

Project: Great Wolf, Bicester
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Date: 25/07/2019

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1.0 Introduction

- 1.1 Motion has been appointed to provide highways and transport advice in relation to the proposed development of Bicester Golf Course, Chesterton near Bicester. The site is situated to the south of the A4095 to the east of Chesterton. The site currently forms part of the Bicester Golf Course and Hotel.
- 1.2 The development proposals comprise the redevelopment of 9 holes of the existing 18 hole of the golf course and construction of a 500-bedroom hotel and indoor family resort.
- 1.3 Bicester and surrounds are a growth area for development and there are a number of committed developments within the area which have been identified by Officers at Oxfordshire County Council (OCC) and Cherwell District Council (CDC) and require consideration as part of the Transport Assessment.
- 1.4 At a pre-application meeting between Officers at OCC and Motion, it was discussed that the inclusion of both TEMPRO traffic growth factors and traffic flows associated with committed developments would result in double counting of expected traffic growth on the local network.
- 1.5 This Note has been prepared to outline the methodology for assessing the future baseline traffic flows with regard traffic growth from committed development and TEMPRO growth factors on the local highway network. The purpose of this Note is to seek agreement with Officers at OCC regard the assessment of future year baseline traffic flows.

2.0 Extent of Assessment

- 2.1 The planning application will be supported by a Transport Assessment which will consider the effect of the development proposals on the highway network in the vicinity of the site. At this stage, the intended scope of junctions to be assessed is shown in [Figure 2.1](#) and can be summarised as follows:
 1. B430 / B4030 signalised junction;
 2. B4030 / Howes Lane / Middleton Stoney Road / Vendee Drive roundabout;
 3. Vendee Drive / A4095 priority junction;
 4. Proposed site access / A4095 priority junction;
 5. A4095 / B430 staggered junction;
 6. B430 / A34 junction;
 7. B430/ Church Road; and,
 8. Vendee Drive / A41 / Bicester Park & Ride roundabout.

3.0 Baseline Assessment

- 3.1 In order to determine the 2019 baseline traffic flows at the above junctions, traffic surveys have been at the above junctions. The surveys were undertaken to include the weekday morning and evening peaks as well as a typical Saturday peak from which the peak one-hour period within each of the morning, evening and Saturday periods can be determined.
- 3.2 For the Vendee Drive/ A41 roundabout, this junction is within the Bicester Transport Model and data has been requested from OCC for this junction/ junction traffic data has been requested from OCC from the Bicester Transport Model

4.0 Committed Developments

4.1 A number of committed developments have been identified by Officers at OCC and CDC which need consideration as part of the planning application. The committed developments which will be considered are outlined below alongside a brief summary of the proposals, in addition, the level of build of each development is included where relevant. As the baseline traffic surveys will account for any occupied development, the future year assessment will only consider the elements yet to be constructed. The following committed developments have been considered for inclusion in the future year assessment:

- ▶ North West Bicester – mixed use development including 393 residential dwellings, community centre and land set aside for a primary school. OCC have advised that 166 of the 393 dwellings are currently occupied and therefore would be included within baseline surveyed traffic flow.
- ▶ Wretchwick Green – mixed use development of up to 1500 residential dwellings alongside employment uses and primary school.
- ▶ Bicester Office Park – 60,000 square metres of B1 office use.
- ▶ Bicester Gateway – retail development with a mix of food and non-food retail plus a restaurant and gym.
- ▶ Kingsmere – mixed use development including 1716 residential dwellings, nursing home and employment uses. OCC have advised that 1198 of the 1716 dwellings are currently occupied and therefore would be included within baseline surveyed traffic flow.
- ▶ Graven Hill – mixed use development including 1900 dwellings, primary school, community centre and employment uses. OCC have advised that 85 of the 1900 dwellings are currently occupied and therefore would be included within baseline surveyed traffic flow.
- ▶ RAF Bicester – mixed use development comprising hotel with conferencing facilities as well as a technical site with B1c, B2 and B8 uses.
- ▶ Heyford Park – mixed use development comprising 1175 residential dwellings, office and employment uses, conference centre and a heritage centre. OCC have advised that 755 of 1175 dwellings are currently occupied and therefore would be included within baseline surveyed traffic flow.
- ▶ Bicester Golf Hotel – increase in hotel space to provide 60 additional bedrooms.
- ▶ South West Bicester (phase 2) – up to 680 residential dwellings plus an extra care facility.
- ▶ Gateway Office Park – 150-bedroom hotel and up to 16,725 square metres of B1 office space.
- ▶ BSA Chesterton – reconfiguration and expansion of sports and leisure facilities at the Bicester Sports Association, Chesterton.
- ▶ Gavray Drive – allocated land in the Local Plan for up to 300 residential units, an application for 180 units was refused in 2015.

4.2 The Transport Assessment/ Transport Statement submitted alongside each of the above planning applications has been interrogated to determine anticipated vehicle trips from these sites on the highway network being considered as part of the current Transport Assessment.

4.3 Table 4.1 below summaries the committed developments listed above and the junctions which were assessed as part of the respective Transport Assessments supporting the planning application. Junction are number as per the list at Paragraph 2.1 above.

	1	2	3	4	5	6	7	8
North West Bicester	-	Y	-	-	-	-	-	-
Wretchwick Green	-	-	-	-	-	-	-	Y
Bicester Office Park	-	-	-	-	-	-	-	Y
Bicester Gateway	-	-	-	-	-	-	-	-
Kingsmere	-	Y	-	-	-	-	-	-
Graven Hill	-	-	-	-	-	-	-	Y
RAF Bicester	-	-	-	-	-	-	-	-
Heyford Park	Y	-	-	-	Y	-	-	-
Gateway Office Park	-	-	-	-	-	-	-	Y
BSA Chesterton	-	-	Y	-	-	-	-	-
Gavray Drive	-	-	-	-	-	-	-	-
South West Bicester	-	-	-	-	-	-	-	-
Bicester Golf Hotel	-	-	-	-	-	-	-	-

Table 4.1 Summary of Committed Flows

5.0 Future Year Assessment

5.1 The proposed future assessment for the purpose of the Transport Assessment will be 2026 and this is consistent with the assessment year of the Bicester Transport Model.

5.2 In order to provide a robust assessment, a combination of committed development flows and TEMPRO growth factors will be used on a junction by junction basis depending on the extent to which each committed development results in a change vehicle trips at that junction. A summary of how future year flows will be determined for each junction within the network is provided below.

1. B430 / B4030 signalised junction

The future year assessment will comprise baseline traffic flows plus traffic associated with the Heyford Park committed development. Given the proximity of the Heyford Park development it is considered that this will comprise the future traffic growth at this junction and, as such, no TEMPRO growth factor will be applied to baseline traffic data at this junction. Based on the scope of assessment supporting other committed development, no other committed development is considered to have a material change in traffic flows at this junction.

2. B4030 / Howes Lane / Middleton Stoney Road / Vendee Drive roundabout

The future year assessment will comprise baseline traffic flows plus traffic associated with the North-West Bicester, Kingsmere and RAF Bicester developments. It is considered that these three developments will comprise the future traffic growth at this junction and, as such, no TEMPRO growth factor will be applied to baseline traffic data at this junction. Based on the scope of assessment supporting other committed development, no other committed development is considered to have a material change in traffic flows at this junction.

3. Vendee Drive / A4095 priority junction

The only committed development which includes detail of expected traffic flows at this junction is the proposed BSA scheme in Chesterton. On that basis future year assessment will comprise the 2019 baseline plus a TEMPRO growth factor and traffic associated with the BSA Chesterton scheme. Based on the scope of assessment supporting other committed development, no other committed development is considered to have a material change in traffic flows at this junction.

4. Proposed site access / A4095 priority junction

None of the identified committed development include details of expected change in traffic flows at this junction. On that basis future year assessment will comprise the 2019 baseline plus a TEMPRO growth factor. Based on the scope of assessment supporting other committed development, no other committed development is considered to have a material change in traffic flows at this junction.

5. A4095 / B430 staggered junction

The future year assessment will comprise baseline traffic flows plus traffic associated with the Heyford Park committed development. Given the proximity of the Heyford Park development it is considered that this will comprise the future traffic growth at this junction and, as such, no TEMPRO growth factor will be applied to baseline traffic data at this junction. Based on the scope of assessment supporting other committed development, no other committed development is considered to have a material change in traffic flows at this junction.

6. B430 / A34 junction

The future year assessment will comprise baseline traffic flows plus traffic associated with the Heyford Park committed development. Whilst this junction was not included within the scope of junctions assessed by the Heyford Park development, an assumption of Heyford Park associated vehicle movements at this junction can be based on traffic flows presented for B430/A4095 junction. The Heyford Park development is considered to comprise the future traffic growth at this junction and, as such, no TEMPRO growth factor will be applied to baseline traffic data at this junction. Based on the scope of assessment supporting other committed development, no other committed development is considered to have a material change in traffic flows at this junction.

7. Vendee Drive / A41 / Bicester Park & Ride roundabout

As set out in Paragraph 3.2 data for this junction has been requested from OCC from the Bicester Transport Model. It is assumed that this data is for the 2026 scenario and includes all relevant committed developments and traffic growth and therefore no additional consideration of committed developments or TEMPRO traffic growth is required for this junction.

5.3 TEMPRO has been interrogated to establish growth factors for the period 2019 to 2026 for the MOSA area in which the site is located, Cherwell 016. TEMPRO factors for the weekday morning, evening and Saturday peak periods are listed below and outputs from TEMPRO are attached at [Appendix A](#).

- ▶ Weekday Morning Peak 1.1359
- ▶ Weekday Evening Peak 1.1384
- ▶ Saturday Peak 1.1466

6.0 Summary

- 6.1 Motion has been appointed to provide highways and transport advice in relation to the proposed development of Bicester Golf Course, Chesterton near Bicester. The site is situated to the south of the A4095 to the east of Chesterton. The site currently forms part of the Bicester Golf Course and Hotel.
- 6.2 The development proposals comprise the redevelopment of 9 holes of the existing 18 hole of the golf course and construction of a 500-bedroom hotel and indoor family resort.
- 6.3 This Note has been prepared to outline the methodology for assessing the future baseline traffic flows with regard traffic growth from committed development and TEMPRO growth factors on the local highway network. The purpose of this Note is to seek agreement with Officers at OCC regard the assessment of future year baseline traffic flows.

Appendix A
TEMPRO Output



- data selections
- trip end selections
- trip end by time period selections

select time period:
 weekday AM peak period (0700 - 0959)

- Trip end type**
- Production/Attraction
 - Origin/Destination

Reset Selections

- Select data type**
- Growth factors
 - Future year minus base year
 - Base year data
 - Future year data

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

- Walk
- Cycle
- Car Driver
- Car Passenger
- Bus/Coach
- Rail/Underground
- Combined Modes

Area Description
 Level
 E02005936

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2. Select Areas to make up the geographic region:

Cherwell 016 (E02005936)

3. Select area type:

- Urban
- Rural
- All

4. Select road type:

- Motorway
- Trunk
- Principal
- Minor
- All

5. Select which area it serves:

- Region
- England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
E02005936	Cherwell 016	1.1359

All Purposes	Destination
	1.0689

Weekday Morning Peak

TEMPro main form

Results

Select data type

- Growth factors
- Future year minus base year
- Base year data
- Future year data

**Italised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels*

Walk | Cycle | Car Driver | Car Passenger | Bus/Coach | Rail/Underground | Combined Modes

Area Description

Level

E02005936

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

Cherwell 016 (E02005936)

3: Select area type:

- Urban
- Rural
- All

4: Select road type:

- Motorway
- Trunk
- Principal
- Minor
- All

5: Select which area it serves:

- Region
- England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
E02005936	Cherwell 016	1.1384

All Purposes

Destination

1.1183

Reset Selections

Weekday Evening Peak

Data selections

Trip end selections

Trip end by time period selections

Select time period:

Saturdays (all times of day)

Trip end type

Production/Attraction

Origin/Destination

Reset Selections

Select data type

Growth factors

Future year minus base year

Base year data

Future year data

**Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels*

Walk | Cycle | Car Driver | Car Passenger | Bus/Coach | Rail/Underground | Combined Modes

Area Description

Level

E02005936

Results

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

Cherwell 016 (E02005936)

3. Select area type:

Urban

Rural

All

4. Select road type:

Motorway

Trunk

Principal

Minor

All

5. Select which area it serves:

Region

England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
E02005936	Cherwell 016	1.1466

All Purposes	Destination
	1.1071

Saturday Peak