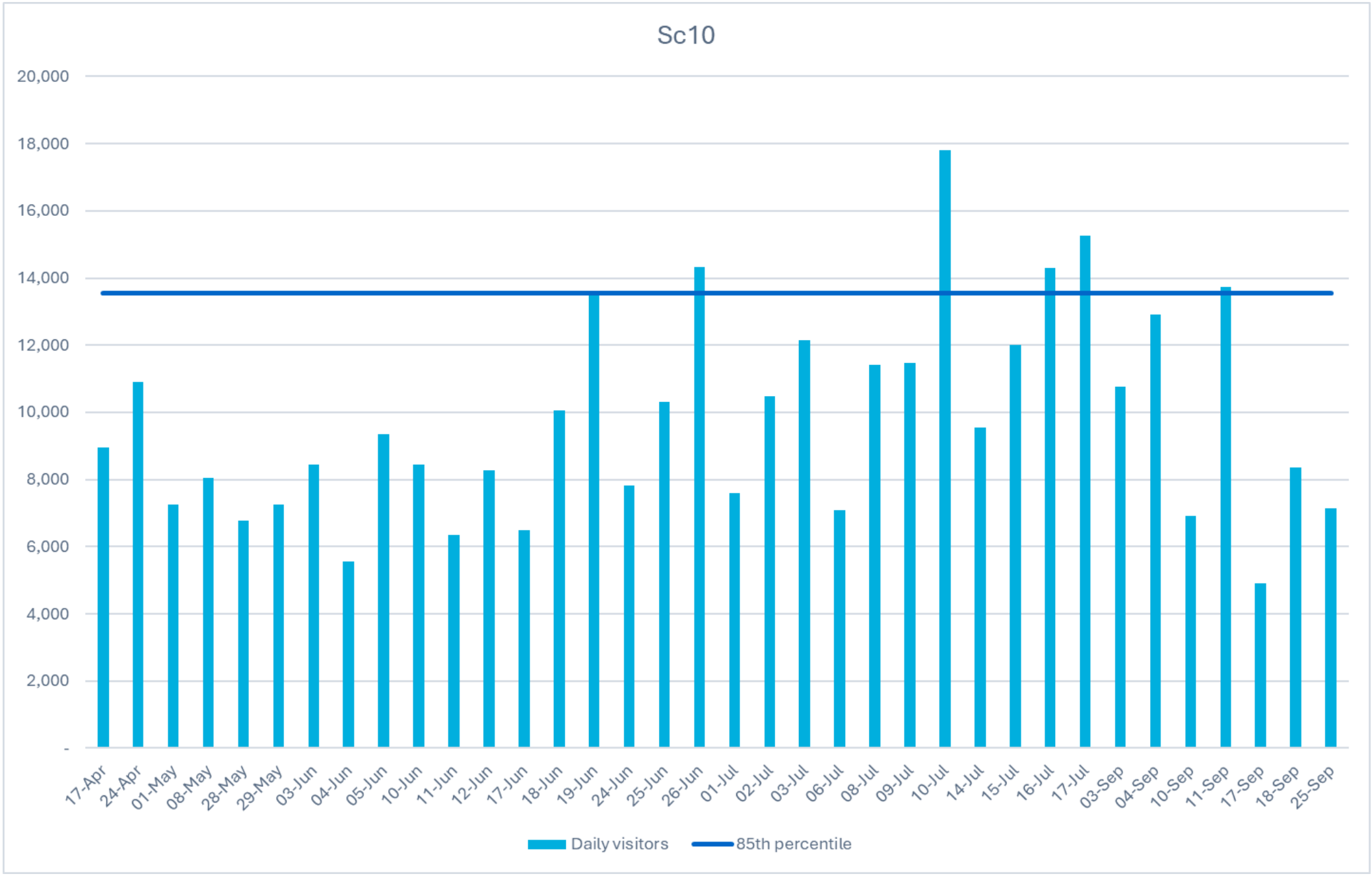
30-Jul
31-Jul
01-Aug
03-Aug
04-Aug
05-Aug
06-Aug
07-Aug
08-Aug
10-Aug
11-Aug
12-Aug
13-Aug
14-Aug
15-Aug
17-Aug
18-Aug
19-Aug
20-Aug
21-Aug
22-Aug
25-Aug
26-Aug
27-Aug
28-Aug
29-Aug
04-Sep
05-Sep
11-Sep
12-Sep
18-Sep
19-Sep
25-Sep
26-Sep
Daily visitors
85th percentile


Year 10
35000
30000
25000
20000
15000
10000
5000
0
March
April
May
June
July
August
September
October
November
Month
Daily visitors
Sc9 85th percentile
Sc12 85th percentile


Sc9
12,000
10,000
8,000
6,000
4,000
2,000
-
15-Apr
16-Apr
22-Apr
23-Apr
29-Apr
30-Apr
06-May
07-May
22-May
02-Jun
07-Jul
13-Jul
24-Sep
02-Oct
09-Oct
16-Oct
23-Oct
05-Nov
06-Nov
Daily visitors
85th percentile


Sc10
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
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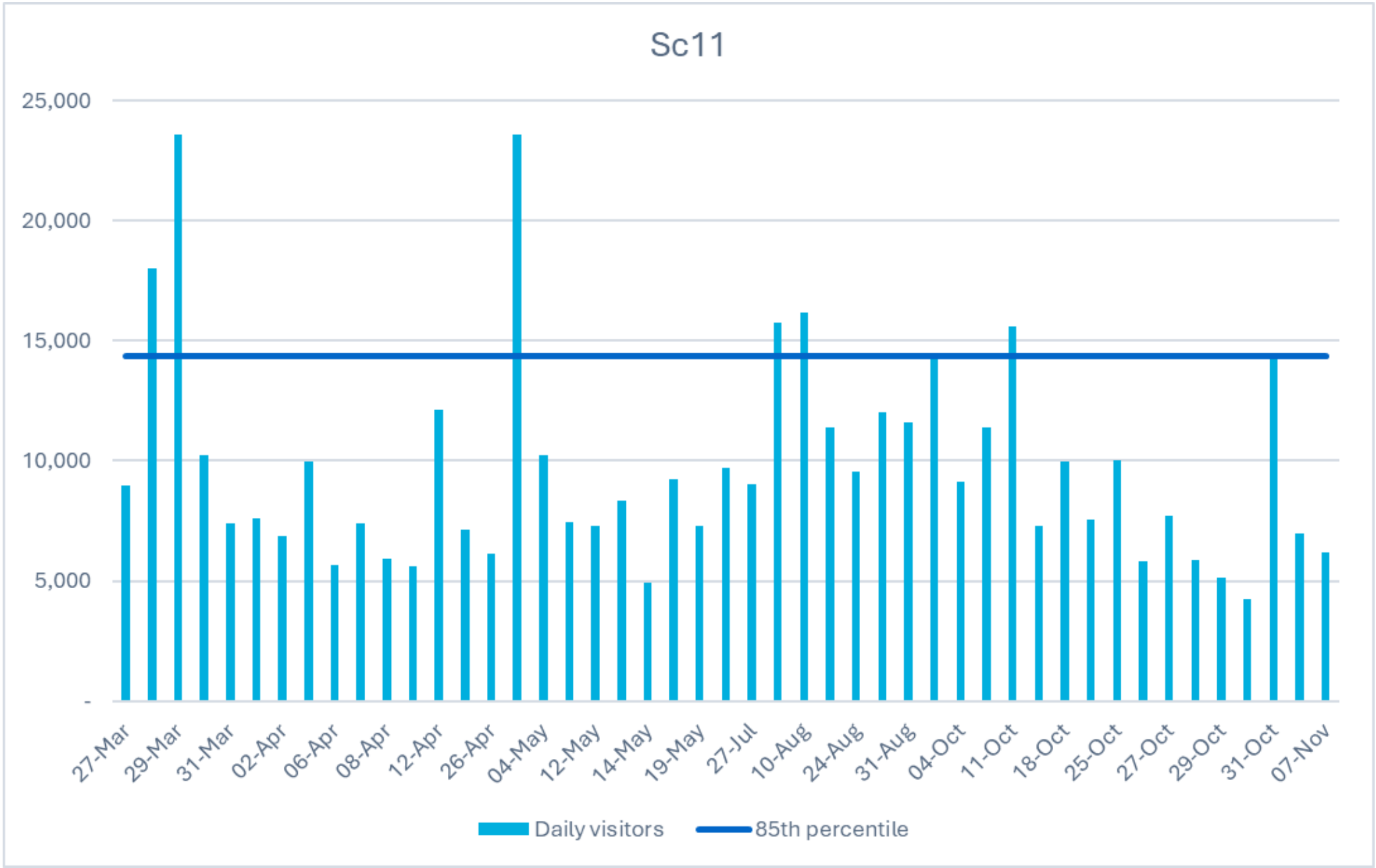
24-Apr
01-May
08-May
28-May
29-May
03-Jun
04-Jun
05-Jun
10-Jun
11-Jun
12-Jun
17-Jun
18-Jun
19-Jun
24-Jun
25-Jun
26-Jun
01-Jul
02-Jul
03-Jul
06-Jul
08-Jul
09-Jul
10-Jul
14-Jul
15-Jul
16-Jul
17-Jul
03-Sep
04-Sep
10-Sep
11-Sep
17-Sep
18-Sep
25-Sep
Daily visitors
85th percentile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25,000
20,000
15,000
10,000
5,000
-
27-Mar
29-Mar
31-Mar
02-Apr
06-Apr
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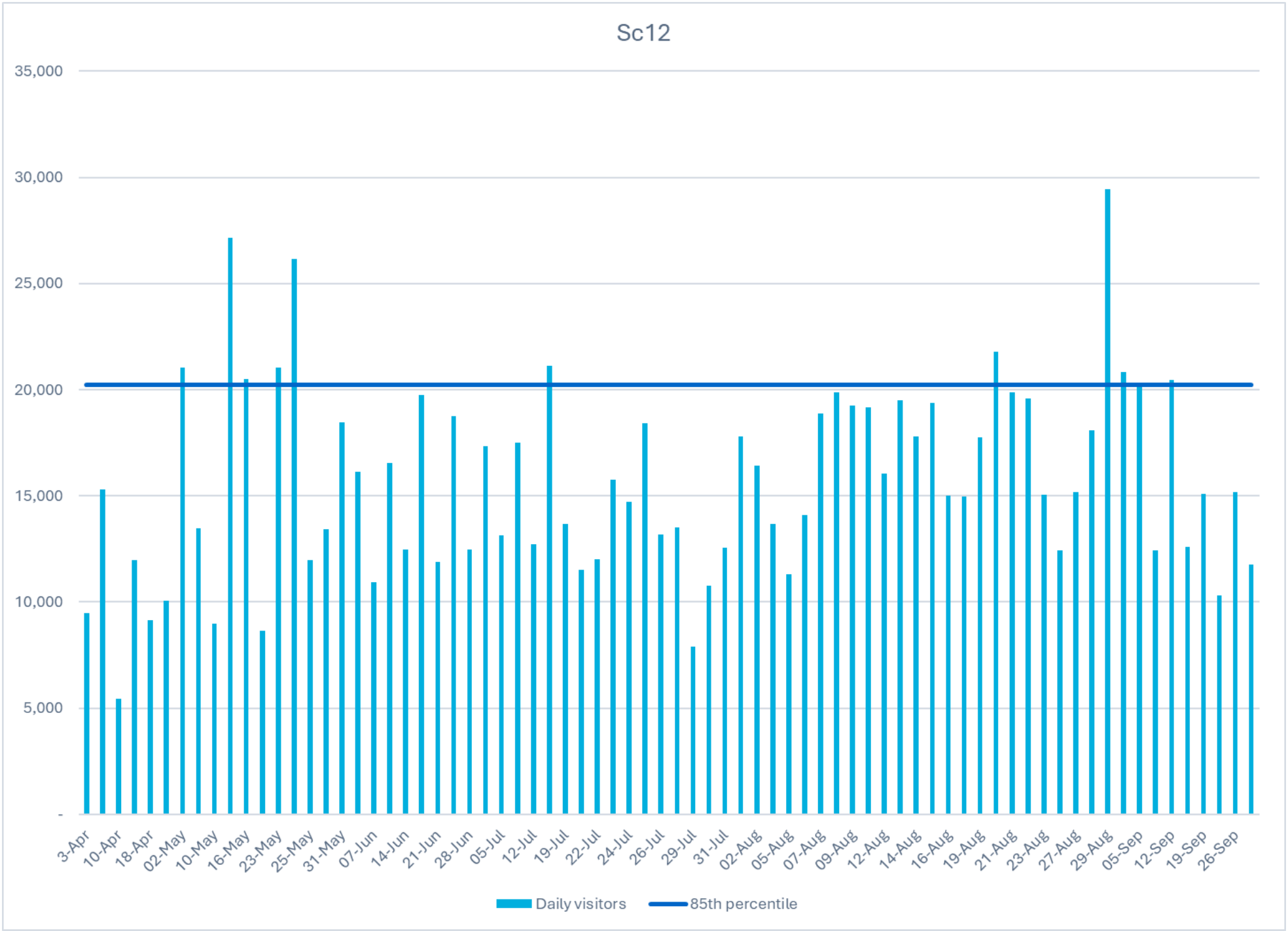
12-Apr
26-Apr
04-May
12-May
14-May
19-May
27-Jul
10-Aug
24-Aug
31-Aug
04-Oct
11-Oct
18-Oct
25-Oct
27-Oct
29-Oct
31-Oct
07-Nov
Daily visitors
85th percentile


Sc12
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
3-Apr
10-Apr
18-Apr
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16-May
23-May
25-May
31-May
07-Jun
14-Jun
21-Jun
28-Jun
05-Jul
12-Jul
19-Jul
22-Jul
24-Jul
26-Jul
29-Jul
31-Jul
02-Aug
05-Aug
07-Aug
09-Aug
12-Aug
14-Aug
16-Aug
19-Aug
21-Aug
23-Aug
27-Aug
29-Aug
05-Sep
12-Sep
19-Sep
26-Sep
Daily visitors
85th percentile

G Phase Mode Share Breakdown

Phase 1

Car

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
1	DO - WD - ST	19,108	48.0%	9,172
2	DN - WD - ST	74,319	78.2%	58,117
3	DO - WE - ST/SH	178,188	45.0%	80,185
4	DN - WE - ST/SH	278,385	73.4%	204,335
Total	**-**	**550,000**	**-**	**351,808**

Total car mode share is then calculated as 63.97% using total attendees and current demand.

Active Travel

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
1	DO - WD - ST	19,108	1.0%	191
2	DN - WD - ST	74,319	0.3%	223
3	DO - WE - ST/SH	178,188	1.0%	1,782
4	DN - WE - ST/SH	278,385	0.4%	1,114
Total	**-**	**550,000**	**-**	**3,309**

Total active travel share is then calculated as 0.60% using total attendees and current demand.

Public Transport

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
1	DO - WD - ST	19,108	50.0%	9,554
2	DN - WD - ST	74,319	19.4%	14,418
3	DO - WE - ST/SH	178,188	53.0%	94,440
4	DN - WE - ST/SH	278,385	24.2%	67,369
Total	**-**	**550,000**	**-**	**185,781**

Total public transport share is then calculated as 33.78% using total attendees and current demand.

Taxi

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
5	DO - WD - ST	19,108	1.0%	191
6	DN - WD - ST	74,319	2.2%	1,635
7	DO - WE - ST/SH	178,188	1.0%	1,782
8	DN - WE - ST/SH	278,385	2.0%	5,568
Total	**-**	**550,000**	**-**	**9,176**

Total taxi share is then calculated as 1.67% using total attendees and current demand.

Phase 4

Car

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
5	DO - WD - ST	77,798	48.0%	37,343
6	DN - WD - ST	175,255	77.6%	135,998
7	DO - WE - ST/SH	250,281	45.0%	112,626
8	DN - WE - ST/SH	676,666	73.1%	494,643
Total	**-**	**1,180,000**	**-**	**780,610**

Total car mode share is then calculated as 66.15% using total attendees and current demand.

Active Travel

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
5	DO - WD - ST	77,798	1.0%	778
6	DN - WD - ST	175,255	0.3%	526
7	DO - WE - ST/SH	250,281	1.0%	2,503
8	DN - WE - ST/SH	676,666	0.4%	2,707
Total	**-**	**1,180,000**	**-**	**6,513**

Total active travel share is then calculated as 0.55% using total attendees and current demand.

Public Transport

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
5	DO - WD - ST	77,798	50.0%	38,899
6	DN - WD - ST	175,255	19.9%	34,876
7	DO - WE - ST/SH	250,281	53.0%	132,649
8	DN - WE - ST/SH	676,666	24.5%	165,783
Total	**-**	**1,180,000**	**-**	**372,207**

Total public transport share is then calculated as 31.54% using total attendees and current demand.

Taxi

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
5	DO - WD - ST	77,798	1.0%	778
6	DN - WD - ST	175,255	2.1%	3,680
7	DO - WE - ST/SH	250,281	1.0%	2,503
8	DN - WE - ST/SH	676,666	2.0%	13,533
Total	**-**	**1,180,000**	**-**	**20,494**

Total taxi share is then calculated as 1.74% using total attendees and current demand.

Phase 8

Car

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
9	DO - WD - ST	131,817	46.0%	60,636
10	DN - WD - ST	351,981	65.2%	229,492
11	DO - WE - ST/SH	458,034	45.0%	206,115
12	DN - WE - ST/SH	1,158,168	64.7%	749,335
Total	**-**	**2,100,000**	**-**	

Total car mode share is then calculated as 59.31% using total attendees and current demand.

Active Travel

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
9	DO - WD - ST	131,817	1.0%	1,318
10	DN - WD - ST	351,981	0.6%	2,112
11	DO - WE - ST/SH	458,034	1.0%	4,580
12	DN - WE - ST/SH	1,158,168	0.6%	6,949
Total	**-**	**2,100,000**	**-**	

Total active travel share is then calculated as 0.71% using total attendees and current demand.

Public Transport

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
9	DO - WD - ST	131,817	52.0%	68,545
10	DN - WD - ST	351,981	32.5%	114,394
11	DO - WE - ST/SH	458,034	53.0%	242,758
12	DN - WE - ST/SH	1,158,168	33.1%	383,354
Total	**-**	**2,100,000**	**-**	

Total public transport share is then calculated as 38.53% using total attendees and current demand.

Taxi

Scenario	Ref	Total Attendees	Current Mode Share	Current Demand
5	DO - WD - ST	131,817	1.0%	1,318
6	DN - WD - ST	351,981	1.7%	5,984
7	DO - WE - ST/SH	458,034	1.0%	4,580
8	DN - WE - ST/SH	1,158,168	1.7%	19,689
Total	**-**	**2,100,000**	**-**	**31,571**

Total taxi share is then calculated as 1.50% using total attendees and current demand.

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H Weekend Traffic Analysis Technical Note

To	Oxfordshire County Council	**Technical Note**	
From	Steer		
Date	04 November 2024		
Project	Puy du Fou	Project No.	24632101

Puy du Fou – Weekend Traffic Analysis

Introduction

1. Steer has provided this Technical Note as part of the ongoing transport and highway advice being provided to Puy du Fou in respect to the Proposed Development (referred to as the 'Site') for a new park located to the north of Bicester.

2. Puy du Fou is a multiple award-winning world leader in creating spectacular historical shows and immersive experiences based upon the history and culture of a country and its people. Puy du Fou wants to create a new British cultural and historical attraction which will be a place where visitors can walk in a beautiful, wooded park with stunning landscaped gardens. Guests can immerse themselves in British history with carefully curated period villages, and experience a series of world-class live shows based on the country's history.

3. Further information can be found on the Puy du Fou public consultation website[1] which provides an introduction to Puy du Fou and the vision for the new Site.

4. The site is located near Junction 10 of the M40 motorway in Oxfordshire, approximately 3km north of Bicester, near the village of Bucknell. A Site location plan is shown in **Appendix A**.

5. Discussions are ongoing with Oxfordshire County Council's (OCC) modelling and development control teams around the excellent transport links and connections at the Site, and the proposed Transport Strategy. It is worth reflecting on the multi-modal approach as it frames any understanding of the traffic impacts and modelling approach. The robustness of the Transport Strategy is based on locational circumstances, Puy du Fou's distinct operations, and Steer's experience of major leisure and sports schemes. The key objectives of the Transport Strategy are as follows:

- To promote public transport usage through
  - A strategy to connect Bicester Village and Bicester North stations with the Site via shuttle buses;
  - Improvements to local bus services in and around the vicinity of the Site, and connections between local populations such as Bicester, Banbury, Oxford and Upper Heyford;
  - Journey planning integrated into ticket booking process; and
  - Local coach tours and trips, and long-distance bus/ coach operations.
- Implement an active trave strategy, including
  - New and improved cycle/ wheeling infrastructure, especially between the Site and Bicester;
  - Improved Public Rights of Way (PRoW); and
  - New pedestrian connections to local villages, and emerging committed development.
- Implementation of a Travel Plan for visitors and staff
- Limiting car parking provision, incentives for car sharing, and dynamic car park pricing

[1] www.PuyduFouconsultation.co.uk

6. Steer have been regularly engaging with OCC Highways and Transportation to discuss the Transport Strategy and the implications of the proposals. As set out in the Transport Modelling Proposal Note of 14 October 2024 (included as **Appendix B**), at present there is no weekend model for Bicester despite significant growth in the district over the last 15 years, and a regulatory local plan adopted and emerging. This is not unusual given that the weekday peak periods are the primary focus for capacity enhancements and understanding how networks operate – this approach is corroborated by Steer.

7. On this basis, the following approach is proposed for modelling the impacts of the Site (as demonstrated in **Figure 1**):

- Undertake focused Manual Classified Counts (MCCs) at key junctions (Junction 10 M40, Baynards Green and key points on Bicester Ring Road) for weekday and weekends, along with a set of Automatic Traffic Counts (ATCs) on links approaching junctions, to understand variations between time of day and weekend, as summarised in **Appendix C**.
- Use the Bicester Traffic Model Local Plan (BTMLP) to test the weekday morning and evening peak hour impacts.
- Use a combination of peak hour data from the BTMLP Model and collected MCC and ATC data to create a set of turning counts for the shoulders either side of the peak as well as peak Puy du Fou operating periods, such as evening egress. This would be used to assess the impact of the Site against the typical weekday peak hour and adjacent 'shoulders'.
- Independent junction modelling will then be undertaken at agreed junctions to test these for the weekday.
- Using a combination of OCC's yearly data collection site and the identified MCCs and ATC, identified earlier, create a excel based model of the M40 corridor (Junction 9 and 10) and the key locations around Bicester, creating a set of turning counts for the weekend peak operating periods, apply suitable growth to account for committed and proposed development and undertake independent junction modelling. The excel model would allow for sensitivity testing of applying different arrival and departure patterns, as well as replicating alternative route choices.
- Utilise traffic count data to highlight that the total traffic in the evening (i.e. that associated with egress and the night show) is no worse than peak periods at that junctions will continue to operate satisfactorily.

Figure 1: Proposed Modelling Approach

8. As mentioned, there is no current weekend model for Bicester. OCC has enquired whether such an approach is needed to understand the traffic impacts of Puy du Fou, and this Technical Note specifically addresses why it is not considered to be necessary or proportionate to develop a full scale weekend model of Bicester, rather than assessing the impacts through typical and conventional modelling techniques, as identified above, e.g. undertaking stand-alone junction assessments for the peak development period during the weekend in parallel to the weekday modelling.

9. The assessment considers:

- The profile of observed traffic across the week at various locations within and around Bicester;
- The difference between weekday and weekend flows;
- The profile of development traffic; and
- The ingress and egress routes to the Site.

Site Surveys

10. Data has been obtained from OCC's Transport Monitoring team in October 2024 and analysed by Steer. The data includes information which is understood to have been used in OCC's current BTM 2026 future base year review. Additional data from independent collection sites and publicly available data from WebTRIS have also been considered.

11. The assessment includes a summary of the following locations:

- A4095 Howes Lane: Shakespeare Drive (N) to Middleston Stoney Road (S), Surveyed 09/01/23
- A4095: From Heather Road (W) to Hornbeam Road (E), Surveyed 09/01/23
- A41 Oxford Road: From B4030 Vendee Drive (S) to Pioneer Way (N), Surveyed 26/09/22
- A41: From B4030 Vendee Drive (SW) to Wendlebury Road (NE), Surveyed 09/01/23
- A41: From Wendlebury Road (NE) to B4030 Vendee Drive (SW), Surveyed 09/01/23
- Access Road: From B4030 Vendee Drive (NE) to Bicester Park & Ride (SW), Surveyed 28/11/22
- Access Road: From Bicester Park & Ride (SW) to B4030 Vendee Drive (NE), Surveyed 28/11/22
- B4030 Vendee Drive: From Heaton Road (NW) to Whitelands Farm (SE), Surveyed 09/01/23
- B4030: From Empire Road (E) to Middleton Road (W), Surveyed 09/01/23
- B4100 Banbury Road: From Rowan Road (S) to Stable Road (N), Surveyed 02/10/23
- B430: From A43 (N) to Ardley Road (S), Surveyed 10/07/23
- Buckingham Road: From Cedar Drive (N) to Woodfield Road (S), Surveyed 02/10/23
- Charbridge Lane: From Bicester Road (N) to Gavray Drive (S), Surveyed 05/07/22
- Charles Shouler Way: From A41 Oxford Road (W) to Wendlebury Road (E), Surveyed 26/09/22
- Middleton Stoney Road: From A4095 Howes Lane (W) to Ludlow Road (E), Surveyed 30/10/23
- Middleton Stoney Road: From Goodwood Close (E) to Whitelands Way (W), Surveyed 30/10/23
- Middleton Stoney Road: From Ludlow Road (W) to Shakespeare Drive (E), Surveyed 30/10/23
- M40: From Off Sliproads to A43/B430
- M40: From A43/B430 to On Sliproads
- A43: From B430 to M40
- A43: From M40 to B430

12. The location of the count sites is shown in **Appendix D**.

Trip Generation

13. A Trip Generation and Mode Share Technical Note will be circulated with OCC setting out the number of trips associated with each mode, across the arrival and departure hours associated with the Site's opening and closing times based on twelve different scenarios, as summarised below in **Table 1.**

Table 1: Trip Generation Scenarios

Scenario	Day only/ day and night	Weekday & Friday/ Weekend	School term/ School Holidays	Reference
SC1	Day only	Weekday & Friday	School term	DO – WD – ST
SC2	Day and night	Weekday & Friday	School term	DN – WD – ST
SC3	Day only	Weekend	School term/ school holiday	DO – WE – ST/SH
SC4	Day and night	Weekend	School term/ school holiday	DN – WE – ST/SH
SC5	Day only	Weekday & Friday	School term	DO – WD – ST
SC6	Day and night	Weekday & Friday	School term	DN – WD – ST
SC7	Day only	Weekend	School term/ school holiday	DO – WE – ST/SH
SC8	Day and night	Weekend	School term/ school holiday	DN – WE – ST/SH
SC9	Day only	Weekday & Friday	School term	DO – WD – ST
SC10	Day and night	Weekday & Friday	School term	DN – WD – ST
SC11	Day only	Weekend	School term/ school holiday	DO – WE – ST/SH
SC12	Day and night	Weekend	School term/ school holiday	DN – WE – ST/SH

14. From Steer's work undertaken to date it is evident that:

- Other than conference/ hotel use, the Site is expected to be closed between November and April (this is the same as Puy du Fou France which is a mature Park operating for 30 years).
- The period of closure correlates with peak operating times for major traffic generators in the area such as Bicester Village, e.g. Black Friday in November, the lead up to Christmas, and post-Christmas periods.
- While flexibility will be sought, the Site is expected to open at 10:00 on a typical weekday and 09:00 at the weekend with shows starting around 15 minutes after opening. The Park would close after the last show finishes, generally around 19:00 in the scenario where there is no night show. On evenings when there is a night show, which occur after dusk, the night show would finish at around 23:00. There is some flexibility around the finish times as this will depend on the programme on the day, however shows would end outside of the peak traffic periods. Therefore, the peak arrival and departure times are outside of typical morning and evening peaks.
- The Site would have a flexible calendar, e.g. the Site will not be open every day, and night shows will be frequent, but will not occur every night of opening. Typically, Puy du Fou's other sites are at their busiest at the weekend and during school holidays or bank holidays. The greatest demand is likely to occur in the summer holidays, when traffic volumes in the peak periods are lower, given a reduction in education-oriented trips associated with the school run, and fewer commuter trips as a higher percentage of the population are on holiday.
- A 50% mode share target to be via sustainable travel.
- Similarly to existing sites in France and Spain, the Site will open with 60% of the full offer of shows available to guests as part of the phased approach. Additional shows will be added from the Opening

Year to Year 10, when it is anticipated that the full offer will be delivered. This corresponds to increased visitor numbers between Opening Year and Year 10, and should be noted that the impacts arising in Year One will therefore be significantly less than in Year 10.

15. In terms of arrival and departures, it is expected that the peak vehicular trip generation will occur:

- In the hour preceding opening, between 09:00 and 10:00 on a weekday, and between 08:00 and 09:00 on a weekend. While approximately half of visitors will arrive in the preceding hour, the remainder are split between the preceding and post opening hours. This would follow a typical 'bell' shape curve.
- In the hour post day only closing time e.g.19:00
- In the hour post night show e.g. between 22:00 and 23:00 (depending on the time of year)

Traffic Distribution

16. When developed, the detail of the traffic distribution will be agreed with OCC. This is currently anticipated to be undertaken in late November/ early December 2024.

17. The current working assumption on arrivals by car have been developed based on populations, travel time, and simple gravity model assumptions. See below for the network distribution assumptions:

- c40% to 50% from the north
  - c20% to 30% via the M40 (southbound)
  - c10% to c15% from the north via A43 (Brackley)
  - c5% to c8% from the north via A43 and A421 (Buckinghamshire)
- c35 to 45% from the south east (M40 northbound)
- c15 to 25% from the south (A34)
- c 2% from the east via A41 – heading anticlockwise around Bicester

18. A plan showing the typical routes is included as **Appendix E**.

19. It is assumed that:

- All traffic from the north would come through M40 Junction 10 and Baynards Green, as such it does not have an origin or destination in the vicinity of Bicester;
- Traffic on the M40 northbound would continue on the M40 and access the Site via Junction 10, not accessing Bicester;
- Traffic on the A34 would primarily turn left onto the M40 and access the Site via Junction 10, with no or very little traffic accessing Bicester; and
- Traffic from the east would route via A41 – heading anticlockwise around Bicester.

20. In terms of routing, the Google Maps journey planning tool has been utilised to verify these assumptions, and this has shown that for trips from the south (A34 and M40 northbound), the M40 junction 10 access would have a shorter drive time than routing via Bicester.

Key Issues

21. It is understood that with regards to the weekend impacts, OCC's main comments are:

- Inbound traffic may impede upon the operation of M40 Junction 9 – specifically queuing which may occur on the off M40 off slips, associated with arrivals into Bicester; and
- Development traffic using M40 junction 10 may cause some reassignment, predominantly from the B4100 onto the M40 (or other roads).

23. In respect of this, it is of note that:

- Through traffic on the M40 northbound is unlikely to impact upon the operation of junction 9;
- Left turning traffic from the A34 to the M40 is accommodated within a two-lane approach to the junction for some 320m ahead of the signal stop line; and
- Significant adverse impacts at Junction 10 would be mitigated through a strategy to be agreed with OCC and National Highways.

24. These are all recognised for the importance in forming the mitigation strategy to be agreed with OCC and National Highways (NH), including the following:

- A Signage Strategy;
- Implement journey planning at the time of booking to promote agreed sustainable travel routes, with real time updates for car users; and
- Variable message signs, if necessary.

25. OCC's comments are predominantly around the arrival traffic associated with the Site as egress for the Site will be later in the evenings when background traffic volumes are considerably less.

Observations and Findings

26. A full set of the graphs taken from the traffic analysis are included within **Appendix F**.

27. The following findings have emerged from the a review of all of the site identified in paragraph 11 (and shown in **Appendix C**) majority of sites that were reviewed:

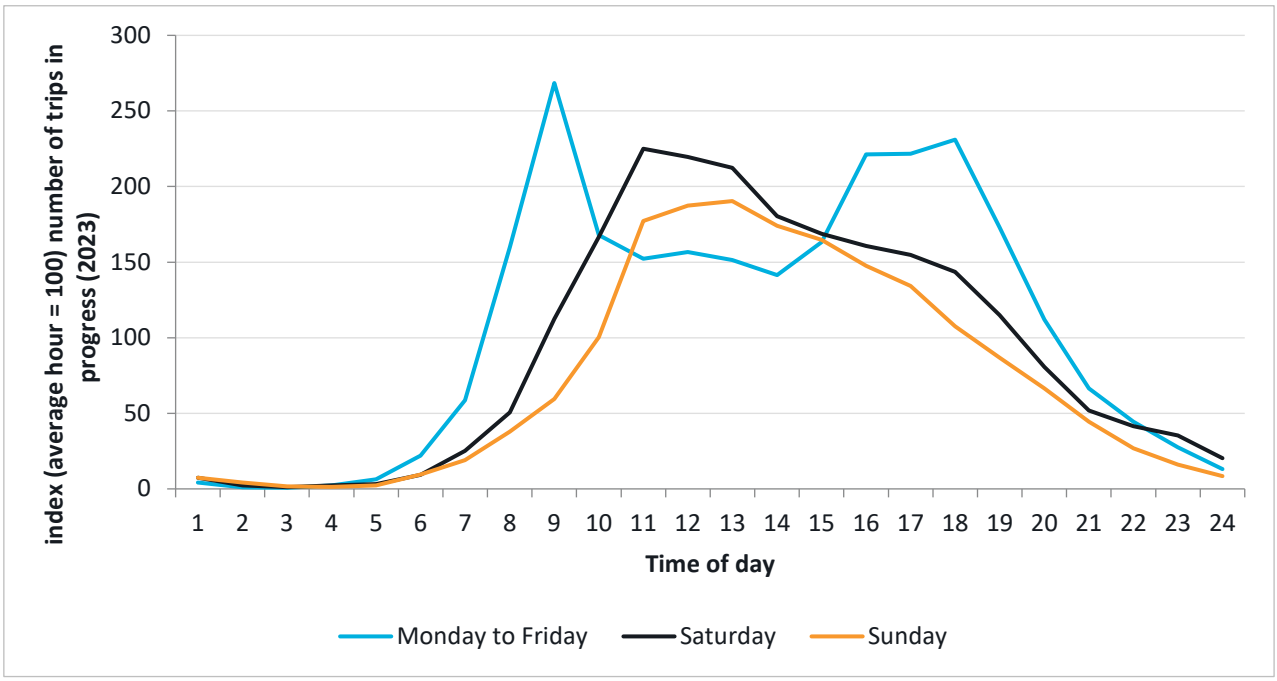
- There are minimal differences between the average Monday to Friday and average Tuesday to Thursday traffic volumes;
- The morning peak is between 07:00 and 08:00;
- The evening peak is more variable and occurs between 16:00 and 18:00;
- The peak period within the evening is lower than the morning peak;
- The Saturday peak is between 11:00 and 13:00;
- The Sunday peak is between 11:00 and 13:00, or in some circumstances an hour later;
- The Sunday peak is lower than the Saturday peak, and the flows build up later and dissipate earlier;
- The morning peak exhibits the highest flow at any time of the week;
- Weekend flows are generally lower than any of the peak periods in the weekday (AM or PM); and
- The Saturday peak period occurs later in the day than a weekday and is slightly more prolonged.

28. Despite the strong retail offering in Bicester, notably Bicester Village, these findings are generally consistent with typical network travel patterns. For example, commuting and school trips are predominantly undertaken in the morning peak, before 09:00, while commuting trips in the evening are typically after 17:30 and do not include as many education related trips.

29. Weekend trips, which include more retail and leisure movements, are predominantly focused around later arrival times. This is better aligned with shop opening times and shorter dwell times compared to a typical working day. Arrival and departure profiles for Sunday reflect shorter opening hours of shops on Sundays.

30. The National Travel Survey dataset NTS0501 provides data on 'Trips in progress by time of day and day of week'. **Figure 2** below shows the typical profile of all car driver trips in 2023. The findings from the study area align with those shown below.

Figure 2: NTS0501 data on 'Trips in progress by time of day and day of week' (2023)



31. The data shown in **Figure 2** is also in line with assessments conducted by the Great Wolf Lodge application, which undertook isolated junction modelling for the weekend period of 13:00 to 14:00 on a Saturday, as this was identified as being the peak period at the weekend. The Great Wolf Lodge is a water park development, with an on-site hotel offering, located in Chesterton, near Bicester, approved in 2021.

32. For each of the locations identified in paragraph 10, the profile of the average weekday, Saturday and Sunday flows are shown by direction. These are included in **Appendix F**.

33. The peak car generation period which is closest to the observed peak on the network has been indicated by a set of parallel bars on each graph. The morning peak period from 08:00 to 10:00, and the evening peak of 18:00 to 23:00 as these represent the times at which visitors would arrive and depart from the Site. The evening peak generation period covers a wider time period as this represents a wider departure profile as well as arrivals to the Park which are coming solely for the night show, as well as variation in the finish time for night shows.

34. Ingress and egress flows for the development in Year 10 have also been included on the graphs. These include the following scenarios:

- Scenario 9 – Day Only, Weekday, School Term
- Scenario 12 - Day and Night show, Weekend, School Term/ School Holiday

35. The flows shown on the graphs show an allowance for 10% of the movements which would originate from the South, M40 northbound, and A34, routing via the A41 and the ring road. However, it is not anticipated that this level of flow would use the Bicester ring road given that the most direct route is via the M40 and Junction 10.

36. As an example, **Figures 3 and 4** provide extracts from the set of graphs showing the observed profile of the traffic flow on the B4030 Vendee Drive. These show similar characteristics to the other locations surveyed. From this it can seen that:

- The peak in the morning, which would correlate with arrivals to the Park is at 08:00 but that the flow is significantly lower northbound than it is southbound, i.e. development flow is counter directional.
- Traffic will be arriving to the Park as the peak dissipates

- In the evening, the peak occurs at 17:00 however traffic is highest northbound, which again is counter directional for traffic leaving the Park.
- The Saturday northbound peak is at 11am, i.e. two hours after an opening time of 09:00. While the northbound weekend peak is similar to the weekday morning peak hour in terms of volume, it is significantly less than the evening weekday peak.
- The Saturday southbound peak it is 12:00 and significantly drops off after 14:00. The Saturday peak is lower than the weekday morning peak period.
- The Sunday peak is similar or less than the Saturday and builds up later and dissipates earlier.
- In the evening, traffic volumes drop quickly and are under 200 vehicles per hour after 20:00.

Figure 3: Example output – B4030 Vendee Drive - Northbound

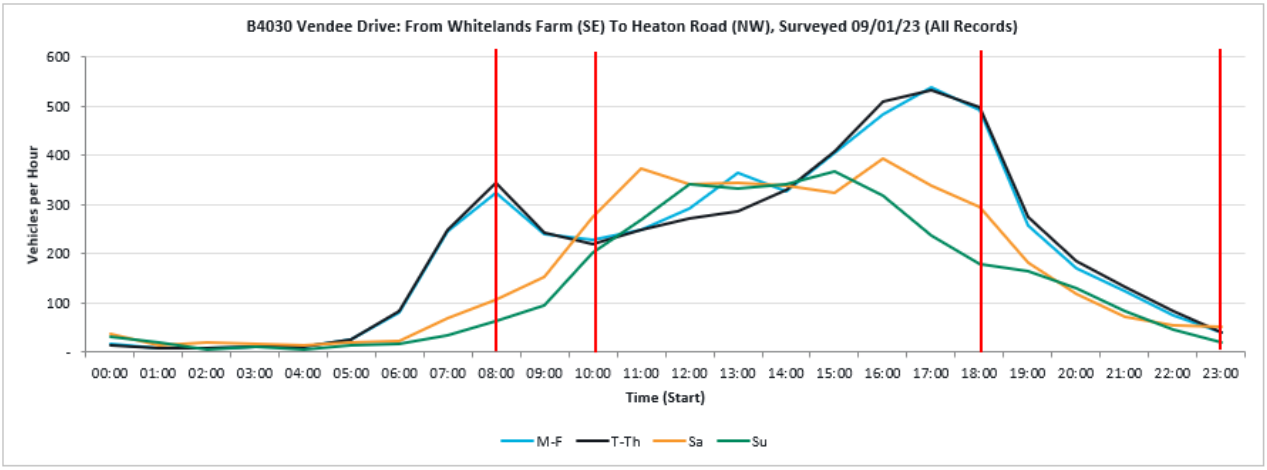
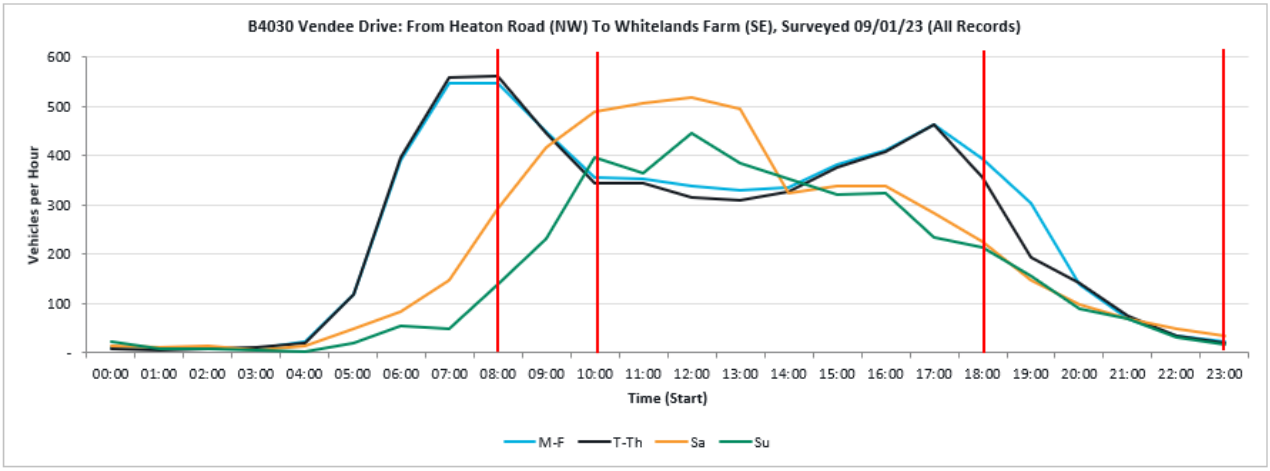


Figure 4: Example output – B4030 Vendee Drive – Southbound



37. The data in graphs highlights that the level of car trips estimated to access the Site via roads in the immediate vicinity of Bicester is limited, and that the peak demand occurs outside of the peak on weekdays and weekends.

38. The impact of the Site on the surrounding highway network is unlikely to cause any significant changes to the way in which the junctions in Bicester operate, nor will there be any significant traffic redistribution which would create any serious safety risks to the Strategic Road Network in the vicinity of Junction 9.

40. This highlights that there is no need to create a weekend strategic model to undertake an assessment of the Site. Any weekend assessment can be based upon typically accepted standalone junction modelling. Should it be necessary to undertake a sensitivity test of the excel model which allows for some traffic redistribution or rerouting, then this can be developed through an excel spreadsheet model (as set out in paragraph 6).

Summary and Conclusion

41. This Technical Note has reviewed observed traffic flow profiles in and around Bicester for both a weekday, and weekend (Saturday and Sunday) scenario.

42. The assessment considered the number of car trips that may be generated by the Site, the likely origin, likely route taken to reach the Site, and the time of day at which they will be present on the network.

43. The Technical Note has identified that:

- There is no weekend model at present, and the emerging Local Plan evidence base is not intending to include a weekend model;
- As is normal practice for, applications for leisure and retail uses these have undertaken standalone junction modelling using observed traffic counts with committed development growth applied to assess weekends;
- The access and mitigation strategy for the development is to minimise traffic impacts and improve walking, cycling and public transport access - these improvements to active travel and public transport will be beneficial to Bicester;
- Weekend peak flows are later in the day than weekdays, typically between 11:00 and 13:00, and traffic volumes are less than either one of the morning and evening peak hours;
- The weekend peak in Bicester is limited to a period in the late morning/ early afternoon associated with shopping – this does not correspond with Puy du Fou peak trip generation, especially with a weekend opening time of 09:00;
- Peak egress operates well outside of the weekend peak as flows drop off earlier than weekday;
- The traffic impacts within Bicester are likely to be minimal as the strategy is for traffic to use and access the Site via the M40 – largely avoiding Bicester;
- With close discussion with OCC, a comprehensive assessment will be undertaken. It is possible to assess impacts at the weekend using junction count data and undertaking independent junction modelling; and
- Any mitigation put in place to deal with weekday impacts would provide benefits during the weekend, given that they are being designed to accommodate development traffic during the weekday peak periods, which have been shown to higher than the weekend.

44. It can be concluded that there is no need to create a weekend strategic model to undertake an assessment of the Site. Any weekend assessment can be based upon the typically accepted standalone junction modelling. Should it be necessary to undertake a sensitivity test which allows for some traffic redistribution or rerouting this can be developed through an excel spreadsheet model.

Next Steps

45. Based on the above and following the initial discussions with OCC around the times and dates of traffic model availability, the following strategy is proposed:

- Undertake additional focused MCCs at key junctions (Junction 10 M40, Baynards Green and key points on Bicester Ring Road) for weekday and weekends, along with a set of ATCs on links approaching junctions;
- Use the BTMLP (version 2031 and 2042) to test the morning and evening peak hour impacts;
- Use a combination of data from the Local Plan Model and MCC and ATC data to create a set of turning counts for the shoulders either side of the peak, as well as Puy du Fou peak operating periods, such as evening egress. This would be used to assess the impact of the Site against the typical weekday peak hour and adjacent shoulders;
- Develop an excel based traffic model of the M40 Strategic Road Network (including Junctions 9 and 10 and Bicester Ring Road) to inform independent junction modelling at agreed junctions to test these for the weekend;
- Utilise traffic count data to highlight that the total traffic in the evening (that associated with egress and the night show) is no worse than peak periods when the junctions operate satisfactorily;
- Update the NH Microsimulation Model to include additional hours and weekend traffic flows; and
- Undertaken an Impact assessment and test mitigation options produced where necessary.

46. We welcome the opportunity to discuss the findings of the Technical Note with OCC development control and their modelling team and to agree a way forward to assess the impacts of the Site.

Appendix A – Site Layout Plan

Appendix B – Proposed Approach to Traffic Modelling

To	Oxfordshire County Council	**Technical Note**	
From	Steer		
Date	14 October 2024		
Project	Puy du Fou	Project No.	24632101

Transport Modelling Proposal

Introduction

1. Following discussions with Oxfordshire County Councils modelling and development control teams this note sets out the proposed approach to assessing the impacts arising from the Puy Du Fou development in terms of traffic modelling and junction assessments. The note specifically addresses the need to develop a weekend model rather than undertaking stand-alone junction assessments for weekend periods.

Traffic Generation

2. A trip generation and mode share note will be circulated to OCC shortly. This will set out how many trips are estimated to be generated by mode, and by hour, based on twelve different scenarios, as summarised below in Table 1.

Table 1: Scenarios

Scenario	Day only/ day and night	Weekday & Friday/ Weekend	School term/ School Holidays	Reference
SC1	Day only	Weekday & Friday	School term	DO – WD – ST
SC2	Day and night	Weekday & Friday	School term	DN – WD – ST
SC3	Day only	Weekend	School term/ school holiday	DO – WE – ST/SH
SC4	Day and night	Weekend	School term/ school holiday	DN – WE – ST/SH
SC5	Day only	Weekday & Friday	School term	DO – WD – ST
SC6	Day and night	Weekday & Friday	School term	DN – WD – ST
SC7	Day only	Weekend	School term/ school holiday	DO – WE – ST/SH
SC8	Day and night	Weekend	School term/ school holiday	DN – WE – ST/SH
SC9	Day only	Weekday & Friday	School term	DO – WD – ST
SC10	Day and night	Weekday & Friday	School term	DN – WD – ST
SC11	Day only	Weekend	School term/ school holiday	DO – WE – ST/SH
SC12	Day and night	Weekend	School term/ school holiday	DN – WE – ST/SH

3. From the work undertaken to date it is evident that:

- The park is expected to be closed (other than for some conferences and hotel uses) between November and April i.e. 5 months of the year.

- The closed period generally correlates with what is understood to be some of the peak operating times for Bicester Village, i.e. dates such as Black Friday, and the lead up to and post Christmas.
- The park is expected to open at 10am during the weekday and 9am at the weekends, with it closing around 7pm in the evening when there is no night show. On evenings when there is a night show this would typically be after dusk and the park would therefore close at around 11pm. It is therefore evident that the peak arrival and departure times are outside of typical morning and evening peaks.
- The greatest demand is likely to occur in the summer holidays, when traffic volumes in the peak periods are generally lower.
- A target of 50% arrivals by sustainable travel modes is also to be applied.
- Visitor number will grow over time, and as such impacts arising in Year one will be significantly less than in Year 10.

Traffic Models

4. From initial discussions with OCC and National Highways it is understood that there are three models which assess roads in the vicinity of the proposal. These are summarised below:

The Bicester Traffic Model (BTM)

5. This strategic model covers the Bicester Area and as such would cover the PdF assessment area. The model has an initial base year of 2016 and is a one hour only - peak hour model covering 07:30 to 08:30 and 17:00 to 18:00.

6. Given the date of the model, OCC recently undertook a validation exercise reviewing the 2026 future base year against counts undertaken in 2022 / 2023 to determine whether the model is performing as expected, and as such can still be considered fit for purpose.

7. This model is the one most commonly used by developers to test development impacts. This model was used by the Oxford Strategic Rail Freight Interchange (SRFI) in their initial assessment in 2021 / 22.

8. It is understood that there is a 2042 Future Year (FY) scenario of the Bicester Transport Model (BTM) being developed, which has a finer level of granularity than the CLP2042 model. It is understood that uncertainty logs have been updated for the local plan work, and the model will be available for use after the Reg 19 consultation goes public, which is expected in late November 2024.

Cherwell Local Plan Model (CLP2042)

9. It is understood that this is an adaptation of the National Highways Southeast strategic model, and is being used rather than the BTM to test the Local Plan scenarios as it has more up to date traffic flows than the BTM. The model is a three hour peak model, i.e. it covers peak hours of 07:00 to 10:00 and 16:00 to 19:00, as well as an interpeak period.

10. In terms of the CLP2042 model it is understood that LMVR and Forecast Year (2042)) reports will be published alongside the CLP2042 draft submission as part of the evidence base. OCC have noted that:

- The Base (2019) model has been developed and validated.
- The 2042 model with proposed CLP2042 allocations and incorporating up-to-date Uncertainty Log assumptions for 2042 has been developed.
- Work on the 2042 Forecast Year scenario is in progress and on track to be completed by the end of October.
- A CLP2031 scenario is also being developed as this is needed for the HRA assessment of the cumulative impact (all Districts) on European Sites, and for AQMA assessment.

11. Notwithstanding this, it is understood that OCC are unable to share details about the modelling until the draft CLP2042 is published.

The M40 Junction 10 VISSIM microsimulation model

12. This is a microsimulation model which has been developed by National Highways (NH) to test the three junctions that make up M40 Junction 10, as well as the A43 Baynards Green junction. This model has been used by developers at Baynards Green to determine their impacts at the junction. It was also used by the Oxford SRFI consultants to test impacts and options for the M40 / A43 junction, alongside the BTM.

Weekend Modelling

13. At present there is no weekend model. This is not particularly unusual given that the Weekday peak periods are the primary focus for capacity enhancements and understanding how networks operate.

14. Data has been obtained from OCCs Transport Monitoring team and analysed by the project team. The data analysed includes some of the data which is understood to have been used in OCC's BTM 2026 future base year review. Additional data from independent collection sites and publicly available data from WebTRIS has also been considered.

15. The data has shown that:

- Weekend daily traffic flows are lower than weekday
- Sunday flows are significantly lower than Saturday
- The Saturday peak period tends to occur later in the day than a weekday
- The Great Wolf application undertook isolated junction modelling for the weekend period of 13:00 to 14:00 (as the peak hour)

16. A full note on the finding of the traffic profile analysis will be provided to OCC shortly.

The proposed approach

17. On the basis of the above, a weekend model is not considered necessary by Steer as:

- The traffic impacts within Bicester are likely to be minimal as the strategy is for traffic to use and access the proposed development Site via the M40 – largely avoiding Bicester.
- The Puy du Fou peak operating periods at the weekend are predominantly outside of peak weekend period.
- Off-peak weekend flows are generally lower than the corresponding times during the week.
- The weekend peak in Bicester is limited to a period in the late morning / early afternoon, associated with shopping. This does not correspond with Puy du Fou peak trip generation (especially if the Park opens at 9am).
- Other developers (e.g. Great Wolf and Bicester Village) have not created weekend models. They have undertaken junction modelling assessments of weekend peak periods (13:-00 to 14:00) only.
- The Local Plan does not consider impacts at the weekend within Bicester.
- It is possible to assess impacts at the weekend using junction count data and undertaking independent junction modelling.
- Any mitigation put in place to deal with weekday impacts would provide benefits during the weekend.
- The access and mitigation strategy for the development is to minimise traffic impacts as far as possible and improve walking, cycling and public transport. These improvements to active travel and public transport will be beneficial to Bicester.

18. On the basis of the above and following the discussions with OCC around the times and dates of traffic impacts, the following strategy is proposed:

- Produce a Technical Note summarising the variations in traffic flows on links in and around Bicester, justifying why a weekend model is not required.

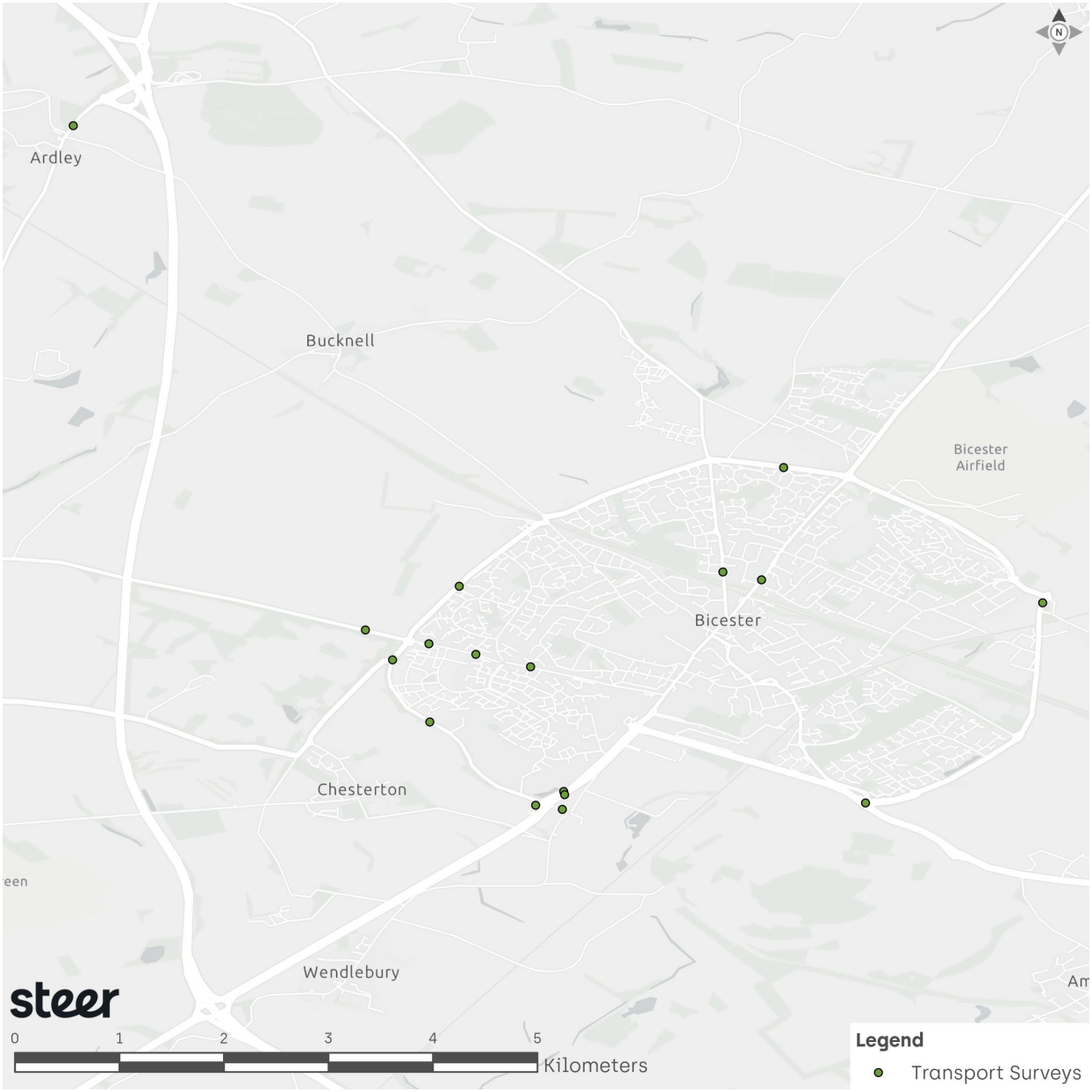
- Undertake focused manual classified counts (MCC's) at key junctions (Junction 10 M40, Baynards Green and key points on Bicester Ring Road) for weekday and weekends, along with a set of ATC's on links approaching junctions, to understand variations between time of day and weekend.
- Use the BTM to test the morning and evening peak hour impacts.
- Use a combination of '3-hour' data from the Local Plan Model and collected MCC and ATC data to create a set of turning counts for the shoulders either side of the peak as well as peak Puy du Fou operating periods, such as evening egress. This would be used to assess the impact of the proposed development against the typical weekday peak hour and adjacent 'shoulders'.
- Independent junction modelling will then be undertaken at agreed junctions to test these for the weekday and weekend.
- Utilise traffic count data to highlight that the total traffic in the evening (i.e. that associated with egress and the night show) is no worse than peak periods when the junctions operate satisfactorily.
- Update the National Highway Microsimulation Model to include additional hours and weekend traffic flows. Impact assessment would then be undertaken, and test mitigation options produced where necessary.

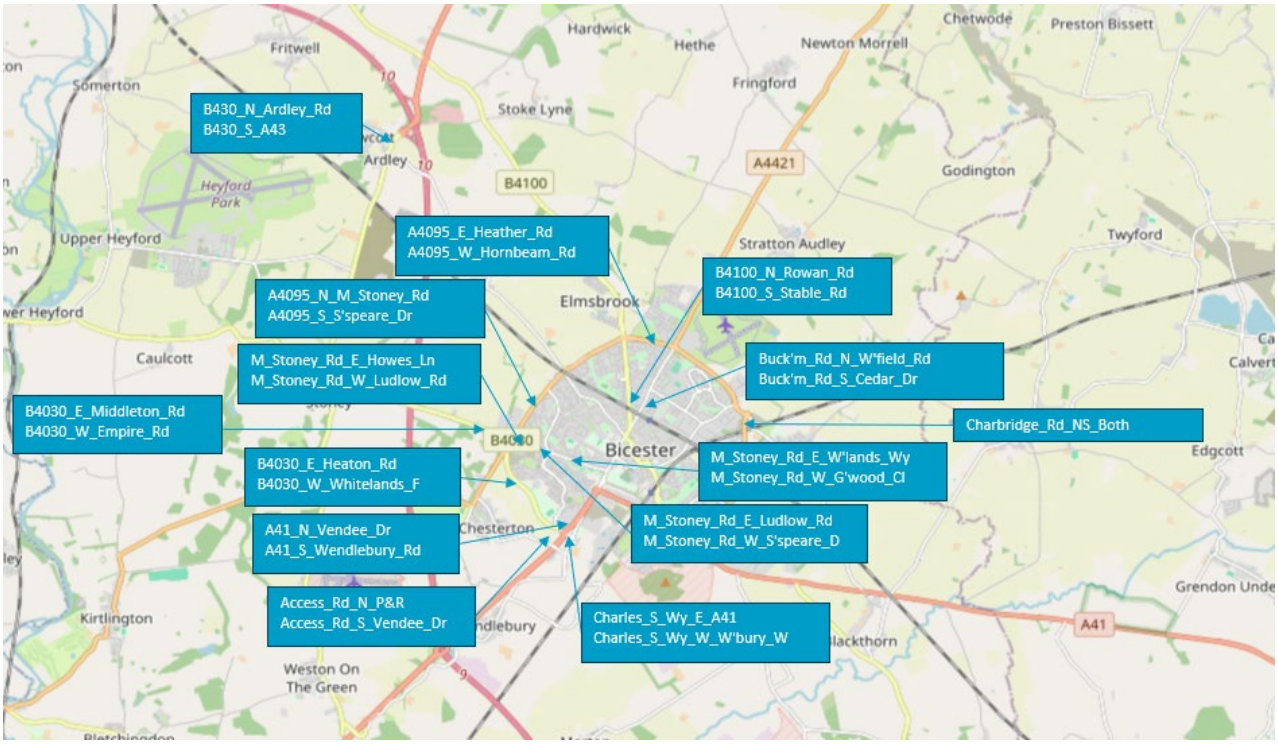
19. Agreement with OCC to this approach, following a technical meeting to discuss the findings of the traffic profile are sought.

Appendix C – Proposed Traffic Count Locations

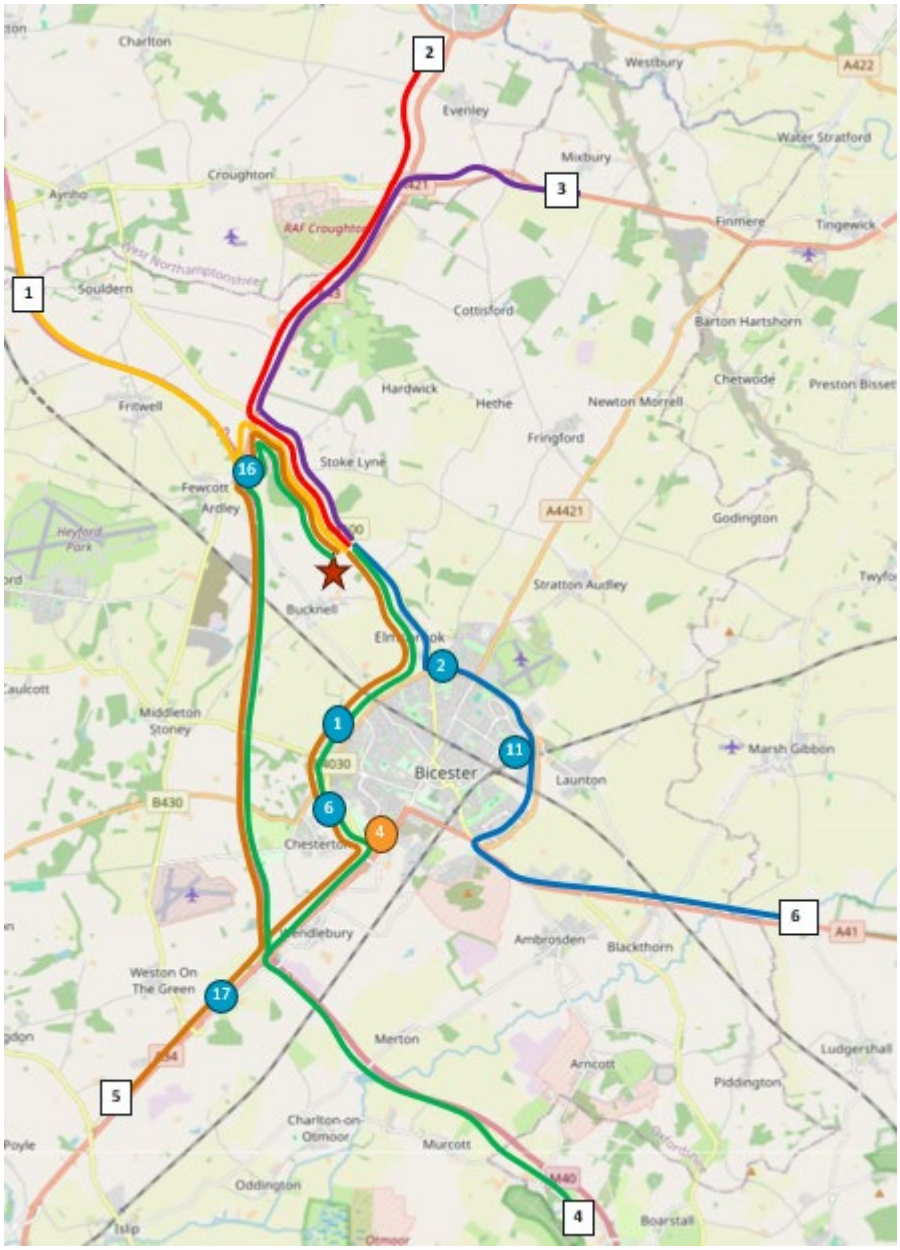
Location
B4030 Vendee Drive
M40 Junction 9
M40 Junction 10
A43 Baynards Green Roundabout
B4100 / A4095 signals – Current under construction
A41 / Vendee Drive / Charles Shouler Way
Vendee Drive / A4095
Vendee Drive / B4030 / Howes Lane / Middleton Stoney Rd
A4095 / Bucknell Road / Howes Lane
A4095 Howes Lane
A4095 between Bucknell Road roundabout and Banbury Road roundabout
A4095 between Banbury Road roundabout and Buckingham Road roundabout
A4421 Skimmingdish Lane
A4421 between Lauton Road roundabout and Bicester Lane roundabout
A4421 Charbridge Lane
A4421 Wretchwick Way
A4421 between Peregrinte Way roundabout and A41 roundabout
A41 between Oxford Road roundabout and B4030 roundabout
A41 between B4030 roundabout and M40 Junction 9
A34 between Ardley Roundabout and B430
A43 between Junction 10 and Tusmore
B4100 between the A4095 roundabout and East Street
Bucknell Road/ Bicester Road/ Ardley Road between A4095 roundabout and B430
B430 between Ardley Roundabout and Ardley Fields Household Waste & Recycling Centre

Appendix D – Survey Site Locations



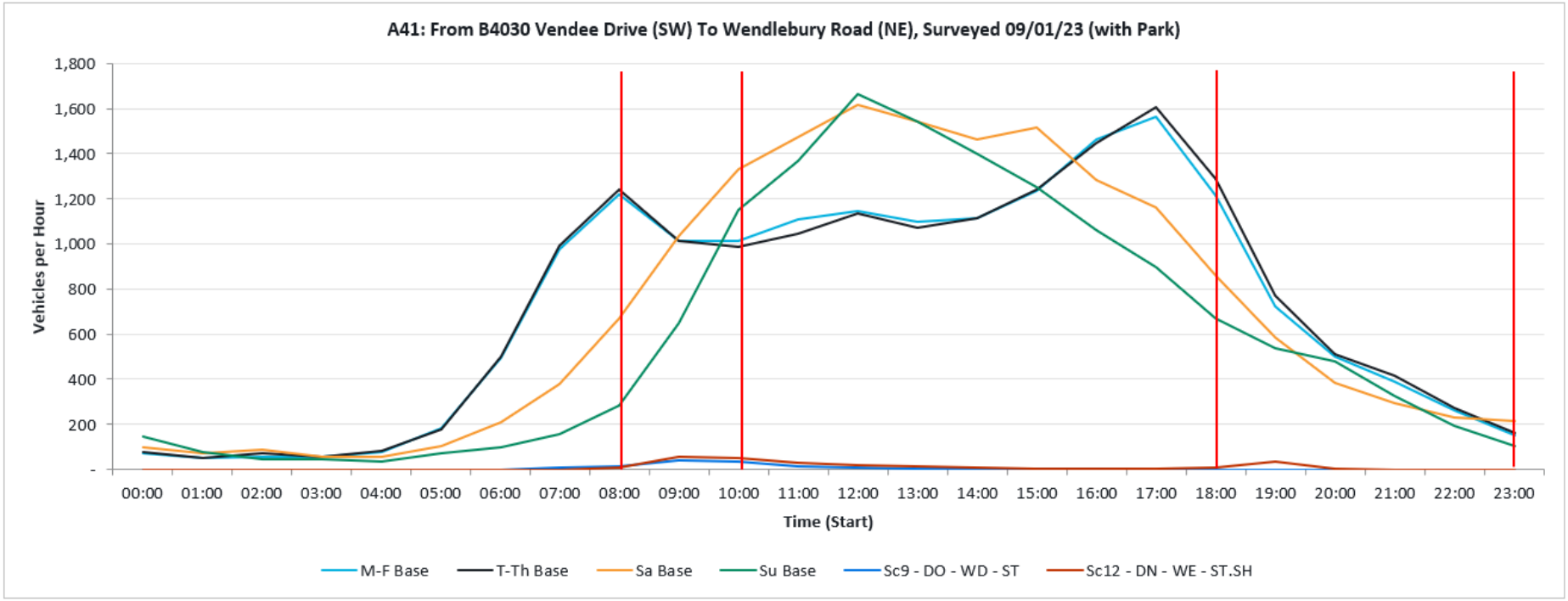

B430_N_Ardley_Rd
B430_S_A43
A4095_E_Heather_Rd
A4095_W_Hornbeam_Rd
A4095_N_M_Stoney_Rd
A4095_S_S'speare_Dr
M_Stoney_Rd_E_Howes_Ln
M_Stoney_Rd_W_Ludlow_Rd
B4030_E_Middleton_Rd
B4030_W_Empire_Rd
B4030_E_Heaton_Rd
B4030_W_Whitelands_F
A41_N_Vendee_Dr
A41_S_Wendlebury_Rd
Access_Rd_N_P&R
Access_Rd_S_Vendee_Dr
B4100_N_Rowan_Rd
B4100_S_Stable_Rd
Buck'm_Rd_N_W'field_Rd
Buck'm_Rd_S_Cedar_Dr
Charbridge_Rd_NS_Both
M_Stoney_Rd_E_W'lands_Wy
M_Stoney_Rd_W_G'wood_Cl
M_Stoney_Rd_E_Ludlow_Rd
M_Stoney_Rd_W_S'speare_D
Charles_S_Wy_E_A41
Charles_S_Wy_W_W'bury_W
Bicester
Somerton
Fritwell
Ardley
Stoke Lyne
Hardwick
Hethe
Newton Morrell
Chetwode
Preston Bissett
Fringford
Godington
Stratton Audley
Twyford
Upper Heyford
Elmsbrook
Caulcott
Edgcott
Chesterton
Kirtlington
Weston On
The Green
Grendon Unde
A4421
B4100
A41

Appendix E – Routing Options

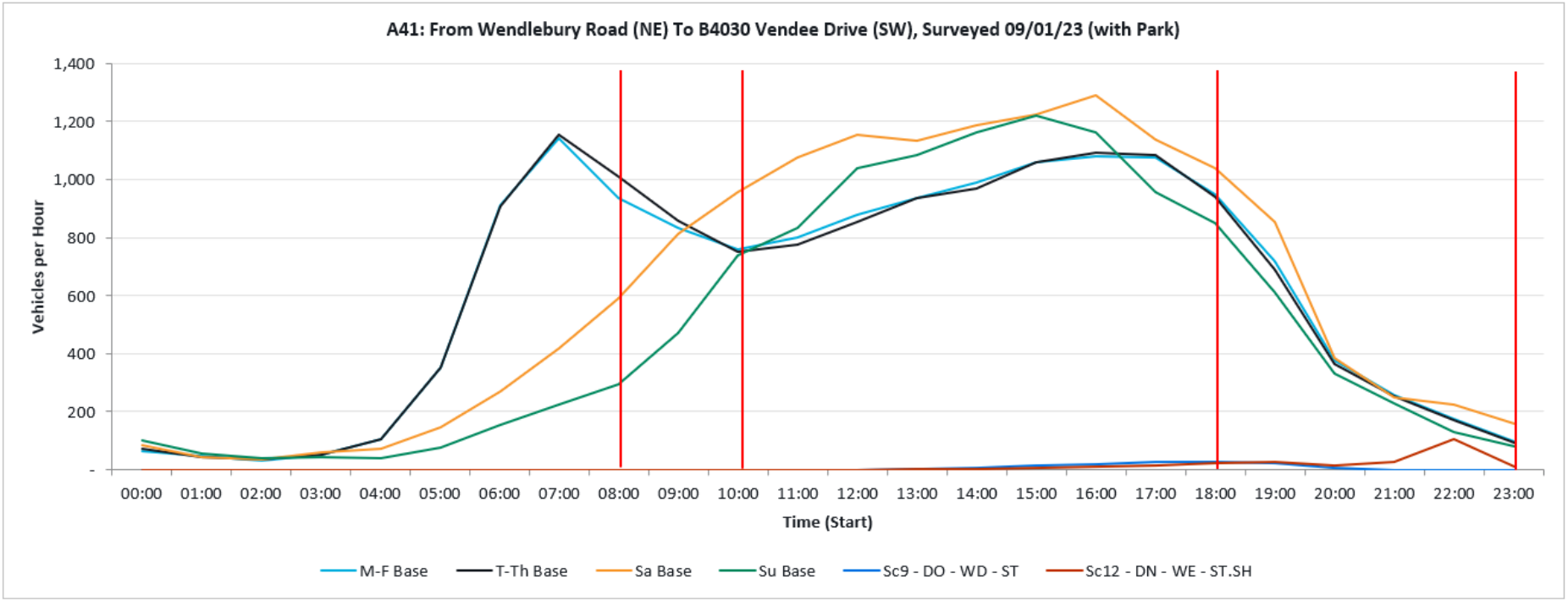


Appendix F – Graphs of Sites Surveyed

A41: From B4030 Vendee Drive (SW) To Wendlebury Road (NE), Surveyed 09/01/23 (with Park)

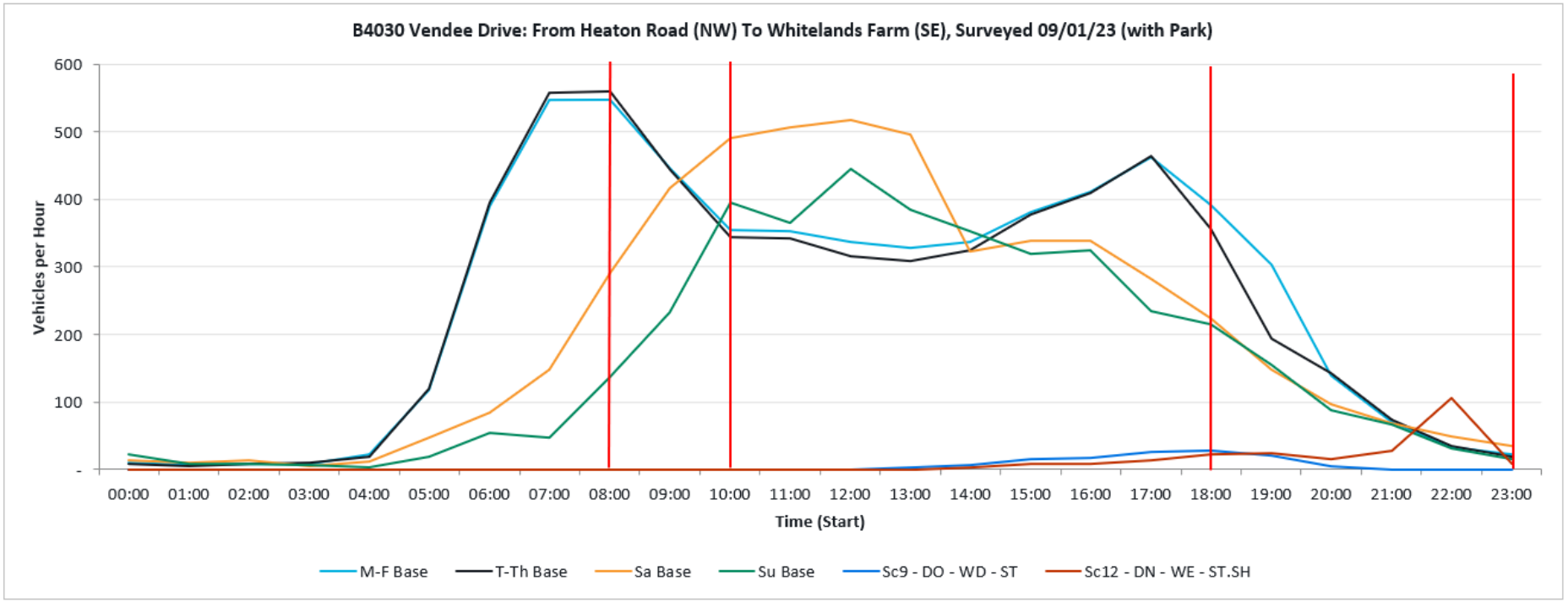


A41: From Wendlebury Road (NE) To B4030 Vendee Drive (SW), Surveyed 09/01/23 (with Park)

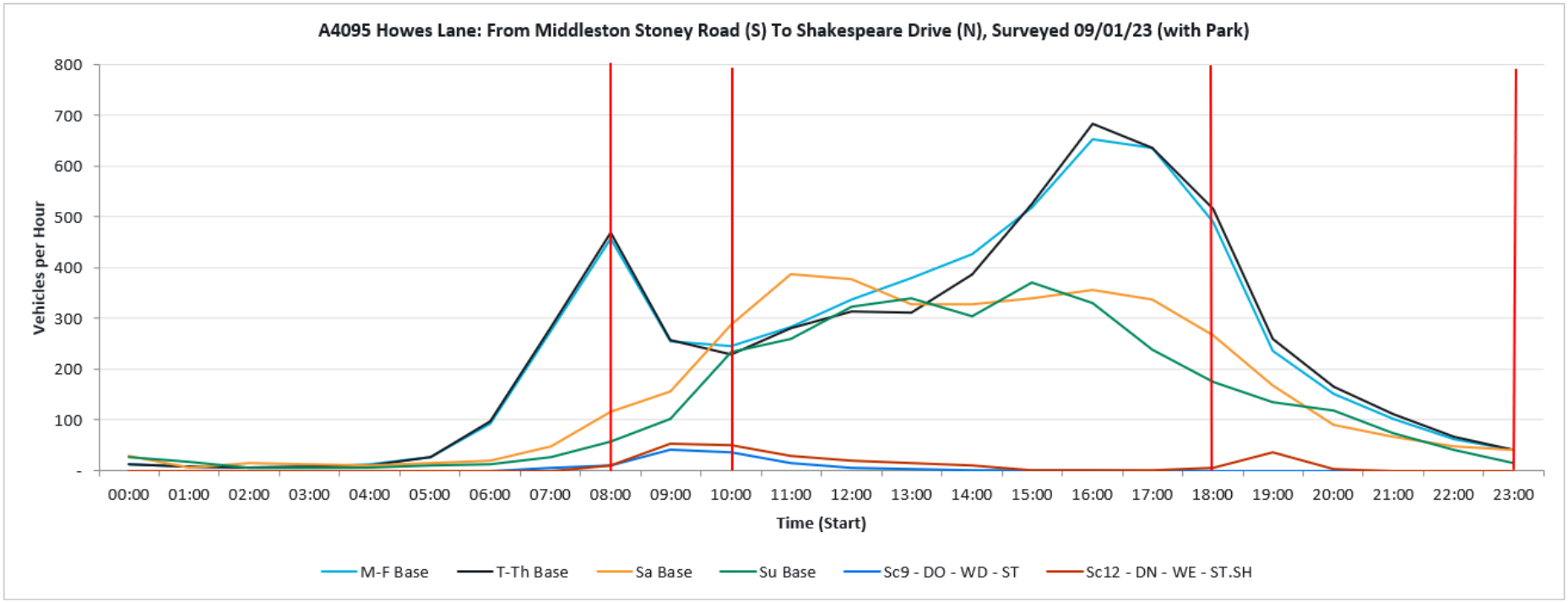


B4030 Vendee Drive: From Whitelands Farm (SE) To Heaton Road (NW), Surveyed 09/01/23 (with Park)

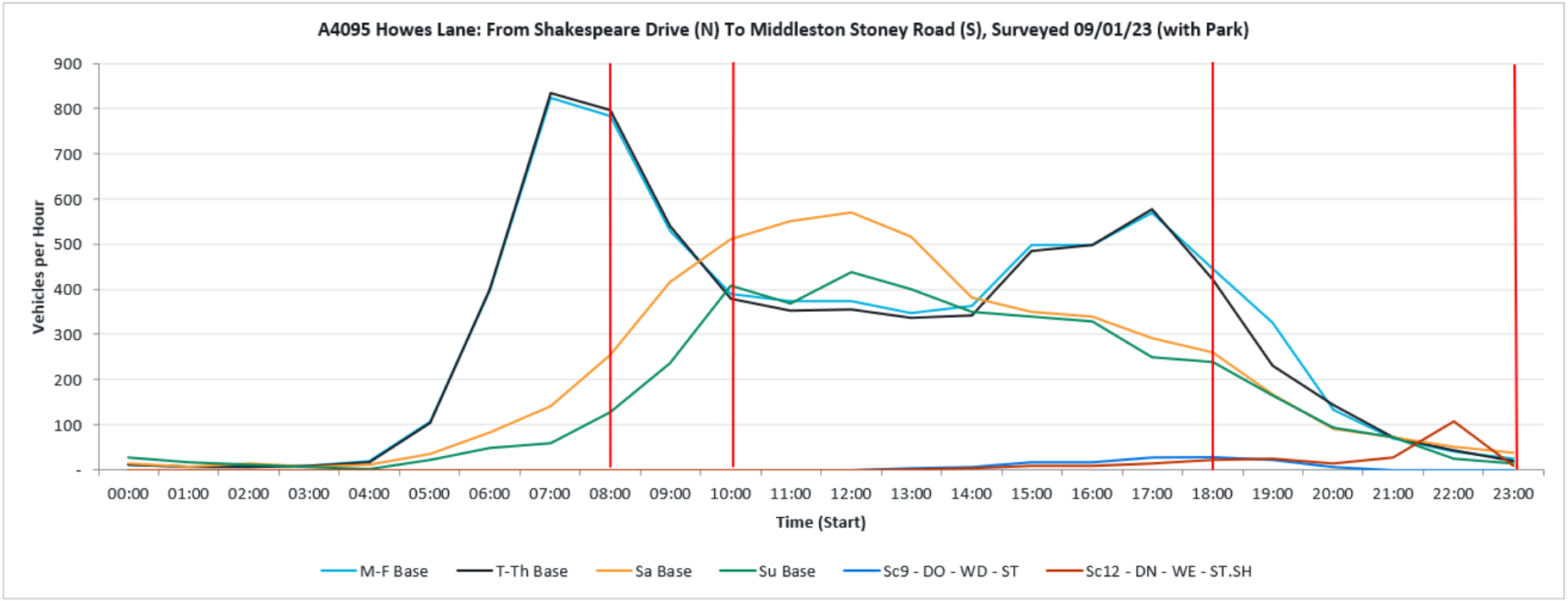
B4030 Vendee Drive: From Heaton Road (NW) To Whitelands Farm (SE), Surveyed 09/01/23 (with Park)



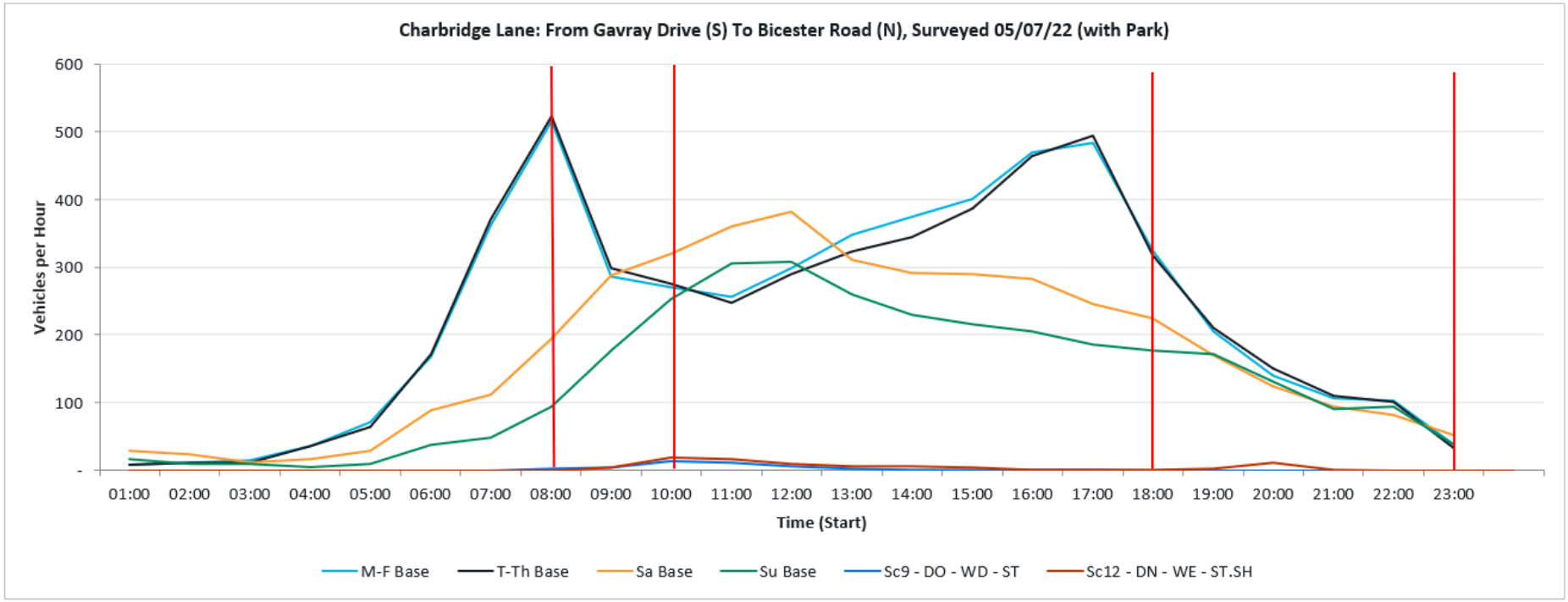
A4095 Howes Lane: From Middleston Stoney Road (S) To Shakespeare Drive (N), Surveyed 09/01/23 (with Park)



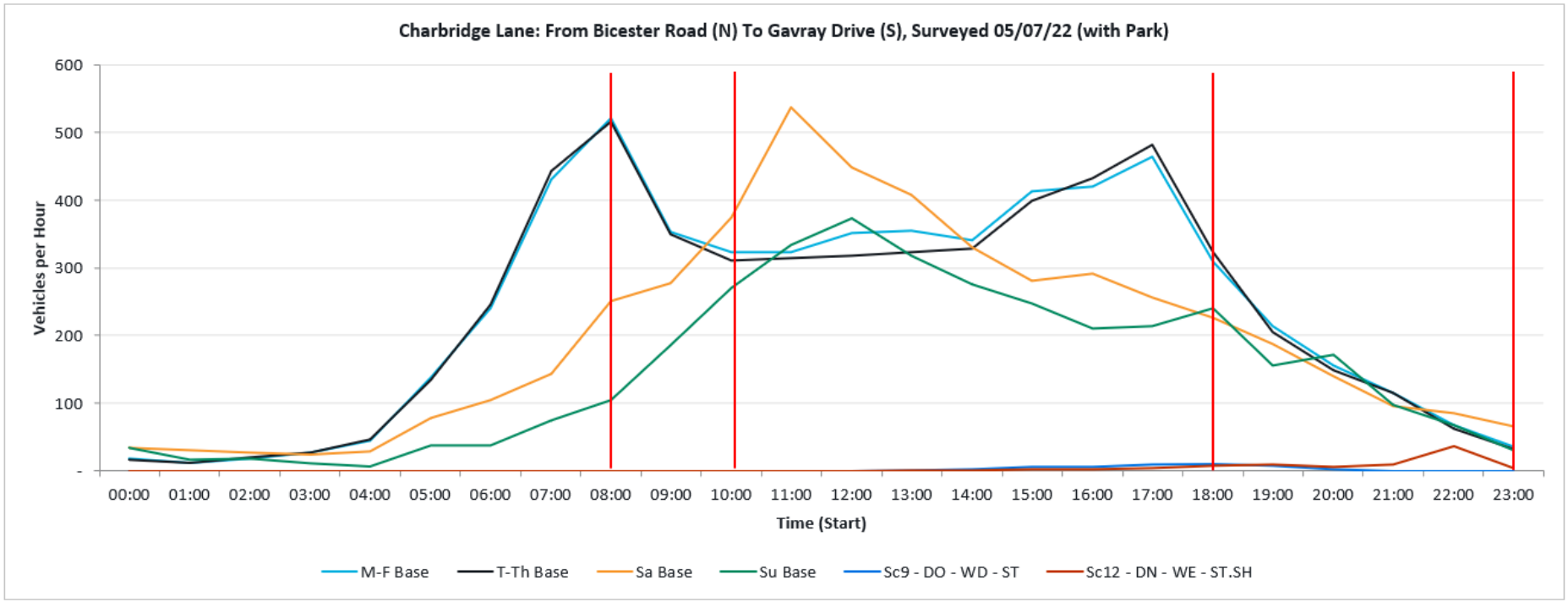
A4095 Howes Lane: From Shakespeare Drive (N) To Middleston Stoney Road (S), Surveyed 09/01/23 (with Park)



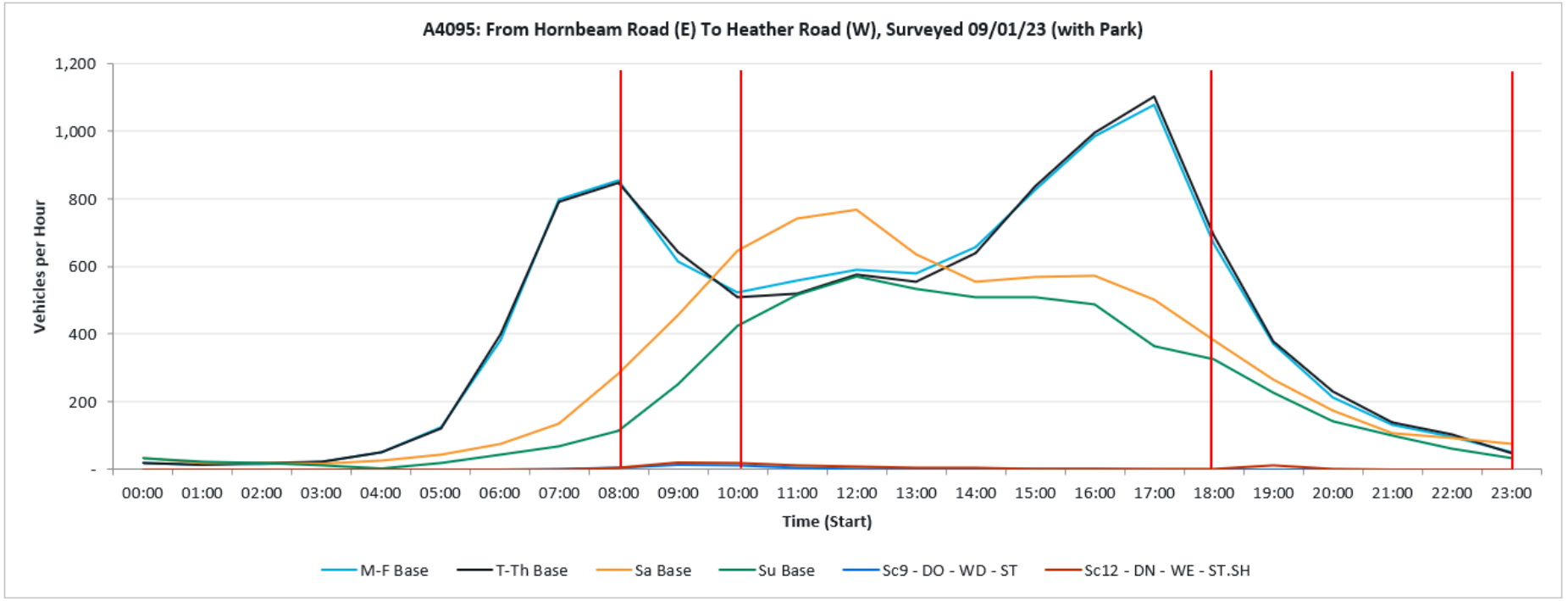
Charbridge Lane: From Gavray Drive (S) To Bicester Road (N), Surveyed 05/07/22 (with Park)



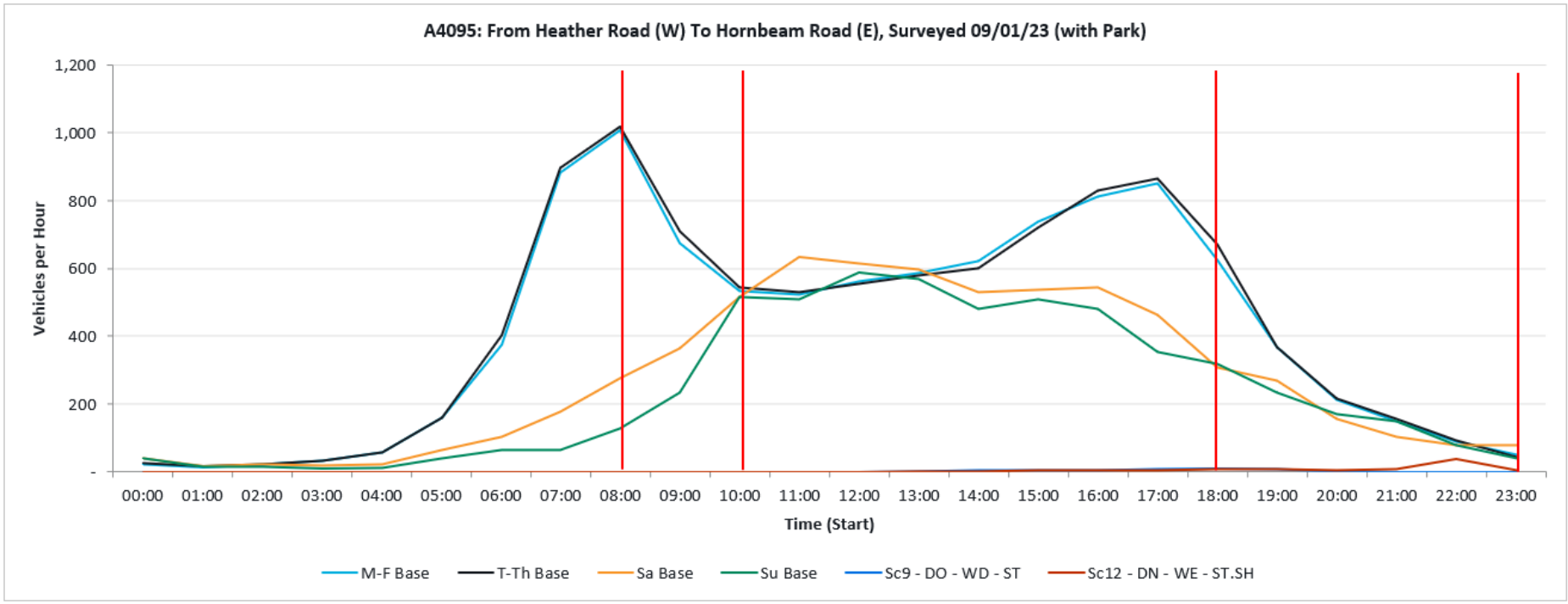
Charbridge Lane: From Bicester Road (N) To Gavray Drive (S), Surveyed 05/07/22 (with Park)



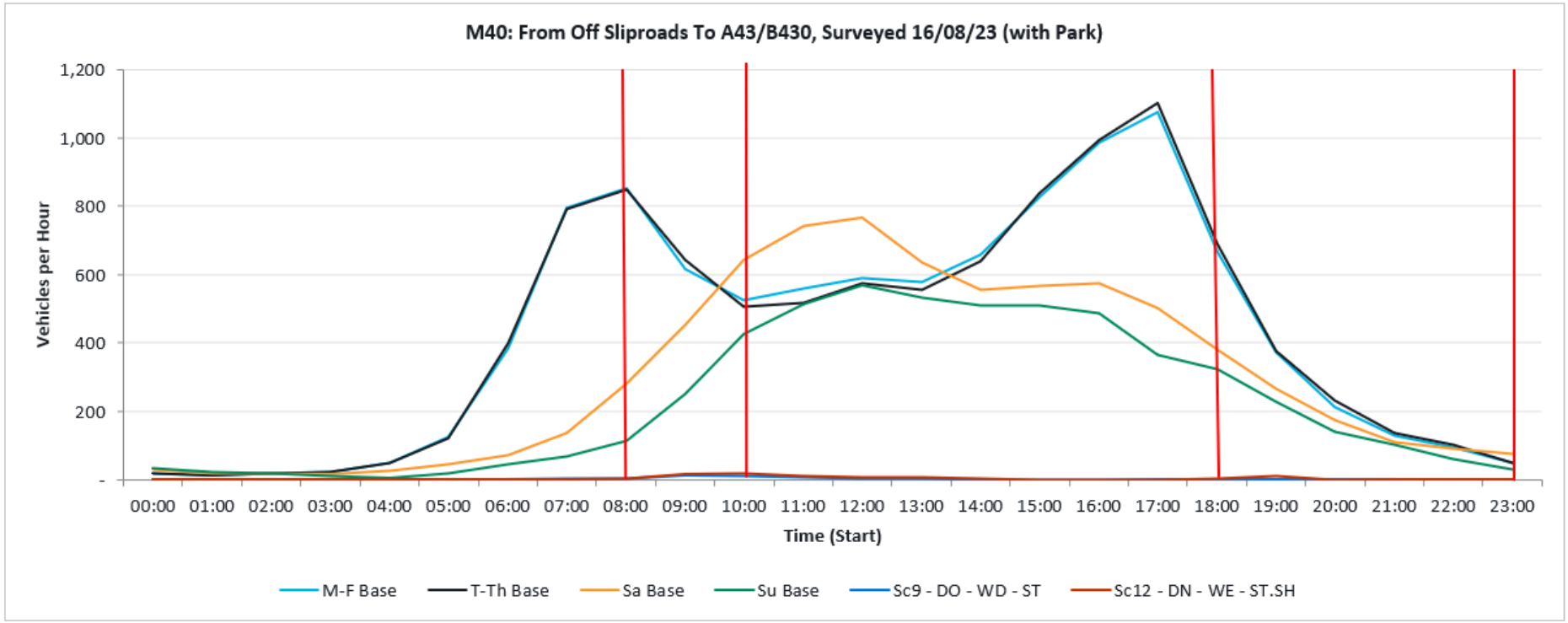
A4095: From Hornbeam Road (E) To Heather Road (W), Surveyed 09/01/23 (with Park)



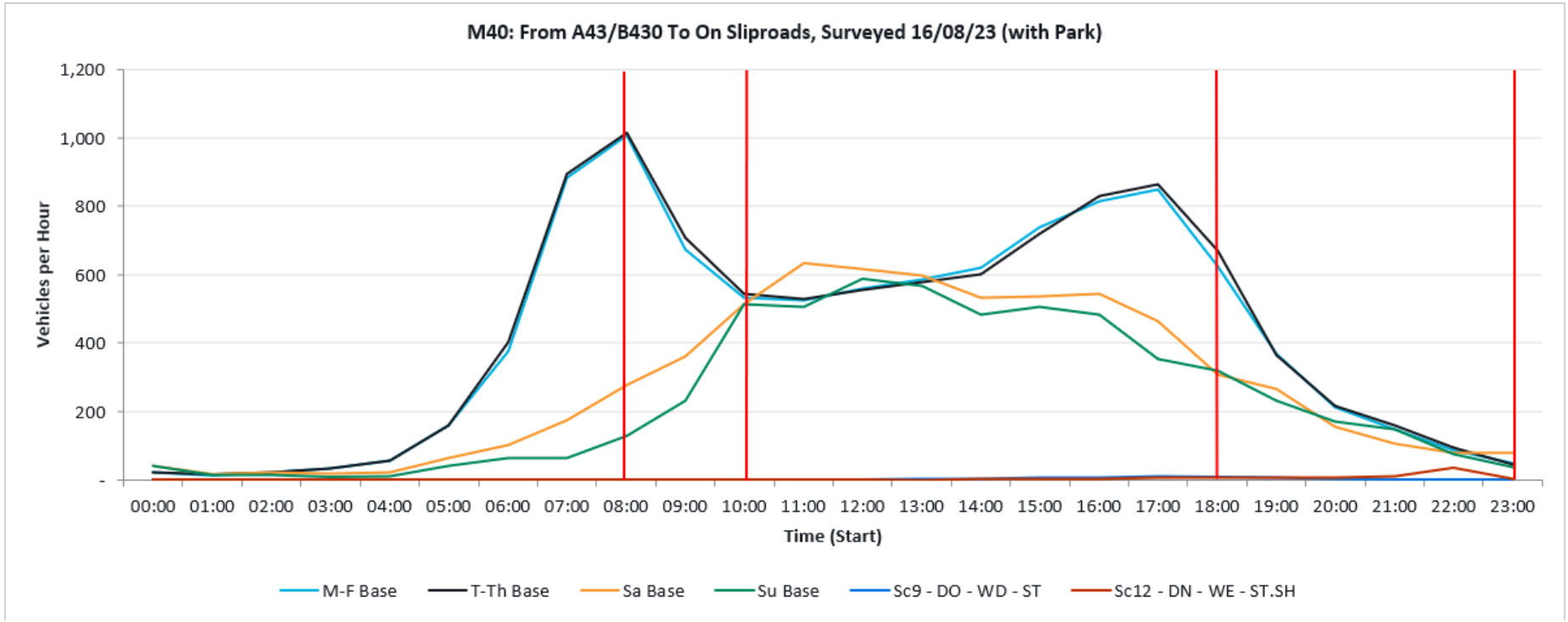
A4095: From Heather Road (W) To Hornbeam Road (E), Surveyed 09/01/23 (with Park)



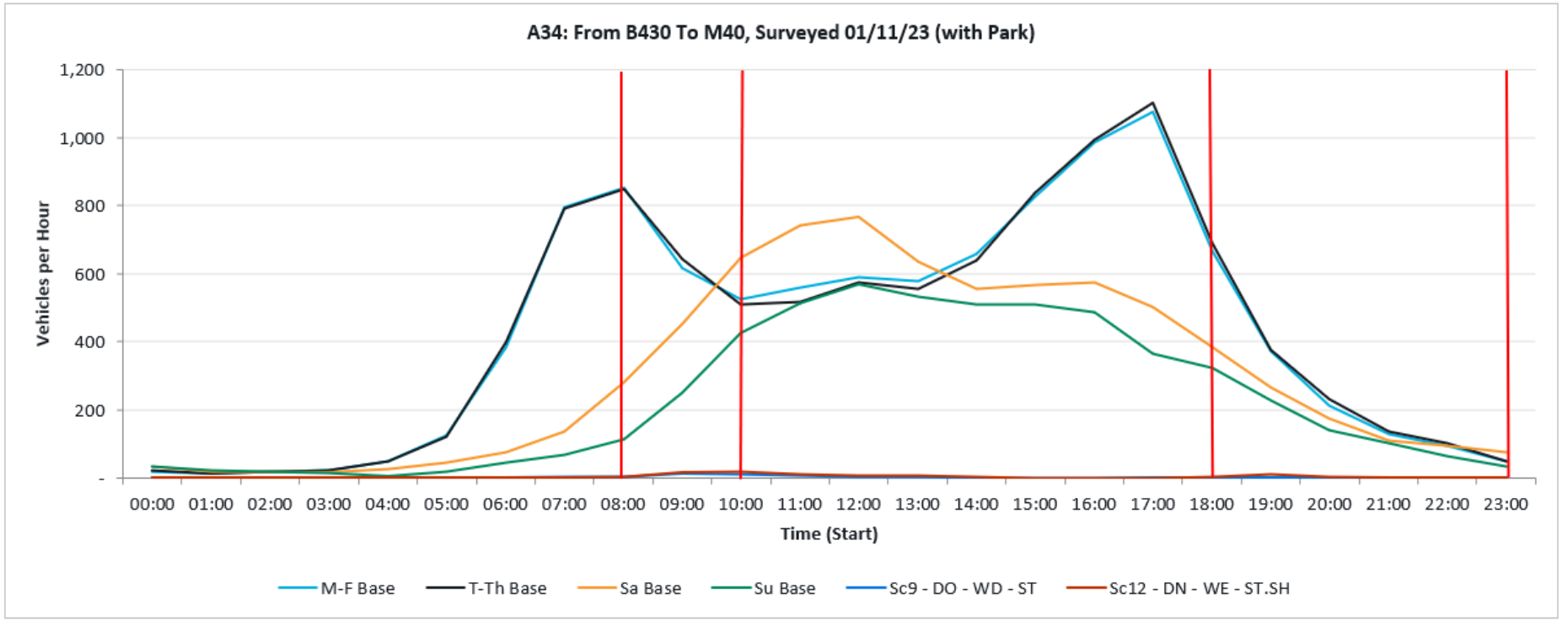
M40: From Off Sliproads To A43/B430, Surveyed 16/08/23 (with Park)



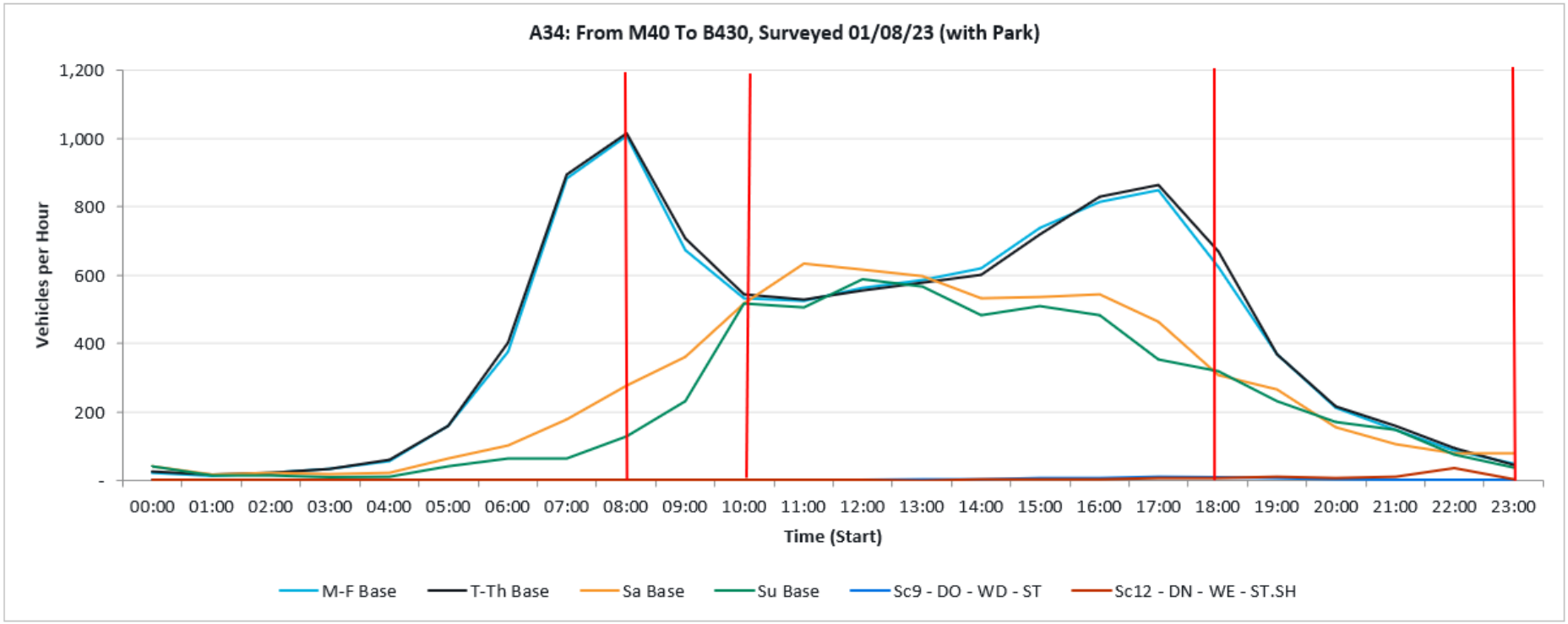
M40: From A43/B430 To On Sliproads, Surveyed 16/08/23 (with Park)



A34: From B430 To M40, Surveyed 01/11/23 (with Park)



A34: From M40 To B430, Surveyed 01/08/23 (with Park)



I Rail Distribution for Peak Weekday and Weekend Scenarios, by Origin

Rail Distribution for Peak Weekday and Weekend Scenarios, by Origin

Ingress

Weekday

Ingress: Scenario 1 (WD), Phase 1

Table 1: Rail Demand Distribution in hourly intervals, Scenario 1 (Ingress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
07:00 – 08:00	4	12	0	0	16	0	4	5	4	13
08:00 – 09:00	11	36	0	0	47	1	13	15	12	41
09:00 – 10:00	11	35	0	0	46	1	12	14	12	39
10:00 – 11:00	3	11	0	0	14	0	4	4	4	12
11:00 – 12:00	2	5	0	0	7	0	2	2	2	6
12:00 – 13:00	1	2	0	0	3	0	1	1	1	3
13:00 – 14:00	0	1	0	0	1	0	0	0	0	0
14:00 – 15:00	0	0	0	0	0	0	0	0	0	0
Daily Total	32	102	0	0	134	2	36	41	35	114

Ingress: Scenario 5 (WD), Phase 4

Table 2: Rail Demand Distribution in hourly intervals, Scenario 7 (Ingress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
07:00 – 08:00	5	17	0	0	22	1	6	7	6	20
08:00 – 09:00	15	50	1	0	66	2	17	20	17	56
09:00 – 10:00	15	49	1	0	65	2	17	20	16	55
10:00 – 11:00	5	16	0	0	21	1	5	6	5	17
11:00 – 12:00	2	7	0	0	9	0	3	3	2	8
12:00 – 13:00	1	4	0	0	5	0	1	1	1	3
13:00 – 14:00	0	2	0	0	2	0	1	1	1	3
14:00 – 15:00	0	1	0	0	1	0	0	0	0	0
Daily Total	43	146	2	0	191	6	50	58	48	162

Ingress: Scenario 9 (WD), Phase 8

Table 3: Rail Demand Distribution in hourly intervals, Scenario 11 (Ingress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
07:00 – 08:00	12	39	0	0	51	1	13	16	13	43
08:00 – 09:00	34	113	1	0	148	4	39	46	38	127
09:00 – 10:00	33	111	1	0	145	4	38	45	37	124
10:00 – 11:00	11	35	0	0	46	1	12	14	12	39
11:00 – 12:00	5	16	0	0	21	1	6	7	5	19
12:00 – 13:00	2	8	0	0	10	0	3	3	3	9
13:00 – 14:00	1	3	0	0	4	0	1	1	1	3
14:00 – 15:00	0	2	0	0	2	0	1	1	1	3
Daily Total	98	327	2	0	427	11	113	133	110	367

Weekend

Ingress: Scenario 3 (WE), Phase 1

Table 4: Rail Demand Distribution in hourly intervals, Scenario 3 (Ingress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
07:00 – 08:00	13	43	0	0	56	2	15	17	14	48
08:00 – 09:00	39	131	1	0	171	5	45	53	43	146
09:00 – 10:00	38	125	1	0	164	5	43	51	42	141
10:00 – 11:00	12	39	0	0	51	2	14	16	13	45
11:00 – 12:00	6	19	0	0	25	1	6	7	6	20
12:00 – 13:00	3	9	0	0	12	0	3	4	3	10
13:00 – 14:00	1	4	0	0	5	0	1	1	1	3
14:00 – 15:00	1	2	0	0	3	0	1	1	1	3
Daily Total	113	372	2	0	487	15	128	150	123	416

Ingress: Scenario 7 (WE), Phase 4

Table 5: Rail Demand Distribution in hourly intervals, Scenario 7 (Ingress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
07:00 – 08:00	28	94	1	0	123	4	32	38	31	105
08:00 – 09:00	85	282	3	0	370	11	98	114	94	317
09:00 – 10:00	81	271	3	0	355	10	94	109	90	303
10:00 – 11:00	26	86	1	0	113	3	30	35	29	97
11:00 – 12:00	12	40	0	0	52	2	14	16	13	45
12:00 – 13:00	6	20	0	0	26	1	7	8	7	23
13:00 – 14:00	2	8	0	0	10	0	3	3	3	9
14:00 – 15:00	1	4	0	0	5	0	1	2	1	4
Daily Total	241	805	8	0	1054	31	279	325	268	903

Ingress: Scenario 11 (WE), Phase 8

Table 6: Rail Demand Distribution in hourly intervals, Scenario 11 (Ingress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
07:00 – 08:00	54	180	2	0	236	7	62	73	60	202
08:00 – 09:00	162	541	6	0	709	21	187	218	179	605
09:00 – 10:00	156	520	6	0	682	20	180	210	172	582
10:00 – 11:00	49	165	2	0	216	6	57	66	55	184
11:00 – 12:00	23	77	1	0	101	3	27	31	26	87
12:00 – 13:00	12	39	0	0	51	1	13	16	13	43
13:00 – 14:00	5	16	0	0	21	1	5	6	5	17
14:00 – 15:00	2	8	0	0	10	0	3	3	2	8
Daily Total	463	1546	17	0	2026	59	534	623	512	1728

Egress

Weekday

Egress: Scenario 1 (WD), Phase 1

Table 7: Rail Demand Distribution in hourly intervals, Scenario 1 (Egress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
14:00 - 15:00	0	0	0	0	0	0	0	0	0	0
15:00 - 16:00	0	1	0	0	1	0	0	0	0	0
16:00 - 17:00	1	5	0	0	6	0	2	2	2	6
17:00 - 18:00	5	16	0	0	21	1	5	6	5	17
18:00 - 19:00	7	25	0	0	32	1	9	10	8	28
19:00 - 20:00	7	24	0	0	31	1	8	10	8	27
20:00 - 21:00	6	20	0	0	26	1	7	8	7	23
21:00 - 22:00	4	13	0	0	17	1	5	5	4	15
22:00 - 23:00	0	1	0	0	1	0	0	0	0	0
Daily Total	30	105	0	0	135	5	36	41	34	116

Egress: Scenario 5 (WD), Phase 4

Table 8: Rail Demand Distribution in hourly intervals, Scenario 5 (Egress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
14:00 - 15:00	0	0	0	0	0	0	0	0	0	0
15:00 - 16:00	0	2	0	0	2	0	1	1	1	3
16:00 - 17:00	2	6	0	0	8	0	2	2	2	6
17:00 - 18:00	7	22	0	0	29	1	8	9	7	25
18:00 - 19:00	10	34	0	0	44	1	12	14	11	38
19:00 - 20:00	10	34	0	0	44	1	12	14	11	38
20:00 - 21:00	8	28	0	0	36	1	10	11	9	31
21:00 - 22:00	6	19	0	0	25	1	6	7	6	20
22:00 - 23:00	0	1	0	0	1	0	0	0	0	0
Daily Total	43	146	0	0	189	5	51	58	47	161

Egress: Scenario 9 (WD), Phase 8

Table 9: Rail Demand Distribution in hourly intervals, Scenario 9 (Egress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
14:00 - 15:00	0	0	0	0	0	0	0	0	0	0
15:00 - 16:00	1	4	0	0	5	0	1	1	1	3
16:00 - 17:00	4	14	0	0	18	1	5	6	5	17
17:00 - 18:00	15	49	1	0	65	2	17	20	16	55
18:00 - 19:00	23	77	1	0	101	3	27	31	26	87
19:00 - 20:00	23	76	1	0	100	3	26	31	25	85
20:00 - 21:00	19	63	1	0	83	2	22	25	21	70
21:00 - 22:00	12	42	0	0	54	2	14	17	14	47
22:00 - 23:00	1	3	0	0	4	0	1	1	1	3
Daily Total	98	328	4	0	430	13	113	132	109	367

Weekend

Egress: Scenario 3 (WE), Phase 1

Table 10: Rail Demand Distribution in hourly intervals, Scenario 3 (Egress)

Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
14:00 - 15:00	0	1	0	0	1	0	0	0	0	0
15:00 - 16:00	2	8	0	0	10	0	3	3	3	9
16:00 - 17:00	8	26	0	0	34	1	9	10	8	28
17:00 - 18:00	18	59	1	0	78	2	20	24	20	66
18:00 - 19:00	26	87	1	0	114	3	30	35	29	97
19:00 - 20:00	25	83	1	0	109	3	29	33	27	92
20:00 - 21:00	19	65	1	0	85	2	22	26	21	71
21:00 - 22:00	13	42	0	0	55	2	15	17	14	48
22:00 - 23:00	1	3	0	0	4	0	1	1	1	3
Daily Total	112	374	4	0	490	13	129	149	123	414

Egress: Scenario 7 (WE), Phase 4

Table 11: Rail Demand Distribution in hourly intervals, Scenario 7 (Egress)

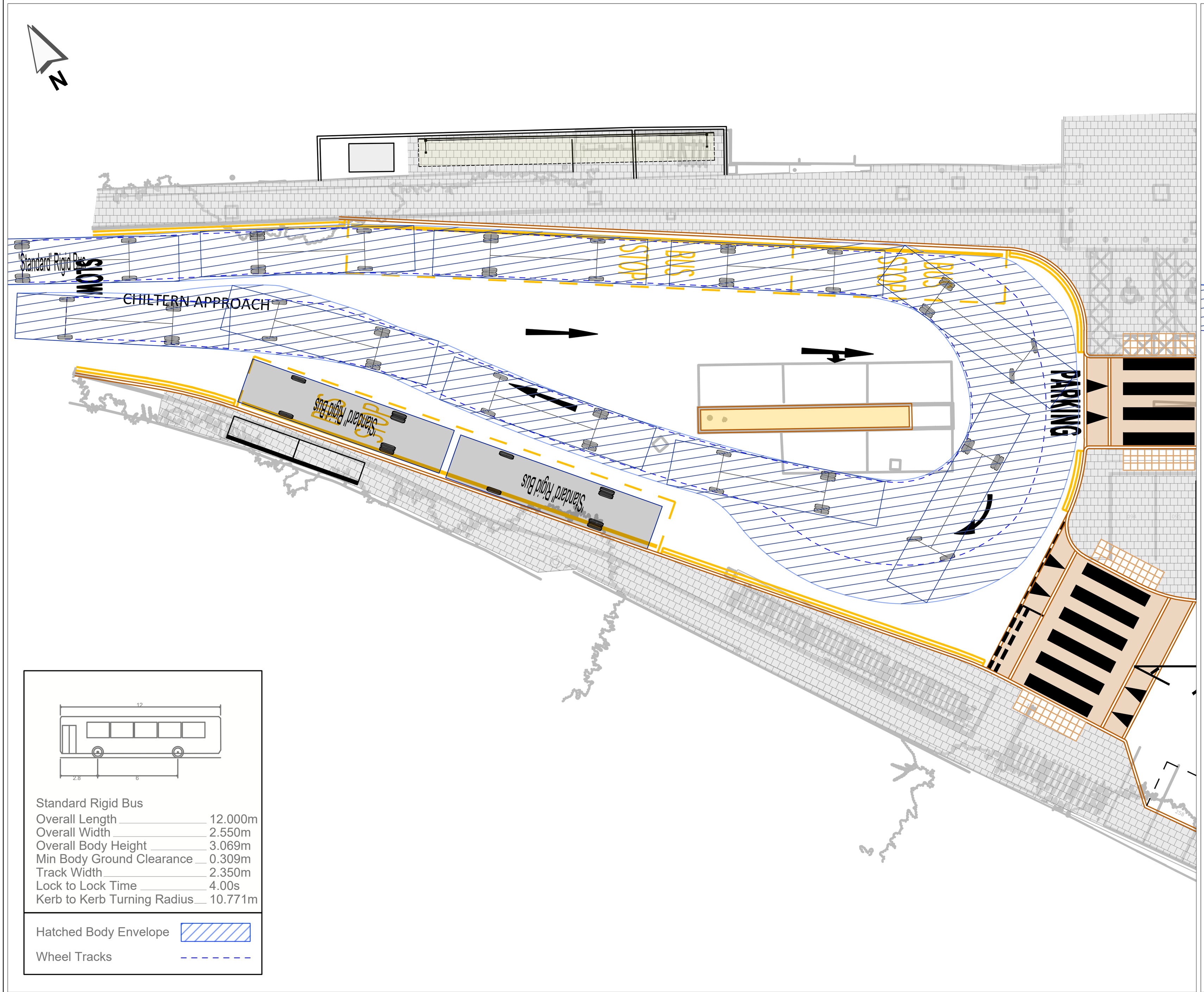
Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
14:00 - 15:00	0	1	0	0	1	0	0	0	0	0
15:00 - 16:00	5	16	0	0	21	1	6	7	5	19
16:00 - 17:00	16	52	1	0	69	2	18	21	17	58
17:00 - 18:00	38	127	1	0	166	5	44	51	42	142
18:00 - 19:00	56	188	2	0	246	7	65	76	62	210
19:00 - 20:00	54	179	2	0	235	7	62	72	59	200
20:00 - 21:00	43	142	2	0	187	5	49	57	47	158
21:00 - 22:00	28	93	1	0	122	4	32	38	31	105
22:00 - 23:00	2	7	0	0	9	0	2	3	2	7
Daily Total	242	805	9	0	1056	31	278	325	265	899

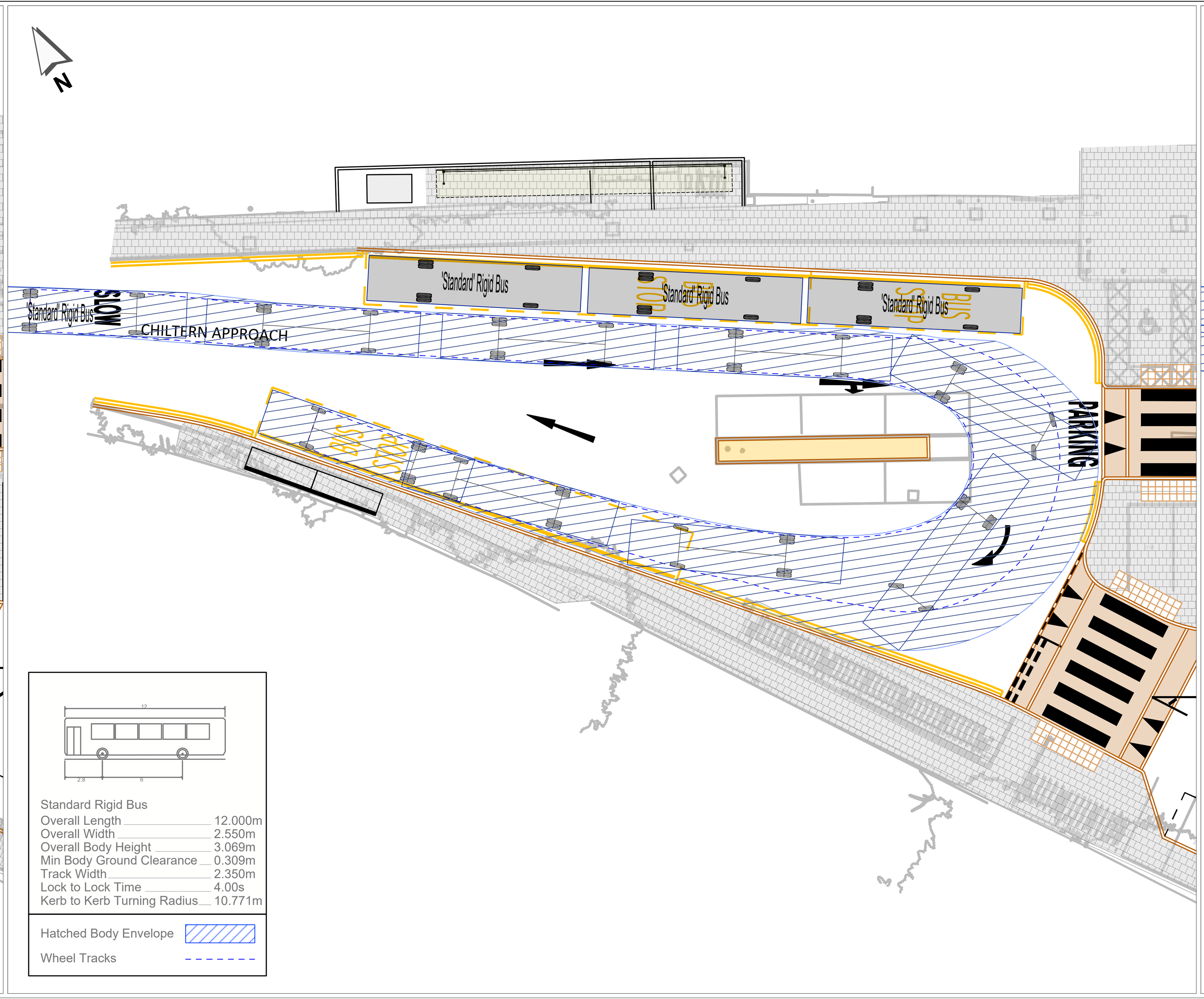
Egress: Scenario 11 (WE), Phase 8

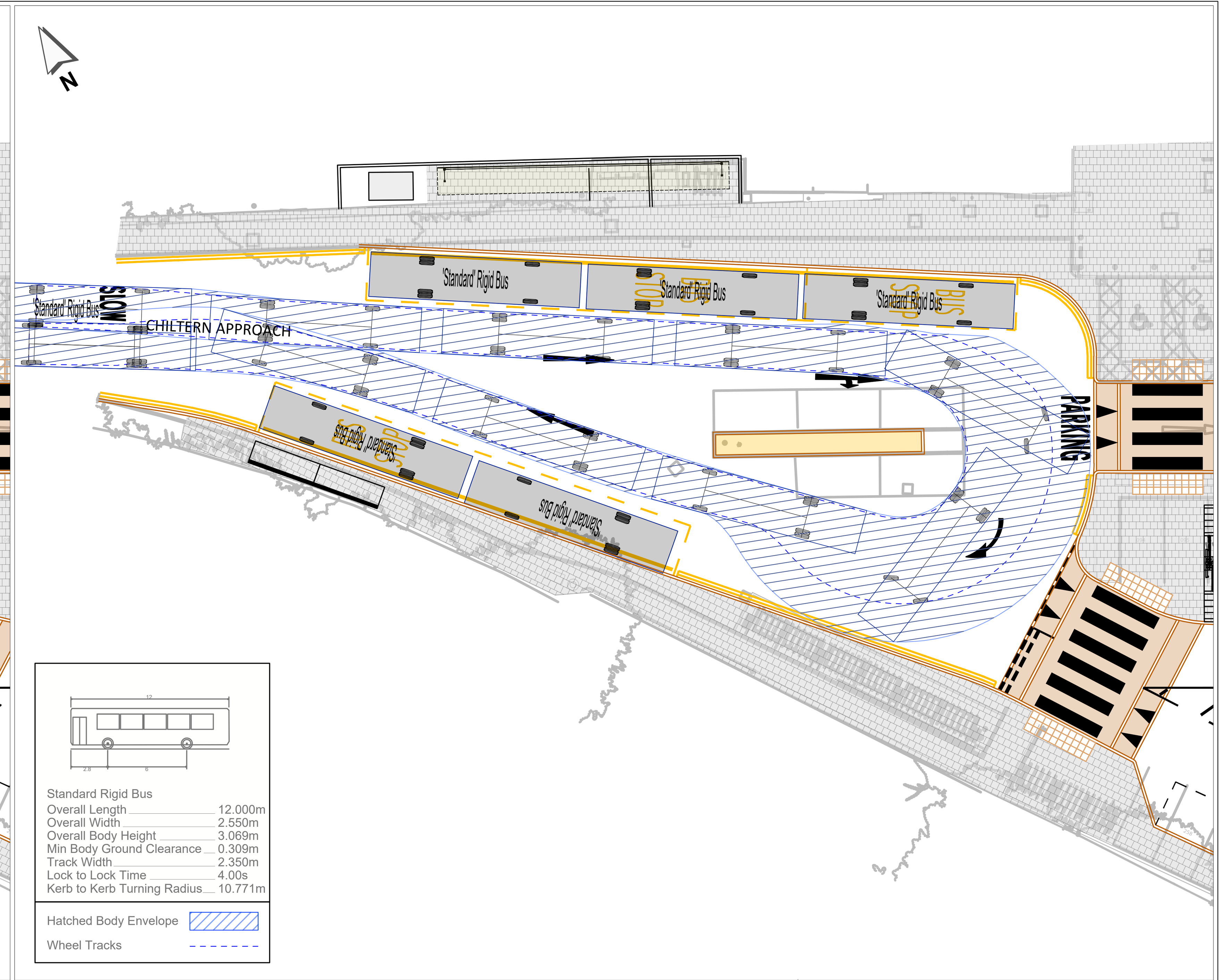
Table 12: Rail Demand Distribution in hourly intervals, Scenario 11 (Egress)

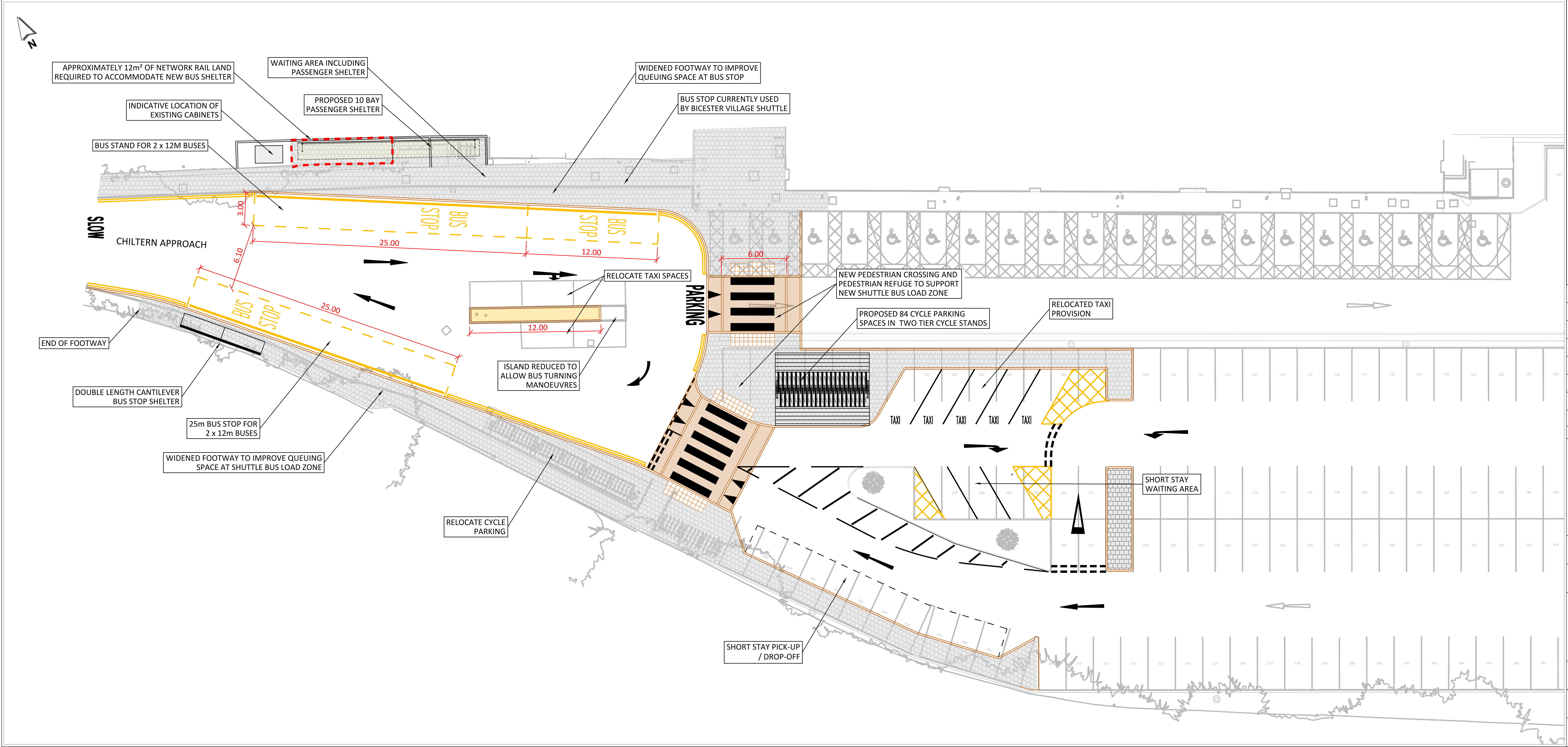
Time Period	Bicester North					Bicester Village				
	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total	Origin: North	Origin: South	Origin: East	Origin: West	Hour Total
14:00 - 15:00	1	2	0	0	3	0	1	1	1	3
15:00 - 16:00	10	32	0	0	42	1	11	13	11	36
16:00 - 17:00	30	100	1	0	131	4	35	40	33	112
17:00 - 18:00	73	243	3	0	319	9	84	98	80	271
18:00 - 19:00	108	360	4	0	472	14	125	145	119	403
19:00 - 20:00	103	344	4	0	451	13	119	139	114	385
20:00 - 21:00	81	271	3	0	355	10	94	109	90	303
21:00 - 22:00	54	179	2	0	235	7	62	72	59	200
22:00 - 23:00	4	13	0	0	17	0	4	5	4	13
Daily Total	464	1544	17	0	2025	58	535	622	511	1726

J Bicester North Station Forecourt Improvement









NOTES:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSION IN METRES.
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4. SHUTTLE BUS SIZE BASED ON 12M LONG SINGLE DECK BUS.
5. EXISTING FEATURE SHOWN IN GREY
6. PROPOSED FEATURES SHOWN COLOUR AND PROPOSED ROAD MARKING IN BLACK

KEY:

- PROPOSED FOOTWAY INCLUDING WIDENING OF EXISTING FOOTWAYS
- PROPOSED RAISED TABLE
- PROPOSED TRAFFIC ISLAND MODIFICATION
- PROPOSED TACTILE PAVING
- PROPOSED KERB ALIGNMENT
- NETWORK RAIL LAND

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Drawing Title: BICESTER NORTH SHUTTLE BUS LAYOUT CONCEPT

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K 500 Bus Service Timetable

Banbury • Brackley • Bicester

MONDAY TO FRIDAY (excluding Bank Holidays)

Banbury Bus Station Bay 5	0550	0650	0750	0900	and then at these times	**00**	until	1400	1510	1610	1710	1830	1930	2130	2330
Grimsbury Stroud Park	0555	0656	0801	0907		**07**		1407	1517	1619	1719	1837	1935	2135	2335
Banbury Gateway Retail Park	0557	0659	0805	0910		**10**		1410	1520	1623	1723	1840	1937	2137	2337
Chacombe Middleton Road	x	0707	0814	0918		**18**		1418	1528	1632	1732	1848	x	x	x
Middleton Cheney Rectory Lane	0607	0713	0820	0923		**23**		1423	1533	1637	1737	1853	1947	2147	2347
Farthinghoe Church	0615	0721	0830	0932		**32**		1432	1542	1646	1746	1902	1955	2155	2355
Brackley Jutland Drive	0625	0732	0842	0945		**45**		1445	1555	1700	1800	1914	2005	2205	0005
Brackley Market Place	0635	0742	0852	0955		**55**		1455	1610	1710	1810	1925	2015	2215	0015
Brackley Tesco	0638	0745	0855	0958		**58**		1458	1613	1713	1813	1928	2018	2218	0018
Elmsbrook Braeburn Avenue	0653	0800	0909	1012		**12**		1512	1627	1727	1827				
Bicester Manorsfield Road Stop 5	0702	0812	0917	1020		**20**		1520	1637	1737	1837				
Bicester Village Station	0705	0815	0920	1023		**23**		1523	1640	1740	1840				

Bicester • Brackley • Banbury

MONDAY TO FRIDAY (excluding Bank Holidays)

Bicester Village Station			0710	0830	and then at these times	**30**	until	1430	1530	1645	1750	1855			
Bicester Manorsfield Road Stop 8			0717	0837		**37**		1437	1537	1652	1757	1902			
Elmsbrook Business Centre			0725	0845		**45**		1445	1545	1700	1805	1910			
Brackley Tesco	0600	0642	0742	0900		**00**		1500	1600	1715	1820	1925	2025	2225	
Brackley Market Place	0605	0647	0747	0905		**05**		1505	1605	1720	1825	1930	2030	2230	
Brackley Jutland Drive	0613	0655	0755	0913		**13**		1513	1613	1728	1833	1938	2038	2238	
Farthinghoe Almshouses	0625	0708	0808	0925		**25**		1525	1625	1740	1845	1950	2050	2250	
Middleton Cheney Library	0635	0718	0818	0935		**35**		1535	1635	1750	1855	2000	2100	2300	
Chacombe Ring	x	0724	0824	0941		**41**		1541	1641	1756	x	x	x	x	
Banbury Gateway Retail Park	0645	0733	0833	0950		**50**		1550	1650	1805	1905	2010	2110	2310	
Grimsbury Stroud Park	0648	0737	0837	0953		**53**		1553	1656	1808	1908	2011	2111	2311	
Banbury Bridge Street	0655	0745	0845	1000		**00**		1600	1710	1815	1915	2015	2115	2315	

on college days, continues to Neithrop Bath Rd for Banbury & Bicester College, arriving 0855

Banbury • Brackley • Bicester

SATURDAY (excluding Bank Holidays)

Banbury Bus Station Bay 5	0650	0800	and then at these times	**00**	until	1400	1510	1610	1710	1830	1930	2130	2330
Grimsbury Stroud Park	0657	0807		**07**		1407	1517	1619	1719	1837	1935	2135	2335
Banbury Gateway Retail Park	0700	0810		**10**		1410	1520	1623	1723	1840	1937	2137	2337
Chacombe Middleton Road	0708	0818		**18**		1418	1528	1632	1732	1849	x	x	x
Middleton Cheney Rectory Lane	0713	0823		**23**		1423	1533	1638	1738	1855	1947	2147	2347
Farthinghoe Church	0722	0832		**32**		1432	1542	1646	1746	1903	1955	2155	2355
Brackley Jutland Drive	0735	0845		**45**		1445	1555	1659	1759	1913	2005	2205	0005
Brackley Market Place	0745	0855		**55**		1455	1610	1710	1810	1925	2017	2217	0017
Brackley Tesco	0748	0858		**58**		1458	1613	1713	1813	1928	2020	2220	0020
Elmsbrook Braeburn Avenue	0802	0912		**12**		1512	1627	1727	1827				
Bicester Manorsfield Road Stop 5	0810	0920		**20**		1520	1637	1737	1837				
Bicester Village Station	0813	0923		**23**		1523	1640	1740	1840				

Bicester • Brackley • Banbury

SATURDAY (excluding Bank Holidays)

Bicester Village Station			0830	and then at these times	**30**	until	1530	1645	1750	1855		
Bicester Manorsfield Road Stop 8			0837		**37**		1537	1652	1757	1902		
Elmsbrook Business Centre			0845		**45**		1545	1700	1805	1910		
Brackley Tesco	0650	0750	0900		**00**		1600	1715	1820	1925	2025	2225
Brackley Market Place	0655	0755	0905		**05**		1605	1720	1825	1930	2030	2230
Brackley Jutland Drive	0703	0803	0913		**13**		1613	1728	1833	1938	2038	2238
Farthinghoe Almshouses	0715	0815	0925		**25**		1625	1740	1845	1950	2050	2250
Middleton Cheney Library	0725	0825	0935		**35**		1635	1750	1855	2000	2100	2300
Chacombe Ring	0731	0831	0941		**41**		1641	1756	x	x	x	x
Banbury Gateway Retail Park	0740	0840	0950		**50**		1650	1805	1905	2010	2110	2310
Grimsbury Stroud Park	0744	0844	0953		**53**		1653	1808	1908	2011	2111	2311
Banbury Bridge Street	0755	0855	1000		**00**		1700	1815	1915	2015	2115	2315

500

Banbury • Brackley

SUNDAY AND MOST BANK HOLIDAYS

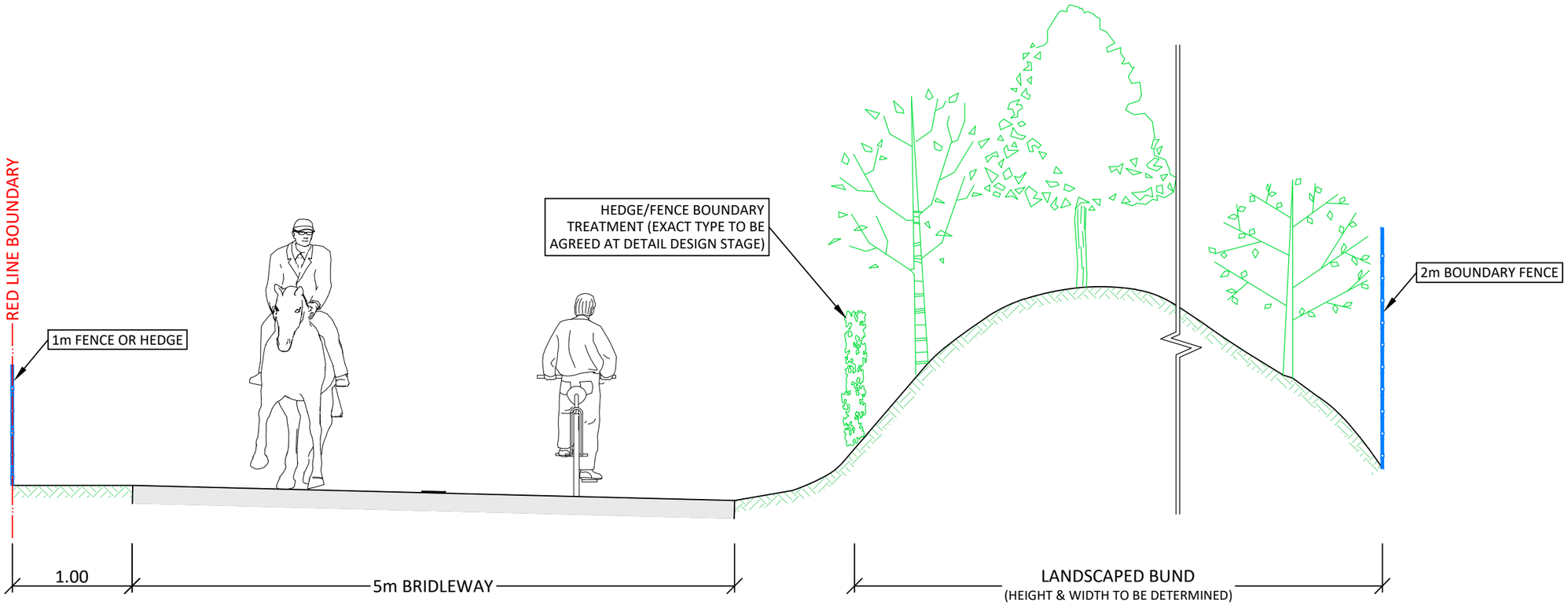
Banbury Bus Station Bay 5	0700	0800	and then at these times	**00**	until	1500	1610	1710	1810
Grimsbury Stroud Park	0707	0807		**07**		1507	1617	1717	1817
Banbury Gateway Retail Park	0710	0810		**10**		1510	1620	1720	1820
Middleton Cheney Rectory Lane	0720	0820		**20**		1520	1630	1730	1830
Farthinghoe Church	0728	0828		**28**		1528	1638	1738	1838
Brackley Jutland Drive	0738	0838		**38**		1538	1648	1748	1848
Brackley Market Place	0750	0850		**50**		1550	1700	1800	1900
Brackley Tesco	0753	0853		**53**		1553	1703	1803	1903

Brackley • Banbury

SUNDAY AND MOST BANK HOLIDAYS

Brackley Tesco	0755	0855	0955	and then at these times	**55**	until	1555	1705	1805	1905
Brackley Market Place	0800	0900	1000		**00**		1600	1710	1810	1910
Brackley Jutland Drive	0808	0908	1008		**08**		1608	1718	1818	1918
Farthinghoe Almshouses	0820	0920	1020		**20**		1620	1730	1830	1930
Middleton Cheney Library	0830	0930	1030		**30**		1630	1740	1840	1940
Banbury Gateway Retail Park	0840	0940	1040		**40**		1640	1750	1850	1950
Grimsbury Stroud Park	0843	0943	1043		**43**		1643	1753	1853	1953
Banbury Bridge Street	0850	0950	1050		**50**		1650	1800	1900	2000

L PRoW Cross Section



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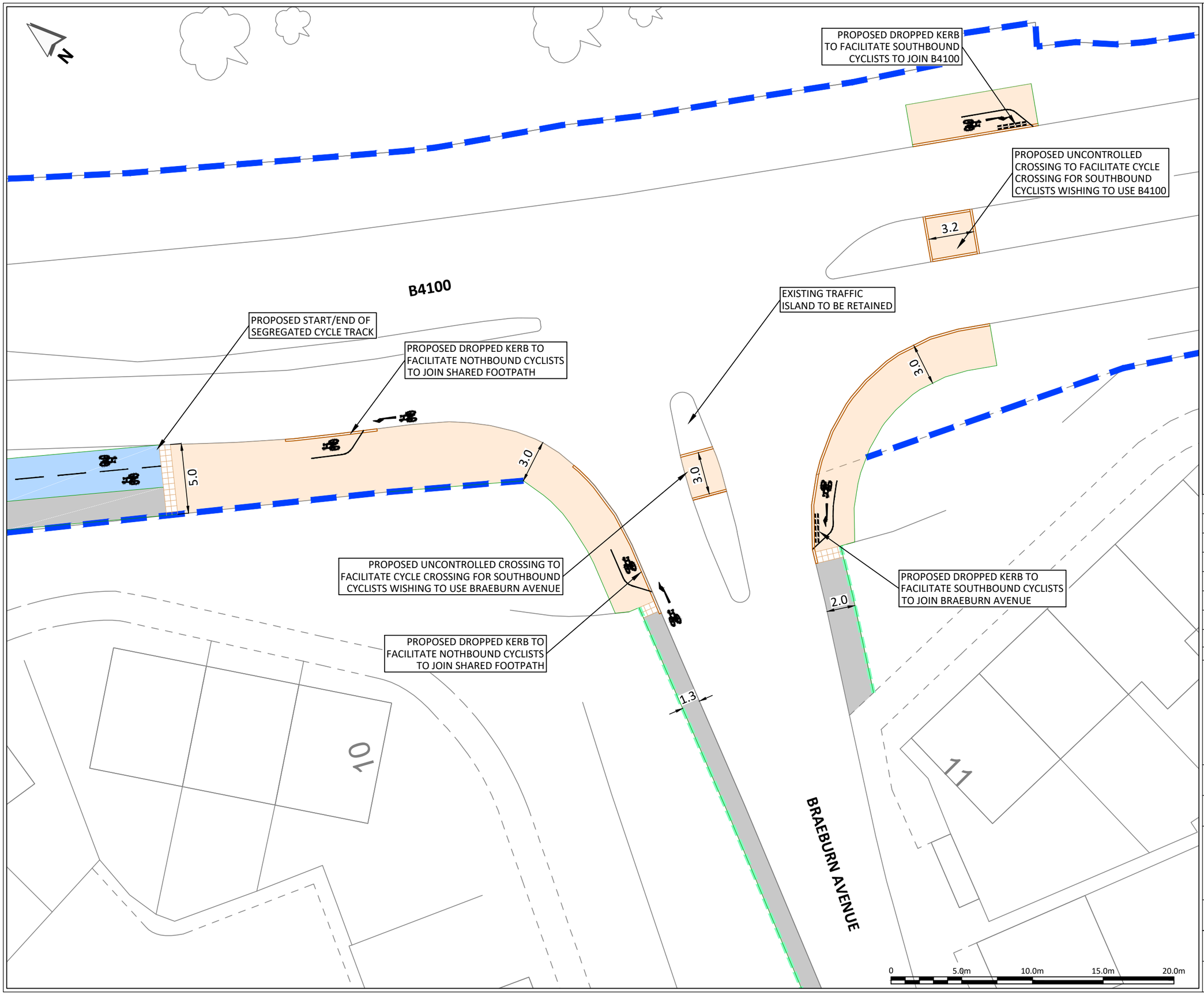
M Braeburn Avenue Options and B4100 Cycle Route



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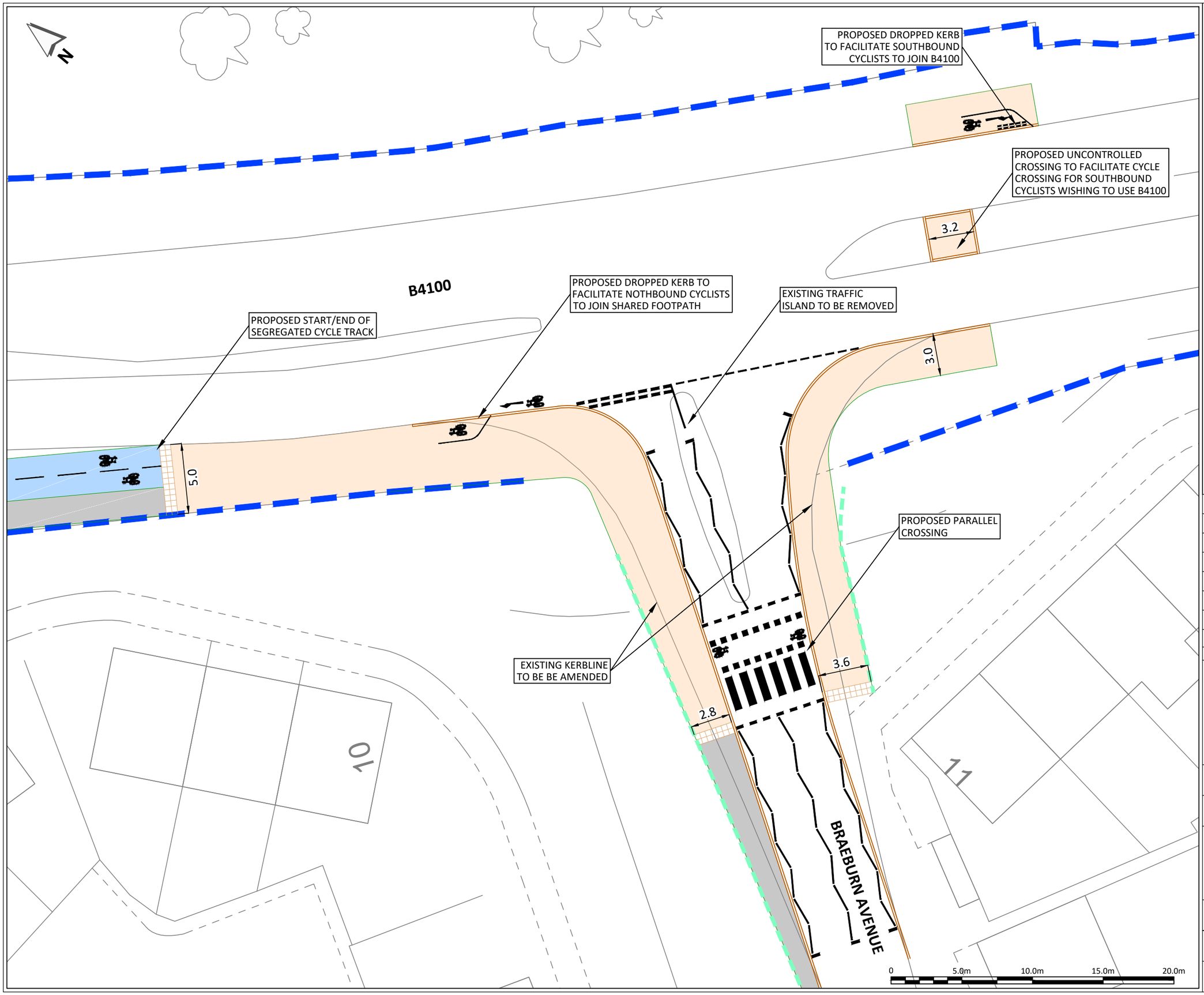

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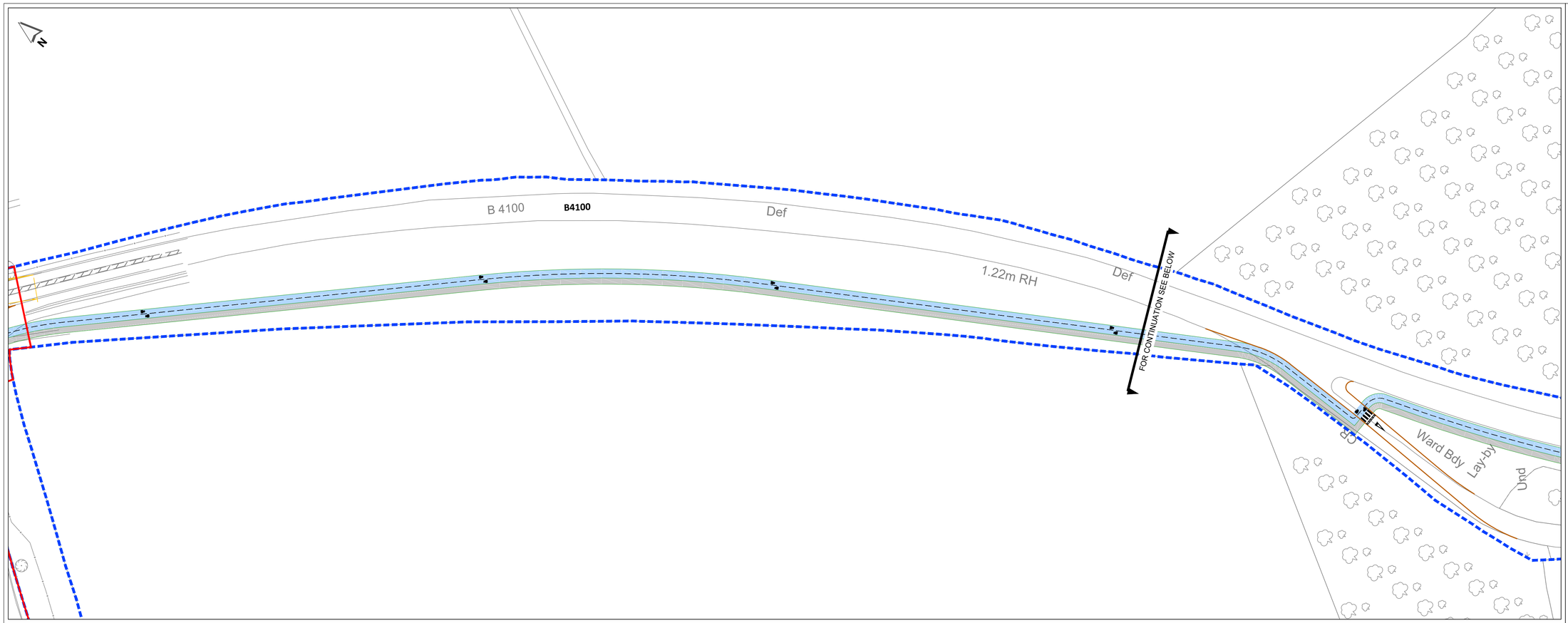

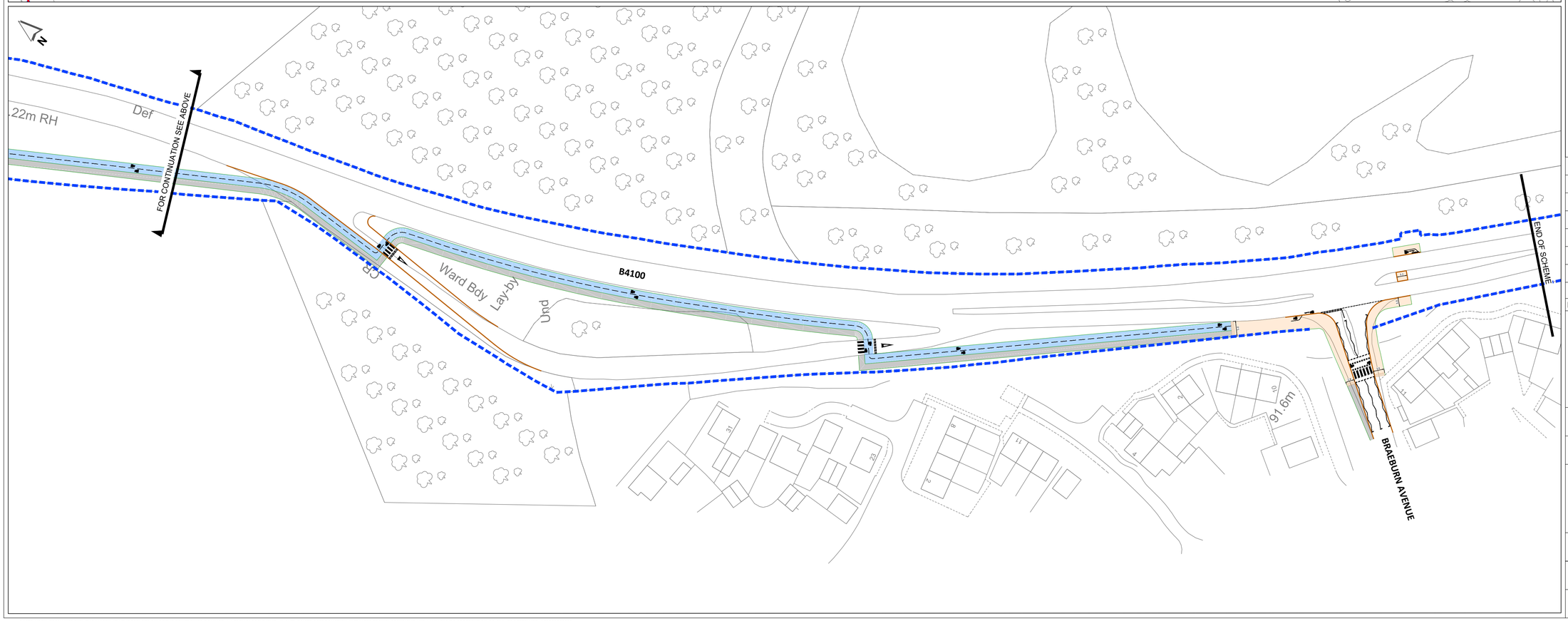

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- PROPOSED SITE BOUNDARY
- PROPOSED KERBLINE
- PROPOSED EDGING
- EXISTING ROAD MARKINGS
- PROPOSED ROAD MARKINGS
- PROPOSED FOOTWAY
- PROPOSED CYCLE TRACK
- PROPOSED SHARED FOOTWAY
- EXISTING HEDGES

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Project Title: PUY DU FOU UK

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DATE: 26/08/2025

N Sweco Traffic Modelling Report

Puy du Fou UK
Strategic Modelling

2031 and 2042 Highway Assessment

SWECO

Change list

Version	Date	Description of the change	Reviewed	Approved by
1	29/07/2025	Initial for Review	RW	RW
2	19/08/2025	Final including comments	RW	RW

Sweco UK Limited	Reg. No. 2888385
Project Name	Puy du Fou Transport Modelling
Project Number	65215237
Client	Puy Du Fou Signature
Author	Fred van Vuren
Date	2025-08-19
Version	2
Document reference	Puy_du_Fou_SummaryReport_Final.docx

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1 Introduction

Sweco (on behalf of Oxfordshire County Council) were commissioned by Steer (on behalf of Puy du Fou United Kingdom Limited) to undertake a series of assessments of the proposed Puy du Fou development to be constructed near Bicester.

Puy du Fou is a globally renowned immersive cultural and historical attraction, first established in western France in 1977. It has since pioneered a distinctive artistic model within the entertainment industry, demonstrated by Puy du Fou France being one of the most popular tourist attractions in France.

After success with Puy du Fou in France, a second park was opened in 2021 near Toledo in Spain, Puy du Fou España. Following continued success in Spain, Puy du Fou is now seeking to develop a number of sites across the world, and the UK is one of the key destinations as a result of Britain's extensive and interesting history on which the shows will be based.

1.1 Report Structure

This report is presented according to the following structure:

- Section 2 presents details about the model background and about the primary assumptions in the modelling work completed.
- Section 3 presents the network and demand changes made to reflect the Puy du Fou access and trips.
- Section 4 provides an overview of the assignment methodology used in this project and its significance.
- Section 5 presents the results of the transport modelling of the Puy du Fou trips on the baseline future year network, illustrating link attribute changes such as flow, delay and congestion.
- Section 6 presents the results of the transport modelling of the Puy du Fou mitigation schemes, to assess the impact of these schemes on trips in the model.

2 Model Background and Assumptions

2.1 Reference Case Modelling

The assessments of the impact of the proposed development were undertaken using the existing Bicester Transport Model (BTM) as a basis.

The Bicester Transport Model is a multi-modal transport model with component parts. The models referred to in this project are a 2031 and a 2042 highway assignment model developed in Saturn.

Assessment is made for the highways assignment only with no variable demand modelling considered as agreed with Oxfordshire County Council.

The highway models, as supplied, were developed for assessment of the Oxford Strategic Rail Freight Interchange Reference Case 2 (OxSRFI) for the two forecast years: 2031 and 2042. These models are the Reference Case against which the OxSRFI is assessed and therefore do not contain the OxSRFI development trips or schemes.

The models comprise of a number of scenarios depending on the inclusion of the Cherwell Local Plan Review demand and mitigation. As such the Reference Case scenarios are:

- 2031 OxSRFI Reference Case 2 (RC2) (i.e. OxSRFI itself is not included);
- 2042 With CLPR;
- 2042 With CLPR and CLPR Mitigations.

The BTM covers the district of Cherwell with the largest detailed model area representing the town of Bicester. It covers the main strategic road network links, being the A41 and the M40 between Junctions 9 and 10. The model also has wider area connectors and a separate car user class to represent external trips.

The modelled time periods are:

- AM Peak Hour (0730-0830);
- Average Inter Peak (1000-1600); and
- PM Peak Hour (1700-1800).

In each case, the modelled peak hour is assigned with a pre-peak 'PASSQ' file that preloads any existing queues into the network prior to the start of the peak hour.

The model represents vehicle trips in Passenger Car Units. These PCUs allow comparison across multiple vehicle types such as cars, vans and lorries by creating a standard unit of length.

In the model, there are six user classes:

Car Commute (PCU = 1)

Car Employers Business (PCU = 1)

Car Other (PCU = 1)

Car External (PCU = 1)

LGV (PCU = 1)

HGV (PCU = 2.3)

One important assumption to note is that the peak arrival of visitors to Puy du Fou in the AM is not expected to coincide with the model's AM peak hour: the Puy du Fou peak is estimated to be between 0900-1000, whilst the peak hour in BTM is 0730-0830. As requested by National Highways (NH) to model a worst-case scenario, the peak arrival of visitors has been added to the peak hour in the BTM.

In addition, the park does not open year-round. It is projected to open 176 days of the year, with no or minimal visitor trips accessing the site which comprises much of the traffic. This is not directly reflected in the modelling, but when the park is closed it is expected that the network will perform as in the Reference Case.

3 Demand and Network Methodology

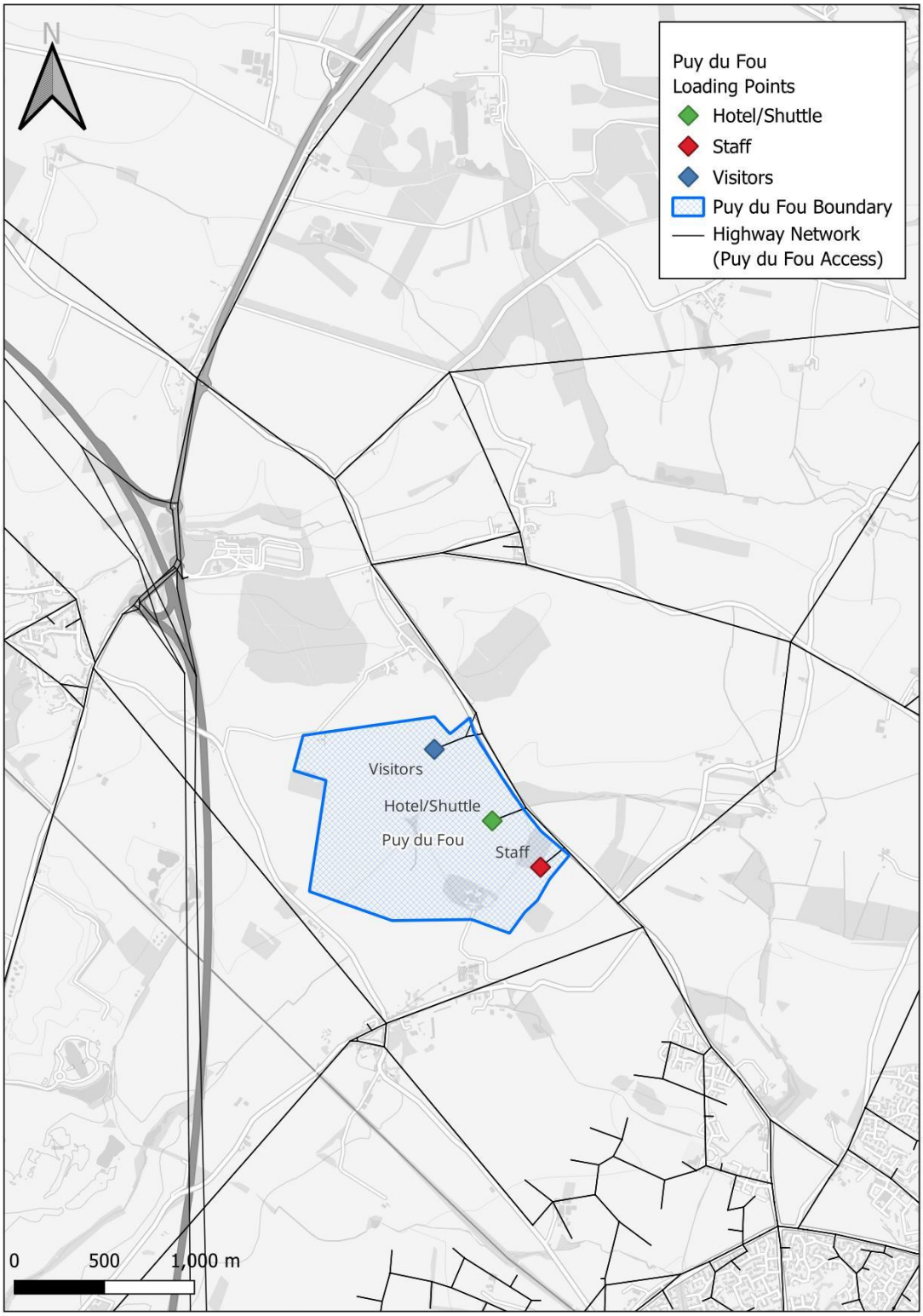
This section details the creation and update of aspects of the strategic highway network for the 2031 and 2042 models including the proposed development.

3.1 Highway Access to Puy du Fou

3.1.1 Access Points

The access arrangements for the site were coded into the model according to the received scheme drawing “PDF_UK-TCA-01-0101-P012-Strategic Zonal Masterplan”, appended as Appendix 3. This consisted of the addition of three roundabouts along the B4100 between Bicester and Baynards Green, with the uppermost roundabout serving Puy du Fou visitors, the middle roundabout providing access to hotel residents and shuttle vehicles, and the lower access roundabout serving as the staff entrance.

Figure 3-1: Access points for Puy du Fou



3.1.2 Hotel and Conference Visitor Access

The modelling does not include any trips to and from the middle access point that represents access for hotel and conference visitors. This was made under the assumption that these trips were already captured as “regular visitor” trips that would access the park through the visitor access. It is likely that any visitors to the hotel would follow standard arrival and departure patterns, but these may be spread over two days: arrive in the morning of day one and leave in the evening of day two.

The only vehicle movements accessing the site via this entrance are the bus preloads that represent public bus and shuttle bus trips.

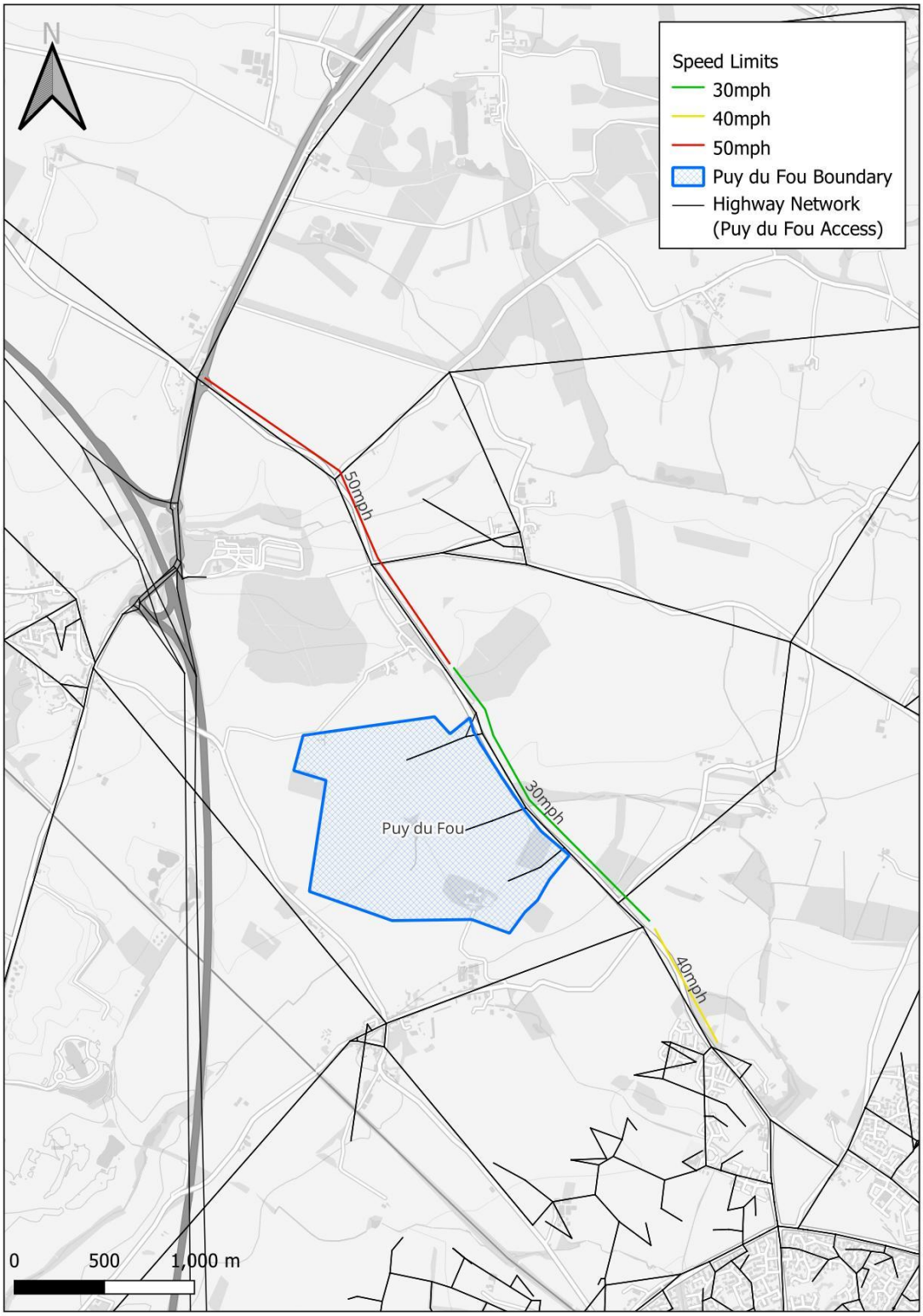
Due to the close proximity of the visitor entrance and the hotel/conference centre access, it is likely, and therefore assumed, that routing will be the same to access both amenities.

3.1.3 Speed Limits

The B4100 is currently a single lane carriageway under national speed limit (60mph for cars) for the majority of the route between Bicester and Baynards Green, with some limited stretches of 50mph to the north close to the Baynards Green roundabout and 40mph to the south close to the urban area of Bicester. The existing 60mph section runs approximately from the intersection of the B4100 with Bainton Road to the south, to slightly south of the B4100 junction with The Green.

Speed limit reductions were implemented according to information provided to Sweco by Steer, and are based on providing safe access for all modes of transport and improving conditions for walking and cycling. Visualisation of the proposed speed limits are provided below in Figure 3-2.

Figure 3-2: Updated speed limits



3.2 (Shuttle) Bus Access to Puy du Fou

Buses are only assessed in this model as a means to determine the congestion impacts of these vehicles. Additional work has been done separate to this assessment to understand and forecast public transport use for this site and the background growth.

3.2.1 Public Buses

Analysis of the model shows that there will be one bus service running along the B4100 corridor, the 500. The route of the bus was adjusted to account for stopping at the middle access point for Puy du Fou, similar to the shuttle services, and then continuing along the route as existing in the Reference Case models.

In addition, the frequency of this bus service was updated from one to two buses every hour across the AM, Inter-Peak and PM models.

3.2.2 Shuttle Services

Bicester is well connected to public transport, with two main train stations and a park and ride to the southwest. Steer provided the assumptions that shuttle services would run from both train stations in 2031, and from the train stations and the park and ride in 2042. The number of shuttles per hour was derived from the visitor profile provided by Steer. This was disaggregated into shuttle services to and from the park and ride, and to and from the train stations. The services to and from the train stations were assumed to follow a 2/3:1/3 spit between Bicester North and Bicester Village, as Bicester North is expected to be the busier station.

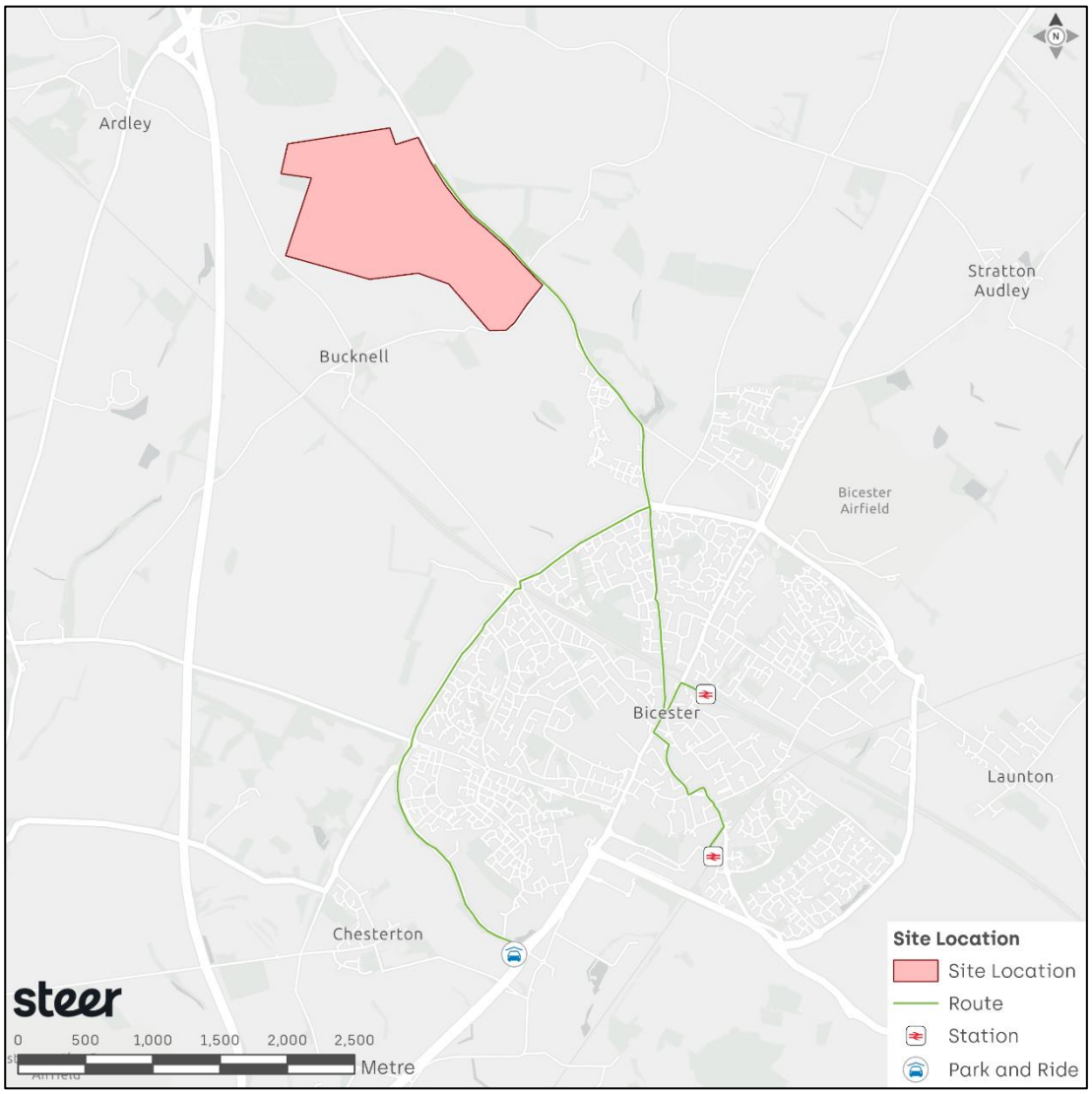
Figure 3-3: 2031 bus service patterns to serve Puy du Fou

Time Period	Services from BCN	Services from BCV	Services from PnR	General Public Services (500)
AM	1	1	0	2
IP	1	1	0	2
PM	1	1	0	2

Figure 3-4: 2042 bus service patterns to serve Puy du Fou

Time Period	Services from BCN	Services from BCV	Services from PnR	General Public Services (500)
AM	2	1	1	2
IP	1	1	1	2
PM	1	1	1	2

Figure 3-5: Provided bus routing patterns. Source: Steer



3.3 Highway Demand Methodology

Hourly visitor profiles were provided by Steer, disaggregated into different vehicles: Car, Coach, Local Bus, Rail (and Shuttle), Rail (and Taxi), Bicester Park and Ride, Taxi and Bike/Scooter. This was provided for Scenario 2b (2031) and Scenario 10b (2042).

In addition, geographical distribution of staff and visitors was provided, disaggregated by Visitors, Easy-to-Find Staff (e.g. food service, retail, customer service) and Hard-to-find Staff (e.g. performers, specialist engineering, management). This geographical demand apportions the total number of trips in the AM and PM peak hour to Middle Super Output Areas dependent on their driving time to the site (Local, >1hr, >2hr, >3hr, 3+hrs) and their population. Middle Super Output Areas are statistical geographic areas comprising between 2,000 and 6,000 households.

Please note, AM and PM peak hour data is set out in this report as the critical evaluation periods. No assessment of Inter peak is made as flow levels across the area are generally lower during this time period.

Full details of the methodology to determine the modal split of users and thus the number of cars, taxis and buses generated by the development is included within the Transport Assessment.

Table 3-1: Visitor distribution assumptions: 2031, Persons.

Assumption	Car	Coach	Local Bus	Shuttle	PnR	Taxi	Total
Occupancy	2.3	50	30	65	50	3.1	-
AM Arrivals 0900-1000	390	370	5	85	-	1	870
AM Mode Share 0900-1000	44.83%	42.53%	0.57%	9.77%	-	0.11%	
PM Departures 1700-1800	264	185	12	60	-	6	539
PM Mode Share 1700-1800	48.98%	34.32%	2.23%	11.13%	-	1.11%	

Table 3-2: Visitor distribution assumptions: 2042, Persons.

Assumption	Car	Coach	Local Bus	Shuttle	PnR	Taxi	Total
Occupancy	2.3	50	30	65	50	3.1	-
AM Arrivals 0900-1000	644	638	9	147	4	2	1475
AM Mode Share 0900-1000	43.66%	43.25%	0.61%	9.97%	0.27%	0.14%	
PM Departures 1700-1800	436	319	21	103	21	10	931
PM Mode Share 1700-1800	46.83%	34.26%	2.26%	11.06%	2.26%	1.07%	

Table 3-3: Staff distribution assumptions

Assumption	Easy to Find 2031	Hard to Find 2031	Easy to Find 2042	Hard to Find 2042
Total Staff	350	350	1,050	1,050
Staff Arriving by Car	163	29	528	55
AM Arrivals	33	6	106	11
PM Departures	33	6	106	11

These MSOAs were assigned to corresponding zones within the BTM. In the case of Cherwell, which was provided as three different MSOAs, these were assigned to three different zones in the study area which were located in densely populated areas.

Once the zonal correspondence had been prepared, trip ends for each user class (Car Commute – Staff, Car Other – Visitor, Car Employers Business – Taxi, and HGV – Coach) were created according to the proportion of trips using each mode. These were provided by Steer. Total trip ends to be added to the Reference Case matrices by year and by user class are presented in Table 3-4 below.

Table 3-4: Puy du Fou trips in PCUs to be added to the Reference Case matrices.

Puy du Fou Purpose	User Class	Time Period	Year 1 (2031)	Year 10 (2042)
Visitor	Car Other	AM	170	281
		PM	115	190
Staff	Car Commute	AM	39	117
		PM	39	117
Taxi	Car Employers Business	AM	1	1
		PM	2	4
Coach	HGV	AM	8	13
		PM	4	7

The modelled visitor trips are not symmetrical (i.e. the total number of trips leaving in the PM does not match the number entering in the AM) due to the trip patterns of the park which do not always align with the peak periods. In particular for the evening show which finishes later than the PM peak and therefore is not captured.

As discussed earlier, one important assumption to note is that the peak arrival of visitors to Puy du Fou in the AM is not expected to coincide with the model's AM peak hour: the Puy du Fou peak sits 0900-1000, whilst the peak hour in BTM is 0730-0830. To model a worst-case scenario, the peak arrival of visitors has been added to the peak hour in BTM.

3.4 2031 Highway Demand

The resultant 2031 matrix totals for the Reference Case and the Puy du Fou models are presented below:

Table 3-5: 2031 matrix totals

Scenario	Time Period	Car Commute	Car EB	Car Other	LGV	HGV
2031 Reference Case	AM	10,831	1,546	6,203	3,640	3,771
	PM	10,607	2,657	7,494	3,366	2,663
2031 Puy du Fou	AM	10,870	1,547	6,373	3,640	3,779
	PM	10,646	2,659	7,609	3,366	2,667

3.5 2042 Highway Demand

The resultant 2042 matrix totals for the Reference Case and the Puy du Fou models are presented below:

Table 3-6: 2042 matrix totals

Scenario	Time Period	Car Commute	Car EB	Car Other	LGV	HGV
2042 With CLPR	AM	14,977	2,191	6,902	4,191	4,122
	PM	14,787	3,764	8,947	3,875	2,912
2042 With CLPR and Puy du Fou	AM	15,094	2,192	7,183	4,191	4,135
	PM	14,904	3,768	9,137	3,875	2,919
2042 With CLPR and CLPR Mitigation	AM	14,948	2,190	6,900	4,191	4,122
	PM	14,758	3,761	8,949	3,875	2,912
2042 With CLPR, CLPR Mitigation and Puy du Fou	AM	15,065	2,191	7,181	4,191	4,135
	PM	14,875	3,765	9,139	3,875	2,919

The differences between the scenarios with and without Puy du Fou traffic correspond to the visitor demand identified earlier in Table 3-4.

4 Bicester Transport Model Convergence (OBA Assignment)

The existing Bicester Transport Model, as supplied, uses Origin-Based Assignment (OBA), rather than the more common Frank-Wolfe based equilibrium assignment. Where possible, the existing convergence criteria was retained. However, issues were found in a number of models, whereby the model was unable to converge for change in percentage link flow (%Flow) due to a very small traffic volume rerouting between assignment iterations. A series of tests were undertaken to try and improve the convergence of the model, including implementing small signal timing changes, junction capacity adjustments and Saturn parameter adjustments (STPGAP). However, these were unsuccessful in achieving the %Flow criterion.

The following guidance is set out in Section 9 of the Saturn user manual in relation to OBA:

“A (further) problem with the use of %FLOWS as the stopping criterion is that it may depend on the “accuracy” of the assignment method used. Thus, if one uses an extremely accurate assignment such as OBA… the true difference in link flows between loops n-1 and n will be obtained (to a good approximation) whereas with a less accurate technique, such as the default Frank-Wolfe algorithm, … the differences in link flows tend to be reduced and %FLOWS measure increased. Hence, despite being a better assignment method with better convergence properties, OBA may perversely appear less convergent than Frank-Wolfe in terms of %FLOWS.

On balance, therefore, our current “best buy” for a stopping criterion is the GAP… although we recognise that there is a strong case for carrying on with %FLOWS for historical continuity and the default is both %FLOWS and GAP in order to conform with DfT recommendations (see TAG Unit M3.1, Table 4).

However, whichever stopping criterion users choose, they should always view GAP as their most important single indicator of overall convergence.”

The interpretation of this is that OBA is a very accurate assignment method but does not perform as well as other methods on one of the conventional assignment convergence criteria (“Percentage of links with flow change (P1) < 1%”). There is therefore less need to meet this criterion as stringently, and the threshold for accepting stability of the model can be relaxed.

As such the value of RSTOP, the Saturn parameter which determines the level of %Flows required for convergence, was reduced from 98 in non-converged models to a value no less than 96.0, to provide stable model results. This slightly relaxed criterion for %Flow convergence is not considered to impact the results of the modelling presented in this report. This was discussed and confirmed with OCC and is understood to be consistent with other modelling carried out using the BTM on behalf of OCC.

Further information can be found in Appendix S of the Saturn manual.

A tabulated list of the amended RSTOP values is presented below.

Table 4-1: Adjusted convergence criteria to aid model stability

Scenario	RSTOP As Supplied	Updated RSTOP	Additional Notes
2031 OxSRFI RC2 AM	98.0	96.4	Converges at Loop 41
2042 CLPR Mitigation Puy du Fou AM	98.0	98	Model does not converge above 90 (%FLOW) for two consecutive loops. Convergence requires four consecutive loops. The most stable model loop was taken forward.
2042 CLPR Mitigation Puy du Fou PM	98.0	97.0	Converges at Loop 58
2042 CLPR Mitigation Puy du Fou with PDF Mitigations PM	98.0	96.8	Converges at Loop 88

5 Transport Modelling Results

5.1 Description of Model Outputs

During assessment and interpretation of these modelling results, it is important to note that no comparisons have been made against the base year. There are therefore impacts of background traffic growth through government housing and population forecasts that are not assessed for this work, nor would it be required to.

The impacts of this background growth will be to constrain capacity at many junctions in an already congested model. When additional Puy du Fou trips are added on top of these background increases, the model performs understandably worse. It is likely that background growth will exceed the increase in traffic generated by Puy du Fou and therefore require additional mitigation which may provide more capacity at constrained junctions once the park is constructed and operational.

Four different figures have been prepared for the assessment of the impacts of Puy du Fou visitors and staff on the Bicester Transport Model’s highway network. These are:

- Link flow difference
- Delay difference
- Link Volume over Capacity (V/C), where link V/C changes between two compared models.

Comparisons have been made for the AM and PM peak periods as the critical periods. The Interpeak is retained for derivation of daily trip totals only.

A description of these outputs and what they mean is provided below in Table 5-1.

Table 5-1: Model outputs and definitions

Link Attribute	Unit	Description
Link Flow (Difference)	Actual Flow	The difference in the number of PCUs using links between the two compared models.
	PCUs	Shows which roads trips are moving away from (via reduction) as a result of the tested scenario, and where they are moving to (via increase).
		Outputs are interrelated – vehicles change their travel patterns because of (time) cost, so delay plots show which areas may be causing the rerouting.
Link Delay (Difference)	Seconds	The difference in the average delay experienced by vehicles along a link.
		Can also be provided for nodes (junctions) which is generally related to the average per arm across the whole junction – can be calculated for maximum delay.
		Delay can be mitigated by reducing flow or increasing capacity (more lanes, improved signal timings etc).
Link Volume over Capacity (V/C)	%	A measure of the congestion on a link. The ratio between the link volume (number of vehicles) and the link capacity (maximum throughput of the link).
		Link capacity is dependent on road quality (number of lanes, width of road, speed limit, road condition etc)
		Link V/C scales – <85% is usually expected to flow smoothly, 85-100% experiences increasing congestion and 100%+ is over capacity.

To aid in understanding the locations discussed in this results section, a table (Table 5-2) and map of the key locations (Figure 5-1) is presented below.

Table 5-2: Table of key locations discussed in model result analysis

Location	Type	Additional Information
Puy du Fou Access	Junction	Addition of three junctions on existing B road,
B4100	Road	B road to the north of Bicester providing access to M40 Junction 10
Cherwell Roundabout	Junction	Part of M40 Junction 10, providing access to Cherwell Valley motorway services
Baynards Green Roundabout	Junction	4 arm roundabout, currently unsignalized. Connects A43 to B4100. Key junction for upgrade as part of CLP.
Barleymow Roundabout	Junction	4-arm roundabout, currently unsignalized. Connects A43 to A421 and B4031
M40 Junction 10	Junction	Motorway junction north of Bicester.
M40 Junction 9	Junction	Motorway junction south of Bicester.
Bucknell	Village	Settlement north-west of Bicester. Connected to B4030, M40 J10 via Ardley Road and B4100. Concerns of rat-running through this village by background and PdF traffic.
Middleton Stoney	Village	Settlement west of Bicester, connected to B4030 and B430. Concerns of northbound traffic using B430 instead of M40 due to congestion at both motorway junctions.
Bicester	Town	Largest settlement.

Figure 5-1: Map of key locations discussed in model result analysis

5.2 2031 Puy du Fou vs Reference Case

The following section presents the model outputs from the 2031 models, compared as the 2031 Oxford Strategic Rail Freight Interchange (OxSRFI) Reference Case (i.e. it excludes OxSRFI) against the same model with additional Puy du Fu traffic and access infrastructure.

The modelling results should be considered against the objective of the Oxfordshire Local Transport and Connectivity Plan 5 (adopted in July 2022) which outlines OCC's long-term vision for transport and travel in the county and identifies key themes which transport policy and intervention should target. The aspiration is to replace or remove 1 out of every 4 current car trips in Oxfordshire by 2030 and 1 out of 3 car trips in Oxfordshire by 2040. This should lead to a reduction in car vehicle miles driven in Oxfordshire, and an increase in the number of cycle and public transport trips. OCC seek to achieve this by reducing the need to travel, discouraging individual private vehicle journeys and making walking, cycling, public and shared transport the natural first choice. We understand that the traffic modelling does not take account of these anticipated reductions in background traffic and can therefore be considered a robust assessment of future conditions.

5.2.1 Link Flow Difference

Figure 5-2 and Figure 5-3 present the differences in link flow in the AM and PM peak hour respectively.

In the AM, the key impact is an increase in motorway traffic travelling northbound from south of Bicester. This traffic appears to exit the motorway at M40 Junction 10, and travel to the Puy du Fou site along the B4100. Reductions in flow along the B4100 result from the migration of north-south trips to and from Bicester that are now competing for capacity along the B4100. These trips tend to move to other routes such as Hethe Road and the A4421. Rat-running through Bucknell can be seen which is largely attributed to Puy du Fou trips accessing the site by bypassing Baynards Green junction and other delay hotspots around M40 Junction 10.

In the PM, a similar pattern is seen, with the addition of routing by Puy du Fou traffic through Middleton Stoney and along the B430. This traffic also uses Bucknell as a rat-run.

Figure 5-2: 2031 AM flow difference in PCUs

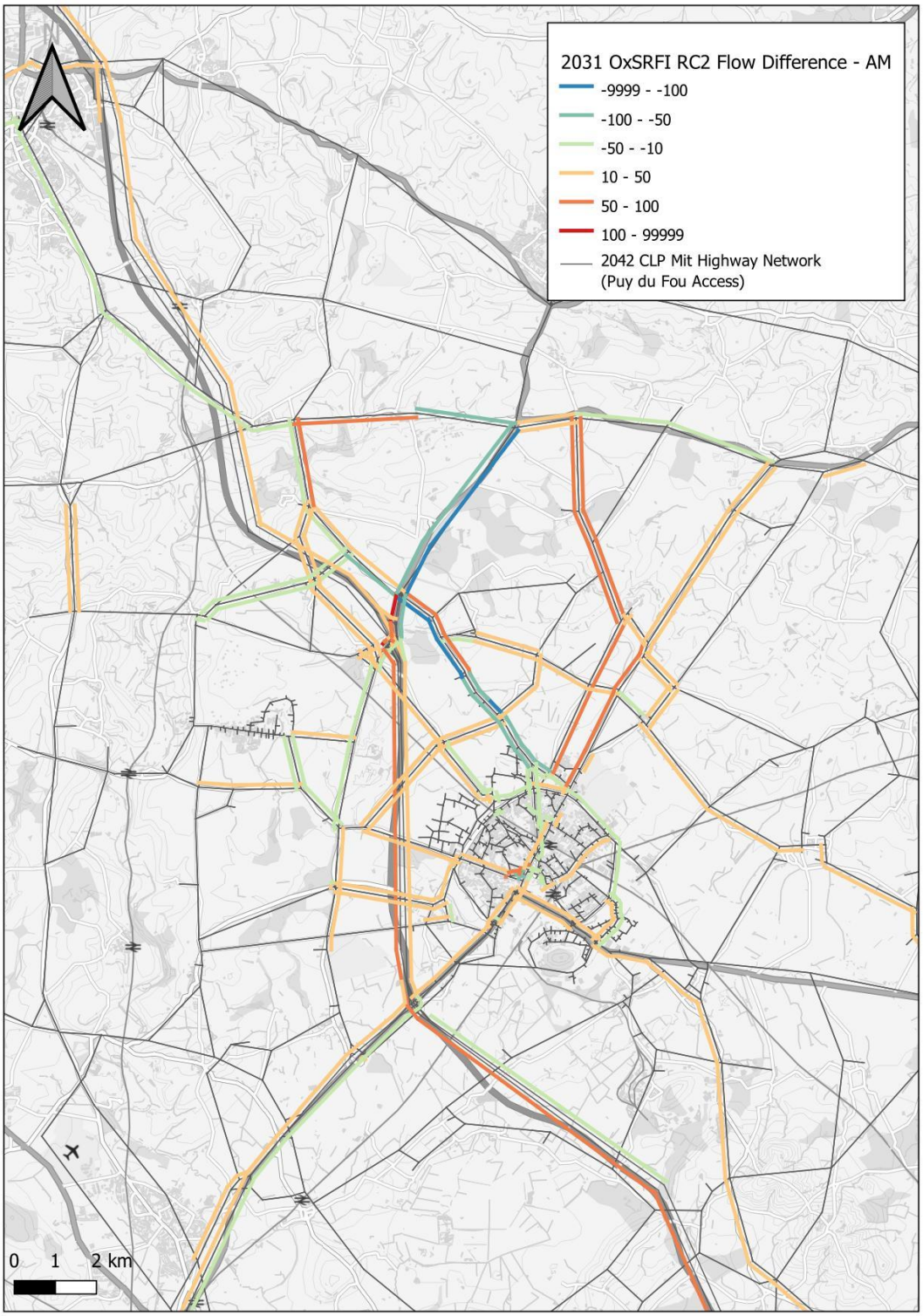
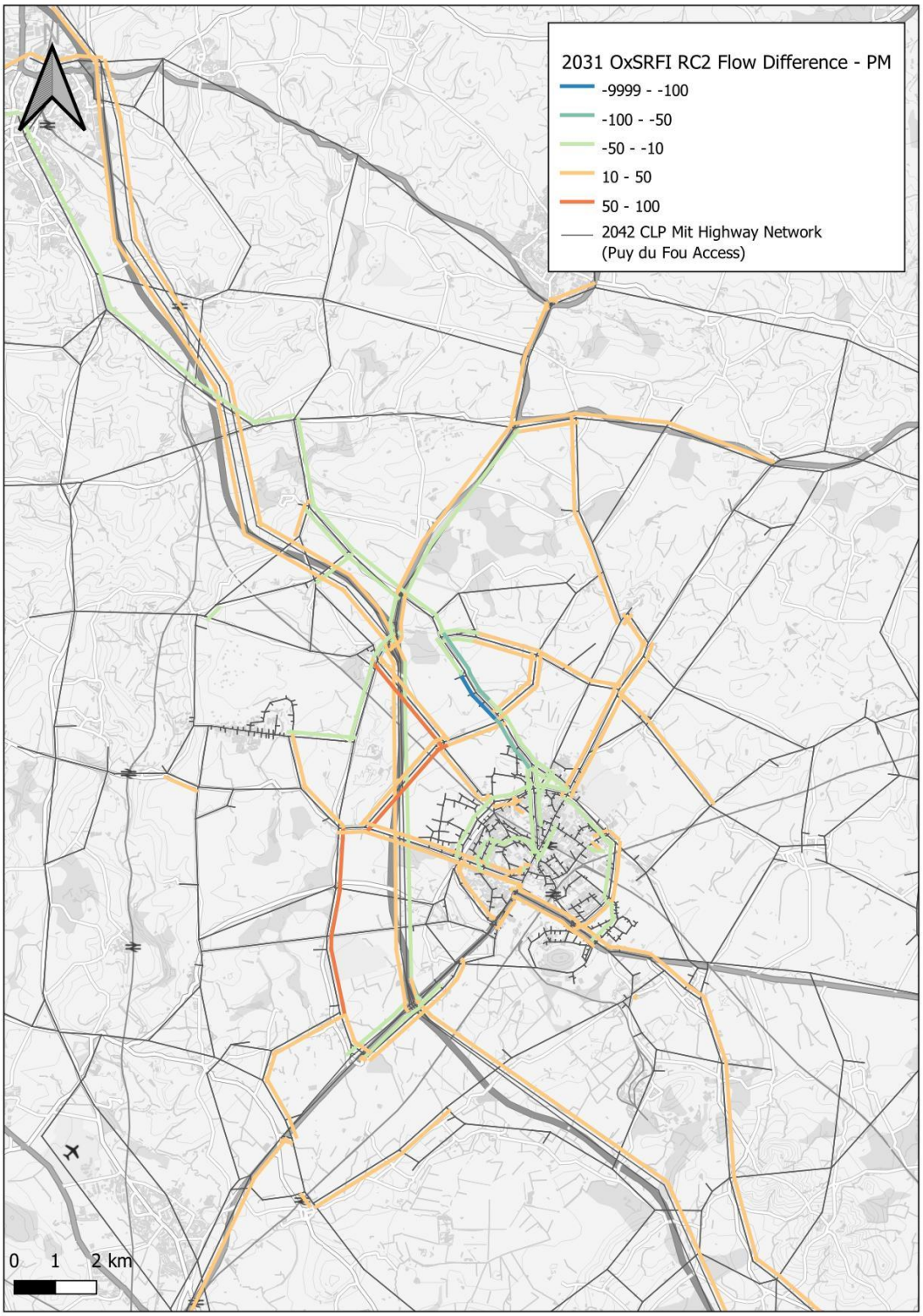


Figure 5-3: 2031 PM flow difference in PCUs



5.2.2 Link Delay Difference

Figure 5-4 shows the impact of the changes in flow (shown in the difference plot) on delays experienced by trips in the AM model. Please note that, here, delay is output from the Saturn programme and is the difference between the inherent travel time in free flow conditions and the final assignment including any congestion. As such, the inherent travel time through a network is effectively removed from the delay difference calculation. Therefore, if the underlying network is changed, the delay may not change even though the travel time would.

Most of the delay differences shown are localised to areas with existing capacity constraints, namely a large increase on the northern arm approaching Baynards Green roundabout and Middleton Stoney.

A decrease in delay is seen on the B4100 to either side of the development site access points. With the addition of trips accessing the development site, which utilise the available highway capacity, and the increased inherent travel times due to infrastructure changes, this route becomes less appealing to non-PDF traffic. This causes trips that would have previously used this route as a through route to relocate to elsewhere in the network. These rerouted trips then add additional delay onto alternative routes across the wider network, whilst the delay decrease is attributed to the reduction in through trip traffic.

Figure 5-5 shows the delay difference in the PM models. A similar pattern is seen in the PM as in the AM, with the addition of increased delays at the M40 Junction 10 on and off slips on the southern side.

Figure 5-4: 2031 AM delay difference in seconds

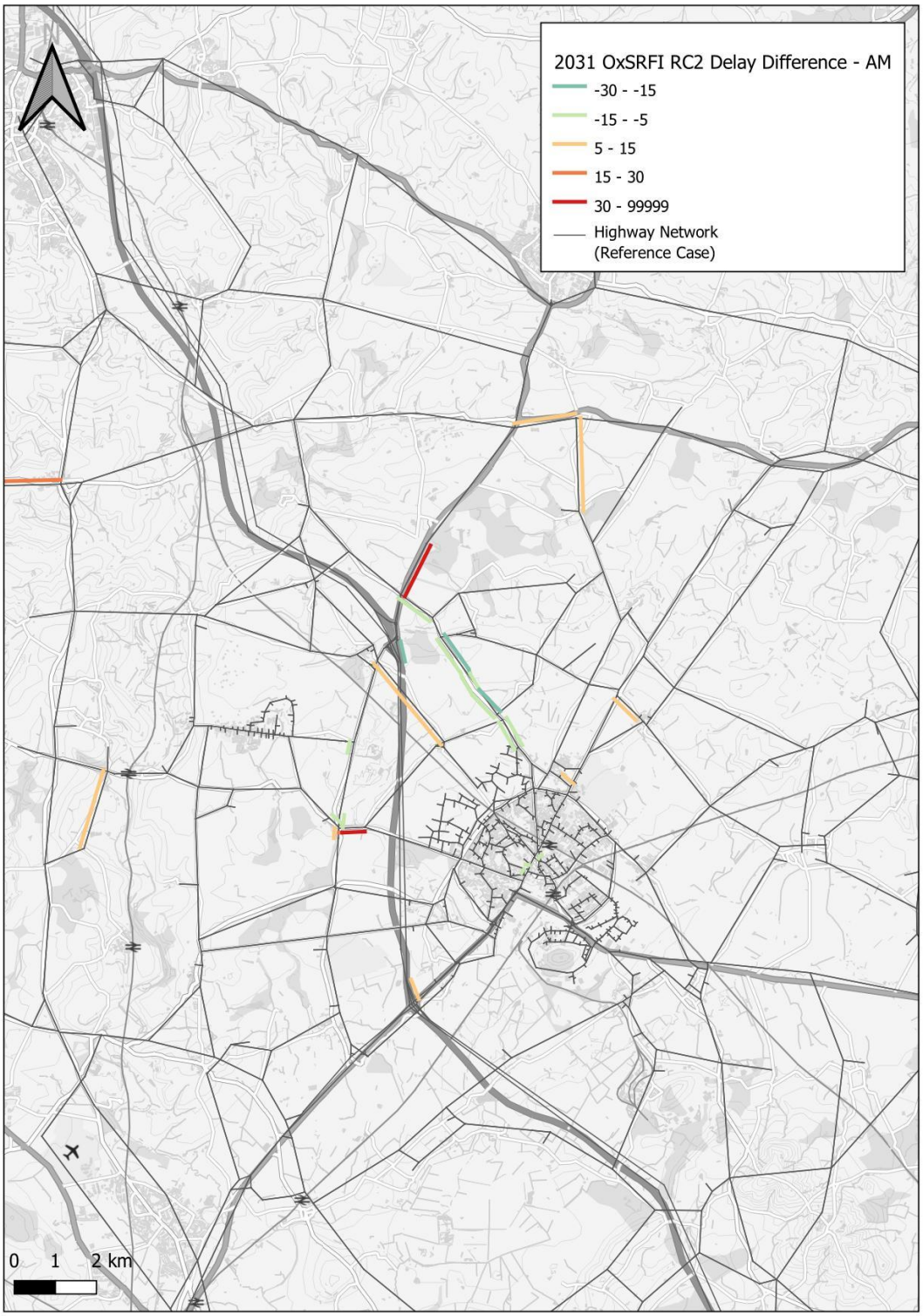


Figure 5-5: 2031 PM delay difference in seconds

5.2.4 Link Volume over Capacity

Figure 5-6 and Figure 5-7 present the links that experience an increase in their volume compared to their capacity which pass over the 85% threshold that is likely to cause significant delays. The primary locations that are likely to be impacted by Puy du Fou traffic in this way are the western approach to Baynards Green roundabout, the northbound approach to the B430 from Bucknell, the westbound approach to Middleton Stoney and the northbound A41 traffic. In the PM, impacts are also expected to be seen at the northern approach to the A43/M40 Cherwell roundabout and the southbound off-slips at this location.

Figure 5-6: 2031 AM links where volume exceeds 85% capacity with Puy du Fou traffic

Figure 5-7: 2031 PM links where volume exceeds 85% capacity with Puy du Fou traffic

5.3 2042 CLPR Mitigation: Puy du Fou vs Reference Case

The following section presents the model outputs from the 2042 models, comparing the 2042 Cherwell Local Plan Review and Mitigations scenario against the same model with additional Puy du Fu traffic and development access infrastructure.

5.3.1 Link Flow Difference

Figure 5-8 and Figure 5-9 present the AM and the PM link flow differences respectively. Flow changes in these models are more substantial than in 2031 due to the overall level of background demand being higher and the addition of a larger number of trips for Puy du Fou.

Large increases in traffic along the M40 from the south are found. Rat-running is seen to be a major concern for the village of Middleton Stoney and Bucknell. The use of these routes by Puy du Fou traffic results in wide rerouting by local traffic along less desirable routes. Routing by local traffic away from the B4100 is seen similar to the 2031 models, with increases in traffic on Hethe Road.

Flows also indicate that traffic is leaving the motorway at an earlier junction, such as Junction 11, and using alternative routes to access Bicester to avoid the large delays seen at M40 Junction 9 and 10.

Figure 5-8: 2042 AM flow difference in PCUs

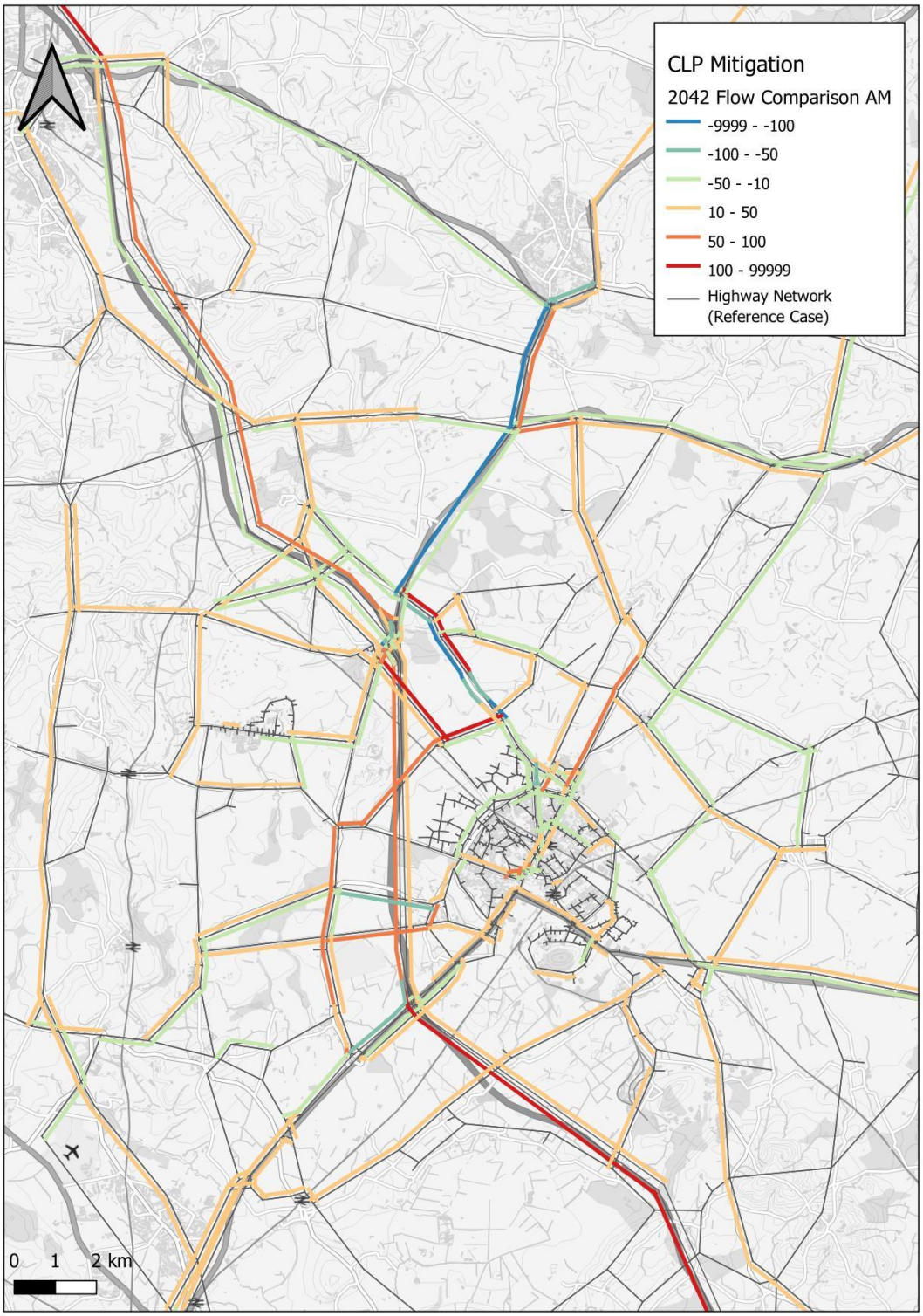
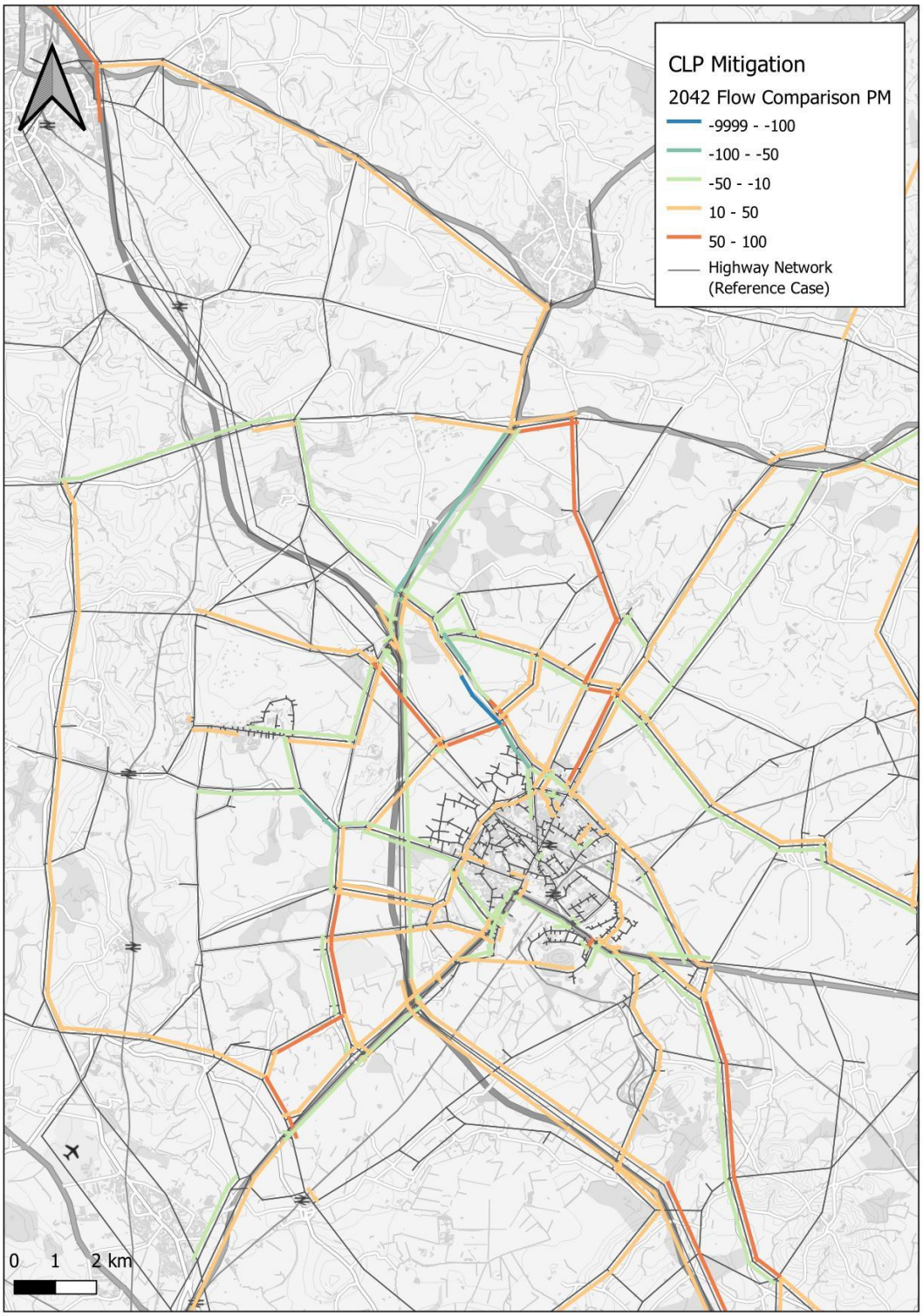


Figure 5-9: 2042 PM flow difference in PCUs



5.3.3 Link Delay Difference

Figure 5-10 and Figure 5-11 show the link delay difference in the AM and PM respectively. As in the 2031 models, the decrease in delay at the B4100 is not representative of the expected changes in travel time due to the inclusion of additional network and Puy du Fou trips, as the increased travel time causes trips to reroute away from the B4100. This reduces what Saturn classifies as delay at these locations.

Major delay hotspots in this model include the approaches to the A43/A421 Barleymow roundabout, and also at M40 Junction 9 and Junction 10. In the PM, the southbound on-slips to the M40 at Junction 10 show increased delay as Puy du Fou traffic joins the motorway, but there is also an increase in delay on the Oxford Road that runs alongside the A41. There may be some concerns of rat-running to avoid the M40 Junction 9 roundabout by leaving and rejoining at the smaller access points either side of the roundabout.

Figure 5-10: 2042 AM link delay in seconds

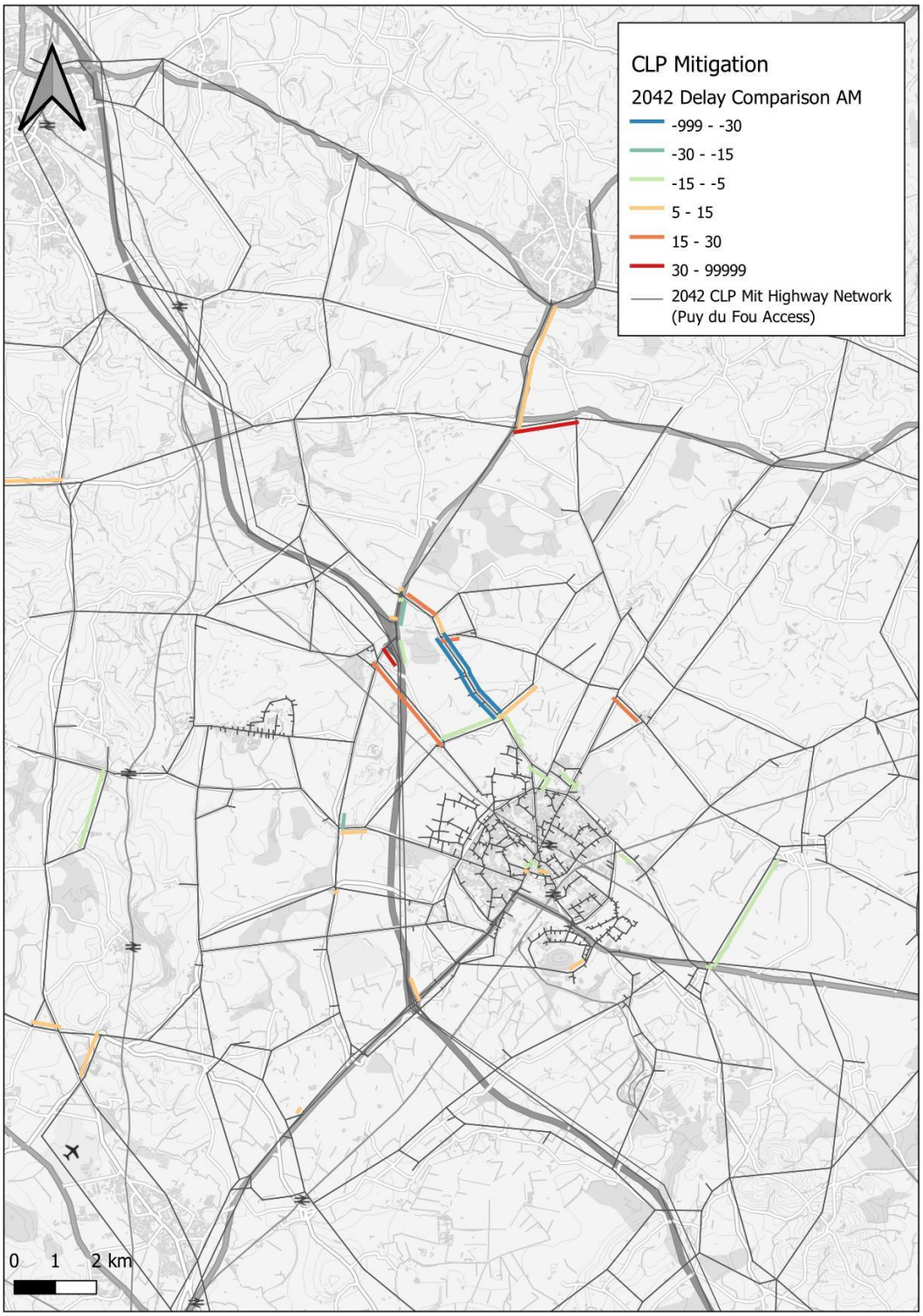
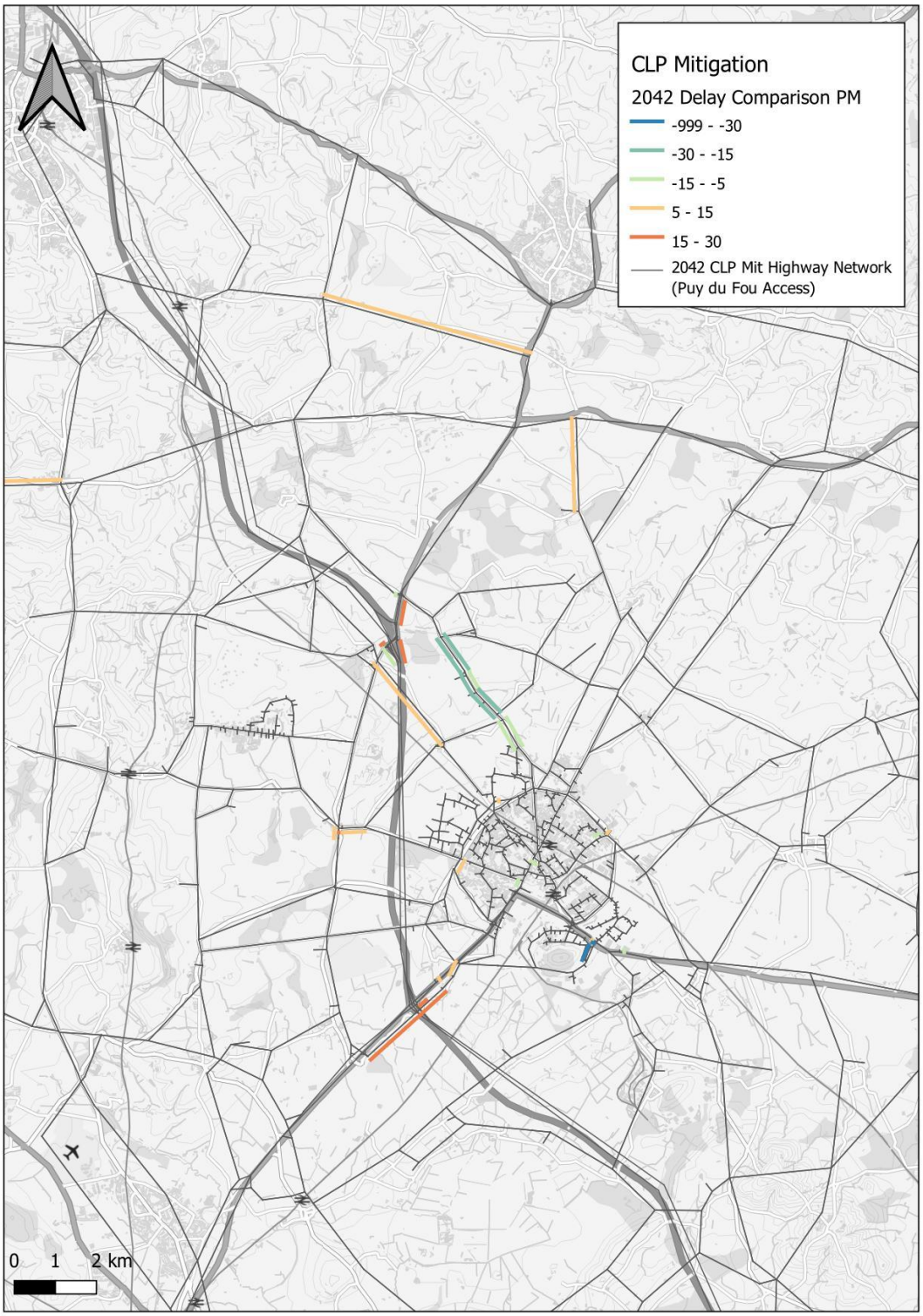


Figure 5-11: 2042 PM link delay in seconds



5.3.4 Link Volume over Capacity

Figure 5-12 and Figure 5-13 indicate that there are no major locations that experience an increase in link volume over capacity that would raise the ratio over 85%, but this is likely due to all relevant pinch points in the model already being at or near capacity in the Reference Case model.

Figure 5-12: 2042 AM links where volume exceeds 85% capacity with Puy du Fou traffic

Figure 5-13: 2042 PM links where volume exceeds 85% capacity with Puy du Fou traffic

6 Puy du Fou Mitigations

6.1 Mitigation Schemes

Following a review of the impacts of the Puy du Fou traffic on the 2042 CLPR with Mitigation scenario, a number of mitigation impacts were proposed by Steer to lessen the impact of additional traffic on the already highly congested network. A list of the major impacts is presented below:

Time Period	Junction/ Link	Issue
AM	A43 at M40 J10 Roundabout west of M40.	NB M40 off slip over capacity at the roundabout (non-signalised).
AM	Junction of A43/ A421 north of Baynard's Green	A43 SB and A421 WB is over capacity entering the roundabout.
PM	B430 and B4030 - staggered signal junction in Middleton Stoney.	Southbound movement is over capacity.
AM and PM	A43 at M40 SB off-slip (north of M40). Signalised roundabout in mitigation scenario	Southbound movement is over capacity.
PM	J10 SB on-slip A43 to M40	Significantly over capacity for traffic trying to get onto the M40. This is due to insufficient capacity on single lane slip, rather than merging capacity.
AM and PM	M40 J9 roundabout	On and off slips to/ from PdF directions

The proposed mitigation impacts are summarised below:

- Closure of Bainton Road between B4100 and Ardley Road.
- Signalisation of Ardley M40 off slip junction.
    - LinSig was provided
- Optimisation of the signals at Baynards Green.
    - Optimised via SigOpt in Saturn.
- Optimisation of the signals at Cherwell junction / M40 southbound off slip.
    - Optimised via SigOpt in Saturn.
- Addition of a flare at the A43 / Barley Mow roundabout on the A421 approach for c100m.
    - Not completed as the model already has two lanes on this approach which is not representative of current situation.
- Update of M40 J9 to reflect the inclusion of smart signals to better manage demand.
    - This cannot be modelled in Saturn and so was not included.

Figure 6-1: Locations of mitigation measures

6.2 Model Results: 2042 CLPR Mitigation Puy du Fou Mitigation vs 2042 CLPR Mitigation Puy du Fou

The following section presents the model outputs from the 2042 models, compared as the 2042 Cherwell Local Plan Review and Mitigations against the same model with additional Puy du Fou traffic and Puy du Fou mitigation proposals.

It is recommended to view the link flow plots alongside the staff and visitor routing plots in Appendix 1 to understand which trips are being rerouted. In many cases, it is local traffic that is being impacted rather than Puy du Fou traffic, as these follow routes that are generally reasonable ways to access the site.

6.2.1 Link Flow Difference

Figure 6-2 shows the AM link flow difference and the impact of the Puy du Fou mitigation schemes. The closure of Bainton Road is effective at preventing traffic from using Bucknell as a shortcut, and results in the shifting of Puy du Fou traffic onto the motorway and along the B4100, but also along Vendee drive to bypass Bicester town centre. There is a large decrease in the number of trips using the B430.

There is a slight reduction of motorway traffic seen on the plots (±50trips). This is largely attributed to non-Puy du Fou traffic choosing alternative routes through the network: either loading at different locations, or exiting the motorway earlier to avoid congested areas required by Puy du Fou traffic, such as M40 Junction 10. Trips travelling to or from Bicester may also be avoiding the motorway junctions 9 and 10, instead routing along A roads which are less congested.

Figure 6-3 shows the link flow difference in the PM and illustrates similar effectiveness of the mitigation measures at deterring traffic from using Bucknell as a shortcut. There are increases in traffic seen at M40 Junction 10 going northbound, as well as increases in use of the bypass roads around the town centre. This is the impacts of rerouted local traffic away, from the B4100.

Figure 6-2: 2042 AM link flow difference in PCUs

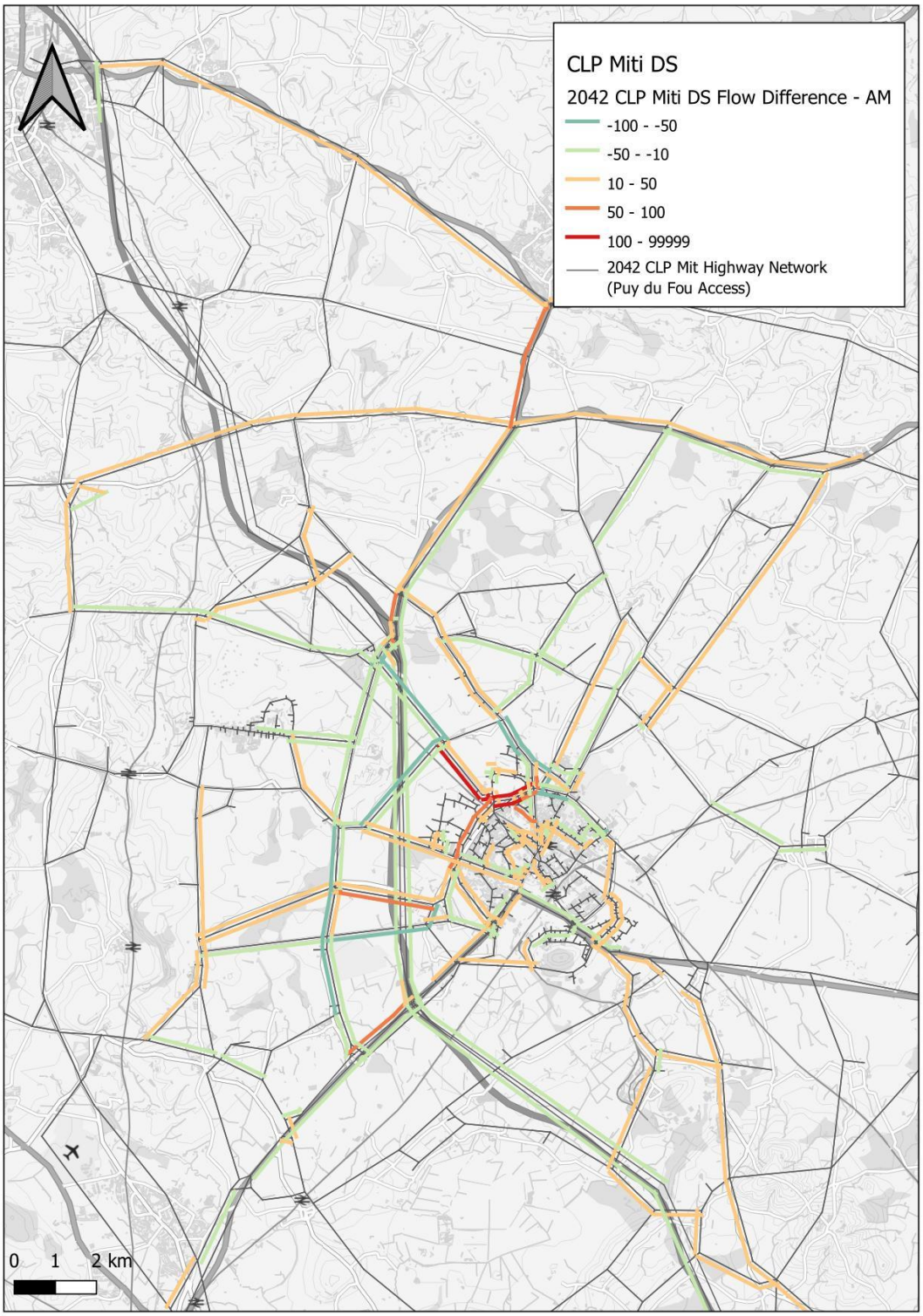
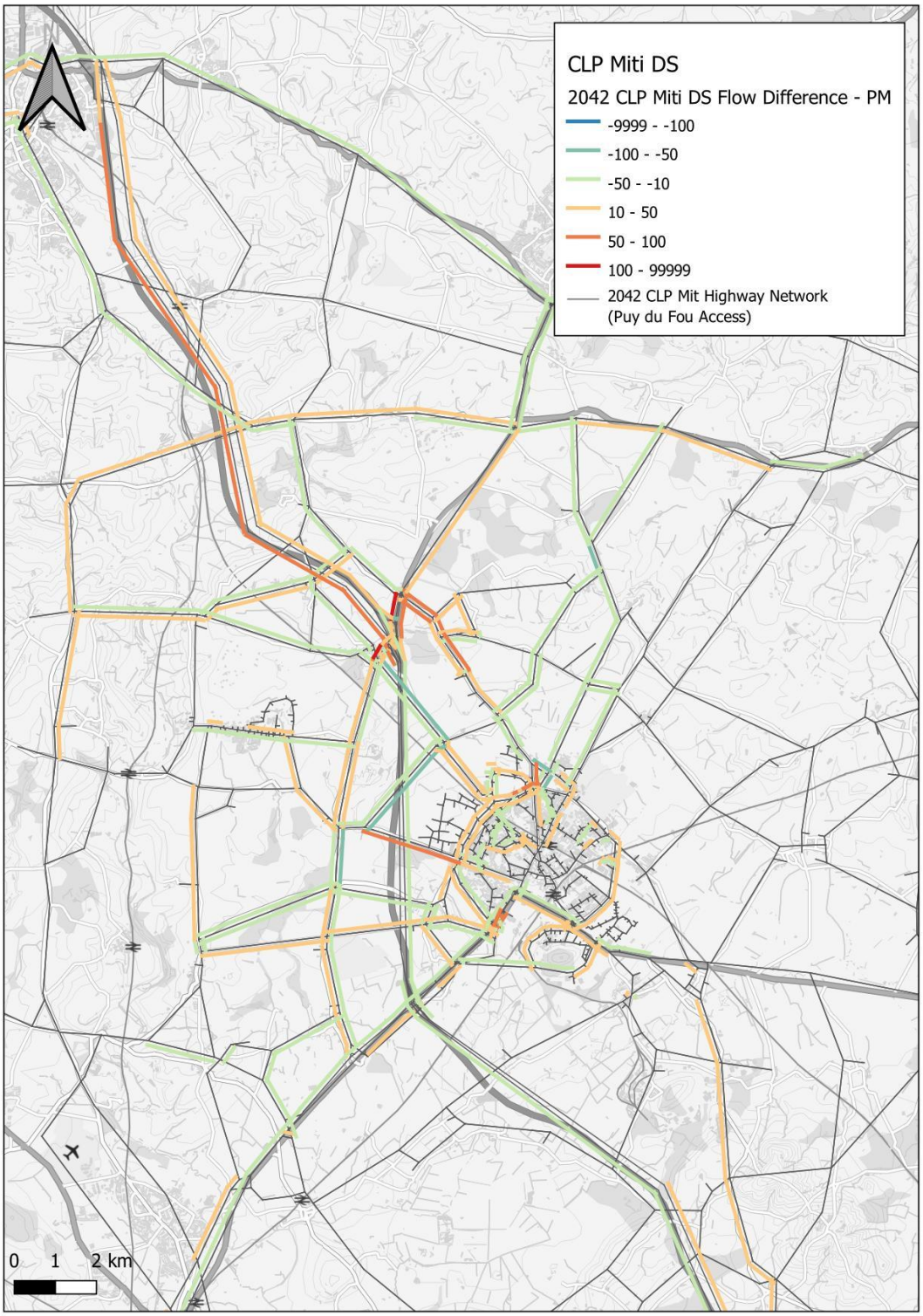


Figure 6-3: 2042 PM link flow difference in PCUs



6.2.2 Link Delay Difference

Figure 6-4 and Figure 6-5 present the changes in delays caused by the proposed mitigation schemes.

In the AM, the primary concerns are the increase in delays at the Baynards Green junction and at M40 Junction 10. Baynards Green is likely due to adjusted green times of the signals giving more capacity to constrained movements identified in the scenario without mitigations. There may be opportunity to further optimise these signals in a local junction model. In addition, capacity changes have attracted additional traffic to use this route, potentially causing greater congestion, Secondly, delay increases are seen at M40 Junction 10 at the Ardley roundabout due to the inclusion of signal controls. Constraining movements of the circulating traffic to allow specific green time for offslip traffic to enter the roundabout means that delays are found on the circulatory movements.

In the PM, M40 Junction 10 remains an issue with delay increases as a result of the inclusion of signal controls. Delay increases are also seen in Middleton Stoney, likely due to local traffic rerouting through the area. This is also seen on the southbound offslip at M40 Junction 10, caused by the increased access of Puy du Fou traffic to the southbound motorway.

Figure 6-4: 2042 AM link delays in seconds

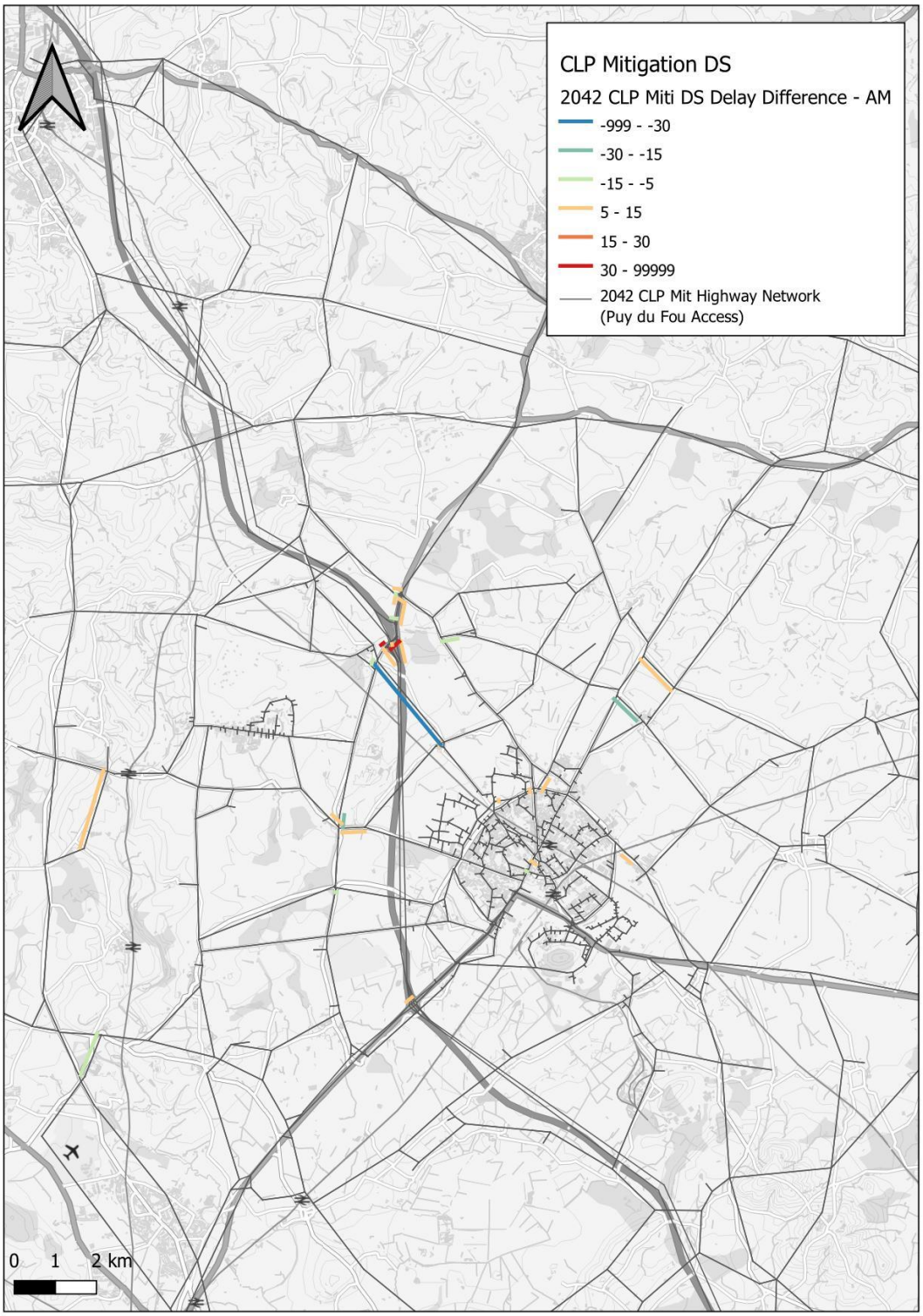


Figure 6-5: 2042 PM link delays in seconds.

6.2.3 Link Volume over Capacity

Figure 6-6 shows that the impacts of the mitigation schemes appear to have created more congestion in the AM. However, it should be considered that part of the mitigation measures are to provide local residents with assurance that minor roads will not be adversely affected by rat-running by Puy du Fou traffic (in the case of Bainton Road), and that by closing this relatively attractive local route, traffic will be forced to use more appropriate routes, which may also be more congested. Furthermore, any increases in V/C at junctions with traffic signals may have the opportunity for improved optimisation through junction modelling to improve performance.

Figure 6-7 suggests that the main increase in congestion caused by the mitigations is at Baynards Green. It is possible that with improved signal optimisation, this could be reduced.

Figure 6-6: 2042 AM links where volume exceeds 85% capacity in the Do Something scenario and not the Do Minimum

Figure 6-7: 2042 PM links where volume exceeds 85% capacity in the Do Something scenario and not the Do Minimum

7 Conclusions

Sweco were commissioned by Steer to undertake transport modelling of the impacts of staff and visitor trips from the proposed Puy du Fou theme park in Bicester. These assessments were undertaken using several different scenarios of the existing Bicester Transport Model.

Visitor and staff arrival and departure profiles were provided by Steer, from which demand matrices were created and added to the existing demand matrices for the Bicester Transport Model. These were provided with occupancy rates and mode shares which were used to generate the number of trips and their origins and destinations. In total, 218 vehicles were added in 2031 AM, 160 in 2031 PM, and 412 and 318 in the 2042 AM and PM models respectively. Note that these are only peak hour arrivals and departures and do not represent total visitor numbers.

When deriving the peak hour arrival and departures, the peak hour in the model and the peak hour of arrivals and departures were not aligned. This is discussed further in Section 2. The Puy du Fou peak arrivals lies between 0900 and 1000, whilst the peak hour in BTM is 0730-0830. To model a worst-case scenario as requested by National Highways, the peak arrival of visitors has been added to the peak hour in BTM.

Furthermore, the park does not open year-round. It is projected to open 176 days of the year, with no or minimal visitor trips accessing the site which comprises much of the traffic. As such, the model would operate similar to the Reference Case with regards to delays and congestion.

The access arrangements for Puy du Fou were coded in according to the provided masterplan, with associated speed restrictions.

As the Bicester Transport Model experiences high congestion in the Reference Case, the addition of traffic to the network shows increases in the use of minor roads to avoid congestion hot spots. Delay increases are also seen at major intersections such as the M40 Junctions 9 and 10. Without mitigations, use of Bainton Road to access Puy du Fou instead of through M40 Junction 10 is very high, especially in the 2042 models.

To counteract this, a number of mitigation schemes were added to the 2042 Cherwell Local Plan Review Mitigations model. These included signalising the M40 Junction 10 northbound offslips, and closing Bainton Road. These are effective at mitigating the concerns of local residents from bypassing the strategic road network to access the site, but do cause additional capacity constraints at junctions leading to some additional delays. However, due to the congested nature of the network, this would be difficult to remove entirely.

The results of the modelling appear to indicate that the local road network is largely able to handle the additional traffic that Puy du Fou would generate, but there are significant pre-existing constraints at the two motorway junctions either side of Bicester.

Appendix 1 – Staff and Visitor Routing Plots

The following plots show the staff and visitor routing in the 2042 CLPR Mitigation with Puy du Fou DS models. These therefore include the mitigation measures discussed in Section 6.

These plots demonstrate the routes that staff and visitors would use to access the site. However, due to the congested nature of the network, not all trips are able to access the site. The suppressed demand has also been plotted to indicate areas of further pressure in the network that may need to be investigated further.

Figure 7-1: 2042 CLPR Mitigation with Puy du Fou traffic and mitigations – AM staff routing and suppressed demand

Figure 7-2: 2042 CLPR Mitigation with Puy du Fou traffic and mitigations – PM staff routing and suppressed demand

Figure 7-3: 2042 CLPR Mitigation with Puy du Fou traffic and mitigations – AM visitor routing and suppressed demand

Figure 7-4: 2042 CLPR Mitigation with Puy du Fou traffic and mitigations – PM visitor routing and suppressed demand

Appendix 2 – Journey Time Routes

The total time per link has been collated by journey time route and is presented below. This shows the total expected change in travel time for users traversing each of the assessed routes.

The location of the routes is presented below, and this data is then tabulated on the following pages.

Figure 7-5; GIS representation of journey time routes

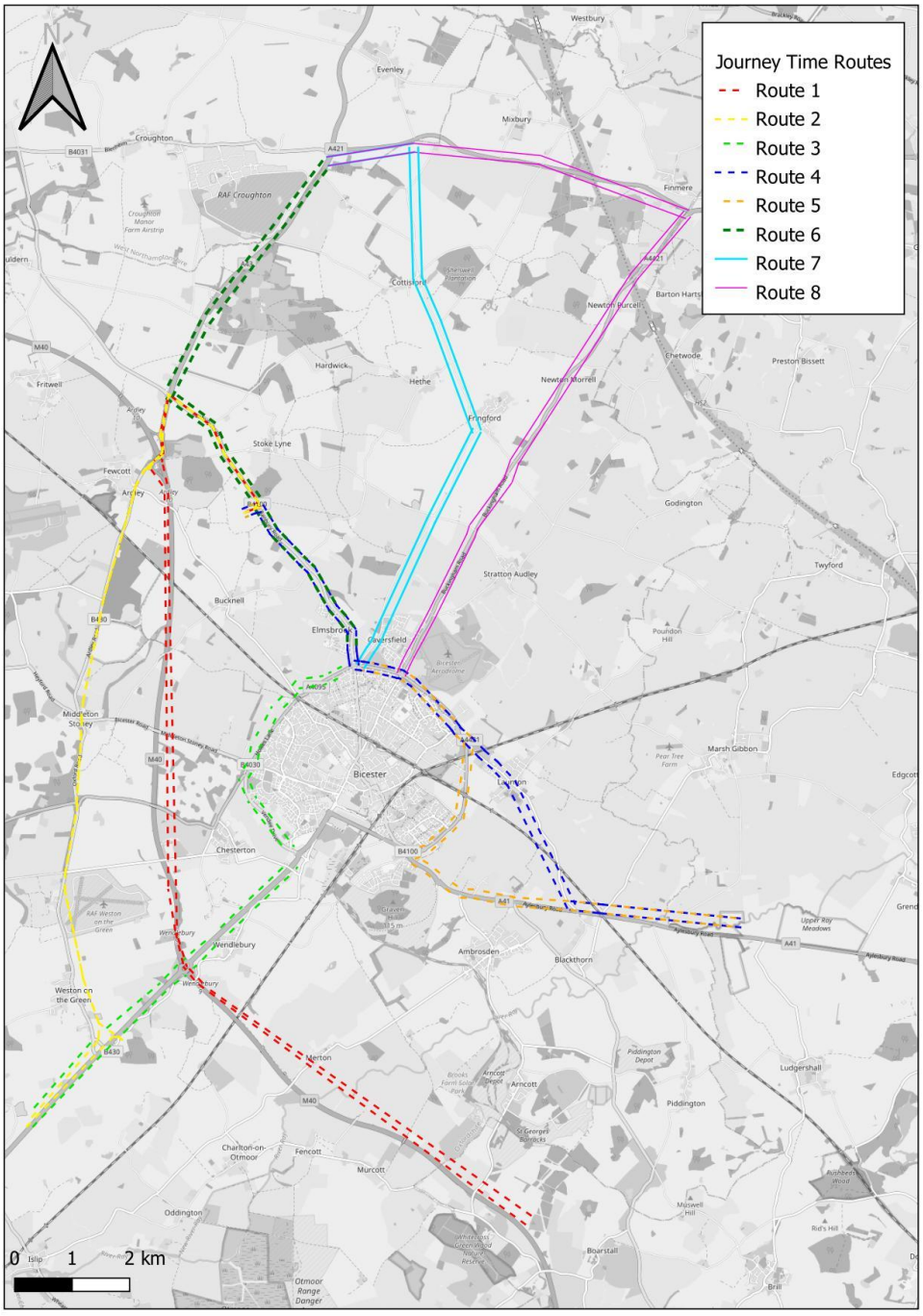


Table 7-1: AM Journey Time Route comparison

Route	Name	Dir	2031 RC	2031 PDF	%Difference 1	2042 CLP	2042 CLP PDF	%Difference 2	2042 CLP Mit	2042 CLP Mit PDF	%Difference 3	2042 CLP Mit PDF DS	%Difference 4
1	A43/ A421 junction to Bicester (A4095/ A4421 junction) via Hethe Rd	NB	862	864	0%	939	1012	8%	1033	1075	4%	1144	6%
		SB	1126	1066	-5%	1232	1139	-8%	1434	1394	-3%	1366	-2%
2	A43/ A421 junction to Bicester (A4095/ A4421 junction) via A4421	NB	714	726	2%	788	785	0%	721	741	3%	733	-1%
		SB	715	696	-3%	910	855	-6%	876	882	1%	893	1%
3	A43/ A421 junction to Bicester via B4100	NB	612	613	0%	716	709	-1%	821	837	2%	708	-15%
		SB	722	718	-1%	922	922	0%	821	802	-2%	901	12%
4	M40 south of junction 9 to PDF site via junction 10.	NB	909	910	0%	1020	1004	-2%	1026	1038	1%	990	-5%
		SB	880	870	-1%	1041	1020	-2%	1091	1053	-3%	988	-6%
5	A41 south of M40 to PDF via Bicester bypass	NB	461	459	0%	483	476	-1%	469	473	1%	465	-2%
		SB	505	495	-2%	683	663	-3%	697	663	-5%	631	-5%
6	A41 south of M40 to PDF via B430	NB	539	576	7%	572	590	3%	694	728	5%	716	-2%
		SB	792	886	12%	1012	1133	12%	632	682	8%	650	-5%
7	A41 east of Bicester to PDF via A41/ A4421	NB	672	674	0%	679	685	1%	685	732	7%	722	-1%
		SB	723	745	3%	799	856	7%	742	768	3%	742	-3%
8	A41 east of Bicester to PDF via A41/ Blackthorn Rd/ A4421	NB	746	752	1%	789	801	2%	794	841	6%	828	-1%
		SB	919	932	1%	1067	1113	4%	1031	1046	2%	1023	-2%

1 – 2031 vs 2031 Puy du Fou
2 – 2042 CLP vs 2042 CLP Puy du Fou
3 – 2042 CLP with CLP Mitigation vs 2042 CLP with CLP Mitigation and Puy du Fou
4– 2042 CLP with CLP Mitigation and Puy du Fou vs 2042 CLP with CLP Mitigation and Puy du Fou Mitigations
B4100 journey time distances vary by a small amount because the access points for Puy du Fou do not exist in the Reference Case network. Therefore the nearest link end point has been used for comparison.

Table 7-2: PM Journey Time Route comparison

Route	Name	Dir	2031 RC	2031 PDF	%Difference 1	2042 CLP	2042 CLP PDF	%Difference 2	2042 CLP Mit	2042 CLP Mit PDF	%Difference 3	2042 CLP Mit PDF DS	%Difference 4
1	A43/ A421 junction to Bicester (A4095/ A4421 junction) via Hethe Rd	NB	1108	1095	-1%	1346	1310	-3%	1285	1308	2%	1321	1%
		SB	979	968	-1%	1222	1247	2%	1040	1062	2%	1068	1%
2	A43/ A421 junction to Bicester (A4095/ A4421 junction) via A4421	NB	1011	992	-2%	1128	1140	1%	936	957	2%	957	0%
		SB	675	691	2%	914	944	3%	664	678	2%	729	8%
3	A43/ A421 junction to Bicester via B4100	NB	748	744	0%	966	951	-2%	775	770	-1%	1017	32%
		SB	663	668	1%	886	909	3%	849	856	1%	1040	21%
4	M40 south of junction 9 to PDF site via junction 10.	NB	893	889	0%	985	975	-1%	996	981	-2%	960	-2%
		SB	875	874	0%	962	982	2%	1003	1024	2%	985	-4%
5	A41 south of M40 to PDF via Bicester bypass	NB	450	446	-1%	599	582	-3%	565	546	-3%	539	-1%
		SB	466	466	0%	514	527	3%	519	529	2%	519	-2%
6	A41 south of M40 to PDF via B430	NB	569	629	11%	732	792	8%	679	722	6%	711	-1%
		SB	579	619	7%	613	656	7%	572	635	11%	600	-5%
7	A41 east of Bicester to PDF via A41/ A4421	NB	672	674	0%	721	753	4%	684	714	4%	704	-1%
		SB	679	678	0%	698	700	0%	701	701	0%	716	2%
8	A41 east of Bicester to PDF via A41/ Blackthorn Rd/ A4421	NB	869	873	0%	927	942	2%	923	931	1%	921	-1%
		SB	734	737	0%	792	796	0%	790	801	1%	804	0%

1 – 2031 vs 2031 Puy du Fou
2 – 2042 CLP vs 2042 CLP Puy du Fou
3 – 2042 CLP with CLP Mitigation vs 2042 CLP with CLP Mitigation and Puy du Fou
4– 2042 CLP with CLP Mitigation and Puy du Fou vs 2042 CLP with CLP Mitigation and Puy du Fou Mitigations
B4100 journey time distances vary by a small amount because the access points for Puy du Fou do not exist in the Reference Case network. Therefore the nearest link end point has been used for comparison.

Appendix 3 – Puy du Fou Access Arrangements

NOTES:

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2. All dimensions are to be checked on site.
3. This drawing is to be read in conjunction with all other Tate + Co and relevant consultants' drawings and information.
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KEY:

- Site
- Hotel
- Indoor show
- Outdoor show
- Village
- Other building
- MEP
- Parking
- Public Right of Way
- Service road
- Path
- Dry Basin
- Ancient woodland
- Existing Hedgerows/Woodland
- New woodland
- Amenity Grass Mix
- Amenity Grassland
- Mixed Native Hedge
- Perennial
- Ornamental Shrubs
- Wildflower/Species-Rich Grassland
- Marginal/Emergent/Aquatic Planting
- Lake

rev	date	amendment	by	approved
P04	30.09.2024	For Information	FR	HP
P03	29.09.2024	For Review	FR	HP
P09	28.11.2024	Design Team Issue	FR	LP
P02	27.09.2024	For Review	FR	HP
P01	26.09.2024	For Review	FR	HP
P07	25.10.2024	For Review	HP	LP
P06	21.10.2024	For Phasing Information	FR	HP
P05	18.10.2024	Design Team Issue	FR	HP
P012	11.02.2025	For Information	NS	LP
P011	10.01.2025	Design Team Issue	NS	LP
P010	05.12.2024	Design Team Issue	FR	LP
P08	01.11.2024	For Costing Information	FR	HP

0 25M 50M 125M 250M

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Puy du Fou, UK

Owner

drawing title

Strategic Zonal Masterplan

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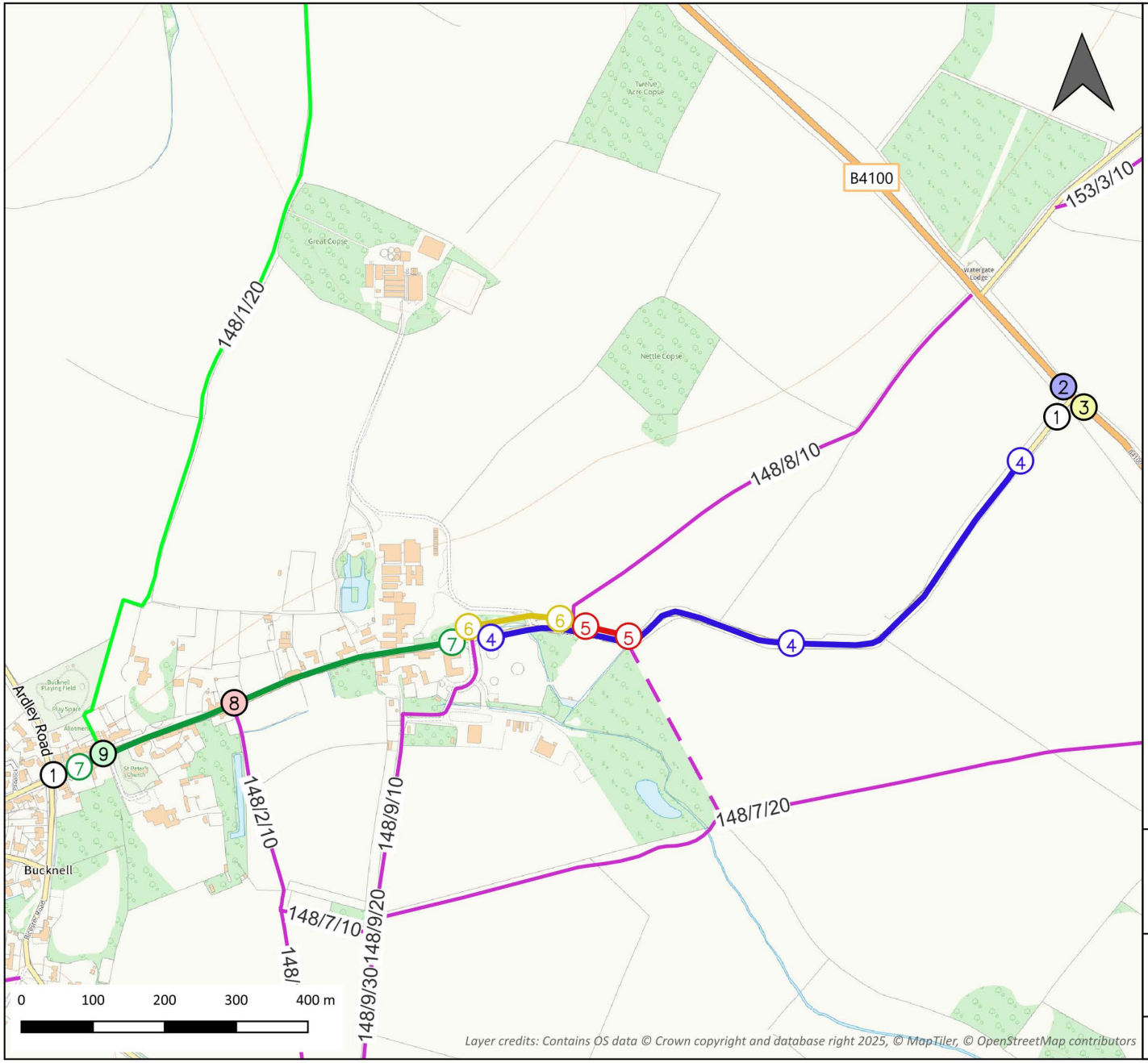
status	Planning	**job no.** PDF_UK	
drawing no.			**revision**
PDF_UK TCA ZZ ZZ DR AR 01-0101			P012

O Off-Site Highway Improvements



Potential Bainton Road Improvements

1. Signage
   - Single Track / Pedestrians in Road
   - No access to PdF
2. Potential to narrow down junction
3. Potential to improve Pedestrian / Cycle route crossing bellmouth – with priority to pedestrian / cyclists
4. Review of speed limit between B4100 and Lower Farm Barns
5. Informal path within verge to connect PRoW 148/8/10 to potential future footpath
6. Virtual footway to connect PRoW 148/8/10 and PRoW 148/9/10
7. Opportunity for virtual footway / formalisation of car parking
8. Pinch point build out at access to PRoW 148/2/10
9. Improve surfacing to PRoW and provide drop kerb

Public Rights of Way

- Bridleway
- Footpath
- Potential Future Footpath

Puy du Fou

24632101-GIS-01

Potential Bainton Road Improvements

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Tim.Wilcox	26-08-2025	1:12,500.015967

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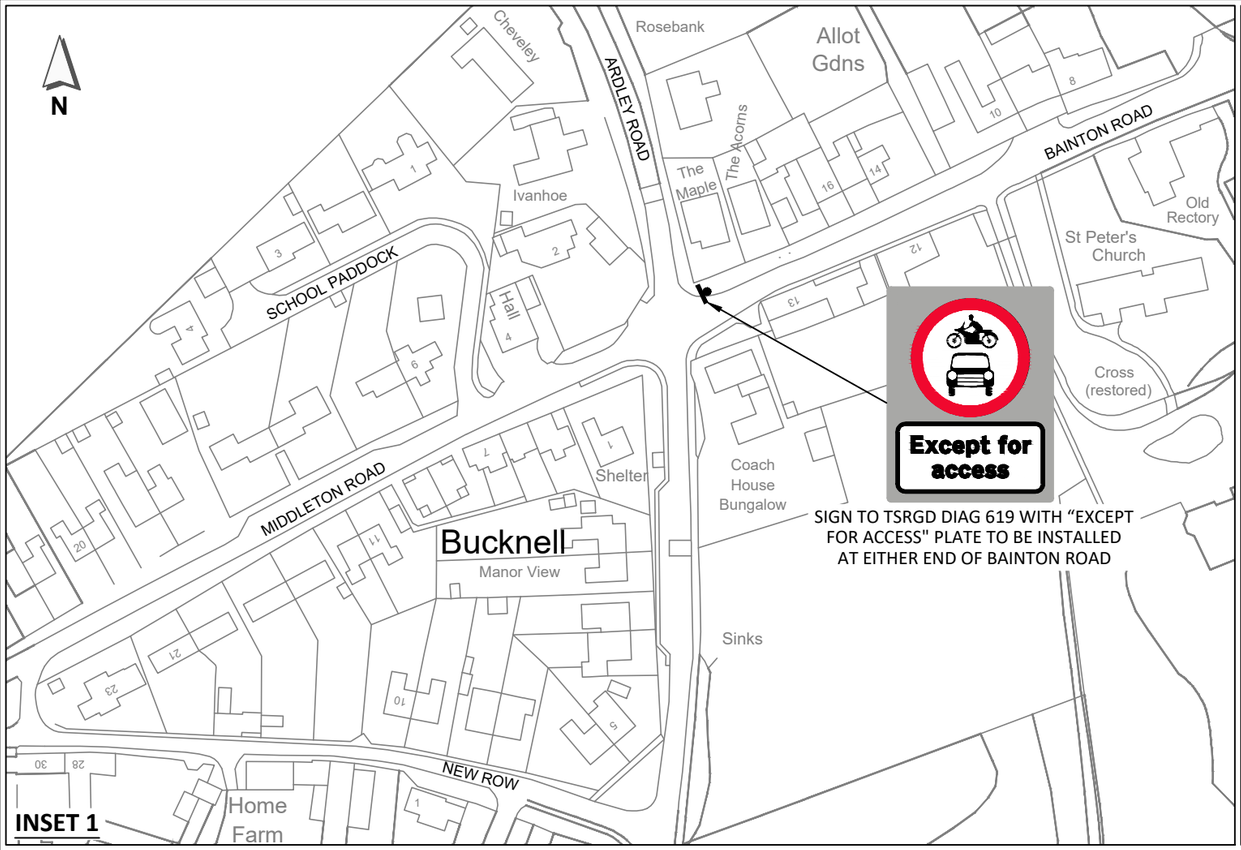

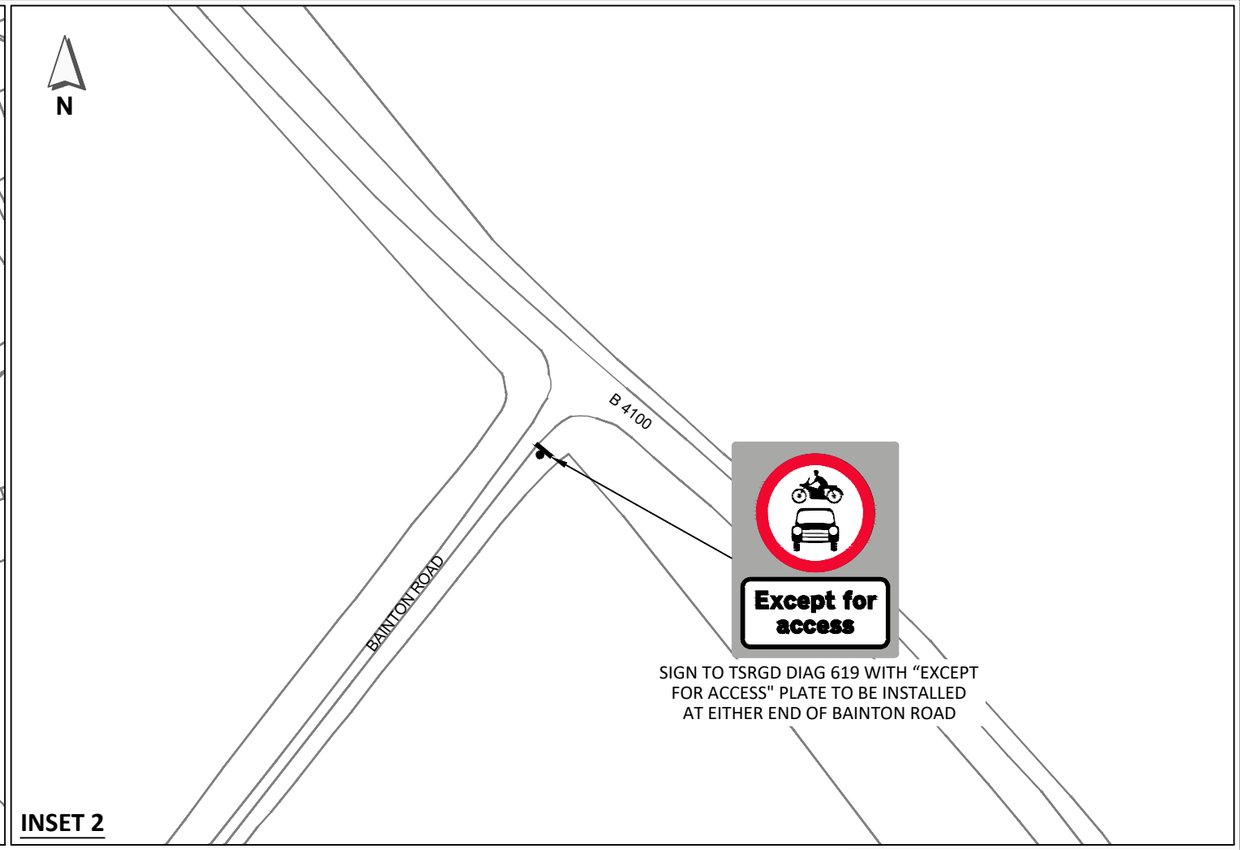

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Drawing Title: POTENTIAL SIGNAGE TO RESTRICT ACCESS TO BAINTON ROAD

Status: FIT FOR INFORMATION

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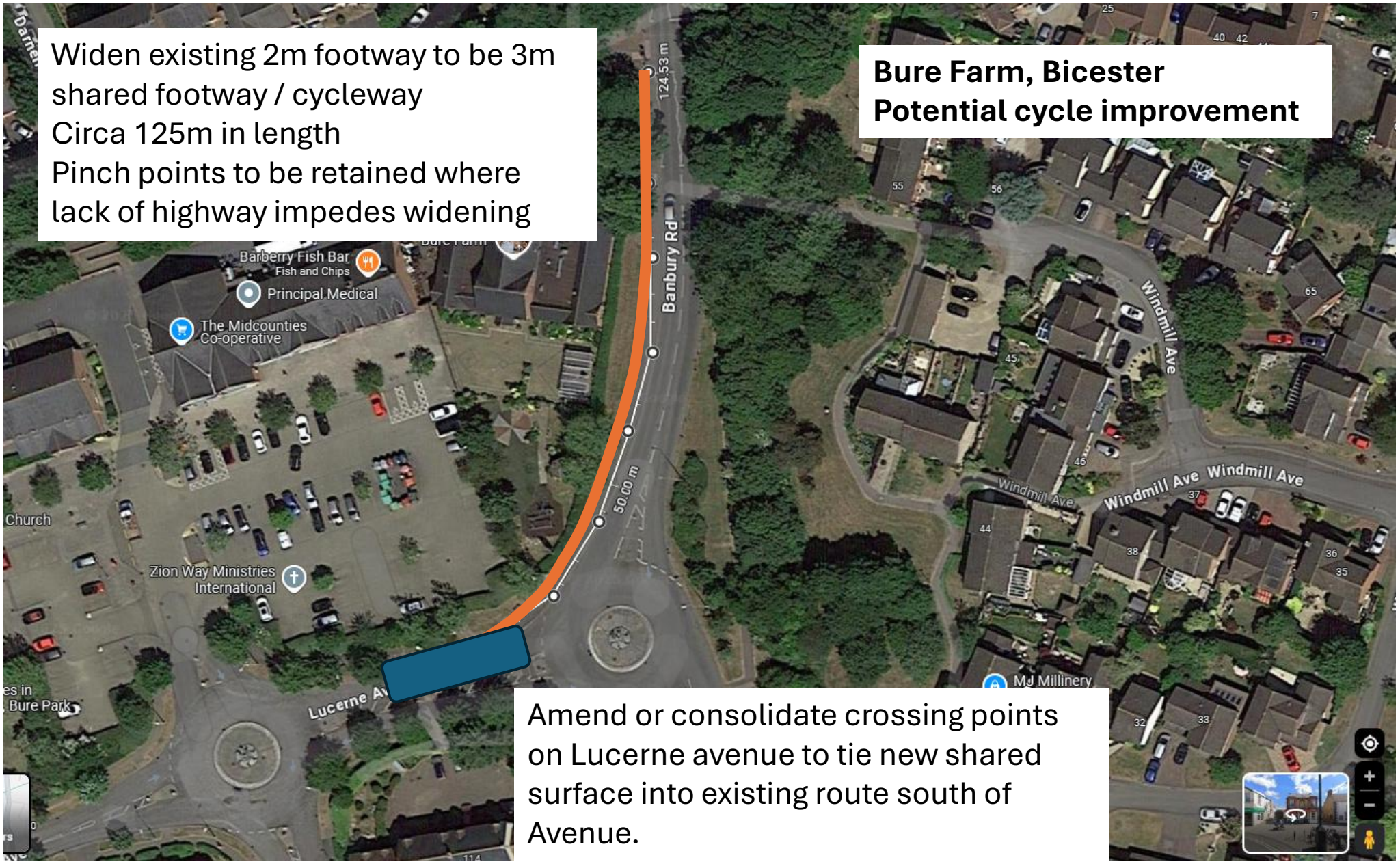
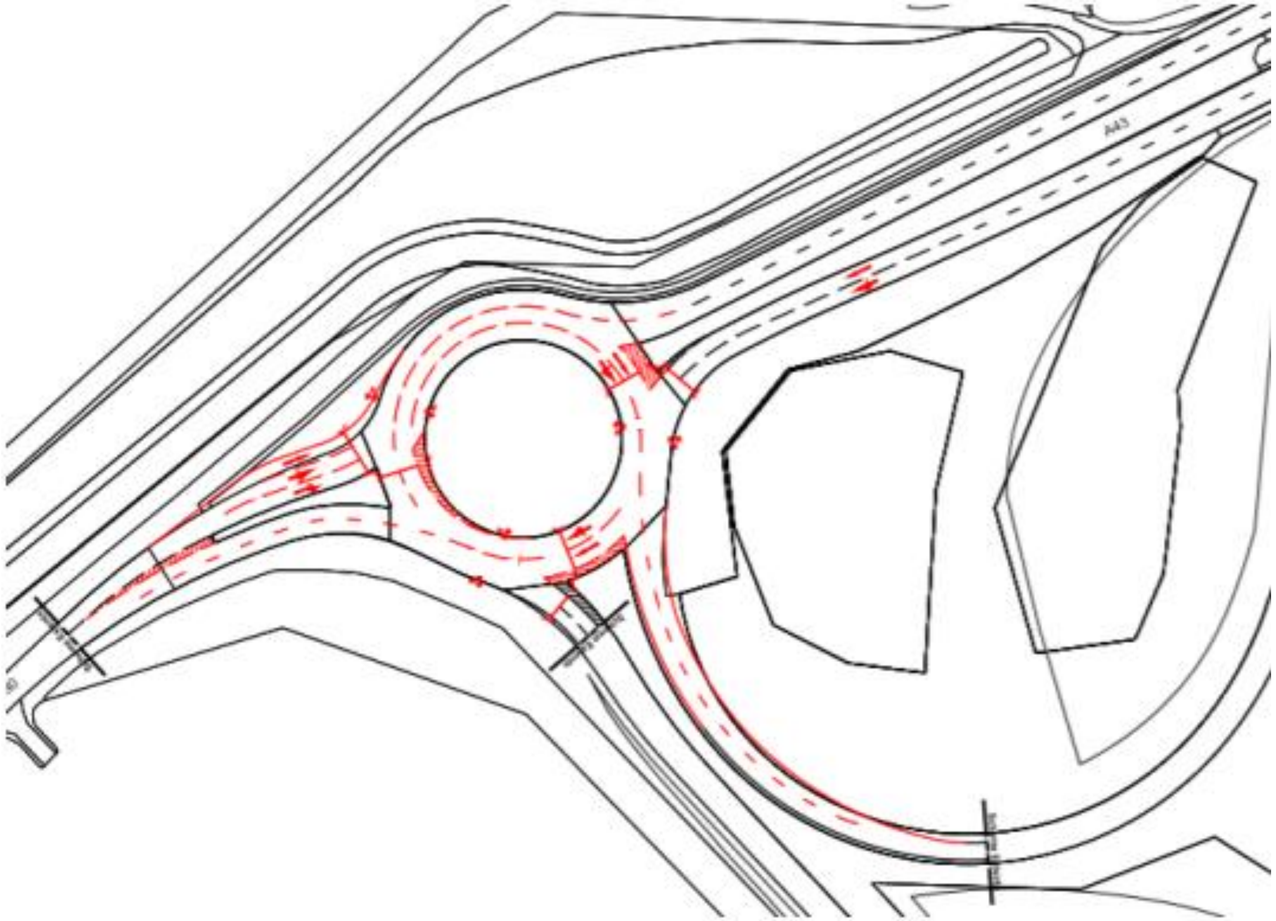
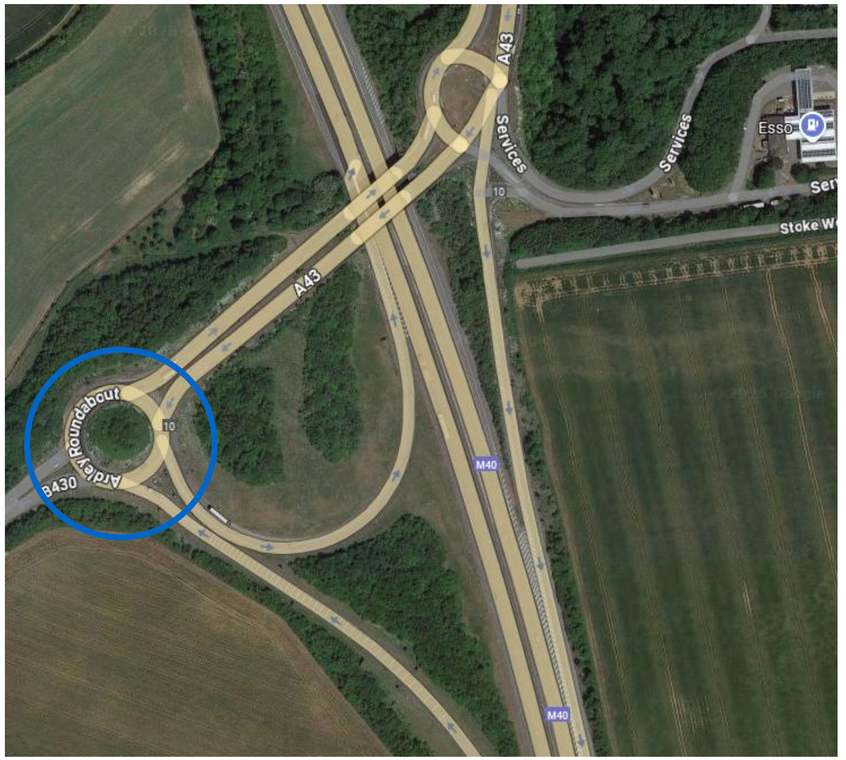

Widen existing 2m footway to be 3m shared footway / cycleway
Circa 125m in length
Pinch points to be retained where lack of highway impedes widening
Bure Farm, Bicester
Potential cycle improvement
Amend or consolidate crossing points on Lucerne avenue to tie new shared surface into existing route south of Avenue.
Banbury Rd
124.53 m
50.00 m
Windmill Ave
Windmill Ave Windmill Ave
Barberry Fish Bar
Fish and Chips
Principal Medical
The Midcounties Co-operative
Zion Way Ministries International
Church
Lucerne Av
Bure Park
MJ Millinery

Ardley Improvements

Junction 10 improvements

- Improve Ardley Road off-slip/ operation of M40 junction





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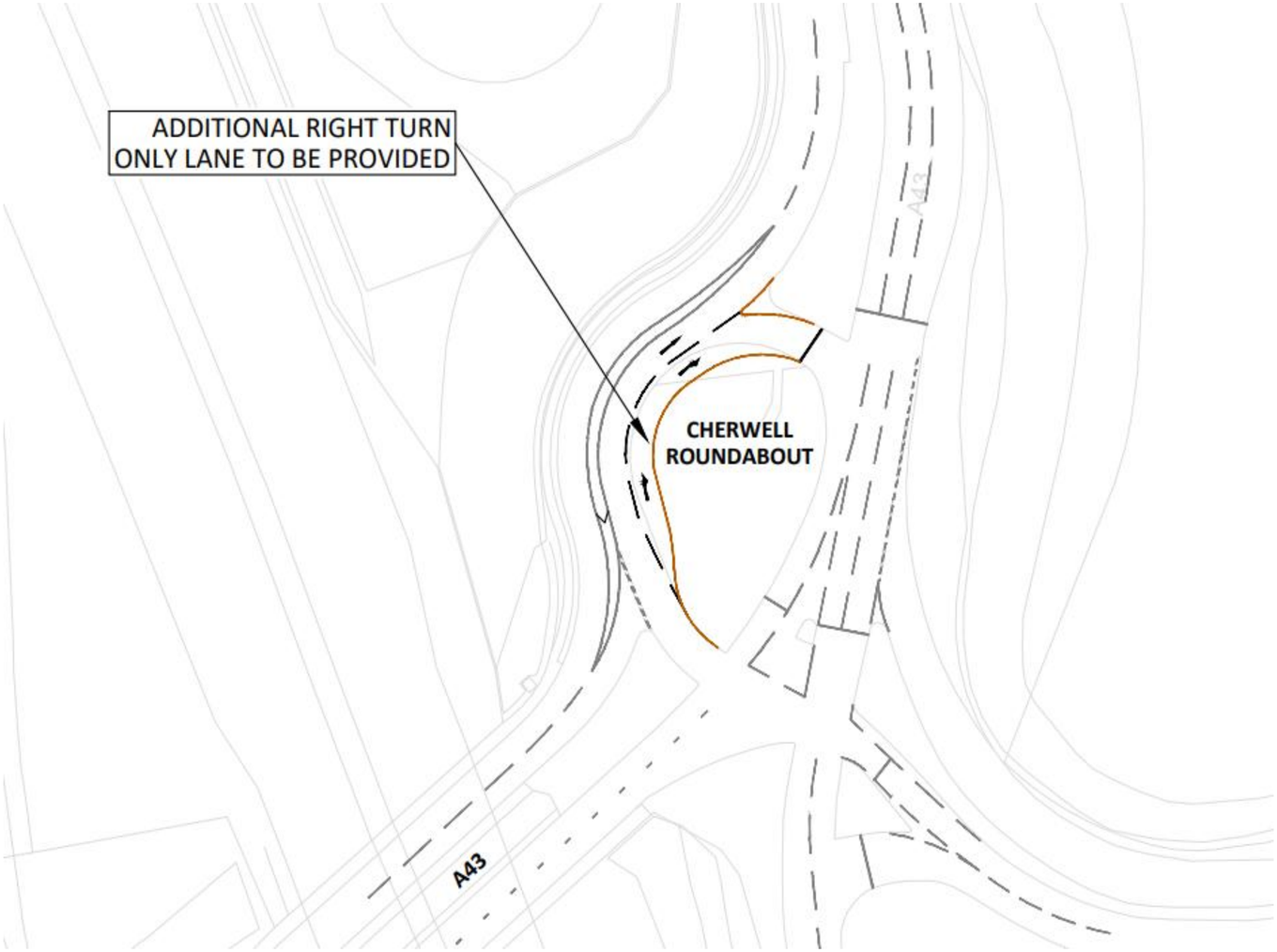
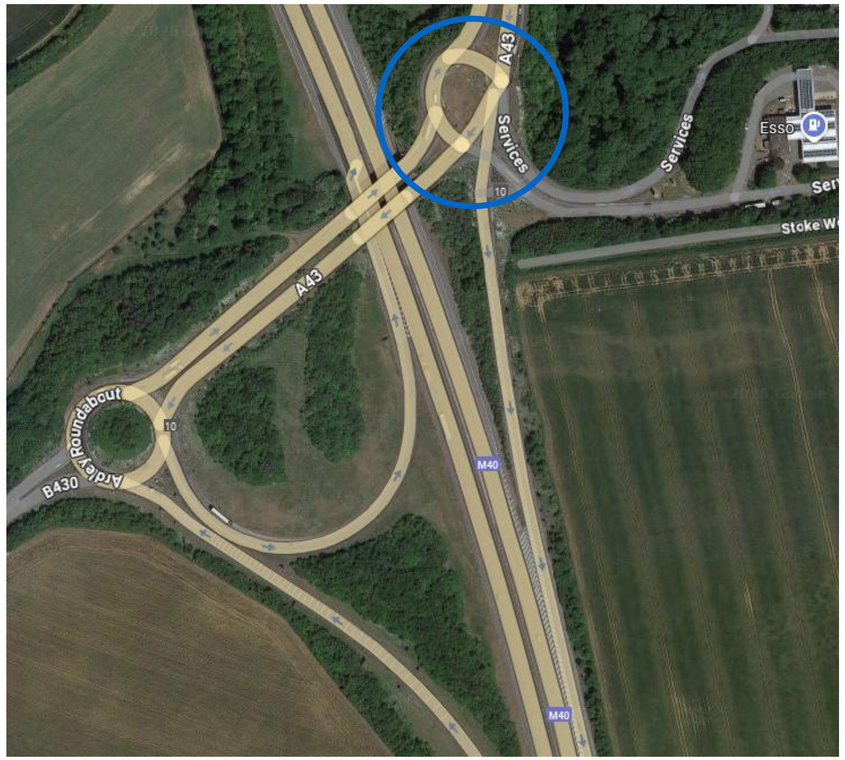
Cherwell Services Improvements

Junction 10 improvements

Minor amendment to alignment of Signal junction





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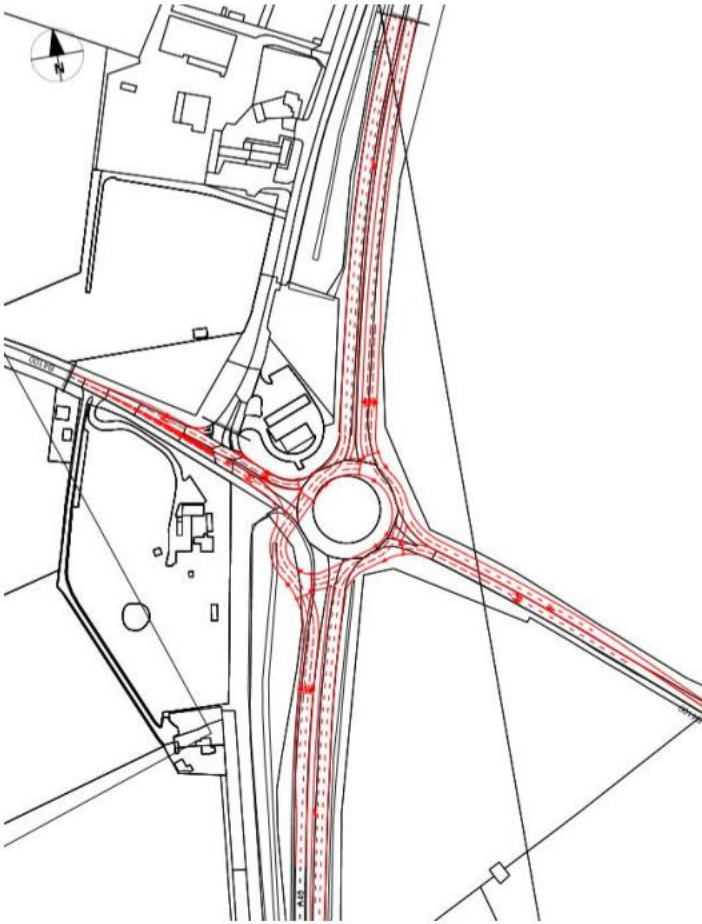

Figure 2. Baynard's Green Roundabout (1).

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Prepared for

Puy du Fou United Kingdom Limited

Steer project/proposal number

24632101

Client contract/project number

Click here to enter text.

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