



ENVIRONMENTAL STATEMENT
VOLUME 1
CHAPTER 3 - REASONABLE ALTERNATIVES
AND DESIGN EVOLUTION

3 REASONABLE ALTERNATIVES AND DESIGN EVOLUTION

3.1 INTRODUCTION

3.1.1 This Chapter outlines the reasonable alternatives and design iterations to the Proposed Development that have been considered by the Applicant, together with the principal reasons for proceeding with the Proposed Development.

3.2 REQUIREMENT FOR THE CONSIDERATION OF ALTERNATIVES

3.2.1 Schedule 4 of the EIA Regulations (**Ref. 3.1**) states that an Environmental Statement (ES) should include;

“A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.

3.2.2 To accord with the EIA Regulations, this chapter sets out the main alternatives studied and alternatives not studied by the Applicant, in terms of the layout and design principles based on the following:

- The Do-Nothing Scenario; and
- Design Evolution and Alternative Site Layout and Land Uses.

3.3 ALTERNATIVES NOT STUDIED

ALTERNATIVE SITES

3.3.1 No reasonable alternative sites have been considered for the Proposed Development. A detailed assessment of other sites in and on the edge of ten town centres in the wider area in the Planning Statement has been undertaken to support this conclusion. As part of the Planning Statement, a Sequential Assessment was undertaken, which reviewed sites both in and on the edge of town centres at 10 different towns. The Applicant's specific requirements for the chosen site were relaxed for the purposes of the Sequential Assessment, these are detailed below:

- Located 120 minutes' drive time from London and Birmingham (*30% further than the Applicant's identified viable catchments*);
- Approximately 6ha with a relatively level topography (*50% of the Applicant's requirement, needing decked car parking and hotel, neither are viable*);
- Not necessarily concealed with no nearby sensitive receptors (*for the assessment to consider these for each site*);
- Proximity to and ability to connect to public transport infrastructure (*inappropriate to apply flexibility to this point*);
- Main road proximity / visibility and ease of access (*inappropriate to apply flexibility to this point*);
- Not focused on M40 corridor location (*overlooking the Applicant's initial investigation into the UK identifying this route*); and
- Proximity to population of 30,000 plus providing local workforce (*inappropriate to apply flexibility to this point*).

- 3.3.2 Notwithstanding the high degree of flexibility applied, in the absence of any suitable opportunities within the town centres (or in well-connected edge or out-of-centre locations) that have been reviewed, the Site is considered a preferred location in planning policy terms for new 'main town centre use' floorspace as is being proposed.
- 3.3.3 The Site meets the Applicant's criteria and the ability to deliver the Proposed Development, based on specific operational and branding requirements reflective of facilities recently built and operational across North America. These requirements relate to the physical space required to deliver a resort experience meeting Great Wolf Resort's needs, as well as encapsulating the geographic and demographic requirements to capture the necessary guest markets and future workforce. The Site offers a unique combination of these specific requirements not met by other sites considered and is therefore considered as appropriate for the Proposed Development.
- 3.3.4 For further information please refer to the Planning Statement submitted as a standalone document within the Planning Application.
- 3.3.5 The Cherwell Local Plan 2011-2031 (**Ref. 3.2**) Section C.18 expresses the need to expand the economy of Bicester by "*promoting the provision of hotels, restaurants and leisure development opportunities*" it therefore supports new leisure based development and the proposed Great Wolf Lodge presents an opportunity to expand and improve the leisure facilities available within Cherwell District, on an established commercial leisure site, and is anticipated to bring economic benefits to the district and wider area.

ALTERNATIVE SIZES

- 3.3.6 The Applicant has identified the space required in order to deliver the Proposed Development, based on the facilities that they have already built in the USA. The Proposed Development will be the flagship resort in Europe and the UK, offering the latest Great Wolf experience and the size of the Site meets the demand of the critical mass needed for the Proposed Development to be viable.

3.4 REASONABLE ALTERNATIVES STUDIED

DO-NOTHING SCENARIO

- 3.4.1 If the Site was not redeveloped it would remain in its current form (9 holes of the wider 18-hole golf course), as the Do-Nothing scenario. The existing baseline conditions and future baseline conditions set out within each topic chapter in this ES represent the Do-Nothing scenario.

DESIGN EVOLUTION AND ALTERNATIVE SITE LAYOUT AND LAND USES

- 3.4.2 The design evolution of the Proposed Development is informed by the existing environmental constraints and opportunities within and surrounding the Site and the adjoining areas, to inform the land uses, nature, scale and massing and proposed layout of the built form and the areas of open space. The use and layout of the Proposed Development has been influenced by the constraints of the Site which includes, but is not limited to:

- Adjacent to Bicester Hotel, Golf and Spa and residential properties;
- Views into and across the Site;
- Public Right of Way (PRoW) (Footpath 161/6/10) traverses the Site in a north to south-east direction;
- High Water Table (the Site has area's where the water table is approximately 250mm below the surface); and

- Great Crested Newt presence within 9 of the 10 ponds that currently exist on the Site.

3.4.3 Considerations have occurred in the context of relevant national and local planning policies, best practice guidance and development standards, baseline studies, as well as feedback obtained from key stakeholders and the general public during consultations.

3.4.4 A number of environmental topics have influenced the design of the Proposed Development during its evolution, as summarised in **Table 3-1** below.

Table 3-1 - Environmental Considerations in the Evolution of the Proposed Design

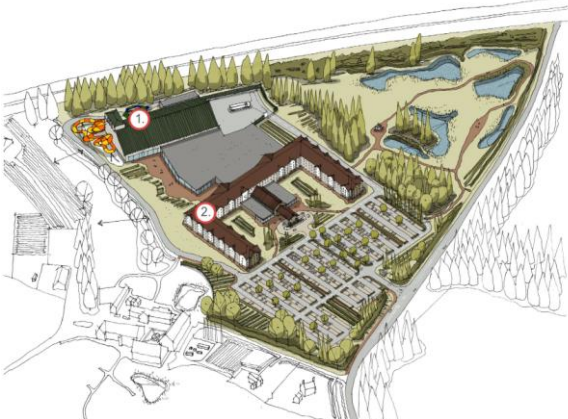
Technical Topic	Considerations within the Proposed Development
Traffic and Transport	<p>In order to avoid increased traffic to the Green Lane access route to the existing Bicester Hotel Golf and Spa, a new T-Junction a new T-Junction will provide access to the Proposed Development. This junction will connect to the A4095 and will include a new right turn lane within the A4095. The A4095 runs along the northern boundary of the Site and is a more substantial road better suited to serving the Proposed Development compared to access via Green Lane.</p> <p>There is a Public Right of Way (Footpath 161/6/10) that crosses the Site in a north to south-east direction, which is rarely used. In order to improve usability, security and deliver a more commodious environment for ramblers, the Proposed Development proposes the diversion of the route around the south-eastern boundary of the Site.</p>
Biodiversity	<p>A Phase 1 Habitat Survey was undertaken to determine the types of habitats within the Site and the suitability for protected species. There are a number of ponds within the Site, the survey identified habitats that support great crested newts. The results of the survey were used to develop the ecological enhancement measures and have informed the design of the Proposed Development, the drainage strategy and landscape strategy. Where possible, the Proposed Development has altered to maximise the retention of the ponds and terrestrial habitat. The Proposed Development also includes the creation of new and replacement habitat, providing connectivity through the Site for great crested newts.</p>
Landscape and Visual	<p>The Site is very well visually contained by hedgerows and woodland between 4-13m tall. Taller vegetation is located on the western boundary of the Site. To maximise the natural vegetative screening at the Site, the taller structures of the Proposed Development are to be located on the western side of the Site adjacent to the M40, also because higher sensitivity receptors are concentrated to the east.</p>
Water Resources	<p>Due to the nature of the Proposed Development the measures to re-use and minimise the consumption of water have been adopted within the design. These include:</p> <ul style="list-style-type: none"> ▪ Low flow rate showers; ▪ WC's with 4.5l effective flush volume; ▪ Wash hand basin taps with flow rate of 8 l/s; ▪ Water efficient commercial dishwashing equipment; ▪ Water efficient commercial washing machines; ▪ Adoption of regenerative media filter technology in the Waterpark to considerably reduce the amount of water required for the backwash


Technical Topic	Considerations within the Proposed Development
	<p>process. The estimated annual water consumption reduction through the adoption of this filter technology is 28,800,000 litres per annum;</p> <ul style="list-style-type: none"> ▪ Water sub-meters to water-consuming plant or building areas consuming 10% or more of the building's total water demand, linked to building management system, to facilitate monitoring and raise out-of-limit alarms; and ▪ A leak detection system capable of detecting a major water leak would be installed on the utilities water supplies to detect any major leaks within the building, as well as between the building and the utilities water supplies (i.e. on the underground service pipe from the water meters at the site boundary to the point of entry into the buildings).

Comparison of the Alternatives and Design Evolution

- 3.4.5 Since March 2019, the project team have held seven pre-application consultations with officers at Cherwell District Council. The Proposed Development has been reviewed and refined in response to advice and comments, in addition to iterative and early environmental testing of the Proposed Development.
- 3.4.6 Schedule 4, Paragraph 2 of the EIA Regulations 2017 (**Ref 3.1**) requires that an ES provides an indication of the main reasons for selecting the chosen design for the Proposed Development, including a comparison of the environmental effects. **Table 3-2** below provides a summary of the reasonable alternatives considered and a high-level comparison of the associated environmental effects of each.
- 3.4.7 The sequence of the design evolution for the Proposed Development through the Pre-Application Consultations set out in **Table 3-2** below is reported more fully in the Design and Access Statement, prepared by EPR, submitted with the planning application.

Table 3-2 – Comparison of Alternatives and Design Evolution for the Proposed Development

Alternative	Comparison of the Alternatives with Likely Environmental Effects	
Do nothing scenario: Site remains as per status quo	Continuation of the status quo would not give rise to any new environmental effects.	
Pre-Application Consultation Meeting 1 (28 th March 2019)	<p>Max height of buildings, in relation to the ZTV (Zone of Theoretical Visibility) are based on 23m (1).</p> <p>Massing of hotel and buildings to be altered, to reduce visual impact (2)</p> <p>A drop off zone within the carpark to be included in future design to improve accessibility of guests entering the Proposed Development.</p> <p>Potential for significant effects on views and landscape setting, and on ecology (specifically great crested newts) due to loss of habitat.</p>	

Alternative	Comparison of the Alternatives with Likely Environmental Effects	
<p>Pre-Application Consultation Meeting 2 (15th May 2019)</p>	<p>The Red Line Boundary was extended to include the land at the 10th fairway of the existing Golf course, south-west of the Site. This new land will be landscaped creating a buffer (1) which reduces the visual impact of the scheme to the south.</p> <p>In addition, additional 'stepping stone' ponds are included to provide connectivity for great crested newts between the ponds in the north-western corner to the habitat to the south and east of the Site.</p> <p>Retention of as many trees as possible to soften landscape and reduce loss of arboricultural features. Use of existing landscape in car park to break up the massing. (4).</p> <p>Green roofs to be developed for the Family Entertainment Centre (FEC), to improve views from hotel rooms overlooking the FEC.</p> <p>Scale and massing of the building reduced, maximum heights reduced from 23m AoD to 22m AoD, to make the building more low lying in the landscape.</p> <p>This iteration of the proposals reduces the potential for significant effects on views, townscape and ecology (great crested newts).</p>	 <p>The figure consists of two parts. The top part is a site plan showing a proposed building complex (labeled 'PROPOSED BUILDING') and a parking area. A red dashed line indicates the 'Red Line Boundary'. Numbered callouts (1, 2, 4) point to specific landscaping features: (1) a landscaped buffer zone, (2) a pond, and (4) a 'stepping stone' pond. The bottom part is an elevation drawing showing the building's profile against a landscape background. It labels the 'PROPOSED BUILDING', 'PARKING AREA', 'SERVICE YARD', and 'LANDSCAPE BUFFER'. A red circle with the number '1' highlights the height of the landscape buffer.</p>

Alternative	Comparison of the Alternatives with Likely Environmental Effects	
<p>Pre-Application Consultation Meeting 3 (13th June 2019)</p>	<p>The main building repositioned further away from the M40 (1). This allows for a greater landscape and ecological buffer between the waterpark building and the M40, and improving views of the Proposed Development from the M40.</p> <p>The guestroom massing is changed from straight residential wings to a stepped plan form (2).</p> <p>Facade studies propose a palette of local materials to clad the elevations of the building such as banding of local Cotswold stone and sage green timber board cladding, to be in keeping with the local area (3).</p> <p>Car park layout is redesigned to include additional landscape features and to zone parking areas surrounded by pockets of landscape / trees (4).</p> <p>Secondary service access removed due to concerns regarding road traffic along the A4095 and the loss of vegetation serving as a landscape buffer that would be removed to allow for the secondary access junction.</p> <p>This iteration of the proposals reduces the potential for significant effects on views, ecology and traffic.</p>	

Alternative	Comparison of the Alternatives with Likely Environmental Effects	
<p>Pre-Application Consultation Meeting 4 (3rd July 2019)</p>	<p>Further reductions in scale of the buildings as the guestroom wings of the hotel are partially reduced from four storeys to three storeys (1).</p> <p>The waterpark will take inspiration from rural barns and farm buildings, using green coloured steel or timber panels.</p> <p>This iteration of the proposals reduces the potential for significant effects on views.</p>	

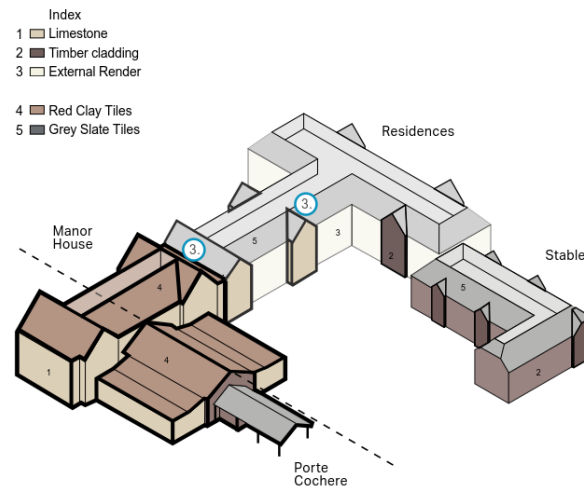
Pre-Application Consultation Meeting
5th September 2019)


Local Bicester elevation studies are conducted with elevational analyses conducted according to visibility. More visible elevations will be treated with higher detail and quality. The findings are incorporated into the design (3).

The FEC shall incorporate areas of green roof to reduce visual impact.

Bulk of guestrooms are visually broken down through the allocation of vertical residences bays, the hierarchy of materials and the varied roofscape (3).

This iteration of the proposals reduces the potential for significant effects on views.



Alternative	Comparison of the Alternatives with Likely Environmental Effects	
<p>Pre-Application Consultation Meeting 6 (9th October 2019)</p>	<p>Detailed façade treatments to the elevations and presented. 3-storey elements are clad in timber, with stone for the 'manor house' front.</p> <p>Windows repositioned and made less regular on the hotel's main elevations, grouping the windows together to break up the rhythm of the façade.</p> <p>The overall mass of the Proposed Development is broken down into three smaller, separate components- the hotel, the Water Park and the lower lying FEC.</p> <p>This resembles the final Proposed Development and therefore the effects are as presented in this ES.</p>	 <p>Windows repositioning on front, north east elevation.</p>

Main Reasons for Selecting Chosen Option

- 3.4.8 The chosen design includes refinements in response to pre-application consultation meetings, and initial transport, landscape and ecological assessment, to improve the final design of the Proposed Development. The Proposed Development incorporates landscape and ecological mitigation areas, to result in biodiversity net gain.

3.5 CONSTRUCTION ALTERNATIVES

- 3.5.1 The exact methods of construction will be determined post determination of the planning application once a contractor has been appointed. The appointed contractor will prepare a method statement and a final Construction Management Plan (CMP).

3.6 SUMMARY

- 3.6.1 During the design and consultation process, alternative building heights, site layouts, massing and landscape features were considered and the final design was selected as this will perform better in terms of views of the Proposed Development and setting within local Oxfordshire environment, ecological mitigation and enhancement and avoidance of traffic impacts on the local road network.

3.7 REFERENCES

- **Ref. 3.1:** HM Government (2017). The Town and Country Planning (Environmental Impact Assessment) Regulations 2017. [Online] Available at: http://www.legislation.gov.uk/ukxi/2017/571/pdfs/ukxi_20170571_en.pdf
- **Ref. 3.2:** Cherwell District Council (2016). Cherwell Local Plan 2011-2031. [Online] Available at: <https://www.cherwell.gov.uk/info/83/local-plans>
- **Ref. 3.3:** Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework. [Online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf