

# NW Bicester Eco Development

## Transport Assessment: Addendum – 5<sup>th</sup> April 2011

### 1.1 Introduction

This note forms an addendum to the Transport Assessment for the Exemplar Site development at NW Bicester, originally submitted as part of the hybrid planning application in November 2010. The application is being re-submitted in April 2011 and this note forms part of the revisions.

The changes to the development related to transport are in summary:

- Revised development schedule with a total of 393 residential properties (not the 394 previously referred to);
- Substantial revisions to the layout of the north fields and some revisions to the south and central fields;
- The connecting route between the north and central fields is to be bus, taxi, emergency and refuse vehicles and cyclists only;
- Revised residential parking strategy;
- Amended proposals for bus service provision; and
- Amended Draft Travel Plan (which is separately provided as a revised document).

The terminology of the Transport Assessment and Travel Plan with respect to the use of 'car/non-car' and 'vehicle/non-vehicle' was questioned by Oxfordshire CC and the Highways Agency on the original submission. The modal share is based on the PPS1 Annex terminology of 'car' and 'non-car' and for clarification the 'car' category includes light goods vans and heavy goods vehicles. All other modes of travel are included in the 'non-car' category, although in traffic terms, taxis and motorcycles are to be counted in future assessment as vehicles.

The following sections explain the updates to previous sections of the Transport Assessment.

The following figures have also been revised and are attached with this Addendum:

**Figure 5.1a:** Site Layout Plan (Northern Element)

**Figure 5.1b:** Site Layout Plan (Southern Element)

**Figure 5.2:** Transport Proposals Plan

**Figure 5.3:** Proposed Exemplar Site Bus Route Plan

**Figure 5.4:** Accessibility to Exemplar Site Bus Route

### 1.2 Site Layout

The layout of the northern fields has been revised and incorporates a road hierarchy with a central spine road of 6.0 metres width with traffic calming features, designed to a 20mph speed limit. A spur road is proposed of similar standard to the west which in the long term will provide a connection to fields to the south west. From these routes, there will be a network of minor access roads, access ways and home zones, all designed to low traffic speeds and giving priority to pedestrians and cyclists. The revised layout includes for a network of segregated

walking and cycling routes providing direct links north to south within each part, and west to east between the two parts in the northern fields and on road routes through the development, with surfacing and features designed to discourage traffic speed.

## 1.3 Connecting Route

The two parts of the site will be linked by a bus, cycle, taxi, emergency and refuse vehicle only link. This will discourage residents in the northern part of the site from making very short journeys by car to the shops and services in the southern part. This will mean that the northern access from Banbury Road will serve 227 residential properties and the southern access will serve 166 residential properties and the non-residential uses.

## 1.4 Residential Car Parking Provision

The parking strategy for residents recognises that the majority of households will own at least one car. It therefore seeks to ensure that the residential development does not significantly under-provide for parking and then suffer from problems of inappropriate/ overspill parking but does not encourage car use by providing parking immediately in front of every household's front door.

The Cherwell DC standards set a **maximum** level of providing 1 space per dwelling for 1 bed properties, 2 spaces for 2, 3 or 4 bed properties plus an optional garage. With the anticipated mix of properties, the maximum would give rise to an average of **2 spaces** per property plus garages.

For the exemplar site, it is proposed that there is an average of **1.59 spaces** per property plus garages at a ratio of **0.47** per property. The parking for residential accommodation is as follows:

### PRIVATE ACCOMMODATION:

- 2b housing: 2 parking spaces, one allocated, one unallocated;
- 3b housing: 2 parking spaces, or one space and a single garage;
- 4b detached housing: 1 parking spaces and 1 single garage or 2 parking spaces;
- 5b detached housing: 2 parking spaces and 1 double sized garage, half of which will be storage area.

### SOCIAL ACCOMMODATION:

- 1 parking space to 1b and 2b flats;
- 2b housing: 2 parking spaces, one allocated, one unallocated;
- 3b housing: 2 parking spaces or one space and a single garage;
- 2 parking spaces to disabled bungalows. Bungalows to have on plot parking whilst parking facilities to social houses provided in parking courts;
- 4b detached housing: 1 parking spaces and 1 single garage or 2 parking spaces;
- 5b detached housing: 2 parking spaces and 1 double sized garage, half of which will be storage area and/or habitable accommodation.

Garages are being provided for 5 bed detached units and some of the 3 and 4 bed units. The single garages will be of the standard size 6m x 3m to accommodate a car and bicycle storage. The size of the garages for the 5 bed units will be double sized, but with a single garage door, thus providing additional storage area for the property and/or habitable accommodation. External parking spaces are to be provided in accordance with Oxfordshire CC standards.

The analysis of the Exemplar Site layout demonstrates that of the parking spaces for the 393 units, 32.5% of spaces are on-plot, 39.5% off street to the front or side and 28.0% in rear courts.

Visitor spaces are to be provided in parking bays within the street design, primarily in Home Zone B (access streets) with a maximum of 87 spaces provided across the development, representing one space per 4.5 residential units.

## 1.5 Bus Services and Infrastructure

A bus service of 15 minutes frequency will be provided by the developer from the occupation of the 200<sup>th</sup> unit of the development. From the occupation of the 50<sup>th</sup> unit to the 200<sup>th</sup> unit, a half hourly frequency bus service is proposed. From first occupation, either a responsive mini bus service will be provided (managed by the travel plan co-ordinator) or a half hourly bus service will be operated (currently subject to funding discussions). The bus service will link the site via Banbury Road to:

- Bicester North Station;
- Town centre/ bus station; and
- Bicester Town Station.

The proposed bus route is shown in [Figure 5.3](#). It is proposed that the bus route is one way in an anti-clockwise direction, entering the site at the northern access from Banbury Road, travelling through the spine route and exiting via the southern access to Banbury Road.

The bus route will not only serve the development site, but provide a new bus service for residents in the Banbury Road area of Bicester. The population of the town living within 400m walking distance of a proposed bus stop is shown in [Figure 5.4](#), and is estimated as some 11,000 people. These residents will benefit from the 15 minute frequency service which connects to the rail stations and the town centre.

The bus route is proposed in two phases, with the first going from the site to Bicester North Station and the town centre (prior to 2013 when the new Chiltern service is anticipated to open) and then post the new service, re-routing to the town centre and Bicester Town Station, with early morning and late evening connections to Bicester North to serve the London trains. The services will be integrated in timetable with the existing Bicester North Station services and the proposed enhanced rail services from Bicester Town Station.

Four stops are proposed to serve the development:

- A drop off location on Banbury Road north of the access junction, with a bus lay-by. This stop will serve the proposed bus route but also allow residents to board existing bus services on Banbury Road to Silverstone and Brackley (the X88);
- In the northern residential area, located on the spine route and adjacent to the public open space;
- In the village green area, located on the spine route to the north of the junction with the access road heading south west which will eventually serve the later development phases; and
- A temporary stop in the village square, close to the Eco Business Centre, which will serve the site until such time as the bus services go south from the village triangle to serve latter phases of the development.

In the initial phase of the development, which will begin by building units in the southern part of the site and thus the spine road will not be in place through to the northern access, bus services

would enter and leave the site through the southern access, with a turning area provided at the western end of the spine road.

These bus stops provide access within 400 metres to all parts of the development. Each bus stop will have a shelter and real time information. The proposed hours of operation of the bus service are as follows:

- Monday to Friday 07:00 to 19:00 inclusive; and
- Saturday 08:00 to 18:00 inclusive.

It is proposed that the bus service will be provided by a hybrid vehicle or a vehicle of equivalent or lesser emissions.

It is recognised that the provision of a 15 minute frequency service across the day and a service in the evenings and weekends including Sundays, would significantly raise the potential of buses to meet travel needs and the target modal share. Frequency is the key influencing factor in patronage and if services are 15 minutes, people do not need to know the timetable. The developer is committed to providing the 15 minute service at 200<sup>th</sup> unit occupation. If funding support were to be available, the 15 minute service could be introduced at 50<sup>th</sup> unit occupation. Moreover, the service could be extended to begin at 06:30 and end at 19.30 to better provide for rail commuters, also subject to external funding support. As later phases of the Eco Development take place it is likely that the bus service will re-route within the Exemplar to maintain access but also serve adjacent developments.

Once operational, the option of also linking to the industrial estate will also be considered.

The services will be branded for the Bicester Eco Development and other possibilities to be considered include;

- Using 'zero-carbon' electric;
- Using Smartcard ticketing;
- Offering integrated ticketing with the rail services.

Achieving the modal share for bus use will require attention to priority for buses in the town centre to ensure that using the bus is an attractive option compared to the car for connections to the rail stations and the town centre. Oxfordshire County Council are currently investigating the potential for bus priority schemes at Bucknell Road and Banbury Road as part of the County Council's LTP3 strategy work. There is also a need to address priority for buses entering and circulating around the town centre, but this will need to form part of the masterplan travel strategy and the Bicester wide measures as proposed in LTP3. Nevertheless, the developers of the Exemplar site will be supportive of measures to assist bus movements through their proportionate contributions to transport in Bicester.

## 1.6 Draft Travel Plan

In line with current policies and in order to establish and maintain the required level of sustainable travel associated with the proposed development, a Draft Travel Plan has been prepared for the whole Exemplar Site development. This has been revised as part of the re-submission.

The Travel Plan sets out the aims and targets and the Travel Strategy and appropriate measures to achieve the targets. The modal share targets resulting from the measures have been used as the basis for the traffic generation calculations in this Transport Assessment and thus the two reports should be read in conjunction with each other. The overarching aim for the development is set out in the Travel Plan as to:

***“Reduce the need or desire to travel through integrated design and provide sustainable travel choice options that have less reliance on private cars and seek to relieve congestion.”***

The specific aims are:

- To create a high quality place in which people want to live and work
- To reduce the need to travel whilst ensuring access to a full range of facilities and services
- To provide people with information on travel choices
- To promote the use of non-car modes – walking, cycling and public transport
- To reduce single occupancy vehicle trips
- To reduce the travel related carbon impact of the site
- To manage traffic to reduce vehicle speeds and give priority to pedestrians, cyclists and public transport over cars
- To ensure there are no undue congestion impacts on the wider town and road network arising from the development
- To provide a mechanism for the ongoing development and implementation of the Travel Plan

The targets for the Travel Plan are as follows:

**T1:** By 2026, 50% of all trips originating from the Exemplar Site will be by non-car modes

**T2:** By 2016 (three years post first occupation), 45% of all trips originating from the Exemplar Site will be by non-car modes

**T3:** By 2016, no more than 20% of pupils will arrive at school by car on a typical school day.

**T4:** By 2016 (3 years post first occupation) 16% of working adults are to be working from home on a typical work day.

**T5:** By 2020, average vehicle emissions for cars owned by exemplar site residents will be less than 110gCO<sub>2</sub>/km by 2020.

**T6:** By 2020, average annual vehicle kilometres by private cars owned by exemplar site residents will be 10% lower than the 2008 UK average of 14,723.