

BikePark Wales Environmental Statement Vol.1

.....

Chapter 5: Assessment of Alternatives

March 2019

Prepared by: The Urbanists, in conjunction with Peter Quinn Landscape Architect, Wildwood Ecology and BikePark Wales.
Address: The Urbanists, The Creative Quarter, 8A Morgan Arcade, Cardiff, CF10 1AF, United Kingdom
Email: liam.hopkins@theurbanists.net
Website: www.theurbanists.net

Issue date	March 2019	
Drawing status	Final	
Revision		
Author	LH/HA	
Checked by	MF	

All plans within this document are reproduced from Ordnance Survey with permission of the controller of Her Majesty's Stationary Office (C) Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution/civil proceedings. Licence No 100054593.

CHAPTER 5

ASSESSMENT OF ALTERNATIVES

TABLE OF CONTENTS	PAGE
5.1 INTRODUCTION	5:1
5.2 STRATEGY CONTEXT	5:1
5.3 DEVELOPMENT AIMS	5:1
5.4 ALTERNATIVE LOCATIONS CONSIDERED	5:2
5.5 DESIGN APPROACH AND EVOLUTION	5:4
5.6 CONCLUSION	5:6

5 ASSESSMENT OF ALTERNATIVES

5.1 Introduction

- 5.1.1 This chapter sets out the alternatives that were examined in terms of the required expansion of BikePark Wales, how these could be physically provided, how this influenced the site options, and how further investigation of the initially preferred site led to the selection of an alternative site.

5.2 Strategy Context

- 5.2.1 Since opening, BikePark Wales has seen a continual increase in visitor numbers from approximately 47,500 tickets sold in 2013/14 to approximately 75,000 tickets sold in 2017/18. Continued growth is expected, but the mountain bike market is also becoming increasingly competitive. To ensure continued growth and prominence in the market place, BikePark Wales has planned and secured funding to implement a major growth plan over the next 4 years that will result in a capital investment of £1.5 million.
- 5.2.2 This investment is imperative to ensure that BikePark Wales can strengthen its offer to existing and new customers and maintain its position as the premier mountain bike destination in the UK. BikePark Wales anticipates that the new facilities that will be delivered will increase visitor numbers to the Park by a further 30% by 2022. This increase in visitor numbers will allow the BikePark Wales business to grow and increase the positive impact that it has on the local economy in terms of job creation and increased overnight visitors to the local area.
- 5.2.3 The development proposed in the planning application marks the first step in improving the customer experience provided at BikePark Wales.

5.3 Development Aims

Examination of alternatives in the Major Growth Plan

- 5.3.1 Having experienced significant increase in visitor numbers, BikePark Wales identified the need for further investment in the Park in order to remain competitive in the a market, thus continuing to be the UK's premier mountain bike destination.
- 5.3.2 The £1.5 million investment seeks to:
- Expand the core trail offering and deliver two green graded trails (beginner) in order to open the Park to the family market;
 - Improve the uplift road so a faster service can be provided to customers;
 - Provide additional facilities, including shower and toilet block, bike hire centre, office building and catering facility;
 - Provide 36 camping pods and 5 chalet's for overnight stay; and
 - Provide a total of 226 new parking spaces (including overflow area), which is critical to address existing parking issues on site.

CHAPTER 5

ASSESSMENT OF ALTERNATIVES

- 5.3.3 Having set out the context, objectives, and required components above, the aim was to examine options / alternatives locations in relation to achieving the aforementioned objectives, and having regard to a set of Critical Success Factors. These are set out below for convenience:

Critical Success Factors

Table 5.1: Critical Success Factors

CSF1: Proximity Proposals must: • From a practical and customer experience perspective, be consistent with the existing on site operations and be in close proximity to the existing BikePark Wales facilities.
CSF2: Customer Expectations Proposals must: • Be representative of what BikePark Wales stands for. • Cater for all customers needs, including those with disabilities.
CSF3: Scale and Design Proposals must: • Be of a reasonable size in order to cater for the increase in visitor numbers, particularly families. • Be finished with materials that are sympathetic to the surrounding woodland environment.
CSF4: Availability Proposals must: • Be located on a site which is readily available to BikePark Wales.
CSF5: Ecological Factors The proposals must: • If possible, be located on a site which is the least ecologically sensitive in order to reduce the impact of the proposals upon species and habitat. • Be supported by an Ecological Assessment Report in order to identify risks and recommend appropriate mitigation measures.
CSF6: Landscape Factors The proposals must: • Be located on a site that reduces the impact of the proposals upon the wider landscape.

5.4 Alternative locations considered

- 5.4.1 Since 2016, discussions regarding the expansion of BikePark Wales have been ongoing between the Park, Natural Resources Wales and Merthyr Tydfil County Borough Council. During these discussions Natural Resources Wales acknowledged the ecological constraints that surround the existing BikePark Wales site, which formed the basis for the site selection process.

CHAPTER 5

ASSESSMENT OF ALTERNATIVES

- 5.4.2 Based on the discussions mentioned above, the following options were considered by BikePark Wales. These figures are included in the Appendices.

Option 1 (land to the north of the existing Park)

- 5.4.3 This site is located to the north of the existing centre. Considerable time and effort was spent in pursuit of this option, however, the site was not commercially available and was also subject to ecological constraints as it is a designated Site of Importance for Nature Conservation. The site therefore failed critical success factor 4.

Option 2 (land to the south of the existing Park)

- 5.4.4 Following the end of discussions regarding site 1, focus turned to site 2. This site is located south of BikePark Wales, with the A470 running directly adjacent to it. However, it is located approximately 600 meters away from the existing facilities. Given that BikePark Wales are looking to expand into the family market, this distance is considered to great (particularly when the gradient is taken into account). Furthermore, it is not considered safe for children to be walking on the main access road into the Park. The site therefore failed critical success factor 1 and 2.

Option 3 (land to the south east of the existing Park)

- 5.4.5 The next site option considered was the combination of part of the current development site, and land to the south east of the existing Park. Initial designs for the development were progressed for this site, which proposed the provision of new parking on the land to the southeast. A preliminary ecological appraisal was undertaken to identify the ecological baseline. The survey found a number of sensitive ecological receptors, including the potential presence of Marsh Fritillary butterfly. Following engagement with the Merthyr Tydfil County Borough Council and Natural Resources Wales, BikePark Wales decided against proposing the development of the site on ecological grounds. The site therefore failed critical success factor 5.

Option 4 (The chosen site)

- 5.4.6 This site is the only remaining option for BikePark Wales, and without its development it will not be possible to deliver the investment that is required to ensure BikePark Wales remains the premier mountain bike destination.
- 5.4.7 However, it is also considered that this site is the most appropriate. The site is located close to the existing centre and can be integrated into it and the existing facilities (critical success factor 1); it is large enough to provide development that can satisfy all users and create a high quality development that is synonymous with the wider design quality provided at the Park (critical success factor 2); it is large enough to accommodate the required development (critical success factor 3); it is readily available as it is owned by Natural Resources Wales (like the wider Park) (critical success factor 4); it can be developed without unacceptable ecological impacts (refer to ecology assessment) (critical success factor 5); and, finally it provides the opportunity to incorporate the required development sensitively and integrate appropriate mitigation to reduce its landscape and visual impact (critical success factor 6).

5.5 Design approach and evolution

- 5.5.1 Throughout the design process, a series of sensitive design choices and amendments have been undertaken to minimise the environmental impact of the proposed scheme. Iterations of the scheme layouts are included in the appendices. Key design features are described below:

Location of development

- 5.5.2 The location of development has sought to minimise the requirement for undeveloped land. The shower block, natural play and picnic area and trail maintenance yard will be located on developed land. Where development requires the use of undeveloped land, the impact on green infrastructure has been minimised. Development has been located to minimise encroachment into areas of mature woodland and the layout has sought to incorporate mature trees within areas of development.

Replacement green infrastructure and enhancement

- 5.5.3 Where tree removal is required (the area of accommodation and overflow parking) appropriate mitigation is proposed through the provision of a large number of tree and shrub planting. This planting will screen views of the development and help to assimilate it into the site landscape. In terms of species types, planting will consist of native species so that they are appropriate to the site character and establish and flourish.
- 5.5.4 As part of the layout large areas of grassland will be retained amongst the proposed accommodation, which will require minimal excavation to establish. To maximise the value of the retained grassland a management and maintenance regime will be implemented to ensure its enhancement. Grassland fungi will be allowed to grow onsite (where existing soil conditions are appropriate and suitable spores are likely already to be present) with management tailored for promotion of fungal growth. Further details are set out in Chapter 6.
- 5.5.5 Woodland (saprophytic) fungi growth will also be promoted by retained deadwood piles within woodland areas, and also within the habitat piles part of the reptile mitigation.
- 5.5.6 All larger trees highlighted as having suitable roost features for bats will be retained and remain unlit. Five bat boxes will be installed within wooded areas on trees that do not already have bat features on them. Dark corridors will be retained across the site at night with no lighting of any tree, vegetated corridor, water feature or bat feature (enhancement or otherwise). Lighting that is present will be low level, low wattage and with no upward spill.
- 5.5.7 Prior to commencement of construction, a reptile mitigation strategy will be implemented. This will result in the translocation of reptiles from the site to a receptor site that will be suitably enhanced. Onsite habitat piles will also be provided on site to cater for reptiles. Creation of these habitat piles will also provide opportunities for bird species.

Topography

- 5.5.8 Where possible the development will be incorporated into the existing site topography with minimal cut and fill. The accommodation, for example, will be incorporated into the existing site topography without re-profiling the site topography.

CHAPTER 5

ASSESSMENT OF ALTERNATIVES

-
- 5.5.9 The ground profile has been designed to minimise the amount of land requiring development. Specifically, the ground levels proposed for the new parking areas have been designed to prevent encroachment into the woodland to the north and east of the development site.

Parking areas

- 5.5.10 The new parking areas and the overflow parking areas have been dispersed throughout the development layout to minimise their visual appearance and impact on the site landscape and replicate the organic parking layout that already exists on the site.
- 5.5.11 Wide topsoil covered subsoil bunds are proposed between each parking area with similar but higher and wider bunds between each bay. Bunds will be planted with shrubs and tree whips reinforced with feathered and standard trees. The perimeter of the parking area will also feature wide topsoil covered subsoil bunds with whip and feathered tree planting. These treatments will provide a green framework to the new parking area that will soften and screen views.
- 5.5.12 The parking areas will consist of dry-bound macadam stone and will not be formally marked (with white lines). This will replicate the natural approach that is currently in operation at the BikePark Wales site, and further reduce their landscape and ecological impact.

Accommodation

- 5.5.13 The accommodation proposed has been designed to respond to the site character. The layout is organic in nature to respond to the site topography, while a variety of accommodation types (with varying forms and finishes) are proposed to provide visual interest. All materials proposed will have natural finishes that replicate the vernacular of the existing centre and which are appropriate to the woodland setting of the site.
- 5.5.14 The accommodation will require minimal excavations to create the necessary foundations. This will minimise ground disturbance and minimise the risk of damage to the roots of adjacent trees.

Drainage and services

- 5.5.15 The surface water drainage system for the site avoids the use of hard infrastructure, and instead relies on a series of swales and soakaways (ditch and below ground cellular) that will blend into the site landscape. To minimise the extent of the development area, swales and soakaways are incorporated into other development components like parking areas, roads and accommodation.
- 5.5.16 The foul water drainage system for the site has sought to use existing infrastructure where possible. The shower and toilet block, for example will connect (via a new foul water sewer) to an existing foul water septic tank. The remainder of the development will be served by new foul water infrastructure consisting of a foul water sewer that connects to a foul water proprietary cesspit tank. As with the surface water strategy, the approach has been to incorporate foul infrastructure into other development components. The surface water sewer serving the shower and toilet block will connect to the existing foul sewer beneath the natural play area, the shepherds huts and toilet pods follow the alignment of a pedestrian access route, while the cesspit will be located below a new parking area.
- 5.5.17 Utilities and services required on the site are aligned and dug to minimal depths that will protect damage to the routes of trees that will be maintained on the site. In respect of lighting fixtures, the

CHAPTER 5

ASSESSMENT OF ALTERNATIVES

design will consist of low lying posts that will be located to light key pedestrian routes only and prevent light spill into the surrounding woodland and prevent skyglow.

5.6 Conclusion

5.6.1 This chapter has provided an overview of the detailed and rigorous process of assessing alternative sites that was undertaken by the applicant prior to the selection of the preferred development site. This examination sets out the Critical Success Factors required by the applicant, which resulted in the consideration of four potential development sites. This rigorous assessment of alternative options has demonstrated that BikePark Wales has considered all of site options available to it, and subsequently selected the most appropriate site for development.

5.6.2 This chapter also provides an explanation for the design approach taken, and demonstrates that minimising environmental impact has been the key design driver, whilst delivering the operational requirements of BikePark Wales.

