

Water Eaton

PR6a : Land East of Oxford Road

Transport Assessment Addendum

Bellway


**STRATEGIC
LAND**



CHRIST CHURCH
UNIVERSITY OF OXFORD

WE/TA/P02



Water Eaton, North Oxford (Site PR6a)

Transport Assessment Addendum

Client: Bellway Homes and Christ Church

i-Transport Ref: MG/ITB16565-107BR

Date: 27 February 2024

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SECTION 1 Introduction

1.1 Background

- 1.1.1 Bellway Homes and Christ Church submitted an outline planning application for residential led mixed use development (up to 800 new homes) on the PR6a Water Eaton site to Cherwell District Council (CDC) in May 2023. CDC has registered the application under the following reference - 23/01233/OUT. A site location plan is provided at **Figure 1.1**.
- 1.1.2 A Transport Assessment (report ref WE/TA/P01, I-Transport ref ITB16565-102F, dated 28 April 2023) and Framework Travel Plan (report ref WE/FTP/P01, I-Transport ref ITB16565-103F, dated 28 April 2023) accompanied the planning application.
- 1.1.3 The applicant has received comments from the local highway authority, Oxfordshire County Council (OXCC), dated 30 June 2023. Comments were also received from Active Travel England dated 11 July 2023. National Highways provided an initial holding response on the application dated 21 July 2023. Following the submission of further information from i-Transport, National Highways lifted its holding position on 11 September 2023 recommending that conditions should be attached to any planning permission that may be granted.
- 1.1.4 As a result of consultation comments received, the application and site layout proposals have been updated and additional technical work has been undertaken. This Transport Assessment Addendum details the transport and highway related changes to the application. It should be read in conjunction with the Transport Assessment.
- 1.1.5 Following comments from OXCC, the Framework Travel Plan has also been updated (report ref WE/FTP/P02, i-Transport ref ITB16565-103I, dated 27 February 2024).
- 1.1.6 Several other consultees including Gosford and Water Eaton Parish Council, CycloX, the Ramblers Association and the British Horse Society have provided transport / highways comments on the application - a consultee comments / applicant responses tracker has been prepared and is provided at **Appendix A**.
- 1.1.7 A number of transport related comments were received from third parties which have been taken into account in the resubmission.

1.2 Revised National Planning Policy Framework December 2023

- 1.2.1 There was a revised National Planning Policy Framework published in December 2023.

1.2.2 Section 9 (paragraphs 108 – 117) deals with Promoting Sustainable Transport. Paragraph 114 sets out that:

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

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

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

the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”

1.2.3 Paragraph 115 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 would be severe.”

1.2.4 Paragraph 116 goes onto state that:

Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

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

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

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

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

1.2.5 Paragraph 117 confirms that:

“All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.”

1.2.6 The transport tests remain largely unchanged from the previous version of the NPPF.

1.3 Summary of Changes

1.3.1 The main transport changes to the application are as follows:

- Minor amendments to the Oxford Road CYCLOPS access junction including safeguarding sufficient space for a right turn movement into PR6b on the northern arm;
- Confirmation that a pedestrian / cycle access from the site is provided to the Parkway / Station / Park and Ride site to the north - it is envisaged that the Section 106 Agreement will secure a pedestrian / cycle link as far as the site boundary in this location;
- An assessment demonstrating why it is not appropriate for the site to be car-free and that parking details are better addressed at reserved matters stage;
- Further work with OXCC regarding an improvement scheme at Cutteslowe roundabout; and
- Updated traffic modelling which demonstrates that direct impacts from the development and the wider PR sites on the transport network have been cost effectively mitigated to an acceptable degree with the residual cumulative impacts not being severe.

1.4 Transport Objectives

1.4.1 The transport objectives for the development which were set out in the Transport Assessment remain unchanged and are summarised below for ease of reference.

1.4.2 The Local Transport and Connectivity Plan (LTCP) is OXCC's statutory Local Transport Plan.

1.4.3 OXCC are promoting a 'decide and provide' approach to transport planning for new developments. The approach decides on the preferred future and then provides the means to work towards that. It offers the opportunity for more positive transport planning and helps implement a transport user hierarchy by considering walking and cycling up-front.

1.4.4 Having regard to the guidance for new developments set out in Appendix 3 of OXCC's Local Transport Connectivity Plan, the following transport / connectivity objectives are set for the Development to complement the 'decide and provide' approach:

- 1 Deliver a well-connected, walkable 20-minute neighbourhood with facilities within the development that reduce the need for travel. The 20-minute neighbourhood concept represents a 10-minute walk to access local facilities and services and a 10-minute walk back. This equates to approximately an 800-metre walking distance when considering average walking speed.
- 2 Deliver direct and safe connections which prioritise access on foot, bike or bus to/from neighbouring communities and places of employment, retail, education, and leisure facilities. This includes improving existing cycling and walking infrastructure that link the development to neighbouring communities and to avoid severance.
- 3 Deliver excellent access to transport interchanges.
- 4 Provide frequent, reliable and easily accessible public transport to local facilities, employment and nearby town centres, including creating a positive bus environment, including real-time information at stops, accessible, safe and well-lit bus shelters which facilitate modal interchange.
- 5 Provide easy access to a network of open and green spaces (within a 10-minute walk) to enhance health and wellbeing. These should provide a mix of formal play spaces and informal open space that promotes biodiversity.
- 6 Roads and junctions connecting to developments need to prioritise walking, cycling and public transport and be futureproofed in line with the Innovation Framework.
- 7 New streets to be designed having regard to DfT's 'Manual for Streets', Oxfordshire County Councils Street Design Guide and Oxfordshire County Councils Walking and Cycling Design Guides, Healthy Streets Approach, LTN 1/20 and the Department for Transport's Inclusive Mobility.
- 8 Provide a comprehensive safe, convenient well landscaped and inclusive network for cycling, walking and public transport which offer direct, continuous and uninterrupted routes to facilities.
- 9 Consider appropriate filtered permeability and low traffic areas, making cycling and walking routes more direct and attractive than using a car.
- 10 Provide mobility hubs to improve interchange opportunities, connectivity and accessibility.
- 11 Provide appropriate parking throughout, including:

- Cycle parking that has regard to OXCC's best practice requirements and guidance;
- Parking (car and motorcycle) having regard to OXCC's parking standards including an effective network of EV charging and access to an electric car club;
- Appropriate visitor parking provision, designed with flexibility through the masterplan; and
- Parking control measures (such as CPZ's) to avoid overspill parking onto streets and design to discourage any pavement parking from occurring.

12 Provide effective digital connectivity to enable home working and include flexible work/office space.

1.5 Structure

1.5.1 The remainder of this Transport Assessment Addendum is structured as follows:

- Section 2 - The Development;
- Section 3 – Site Access Arrangements;
- Section 4 – Site Layout and Parking Strategy;
- Section 5 – Walking and Cycling Connectivity;
- Section 6 – Public Transport Connectivity;
- Section 7 – Framework Travel Plan;
- Section 8 – Traffic Impact; and
- Section 9 – Summary and Conclusions.

SECTION 2 The Development

2.1 Description of Development

2.1.1 The Description of Development remains unchanged from the original planning submission and is set out below for ease of reference:

“Outline application (with all matters except access reserved for future consideration) for the demolition of existing buildings and the erection of up to 800 dwellings (Class C3); a two form entry primary school; a local centre comprising: convenience retailing (not less than 350sqm and up to 500sqm (Class E(a))), business uses (Class E(g)(i)) and/or financial and professional uses (Class E(c)) up to 500sqm, café or restaurant use (Class E(b)) up to 200sqm; community building (Class E and F2); car and cycle parking; associated play areas, allotments, public open green space and landscaping; new vehicular, pedestrian and cycle access points; internal roads, paths and communal parking infrastructure; associated works, infrastructure (including Sustainable Urban Drainage, services and utilities) and ancillary development. Works to the Oxford Road in the vicinity of the site to include, pedestrian and cycle infrastructure, drainage, bus stops, landscaping and ancillary development.”

2.1.2 The Development includes the following key delivery requirements / land uses:

- Up to 800 homes;
- A primary school (two form entry);
- A local centre, including community uses, retail and commercial space; and
- Formal and informal open space.

2.1.3 An indication of the quantum of development which could be delivered at the Site is provided in **Table 2.1** below (this is the same quantum of development that was assessed in the Transport Assessment which was submitted with the application in May 2023).

Table 2.1 Indicative Land Use Budget

Use	Number	Floorspace (sqm)
Houses (C3)	534	-
Apartments (C3)	266	-
Retail (E(a))	-	500
Business (E(g))	-	500
Services (E(c))	-	500
Café/ restaurant (E(b))	-	200
Community (F.2(b))	-	400
2 FE Primary school	-	2,230sqm

2.2 Illustrative Masterplan and Development Parameter Plans

2.2.1 The illustrative masterplan and land use and access parameter plan have been updated and are provided at **Appendix B**. An extract from the illustrative masterplan is provided at **Image 2.1** below.

Image 2.1 Illustrative Masterplan (Drawing 42T)



2.3 Development Tested

2.3.1 The Transport Assessment Addendum continues to test:

- 800 dwellings – 50% private and 50% affordable;
- Primary school – 2-form entry;
- Local centre including:
 - Shops / retail (use class E a) – 500sqm;
 - Ancillary business development (use class E g) – 500sqm;

- Services (use class E c) – 500sqm;
- Café or restaurant (use class E b) – 200sqm; and
- Community building use class F.2 b) - 400 sqm.

2.3.2 Access to the site is proposed from Oxford Road. The site will be assisting in bringing forward OXCC's North Oxford corridor improvements which includes the Oxford Road cycle super highway (through delivery of infrastructure along the site frontage and proportionate contributions to other infrastructure).

SECTION 3 Site Access Arrangements

3.1 Access Strategy Overview

3.1.1 The overall access strategy remains largely unchanged from the original planning submission and is summarised below for ease of reference:

- Accommodate a walking / cycling super highway along the A4165 Oxford Road site frontage which forms part of OXCC's wider North Oxford Corridor plan to improve cycling connections between Cherwell District / Kidlington and Oxford city - OXCC's proposals are to accommodate where feasible one directional segregated cycle lanes and footways either side of Oxford Road;
- Provide convenient and attractive pedestrian and cycle links into the surrounding highway network and local area;
- Accommodate buses that will remain on Oxford Road but with new bus stops that are within a reasonable walk distance of the new homes;
- Provide vehicular accesses to the site from Oxford Road that prioritise safe crossing movements for pedestrians and cyclists; and
- Minimise the number of vehicular accesses to the Site from Oxford Road – Policy PR6a suggests the provision of two vehicular accesses from Oxford Road and the access proposals comply with this.

3.1.2 The site access arrangements have been developed in consultation with OXCC Highways, CDC, and consultants acting for site PR6b on the west side of Oxford Road.

3.2 Proposed Access Arrangements

Access from the A4165 Oxford Road

3.2.1 Following comments from OXCC Highways, the site access arrangements have been updated and are provided in the following i-Transport drawings which are submitted for approval:

- ITB16565-SK-065 - Proposed Water Eaton (PR6a) Access Strategy and Cycle Super Highway along Oxford Road - Including Left In Left Out Priority And Partial Cyclops Signal Junction;

- ITB16565-SK-067 - Proposed Water Eaton (PR6a) Access Strategy And Cycle Super Highway along Oxford Road - Including Left In Left Out Priority And Partial Cyclops Signal Junction – Southern Extent; and
- ITB16565-SK-066 - Proposed Water Eaton (PR6a) Access Strategy And Cycle Super Highway along Oxford Road - Including Left In Left Out Priority And Partial Cyclops Signal Junction – Northern Extent.

3.2.2 In addition, an updated indicative drawing (submitted for information purposes only) showing the proposed PR6a access strategy and cycle super highway along Oxford Road along with the potential PR6b site access arrangements is provided at **Appendix C**. This shows that the Water Eaton access strategy does not prejudice PR6b coming forward. The detail of the PR6b site access arrangements and west side cycle superhighway along Oxford Road will need to come forward with any future planning application on PR6b.

3.2.3 Key aspects of the access design remain largely unchanged from the original planning submission and are summarised below:

- The A4165 Oxford Road being subject to a 30mph speed limit along the site frontage (as per the approved Traffic Regulation Order);
- A walking / cycling superhighway along the eastern side of A4165 Oxford Road - the proposals accommodate a 2.5m wide segregated cycle lane and a 2.0m footway. A 3m verge separating the segregated cycle lane / footway and the Oxford Road carriageway / bus lane, suitable for appropriate street trees and planting is also included;
- The existing Oxford Road west side shared use footway / cycleway to remain available for pedestrians and northbound cyclists – this would eventually be upgraded to the cycle super highway dimensions as and when the PR6b site comes forward for development;
- This would achieve OXCC's cycle superhighway aspiration of having southbound cyclists one way along the east side of Oxford Road and northbound cyclists one way along the west side of Oxford Road;
- The southern vehicular access to the site as a 3 arm Cycle Optimised Protected Signals (CYCLOPS) junction (capable of accommodating a fourth / western arm for an access into the PR6b site);
- The northern vehicular access to the site as a left in left out priority junction with a full set back for cycle crossing;

- The existing accesses to St Frideswide's Farm and Water Eaton from Oxford Road are to be closed to vehicular traffic and to be turned into pedestrian / cycle accesses (bridleway access for the Water Eaton access). Alternative vehicular access arrangements to the properties, associated buildings and agricultural land served from these accesses will be provided (both during and after construction) from the proposed Oxford Road site accesses and street network within the application site only (which would be set at reserved matters stage and designs will need to allow for the type of agricultural vehicles and manoeuvres expected in a safe manner);
- A controlled pedestrian / cycle crossing of Oxford Road broadly in line with the Water Eaton bridleway;
- Floating bus stops on Oxford Road near the proposed controlled crossing and retention of the southbound bus lane; and
- Pipal Cottage is currently accessed from Oxford Road – it is understood that the owner is willing to have the access to the property redirected to come from within the development and this can be accommodated in the reserved matters scheme design.

3.2.4 Each of the above aspects of the access are discussed in more detail below.

Walking / Cycling Superhighway

3.2.5 As set out above, a walking / cycling superhighway along the eastern side of A4165 Oxford Road is proposed - the proposals accommodate a 2.5m wide segregated cycle lane and a 2.0m footway (there is a 3m verge separation between the segregated cycle lane footway and the Oxford Road carriageway / bus lane (suitable for street trees and planting)).

3.2.6 Following discussions with OXCC, the scheme has been updated for the section between the Oxford Parkway / Park and Ride junction and the proposed left in left out access as it passes Pipal Cottage. The drawings show that pedestrians and cyclists would use the existing shared footway cycleway for this section but between point A (at the northern end of the site frontage at the Oxford Parkway / Park and Ride junction) and point B (just south of the left in left out access) the footway / cycleway along the east side of Oxford Road may change and route within the site (i.e. on land behind Pipal Cottage) with the detail to be determined at reserved matters stage.

3.2.7 The existing Oxford Road west side shared use footway / cycleway will remain available for pedestrians and northbound cyclists – this would eventually be upgraded to the cycle superhighway dimensions as and when PR6b comes forward for development. The detail of how this is achieved would be for the promoters of development at Site PR6b to agree with CDC and OXCC.

3.2.8 This would achieve OXCC's cycle superhighway aspiration having southbound cyclists one way along the east side of Oxford Road and northbound cyclists one way along the west side of Oxford Road.

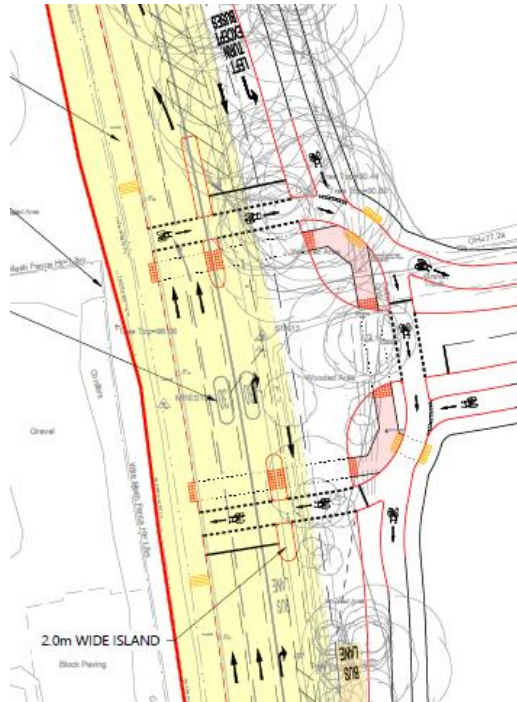
Southern Vehicular Access - CYCLOPS junction

3.2.9 The southern vehicular access to the site is a 3 arm Cycle Optimised Protected Signals (CYCLOPS) junction, capable of accommodating a fourth / western arm for an access into PR6b.

3.2.10 OXCC Highway's consultation response confirms that the primary vehicular access is to the south of the site frontage on Oxford Road and is in the form of a CYCLOPS junction. This essentially creates an 'all-red' phase for vehicles and allows pedestrians and cyclists to circulate around the perimeter of the junction in a clockwise direction in a single movement. There are no examples of this currently in Oxfordshire but it is considered safer for active travel users and fits in well with the 'cycle superhighway' scheme. Until PR6b and the 'cycle superhighway' come forward, the applicant will construct the junction as a 3-arm junction and leave the western side as existing which is considered acceptable in the short term. OXCC requested that the applicant look at safeguarding sufficient space for a right turn movement into PR6b from the north, which wasn't shown on the drawings submitted with the application.

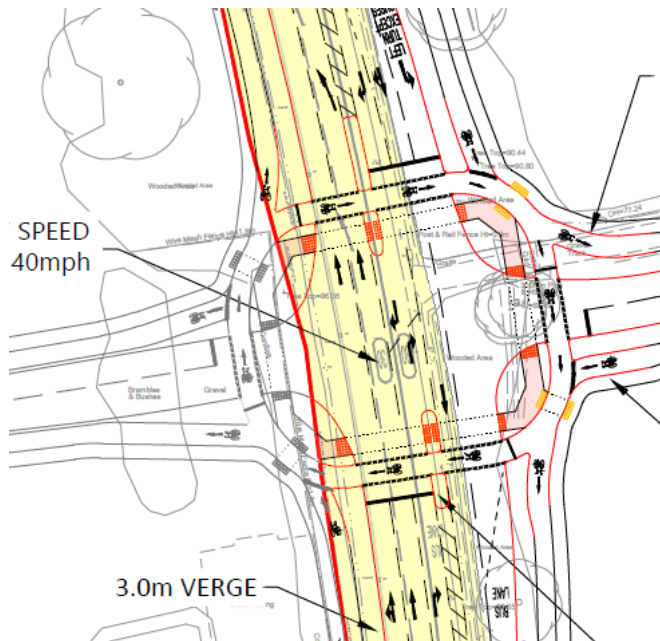
3.2.11 The CYCLOPS junction has therefore been updated to safeguard sufficient space for a right turn movement into PR6b on the northern arm as well as extending the verge to the north and south of the junction as far as the junction to seek to ensure that that cyclists use the pedestrian / cycle facilities along Oxford Road and at the junction. An extract from updated drawing ITB16565-SK-067 is shown in **Image 3.1**.

Image 3.1 Extract from Drawing ITB16565-SK-067 – 3 arm CYCLOPS Junction



3.2.12 **Image 3.2** below shows how the Cyclops junction is capable of accommodating a fourth / western arm for an access into PR6b including a right turn lane into PR6b from the northern arm (see indicative drawing at **Appendix C**).

Image 3.2 Potential Cyclops Junction 4th arm - access to PR6b in the Future

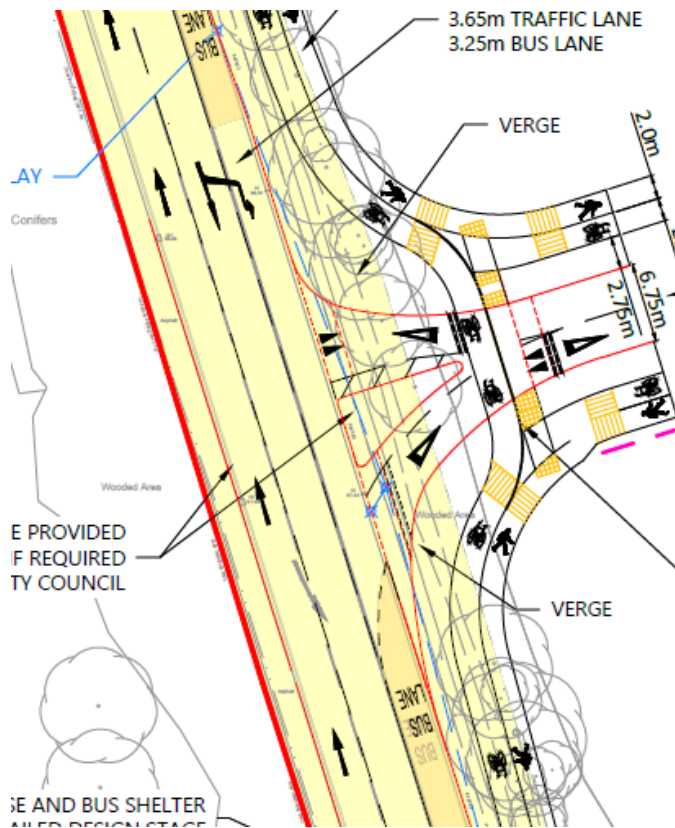


3.2.13 A vehicle swept path analysis at the updated southern site access junction is provided at **Appendix D**.

Northern Vehicular Access - Left In Left Out Priority Junction

- 3.2.14 The northern vehicular access to the site is proposed as a left in left out priority junction with a full set back for cycle crossing.
- 3.2.15 Minor changes to the drawing have been undertaken and an extract from the updated drawing ITB16565-SK-066 is shown in **Image 3.3** below. As requested by OXCC, the radii is sufficiently tight to slow vehicles turning left into the site from Oxford Road.

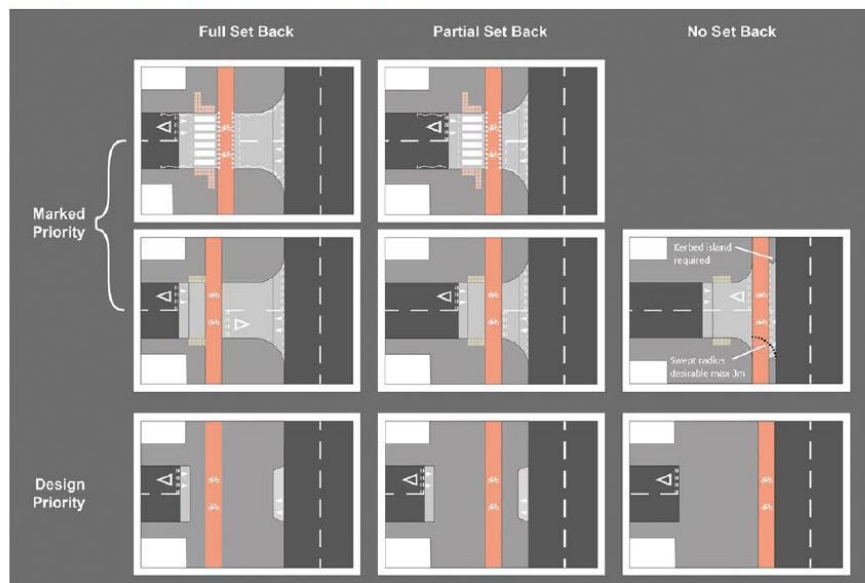
Image 3.3 Extract from Drawing ITB16565-SK-066



- 3.2.16 CycloX consultation response suggest various improvements to the designs that will make them LTN 1/20 Cycle Infrastructure Design compliant – specifically all cycle crossings of side roads along this route should be LTN 1/20 no set back, design priority. A full set back raised table priority crossing for the southbound cycle superhighway is proposed as it crosses the access arm. This is LTN1/20 compliant as shown in Figure 10.13 of LTN1/20 (see **Image 3.4**) and a circa 5m set back is provided and can accommodate traffic flows of around 2,000 vehicles per day on the minor arm. The full set back arrangement is agreed as being appropriate and safe by OXCC.

Image 3.4 Extract from LTN1/20 – Figure 10.13

Figure 10.13: Priority crossings of cycle tracks at side roads*



* Note – yellow globes at parallel crossings omitted for clarity.

3.2.17 A vehicle swept path analysis at the northern site access junction is provided at **Appendix D**.

3.2.18 The access design enables a second access to PR6b from Oxford Road to the north – see **Appendix C**. The northern access is shown illustratively but has been updated to show a full set back raised table priority crossing for the northbound cycle superhighway as it crosses the access arm.

Pedestrian / Cycle Accesses

3.2.19 Pedestrian / cycle accesses to the development from Oxford Road are proposed as follows:

- South of the Parkway Station / Park and Ride junction and in the vicinity of Pipal Cottage;
- Northern vehicular access - left in left out priority junction;
- Water Eaton access / bridleway – retained as bridleway access facilitating pedestrian and cycle movements with no vehicular traffic;
- CYCLOPS junction incorporating the north side footway / cycleway routing over the existing track access to the farm so that is no longer available as a vehicular access; and
- Southern part of the site (just to the north of the recently approved Land South West of St Frideswide’s Farm, Banbury Road scheme (OCC ref 21/01449/FUL).

3.2.20 OXCC's consultation response states that it is important that a further pedestrian / cycle access from the site is provided to the Parkway / Station / Park and Ride site to the north. This was shown in the original planning submission and the updated land use and access parameter plan also shows the indicative location for this pedestrian / cycle access – it is envisaged that the Section 106 Agreement will secure a pedestrian / cycle link as far as the site boundary in this location.

3.2.21 There will also be pedestrian / cycle links to the boundary with Cutteslowe Park to the south to enable a link to a potential future cycleway through Cutteslowe Park. This was also shown in the original planning submission and the updated land use and access parameter plan shows the indicative location for this pedestrian / cycle access – it is envisaged that the Section 106 Agreement will secure a pedestrian / cycle link as far as the site boundary in this location.

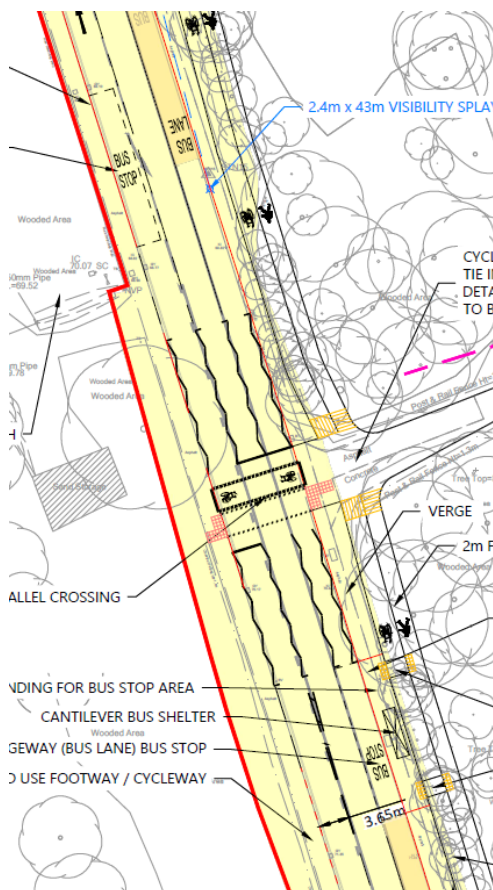
3.2.22 In addition, there will be other pedestrian and cycle accesses as follows:

- A pedestrian / cycle access into the eastern part of the approved development to the south (OCC Ref. 21/01449/FUL);
- Bridleway 229/9/30 running east from Oxford Road along the Water Eaton access track through the site provides an alternative pedestrian / cycle access to the north / Kidlington; and
- Public Footpath 229/8/10 running to the south of St Frideswide's Farm provides an alternative pedestrian access to the east / north;

Oxford Road – Controlled Pedestrian / Cycle Crossing

3.2.23 The original planning submission proposed a toucan signal-controlled crossing on Oxford Road broadly in line with the Water Eaton bridleway. The updated drawing has improved this to a parallel pedestrian / cycle crossing. This allows easy access to the public footpath routing west of Oxford Road through the PR6b site (either in its existing alignment or minor diversion of footpath to bring it in line with the controlled crossing). An extract from updated drawing ITB16565-SK-066 is shown in **Image 3.5** below.

Image 3.5 Extract from Drawing ITB16565-SK-066 – Oxford Road – Controlled Pedestrian / Cycle Crossing and Bus Stops



3.2.24 It is noted that the British Horse Society has asked for consideration to be given to an equestrian crossing of Oxford Road in this location. This is not considered necessary as:

- The applicant is not aware of a significant demand for equestrians in this location;
- There is no bridleway on the east side of Oxford Road; and
- OXCC’s Public Right of Way team has not requested that the crossing accommodates equestrians.

3.2.25 CDC planning case officer’s response states that:

“During public consultation however, a request was made for a bridge to be provided over the Oxford Road to link the two sites and this was echoed by Members when the design brief was considered by planning committee. Whilst this was discussed briefly and discounted at pre-application, it was requested that this was included within the application submission along with a justification as to why it was discounted. This does not appear to have been included. I note the references to this in the TA, statement of community involvement and design and access statement, however, these are statements and neither of these assess the proposed bridge in terms of land take, potential design, likely use etc. and therefore why it has been discounted. Further clarification is therefore required.”

3.2.26 The Transport Assessment did provide this assessment and justification as to why a bridge was discounted (paragraphs 6.3.24 – 6.3.25 of the Transport Assessment) and this is reproduced below for ease of reference.

3.2.27 Table 10.2 of LTN1/20 provides an indication of the suitability of each type of pedestrian / cycle crossing, depending on the speed and volume of traffic and the number of lanes to be crossed in one movement – see **Image 3.6** below.

Image 3.6 – Extract from LTN1/20 – Table 10.2

Table 10-2: Crossing design suitability

Speed Limit	Total traffic flow to be crossed (pcu)	Maximum number of lanes to be crossed in one movement	Uncontrolled	Cycle Priority	Parallel	Signal	Grade separated
≥ 60mph	Any	Any	Green	Green	Green	Green	Green
40 mph and 50 mph	> 10000	Any	Green	Green	Green	Green	Green
	6000 to 10000	2 or more	Green	Green	Green	Green	Green
	0-6000	2	Green	Green	Green	Green	Green
	0-10000	1	Yellow	Green	Green	Green	Green
≤ 30mph	> 8000	> 2	Green	Green	Green	Green	Green
	> 8000	2	Green	Green	Yellow	Green	Green
	4000-8000	2	Green	Green	Yellow	Green	Green
	0-4000	2	Green	Green	Green	Green	Green
	0-4000	1	Green	Green	Green	Green	Green

- Provision suitable for most people
- Provision not suitable for all people and will exclude some potential users and/or have safety concerns
- Provision suitable for few people and will exclude most potential users and/or have safety concerns

Notes:
 1. If the actual 85th percentile speed is more than 10% above the speed limit, the next highest speed limit should be applied.
 2. The recommended provision assumes that the peak hour motor traffic flow is no more than 10% of the 24 hour flow.

3.2.28 Oxford Road will be subject to a 30mph speed limit (following the approval of the Oxford Road / Banbury Road TRO), daily traffic flows will be in excess of 8,000 vehicles per hour and 2 lanes will be crossed in one movement. Having regard to **Image 3.6** above (extracted from LTN1/20),

an at grade signal-controlled crossing is identified as being the appropriate provision for 'most people'. A bridge crossing across what will be a 30mph single carriageway urban road would introduce unnecessary ramps and steps (which may deter some people from using it) as well as potentially having negative visual and landscape effects in this setting.

3.2.29 Additionally, OXCC's consultation response has not requested a pedestrian / cycle bridge on Oxford Road.

3.2.30 A bridge crossing is undesirable and unnecessary in this location given the nature of the road. On this basis, design work has not been undertaken.

Oxford Road – Bus Provision

3.2.31 Oxford Road forms a high frequency bus corridor with bus services throughout the day linking the Site with a number of key destinations including Oxford city centre, Churchill Hospital, John Radcliffe Hospital and Kidlington (see Section 6 of this document).

3.2.32 As set out in the Transport Assessment, following discussions with OXCC and the bus operators it has been agreed that it is appropriate for the bus services to stay on Oxford Road and not to route into either the Water Eaton site or the PR6b site.

3.2.33 New bus stops are also proposed on Oxford Road near the proposed controlled crossing near the Water Eaton bridleway – the southbound bus stop is just to the south of the crossing and the northbound bus stop just to the north of the crossing. OXCC's consultation response discusses bus stop specification as follows:

- New southbound (floating) stop:
 - Minimum 50sqm island size;
 - Minimum face length 18m;
 - Minimum 2.5m width;
 - Bus stop pole/flag/timetable case located at head of stop area;
 - Centrally located shelter, cantilever type, RTI compatible, back to cycle track, minimum 6m long;
 - Two crossing points located at either end of island; and
 - No cycle parking on island.
- New northbound stop:
 - Bus stop pole/flag/timetable case located at head of stop area;

- Cantilever type shelter, RTI compatible, minimum 4.5m long; and
- OXCC note that cycle facilities will be upgraded by PR6b northbound – this needs to include appropriate works at this stop (i.e. floating arrangement as per southbound stop)

3.2.34 The updated access drawings show this level of bus stop provision. An extract from updated drawing ITB16565-SK-066 is shown in **Image 3.5** above.

3.2.35 Cycle parking and scooter parking / other forms of micromobility parking is proposed within a short walk of the proposed new bus stops on Oxford Road, to assist in the transfer of trips to sustainable modes.

3.2.36 There are existing bus stops on Oxford Road / Banbury Road just to the north of Jordan Hill. The southern parts of the site are closer to the existing bus stops on Oxford Road / Banbury Road. OXCC consultation response states that existing “Jordan Hill” stops need upgrading with new RTI compatible shelters in liaison with Oxford City Council and additionally, alterations are needed to appropriately accommodate cyclists and bus passengers in light of the increased usage of the stops and increased cycle flows.

3.2.37 OXCC have suggested a financial towards upgrading the existing 4 bus stops south of the site on the A4165 to include Real Time Information board. The applicant is content to make a contribution to improvements to these 4 bus stops subject to it meetings the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

3.2.38 The above ensures that appropriate access to bus services is provided for future residents through:

- Oxford Road forming a high frequency bus corridor providing direct routes to a number of key destinations including Oxford city centre, Churchill Hospital, John Radcliffe Hospital and Kidlington; and
- Bus stops (existing / or new) being within the walkable 20-minute neighbourhood concept (i.e. within a circa 10-minute / 800m walk distance of residential areas).

Pipal Cottage Access

3.2.39 Pipal Cottage is currently accessed from Oxford Road. It is understood that the owner is willing to have the access to the property redirected to come from within the development and this can be accommodated in the reserved matters scheme design.

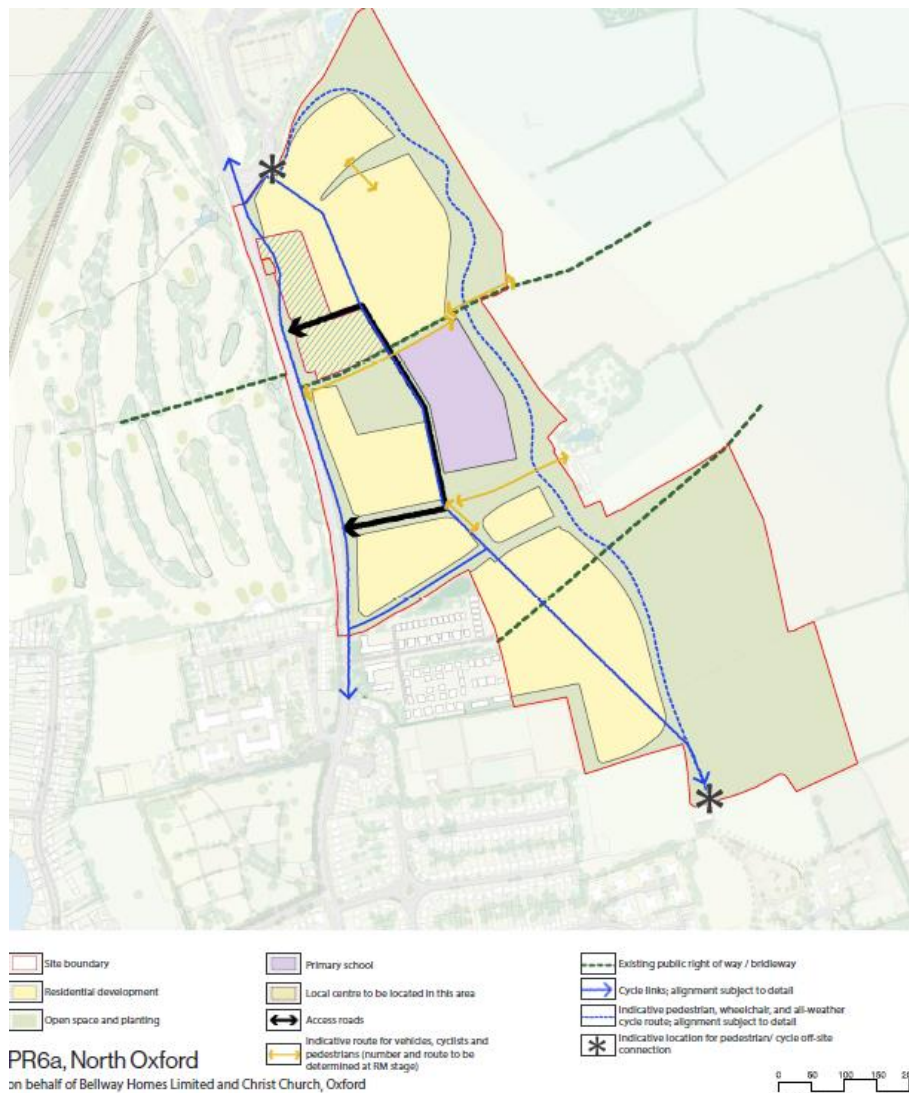
SECTION 4 Site Layout and Parking Strategy

4.1 Site Layout

4.1.1 As set out in the Transport Assessment the proposed development provides for a well-connected, walkable 20-minute neighbourhood with facilities within the development that reduce the need for travel (a 10 minute walk to access local facilities and services and a 10 minute walk back - equating to approximately an 800 metre walking distance when considering average walking speeds).

4.1.2 An extract from the updated Land Use and Access Parameter Plan is provided at **Image 4.1** below.

Image 4.1 Land Use and Access Parameter Plan – Drawing 32W



4.1.3 The Design and Access Statement provides a detailed analysis of the site layout. The updated proposed movement network is shown at **Image 4.2** below.

Image 4.2 Proposed Movement Network

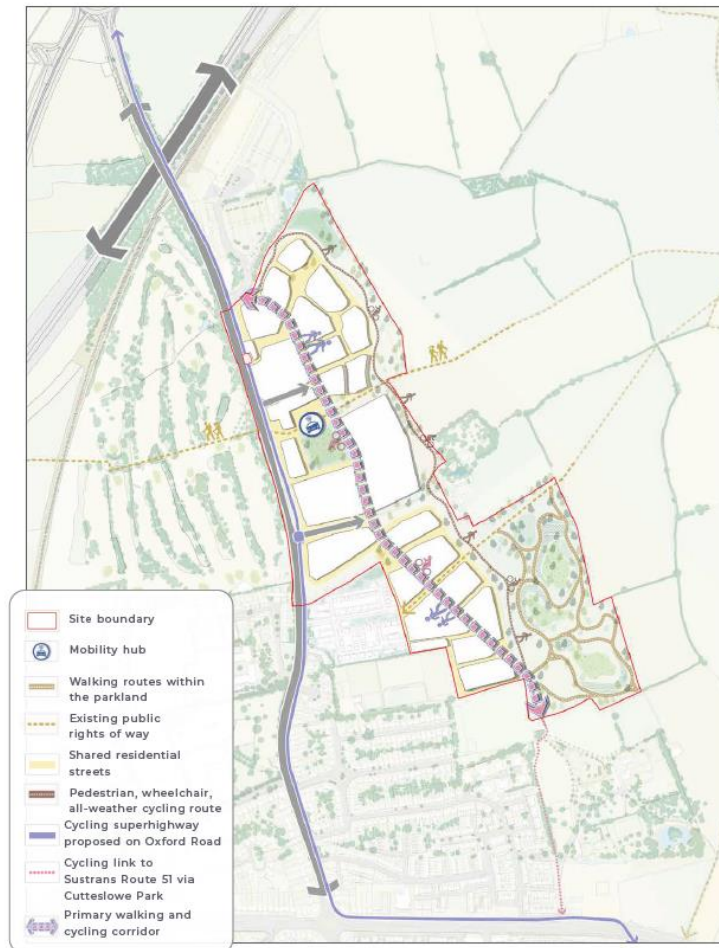


Figure 35 Proposed movement network

Source: Design and Access Statement

4.1.4 A summary of the key transport elements is provided below.

Walking

4.1.5 Water Eaton is proposed as a well-connected, walkable 20-minute neighbourhood with a number of key destinations/ facilities such as local centre and primary school are located within walking distance (800m) and wider facilities and services in Oxford and Kidlington easily accessible through the proposed new bus stop which is located along the public right of way/bridleway that will link PR6a and PR6b , and further afield to Oxford North (to the west) by a proposed controlled crossing. Residents will be encouraged to walk or cycle to the local centre for day-to-day needs such as local shopping, taking children to school (with the school and local

centre adjacent to footpaths and cycleways) and access to wider facilities and services in both Kidlington and Oxford

- 4.1.6 A further east-west public footpath links the site with the footpaths in the adjacent consented Croudace scheme in Oxford city.
- 4.1.7 New footpaths are provided along Oxford Road, replacing the existing shared footpath cycleway with safer, higher quality routes.
- 4.1.8 Further north-south and east-west footpaths are provided in the streets within the scheme, many of which will be designed as shared streets for pedestrians and cyclists (rather than cars) in order to allow street play and social interaction.
- 4.1.9 To the east of the site, a route is provided for leisure use that will meander through wildlife zones, ponds and copses, linking to play areas, pocket parks and exercise areas. A more formal, wheelchair accessible route will link through the length of the site, with informal mown footpaths being established in the parkland adjacent to Cutteslowe Park.
- 4.1.10 In order to discourage people from driving their children to school during drop-off and pick-up, a school street is proposed to ensure safety for children who will be walking and cycling to school everyday. This will also mean that children can play in the barrows park prior to school, with minimal traffic (if any) to navigate in crossing the school street to the school entrance.

Cycling

- 4.1.11 In addition to the Oxford Road cycle super highway, a 'fast' / commuter cycle route is proposed through the centre of the site along the main spine road. This route will link the Park and Ride with Cutteslowe Park and beyond to Oxford city centre.
- 4.1.12 This route would provide an almost exclusively off-road cycle connection, through quieter residential and parkland areas, to the city, and also to Cherwell School allowing secondary school pupils from the development to cycle easily to school.
- 4.1.13 The proposals allow for pedestrian / cycle access to the site boundary to the north to facilitate access to the Oxford Parkway Station / Park and Ride site and to the site boundary to the south to facilitate access to Cutteslowe Park (and the propose cycle link through Cutteslowe Park).

Mobility Hubs

- 4.1.14 Mobility Hubs are recognisable places with an offer of different and connected transport modes supplemented with enhanced facilities and information features to both attract and benefit the traveller. They are places where multiple mobility offers are brought together in one place. They

can come in many shapes and sizes, but each provide a more convenient, comfortable, and safer environment to access a range of sustainable transport modes. In addition, they support low car lifestyles and the reallocation of space from car parking to other infrastructure demands. By having alternative transport options, residents can be encouraged to avoid owning a car – freeing up parking spaces and reducing congestion – all while being assured that their own mobility needs can still be catered for.

4.1.15 A Mobility Hub is proposed at / next to the local centre as shown in the illustrative Masterplan. OXCC's Strategic Planning consultation response states that OXCC welcomes the provision of a Mobility Hub on the site and will liaise with CDC as needed about any County Council use or adoption of facilities.

4.1.16 OXCC Highways consultation response states that at the local centre the following transport infrastructure should be provided:

- Cycle parking ;
- Electric Vehicle Charging Facilities;
- Cycle maintenance station

4.1.17 This infrastructure could be provided within the Mobility Hub which may also include the following additional infrastructure:

- Digital Pillar – transport information etc;
- Waiting area / covered seating – Wi-Fi, phone charging etc available;
- Electric bike docking stations;
- Potential e scooters / e scooter hire;
- Car club spaces / vehicles;
- Area for taxis;
- Package delivery lockers; and
- Community concierge parcel last mile delivery.

4.1.18 The detail of the Mobility Hub will be set out within the Section 106 agreement.

Street Hierarchy

4.1.19 Water Eaton is designed to be a walkable neighbourhood which puts pedestrians and cyclists first. The updated street hierarchy map is shown in **Image 4.3** below

Image 4.3 Street Hierarchy Map

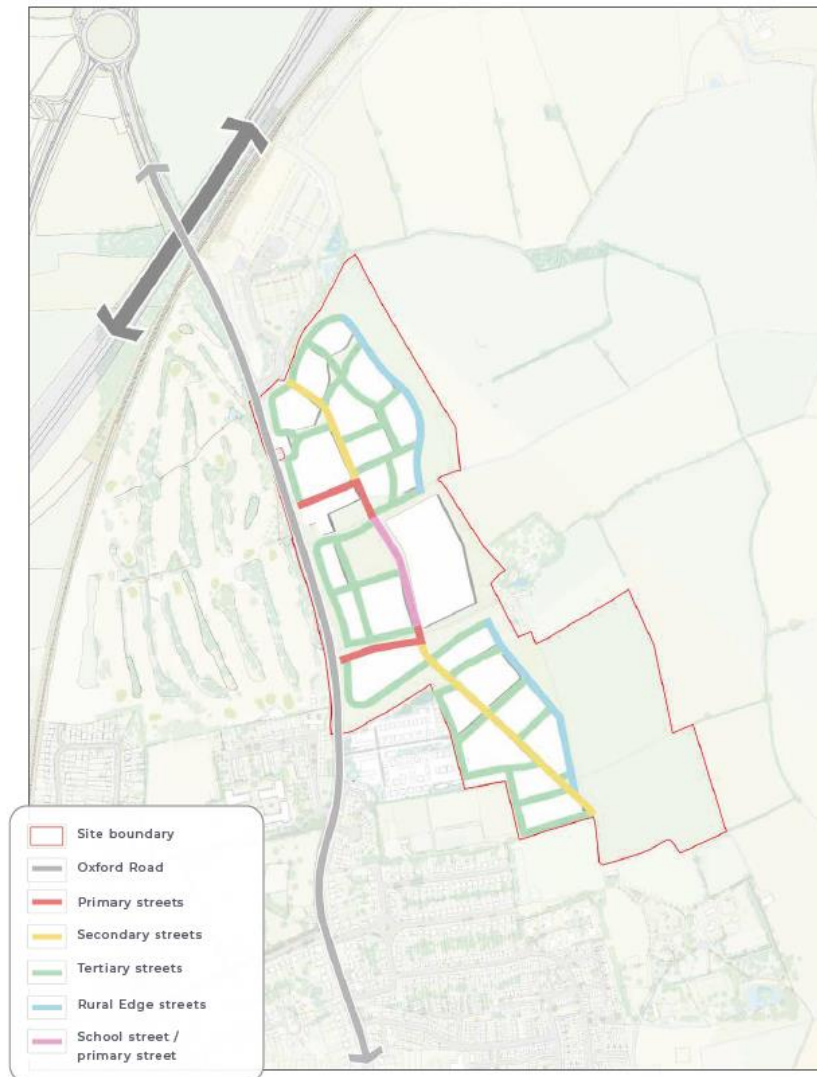


Figure 36 Street Hierarchy Map

Source: Design and Access Statement

4.1.20 Water Eaton is designed to be a walkable neighbourhood which puts pedestrians and cyclists first.

4.1.21 The street hierarchy map on the following page highlights how the design of the streets is characterised by their dimensions, land use and density.

Primary Streets

4.1.22 The primary streets are approximately 20 metres wide and form the main access routes from Oxford Road for all forms of transport, which will include walking, cycling and cars.

Secondary Streets

4.1.23 The secondary streets are approximately 15 metres wide and will provide north-south connectivity across the site. These streets are shared surfaces where walking and cycling is prioritised over cars, and with the only function of connecting the site to the primary street.

Residential Streets

4.1.24 The residential streets are quiet shared surfaces that make up majority of the streets on site. The only function of these streets is to provide access to residential properties.

Rural Edge Streets

4.1.25 Rural edge streets are located along the eastern periphery of the development area that overlooks the countryside. These streets are quiet residential streets that can also qualify as shared driveways for the houses overlooking the rural edge.

School Street

4.1.26 The street adjacent to the school is proposed as a school street which will be temporarily closed off for traffic during the mornings and afternoons during school days, except for emergency vehicles. The scheme should encourage pupils and families to walk and cycle to drop-off and pick-up, discouraging people driving.

4.1.27 Street sections are provided in the Design and Access Statement.

4.2 Parking Strategy

Background

4.2.1 The Transport Assessment sets out that:

- Given that this is an outline scheme and the mix and type of dwellings is unknown, it is not possible to determine the number of parking spaces (car and cycle spaces which will be provided across the site);
- The applicants will agree a scheme with OXCC which pays due regard to OXCC's parking standards and the desire to limit car parking across the site. Indeed, the level of parking provision may differ across the site depending on the location of the dwelling within the site and the phase of the development. It is the intention to provide parking across the site, broadly in accordance with the provision as set out in **Table 4.1** below;

Table 4.1 Proposed Car Parking Provision

Number of Bedrooms per Dwelling	Parking Provision
1 - 2	Up to 1 space per dwelling within the development site
3	Up to 2 spaces per dwelling within the development site
4+	Up to 2 spaces per dwelling within the development site
Wheelchair accessible or adaptable houses and flats	1 space per dwelling to be provided within the curtilage of the dwelling

- Visitor parking will be provided having regard to the standards – Bellway will take an approach that is consistent with national research (DCL, 2007, Residential Car Parking Research) which suggests, *“that no special provision should be made for visitors where at least half of the parking provision associated with the development is unallocated. In other circumstances it may be appropriate to allow for additional demand for visitor parking of 0.2 spaces per dwelling”*.
- Parking details will be set out within subsequent reserved matters applications, and will seek to provide appropriate parking across the site; and
- It is envisaged that a Controlled Parking Zone will be required to support the parking provision provided on site with the new development as well as to ensure that there is no overspill on-street parking from the nearby Oxford Parkway Station / Park and Ride site.

4.2.2 OXCC Highways consultation response states that they agree cycle and car parking will be agreed under reserved matters applications; however, OXCC requires a robust assessment to demonstrate why the site cannot be car-free, especially in areas of the site close to Oxford Road and Oxford Parkway. A Controlled Parking Zone (CPZ) will be required for the site to help modal shift towards active and sustainable travel and to reduce potential overflow parking related to Oxford Parkway.

Car Parking Assessment

4.2.3 As set out above, the applicant already recognises that a Controlled Parking Zone (CPZ) is appropriate and it is envisaged that this will be secured in conditions or the Section 106 Agreement.

4.2.4 OXCC's Parking Standards for New Developments discusses car free development and states in paragraph 4.12:

"Car-Free development means that no car parking spaces are provided within the site other than those reserved for disabled people, car clubs or operational uses. The concept of car free developments is fully supported by OCC where any such development proposal satisfies the following criteria:

a. The proposed site is located within, or on the edge of, a city / town with (or will be provided with) parking restrictions imposed within its vicinity;

b. The site has access (or will be provided with) excellent connections to pedestrian & cycle infrastructure and should be within 400m direct walking distance of frequent (15 – 20 minute) public transport services.

c. The site is to be located within 800m walking distance to a range of local amenities and services i.e. those set out in paragraph 3.2.3 of OCC's Implementing 'Decide & Provide': Requirements for Transport Assessments document.

d. Consideration is to be given to parking provisions for people with impaired mobility."

4.2.5 These aspects are looked at further below.

Point A - The proposed site is located within, or on the edge of, a city / town with (or will be provided with) parking restrictions imposed within its vicinity

4.2.6 The site is on the edge of Oxford city and as set above parking restrictions are likely to be imposed on site.

Point B - The site has access (or will be provided with) excellent connections to pedestrian & cycle infrastructure and should be within 400m direct walking distance of frequent (15 – 20 minute) public transport services

4.2.7 The site will have access to good connections to pedestrian & cycle infrastructure.

4.2.8 The plan at **Appendix E** shows that some but not all parts of the residential areas of the site are within 400m direct walking distance of frequent public transport services.

Point C - The site is to be located within 800m walking distance to a range of local amenities and services

4.2.9 OCC's Implementing 'Decide & Provide': Requirements for Transport Assessments document sets out the list of local amenities and services as follows:

- Primary school;
- Secondary school;

- Supermarket or local grocery shop (selling fresh food);
- GP surgery; and
- Employment (such as a town centre, science park, business park, industrial estate, or other employment sites of a similar scale, e.g. major hospital, university, etc.).

4.2.10 The plans at **Appendix E** show that:

- The on site primary school is less than a 800m walking distance;
- Secondary schools is greater than a 800m walking distance - Cherwell School is 3.2km and Gosford School is 2.4km;
- Supermarket or local grocery shop (selling fresh food) – the on-site shop is less than a 800m walking distance but Sainsbury's in Kidlington is more than 800m (1.5km);
- GP surgery – on the basis that a GP surgery will not be on Site then a doctors is more than a 800m walking distance (Kendall Crescent Health Centre – 1.24km); and
- Employment – there is a small business park (Jordan Hill Business Park) within 800m but the major employment areas are more than 800m (North Oxford – 3.5km, Oxford City Centre – 5km, John Radcliffe Hospital – 6.5km and Oxford Business Park, Cowley – 9km).

4.2.11 It is acknowledged that the site is clearly in a sustainable location in transport terms. It has good accessibility to some local amenities and services (active travel improvements in the area will further strengthen this) as well as good access to public transport. However, there are a number of local amenities and everyday services including secondary schools, supermarkets and employments areas beyond the 800m walking distance.

4.2.12 The following are important considerations which must be factored into providing appropriate car parking provision:

- Non car modes are being given priority through the development and surrounding area so as to not encourage car travel;
- The reality is that many future residents will want / need to own a car for trips to some local amenities / services but also for less frequent trips such as holidays / leisure / entertainment;
- Car ownership dos not always directly relate to regular car use;
- There are people who rely on the use of private cars / vans for work purposes and have no reasonable option to use walking, cycling or public transport;

- With controlled on-street parking and the lack of any opportunities for informal parking within the Site it is necessary to give due consideration to provide appropriately for residential parking;
- Car club is not always an option, as that is an alternative to car ownership – with carrying pets often not permitted etc; and
- The need to balance parking provision between a level that acknowledges the accessible location of the site and yet provides housing that is attractive to occupiers and which will sell.

4.2.13 It is anticipated that the level of car parking provision may differ across the site depending on the location of the dwellings within the site and the phase of the development. It maybe that some areas, such as at / near the local centre or near Oxford Road have low or zero car parking. However, as agreed by OXCC the details of these matters is better addressed at reserved matters stage.

SECTION 5 Walking and Cycling Connectivity

5.1 Background

5.1.1 The Transport Assessment (Section 7) sets out the strategy for walking and cycling connectivity.

5.1.2 OXCC Highway's consultation response discusses future transport improvements. The need for a package of transport improvements in the area was addressed through the Cherwell Local Plan Partial Review and the District's Infrastructure Delivery Plan (IDP). The package is to be largely funded by the developers of the sites allocated in the Partial Review of which the Water Eaton site / PR6a is one.

5.1.3 OXCC expects the Water Eaton site to partly fund (through financial contributions secured in a Section 106 Agreement) a number of active travel improvements that OXCC will deliver. These include:

- Oxford Road cycle superhighway;
- New signalised junctions along A4260/A4165 corridor;
- Improvements at Kidlington roundabout;
- Improvements at Cutteslowe roundabout; and
- Cutteslowe Park Cycle Route.

5.1.4 These are discussed in more detail below.

5.2 Oxford Road Cycle Superhighway

5.2.1 OXCC has confirmed that the Oxford Road cycle superhighway includes the whole length of the corridor between Kidlington roundabout and Cutteslowe roundabout minus the site frontages of PR6a and PR6b (which will be delivered via each developer through S278 agreements) and major signal junctions on the corridor.

5.2.2 OXCC has stated that the cost of the scheme is being split between Water Eaton (PR6a), PR6b, PR7a and PR7b.

5.2.3 The applicant is content to make a proportionate financial contribution to the Oxford Road cycle superhighway subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

5.3 **New Signalised Junctions along A4260/A4165 corridor**

5.3.1 It is understood that this includes improvements to the Oxford Parkway / Park and Ride / Oxford Road junction to facilitate safer pedestrian and cycle crossing movements.

5.3.2 The applicant is content to make a proportionate financial contribution to the Oxford Parkway / Park and Ride / Oxford Road junction subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

5.4 **Improvements at Kidlington Roundabout**

5.4.1 OXCC has a committed improvement scheme at Kidlington roundabout which improves facilities for pedestrians and cyclists through the junction to improve connectivity between Kidlington, the Water Eaton site and Oxford. OXCC has advised that although the scheme is being forward funded, the contribution request is supported by Policy PR11 of the Cherwell Local Plan (Partial Review).

5.4.2 OXCC has stated that the cost of the scheme is being split between Water Eaton (PR6a) PR6b, PR7a and PR7b.

5.4.3 The applicant is content to make a proportionate financial contribution to the improvement scheme at Kidlington roundabout subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

5.5 **Improvements at Cutteslowe Roundabout**

5.5.1 The Cutteslowe roundabout which accommodates the A40 northern ring road only has limited pedestrian and cycling facilities especially for north south movements.

5.5.2 OCC's improvement scheme at the roundabout will enhance pedestrian / cycle provision at the roundabout including improvements to controlled crossing points (especially the A40) to allow residents from the site safe and convenient access by active modes to Oxford city to the south. The scheme will also benefit existing residents and help convert existing vehicular trips on the network from private car to active modes which in turn helps free up capacity on the network. OXCC has stated that the cost of the scheme is being split between Water Eaton (PR6a) PR6b, PR7a and PR7b and a financial contribution is being sought from each of these sites.

5.5.3 The applicant is content to make a proportionate financial contribution to the Cutteslowe roundabout improvements subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

5.6 Cutteslowe Park Cycle Route

5.6.1 During the Enquiry by Design event in July 2021 and at subsequent public consultation events the desire for a potential cycle link through Cutteslowe Park to connect the site to the existing pedestrian / cycle bridge over the A40 (east of the Cutteslowe roundabout) was identified. As set out in the Transport Assessment - the Water Eaton team has undertaken some design work and identified a potential route on the west side of the park – drawing reproduced at **Appendix F**.

5.6.2 Oxford City Council's consultation response discusses the cycle route and states:

“The cycle route connection into Cutteslowe Park is welcomed and the location has been agreed with the City Council at pre-app stage. The Applicant’s Transport Consultants have also engaged with community groups, in particular Friends of Cutteslowe Park. The provision of a new cyclepath route through Cutteslowe Park linking to the by-pass and to the existing ‘quite route’ cycle network at the south of the Park and into/out of Oxford City Centre (County Council’s LCWIP refers) is considered vital to encourage existing and future residents within the City and PR6a to be active & travel sustainably meeting the County and City Councils’ climate priorities and Active Travel plans and enable the significant modal shift needed in order to avoid an adverse impact on the highway network from this development. The connection is vital for those less confident at cycling providing a safe cycling route to and from Kidlington, Water Eaton P&R and railway station into and out of the City Centre through PR6a ...”

5.6.3 OXCC has stated that the cost of the scheme is being split between Water Eaton (PR6a) and PR6b.

5.6.4 The applicant is content to make a proportionate contribution to the Cutteslowe Park Cycle Route subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

5.6.5 Delivery of the site accesses and Oxford Road cycle superhighway along the Water Eaton site frontage and on site walking and cycling facilities along with proportionate contributions to OXCC's walking and cycle schemes above will ensure that there is appropriate walking and cycling accessibility for future residents and users of the development.

5.6.6 This also addresses ATE's comments regarding delivery of on-site pedestrian / cycle infrastructure, pedestrian / cycle accesses and off site provision.

SECTION 6 Public Transport Connectivity

6.1 Existing Services

6.1.1 The existing public transport services have been reviewed as its a number of months since submission of the application. The overall position is largely unchanged but a number of services have tweaked their timings slightly. The current position is summarised below.

6.1.2 There are two main bus operators in Oxford - Stagecoach and the Oxford Bus Company. Bus services local to the site are mainly operated by Stagecoach. The site falls within the Oxford Smartzone network – see plan provided at **Appendix G**. A number of buses route along Oxford Road including:

- Stagecoach 2 / 2 a - Oxford City Centre to Kidlington Via Oxford Road / Banbury Road, Summertown;
- Stagecoach 700 - Thornhill Park & Ride to Kidlington Via Churchill, JR Hospital, Summertown, Oxford Parkway; and
- Stagecoach S5 - Oxford – Bicester.

6.1.3 A summary of bus services routing along Oxford Road from Oxford Parkway and Jordan Hill are provided at **Appendix G**.

6.1.4 In summary, Oxford Road forms a high frequency bus corridor with bus services throughout the day linking the Site with a number of key destinations including Oxford city centre, Churchill Hospital, John Radcliffe Hospital and Kidlington.

Rail

6.1.5 The nearest railway station to the site is Oxford Parkway situated immediately to the north of the site.

6.1.6 Oxford Parkway Station is on the line between Oxford and Bicester. The station provides facilities including 150 CCTV monitored cycle parking spaces, with 40 more spaces adjacent to the park and ride, and 830 car parking spaces including 18 accessible spaces and Class A Step Free Access. A summary of destinations from Oxford Parkway Station is provided in **Table 6.1**.

Table 6.1: Rail Service Summary

Destination	Frequency of Services		Journey Time (minutes)
	Peak	Off-Peak	
Oxford	2	2	6
London Marylebone	2-3	2	80
Bicester	2-3	2	15
Haddenham & Thame Parkway	2	1	27

Source: National Rail

6.1.7 Oxford Railway Station is located approximately 6 miles to the south of the site within the City Centre. As presented in **Table 6.1**, Oxford Parkway Station provides a connection to Oxford Railway Station, and it is also located within a reasonable cycling distance from the site. From Oxford Railway Station there are further opportunities to travel further afield by changing at this station if travelling from Oxford Parkway Railway station. These destinations include London Paddington, Didcot Parkway, Manchester Piccadilly, and Reading.

6.2 Proposed Improvements

6.2.1 As set out in Section 3 of this document:

- Following discussions with OXCC and the bus operators it has been agreed that it is appropriate for the bus services to stay on Oxford Road and not to route into either the Water Eaton site or the PR6b site;
- New bus stops are proposed on Oxford Road near the proposed controlled crossing near the Water Eaton bridleway – the southbound bus stop is just to the south of the crossing and the northbound bus stop just to the north of the crossing;
- Cycle parking and scooter parking / other forms of micromobility parking is proposed within a short walk of the proposed new bus stops on Oxford Road, to assist in the transfer of trips to sustainable modes; and
- There are existing bus stops on Oxford Road / Banbury Road just to the north of Jordan Hill. The southern parts of the site are closer to the existing bus stops on Oxford Road / Banbury Road. OXCC consultation response states that existing “Jordan Hill” stops need upgrading with new RTI compatible shelters in liaison with Oxford City Council and additionally, alterations are needed to appropriately accommodate cyclists and bus passengers in light of the increased usage of the stops and increased cycle flows. OXCC have suggested a contribution towards upgrading the existing 4 bus stops south of the

site on the A4165 to include Real Time Information. The applicant is content to make a financial contribution to improvements to these bus stops subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

6.2.2 The nearest railway station to the site is Oxford Parkway situated immediately to the north of the site. Residents will be able to access Oxford Parkway via the new access to the north of the site or the Oxford Road cycle super highway and the Parkway junction with Oxford Road – it is a reasonable walk and cycle distance for residents. This will provide the opportunity for access to a number of destinations including Oxford Station (city centre), London Marylebone and Bicester.

6.2.3 OXCC consultation response states that:

- Whilst there is a good level of service between the site and Oxford City by both train and bus, there is a lack of options to employment areas to the south and east of the city. These areas include the hospitals (currently served by the 700 which is commercially unviable long-term), ARC (formally Oxford Business Park) and Oxford Science Park; and
- A new bus service is proposed known as the Eastern Arc route which serves these sites along with areas of Headington, Marston and Cowley and connecting to Redbridge, Thornhill and Oxford Parkway Park & Rides. A frequent bus service to these employment areas is considered a critical part of reducing vehicular trips towards Oxford, as such a contribution is requested.

6.2.4 OXCC has stated that financial contributions have been or will be sought from the other Partial Review sites. The applicant is content to make a proportionate contribution to the Eastern Arc bus route subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

6.2.5 OXCC is seeking contributions to the:

- A4260 southbound bus lane from Bicester Road / A4260 junction to Kidlington roundabout; and
- Oxford Airport Transport Hub.

6.2.6 The applicant has sought additional justification on both schemes and subject to that the applicant is content to make a proportionate contribution subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010 .

SECTION 7 Framework Travel Plan

- 7.1.1 Following comments from OXCC, the Framework Travel Plan (FTP) has also been updated (report ref WE/FTP/P02, i-Transport ref ITB16565-103I, dated 27 February 2024). The changes relate to turning the document into more of an overarching framework document for the site and proposed uses as a whole.
- 7.1.2 The FTP has been produced to outline the measures to be used to encourage travel by modes other than single occupancy car use at the development. The FTP has been developed in accordance with OXCC's Transport Assessments and Travel Plans (2014) guidance document, and OXCC's Local Transport and Connectivity Plan (LTCP) including the Implementing 'Decide & Provide: Requirements for Transport Assessments.
- 7.1.3 The FTP sets out the predicted mode share of all person trips for the development across a day (12 hour day 07:00 – 19:00) as well as morning and evening peak hour traffic trip rates and traffic generation as set out in the Decide and Provide approach in the Transport Assessment.
- 7.1.4 To achieve the aims and objectives of the FTP, a package of 'Soft' measures designed to encourage residents to consider sustainable travel opportunities has been developed. The FTP identifies the following measures:
- Provision of residents 'Resident's Travel Website', to provide information of travel opportunities and to promote travel;
 - Offer of a sustainable travel voucher;
 - Negotiation of discount for cycle equipment (where possible);
 - Creation of a steering group consisting of local residents to guide and oversee the delivery of the Travel Plan;
 - Community noticeboards to identify travel opportunities and incentives;
 - Delivery of a car club; and
 - Promotion of local car-share groups.
- 7.1.5 The progress against the FTP objectives and targets will be monitored through the build period plus an additional 2 years (around 8 – 10 years) and will be undertaken using a Monitoring and Evaluation Plan (to be agreed with OXCC) and the Residential Travel Surveys. These surveys will be used to identify resident travel patterns and used to set objectives of the Travel Plan.

- 7.1.6 The Travel Plan will include a Monitoring and Evaluation Plan (MEP) in line with the Decide and Provide guidance, which can be secured through a condition should planning be approved.
- 7.1.7 The Primary School will have a separate School Travel Plan which will be in accordance with Modeshift STARS green and bronze accreditation. Targets and monitoring will be undertaken through the online toolkit. For the Local Centre and other uses, Travel Plan Statements will be produced setting out relevant measures to the land uses.

SECTION 8 Traffic Impact

8.1 Traffic Modelling Approach

8.1.1 As set out in the Transport Assessment, it was agreed with OXCC that the North Oxford VISSIM Model is the appropriate tool to test the impact of the Water Eaton site as well as the cumulative impact of all PR sites on the operation of the local and strategic highway network.

8.1.2 OXCC Highways consultation response states that although the location is considered sustainable, their suggested sustainable transport improvements are deemed essential in reducing car dependency and ensuring residents choose to travel using active and sustainable transport. The site has been assessed taking into account the infrastructure requirements with the trip generation based on a large modal shift. The assessment and acceptability of the application is therefore dependant on this infrastructure coming forward.

8.1.3 Following submission of the planning application, minor amendments have been made to the VISSIM modelling on behalf of all PR sites to take account of an audit of the model undertaken by OXCC and comments from OXCC highway officers.

8.1.4 Technical Notes providing a summary of the amendments made and the results which have been extracted from the updated VISSIM modelling is provided in **Appendix H**. Vectos MicroSim has also produced a number of separate technical notes which provide further information (which are also included in **Appendix H**), as follows:

- Forecasting Report;
- Forecast Capping Discussion Note;
- Mode Shift Discussion Note;
- Response to OCC Model Audit Note; and
- Bus Impact Note and Bus Impact Note Addendum

8.2 Development Trip Generation

8.2.1 The forecast traffic generation for the proposed development has remained unchanged from the previously submitted Transport Assessment – repeated below in **Table 8.1** for ease of reference.

Table 8.1: External Traffic Generation

Time Range	Morning Peak Hour			Evening Peak Hour		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
Residential (800 dwellings)	33	131	164	146	61	207
Primary Education / other	23	5	28	0	8	8
Total	56	136	192	146	69	215

8.3 2025 Year of Opening

8.3.1 An updated assessment of the impact of the full development on the local highway network has been undertaken for the likely year of opening, i.e. 2025, when the development is expected to first become available for occupation. The purpose of the assessment is to determine the true development impacts and requirement for any mitigation when isolated from other planned development in the area.

8.3.2 To establish the impact of the proposed development and other committed / cumulative development the following modelling scenarios have been undertaken:

1. 2025 Future Year Baseline (2023 from VISSIM model growthed to 2025);
2. 2025 + Committed Development (Committed development from VISSIM model); and
3. 2025 + Committed Development + PR6a Water Eaton Development.

Traffic Growth

8.3.3 The revised 2025 junction modelling utilises the 2023 baseline traffic taken from the updated VISSIM model, with appropriate background traffic growth applied. Updated growth rates for the 2025 future year scenario have been obtained from TEMPRO using the analysis.

8.3.4 Growth rates to 2025 have been derived from the National Transport Model (NTM) with adjustments made for local factors derived from the TEMPRO v8.1 database. Data relating to the Core Scenario and Oxford 001 Middle Layer Super Output Area output area (MSOA), which encompasses Cutteslowe and Wolvercote, has been used as this is considered the most representative area for the proposed development, using Version 8.0 of the NTEM dataset. For robustness, no adjustments have been made to the future housing and jobs contained within the planning assumptions.

8.3.5 The growth factors are summarised in **Table 8.2**.

Table 8.2: Traffic Growth Factors

Growth Period	Morning Peak	Evening Peak
2023-2025	1.0058	1.0044

Source: TEMPRO

Committed Development

8.3.6 Committed development included within the 2025 assessment is based on the same assumptions as those which have been incorporated in the updated 2031 VISSIM model and have been agreed with OXCC. These assumptions are set out in the Vectos Microsim notes on forecasting and the capping of growth (VM210467.R001b Forecasting Report and VM210467.DN02a PR VISSIM Capping Discussion Note) included within the Transport Assessment.

8.4 Local Highway Network – Development Impacts and Highway Network Operation

8.4.1 The traffic flows from the VISSIM model that have been inputted to the junction modelling are provided at **Appendix I**, while the modelling outputs for the operation of the local highway network are provided at **Appendix J**.

Kidlington Roundabout

8.4.2 The Kidlington roundabout is an unsignalised 5-arm roundabout with an inscribed circle diameter of approximately 110m located to the south of Kidlington between the A4165 Oxford Road, the A4260, and Bicester Road. The TRL program Junctions 10 has been used to assess the capacity of the junction. The results of the operational assessments for the 2025 with and without development scenarios are presented in **Table 8.3**.

Table 8.3: Operation Assessment for Kidlington Roundabout

	Morning Peak Hour			Evening Peak Hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2025 + Committed Development						
A4260 Oxford Road (N)	0.47	1.0	4	0.71	3	7
Bicester Road	0.25	<1	3	0.19	<1	3
Oxford Road (S)	0.29	1	3	0.55	1	4
A420 Frieze Way	0.21	<1	2	0.45	1	3
Oxford Road (N)	0.30	<1	5	0.36	1	8
2025 + Committed Development + Development						
A4260 Oxford Road (N)	0.48	1	4	0.73	3	8
Bicester Road	0.25	<1	3	0.20	<1	3
Oxford Road (S)	0.32	1	3	0.57	1	4
A420 Frieze Way	0.21	<1	2	0.47	1	3
Oxford Road (N)	0.31	<1	6	0.37	1	9

Source: Junctions 10

8.4.3 The analysis demonstrates Kidlington Roundabout is predicted to operate well within its theoretical capacity with negligible queuing and delay during both peak hours in 2025 in both the with and without development scenarios.

8.4.4 OXCC has committed improvements at the Kidlington Roundabout. The proposals include the introduction of a bus lane on the Bicester Road entry arm to the roundabout and significantly improved facilities for pedestrians and cyclists through the junction to improve connectivity between Kidlington, the Water Eaton site and Oxford. The results of the operational assessment for the potential improvement scheme in the with development scenario are summarised in **Table 8.4.**

Table 8.4: Operational Assessment for Kidlington Roundabout: 2025 + Committed Development + Development – With OXCC Improvement

	Morning Peak Hour			Evening Peak Hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2025 + Committed Development + Development						
A4260 Oxford Road (N)	0.48	1	4	0.73	3	8
Bicester Road	0.67	2	1	0.55	1	14
Oxford Road (S)	0.32	1	3	0.57	1	4
A420 Frieze Way	0.21	<1	2	0.47	1	3
Oxford Road (N)	0.31	<1	6	0.37	1	9

Source: Junctions 10

8.4.5 **Table 8.3** demonstrates when the OXCC proposed improvements are taken into account, the Kidlington Roundabout will continue to operate within capacity with negligible queuing and delay with the additional development generated traffic in the 2025 design year.

A4165 Oxford Road Corridor

8.4.6 A LinSIG model of the A4165 Oxford Road corridor broadly between the Oxford Parkway Park and Ride vehicular access and pedestrian crossing to the north and the Croudace access to the south has been created to assess the operation of the local highway network during the weekday morning and evening peak hour periods.

8.4.7 The results of the operational assessments for the 2025 with development scenario is presented in **Table 8.5**.

Table 8.5: Operational Assessment for A4165 Oxford Road Corridor – 2025 + Committed Development + Development

Junction	Arm	2025 + Committed Development + Development					
		Morning Peak Hour			Evening Peak Hour		
		Degree of Saturation	Mean Max. Queue Length	Delay per PCU (secs)	Degree of Saturation	Mean Max. Queue Length	Delay per PCU (secs)
Oxford Parkway Ped Crossing	Oxford Rd (N)	49.7%	7	5	55.1%	8	6
	Oxford Rd (S)	38.8%	2	3	64.0%	5	4
Oxford Parkway Park & Ride	Oxford Rd (N)	46.3%	5	10	71.5%	17	17
	P&R Access	31.6%	1	47	63.5%	5	51
	Oxford Rd (S)	61.0%	14	9	65.5%	27	7
Oxford Road / Northern Site Access	Oxford Rd (N)	0.0%	0	0	0.0%	0	0
	PR6a Access	0.0%	0	0	0.0%	0	0
	Oxford Rd (S)	1.9%	0	0	2.6%	0	0
Proposed Parallel Crossing	Oxford Rd (N)	36.0%	3	3	51.3%	4	3
	Oxford Rd (S)	40.3%	2	2	57.1%	8	4
Oxford Rd / Cyclops Site Access	Oxford Rd (N)	63.6%	9	15	85.7%	21	21
	PR6a Site Access	62.1%	3	71	27.4%	1	59
	Oxford Rd (S)	60.3%	6	20	82.4%	11	25
	PR6b Site Access	0.0%	0	0	0.0%	0	0
Oxford Rd / Croudace Access	Oxford Rd (N)	41.5%	0	2	53.4%	1	2
	Croudace Access	9.6%	0	4	5.6%	0	12
	Oxford Rd (S)	2.2%	0	0	5.4%	0	0

Source: LinSIG

8.4.8 The analysis demonstrates the Northern Left-In/Left-Out Access is forecast to operate with ample spare capacity with no queueing or delay on the Oxford Road corridor. **Table 8.5** also indicates the proposed CYCLOPS signal junction will also operate within its theoretical capacity within the weekday morning and evening peak hour. While there is some limited queueing and delay at the junction this is commensurate with the level of flow on the Oxford Road and is in part due to road space being allocated to pedestrian and cycle infrastructure, as well as 'green time' being allocated to cyclists and pedestrians. When these aspects are considered, it is evident that the junction is predicted to work satisfactorily.

8.4.9 The proposed parallel crossing will also result in a negligible impact on the operation of the A4165 Oxford Road Corridor.

Cotteslowe Roundabout

8.4.10 The Cotteslowe Roundabout is a 4-arm signalised roundabout junction located between the A4165 Banbury Road (northern arm) the A40 Oxford ring road and the A4165 Banbury Road leading into Oxford city centre via the A4144 St Giles. There are controlled crossings of the A40 western arm and Banbury Road northern arms of the Cotteslowe roundabout.

8.4.11 It is understood that OXCC's has an aspiration to deliver an improvement scheme at the junction in order to improve conditions for pedestrians but there is no certainty on the final scheme or timescales for delivery.

8.4.12 For the purposes of this assessment, LinSIG has been used to assess the capacity of the existing layout of the junction. The results of the operational assessments for the 2025 with and without development scenarios are presented in **Table 8.6**.

Table 8.6: Operational Assessment for Cotteslowe Roundabout

	Morning Peak Hour			Evening Peak Hour		
	DoS (%)	Queue	Delay	DoS (%)	Queue	Delay
2025 + Committed Development						
A4165 Banbury Rd (N) Ahead Left	90.3%	15	57	85.1%	19	17
A40 North Way (E) Ahead Ahead2	65.4%	10	45	67.1%	12	11
A40 North Way (E) Ahead	88.5%	15	43	84.9%	17	15
A4165 Banbury Rd (S) Ahead Ahead2	47.5%	5	9	66.0%	8	8
A40 North Way (W) Ahead Left	85.7%	21	45	82.2%	18	16

	Morning Peak Hour			Evening Peak Hour		
	DoS (%)	Queue	Delay	DoS (%)	Queue	Delay
A40 North Way (W) Ahead	89.8%	22	45	85.3%	19	16
2025 + Committed Development + Development						
A4165 Banbury Rd (N) Ahead Left	94.5%	19	44	94.5%	20	63
A40 North Way (E) Ahead Ahead2	86.3%	12	38	86.3%	15	65
A40 North Way (E) Ahead	97.1%	17	35	97.1%	16	51
A4165 Banbury Rd (S) Ahead Ahead2	51.6%	8	16	51.6%	5	9
A40 North Way (W) Ahead Left	94.2%	18	43	94.2%	26	65
A40 North Way (W) Ahead	95.9%	19	42	95.9%	29	65

Source: LinSIG

8.4.13 The results in **Table 8.6** demonstrate the Cutteslowe Roundabout is currently operating at or close to its theoretical capacity. With continuous cycle optimisation, the level of queueing and delay is not at a level considered to be 'severe'.

8.4.14 Notwithstanding its current and future operation, the increases associated with the proposed development proposal are negligible in terms of increases in queueing and delay during both peak hours and are unlikely to be perceptible during a typical day. As such, the impact of the development on the operation of the junction falls short of the severe test set out in the NPPF.

8.5 Forecast Flow Increases on the Strategic Road Network

8.5.1 An assessment of the likely impact of the proposed development on the Strategic Road Network (SRN) has been undertaken and summarised below.

8.5.2 The analysis has been agreed with National Highways, who are the highway authority for the SRN, who have raised no objection to the proposed development, subject to conditions.

8.5.3 An analysis has been undertaken by approach direction on both sides of the junctions on the A34 that will form the likely access points on the SRN from future residents and visitors to the site. The following junctions have therefore been assessed:

- A34 / A44 Peartree Roundabout; and
- A34 / Bicester Road North-Facing Slips.

8.5.4 In addition, an assessment has been undertaken of the expected increases in vehicle movements at the M40 / A34 Junction 9: Wendlebury Interchange.

8.5.5 On the basis of the agreed trip generation figures and the trip distribution derived from the updated VISSIM model, a summary of the forecast increase in vehicle flows on the SRN are set out at the three locations set out above in **Tables 8.7 – 8.9** below. The full analysis and diagrammatic representations of the junctions is provided at **Appendix K**.

Table 8.7: A34 / A44 Peartree Roundabout – Forecast Additional Vehicle Movements Accessing / Egressing the A34 from the Junction

Arm	Direction	AM Peak Hour	PM Peak Hour
A34 (North of Junction)	Northbound	7	6
	Southbound	4	11
	Two-Way	11	17
A34 (South of Junction)	Northbound	7	26
	Southbound	17	12
	Two-Way	24	38

Source: North Oxford VISSIM Model

Table 8.8: A34/Bicester Road North-Facing Slips – Forecast Additional Vehicle Movements Accessing / Egressing the A34 from the Junction

Arm	Direction	AM Peak Hour	PM Peak Hour
A34 (North of Junction)	Northbound	1	1
	Southbound	0	2
	Two-Way	1	3

Source: North Oxford VISSIM Model

Table 8.9: M40 / A34 Junction 9: Wendlebury Interchange – Forecast Additional Vehicle Movements on M40

Arm	Direction	AM Peak Hour	PM Peak Hour
M40 (North of Junction)	Northbound	6	6
	Southbound	3	10
	Two-Way	9	16
M40 (South of Junction)	Northbound	0	0
	Southbound	0	0
	Two-Way	0	0

Source: North Oxford VISSIM Model

8.5.6 The analysis presented above demonstrates that the level of traffic arising from the development that will impact on the SRN is negligible and will fall within the day-to-day fluctuations experienced on each route and will not lead to any direct increased safety risk. The impact of development generated traffic on the operation of the Strategic Road Network is therefore not significant.

8.6 2031 Cumulative Traffic Analysis

8.6.1 A cumulative assessment including all the Cherwell Local Plan Partial Review PR sites has been undertaken using the North Oxford VISSIM model for a 2031 design year, i.e. the time horizon for the Local Plan.

8.6.2 This is to determine whether the transport mitigation set out within the Infrastructure Delivery Plan (IDP), which is included as Appendix 4 of the Local Plan Part 1 Partial Review, is required for all the PR sites and / or whether alternative mitigation beyond that currently envisaged is required.

8.6.3 The trip generation and distribution of the various PR sites has remained unchanged. The traffic generation associated with each of the PR sites is summarised in section 4 of the Vectos MicroSim Forecasting Report set out above. There has been no change to the methodology for assessing traffic growth or committed development. This has previously been agreed with OXCC.

8.6.4 The Vectos MicroSim Mode Shift Assessment Discussion Note sets out the assumptions that have been applied to the demands within the updated VISSIM model to replicate the expected effects of changes in travel behaviour arising from the delivery of enhancements to the sustainable and active travel networks. The note considers demand adjustments for:

- Delivery of Park and Ride;
- Active Modes;
- Cycle corridor improvements; and
- Bus corridor improvements.

8.6.5 As part of the updated VISSIM modelling, scenario testing has been undertaken around the level of mode share that may be achieved for the background traffic as a result of the proposed infrastructure being brought forward to the north of Oxford. A low, medium and high mode shift has been assessed and is set out in more detail in the Mode Shift Discussion Note.

8.6.6 On the basis of the above, the following modelling scenarios have been considered and are reported upon:

- 2018 Base (Morning and evening peak period);
- 2031 Future Year Reference Case + Growth Fund schemes (Morning and evening peak period);
- 2031 Future Year Do-Something Low Mode Shift (Morning and evening peak period);
- 2031 Future Year Do-Something Medium Mode Shift (Morning and evening peak period); and
- 2031 Future Year Do-Something High Mode Shift (Morning and evening peak period).

8.6.7 The full results of the updated modelling are presented in the Traffic Modelling Outcomes Summary (i-Transport report reference ITB16565-030B), a copy of which is provided in **Appendix H**.

8.6.8 The following section summarises how the network is forecast to operate in the 2031 design year when all planned and consented development is considered.

8.6.9 It is important to note the modelling and the outputs have been agreed with OXCC and the summary of the results below should be viewed in that context.

Network Statistics

Vehicle Trips

8.6.10 **Table 8.10** below identifies the active number of vehicles in the modelled network, the total number of vehicle trips completed and the latent demand (number of vehicles not able to enter the network) for all scenarios in the AM and PM three-hour peak periods.

Table 8.10: Vehicles in Network (AM and PM Three-Hour Peak Periods)

		2018 Base	Future Year Reference	DS Mode Shift (Low)	DS Mode Shift (Medium)	DS Mode Shift (High)
Vehicles Active in the Network	AM Peak Period	2,126	2,177	2,739	2,521	2,260
	PM Peak Period	2,803	2,439	3,227	3,145	3,025
Vehicle Trips Completed	AM Peak Period	48,889	48,891	50,989	50,182	50,152
	PM Peak Period	50,229	50,400	52,840	52,321	52,091
	AM Peak Period	1	25	47	90	40

		2018 Base	Future Year Reference	DS Mode Shift (Low)	DS Mode Shift (Medium)	DS Mode Shift (High)
Latent Demand at End of Simulation	PM Peak Period	2	125	199	38	23
Total Input Vehicle Numbers	AM Peak Period	51,016	51,093	53,775	52,793	52,452
	PM Peak Period	53,034	52,964	56,226	55,504	55,139

Source: North Oxford VISSIM model

8.6.11 **Table 8.10** demonstrates that despite there being more vehicles in the network in the 2031 Do Something (DS) scenarios compared to the Future Year Reference scenario, the latent demand remains consistently very low. This indicates that the vehicle demand in the DS scenarios can travel through the network during the peak periods. The analysis demonstrates the latent demand is forecast to reduce in the DS high and medium mode share scenarios in comparison to the Future Year Reference scenario.

Journey Times

8.6.12 Route 4 in the VISSIM model (A4260 Oxford Road / Banbury Road corridor between the A4095 and Linton Road) is the most relevant to the PR6a development. **Tables 8.11** and **8.12** below summarise the forecast 2031 Reference Case journey times for this corridor in the weekday morning and evening peak period as well as the forecast change in journey times along the routes for the 2031 Do Something scenario (i.e. 2031 Reference + PR sites and mode shift – low, medium, and high).

Table 8.11: Change in journey times (seconds) along A4260 Oxford Road Corridor in the AM Peak Period

Route	07:00-08:00				08:00-09:00				09:00-10:00			
	Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift		
		Low	Med	High		Low	Med	High		Low	Med	High
A4260 Corridor Northbound												
Linton Road to PR6a Access	451	+10	+7	+7	505	+26	+13	-7	483	+377	+26	+12
PR6a Access to Kidlington Rdbt	193	+18	+21	+20	196	+20	+19	+18	194	+17	+16	+15
Kidlington Rdbt to A4095	533	+2	+20	-3	610	+53	+5	+35	597	+19	+25	+5
Total	1,177	+30	+48	+23	1,311	+99	+37	+46	1,274	+416	+67	+32

Route	07:00-08:00				08:00-09:00				09:00-10:00			
	Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift		
		Low	Med	High		Low	Med	High		Low	Med	High
A4260 Corridor Southbound												
A4095 to Kidlington Rdbt	612	-27	-3	-36	723	-53	+12	-14	643	-20	+8	-6
Kidlington Rdbt to PR6a Access	216	+30	+29	+29	250	+3	+1	-3	224	+142	+45	+36
PR6a Access to Linton Road	590	-39	-43	-41	1,026	-220	-298	-318	526	+11	-31	-35
Total	1,418	-36	-17	-48	2,000	-271	-286	-337	1,393	+133	+22	-5

Source: North Oxford VISSIM Model

Table 8.12: Change in journey times (seconds) along A4260 Oxford Corridor in the PM Peak Period

Route	15:00-16:00				16:00-17:00				17:00-18:00			
	Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift		
		Low	Med	High		Low	Med	High		Low	Med	High
A4260 Corridor Northbound												
Linton Road to PR6a Access	486	+7	+7	+1	491	+22	+13	+12	511	+42	+29	+17
PR6a Access to Kidlington Rdbt	202	+16	+16	+14	206	+17	+18	+16	206	+18	+18	+18
Kidlington Rdbt to A4095	529	-3	-5	-11	514	-3	-1	-5	523	+2	+11	+4
Total	1,217	+20	+18	+4	1,211	+36	+31	+24	1,240	+62	+57	+39
A4260 Corridor Southbound												
A4095 to Kidlington Rdbt	534	-1	-1	0	542	+25	+24	+17	539	+47	+45	+52
Kidlington Rdbt to PR6a Access	201	+37	+34	+32	210	+49	+48	+42	212	+58	+58	+58
PR6a Access to Linton Road	493	+10	+11	+8	567	+41	+39	+21	492	+43	+31	+33
Total	1,228	+47	+44	+41	1,319	+116	+111	+80	1,243	+149	+134	+143

Source: North Oxford VISSIM Model

- 8.6.13 The analysis presented in **Tables 8.11** and **8.12** demonstrates there will be a reduction in journey time along the A4260 corridor in the southbound direction of approximately 5-minutes in the morning peak (08:00-09:00)
- 8.6.14 It is acknowledged that there will be a minimal increase of around 30-seconds on the A4260 corridor in the northbound direction in both the morning peak hour. There is also forecast to be modest increase in journey time in the evening peak hour (17:00-18:00) of approximately 1-minute in the northbound direction and 2-minutes in the southbound direction.
- 8.6.15 However, this needs to be compared with the more significant reduction in journey times along A4260 corridor in the southbound direction in the morning peak hour and in the instances there are forecast to be increases in journey times; they fall short of the severe test.

Queue Lengths

Kidlington Roundabout

- 8.6.16 **Tables 8.13** and **8.14** below summarise the forecast change in average queue lengths at the Kidlington Roundabout for the 2031 Reference Case and Do Something scenarios in the weekday morning and evening peak periods respectively.

Table 8.13: Kidlington Roundabout: Change in Average Queue Length (m): AM Peak

Arm	07:00-08:00				08:00-09:00				09:00-10:00			
	Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift		
		Low	Med	High		Low	Med	High		Low	Med	High
A4260 Oxford Rd (North)	8	-4	-2	-3	2	+3	+5	+6	12	-1	+3	-7
Bicester Rd (East)	4	+2	+2	+1	3	+3	+3	+3	3	+19	+1	-1
Oxford Rd (South)	4	+1	+1	+1	5	+1	+1	+1	5	0	0	0
Frieze Way	1	0	0	0	1	0	+1	+1	1	0	0	0
Oxford Rd, Kidlington access road	2	0	+1	0	1	1	+1	+1	1	0	0	0

Source: North Oxford VISSIM Model

- 8.6.17 **Table 8.13** demonstrates that there would be a negligible increase in queue lengths at the Kidlington Roundabout throughout the morning peak period with the proposed PR sites and proposed infrastructure in place when compared to the 2031 Reference Case.

Table 8.14: Kidlington Roundabout Change in Average Queue Length (m): PM Peak

Arm	15:00-16:00				16:00-17:00				17:00-18:00			
	Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift		
		Low	Med	High		Low	Med	High		Low	Med	High
A4260 Oxford Rd (North)	6	+7	+4	+9	12	+32	+26	+18	15	+47	+36	+58
Bicester Rd (East)	0	0	0	0	1	0	0	0	1	0	0	0
Oxford Rd (South)	7	0	0	0	8	0	0	0	8	0	0	0
Frieze Way	1	0	0	0	2	0	0	0	2	0	0	0
Oxford Rd, Kidlington access road	1	0	0	0	1	0	0	0	1	0	0	0

Source: North Oxford VISSIM Model

8.6.18 **Table 8.15** indicates there is generally no changes forecast in queue lengths at the Kidlington Roundabout during the evening peak period in the Do Something scenario when compared to the 2031 Reference Case.

8.6.19 There is predicted to be an increase in the queue length on the A4260 Oxford Road (North) arm ranging between +4m (1 vehicle) to +58m (10 vehicles) depending on the hour and level of mode shift. It should be noted that the queues for any scenario do not block back to any adjacent key junctions. Overall, the impact on the junction falls significantly short of the severe impact test.

Cotteslowe Roundabout

8.6.20 **Tables 8.16** and **8.17** below summarise the forecast change in average queue lengths at the Cotteslowe Roundabout for the 2031 Reference Case and Do Something scenarios in the weekday morning and evening peak periods respectively.

Table 8.16: Cotteslowe Roundabout Change in Average Queue Length (m): AM Peak

Arm	07:00-08:00				08:00-09:00				09:00-10:00			
	Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift		
		Low	Med	High		Low	Med	High		Low	Med	High
A4165 (North)	29	-8	-11	-12	502	-376	-467	-473	27	+58	-2	-7
A40 (East)	16	0	+1	0	345	-122	-239	-274	26	+6	-9	-9
A4165 (South)	4	+2	+2	0	18	+47	+15	-2	9	+515	+23	+8

Arm	07:00-08:00			08:00-09:00			09:00-10:00					
	Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift		
		Low	Med	High		Low	Med	High		Low	Med	High
A40 (West)	17	-5	-5	-4	36	-25	-25	-24	10	-2	-2	-1

Source: North Oxford VISSIM Model

8.6.21 **Table 8.16** demonstrates that there would generally be a negligible increase in queue lengths during the morning peak period at Cutteslowe Roundabout in the Do Something scenario with a reduction in queues forecast on the A4165 (North) and A40 (East) arms. The queuing in the AM peak is forecast to decrease as there is a reduction in southbound movements due to the mitigations from the IDP package, which is expected to result in more people using other modes than the car. This would reduce the number of vehicles on A4165, which would reduce the number of instances of A40 traffic giving way to A4165 traffic.

8.6.22 The model forecasts the A4165 south arm is expected to experience an increase in queue length ranging from -2m to +515m (90 vehicles) depending on the hour and level of mode shift. The queuing does not result in blocking back to adjacent junctions and only materialises in the DS low mode shift scenario in one hour. In the medium and high mode shift DS scenario the forecast increase in queues on this arm is negligible. As such the cumulative impact of the PR sites at this junction is not anticipated to have a severe residual impact or introduce a road safety issue.

Table 8.17: Cutteslowe Roundabout Change in Average Queue Length (m): PM Peak

Arm	15:00-16:00			16:00-17:00			17:00-18:00					
	Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift			Future Year Ref	DS Mode Shift		
		Low	Med	High		Low	Med	High		Low	Med	High
A4165 (North)	5	+2	+2	+2	7	+3	+2	+2	8	+4	+3	+4
A40 (East)	19	-1	-2	-1	17	0	0	-1	18	+1	-1	0
A4165 (South)	12	+2	-1	-1	9	+6	+3	+3	15	+22	+13	+7
A40 (West)	19	+3	+7	+5	21	0	+3	+1	20	+6	+5	+4

Source: North Oxford VISSIM Model

8.6.23 **Table 8.17** demonstrates that there would be a negligible increase in queue lengths at the Cutteslowe Roundabout throughout the evening peak period with the proposed PR sites and proposed infrastructure in place when compared to the 2031 Reference Case.

Summary

- 8.6.24 The 2031 future year assessment has considered all planned and committed development as well as the PR sites and the anticipated infrastructure which will come forward alongside those sites.
- 8.6.25 The identified mitigation package has led to traffic reductions and redistribution, which generally leads to a betterment in terms of the operation of junctions on the Oxford Road corridor, including Kidlington and Cutteslowe Roundabouts. Changes in journey times along the corridor are generally insignificant and, in some instances, especially the morning peak period, there are improvements in journey times on the A4260 corridor in the southbound direction when considered against the Reference Case.
- 8.6.26 The analysis demonstrates the Northern Left-In/Left-Out Access and proposed CYCLOPS signal junction are forecast to operate within capacity with no material queueing or delay on the Oxford Road corridor during the weekday morning and evening peak periods.
- 8.6.27 The level of traffic arising from the development that will impact on the Strategic Road Network is negligible and has been agreed with National Highways.
- 8.6.28 The direct impacts from the Development and the wider PR sites on the transport network have therefore been cost effectively mitigated to an acceptable degree. The residual cumulative impacts are not severe. The traffic analysis has been agreed with OXCC as confirmed by OXCC and through removing their holding objections on the PR7a and PR9 applications.

SECTION 9 Summary and Conclusions

9.1 Summary

Background

- 9.1.1 Bellway Homes and Christ Church submitted an outline planning application for residential led mixed use development (up to 800 new homes) on the PR6a Water Eaton site to Cherwell District Council (CDC) in May 2023. CDC has validated the application under the following reference - 23/01233/OUT.
- 9.1.2 A Transport Assessment (report ref WE/TA/P01, i-Transport ref ITB16565-102F, dated 28 April 2023) and Framework Travel Plan (report ref WE/FTP/P01, i-Transport ref ITB16565-103F, dated 28 April 2023) accompanied the planning application.
- 9.1.3 The applicant has received comments from the local highway authority, Oxfordshire County Council (OXCC), dated 30 June 2023. Comments were also received from Active Travel England dated 11 July 2023. National Highways provided an initial holding response on the application dated 21 July 2023. Following the submission of further information from i-Transport, National Highways lifted its holding position on 11 September 2023 recommending that conditions should be attached to any planning permission that may be granted.
- 9.1.4 As a result of consultation comments received, the application and site layout proposals have been updated and additional technical work has been undertaken. This Transport Assessment Addendum (ref WE/TA/P02) details the transport and highway related changes to the application. It should be read in conjunction with the Transport Assessment.
- 9.1.5 Following comments from OXCC, the Framework Travel Plan has also been updated (report ref WE/FTP/P02, i-Transport ref ITB16565-103I, dated 27 February 2024).
- 9.1.6 The Description of Development remains unchanged from the original planning submission and is set out below for ease of reference:

“Outline application (with all matters except access reserved for future consideration) for the demolition of existing buildings and the erection of up to 800 dwellings (Class C3); a two form entry primary school; a local centre comprising: convenience retailing (not less than 350sqm and up to 500sqm (Class E(a))), business uses (Class E(g)(i)) and/or financial and professional uses (Class E(c)) up to 500sqm, café or restaurant use (Class E(b)) up to 200sqm; community building (Class E and F2); car and cycle parking); associated play areas, allotments, public open green space and landscaping; new vehicular, pedestrian and cycle access points; internal roads, paths and communal parking infrastructure; associated works, infrastructure (including Sustainable Urban Drainage, services and utilities) and ancillary development. Works to the Oxford Road in the vicinity of the site to include, pedestrian and cycle infrastructure, drainage, bus stops, landscaping and ancillary development.”

9.1.7 The Transport Assessment Addendum continues to test:

- 800 dwellings – 50% private and 50% affordable;
- Primary school – 2-form entry;
- Local centre including:
 - Shops / retail (use class E a) – 500sqm;
 - Ancillary business development (use class E g) – 500sqm;
 - Services (use class E c) – 500sqm;
 - Café or restaurant (use class E b) – 200sqm; and
 - Community building use class F.2 b) - 400 sqm.

Site Access Arrangements

9.1.8 The overall access strategy remains largely unchanged from the original planning submission and is summarised below for ease of reference:

- Accommodate a walking / cycling super highway along the A4165 Oxford Road site frontage which forms part of OXCC’s wider North Oxford Corridor plan to improve cycling connections between Cherwell District / Kidlington and Oxford city - OXCC’s proposals are to accommodate where feasible one directional segregated cycle lanes and footways either side of Oxford Road;
- Provide convenient and attractive pedestrian and cycle links into the surrounding highway network and local area;
- Accommodate buses that will remain on Oxford Road but with new bus stops that are within a reasonable walk distance of the new homes;

- Provide vehicular accesses to the site from Oxford Road that prioritise safe crossing movements for pedestrians and cyclists; and
- Minimise the number of vehicular accesses to the Site from Oxford Road – Policy PR6a suggests the provision of two vehicular accesses from Oxford Road and the access proposals comply with this.

9.1.9 Key aspects of the access design are summarised below:

- The A4165 Oxford Road being subject to a 30mph speed limit along the site frontage (as per the approved Traffic Regulation Order);
- A walking / cycling superhighway along the eastern side of A4165 Oxford Road - the proposals accommodate a 2.5m wide segregated cycle lane and a 2.0m footway. A 3m verge separating the segregated cycle lane / footway and the Oxford Road carriageway / bus lane, suitable for appropriate street trees and planting is also included;
- The existing Oxford Road west side shared use footway / cycleway to remain available for pedestrians and northbound cyclists – this would eventually be upgraded to the cycle super highway dimensions as and when the PR6b site comes forward for development;
- This would achieve OXCC's cycle superhighway aspiration of having southbound cyclists one way along the east side of Oxford Road and northbound cyclists one way along the west side of Oxford Road;
- The southern vehicular access to the site as a 3 arm Cycle Optimised Protected Signals (CYCLOPS) junction (capable of accommodating a fourth / western arm for an access into the PR6b site);
- The northern vehicular access to the site as a left in left out priority junction with a full set back for cycle crossing;
- The existing accesses to St Frideswide's Farm and Water Eaton from Oxford Road are to be closed to vehicular traffic and to be turned into pedestrian / cycle accesses (bridleway access for the Water Eaton access). Alternative vehicular access arrangements to the properties, associated buildings and agricultural land served from these accesses will be provided (both during and after construction) from the proposed Oxford Road site accesses and street network within the application site only (which would be set at reserved matters stage and designs will need to allow for the type of agricultural vehicles and manoeuvres expected in a safe manner);

- A controlled pedestrian / cycle crossing of Oxford Road broadly in line with the Water Eaton bridleway;
- Floating bus stops on Oxford Road near the proposed controlled crossing and retention of the southbound bus lane; and
- Pipal Cottage is currently accessed from Oxford Road – it is understood that the owner is willing to have the access to the property redirected to come from within the development and this can be accommodated in the reserved matters scheme design.

9.1.10 OXCC's comments on the application requested that at the CYCLOPS junction the applicant look at safeguarding sufficient space for a right turn movement into PR6b from the north, which was not shown on the drawings submitted with the application. The junction design has therefore been updated to safeguard sufficient space for a right turn movement into PR6b on the northern arm as well as extending the verge to the north and south of the junction as far as the junction to seek to ensure that that cyclists use the pedestrian / cycle facilities along Oxford Road and at the junction.

9.1.11 Pedestrian / cycle accesses to the development from Oxford Road are proposed as follows:

- South of the Parkway Station / Park and Ride junction and in the vicinity of Pipal Cottage;
- Northern vehicular access - left in left out priority junction;
- Water Eaton access / bridleway – retained as bridleway access facilitating pedestrian and cycle movements with no vehicular traffic;
- CYCLOPS junction incorporating the north side footway / cycleway routing over the existing track access to the farm so that is no longer available as a vehicular access; and
- Southern part of the site (just to the north of the recently approved Land South West of St Frideswide's Farm, Banbury Road scheme (OCC ref 21/01449/FUL).

9.1.12 OXCC's consultation response states that it is important that a further pedestrian / cycle access from the site is provided to the Parkway / Station / Park and Ride site to the north. This was shown in the original planning submission and the updated land use and access parameter plan also shows the indicative location for this pedestrian / cycle access – it is envisaged that the Section 106 Agreement will secure a pedestrian / cycle link as far as the site boundary in this location.

9.1.13 There will also be pedestrian / cycle links to the boundary with Cutteslowe Park to the south to enable a link to a potential future cycleway through Cutteslowe Park. This was also shown in the original planning submission and the updated land use and access parameter plan shows the indicative location for this pedestrian / cycle access – it is envisaged that the Section 106 Agreement will secure a pedestrian / cycle link as far as the site boundary in this location.

9.1.14 Safe and suitable access to the site is therefore proposed.

Site Layout

9.1.15 The scheme delivers a well-connected, walkable 20-minute neighbourhood with facilities within the development that reduce the need for travel. In summary:

- All of the Water Eaton site / residential areas are within an 800m walk distance of the local centre / primary school;
- All of the PR6b site is within an 800m walk distance of the Water Eaton local centre / primary school;
- The public realm and open spaces are within an easy walking distance of the residential areas; and
- The new bus stops on Oxford Road are centrally located and easily accessed from the Water Eaton site and PR6b.

9.1.16 Water Eaton is designed to be a walkable neighbourhood which puts pedestrians and cyclists first. A network of footpaths and cyclepaths are proposed, along with Primary Streets, Secondary Streets, Residential Streets and Rural Edge Streets. The street adjacent to the school is proposed as a School street. A potential pedestrian and cycle access is proposed to the Oxford Parkway Station / Park and Ride site to the north.

9.1.17 A Mobility Hub is proposed at / next to the local centre. OXCC's Strategic Planning consultation response states that OXCC welcomes the provision of a Mobility Hub on the site and will liaise with CDC as needed about any County Council use or adoption of facilities.

Parking Strategy

- 9.1.18 OXCC Highways consultation response states that cycle and car parking will be agreed under reserved matters applications; however, OXCC requires a robust assessment to demonstrate why the site cannot be car-free, especially in areas of the site close to Oxford Road and Oxford Parkway. A Controlled Parking Zone (CPZ) will be required for the site to help modal shift towards active and sustainable travel and to reduce potential overflow parking related to Oxford Parkway.
- 9.1.19 The applicant recognises that a Controlled Parking Zone (CPZ) is appropriate and it is envisaged that this will be secured in conditions or the Section 106 Agreement.
- 9.1.20 OXCC's parking standards suggest that for car free development the site is to be located within 800m walking distance of a range of local amenities and services. An analysis which has been undertaken which shows that:
- The on Site primary school is less than a 800m walking distance;
 - Secondary schools is greater than a 800m walking distance - Cherwell School is 3.2km and Gosford School is 2.4km;
 - Supermarket or local grocery shop (selling fresh food) – the on-site shop is less than a 800m walking distance but Sainsbury's in Kidlington is more than 800m (1.5km);
 - GP surgery – on the basis that a GP surgery will not be on Site then a doctors is more than a 800m walking distance (Kendall Crescent Health Centre – 1.24km); and
 - Employment – there is a small business park (Jordan Hill Business Park) within 800m but the major employment areas are more than 800m (North Oxford – 3.5km, Oxford City Centre – 5km, John Radcliffe Hospital – 6.5km and Oxford Business Park, Cowley – 9km).
- 9.1.21 It is acknowledged that the site is clearly in a sustainable location in transport terms. It has good accessibility to some local amenities and services (active travel improvements in the area will further strengthen this) as well as good access to public transport. However, there are a number of local amenities and everyday services including secondary schools, supermarkets and employments areas beyond the 800m walking distance.
- 9.1.22 The following are important considerations which must be factored into providing appropriate car parking provision:
- Non car modes are being given priority through the development and surrounding area so as to not encourage car travel;

- The reality is that many future residents will want / need to own a car for trips to some local amenities / services but also for less frequent trips such as holidays / leisure / entertainment;
- Car ownership does not always directly relate to regular car use;
- There are people who rely on the use of private cars / vans for work purposes and have no reasonable option to use walking, cycling or public transport;
- With controlled on-street parking and the lack of any opportunities for informal parking within the Site it is necessary to give due consideration to provide appropriately for residential parking;
- Car club is not always an option, as that is an alternative to car ownership – with carrying pets often not permitted etc; and
- The need to balance parking provision between a level that acknowledges the accessible location of the site and yet provides housing that is attractive to occupiers and which will sell.

9.1.23 It is anticipated that the level of car parking provision may differ across the site depending on the location of the dwelling within the site and the phase of the development. It may be that some areas, such as at / near the local centre or near Oxford Road have low or zero car parking. However, as agreed by OXCC the details of these matters is better addressed at reserved matters stage.

Walking and Cycling Connectivity

9.1.24 OXCC Highway's consultation response discusses future transport improvements. The need for a package of transport improvements in the area was addressed through the Cherwell Local Plan Partial Review and the District's Infrastructure Delivery Plan (IDP). The package is to be largely funded by the developers of the sites allocated in the Partial Review of which the Water Eaton site / PR6a is one.

9.1.25 OXCC expects the Water Eaton site to partly fund (through financial contributions secured in a Section 106 Agreement) a number of active travel improvements that OXCC will deliver. These include:

- Oxford Road cycle superhighway;
- New signalised junctions along A4260/A4165 corridor;
- Improvements at Kidlington roundabout:

- Improvements at Cutteslowe roundabout; and
- Cutteslowe Park Cycle Route.

9.1.26 The applicant is content to make a proportionate financial contribution to these improvements subject to them meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

9.1.27 Delivery of the site accesses and Oxford Road cycle superhighway along the Water Eaton site frontage and on site walking and cycling facilities along with proportionate contributions to OXCC's walking and cycle schemes above will ensure that there is appropriate walking and cycling accessibility for future residents and users of the development.

Public Transport Connectivity

9.1.28 There are two main bus operators in Oxford - Stagecoach and the Oxford Bus Company. Bus services local to the site are mainly operated by Stagecoach. A number of buses route along Oxford Road including:

- Stagecoach 2 / 2 a - Oxford City Centre to Kidlington Via Oxford Road / Banbury Road, Summertown;
- Stagecoach 700 - Thornhill Park & Ride to Kidlington Via Churchill, JR Hospital, Summertown, Oxford Parkway; and
- Stagecoach S5 - Oxford – Bicester.

9.1.29 In summary, Oxford Road forms a high frequency bus corridor with bus services throughout the day linking the site with a number of key destinations including Oxford city centre, Churchill Hospital, John Radcliffe Hospital and Kidlington.

9.1.30 The proposed public transport strategy is as follows:

- Following discussions with OXCC and the bus operators it has been agreed that it is appropriate for the bus services to stay on Oxford Road and not to route into either the Water Eaton site or the PR6b site;
- New bus stops are proposed on Oxford Road near the proposed controlled crossing near the Water Eaton bridleway – the southbound bus stop is just to the south of the crossing and the northbound bus stop just to the north of the crossing;
- Cycle parking and scooter parking / other forms of micromobility parking is proposed within a short walk of the proposed new bus stops on Oxford Road, to assist in the transfer of trips to sustainable modes; and

- There are existing bus stops on Oxford Road / Banbury Road just to the north of Jordan Hill. The southern parts of the site are closer to the existing bus stops on Oxford Road / Banbury Road. OXCC consultation response states that existing “Jordan Hill” stops need upgrading with new RTI compatible shelters in liaison with Oxford City Council and additionally, alterations are needed to appropriately accommodate cyclists and bus passengers in light of the increased usage of the stops and increased cycle flows. OXCC have suggested a contribution towards upgrading the existing 4 bus stops south of the site on the A4165 to include Real Time Information. The applicant is content to make a financial contribution to improvements to these bus stops subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

9.1.31 The nearest railway station to the site is Oxford Parkway situated immediately to the north of the site. Residents will be able to access Oxford Parkway via the Oxford Road cycle super highway and the Parkway junction with Oxford Road – it is a reasonable walk and cycle distance for residents. This will provide the opportunity for access to a number of destinations including Oxford Station (city centre), London Marylebone and Bicester. Oxford Railway Station is located to the south of the site within Oxford city centre – it serves destinations include London Paddington, Didcot Parkway, London Marylebone, Manchester Piccadilly, and Reading.

9.1.32 OXCC consultation response states that:

- Whilst there is a good level of service between the site and Oxford City by both train and bus, there is a lack of options to employment areas to the south and east of the city. These areas include the hospitals (currently served by the 700 which is commercially unviable long-term), ARC (formally Oxford Business Park) and Oxford Science Park; and
- A new bus service is proposed known as the Eastern Arc route which serves these sites along with areas of Headington, Marston and Cowley and connecting to Redbridge, Thornhill and Oxford Parkway Park & Rides. A frequent bus service to these employment areas is considered a critical part of reducing vehicular trips towards Oxford, as such a contribution is requested.

9.1.33 OXCC has stated that financial contributions have been or will be sought from the other Partial Review sites. The applicant is content to make a proportionate contribution to the Eastern Arc bus route subject to it meeting the tests in Regulation 122 of the Community Infrastructure Levy Regulations 2010.

9.1.34 In summary, the site is located adjacent to high frequency public transport (Oxford Road high frequency bus corridor and Oxford Parkway rail station) – future residents will have the opportunity to access a range of destinations by public transport.

Framework Travel Plan

9.1.35 Following comments from OXCC, an updated Framework Travel Plan (FTP) has been prepared which outlines the measures to encourage travel by modes other than single occupancy car use and a Monitoring and Evaluation Plan (MEP) in line with OXCC's Decide and Provide guidance for Transport Assessments.

Traffic Analysis

9.1.36 To assess the impacts of the PR sites, OXCC requested that their North Oxford VISSIM model be used to identify the impacts of the PR sites and test the Infrastructure interventions identified in Appendix 4 of the IDP.

9.1.37 The North Oxford VISSIM model is a micro-simulation model representing a large study area. The model is primarily formed of four key corridors including a 7km section of the A34 corridor, a 11km section of the A40 corridor, a 11km section of the A44-A4144 corridor and a 12km section of the A4260-A4165 corridor.

9.1.38 For the evidence base for the Cherwell Local Plan 2011-2031 Partial Review, the impact of the PR sites was considered by OXCC through the use of their strategic traffic model (the OSM). This considered the cumulative impacts of the Local Plan and was used to inform the infrastructure requirements to support the planned growth in the Local Plan.

9.1.39 Updated traffic modelling of the network to assess the impacts of the development has been undertaken for:

- An opening year of 2025, and
- A future year of 2031 which includes all locally planned and committed development

9.1.40 The assessment of development impacts has paid due regard to OXCC's guidance in respect to 'Decide and Provide' with alternative assumptions being considered for trip generation, traffic growth and distribution and an iterative approach to determining a suitable mitigation strategy to address any residual impacts arising from the development.

2025 Assessment

9.1.41 The impacts arising from the proposed development on the Oxford Road corridor are negligible. Junctions within the study area are anticipated to generally work within their theoretical capacity, even before any mitigation is applied to the external network. While the Cutteslowe junction operates at stress / close to capacity the impacts arising from the scheme development is negligible and not significant.

2031 Assessment

9.1.42 The 2031 future year assessment has considered all planned and committed development as well as the PR sites and the anticipated infrastructure which will come forward alongside those sites.

9.1.43 The identified mitigation package has led to traffic reductions and redistribution, which generally leads to a betterment in terms of the operation of junctions on the Oxford Road corridor, including Kidlington and Cutteslowe Roundabouts. Changes in journey times along the corridor are generally insignificant and, in some instances, especially the morning peak period, there are improvements in journey times on the A4260 corridor in the southbound direction when considered against the Reference Case.

9.1.44 The analysis demonstrates the Northern Left-In/Left-Out Access and proposed CYCLOPS signal junction are forecast to operate within capacity with no material queueing or delay on the Oxford Road corridor during the weekday morning and evening peak periods.

9.1.45 The direct impacts from the Development and the wider PR sites on the transport network have therefore been cost effectively mitigated to an acceptable degree. The residual cumulative impacts are not severe. The traffic analysis has been agreed with OXCC as confirmed by OXCC and through removing their holding objections on the PR7a and PR9 applications.

Strategic Road Network

9.1.46 The impact of development generated traffic on the operation of the strategic road network is not significant as agreed by National Highways who do not object to the application subject to conditions.

9.2 Assessment Against Transport Connectivity Objectives

9.2.1 The Local Transport and Connectivity Plan (LTCP) is OXCC's statutory Local Transport Plan and was adopted by full council on 12 July 2022. It sets out OXCC's vision for developing a world leading, innovative and carbon neutral transport system with a focus on how people move safely and quickly around their communities, Oxford city, and the county.

9.2.2 The LTCP includes guidance for new developments and from this 12 transport / connectivity objectives have been set. The objectives and a summary of how each have been met is provided below.

- 1 Deliver a well-connected, walkable 20-minute neighbourhood with facilities within the development that reduce the need for travel:
 - Objective met - the scheme delivers a well-connected, walkable 20-minute neighbourhood with facilities within the development that reduce the need for travel. All of the Water Eaton site / residential areas are within an 800m walk distance of the local centre / primary school.
- 2 Deliver direct and safe connections which prioritise access on foot, bike or bus to/from neighbouring communities and places of employment, retail, education and leisure facilities:
 - Objective met- Water Eaton is designed to be a walkable neighbourhood which puts pedestrians and cyclists first. The development also assist in bringing forward the Oxford Road / Banbury Road cycle superhighway.
- 3 Deliver excellent access to transport interchanges:
 - Objective met – excellent access to the new / existing Oxford Road / Banbury Road bus stops, mobility hubs and Oxford Parkway / Park and Ride achieved.
- 4 Provide frequent, reliable and easily accessible public transport to local facilities, employment and nearby town centres:
 - Objective met – the site is located adjacent to high frequency public transport (Oxford Road high frequency bus corridor and Oxford Parkway rail station) – new bus stops are proposed on Oxford Road and future residents will have the opportunity to access a range of destinations by public transport.
- 5 Provide easy access to a network of open and green spaces (within a 10-minute walk) to enhance health and wellbeing:

- Objective met – the masterplan and parameter plans ensure that easy access to a network of open and green spaces is provided.
- 6 Roads and junctions connecting to developments need to prioritise walking, cycling and public transport and be futureproofed in line with the Innovation Framework:
- Objective met – provided through the Oxford Road cycle super highway, the southern access Cyclops junction and the northern access left in left our arrangement with full set back.
- 7 New streets to be designed having regard to with DfT’s ‘Manual for Streets’, Oxfordshire County Councils Street Design Guide and Oxfordshire County Councils Walking and Cycling Design Guides, Healthy Streets Approach, LTN 1/20 and the Department for Transport’s Inclusive Mobility:
- Objective met – the access and street design has regard to all of the above guidance.
- 8 Provide a comprehensive safe, convenient well landscaped and inclusive network for cycling, walking and public transport which offer direct, continuous and uninterrupted routes to facilities:
- Objective met – through the Oxford Road cycle superhighway (3m verge between carriageway and footway / cycleway) and planting to the east as well as the footpath / cyclepath and street design overall.
- 9 Consider appropriate filtered permeability and low traffic areas, making cycling and walking routes more direct and attractive than using a car:
- Objective met – through the northern access left in left our arrangement with full set back and the school street concept.
- 10 Provide mobility hubs to improve interchange opportunities, connectivity and accessibility:
- Objective met – Mobility Hub to be provided within the site.
- 11 Provide appropriate parking throughout, including:

- Objective met – Bellway will be bringing forward a scheme that provides appropriate levels of parking with details to be set out within subsequent reserved matters applications. It is envisaged that a controlled parking zone will be required to support on-site parking provision associated with the development and to ensure that there is no overspill on-street parking from the nearby Oxford Parkway Station / Park and Ride site.
 - Cycle parking that has regard to OXCC's best practice requirements and guidance;
 - At the time of a reserve matter application Bellway will agree the level of car and motorcycle parking provided across the site with OXCC, having due regard to OXCC's parking standards;
 - An effective network of EV charging and access to an electric car club;
 - Appropriate visitor parking provision spaces that can be used flexibly during the master planning stage; and
 - Parking control measures to avoid overspill parking onto streets and design to discourage any pavement parking from occurring;
- 12 Provide effective digital connectivity to enable home working and include flexible work/office space:
- Objective met – through the Framework Travel and Innovation Plans.

9.3 Conclusions

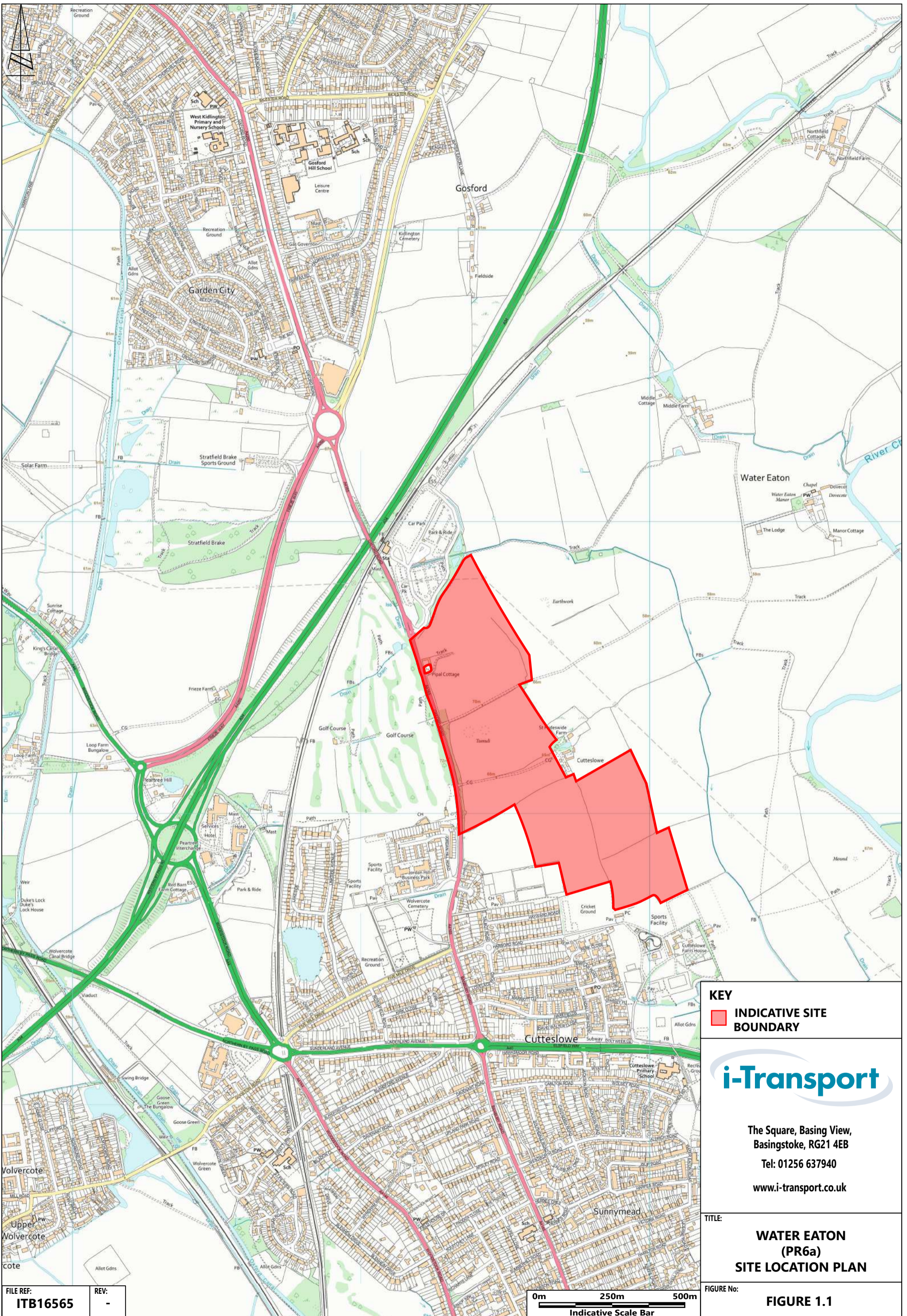
9.3.1 In conclusion:

- Suitable and safe vehicular access is proposed from Oxford Road;
- Safe and suitable pedestrian and cycle accesses are proposed from Oxford Road, the public rights of way and from the Croudace site to the south;
- The plans facilitate pedestrian /cycle access as far as:
 - the site boundary to the north to connect to the Oxford Parkway Station / Park and Ride site;
 - the site boundary to the south to connect to the proposed Cutteslowe Park cycle link;

- Along the Site frontage the scheme delivers OXCC's aspirations for a cycle super highway;
- Within the Site a network of footpaths, cyclepaths and safe streets are proposed – the 20 minute neighbourhood concept is achieved;
- Off site pedestrian and cycle improvements ensure that the site is linked to Kidlington, Oxford city and other key destinations;
- Appropriate and proportional contributions will go towards walking, cycling and public transport schemes in the local area;
- The Site will benefit from good accessibility to public transport – bus (Oxford Road high frequency bus corridor) and rail (Oxford Parkway Station);
- A Framework Travel Plan has also been prepared. A Mobility Hub is proposed within the site;
- The proposals therefore ensure that there are good opportunities to promote sustainable transport modes;
- The impact from the development on the operation of the transport network (in terms of capacity and congestion and on highway safety) is not significant;
- The residual cumulative impacts on the road network are not severe; and
- The main transport / connectivity objectives are met thus the development contributes to OXCC achieving its Local Transport Connectivity Plan.

9.3.2 The updated proposals therefore meet the transport requirements of the Cherwell Local Plan 2011-2031 including Partial Review, Oxfordshire's Local Transport and Connectivity Plan and the National Planning Policy Framework.

FIGURES



KEY
■ **INDICATIVE SITE BOUNDARY**



**The Square, Basing View,
 Basingstoke, RG21 4EB**
 Tel: 01256 637940
www.i-transport.co.uk

TITLE:
**WATER EATON
 (PR6a)
 SITE LOCATION PLAN**

FIGURE No:
FIGURE 1.1

FILE REF:
ITB16565

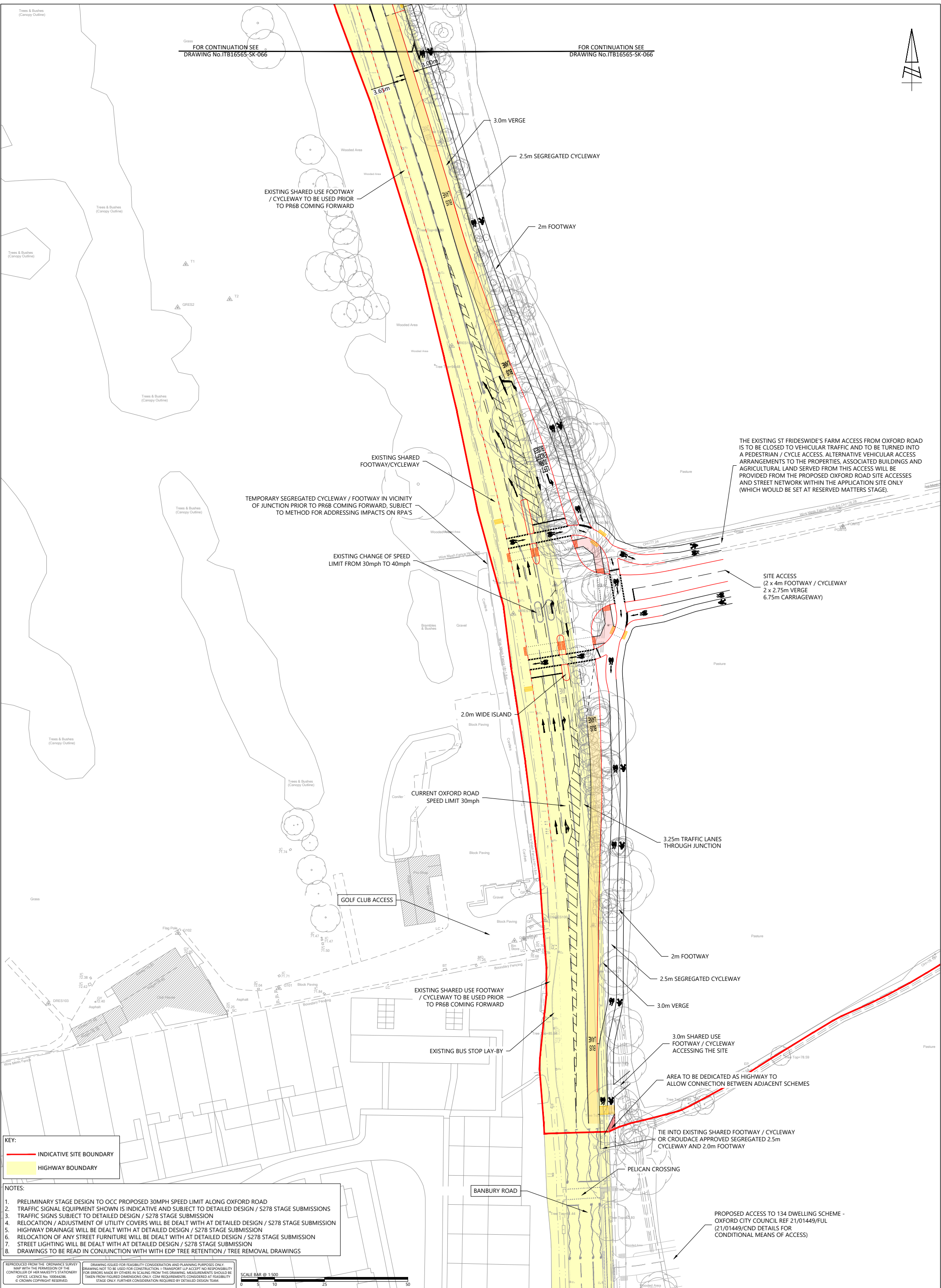
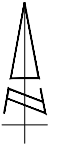
REV:
 -

0m 250m 500m
Indicative Scale Bar

DRAWINGS

FOR CONTINUATION SEE
DRAWING No.ITB16565-SK-066

FOR CONTINUATION SEE
DRAWING No.ITB16565-SK-066



KEY:
— INDICATIVE SITE BOUNDARY
— HIGHWAY BOUNDARY

- NOTES:**
1. PRELIMINARY STAGE DESIGN TO OCC PROPOSED 30MPH SPEED LIMIT ALONG OXFORD ROAD
 2. TRAFFIC SIGNAL EQUIPMENT SHOWN IS INDICATIVE AND SUBJECT TO DETAILED DESIGN / S278 STAGE SUBMISSIONS
 3. TRAFFIC SIGNS SUBJECT TO DETAILED DESIGN / S278 STAGE SUBMISSION
 4. RELOCATION / ADJUSTMENT OF UTILITY COVERS WILL BE DEALT WITH AT DETAILED DESIGN / S278 STAGE SUBMISSION
 5. HIGHWAY DRAINAGE WILL BE DEALT WITH AT DETAILED DESIGN / S278 STAGE SUBMISSION
 6. RELOCATION OF ANY STREET FURNITURE WILL BE DEALT WITH AT DETAILED DESIGN / S278 STAGE SUBMISSION
 7. STREET LIGHTING WILL BE DEALT WITH AT DETAILED DESIGN / S278 STAGE SUBMISSION
 8. DRAWINGS TO BE READ IN CONJUNCTION WITH WITH EDP TREE RETENTION / TREE REMOVAL DRAWINGS

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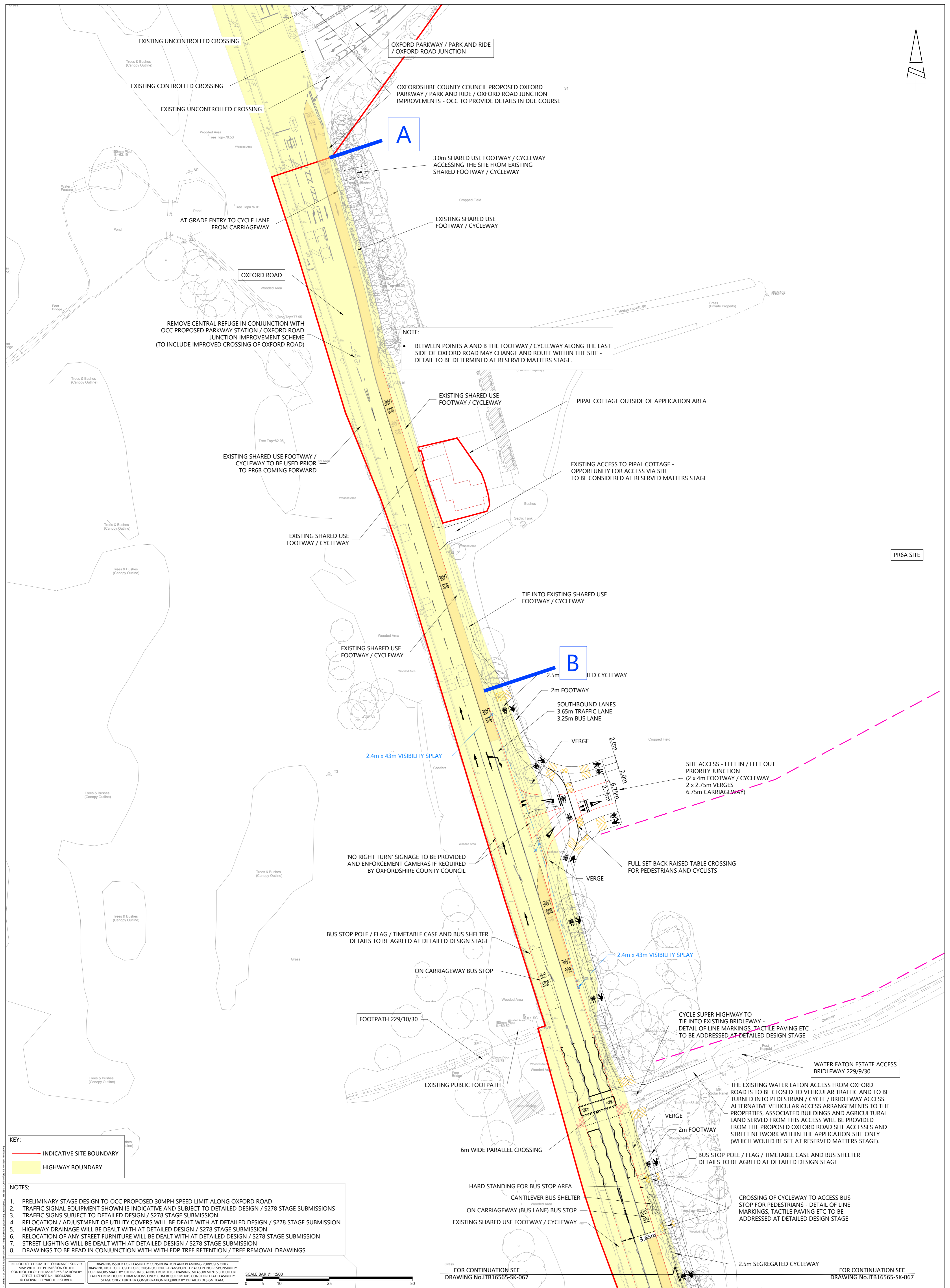
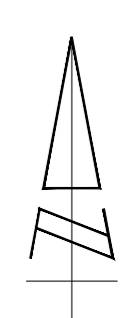
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The Square, Basingstoke, Hampshire, RG21 4EB
Tel 01256 637940
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REV	DATE	BY	DESCRIPTION	CHK	APP	PROJECT
1	14.10.21	PH	HEAVY ALIGNMENT UPDATED	JDM	ME	FOR INFORMATION
2	17.05.22	SH	INTERNAL ADJUST	JDM	ME	
3	17.05.22	SH	HEAVY ALIGNMENT UPDATED	JDM	ME	
4	07.08.23	SH	HEAVY ALIGNMENT UPDATED	JDM	ME	
5	07.08.23	SH	NOTES UPDATED	JDM	ME	
6	07.08.23	SH	HEAVY ALIGNMENT UPDATED	JDM	ME	
7	07.08.23	SH	NOTES UPDATED	JDM	ME	
8	07.08.23	SH	HEAVY ALIGNMENT UPDATED	JDM	ME	

PROPOSED PR6A ACCESS STRATEGY AND CYCLE SUPER HIGHWAY - INCLUDING LEFT IN LEFT OUT PRIORITY AND PARTIAL CYCLOPS SIGNAL JUNCTION (SOUTHERN EXTENT)

WATER EATON (PR6A) BELLWAY HOMES

DRAWN: PH	CHECKED: JDW	APPROVED: JDW
PROJECT No: ITB16565	SCALE @ A1: 1:500	DATE: 13.01.23
DRAWING No: ITB16565 - SK - 067		REV: H



A

B

NOTE:
• BETWEEN POINTS A AND B THE FOOTWAY / CYCLEWAY ALONG THE EAST SIDE OF OXFORD ROAD MAY CHANGE AND ROUTE WITHIN THE SITE - DETAIL TO BE DETERMINED AT RESERVED MATTERS STAGE.

KEY:
- INDICATIVE SITE BOUNDARY
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SCALE BAR @ 1:500
0 5 10 25 50

FOR CONTINUATION SEE DRAWING No.ITB16565-SK-067
FOR CONTINUATION SEE DRAWING No.ITB16565-SK-067

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REV	DATE	BY	DESCRIPTION
J	24.10.23	PH	HIGHWAY ALIGNMENT UPDATED
I	27.09.23	SH	HIGHWAY ALIGNMENT UPDATED
H	06.08.23	SH	RISK COMMENTS INCORPORATED

REV	DATE	BY	DESCRIPTION	CHK	APP	PROJECT
MC		BT		MC		
BT		MC		BT		
BT		MC		BT		
CH		APC				

FOR INFORMATION

PROPOSED PR6A ACCESS STRATEGY AND CYCLE SUPER HIGHWAY - INCLUDING LEFT IN LEFT OUT PRIORITY AND PARTIAL CYCLOPS SIGNAL JUNCTION (NORTHERN EXTENT)
WATER EATON (PR6A)
BELLWAY HOMES

DRAWN:	CHECKED:	APPROVED:
PH	JDW	JDW
PROJECT No:	SCALE @ 1:	DATE:
ITB16565	1500	13.01.23
DRAWING No:	REV:	
ITB16565 - SK - 066	J	