

BikePark Wales Environmental Statement
Vol.2: Appendices and Figures
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Chapter 7: Landscape and Visual

March 2019

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

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APPENDICES AND FIGURES:

APPENDICES	TITLE
7.1	Landscape and Visual Impact Assessment
FIGURES	
7.2	Site Context
7.3	Landscape Constraints
7.4	Landscape Strategy
7.5	Proposed Masterplan

Bike Park Wales

Abercanaid, Merthyr Tydfil.

LANDSCAPE STATEMENT

20th December 2018

Revised 12th March 2019



Peter Quinn Associates
Landscape Architects

CONTENTS

Section	Page
1.0 Introduction and assessment methodology	3
2.0 Landscape baseline (including photographs and views)	6
3.0 The proposals	38
4.0 Planning policy relating to the site	51
5.0 Analysis of effects	
5.1 Likely significant effects	55
5.2 Landscape effects	56
5.3 Visual effects	67
6.0 Cumulative effects	89
7.0 Conclusion	98
8.0 Mitigation	99
9.0 Likely residual effects following mitigation	107
Appendices	110
A1 Methodology including flow chart for assessing significance	
A2 Site context plan (including viewpoints)	
A3 Existing site plan (including viewpoints)	
A4 Landscape constraints Plan	
A5 Masterplan	

1.0 Introduction

1.1 General

In November 2018 Peter Quinn Associates Landscape Architects were instructed by Bike Park Wales to carry out a Landscape Statement on the proposed development at Bike Park Wales, Abercanaid, Merthyr Tydfil, CF48 1YZ. The appraisal will form part of an Environmental Impact Assessment (EIA) of the site. The EIA will also include an Ecological Assessment in relation to the proposed development.

The appraisal has been produced with reference to the “*Guidelines for Landscape and Visual Impact Assessment*” 3rd edition by the Landscape Institute and the Institute of Environmental Management and Assessment and with the guidance of Merthyr Tydfil County Borough Council.

Site selection, screening and scoping have already been completed by others and will not be discussed in this document.

1.2 Overview of the site and the development

The site is located on the west flank of the Taff valley above and to the west of the village of Abercanaid and around 3 km to the south of the centre of Merthyr Tydfil.

It currently operates as a café, cycle hire and mountain biking facility following the construction of a visitor centre on the site of an existing car park in 2012 and the forming of mountain biking trails on the slope above.

It is proposed that the area of parking is expanded, a series of camping pods and lodges are constructed and a toilet and shower facility installed.

1.3 The study

1.3.1 General

The purpose of the study is to ascertain the likely significant effects on landscape in and around the site of the proposed development.

An initial baseline study of the site and its context, with reference to the physical and perceived landscape, views and visual amenity was carried out. An assessment of how the development might relate to the existing landscape and views was then made.

This was followed, on the 2nd November 2018, by a field study comprising a thorough investigation of the site and the immediate area, to confirm data collated in the baseline study, to assess views and to make other observations relating to the site and the proposed redevelopment. Locations from where the redevelopment might be visible were identified and visited.

A photographic survey was carried out to record representative views. These are featured in section 2.0.

Information gathered during the desk and field studies was then analysed to determine the likely effect of the proposals on the landscape and its users.

Though evidence-based, the scope and nature of this type of study means that the majority of judgements made in assessments are qualitative rather than quantitative. A process is followed to ensure that, as much as practical, judgements are transparent and comparable. Given that the author is also the creator of the development masterplan, this approach is designed to ensure that a disinterested approach is taken in the assessment of likely effects. In order to allow others to examine these judgements, the methodology is summarised in the narrative and tables in Appendix 1.0.

It is intended that this report is presented in a way that is accessible to all, including those outside the profession. To that end, each individual user group or element of the landscape is considered separately. An assessment of the effects of the proposed development on each of these is collated into a table in order to present information in a form that is easy to reference. A more nuanced narrative description of the assessment follows each table.

1.3.2 Cumulative effects and recent development of Gethin Woodland Park

The main body of this landscape assessment comprises a review of the latest application (including lodges and pods, van parking, overflow parking and play area) and the application (No. P/18/0335) submitted in September 2018 and currently under consideration by Merthyr Tydfil Borough Council: both applications are closely related in terms of location, function and likely effect.

The cumulative effects that may result from the combination of the above, with the previously completed developments granted permission since 2012 (including application Nos. P/12/0235, P/13/0214 and P/16/0055) will be considered separately in section 6.0 Cumulative Effects.

This study will also review the details, implementation and success or otherwise of landscape mitigation and planning conditions of all previous, relevant applications.

1.3.3 Design development

Earlier drafts of this assessment identified primary mitigatory measures designed to prevent or avoid potential adverse landscape and visual effects. These were used to refine the design and construction methods etc to avoid or minimise such effects: the proposals as presented are significantly different from the original concept.

In particular, the area of proposed parking has been markedly reduced since the initial concept and the consequent probable adverse effects on biodiversity and landscape have also thus been reduced in line with these changes.

Adverse effects which could not be mitigated are listed at the end of section 8.0.

1.4 Shrubs and trees

References to the screening effects of shrubs and trees refer to the effects at the time of the visit: trees and shrubs still carried around a third of their maximum leaf load, though this varied widely with species, form and situation.

Where screening of the site is likely to be fundamentally different in the summertime or wintertime, this is specifically mentioned in the text.

1.5 Compass bearings and named features

References to points of the compass are approximate only except where a description of the precise direction is judged to be important.

Details of rights of way, heights, names of features and other general landscape information not available in, or clear from other documents used in this study, was sourced from the 1:25,000 Ordnance Survey Explorer Map 166, “Rhondda & Merthyr Tydfil”.

2.0 Landscape baseline

2.1 General

The proposals (shown on the location plan within the red line) and the proposals contained in application No P/18/0335 (shown within the orange line) together amend and extend the mountain biking facility known as Bike Park Wales (BPW). The following section describes the landscape of the existing visitor centre and car park, together with the area proposed for development.

The BPW visitor centre is located at grid reference SO 050 036 near to the southern end of Merthyr Tydfil immediately to the west of Abercanaid.

The existing facility is set on a northwestern facing slope within an area of woodland and fields leased from Natural Resources Wales. It comprises a main visitor centre building and small ancillary buildings and structures, a terrace, a trail maintenance yard, car parks, access drive and a network of mountain bike trails.

The terrace is located immediately to the east of the visitor centre. Immediately below the terrace is a pump trail (a short, self-contained practice track). The main visitor centre building houses a café, bike hire, office, shop and toilets.

The developed area of the site, excluding trails and the pre-existing access road, covers approximately 1.5ha. It is outlined in pink on the masterplan, is irregular in shape and roughly follows the contours. It is around 290m in length by c.90m across and is arranged along a west north westerly by east south easterly axis.

The proposed area of development in the latest application is shown outlined in red on the Existing Site Plan (appendix 3.0) and extends BPW to the north east into the adjacent area of woodland and scrub. The area proposed for development in application No P/18/0335 is shown outlined in orange.

2.2 Site context and topography

See Existing Site plan (appendix A3).

Bike Park Wales is located on the western slope of the Taff Valley around 110m above the river bed. Above the visitor centre, the land rises steeply towards the summit of Mynydd Gethin at 491m OD c.1km to the south-west.

The main building is immediately to the south-east of Gethin Woodland Park and is set above the car parks at around 258m OD. The two main car parking areas are situated on terraces separated vertically by around 6m. The lowest point of the car parks is c.237m OD.

The boundaries of the existing area of BPW are not clearly defined on the ground. The land beyond the long south western boundary rises steeply and supports a patchwork of scrub and established deciduous woodland. The short, north western boundary is reasonably well-defined by a mature riparian woodland strip (which follows a small stream, Nant Graig). The very short south eastern boundary is within deciduous woodland.

Downhill from the site, beyond the north eastern boundary, is an area of mature deciduous woodland, scrub and rough pasture which gives on to the A470 around 400m from the visitor centre. Beyond the A470 is Abercanaid and an area of large, modern, industrial/commercial, low-rise buildings.

The general area of BPW has previously been used for mining and associated tipping though evidence on the ground is largely obscured by woodland and groundcover.

The area proposed for development comprises the following:

- a proportion of the area adjacent to, and to the east of, the visitor centre where footpaths, a play area and toilet block are proposed.
- an area of trees and shrubs just to the south of the visitor centre where a bike hire building is proposed
- an area of trees and shrubs just to the north of the visitor centre where an office building is proposed
- a rectangular area of scrub east of the existing trail maintenance yard where van and motorhome parking is proposed.
- a triangular area of woodland north east of the existing car parks where camping pods and lodges are proposed.
- a rectangular area of woodland to the south east of the existing car parks where overflow parking is proposed.

The bike hire building and office, proposed in planning application number P/18/0335 (orange line) covers c.0.06ha. The area proposed for development in the latest application (red line) covers approximately 3.56ha of which 0.65ha is within the area already developed (pink line). The balance of 2.91ha is within land not previously developed.

2.3 Pattern and scale of landscape

BPW is set on a hillside supporting a large area of deciduous woodland. This woodland includes a broad range of species and ages with trees growing in mixed species blocks of various sizes at various densities. Tree cover is not continuous and is broken by glades, clear-felling, scrub, and pasture. There is consequently a complex pattern of scales, colours and textures across the hillside which also varies with the seasons.

2.4 Settlements

BPW is situated in a relatively isolated hillside position. It is separated from the nearest built-up areas by woodland, scrub and pasture and by the A470 dual carriageway.

The nearest other buildings are those of the adjacent farm c.130m to the north north west of the main building.

The next nearest buildings, and the nearest large built-up area, is the predominantly residential village of Abercanaid. The nearest point of the village is located around 500m to the north east of the visitor centre c.75m below it. The main part of the village is around 700m away from the visitor centre and is around 100m below it. Beyond Abercanaid, commercial and industrial buildings extend across the relatively level valley floor.

2.5 Access and circulation

The visitor centre can be accessed by vehicle and foot via a drive leading from the roundabout on the A470 dual carriageway to the Gethin Woodland Park. The roundabout is just over 1km from the main building.

For around five hundred metres beyond the roundabout, the drive is sealed with asphalt. Beyond this point it is surfaced in self-binding crushed stone.

BPW and the area proposed for development is set within Access Land (Rights of Way Act 2000). A number of public rights of way (PROW) also cross or skirt the area of BPW and the site.

Bridleway 110/85, which provides access to the summit of Myndd Gethin above the cycle centre, skirts the west and south west edge of the developed area. This connects with **BOAT** (byway open to all traffic) **110/4** which runs beside the stream (Nant Graig). At its lower end, the BOAT eventually connects with the **Taff trail** alongside the River Taff.

Footpath 110/71 runs from a point north east of the visitor centre and continues past Webber's Pond c.550m to the east. An informal track runs from the footpath as it reaches the lowest point in the area of scrub, through the woodland in which camping pods and lodges are proposed, and joins the main access track as it heads south east near the easternmost part of the existing car park.

Bridleway 110/82 follows the line of the main access drive from the roundabout at the A470, and passes below the visitor centre to join with the western, upper end of BOAT 110/4.

The level of use of PROWs by walkers and others not specifically visiting the cycle centre was difficult to assess where the route is shared with mountain bikers as any footprints left in the surface are mostly obscured by cycle tyre tracks. However, the BOAT and the footpath beyond the stretch it shares with the cycle trail appear to be moderately well-used, though only one pair of walkers was seen during the 3-4 hour period of the site visit.

All footpaths, BOATs and bridleways appear to be surfaced in the native substrate except where they share the route of the main access drive or have been resurfaced with crushed stone for the benefit of mountain bikes.

Vehicles visiting BPW approach the centre heading north west along the drive from the roundabout. The drive forks around 300m before the visitor centre. Vehicles follow the upper (south westernmost) fork towards the visitor centre. At the closest point to the main building, below the terrace, the drive rounds a hairpin bend to head south east and follow a route below the incoming route to rejoin it at the fork. Parking is arranged in bays either side of the drive. The system is one way along its entire length and vehicles rejoining the drive towards the roundabout cannot turn back towards the cycle centre without some difficulty.

The farm north north west of the main building is accessed via a track which branches from the main access drive at the hairpin.

A network of mountain bike trails converges on the area of the main building. These are described in the following section.

2.6 Bike trails

The network of mountain bike trails extends across the hillside above the main visitor centre and covers an area of approximately 200ha. The total length of trails is around 45km.

The trails are generally downhill, and the start point, at the summit of Mynydd Gethin (491m) is accessed by minibus and trailer from a pick-up point around 500m along the access drive from the main building.

Trails are formed from the native substrate and then, along around half of their length, surfaced in crushed stone. Trails are compacted using a relatively light vibrating plate.

Bare ground is apparent alongside newly formed or recently maintained trails where ground has been disturbed. Such areas appear to colonise with herbaceous and woody ruderals within a few years to form a well-vegetated edge.

With the exception of those very close to the main building and car park, the majority of trails are not visible to users of the area around the main building and are not considered in this Landscape Statement except where they are described in planning conditions or run through the area proposed for development.

2.7 Character and setting

The character of the cycle centre is predominantly rural and dominated by trees. Views are in the main restricted by trees and it is not possible to see clearly from one side of the developed area to the other. It is possible however to see several areas of parking from most points within the developed area, especially in winter.

Views are more open in the scrub-covered part of the proposed development area. Views within the wooded areas are more restricted.

The built-up areas of the valley below are generally not apparent in views except from views at the upper, western end of the scrub area and the northern part of the terrace and adjacent areas. Elsewhere, long views are almost entirely restricted to the middle and upper parts of the west-facing slopes of the Taff valley opposite, which reinforces the impression of a rural setting.

The buildings, being finished in grey slate, timber and muted colours, are in keeping with their setting. However, the associated terrace, parked vehicles and trail maintenance yard all detract from the site's character.

The terrace is surfaced in part in grey concrete flags and in part in coarse crushed stone. Though muted in tone, both surfaces are more urban in character than their setting. In certain areas of the car park, the banks and verges are worn and damaged by vehicles and short cutting by bicycles and pedestrians. The trail maintenance yard is only partially screened by landform and presents a generally untidy scene.

The character of the site is described in greater detail in the LANDMAP and other subsequent sections.

2.8 Parking

Parking is arranged in bays along the access drives to the south east of the main building. Individual spaces are unmarked and vary in size. Parking is generally unsupervised and tends not to be arranged formally. It is thus not possible to accurately count existing parking spaces, but it is in theory possible to park around 185 well-arranged cars. Visiting vehicles' sizes vary greatly however with a large proportion of visitors arriving in vans. In reality therefore, the maximum number of vehicles that can be parked is much lower.

Parking is in general divided into discrete parcels separated by vegetated belts, bunds and strips which provide a range of screening effects. The topography contributes to the screening and the overall effect from any particular viewpoint is of a quantity of parking less extensive than the actual total.

2.9 Surface drainage

The area used by BPW is drained by a series of streams. The main channel, Nant Graig, runs south west to north east close and parallel to the north western boundary and on to the River Taff. A series of smaller channels run across the developed area and the area proposed for development parallel to Nant Graig and on towards the Taff.

Webber's Pond is located adjacent to the A470 around 550m to the east of the main building. None of the streams flowing through the area used by BPW for parking flow into Webber's pond although the access road crosses a number of small streams which probably do.

The area of scrub proposed for development, and rough pasture elsewhere around the bike centre, are generally wet or damp throughout the year and waterlogged during much of the winter.

Access drives feature no specific drainage structures along much of their length. Where drainage structures are evident they comprise ditches at the side of the drive which appear to feed into the site streams. Parking areas do not appear to be drained towards dedicated drainage structures except where they slope towards the drive and the associated ditches.

Bike tracks in the vicinity of the visitor centre do not appear to have dedicated drainage systems.

2.10 Development of BPW and planning conditions

2.10.1 General

Until 2012 the area used by BPW featured a smaller car park set in pasture and mixed woodland. The main building, the extensions to the car park and the network of bike trails have been constructed since 2012.

2.10.2 Planning Application P/12/0235

Permission for development was granted on the 18th October 2012 to construct the visitor centre, 17 forest bike trails, campsite (including 5 timber camping pods) with shower block and associated car parking and landscaping works.

A number of conditions were attached to this permission, three of which were directly relevant to the landscape of the site at present. They are as follows:

Condition 7 required the submission and approval of a revised landscape scheme showing existing trees and hedges with details of which were to be retained and showing measures for their protection. It also required that a 5 year schedule of maintenance was provided.

Condition 8 required that the submitted landscape scheme be carried out in the first planting season following occupation of the visitor centre and that any losses within 5 years were replaced.

Condition 9 required that a Habitat Management Plan be submitted with details of mitigation and compensation to be implemented on site in line with the recommendations of the Extended Phase 1 Habitat Survey dated July 2012. Of specific relevance to current landscape were recommendations to:

- Use as few lighting columns as possible and use low level bollards instead where possible. Lighting should completely avoid the two category 1 oak trees.
- A ground level survey of trees earmarked for removal.
- Log piles to be installed throughout using wood from felled trees and supported by stakes and secured by wire to prevent removal or dismantling.
- A total of 12 nest boxes to be erected.

The above conditions do not appear to have been satisfied except that:

- lighting is low-key and largely confined to building-mounted down-lights
- there has been a limited amount of tree and shrub planting
- there are a small number of nestboxes on trees in woodland

2.10.3 Planning Application P/13/0214

Permission for development was granted on the 5th August 2013 for the erection of a single storey extension (plant room) to the main visitor centre.

There were no conditions attached to this permission.

2.10.4 Planning Application P/15/0385

Permission for development was granted on the 28th April 2016 for the construction of 23 additional mountain bike trails.

A number of conditions were attached to this permission, one of which was relevant to the landscape of the site at present as follows:

Condition 2 required that the development should be carried out in accordance with the Ecological Assessment report prepared by Hawkeswood Ecology dated March 2016.

The report was unavailable at the time of this study.

2.10.5 Planning Application P/16/0055

Permission for development was granted on the 7th April 2016 for the retention of revised car parking layout, including the provision of additional parking spaces and the erection of two wood clad huts.

No conditions relevant to landscape were attached.

2.10.6 Planning Application P/17/0367

Permission for development was granted on the 1st February 2018 to construct a new access track and to widen existing forest roads to be used as part of the uplift route.

A number of conditions were attached to this permission, one of which was relevant to the landscape of the site at present as follows:

Condition 3 required that an Environmental Management Plan be submitted with details of drainage and its maintenance and measure to reduce silting and prevent pollution.

The plan was unavailable at the time of this study.

2.11 Natural landscape and designations

2.11.1 General description of vegetation

The area of BPW and the area proposed for development feature the following vegetation types:

- scrub
- mature deciduous woodland with areas of new growth
- young deciduous woodland with mature specimen trees
- mixed deciduous woodland interspersed by parking and other developments

These are labelled on the Landscape Constraints plan and are described in detail in the Ecological Assessment that makes up part of this EIA. Significant trees and groups of trees are also described in detail in RTAC's tree survey report of December 2018.

The vegetation types are described briefly and in landscape terms below:

Scrub

The woody and herbaceous plants in the scrub area have developed since 2012 when BPW was established and the pressure from grazing and an area of larch was removed. The area is surrounded on three sides by woodland and there are many young self-sown saplings. There also appears to have been a limited amount of planting of trees. It is likely that, left to its own devices, the area would become woodland within a short period of time.

Mature deciduous woodland with areas of new growth

The woodland comprises mature trees with saplings. Part of the bike trail named Badger's Run runs within the woodland and compaction of roots beneath the trail appears to have caused damage to a number of trees.

Young deciduous woodland with mature specimens trees

This belt of woodland is contiguous with the area described above but is different in nature: the proportion of young trees is significantly greater. A number of mature trees within this area appear to be suffering as a result of works to parking bays and the drive especially where fill has been piled beneath canopies.

Mixed deciduous woodland interspersed by parking and other developments

Banks and strips of ground between parking areas support trees of various species and of various ages. A number of the trees appear to be suffering from damage and/or compaction of roots.

2.11.2 Threats to vegetation independent of site development

The site supports a number of ash trees. It is likely that the majority of these trees will die in the next few decades primarily as a result of ash dieback (*Hymenoscyphus fraxineus*) and possibly as a result of emerald ash borer (*Agilus planipennis*). The death of these trees may have an effect on the proposals and the landscape.

2.11.3 Designations relevant to landscape

The following designations relevant to landscape cover all or part of BPW or the area proposed for development or are close to them:

- The entire site is shown on the Local development Plan Proposals Map within an area designated as TPO & Ancient/Ancient Semi-natural Woodland (Policy BW5)
- The entire area encompassing BPW is shown on the Local Development Plan Proposals Map within the Merthyr Tydfil Landscape of Historic Interest.
- Webber's Pond Nature Reserve is located beside the A470 c.550m east of and around 55m below the visitor centre.
- The site straddles two areas designated as Sites of Importance for Nature Conservation (SINC) and is next to another:

Abercanaid Fields SINC 20

Series of fields laying either side of the A470 containing mainly species-rich semi-improved grasslands and marshy grasslands. Also some small areas of semi-natural oak/birch woodland, scattered scrub and trees. Site also includes Webber's pond, a private nature reserve with well-developed marginal emergent vegetation, a section of the Glamorganshire Canal and an adjacent disused railway embankment which supports unimproved and semi-improved acid grassland, bracken slopes and trees.

Featuring woodland, scrub communities, neutral grasslands, acid grasslands, marshy grasslands, ffridd communities, heathlands and grass-heath communities, watercourses, standing open water, mineral spoil tips and other post industrial land & mosaic habitats and common land.

Craig Gethin SINC 30

Wooded ffridd slopes, supporting extensive ancient semi-natural woodland and bracken slopes with large trees, together with some scree areas supporting lichen heath. The bracken slopes support abundant bluebell. Also includes an area of wet heathland which extends along a ride within a conifer plantation and supports plant species of interest. The site supports a good range of breeding bird species and brown hare has also been recorded.

Featuring woodland, neutral grasslands, acid grasslands, ffridd communities, heathlands and grass-heath communities, watercourses, mosaic habitats and common land, rock exposures, other features.

Rhydycar West SINC 36

Very extensive mosaic of ffridd enclosures supporting complex of semi-upland and lowland habitats, partly contained within conifer plantation. Main components are ancient semi-natural woodland fragments, other semi-natural woodlands, wet heathland, dry heathland, marshy grassland and semi-improved neutral grasslands. Also there are some bracken slopes, scrub, small ponds, streams and sections of dismantled railway. There are areas of semi-improved acid grasslands to the south especially. The habitats intergrade to form a complex mosaic, and may therefore also include some small areas of improved or low diversity semi-improved grassland, but any such areas are a very minor component. Great crested newt occurs in small pools; noctule and pipistrelle bats have both been recorded. Nationally rare and scarce invertebrates are varied & common throughout the area. Habitats not specifically listed

The Ecological Assessment that makes up part of this EIA describes the SINC's and their locations in greater detail. It also describes the ecology of the site and the area around BPW in greater detail.

2.12 Existing landscape character

2.12.1 LANDMAP general

The LANDMAP database stores information for all of Wales on landscape features and qualities that contribute to character. The information is arranged in five broad areas: geology, habitat, history culture, and visual & sensory.

The following information from LANDMAP is relevant to the site and the proposed development:

2.12.2 Geological landscape

The site straddles two Geological Aspect Areas.

The larger, north eastern part is covered by the Gellideg aspect area (MRTHRGL007) and is classified as *Mountain and upland valley/Glaciated mountain terrain/Glacial mountain valley (Level 3)*.

It is described as having a geographical and topographical character as follows:

Shallow western slope above Afon Taf with two minor tributary valleys, dissected into gently S-dipping mudstone-dominated succession of Namurian Middle Shale - Productive Coal formations...Bounded to E by NNW-SSE Merthyr/Church Fault... Widespread cover of boulder clay on slopes...Extensive made ground after coal and iron mining - closed coal mines, waste tips, old iron workings...

It is evaluated as having **high** value and contains a number of RIGS (Regionally Important Geological Site). It is recommended that the RIGS are conserved as existing.

Tolerance to change: *there are significant threats to the integrity and condition of Earth Heritage features in the area.*

The smaller, south western part of the site is within the Aberfan aspect area (MRTHRGL005) and is classified as *Mountain and upland valley/Glaciated mountain terrain/Glacial mountain valley (Level 3)*.

It is described as having a geographical and topographical character as follows:

Steep western slopes of U-shaped fault controlled Afon Taf valley, dissecting high-level sandstone plateau of gently S-dipping South Wales Pennant Formation. Eroded cirque above Upper Abercanad. Patchy cover of boulder clay and head on slopes. Major deep rotational landslide with rock face above Tarren y Gigfan. Disused quarries, coal mines and made ground.

It is evaluated as having **high** value and recommended to be conserved as existing.

Tolerance to change: *not known*

2.12.3 Landscape habitat

The site is within the MRTHRLH011 aspect area code and is classified as *Dry (Relatively) Terrestrial Habitats/Grassland & Marsh/Acid Grassland (Level 3)*.

The area is described as having *podzolic, brown and surface-water gley* soils with the following Phase 1 habitats:

Semi-natural Broadleaved Woodland
Semi-improved Acid Grassland
Improved Grassland
Bracken
Dry Acid Heath

It does not contain habitats of international importance but has the following Biodiversity Action Plan (BAP) habitats:

Ancient and/or Species Rich Hedgerows
Lowland Heathland
Purple Moor Grass & Rush Pastures

It also contains SSSIs and Local Wildlife sites. The nearest of these is Webber's Pond Nature Reserve located beyond the BPW/proposed development site.

LANDMAP evaluates the area as having **moderate** value and recommends conserving the *diversity of vegetation and heritage features* and suggests a principal management recommendation to *Retain diversity of mosaic through limited reclamation and vegetation management, conserving and enhancing semi-natural habitats and extending heathland areas*.

The aspect area is evaluated as having moderate significance, low connectivity/cohesion and moderate sensitivity (*threat from development*).

2.12.4 Historic Landscape

The site is within the Mid Taff Enclosed Valley Side aspect area (MRTHRLH024) and is classified as *Built Environment/Industrial/Extractive (Level 3)*.

It is described thus: *This area is characterised as a valleyside mineral field associated with coal extraction, for both industrial (iron works), steam coal, and domestic production during the 19th century, in particular the Cefn-glas, Graig, Gethin and Castle Collieries, the former opened before 1860, the latter in 1869. The area is co-terminous with the former extent of post-medieval agricultural enclosure, though during the 20th century has seen extensive afforestation. Features characteristic of the adjacent unenclosed area HL011 are characteristic of the area, indicating the former extent of the unenclosed landscape. The area retains characteristic prehistoric funerary and ritual sites, Bronze Age cairns, while post-medieval agricultural features associated with livestock farming (eg sheep folds) are found throughout. In the medieval and early post-medieval period, the area was enclosed (probably for use as winter pasture); there are also sheepfolds relating to the use of the adjacent upland common (HL011) as summer pasture. As well as the main colliery sites, minor industrial features are also characteristic of the area, and include a number of quarries, airshafts, coal shafts, levels and coal tips. Major landscape changes have resulted from the planting of areas of forestry, and most recently from the construction of the A470(T) road which has effectively separated the enclosed slopes from the valley bottom and transport corridor (HL012) to the east.*

The following features are also described as being important to the historical pattern of the area:

- Irregular Fieldsapes*
- Regular Fieldsapes*
- Woodland*
- Non-nucleated Settlement*
- Extractive*
- Communications*

Significant archaeological interest in the area is provided by:

- Relict-Earthworks*
- Relict-Stone Monuments*
- Buildings & Structures*
- Industrial Archaeology*
- Associations*

The area is described thus: *Substantial remains survive of levels, shafts and various communication features and structures associated with mid 19th century 'steam coal' mining activity and the sites of the Cefn-glas, Graig, Gethin and Castle Collieries; however these remains are heavily obscured by extensive modern forestry plantations.*

LANDMAP shows a disused shaft immediately to the north of Nant Graig, a disused tip adjacent to the access drive and a disused level up-slope from the visitor centre.

The following traditional boundary types are described as prevailing in the area:

- Hedgerow*
- Hedgerow With Trees*
- Dry Stone Walls*
- Stone Rubble Bank*
- Cloddiau Variants/Stone & Earth Banks*

LANDMAP evaluates the area as having **high** value and expands upon this as follows: *The high value assigned to this area reflects the reasonably intact condition of the upland pastoral fieldscape and the presence of substantial extant remains of mid 19th century extractive activity specifically associated with the 'steam coal' industry, now obscured by extensive late 20th century forestry plantations which have detracted from the coherence of this landscape.*

Management recommendations have not been assessed.

2.12.5 Cultural landscape

The site is within the Mynydd Merthyr aspect area (MRTHRCL019) code and is classified as *Influences/Material expressions/Rural (Level 3)*.

The area is described as having the following significant influences on the cultural landscape:

*Agricultural
Forestry
Rural Settlement
Communications & Transport*

It is described as follows: *Prominent landscape features in largely agricultural area adj... Communications routes, industrial development.*

LANDMAP evaluates the area as being commonplace but having **moderate** value and recommends continuing *as now with no major physical development* and limiting forestry expansion.

Tolerance to change: *not known*

Significant threats: *not known*

2.12.6 Visual & sensory landscape

The site is within the Merthyr West Flank aspect area (MRTHRVS917) and is classified as *Upland/Upland Valleys/Open/Wooded Mosaic Upland Valleys (Level 3)*.

The area is described as having *attractive* and both *sheltered and exposed* sensory qualities. Sense of place and local distinctiveness is described as *moderate (long views over patchwork of relic industrial/agriculture above town)*.

The area is large and varied and the descriptions in the database are not all relevant to the site. However the most pertinent descriptions include:

*The area has a distinctive sense of place
It is somewhat akin to a massive area of urban fringe in that the influence of the town is evident throughout yet it is still distinctly rural in overall character
There are areas of woodland and substantial natural regeneration, which look like natural habitats from a distance
Further south the balance is in favour of the remnant field pattern and small blocks of woodland
The naturally regenerated habitat mosaics are a particular feature of the Merthyr landscape and compare favourably visually with some of the sterile reclamation projects designed purely for industrial development or grazing*

LANDMAP evaluates the area as having **moderate** value, scenic quality and rarity and low integrity and high character. It recommends retaining *diversity of mosaic through limited reclamation and vegetation management* and extending *woodland framework while retaining mosaic character* whilst limiting expansion of development.

Tolerance to change: *not recorded.*

2.13 Visual landscape

2.13.1 General

The area within which BPW is set and the area proposed for development is fairly well described by the excerpts presented above. In order to assess the potential effect of the proposed development, a more detailed description of the existing visual environment is presented in the following sections with photographs.

Views of BPW were assessed by observing which areas were visible *from* BPW. These areas were then visited and representative photographs taken. All views were considered with the naked eye and described at the time of the study. Deciduous trees and shrubs had around one third of their leaves at the time of the survey.

Representative viewpoints were used to represent the experience of different types of visual receptor likely to experience similar effects. Viewpoints were chosen where the view of BPW and the site was clearest in any particular area. Photographs taken in the direction of the site generally place it in the approximate centre of the frame unless otherwise stated. Distances are approximate only.

All photographs in this section were taken from a standing position on the ground between the hours of 10.30 and 3.00pm on 2nd November 2018 using a hand-held Nikon F55 set at 50mm (producing a horizontal field of view of c.45°). All photographs are presented at the same size without cropping. In order to illustrate the actual view of the site and its context, photographs have not been annotated but are described in detail.

The approximate positions from which photographs were taken are shown on the Site Context Plan and Existing Site Plan in the Appendices. Heights above OD are given for each viewpoint.

Conditions on the day were dry with minimal cloud cover and excellent visibility.

Unless otherwise stated, names, labels and other descriptions referred to in the text, and not shown on the *Photograph Locations* plans, can be found on the 1:25,000 Ordnance Survey Explorer Map 166, "Rhondda & Merthyr Tydfil"

2.13.2 Summary of of views

Within BPW and the site

Views within the site tend to be framed and/or screened by landform and vegetation. They tend to be restricted in extent being increasingly screened with distance.

From BPW and the site

Views to the south east, south, south west, west and north west are almost completely screened by woodland and landform. Views to the north, north-east and east are restricted to the following areas:

- middle-distance (c.750m) partial views of the commercial and industrial areas beyond Abercanaid
- longer distance views of Merthyr Tydfil (c.1.5km) almost completely screened by vegetation
- long distance (c.1.5km+) clear but restricted views to Pentrebach and slopes above on the north-eastern flank of the Taff valley.

Into BPW and the site

- Views from the commercial and industrial areas beyond Abercanaid are just possible but the site is barely perceptible.
- Views from Merthyr Tydfil are not possible
- Views from Pentrebach are clear but distant and restricted by buildings and vegetation
- Views from the slopes above Pentrebach are clear but distant.

The following section presents representative photographs that show views within, from and towards BPW and describe each view in detail.

Photograph 1



Photograph 1 was taken from the main access drive around 115m from the main entrance to the visitor centre looking north west. Height c.253 OD.

The foreground shows the access drive with bridge walls either side. The drive is one-way (heading into the picture) and is used by every visitor arriving by car and presents the first view of the visitor centre. A large proportion of visitors also approach the visitor centre by foot and by bike from this direction after parking elsewhere or in returning from rides.

The main visitor centre building is visible slightly left of and above the centre of the frame just beyond the black van. The view of the building becomes increasingly clear as it is approached and the effect of framing by roadside vegetation decreases.

Parked vehicles detract from views of the main visitor centre and beyond.

Views above this point (left and centre of frame) are restricted by vegetation and landform. Views to the car park areas below (east of) this point are partly screened by vegetation.

Views east beyond the site are generally restricted by vegetation from this point.

Photograph 2

Photograph 2 was taken from the bridleway adjacent to the main visitor centre looking east. Height c.254 OD.

In the foreground, at the right of the frame, is the tree at the northern end of the pump trail.

The wooden fence at the left of the frame surrounds a settling pond (reed bed).

The blue shipping container is the same as that featured in photographs 5 and 6. Beyond and below the blue container is the trail maintenance yard. The structures visible just to the left of the blue container are storage units associated with trail maintenance. The parked vehicles, containers and the fence around the pond, and the high voltage wires in the distance, detract from what is otherwise a very agreeable view.

In the distance, just above and to the left of the blue container, the upper parts of Pentrebach are clearly visible. The dark ground above Pentrebach is a slag heap which forms part of Merthyr Common (see photograph 17). The common extends to the ridge and beyond the horizon. The highest point on the ridge visible in the view is Mynydd Cilfach-yr-encil.

This section of the bridleway is heavily used by visitors to BPW on bikes and on foot.

Photograph 3

Photograph 3 was taken from the eastern corner of the settling pond (reed bed) looking east. Height c.248 OD.

In the foreground is the area of scrub and grass proposed for development as van and motorhome parking through which footpath 110/71 winds. Part of the bike track which connects with the footpath can just be seen in the right of the frame just below the centre line.

A number of trees covered by the tree survey (T1540, 1541, 1542 and T1546) are visible on the right of the frame. These form the northern edge of the area of woodland proposed for development. The trees on the left of the frame are part of the riparian woodland along Nant Craig.

In the distance, just above the centre of the frame, the upper parts of Pentrebach are clearly visible. The dark ground above Pentrebach is a slag heap which forms part of Merthyr Common. The common extends to the ridge and beyond the horizon. The highest point on the ridge visible in the view is Mynydd Cilfach-yr-encil.

The high voltage wires in the distance detract from what is otherwise a very agreeable view

The area from which the photograph was taken is little visited except by trail maintenance crew. Mountain bikers and the occasional walker use the bike track/footpath through the scrub area.

Photograph 4

Photograph 4 was taken from BOAT 110/4 looking south west towards the visitor centre. Height c.243 OD.

The visitor centre is visible in the centre of the frame but is partly screened by riparian trees and shrubs. In the summer the building is almost completely screened. In winter it is fairly clear.

Further downstream, views of the scrub area are limited by the high bank above the stream. The eye level of a user of the BOAT is below the top of the bank for almost the entire length of the BOAT adjacent to the scrub area.

Litter and other tipping down the banks and into the stream detract from what is otherwise a characterful and charming right of way.

Judging by wear of the surface, this section of the BOAT appears to be lightly used.

Photograph 5



Photograph 5 was taken at the junction between BOAT 110/4 and the farm access track looking south. Height c.248 OD.

The timber office building, under construction at the time of the visit, is clearly visible and dominates views towards the visitor centre and beyond.

The gate at the left of the frame marks the approximate boundary between BPW and the adjacent private farm.

The blue shipping container is the same as that featured in photographs 2 and 6. The track leading to the container is the farm access track.

Judging by wear of the surface, this section of the BOAT appears to be lightly used. The access track to the farm is used approximately daily.

Photograph 6



Photograph 6 was taken at the junction between bridleway 110/85 and the farm access track looking south east. Height c.252 OD.

The blue shipping container is the same as that featured in photographs 2 and 5. The tree at the far right of the frame is that described in photograph 2 at the northern end of the pump track.

The main access drive approaches from the roundabout on the A470 from the right of the frame, turns at the hairpin (immediately to the right of the black van) and heads back south east towards the roundabout along the drive visible just above the centre of the image.

The line of cars and vans at the left of the frame sit above the trail maintenance yard and are parked on the area proposed for redevelopment as a picnic area. The tall group of trees beyond the black van include trees T1530-1534.

The prominent vehicles and container detract from near views of what is otherwise an agreeable scene. They detract markedly from very agreeable longer views onto the opposite side of the Taff valley.

This section of the bridleway is heavily used by visitors to BPW on bikes and on foot.

Photograph 7



Photograph 7 was taken from bridleway 110/85 above and west of the visitor centre looking east. Height c.263 OD.

Views of the visitor centre from south of this point (right of frame) are increasingly well-screened by vegetation until the area of photograph 8 where shrubs and trees give way to more open scrub and herbaceous vegetation.

Very agreeable views above the visitor centre across the Taff valley are restricted by vegetation but clear (though light conditions prevent this from being apparent in the photograph). The roof of the visitor centre detracts from these views but is less disruptive than the ancillary structures and activities to the rear of the visitor centre (between the building and the viewpoint). Partial screening of this area is provided by herbaceous and woody vegetation in the foreground.

The area to the right of the green container just above the frame's centre is proposed for the construction of the bike hire centre.

Observation on the day of study suggests that the bridleway is very well used by mountain bikers. Other users, ie walkers and horse riders, were not observed but are reported as using the bridleway on occasion.

Photograph 8

Photograph 8 was taken from the bridleway above & southeast of the visitor centre looking north. Height c.273 OD.

The office, visitor centre and its terrace and flags is visible in the upper left quadrant of the view. No vehicles are visible around the main building and terrace which gives it the appearance of being well integrated into its woodland setting. Parked vehicles are just visible to the right of the terrace.

Despite a large part of the car park potentially being visible, very few vehicles can be seen to detract from what is a very agreeable view. It is likely that on busier days the adverse effect of vehicles on the view would be greater though not by a significant amount. The view across the Taff valley is restricted by topography but clear (though light conditions prevent this from being apparent in the photograph).

A short section of one of the bike trails is visible to the right of the centre of the frame.

It is not possible to see the area proposed for the construction of the bike hire centre. The area proposed for the outdoor catering facility appears to be partially visible.

Observation on the day of study suggests that the bridleway is very well used by mountain bikers. Other users, ie walkers and horse riders, were not observed but are reported as using the bridleway on occasion.

Photograph 9

Photograph 9 was taken from the lower limb of the main access drive around 75m east of the visitor centre looking north east. Height c.249 OD.

The trailer in the foreground is that just visible beyond the black van in photograph 6.

The trees in the foreground, left of frame, are T1535, 1536 and 1536A. They are proposed for removal to create an access road to the scrub area proposed for parking, and visible beyond. The trees behind the above group are the riparian trees along Nant Graig.

The trees on the right of the frame are part of the woodland in which camping pods are proposed.

Very agreeable distant views are possible across the Taff valley but are restricted and partially screened by vegetation.

This section of the drive is very heavily used by vehicles and users on bikes and on foot.

Photograph 10

Photograph 10 was taken from the bike trail/footpath 110/71 looking west towards the visitor centre. Height c.232 OD.

The main building and office are just visible behind and either side of the van and tractor just above the centre of the frame. The foreground comprises the scrub area proposed for development as a car park. The trees on the right of the frame are part of the riparian woodland along Nant Graig.

The footpath is visible on the right and is clearly well used by bikes. The level of use by walkers could not be discerned as confidently but footprints were visible and a pair of walkers did use it on the day of the study.

The general appearance of the area is very rural and in part, wild. The vehicles described above detract slightly from what is otherwise an agreeable scene.

Photograph 11

Photograph 11 was taken from the existing track through the woodland in which pods and lodges are proposed looking north east. Height c.233 OD.

The large tree at the right of frame is T1546.

The general appearance of the area is very rural with no detracting elements in the foreground or middle ground. It is possible to make out part of Merthyr Tydfil through the trees above the middle of the frame though this does not detract much from the scene. This view is likely to be screened fully by trees in summer and quite clear in winter.

The track appears to be well used by bikes. The level of use by walkers could not be discerned as confidently though footprints were visible and a pair of walkers did use it on the day of the study.

Photograph 12

Photograph 12 was taken from the existing track through the woodland in which pods and lodges are proposed, looking south west. Height c.233 OD.

The branches of the large tree at the top left corner of the frame belong to T1549.

The general appearance of the area is very rural with no detracting elements in the foreground. In the middle distance, it is possible to make out parked vehicles on a bank through the trees just left of the middle of the frame, though this does not detract much from the scene. This view is likely to be screened fully by trees in summer and fairly clear in winter.

The track appears to be well used by bikes. The level of use by walkers could not be discerned as confidently though footprints were visible and a pair of walkers did use it on the day of the study.

Photograph 13

Photograph 13 was taken from the field below the area of woodland proposed for overflow parking looking north. Height c.232 OD.

The field in the foreground is beyond the developed area of BPW and beyond the area proposed for development. The trees on the left edge of the frame however grow along the north eastern edge of the woodland proposed for development as overflow parking. The trees across the centre of the frame form the south eastern edge of the woodland in which it is proposed to construct lodges.

The scene is very rural with only high voltage electrical wires visible on the right side of the frame forming any detractive element. The field is used for rough pasture.

The fence forming the boundary between field and woodland is just visible and marks the edge of an area of russet coloured ground cover within the woodland.

Photograph 14

Photograph 14 was taken looking east from the main access drive looking into the woodland where overflow parking is proposed. Height c.236 OD.

The trees visible across the foreground form the band of woodland between the drive and the adjacent field prominent in photograph 13. The trees are likely to form a dense screen in summer but are likely to offer an ineffective screen in winter.

The ridge of Mynydd Cilfach-yr-encil is visible forming the horizon beyond the trees.

The drive at this point is not frequently used by customers of BPW on foot but is very well used by vehicles and to a lesser extent by mountain bikers returning to cars.

Photograph 15

Photograph 15 was taken from Dyffryn Road, the main road through Pentrebach, outside Greenfield school looking west south west. Height c.147 OD.

Vehicles parked at BPW are just about visible in the centre of the frame just above the gap between the two pitched roofs. The view is glimpsed between trees, buildings and other elements in Pentrebach. The view is in many respects typical of views from dwellings and other properties in the village. No residential properties were visited as part of this study and views from them were inferred from views from publicly accessible areas such as this.

There are many detractive elements in this and similar views, and the hillside and woodland within which BPW is set form a backdrop to these elements rather than the focus of views.

The road is well used by residents walking along the pavement, and local and through traffic.

Photograph 16

Photograph 16 was taken from the footpath north east of and above Pentrebach looking west. Height c.169 OD.

The houses in the foreground mark the north eastern and highest boundary of the village. The A4060, the road which links the Heads of the Valley Road (A465) with the A470 along the eastern side of Merthyr Tydfil crosses the River Taff on the bridge visible at the left of the frame.

The village of Abercanaid is visible as a line of houses separated by trees above the roofs of the houses of Pentrebach.

Vehicles parked at BPW, at a distance of c.1750m, are just visible in woodland to the right of the centre of the frame. The scrub area proposed for car parking can also just be made out though it is partly screened along its southern edge by the adjacent woodland.

The houses detract from what would otherwise be a very agreeable and panoramic view. The vehicles at BPW can be seen in what is an otherwise wooded hillside but they are far from prominent and are unlikely to be noticed by many users of the footpath.

The footpath is part of the Trevithick Trail, a 15km footpath commemorating the first journey in 1804 by a steam locomotive to pull a load on rails. It is well used by local and other walkers.

Photograph 17



Photograph 17 was taken from the top of the slag heap described in photograph 2 looking west. Height c.286 OD.

The houses in the middle ground mark the north eastern and highest boundary of the village of Pentrebach. The A4060, the road which links the A465 with the A470 along the eastern side of Merthyr Tydfil crosses the River Taff on the bridge visible at the left of the frame.

The village of Abercanaid is visible as a group of houses between Pentrebach and the hillside opposite. Vehicles parked at BPW, at a distance of c.2175m, are just visible in woodland just above the apparent centre of Abercanaid. The entire area of scrub proposed for car parking can also just be made out.

The residential, commercial and industrial areas in the valley detract from what would otherwise be a very agreeable panorama. The vehicles at BPW can be seen in what is an otherwise wooded hillside but they are far from prominent and are unlikely to be noticed by the majority of users of Merthyr Common. It should be noted however, that though the summit of the slag heap is a difficult climb, it is obviously well used by walkers and motorbikers. Most walkers, having made the effort to climb up, are likely to pause and admire the view from this location in more detail than users of the footpaths in the locality.

Views from further up the slope between here and the ridge are similar except that the built up areas make up a greater proportion of the view and are more prominent within those views.

3.0 The Proposals

3.1 General

The following description is based primarily on Peter Quinn Associates' Masterplan drawing (No 18/461/01 Rev D) of November 2018. All references to the masterplan refer to this document. It also refers to drawings and other information produced by Peter Quinn Associates, ARM Ltd, Le Trucco Design, Bingham Hall, Holloway Partnership, Trio Building Contractors and others. Drawing numbers and other documents are named where relevant. The reader should refer to this information whilst reading the description.

3.2 General description of the proposals

It is proposed in the latest application that the BPW facility is expanded to include the following:

- new area of van parking
- new area for motorhomes with electrical hook-ups
- new area for overflow parking
- new toilet and shower block
- new camping pods and 5 new timber lodges
- new play area
- new picnic area
- new two-way access drive
- existing informal track remodelled to be a two-way access drive
- new and revised footpath network
- new foul drainage treatment facility
- new SUDS system
- new bike cleaning facility
- remodelled pedestrian friendly visitor centre curtilage and extended terrace
- remodelled pump track
- remodelled bike tracks around the visitor centre
- relocated trail maintenance crew area

Application No. P/18/0335 also proposes the following:

- erection of an office building
- erection of a bike hire building
- erection of an outdoor catering structure

The proposals are described in more detail below:

3.2.1 Van parking

See Masterplan and Bingham Hall's Site Wide Sections drawing No (60)P10, Proposed Site Wide External Works drawing No (60)P01 and Drainage Strategy Report.

Visitor parking spaces are proposed within the lower part of the scrub area c.125m to the east of the visitor centre. At its nearest point, it will be c.17m below the existing terrace level. Each space is 6 x 3m except for the two reserved for disabled parking which have 1250mm wide access strips either side. The van park proposes 118 spaces divided into three bays with the largest containing 46 spaces.

Low, 1m wide topsoil covered subsoil bunds are proposed between each row of vans 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 van parking area will also feature wide topsoil covered subsoil bunds with whip and feathered tree planting.

The surface will be finished in dry-bound macadam stone. It is proposed that surface drainage will rely primarily on the self-draining nature of the dry-bound macadam stone construction. 1.4m deep stone-filled ditches, running alongside and above the topsoil covered bunds, will collect and store any surface water.

The van parking area will require ground modelling to produce appropriate falls across the area. The maximum depth of cut is shown on Bingham Hall's sections as c.1m below existing ground level. The maximum depth of fill is shown at around 1.5m above existing ground level. This is likely to produce a bank extending in certain areas c.3.5m beyond the van parking area.

The lowest of the three bays that comprise the proposed van park extends across the Abercanaid Fields SINC 20.

3.2.2 Motorhome parking

See Masterplan and Bingham Hall's Site Wide Sections drawing No (60)P10, Proposed Site Wide External Works drawing No (60)P01 and Drainage Strategy Report. Certain details were provided verbally by Bingham Hall.

Spaces for 7 motorhomes, each with an electrical hook-up point, are located below and to the east of the proposed play area. Each space is 7.5 x 5.0m and will be suitable for two vans to park when space is not required for motorhomes. The motorhomes are arranged in one bay of six and one bay of one.

The area is located within the area of scrub and, at its nearest point, is around 85m from the visitor centre and c.13m below the existing terrace level.

The surface will be finished in dry-bound macadam stone. It is proposed that surface drainage will rely primarily on the self-draining nature of the dry-bound macadam stone construction. A 1.4m deep stone-filled ditch, running alongside the eastern edge, will collect and store any surface water.

The motorhome parking area will require significant fill which will increase levels by c.2m at its eastern end.

The perimeter of the motorhome parking area will feature topsoil covered subsoil bunds planted with broad beds of whip and feathered tree planting.

One of the bays proposed for motorhome parking is within Craig Gethin SINC 30.

3.2.3 Overflow parking

See Masterplan and Bingham Hall's Site Wide Sections drawing No (60)P10, Proposed Site Wide External Works drawing No (60)P01 and Drainage Strategy Report. Certain details were provided verbally by Bingham Hall.

Spaces for 39No vans and 48No cars are proposed as overflow parking at the southern end of the proposed two-way access drive. Van spaces are generally 6 x 3m and car spaces generally 5 x 2.5m.

The spaces are proposed within an area of woodland described in part as ancient semi-natural and within Craig Gethin SINC 30 and bordering Abercanaid Fields SINC 20. At its nearest point the car/van park is around 225m from the café building and c.20m below the existing terrace level.

The overflow car park will require the removal of a number of young and mature trees and extensive ground modelling to produce appropriate falls across the area. The maximum depth of cut is shown on Bingham Hall's sections as c.1.75m below existing ground level. The maximum depth of fill is shown at around 1m above existing ground level. This is likely to produce a bank extending in certain areas c.4m beyond the parking area. Groundworks will require that at least one mature, A category oak tree is removed and another reduced to a single short trunk with a view to it regrowing or becoming standing dead timber.

The perimeter of the overflow parking area will feature feathered and standard tree planting.

The surface will be finished in dry-bound macadam stone. It is proposed that surface drainage will rely primarily on the self-draining nature of the macadam stone construction. A 600mm high 700mm wide bund will be constructed just beyond the north eastern edge of the parking area to contain any surface flow and prevent contamination of the field below. Pipes through the bund will allow drainage into soakaway pits at the intervals shown on the engineering drawing.

3.2.4 Toilet and shower block

See Masterplan and Le Trucco Design's drawing Nos LT1811.04.01 and LT1811.04.03.

It is proposed that a single storey flat-roofed toilet and shower block is located around 50m to the east of the visitor centre.

The footprint of the building is around 13 x 3.5m and it is set c.7m below the café terrace. It is orientated so that its frontage faces onto the main access drive through the site.

All facades will be clad in timber panelling. The south west (front) façade features three access doors. The north west and south east facades will have a small high window each. The north east façade will have no openings. Bargeboards etc will be grey metal. The colour of the timber treatment is not described but from the illustration appears to be mid reddish brown.

The roof will slope gently towards the north east and will be finished with a sedum sward.

The building will require the removal of a number of mature trees and ground modelling. The building is within Craig Gethin SINC 30.

Foul water service trenches will connect with the existing services via the proposed play area.

3.2.5 Camping pods and lodges

See Masterplan and Le Trucco Design's drawing No LT1811.04.05 and Bingham Hall's Site Wide Sections drawing No (60)P10, Proposed Site Wide External Works drawing No (60)P01 and Drainage Strategy Report and Peter Quinn Associates Landscape Strategy plan 18/461/05 Rev B. Certain details were provided verbally by Bingham Hall.

A series of timber camping pods are proposed within the area of deciduous woodland to the east of the visitor centre. The nearest pod is around 100m from the café building and c.15m below the existing terrace level.

The pods are proposed in four types as follows:

- **21No Standard Camping Pods** (c.5.3 x 3.1m) featuring 2No natural timber end walls with a glazed door in one and a window in the other. The roof is similar to a gambrel style or inverted catenary style roof extending from a single ridge to ground level. It will be covered with black felt "tiles".
- **4No Shepherd's Huts** (c.5.0 x 3.0m) on wheels and featuring corrugated steel shell roofs with natural timber walls. Three walls will feature windows and the fourth, a glazed double door.
- **9No Land pods** (c.3.0 x 3.0m) featuring 2No end walls in grey with a solid door and small window in one. The roof is similar to a gambrel style or inverted catenary style roof extending from a single ridge to ground level with back tarpaulin cover.
- **2No Toilet pods** (c.5.3 x 3.1m). Externally, as per the standard camping pods.

5No 3 bedroom 14 x 9m timber **lodges** are proposed within the area of woodland to the east of the pods. The nearest lodge is around 216m from the visitor centre and c.25m below the existing terrace level.

The lodges will feature grey felt pitched roofs with a single ridge line. Walls will be natural timber with windows on each façade and doors on two facades. Fascia and barge boards will be finished in white.

The three lodges nearest the proposed van parking area (1, 2 and 3) will be accessible by wheelchair.

All pods and lodges will be connected to an electrical supply. Shepherd's huts, lodges and toilet pods will be connected by fresh and foul water services.

Pods will be set on a pad of compacted crushed stone with timber edging. The formation level of the pad will be formed by removing the organic material rich layer from the surface (typically the top 100mm) until a relatively firm topsoil base is reached. The exact location of pods will be adjusted on site to minimise damage and loss of trees.

Lodges 1, 2 and 3 will be supported by timber frames and will be set up to 5m above existing ground level. Lodges 4 and 5 will be set on concrete pad bases. The bases of lodges 4 and 5 are not shown on the sections. The formation level of the concrete pads has been estimated as being a maximum of 600mm below the existing ground level.

Low, topsoil covered subsoil bunds are proposed along part of the northern edge of the woodland between the pods and the access road. Bunds will be planted with native shrub and tree whips. This planting will be reinforced with feathered and standard trees on the bund nearest the lodges.

Lines and groups of native feathered and standard trees are also proposed within the woodland near to lodges and pods and around the woodland edge where lodges are close to the boundary.

The area proposed for pods and lodges straddles Craig Gethin SINC 30 and Abercanaid Fields SINC 20.

3.2.6 Foul and surface water drainage from pods and lodges

See Masterplan and Bingham Hall's Site Wide Sections drawing No (60)P10, Proposed Site Wide External Works drawing No (60)P01 and Drainage Strategy Report and Holloway Partnership's drawing No 003 Site Masterplan Services Strategy.

A new foul drainage system (separate from that serving the existing and proposed buildings around the visitor centre) will be constructed to serve the proposed shower block, motorhomes, shepherd's huts, toilet pods and lodges and will connect to a new underground foul water proprietary cesspit tank adjacent to the van parking area. The tank will discharge its liquor to ground via herringbone pipes.

Foul drainage trenches will be run through the woodland area beneath the footpath network where practical.

Surface water drainage from lodge roofs is shown as connecting with 3 new soakaways within the woodland immediately adjacent to the buildings.

3.2.7 Play area

See Masterplan

It is proposed that a play area is established across the area currently used for the trail crew. Elements of the play area extend uphill towards the café and into an area currently used for parking.

Play structures and features will in the main be bespoke and primarily constructed using timber, stone and ground modelling.

A mechanical plant building will be located above (to the west of) the play area. Native shrub and tree whips reinforced with feathered and standard trees will be planted around this building and around much of the perimeter of the play area. Standard trees will also be planted throughout.

Minor ground modelling will be required to set slides on slopes and to produce play features.

The surface will be finished in composted bark and woodchip mulch and in grass. Drainage will rely primarily on percolation.

The area proposed for the play area is mostly within Craig Gethin SINC 30.

3.2.8 Picnic area

See Masterplan

A small informal picnic area is proposed immediately above the play area towards the visitor centre. It will be surfaced in short grass and will feature timber picnic tables.

Bunds will be created along the southern edge of the picnic area and planted with shrub and tree whips and with feathered and standard trees to separate and screen it from the access drive.

3.2.9 Two way access drive

See Masterplan and Bingham Hall's Site Wide Sections drawing No (60)P10, Proposed Site Wide External Works drawing No (60)P01 and Drainage Strategy Report.

A two way access drive with a general carriageway width of 5.5m is proposed to serve the motorhome and van parking and pods and lodges. The drive will feature a series of unloading lay-bys close to the pods and lodges.

Where practical, the carriageway width is reduced to c.2.5m at footpath and track crossings and marked by the placing of large boulders.

The route of the drive follows an existing track through the woodland approximately north-south as far as the area of scrub where it turns west towards the visitor centre. The drive then runs parallel to the woodland edge towards the proposed toilet block where it joins the existing main access drive.

An area of grasscrete (or ground-reinforcing plastic cell) is proposed at the southern end of the proposed drive where it meets the existing main access drive.

Construction of the east-west part of the drive will require the removal of a number of young and mature trees and extensive ground modelling. The route of the drive avoids direct damage to the rootzone of the A category tree T1542 and associated trees. The north south drive, being based on the existing track, will require the removal of fewer trees and less ground modelling.

The surface will be finished in dry-bound macadam stone. It is proposed that surface drainage will rely primarily on the self-draining nature of the construction. Any excess runoff from the north-south section will run to a swale beside the carriageway and ultimately discharge to ground.

The depth of construction was verbally confirmed as 600mm. Along the north-south section, the formation level will be 150mm below existing ground level with 450mm of the construction profile above ground level. In the east-west section, the formation level will be deeper in order to produce appropriate gradients across the van parking.

The east-west section of the drive will require a limited amount of ground modelling to produce appropriate falls across the area. A plan showing the footprint of the cut has not been provided but a slope of c.1:2 is likely to be the maximum practical gradient at the edge of the excavation. This is likely to produce a bank extending in certain areas to a maximum of c.3.5m beyond the drive.

A soakaway is proposed along the western edge of the north-south drive through the woodland.

3.2.10 Footpath network

See Masterplan and Bingham Hall's Site Wide Sections drawing No (60)P10, Proposed Site Wide External Works drawing No (60)P01 and Drainage Strategy Report.

A network of footpaths is proposed to serve the van parking, camping pods, lodges and other proposed and existing features. The network comprises the following:

- Formalised paths and steps to access the terrace area from below.
- 1.5m wide path from the proposed toilet block through the woodland via the pods to the lodges.
- 900mm wide paths connecting pods and lay-bys to the 1.5m path and new access drive.
- Paths to connect the motorhome area, and play area with the terrace without crossing general access roads.

The surface will be finished in dry-bound macadam stone. It is proposed that surface drainage will rely primarily on the self-draining nature of the construction. Paths are described in the Drainage Strategy as, "having a natural run off/soakaway as the existing road network".

Where paths run beneath the canopy of larger trees a "no-dig" construction method is proposed on the landscape strategy drawing. The depth of construction was verbally confirmed as 150mm.

3.2.11 Pedestrian friendly plaza

Further to the above proposed drive and footpaths, it is proposed that access to the site is amended as follows:

- Access to the visitor centre will be restricted to disabled users and emergency and refuse vehicles approaching from the south east. General parking will be relocated.
- Access to the north western corner of the terrace and visitor centre will be restricted to track construction and maintenance vehicles.
- The track running to the north east of the visitor centre will be restricted to farm vehicles.
- There will be no access to the immediate area of the café building by any other vehicles.

A pedestrian focussed area will extend from the visitor centre through the proposed play area to the motorhome parking area.

3.2.12 Bike cleaning facility

See Masterplan

A bike cleaning area c.10 x 6m enclosed by rock-filled gabions is proposed immediately to the north of the visitor centre. Gabion walls will in part be retaining structures. Visible faces will feature coursed random stone to match the local method of construction.

3.2.13 Bike track network

See Masterplan.

The existing network of bike tracks will be amended as follows:

- Re-routing of the track as it approaches the visitor centre from the north west around the proposed office building. A new ramp will be constructed up to the terrace.
- Minor re-routing of the bike track and footpath 110/71 which currently runs through the area proposed for van parking.
- Revisions to the pump-track (short track below the terrace).
- Amendments to the uplift access tracks immediately south of the proposed bike hire building.

3.2.14 Track maintenance yard

It is proposed that the track maintenance yard is relocated to the immediate west of the visitor centre. The area will be expanded beyond its current size. Facilities currently located behind the visitor centre will be relocated.

The yard will feature two shipping storage containers and will be enclosed by rock-filled gabions. The gabion walls along the eastern boundary will function as retaining structures and screens. Visible faces will feature coursed random stone to match the local method of construction.

The entrance to the yard will feature a set of 2m high double timber gates.

3.2.15 Bike Hire Centre (part of application P/18/0335 currently under consideration)

See Le Trucco Design's drawing Nos LT1811.04.01 and LT1811.04.02 Phase 1 Arboricultural Statement drawing No 18/461/02

It is proposed that a single storey flat-roofed bike hire building is erected around 2m to the south of the visitor centre at the same level. Its roof line will be slightly lower than the visitor centre's.

The building is around 16 x 10m and is arranged so that its frontage follows the building line of the café. The east facing elevation and south eastern corner will be exposed to views by visitors. Other facades will be screened from public view or subject to very close or restricted views.

The east-facing façade will be predominantly glass with a grey stone panel matching the existing stonework at the end nearer the visitor centre. The south eastern corner will be glass, with timber panelling on the rest of the southern façade. Other facades will be timber panelling and grey brick. Bargeboards etc will be grey metal. The colour of the timber treatment is not described but from the illustration appears to be a mid reddish brown.

Two pairs of shipping containers, each around 6.0m x 2.4m, are located to the rear (west) of the proposed building. A small bike wash area will be established between the containers and a food storage container to the north. No details of the colours or cladding of the containers are provided.

A timber bike hire shelter c.6x4m is proposed around 2.5m to the south of the bike hire building. It is constructed in the same fashion as a garden pergola with 6 uprights but with horizontal timber slatting on the rear (southern) façade and a lightweight corrugated sheet roof with lightweight steel cantilevered framework to match the main building. The colour of the timber treatment is not described.

A section of the bank south of the visitor centre will be removed to accommodate the bike hire building and other structures. The base of the slope will be retained by stone filled gabions.

The re-profiled slopes to the west and south of the new building will be planted with native trees and shrubs.

The terrace will be extended to the south to produce a large area for circulation between proposed bike hire building, proposed catering unit and existing visitor centre.

Foul water service trenches will connect with the existing services via the terrace.

Surface water drainage is shown as connecting with a new soakaway within the disabled parking areas to the south. It will be connected via a trench running under the terrace.

3.2.16 External Catering Unit (part of application P/18/0335 currently under consideration)

See Le Trucco Design's drawing Nos LT1811.04.01 and LT1811.04.03

It is proposed that a single storey flat-roofed External Catering Unit is erected around 20m to the south east of the visitor centre at around the same level. An area that is currently used for staff parking will be used to house the unit.

The building is around 6 x 3m and is arranged so that its rear is close and parallel to the existing fence at the edge of the terrace. All facades will be clad in timber panelling. The west façade will have a serving hatch and the north façade an access door. Bargeboards etc will be grey metal. The colour of the timber treatment is not described but from the illustration appears to be a mid reddish brown.

The roof will slope gently towards the east and will be finished with a sedum sward.

3.2.17 Office and Security Building (part of application P/18/0335 currently under consideration)

See Trio Building Contractors' drawing Proposed Timber Frame Building.

It is proposed that a single storey flat-roofed Office and Security Building is located around 20m to the north of the visitor centre at around 1.5m below the terrace level.

The footprint of the building is around 7 x 5m and is orientated so that its frontage faces towards the visitor centre. All facades will be timber panelled. All facades will have doors and windows except the west facade. The colour of the timber treatment is not described but from the illustration appears to be a mid reddish brown.

The roof will be finished in grey rubber. No surface water drainage is shown.

The building will replace a smaller building currently used for drying and another used for security.

3.2.18 Other features

Electrical and communication services

Proposed communications services are shown on Holloway Partnership's drawing as running between the proposed catering unit, the bike hire building, office and down via the pods to the lodges.

Electrical services are shown at a depth of 450mm. Connections to the pods and lodges run through the restored ancient woodland beneath the line of the proposed path. Elsewhere, trenches are proposed beneath existing footpaths and drives.

A series of wayfinding (low-level, downward shining, low lux lighting) bollards are proposed along the proposed footpath through the woodland between the toilet block and proposed pods and lodges. A total of 24 are proposed. A further 3 similar lights are proposed beside the footpath/stepped link between the picnic area and terrace. Five power feeder boxes are proposed within the woodland and one elsewhere.

Fresh water supply

Proposed fresh water pipes are shown at a depth of 900mm. Connections to the pods and lodges run through the restored ancient woodland beneath the line of the proposed path. Elsewhere, trenches are proposed beneath existing footpaths and drives.

Other elements

In addition to the above, the following features are shown on the masterplan and described on the Landscape Strategy drawing (18/461/05 Rev B):

- Non-retaining gabion walls are proposed either side of the approach drive south of the visitor centre.
- Timber piles, leaf litter piles, bat boxes and bird boxes are proposed within woodland and other areas
- Large beds of native shrub and tree whips and feathered and standard trees are proposed throughout the site. A total area of c.0.49ha of tree and shrub whips and around 1200 feathered and standard trees are proposed.

3.2.19 Tree removal schedule

See Masterplan, and RTAC's Tree Survey of December 2018. Categories are as per RTAC's report.

It is proposed that a number of significant trees or groups of trees will need to be removed to complete the above proposals. These include:

- 1 No tree on the border of an area of ancient semi-natural woodland where the office is proposed.
- 5 no trees of which one is categorised as C from an area of woodland where the bike hire building is proposed. Associated shrubs and smaller trees will also be removed.
- 7 no C and U category trees from an area of restored ancient woodland where the proposed two-way access drive (west end) and toilet block are proposed. Associated shrubs and smaller trees will also be removed.

- 4No trees of which one is categorised as C from an area of predominantly young alder, birch and willow at the grasscrete section of the proposed two-way access drive. Associated shrubs and smaller trees will also be removed.
- 46No trees of which one is categorised as A, four as C and one as U from an area described in part as ancient semi-natural woodland within the overflow parking area. It is also proposed to remove the branches from a mature tree categorised as A and covert it to a “monolith”. Associated shrubs and smaller trees will also be removed.
- Shrubs and smaller trees from along the northern edge of the restored ancient woodland within which the pods are proposed to allow the construction of the two-way access road and unloading lay-bys.

RTAC’s survey has more information on trees to be removed.

3.3 Implementation

3.3.1 General

The following descriptions are based on the drawings and on verbal descriptions. Implementation will involve the following operations and procedures:

3.3.2 Car, van and motorhome parking and two-way drive.

Ground clearance, topsoil strip and levelling.

Across all areas proposed for car, van and motorhome parking and the two-way drive and the associated areas of cut and fill, any vegetation will be cut and removed to a height of c.150mm. The remaining vegetation and the top 150mm of topsoil will be removed and stored in a discrete pile for re-use. Vegetation will only be cleared outside of the nesting season and will be subject to other restrictions and conditions as described in the Ecological Assessment.

The remaining depth of topsoil (c.0-450mm) will be cleared and stored in a discrete pile. Subsoil (depth unknown) will be excavated to formation level and stored in a discrete pile for re-use. Weathered bedrock/clay etc below subsoil horizon excavated to reach formation will also be stored in a discrete pile. Piles will be located by agreement with landscape architect/ecologist.

All excavated material generated by the works will be retained on site for incorporation into bunds.

Soft spots within formation.

Soft spots found within formation will be excavated and filled with crushed stone to the engineer’s specification and compacted to produce a firm base.

Road and parking construction

Roads and parking will be constructed from dry-bound macadam stone.

Drives

Where space allows, any significant roots along drives will be avoided by altering the route of the drive. Where avoidance is not possible, roots will be retained and the construction depth increased locally where the engineer advises that this will not significantly affect future use and stability of the drive. Smaller roots will be cut with a hand saw.

A geotextile layer will be spread across the formation before the stone layer is laid. Within woodland and beneath tree canopies, stone will be compacted with a hand-operated single-drum vibrating roller (typically 500kg).

Where paths run beneath the canopy of larger trees and those surveyed separately in the tree survey, a “no-dig” construction method is proposed using “Cellweb” or similar.

Parking areas

Construction of parking areas will follow the procedure for drives except that where significant tree roots are encountered, the edge of the parking area may be amended if this is necessary to retain the root. This is particularly relevant where bays have been incorporated into the proposed overflow parking area to retain significant trees.

3.3.3 Paths

Paths will be constructed from dry-bound macadam stone.

Ground preparation for paths will commence with clearance by machine of the very organic rich surface layer of the topsoil (typically 100mm). Where possible, any significant roots along paths will be avoided by altering the route of the path. Where avoidance is not possible, roots will be retained and the path depth increased locally to run over roots. Smaller roots will be cut with a hand saw.

A geotextile layer will be spread across the formation before the stone layer is laid. Within woodland and beneath tree canopies, stone will be compacted with a vibrating plate. Elsewhere, a hand-operated single drum vibrating roller (typically 500kg) will be used.

Where paths run beneath the canopy of larger trees and those surveyed separately in the tree survey, a “no-dig” construction method is proposed using “Cellweb” or similar.

3.3.4 Surface drainage

Ditch soakaways within van and motorhome parking areas will be excavated to a depth of 1.4m below finished levels. Trenches will be lined with geotextile to prevent the entry of fines and then filled with clean crushed stone.

A ditch/soakaway is proposed along the western edge of the north-south drive through the woodland.

Other soakaways will be constructed in a similar way but to the volume and at the depth described by the engineer.

3.3.5 Service installation

Service trenches will typically be c.900 mm deep and 500mm wide for the laying of cable ducts and water pipes. Trenches containing multiple services will be correspondingly wider.

The base of trenches will be backfilled with pea gravel or similar with arisings above.

Services within woodland will be laid along the line of proposed footpaths where this is practical.

3.3.6 Building construction/erection

Ground preparation for pods and lodges will commence with clearance by machine of the very organic rich surface layer of the topsoil (typically 100mm).

Foundations of buildings within woodland will be excavated by small tracked excavator suited for use within woodland environment. Excavated material will be removed by small dumpers exclusively via the proposed path and drive network.

Concrete will be mixed beyond the woodland and brought in by small dumper exclusively via the proposed path and drive network

Pods and lodges will be constructed by hand from pre-fabricated panels. Panels and other construction elements will be carried by hand or small dumper into the woodland setting.

The bike hire, office and toilet block will be constructed on concrete pad foundations with formation at the level determined by the engineer following site analysis.

3.3.7 Formation of bunds

Bunds will be constructed from subsoil (with a weathered bedrock core where appropriate) and compacted in 150mm layers. Subsoil will then be ripped to 300mm depth at 600mm centres to break-up compaction suitable for root penetration. A minimum 450mm thick layer of topsoil will then be spread and lightly compacted. Gradient should not exceed 1:2. Bunds will be allowed to settle for a minimum of 1 month before planting takes place.

3.3.8 Planting

Before planting, all beds will be cleared of bulky vegetation. A minimum of two weeks after clearance and two weeks before planting, the entire bed will be sprayed with herbicide.

Feathered and standard trees to be pit planted. Shrub and tree whips and transplants to be slit planted.

All beds to be hand dug after planting to relieve surface compaction.

Planted areas to be maintained for a minimum establishment period of 5 years.

4.0 Planning policy relating to the site

4.1 General

This study does not seek to list and analyse all *general* landscape policy that may have some bearing on the proposed development as this is unlikely to form the clearest picture of the development's merits or otherwise. Nor will it discuss policy relating to leisure provision or other social and economic matters. It will however consider those aspects of policy that relate *specifically* to the landscape of this particular site.

The following are judged to contain policies that have clear relevance:

Planning Policy Wales
The Merthyr Tydfil Local Development Plan 2006-2021
 LANDMAP

LANDMAP contains information and judgements relevant to the site and the proposed development. Relevant details from LANDMAP are described in detail in section 2.0 Landscape baseline.

The excerpts laid out below are judged to be directly relevant to the site, the proposed development and the landscape.

4.2 Planning Policy Wales (PPW) see latest edition 10

The PPW edition 10 (2018) is a long and detailed document and many of the recommendations are directed towards planning authorities. The following sections contain guidance and objectives that are particularly pertinent to the site and its landscape:

- 2 People and Places: Achieving Well-Being Through Placemaking
- 3 (part) Good Design and Sustainable Management of Natural Resources
- 4.5 Recreational Spaces
- 5.5 Tourism
- 6.2 Green Infrastructure
- 6.3 Landscape
- 6.4 Biodiversity and Ecological Networks
- 6.6 Recognising the Environmental Qualities of Places
- 6.8 Lighting

The above topics are refined and included in the Merthyr Tydfil Local Development Plan.

4.3 Merthyr Tydfil Local Development plan 2006-2021 (LDP)

The LDP is a long and detailed document with much overlap with the PPW document. Many sections have some relevance to the site and its landscape. The following sections contain guidance and objectives that are particularly pertinent:

Policy BW4 (part): Settlement boundaries/location constraints

Outside defined settlement boundaries, proposals will be regarded as 'countryside development' and will not be permitted unless:-

- The development is associated with rural enterprises or the winning and working of minerals.
- The development supports the expansion of an existing business in the countryside.
- The development is for tourism, recreation or leisure facilities where the need for a countryside location is fully justified.

Policy BW5: Natural heritage

The Council will protect and support the enhancement of the County Borough's distinctive natural heritage. Development proposals will only be permitted where they maintain, enhance or do not cause harm to:-

- *the landscape character of the countryside;*
- *national and local nature conservation designations;*
- *trees, woodlands and hedgerows that have natural heritage value or contribute to the character and amenity of an area; and*
- *other biodiversity interests including protected and priority species and ecological networks.*

Policy BW7 (part): Sustainable design and place making

The Council will support good quality sustainable design and require new development to:- be appropriate to its local context in terms of scale, height, massing, elevational treatment, materials and detailing, layout, form, mix and density;

- *not result in unacceptable impact on local amenity in terms of visual impact, loss of light or privacy, disturbance and traffic movements;*
- *incorporate a good standard of landscape design;*
- *sensitively relate to existing settlement patterns and take account of natural heritage and the historic environment on site and in terms of potential impact on neighbouring areas of importance;*
- *foster 'inclusive design' by ensuring the development allows access for the widest range of people possible;*
- *contribute to the provision of usable open and outdoor play space, ensuring its accessibility and connectivity to other green infrastructure, footpaths and cycleways;*

Policy BW8 (part): Development and the water environment

Proposals for built development will only be permitted where:-

- *...development proposals will be required to avoid exacerbating flood risk locally and elsewhere within the river catchment by incorporating sustainable drainage systems (SuDS) for the disposal of surface water.*
- *Alternative methods of surface water disposal will only be considered where a developer demonstrates that the incorporation of SuDS is inappropriate for practical or environmental reasons.*

Policy BW11 (part): Transport, cycling and pedestrian proposals

Proposals for new... cycling ... facilities will be favourably considered where they:-

- *improve access to the countryside*

Policy AS6 : Local nature conservation designations

Using published scientific criteria, Sites of Importance for Nature Conservation have been designated as shown on the LDP Proposals Map. Applications for development affecting these sites and /or the Cwm Taf Fechan Local Nature Reserve, will not be permitted unless full account has been taken of the relevant features so as to prevent damage to their conservation value. Where appropriate, planning conditions or a planning agreement will be employed to safeguard and /or enhance features, or to provide appropriate mitigation and /or compensatory measures

4.6.3 The distribution of SINC's accords with the spatial priorities of the LDP and in making planning and development decisions, the Council will afford appropriate weight to SINC's in order to secure the well-being of individual features and to maintain or enhance the character and integrity of the wider designation. SINC's are not intended to unduly restrict acceptable development - rather, their primary role is to ensure that development proposals affecting a SINC site receive proper consideration at the planning application stage.

4.4 The site in relation to landscape policy

Certain aspects of the recent development of BPW appears to conform with relevant policies in PPW and the LDP as follows:

- The existing buildings are accessible for all those who might use them and disabled parking spaces are available near to the visitor centre (PPW 3.3.3 and BW7 of the LDP).
- BPW encourages people to participate in sports and recreation without compromising the quality of life of future generations and has contributed to the provision of usable open and outdoor play space, ensuring its accessibility and connectivity to other green infrastructure, footpaths and cycleway and improving access to the countryside (PPW 4.1.1 & .1.4 and BPW7 & BW11 of the LDP)
- Lighting of the visitor centre and car parks etc appears to conform with 13.13.2.
- The visual appearance of the main visitor centre conforms with the aspirations of PPW's 4.11.9 and promotes and reinforces a traditional and local distinctiveness albeit in a modern interpretation (4.11.10). Ancillary buildings such as unscreened shipping containers have however not been as successful in integrating with their setting.
- The development is fully in accordance with policy BW4 of LDP in that tourism, recreation or leisure facilities should be allowed where the need for a countryside location is fully justified

The following relevant policies in PPW and the LDP do not appear to have been closely followed:

- Past development has not conformed with 4.3.1 of the PPW in that it has neither clearly protected nor enhanced biodiversity.
-
- Neither has it clearly conformed with the 5.2.4 (The UK Biodiversity Action Plan) objectives to conserve, and enhance:
 - the quality and range of wildlife habitats and ecosystems;
 - the overall populations and natural ranges of native species;
 - internationally important and threatened species, habitats and ecosystems;
 - species, habitats and natural and managed ecosystems characteristic of local areas;
 - biodiversity of natural and semi-natural habitats where this has been diminished over recent decades.
- Recent development does not appear to have reflected the aspirations of PPW's 5.2.9 in protecting the ancient and semi-natural woodlands and other trees on the site. Development proposals do not appear to have taken all reasonable steps to safeguard or enhance the environmental quality of land in accordance with 5.5.1.
- Similary policy BW5 of the LDP does not appear to have been closely followed in that they have not enhanced and may have caused harm to:
 - *national and local nature conservation designations;*
 - *trees, woodlands and hedgerows that have natural heritage value or contribute to the character and amenity of an area;*
- Policy BW7 of the LDP has not been followed in that *a good standard of landscape design has not been implemented.*

5.0 Analysis of effects

5.1 Likely significant effects

5.1.1 Overview of methodology

The process for establishing whether an effect is significant or not begins by describing the landscape of the existing site and its context in detail (see section 2.0 above). The proposed development is then also described in detail (see section 3.0 above). This section deals with the next step in the process, to identify the possible effects of the proposed development on the site and wider landscape and its users, and to decide whether such effects are significant or not.

A detailed account of the methodology used in analysing effects and assessing their significance (including definitions of terms used in describing landscape effects) is described in Appendix 1.0 but is summarised below.

5.1.2 Summary of methodology

The effects are divided into two broad categories: landscape effects and visual effects. These may be further subdivided into temporary effects (largely during construction) and permanent effects.

Landscape effects may be described as the likely effects on the **character** or the **quality** of a landscape caused by the proposed development whether or not such effects are visible or otherwise experienced by users of the site or users of the wider landscape.

A number of the landscape effects described have a significant ecological component and the reader should refer to the Ecological Assessment that makes up part of this EIA for more detail on ecology.

Visual effects may be described as the likely effects on **views** caused by the proposed development where such effects are visible by users of the site or users of the wider landscape.

The elements of the landscape that might be affected are described as **landscape receptors**. The potential users whose view of the site might be affected by the proposed development are described as **visual receptors**.

In order to assess the likely significance of any particular effect, possible interactions between the proposed development and the receptors are identified.

Assessment of visual and landscape effects will, for clarity, be dealt with separately in the sections that follow.

5.2 Landscape effects: the effect of the proposals on landscape character.

5.2.1 Identification of landscape effects

The following temporary landscape effects are possible:

- Silt, debris and contamination entering watercourses and waterbodies
- Noise
- Dust
- Restrictions to access

The following permanent landscape effects are possible:

- Silt and contamination entering watercourses and waterbodies
- Changes to landform, geology and topography
- Changes to the pattern of the landscape
- Introduction of two way access road
- Introduction of new paths within woodland
- Introduction of new areas of parking within the scrub area
- Introduction of new areas of parking within woodland
- Introduction of camping pods and lodges within woodland
- Introduction of other buildings and structures generally
- Introduction of lighting to woodland and other areas
- Introduction of soakaways
- Relocation of the trail maintenance yard
- Introduction of the play area
- Changes to circulation in the vicinity of the visitor centre
- Loss of vegetation cover

5.2.2 Identification of landscape receptors

The following landscape receptors may be affected by the development:

- Landform, geology and topography
- Landscape pattern and history
- Woodland
- Scrub and grassland
- Waterways and waterbodies
- Access
- Culture
- Sensory (excluding vision)
- Light

The methodology described in Appendix 1.0 is followed to assess the likely overall effect and its significance. The process and results of the assessment are presented in the following sections. Definitions of the values used are summarised below:

Susceptibility of landscape receptors to change:

Described as high, medium, low or negligible.

High susceptibility to change: limited screening, largely undeveloped, cannot host the development without suffering major detrimental effects.

Medium susceptibility to change: some screening, some development, can host the development but with moderate detrimental effects.

Low susceptibility to change: moderate screening, moderate development, can host the development but with minor detrimental effects.

Negligible/no susceptibility to change: prominent screening, dominant development, can host the development with almost no detrimental effects.

Value of landscape receptors

Described as high, medium, low or negligible. Ascertained by considering whether it is valued at a community, local, national or international level. Also considers undesignated landscape of obvious value. Also by consideration of the following:

*Landscape Quality
Scenic quality
Rarity
Representativeness
Conservation interests
Recreation value
Perceptual aspects
Associations*

Landscape sensitivity of the receptor

*Described as high, medium, low or negligible/no change. Assessed by combining **susceptibility** with **value**.*

High sensitivity of receptor: largely undeveloped landscape, rich in valuable features, possibly with a national or regional designation.

Medium sensitivity of receptor: some development, some detracting features possibly with a county or district designation.

Low sensitivity of receptor: prominent development, many detracting features possibly with no designation.

Negligible/no sensitivity of receptor: development dominant, detracting features dominate, no designation.

Size and scale of the landscape effect

The effect is described as either major, moderate, minor or none. Judgements take account of:

- *the extent of the existing landscape elements that will be lost, the proportion of the total that this represents and the contribution that this makes to landscape character*
- *the degree to which aesthetic or perceptual aspects of landscape are altered*
- *whether the effect changes a key characteristic of the landscape*

Geographical extent of the landscape effect

Judgement of size and scale is related to an assessment of the geographical extent of the landscape effect. This should also be described as being, at a site level, affecting the immediate setting, affecting landscape type or character area or having an effect on a larger scale.

Duration of landscape effect

This is described as short term (0-5 years), medium term (5-10 years), or long term (10-25 years).

Reversibility of landscape effect

This assesses whether a development or part of it could be, or is likely to be, reversed within a specific timeframe.

Magnitude of the effect on landscape

*Magnitude is calculated by combining **size/scale**, **geographical extent**, **duration** and **reversibility** and is described as high, medium, low or negligible/no change.*

High magnitude of effect: *the introduction of very prominent/uncharacteristic elements into the landscape or a marked deterioration/improvement in the landscape.*

Medium magnitude of effect: *the introduction of prominent elements into the landscape or a noticeable deterioration/improvement in the landscape*

Low magnitude of effect: *the introduction of minor elements into the landscape or a barely noticeable deterioration/improvement in the landscape*

Negligible magnitude of effect/no change: *the introduction of elements into the landscape that are almost/completely invisible or are compatible with the landscape.*

Overall significance of landscape effects

Where a receptor has a **high** or **medium** sensitivity and the magnitude of the effect is **high** or where a receptor has a **high** sensitivity and the magnitude of the effect is **high** or **medium** then the overall effect will be judged to be significant.

Where a receptor has a medium sensitivity and the magnitude of the effect is medium then the overall effect **may** also be judged to be significant.

Each significant landscape effect is assigned a degree of significance reflecting the combinations of sensitivity and magnitude. These are severe, major, moderate and neutral and refer to adverse as well as beneficial effects. These are described below:

Significance criteria for landscape effects:

Severe adverse

The proposed scheme would result in effects that are at a complete variance with the landform, scale and pattern of the landscape; would permanently degrade, diminish or destroy the integrity of valued characteristic features, elements and/or their setting; would cause a very high quality landscape, possibly of national importance, to be permanently changed and its quality diminished.

Major adverse

The proposed scheme would result in effects that cannot be fully mitigated and may cumulatively amount to a severe adverse effect; are at considerable variance to the landscape degrading the integrity of the landscape; will be substantially damaging to a high quality landscape, possibly of regional importance.

Moderate adverse

The proposed scheme would be out of scale with the landscape or at odds with the local pattern and landform; will leave an adverse effect on landscape of recognised quality, possibly of county importance.

Slight adverse

The proposed scheme would not quite fit into the landform and scale of the landscape; affect an area of recognised landscape character, possibly of local importance.

Neutral

The proposed scheme would complement the scale, landform and pattern of the landscape; maintain existing landscape quality.

Slight beneficial

The proposed scheme has the potential to improve the landscape quality and character; fit in with the scale, landform and pattern of the landscape; enable the restoration of valued characteristic features partially lost through other land uses.

Moderate beneficial

The proposed scheme would have the potential to fit very well with the landscape character; improve the quality of the landscape through removal of damage caused by existing land uses.

5.2.3 Landscape Receptor: landform and geology

Value: High (LANDMAP)
Susceptibility: Medium
Sensitivity: Medium
Size, duration and reversibility of effect: Moderate in size, long-term, permanent
Magnitude of effect: Medium
Likely overall effect on landscape character: Significant

The main adverse effects on landform and geology are the excavation of the bank to allow construction of the bike hire building and the groundworks (excavations and bund construction) associated with the overflow, van, and motorhome parking areas and the east-west section of the two-way drive.

The depth of excavation required to provide acceptable gradients in the overflow parking and other areas will affect the geology at a site level and will affect its immediate setting. It will not however affect the landscape type as the general landscape has previously been subject to mining and other activities that affect the landform.

The combination of a medium sensitivity and a medium magnitude of effect leads to the conclusion that this is a significant effect when considered with the recommendation of the LANDMAP assessment that the landform should be conserved as existing.

The overall effect on landform and geology has been assessed as significant and is likely to be subject to a moderate adverse effect. It will be assessed in section 8.0 for how the effects can be mitigated.

5.2.4 Landscape Receptor: landscape pattern and history

Value: high (LANDMAP)
Susceptibility: Medium
Sensitivity: Medium
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: medium
Likely overall effect on landscape character: Significant

The pattern of the landscape on site and the history of the site are closely linked and have been considered together. The site has good screening and already features some development and would be described as being of low susceptibility if it were not for the changes that would be likely to follow the removal of woodland associated with the overflow parking area which are likely to have an adverse effect on the existing pattern of the landscape.

The overall effect on landscape pattern and history has been assessed as significant and is likely to be subject to a moderate adverse effect. It will be assessed in section 8.0 for how the effects can be mitigated.

5.2.5 Landscape Receptor: woodland

Value: High
Susceptibility: high
Sensitivity: high
Size, duration and reversibility of effect: moderate in size, long-term and unlikely to be reversed
Magnitude of effect: moderate
Likely overall effect on landscape character: Significant

The woodland is not assessed separately in LANDMAP but the landscape habitat is assessed as being of moderate value and of moderate sensitivity. It recommends retention of “*diversity of mosaic through limited reclamation and vegetation management*”. The woodland on and near to the site is TPO'd and is described as being Ancient/Ancient Semi-natural Woodland and is included within the Abercanaid Fields SINC 20 and Craig Gethin SINC 30. It has thus been assigned a high value.

The woodland may be affected by the development as follows:

- Damage to roots of significant and other trees by concrete foundations
- Damage to canopies of significant trees by construction process during construction of buildings and two-way access road
- Damage to roots of significant and other trees by construction of two-way access road
- Damage to roots of significant and other trees by construction of new paths within woodland
- Removal of/damage to significant and other trees by construction of parking within woodland
- Removal of/damage to roots of significant and other trees by construction of topsoil bunds
- Introduction of camping pods and lodges into woodland
- Introduction of lighting to woodland
- Introduction of soakaway to woodland
- Introduction of ditch/soakaway along the edge of the north-south drive through the woodland.
- Installation of access path through woodland
- Installation of services beneath paths and elsewhere within woodland
- Reduction in area of woodland available to plants and animals

The area of woodland directly affected by the construction of paths, drives, bunds, pods and lodges within it is c.0.57ha. The area of woodland removed to facilitate the construction of the overflow parking is c.0.33ha.

The woodland is not judged to be capable of accommodating the development without undue consequences for the maintenance of the baseline or conformity with planning policy. It is thus assigned a high susceptibility and high sensitivity.

The overall effect on woodland has been assessed as significant and is likely to be subject to a moderate adverse effect. It will be assessed in section 8.0 for how the effects can be mitigated.

5.2.6 Landscape Receptor: scrub/grassland

Value: low
Susceptibility: medium
Sensitivity: low
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: moderate
Likely overall effect on landscape character: Not significant

The scrub and grassland is not assessed separately in LANDMAP but the landscape habitat is assessed as being of **moderate** value and of **moderate** sensitivity. It recommends retention of “*diversity of mosaic through limited reclamation and vegetation management*”.

The area of scrub/grassland removed to facilitate the construction of the van parking and motorhome area is c.0.7ha.

Part of the scrub area was until recently closely grazed and the evidence from earlier aerial photographs suggests that this has been the case for many years. The remaining part of the scrub area was planted with a commercial crop of larch. This stand of non-native conifers made up part of Abercanaid Fields SINC 20. The photograph below was taken in the spring of 2012. The conifers have since been felled.



The complex scrub community now growing across the area has developed in less than 6 years and is protected in part by the area’s designation as a SINC. Its replacement with a car park will have an adverse effect on the environmental complexity of the site. This loss is assessed in detail in the Ecological Assessment that forms a separate part of this EIA.

The overall effect on landscape scrub/grassland has been assessed as not being significant. It will not therefore be assessed for how the effects can be mitigated.

5.2.7 Landscape Receptor: Waterways and waterbodies

Value: low
Susceptibility: medium
Sensitivity: medium
Size, duration and reversibility of effect: moderate in size, long-term and reversible in the long-term
Magnitude of effect: medium
Likely overall effect on landscape character: Significant

The waterways and waterbodies are not assessed separately in LANDMAP but the landscape habitat is assessed as being of moderate value and of moderate sensitivity. It recommends retention of “*diversity of mosaic through limited reclamation and vegetation management*”.

The development is unlikely to affect Webber’s Pond. The main possible effects on streams are pollution events, silting and changes to pH. Any effects would be likely to have repercussions downstream.

Runoff conducting silt and pollution into watercourses during and after construction could lead to severe adverse effects on waterflow and wildlife including trees and other vegetation.

The soil and general vegetation are related to the existing acidic ground water. The stone proposed for use on roads and parking areas has not been specified. If limestone or other basic (alkaline) stone were specified then the pH of the groundwater and runoff would be increased. This may have an adverse effect on the existing vegetation and other aspects of the landscape.

The above effects may have a greater effect on wildlife. This is considered in the Ecological Assessment that forms a separate part of this EIA.

The overall effect on waterways and waterbodies has been assessed as significant and could have a moderate adverse effect. It will be assessed in section 8.0 for how the effects can be mitigated.

5.2.8 Landscape Receptor: access

Value: high
Susceptibility: moderate
Sensitivity: moderate
Size, duration and reversibility of effect: Moderate in size, short-term duration and reversible
Magnitude of effect: Minor
Likely overall effect on landscape character: Not significant

LANDMAP only refers to access obliquely as part of the cultural landscape. The cultural landscape is assessed as having moderate value but this is not judged to be specific enough to the access landscape receptor or the site.

The site, before development as BPW was a destination popular enough to have a dedicated car park and was clearly well used. The woodland park, Webber's pond and other landscape features appear to be popular and the area is well served with rights of way and is designated Access Land. It is thus assigned a high value.

In the long-term, susceptibility is judged as low as access will not be unduly adversely affected by the proposals: there are some changes to the route and context of some of the rights of way on the site but these are judged to be minor. In the short-term however, access may suffer greater adverse effects in that the route of footpath 110/71 will be blocked. Susceptibility and sensitivity are thus judged to be moderate.

The informal track through the woodland will be affected in a similar way to footpath 110/71 but this is not a dedicated right of way. The remodelling of the main access path will affect bridleway 110/82 but is not likely to close the route for anything but very short periods and access will probably be retained throughout the development period though no specific construction methodology statement relating to access was available at the time of this study.

The increase in visitor traffic using the site in the long-term will have an adverse effect on access and contributes to the assessment of the effect as moderate. On balance however the magnitude of effect of the proposed development on access is judged as being minor.

The overall effect on access has been assessed as not being significant. It will however be assessed for how the effects can be mitigated.

5.2.9 Landscape Receptor: culture

Value: moderate
Susceptibility: low
Sensitivity: low
Size, duration and reversibility of effect: minor in size, long-term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect on landscape character: Not significant

Cultural features of the site and the immediate area are closely tied to the pattern of the landscape and history. LANDMAP describes the cultural landscape in the area as having moderate value based on its agriculture, forestry, rural settlement, communications & transport. It recommends that no major physical development occurs and the expansion of forestry (assumed to mean commercial plantation type) is limited.

The development could not be described as major and no commercial forestry is planned. The effect of the development on the site's cultural landscape is unlikely to be significant. It will not therefore be assessed for how the effects can be mitigated.

5.2.10 Landscape Receptor: sensory aspects

Value: moderate
Susceptibility: low
Sensitivity: low
Size, duration and reversibility of effect: minor in size, long-term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect on landscape character: Not significant

The description of the Merthyr West Flank aspect area as having *attractive* and both *sheltered and exposed* sensory qualities reflects the experience of visiting the site and the immediate area. It has a very strong sense of place and local distinctiveness that is formed by its mixture of relatively peaceful woodland and glades, open areas (including scrub), farm animals, other users and the exposure to a much larger landscape beyond. Tranquility is greatest in woodland areas away from the active BPW area.

LANDMAP evaluates the area as having **moderate** value and recommends the following:

- retaining *diversity of mosaic through limited reclamation and vegetation management*
- extending *woodland framework while retaining mosaic character*
- limiting *expansion of development*

The area is judged to have a low susceptibility to the changes proposed except in the short term. With the exception of the motorhome parking and play areas, the proposals do not introduce elements that are not already present. Similarly, the motorhomes and play area will not introduce *effects* that are not already present around BPW. There would be an increase in the intensity of use of the site but this is not considered to be of a magnitude that warrants a larger assessment than low.

The overall effect on sensory aspects has been assessed as not being significant and will not be assessed for how the effects can be mitigated.

5.2.11 Landscape Receptor: light

Value: medium
Susceptibility: low
Sensitivity: low/moderate
Size, duration and reversibility of effect: minor in size, long-term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect on landscape character: Not significant

No study was carried out at night so effects have been estimated.

The hillside in which BPW is set is has few street lights, buildings or other elements that are lit at night. In terms of conservation, wildness and sensory appeal this could be assigned a high value. However the already established visitor centre and parking reduces the intactness of the dark scene and leads to an assessment of value as medium and susceptibility as low. Sensitivity is thus judged to be low/moderate.

The magnitude of the effect on light is judged to be low as the increased effect of headlights and the lights of buildings on the darkness of the hillside are limited by the existing vehicles and buildings of BPW. In addition, lux levels of proposed “wayfinder” bollards are specified as low and the light is directed downwards.

The effect of the development on the site’s darkness is unlikely to be significant. It will not therefore be assessed for how the effects can be mitigated.

5.2.12 Landscape effects: general character

It is not considered likely that the overall landscape character would be altered by the proposed development as the proposed elements are not fundamentally different in character from those already existing on the site. Also, the size of the proposed development, though large in relation to the existing BPW visitor centre and car park, is not of a scale that is likely to significantly change the character of the aspect area sufficient to create a new landscape type or sub-type.

In terms of its visual and sensory character, LANDMAP describes the aspect area in which BPW is set as a, “*massive area of urban fringe in that the influence of the town is evident throughout yet it is still distinctly rural in overall character*”. All aspect areas covering BPW are sufficiently heterogeneous to receive the development without noticeable changes to their character.

5.3 Visual effects: the effect of the proposals on views.

5.3.1 Identification of visual effects

The following temporary visual effects will be considered:

- Dust
- Plant
- Compound location and use

The following permanent visual effects will be considered:

- Changes to landform, geology and topography
- Changes to the pattern of the landscape
- Introduction of buildings and other structures
- Introduction of two way access road
- Introduction of new areas of parking within the scrub area
- Introduction of new areas of parking within woodland
- Introduction of camping pods and lodges within woodland
- Introduction of lighting to woodland and other areas
- Relocation of the trail maintenance yard
- Changes to landscape in the vicinity of the visitor centre

5.3.2 Identification of visual receptors

Section 2.0 Visual Landscape indicates that the following users of the landscape are judged to be the visual receptors and may be affected by the proposed development and the application that is currently being decided upon:

- Walkers, cyclists, horse riders and other visitors to BPW and the immediate area
- Walkers, cyclists, horse riders and motorbikers using Merthyr Common
- Walkers and cyclists using the Trevithick Trail
- Residents of Pentrebach
- Drivers, walkers and riders using roads, footpaths, roadside pavements, bridleways and other public rights of way and public open spaces within Pentrebach and built-up areas near the village able to see the site
- Residents of the farm immediately to the North of BPW

5.3.3 Overview of visual receptors

Walkers are amongst the most sensitive users as they tend to travel at a relatively slow pace with a greater than normal awareness and focus on the landscape and their surroundings. Such sensitive receptors will probably notice any changes to the landscape more than any other users.

Footpaths near to the site appear to be walked primarily by local users. They are likely to be very familiar with the local landscape and thus particularly sensitive to changes in the landscape.

Horse riders are also likely to be sensitive to changes to the site and their elevated position means that their views tend to be clearer, being less well screened by intervening features. They are also likely to be local and thus familiar with the local landscape. There are however, far fewer horse riders than walkers and cyclists.

Cyclists typically have a high position relative to car drivers and travel at a slower speed than vehicles. Cyclists are in general likely to be more sensitive to changes than car users but less sensitive than pedestrians. The area of BPW is well used by cyclists, especially at weekends. However, cyclists using the trails at BPW are likely to be less sensitive to changes in the landscape than other cyclists using roads and paths elsewhere, as they are more focussed on the mountain biking activity than the landscape.

Drivers and passengers are usually the least sensitive receptors due to the speed of travel and lower position relative to walkers, cyclists and horse riders. It should be noted however that walkers using roadside pavements should be considered in the same way as walkers using other public rights of way.

LANDMAP evaluates the visual and sensory landscape in and around BPW as having **moderate** value. Whilst this is useful for a landscape-wide assessment, it is not considered to be of fine enough resolution for this assessment and will be set aside.

The methodology described in Appendix 1.0 is followed to assess the likely overall effect and its significance. The effects on each of the visual receptors listed in 5.3.2 above are assessed and presented in the following sections. Definitions of the values used are summarised below:

Susceptibility of the visual receptor to change

*Described as high, medium, or low, susceptibility is a function of the **activity** of the viewer and the extent of their **focus** on or **interest** in the landscape.*

*The **most susceptible** are residents, cyclists, walkers and visitors with a particular interest in the landscape.*

*Of **intermediate susceptibility** are, in general, those travelling in vehicles.*

*The **least sensitive** receptors include those involved in an activity or work that is the primary focus of their interest.*

Value of the view

Described as high, medium, low or negligible. Ascertained by considering whether it is valued at a community, local, national or international level or from facilities associated with the view such as car parks, interpretive panels etc. Also considers other undesignated landscape of obvious value. Also by consideration of the following:

*Landscape Quality
Scenic quality
Rarity
Representativeness
Recreation value
Perceptual aspects
Associations
Intangible appeal*

Visual sensitivity of the receptor

*Described as high, medium, low or negligible/no change. Assessed by combining **susceptibility** with **value**.*

High sensitivity of receptor: *the landscape in the view possibly has a national or regional designation and is the focus of views. Receptors are slow moving and the landscape is the focus of their activity. Includes residents whose view is dominated by the site.*

Medium sensitivity of receptor: *the landscape in the view possibly has a county or district designation. Receptors are slow moving and the landscape is part of their activity. Includes residents for whom the site is a prominent element of their view.*

Low sensitivity of receptor: *the landscape in the view possibly has no designation. Receptors are faster moving and/or the landscape is a minor part of their activity.*

Negligible/no sensitivity of receptor: *the landscape in the view has no designation. Receptors are fast moving and/or the landscape plays no part in their activity.*

Size and scale of the visual effect

The effect is described as either major, moderate, minor or none. Judgements take account of:

- the extent of the existing landscape elements that will be lost from the view, the proportion of the total that this represents and the contribution that this makes to the view*
- the degree to which aesthetic or perceptual aspects of the view are altered*
- the size, prominence, degree of contrast or integration of any new features*
- whether views will be full, partial or glimpsed*

Geographical extent of the visual effect

Geographical extent reflects the following:

- the angle of the view*
- distance of the viewpoint*
- extent of the the changes relative to the existing view*

Duration of the visual effect

This should be described as short term (0-5 years), medium term (5-10 years), or long term (10-25 years).

Reversibility of visual effect

This assesses whether a development or part of it could be, or is likely to be, reversed within a specific timeframe.

Magnitude of the effect on views

*The magnitude is calculated by combining **size/scale**, **geographical extent**, **duration** and **reversibility** and is described as high, medium, low or negligible/no change.*

***High** magnitude of effect: the introduction of very prominent/uncharacteristic elements into views or a marked deterioration/improvement in the view.*

***Medium** magnitude of effect: the introduction of prominent elements into the view or a noticeable deterioration/improvement in the view*

***Low** magnitude of effect: the introduction of minor elements into the view or a barely noticeable deterioration/improvement in the view*

***Negligible** magnitude of effect/no change: the introduction of elements into the view that are almost/completely invisible or are compatible with the existing view.*

Overall significance of visual effects

*Where a receptor has a **high** or **medium** sensitivity and the magnitude of the effect is **high** or where a receptor has a **high** sensitivity and the magnitude of the effect is **high** or **medium** then the overall effect **will** be judged to be significant.*

*Where a receptor has a medium sensitivity and the magnitude of the effect is medium then the overall effect **may** also be judged to be significant.*

Each significant visual effect is assigned a degree of significance reflecting the combinations of sensitivity and magnitude. These are severe, major, moderate and neutral and refer to adverse as well as beneficial effects. These are described below:

Major adverse effect

Where the scheme would cause a significant deterioration in the existing view.

Moderate adverse effect

Where the scheme would cause a noticeable deterioration in the existing view.

Slight adverse effect

Where the scheme would cause a barely perceptible deterioration in the existing view.

Slight beneficial effect

Where the scheme would cause a barely perceptible improvement in the existing view.

Moderate beneficial effect

Where the scheme would cause a noticeable improvement in the existing view.

Major beneficial effect

Where the scheme would cause a significant improvement in the existing view.

No change

No discernible deterioration or improvement in the existing view.

The photographs described in section 2.13 are reproduced below as appropriate.

5.3.4 Visual Receptor: users of PROWs and Access Land in and around BPW

Value of view: medium
Susceptibility of receptor: high
Sensitivity of receptor: high
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: high
Likely overall effect: significant

Gethin Woodland Park is clearly attractive. The presence of a car park pre-dating BPW suggests a popular facility visited by locals in order to enjoy the landscape. It is probably not of regional value or higher and thus views within the BPW area are assigned a medium value.

Users of the BPW area may be divided into two groups: i) walkers, horse riders and cyclists not using the mountain biking trails and ii) mountain bikers. Mountain bikers are physically interacting with the landscape but have some appreciation of views. Walkers and others are likely to be focussed on the landscape, and elements within the landscape, and being mostly local, are very likely to notice any changes. They are thus the most susceptible to changes in the view and have been assigned a high susceptibility. Consequently, sensitivity is described as high.

The proposed changes will affect a large part of the BPW site and will thus be perceived as affecting a major part of views. Temporary effects will also adversely affect many of the views. The magnitude of effect, despite the size and longevity of the effects, is described as medium, as the proposals introduce few new elements into the landscape and large areas of planting are proposed.

Views from the **bridleway 110/85** near to the visitor centre are likely to be affected as follows:

- From points south of the visitor centre (see photograph 8) users will see little change to the view other than the proposed catering unit and the office (under construction in the photo).



Photograph 8 taken from the bridleway above & southeast of the visitor centre.

- A view of the bike hire building roof, associated containers and other buildings will be prominent from the viewpoint of photograph 7. This will affect the view adversely though it will improve in time as proposed screening vegetation grows.



Photograph 7 taken from bridleway 110/85 above and west of the visitor centre.

- The trail maintenance yard proposed to the rear of the visitor centre will be visible in part from viewpoints immediately to the west of the visitor centre though the gabion wall will provide some screening. This will probably have no adverse affect on views as the area to the rear of the visitor centre is not an attractive space at present. Views will improve in time as proposed screening vegetation grows.
- Views from the stretch north of the visitor centre will improve as the presently unkempt area is rationalised and planted with trees and shrubs. Views of the existing maintenance yard will be much improved by its relocation and replacement with a landscaped play area specified in keeping with its rural setting. Views across to Merthyr Common will be framed by proposed and existing trees and will thus improve.

Views onto the scrub area and from **footpath 110/71** within the scrub area (see photographs 3 and 10) are likely to be affected as follows:

- Within the areas proposed for van and motorhome parking, near views will be adversely affected by changing from scrub to vehicle parking, access roads and screening planting. The re-routing of the path will change views but will be unlikely to directly lead to adverse effects. Longer views of Merthyr Common will largely be lost by the screen planting. Views from the lower part of the scrub area will be adversely affected by the construction of lodges within the woodland. The adverse effect on near views will be reduced but not eliminated by planting as it matures.
- Views of the existing maintenance yard will be much improved by its relocation, replacement with a landscaped play area specified in keeping with its rural setting, and by intervening planting.
- The number of sensitive receptors with a view *onto* the scrub area from the proposed play area is likely to increase substantially as the area becomes more accessible. Such views will however become increasingly well-screened as proposed planting matures.



Photograph 3 taken from the eastern corner of the settling pond.



Photograph 10 taken from footpath 110/71 looking towards the visitor centre.

Views from **BOAT 110/4** are likely to be affected as follows:

- From the point where the BOAT runs alongside the stream (see photograph 4) proposed buildings will not be prominent. Vehicles parked along the northern edge of the proposed van and motorhome parks may in places be visible. Any slight adverse effects will reduce in time with the proposed planting between the proposed car parks and edge of the existing woodland.



Photograph 4 taken from BOAT 110/4 looking towards the visitor centre.

- Around the point where the BOAT meets the farm access track (see photograph 5) the office building will be prominent but increasingly screened by planting. Vehicles and containers parked will be almost completely screened. Any slight adverse effects will reduce in time with the proposed planting.



Photograph 5 taken at the junction between BOAT 110/4 and the farm access track.

Views from **bridleway 110/82** above the proposed overflow parking area will see a marked deterioration in the view caused by removal of a significant section of screening woodland (see photograph 14) and replacement with a dry macadam surface and parked cars and vans.



Photograph 14 taken from the main drive looking into the woodland where overflow parking is proposed.

Views from **footpath 110/71** on approaching Webber's Pond and Access Land immediately to the north east of the proposed overflow parking area (see photograph 13) are likely to be adversely affected by the removal of a significant section of screening woodland (see photograph 14) and replacement with a dry macadam surface and parked cars and vans and the introduction of lodges into the woodland. The adverse effects on views will be slightly reduced by the proposed feathered and standard tree planting as it matures but not eliminated.



Photograph 13 taken from the field below the area of woodland proposed for overflow parking.

Views from the **informal track** between the proposed van parking area and the proposed overflow parking area (see photographs 11 and 12) are likely to be adversely affected by the removal of certain trees and shrubs, the widening and resurfacing of the track and the introduction of camping pods, lodges, access footpaths and lit bollards into the woodland. The adverse effects on views will be slightly reduced by the proposed feathered and standard tree planting as it matures but not eliminated.



Photograph 11 taken from the existing track through the woodland in which pods and lodges are proposed.



Photograph 12 taken from the existing track through the woodland in which pods and lodges are proposed.

Views of the **terrace** and front of the **visitor centre** are likely to improve with the following changes:

- Removal of parking from the vicinity of the visitor centre
- Improvements to boundaries and surfaces across the extended terrace area
- Formalisation of desire lines

The addition of buildings and other structures in the vicinity of the visitor centre area is considered to have either no effect on views or again, cause a slight improvement.

General views are likely to improve with the following changes:

- Relocation of track maintenance yard and containers etc to the rear of the visitor centre
- Creation of picnic area and bespoke play area to replace parking and track maintenance yard.
- General planting of tree and shrub whips and of feathered and standard trees.

The likely overall effect on users of footpaths, bridleways, BOATS and Access Land in and around BPW has been assessed as significant and is likely to have a major adverse effect reducing to moderate in time as screening planting matures. It will be assessed in section 8.0 for how the effects can be mitigated.

5.3.5 Visual Receptor: users of Merthyr Common

Value of view: high
Susceptibility of receptor: high
Sensitivity of receptor: high
Size, duration and reversibility of effect: minor, long term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect: not significant

Views from Merthyr Common towards BPW, despite encompassing built-up areas within the valley floor, are very appealing (see photograph 17). The common is, in part, very well used by walkers, horse riders, cyclists, scrambler bikers and paragliders.



Photograph 17 taken from the top of the slag heap.

These may be divided into two groups: i) walkers, horse riders and cyclists and ii) scrambler bike riders and paragliders. Scrambler bike riders and paragliders are physically interacting with the landscape but have some appreciation of views. Walkers and others are likely to be focussed on the landscape and elements within the landscape and being mostly local, are very likely to notice any changes. They are thus the most susceptible to changes in the view and have been assigned a high susceptibility. Consequently, sensitivity is described as high.

However, the proposed buildings and associated structures are unlikely to be noticeable to the vast majority of sensitive receptors, as viewpoints are more than 2km away from BPW. Furthermore, the proposed buildings and structures will be viewed against the backdrop of a well-wooded hillside of complex texture and pattern. Existing buildings at BPW can hardly be made out.

The toilet block, lodges and pods are proposed within an area of woodland and are finished in muted natural tones. Despite the removal of a certain number of trees and shrubs and the raising of certain lodges above ground level, it is unlikely that the installation of these buildings will have a noticeable effect on views except at night in winter.

Of significantly greater prominence in existing views are the vehicles and shipping container. The proposed increase in extent of parking and the expansion into the more exposed scrub area is likely to be noticeable from Merthyr Common especially to those very familiar with the view. Similarly, certain areas of the existing parking and the proposed overflow parking are likely to be noticeable with the removal of a significant area of screening woodland and relatively little proposed screening along its north eastern edge. The distance will reduce the magnitude of the effect substantially but views will be adversely affected. This will reduce in time as proposed screening planting grows.

The overall effect on this view has been assessed as not being significant. It will however be assessed in section 8.0 for how the effects can be mitigated as the view of BPW is clear and the integrity of the woodland around BPW is an important character of that view and its preservation is considered important.

5.3.6 Visual Receptor: users of the Trevithick Trail and other PROWs on the eastern valley flanks

Value of view: high
Susceptibility of receptor: high
Sensitivity of receptor: high
Size, duration and reversibility of effect: minor, long term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect: not significant

Views from the Trevithick Trail and other PROWs, east and east north east of BPW encompass close views of built-up areas within Pentrebach and commercial/industrial areas nearby but are nevertheless appealing (see photograph 16) and enjoyed by a great many walkers and some cyclists. Walkers, and to a lesser extent cyclists, are likely to be focussed on the landscape and elements within the landscape and being mostly local, are very likely to notice any changes. They are thus the most susceptible to changes in the view and have been assigned a high susceptibility. Consequently, sensitivity is described as high.



Photograph 16 taken from the footpath north east of and above Pentrebach.

However, the proposed buildings and associated structures are unlikely to be noticeable to the vast majority of sensitive receptors, as viewpoints are more than 1.5km away from BPW. Furthermore, the proposed buildings and structures will be viewed against the backdrop of a well-wooded hillside of complex texture and pattern. Existing buildings at BPW can hardly be made out.

The toilet block, lodges and pods are proposed within an area of woodland and are finished in muted natural tones. Despite the removal of a certain number of trees and shrubs and the raising of certain lodges above ground level, it is unlikely that the installation of these buildings will have a noticeable effect on views except at night in winter.

Of significantly greater prominence in existing views are the vehicles and shipping container. The proposed increase in extent of parking and the expansion into the more exposed scrub area is likely to be noticeable from Merthyr Common especially to those very familiar with the view. Similarly, certain areas of the existing parking and the proposed overflow parking are likely to be noticeable with the removal of a significant area of screening woodland and relatively little proposed screening along its north eastern edge. The distance will reduce the magnitude of effects substantially but views will be adversely affected. This will reduce in time as proposed screening planting grows.

The overall effect on this view has been assessed as not being significant. It will however be assessed in section 8.0 for how the effects can be mitigated as the view of BPW is clear and the integrity of the woodland around BPW is an important character of that view and its preservation considered important.

5.3.7 Visual Receptor: residents of Pentrebach (views from dwellings)

Value of view: high
Susceptibility of receptor: intermediate
Sensitivity of receptor: medium
Size, duration and reversibility of effect: minor, long term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect: not significant

Views from dwellings within Pentrebach were not assessed from any buildings or private gardens but were inferred from views from publicly accessible areas.

Views from residential properties and associated private gardens are likely to include the hillside around BPW but are unlikely to focus on it. However, residents with a view of the area of BPW being very familiar with the view and able to study it at their leisure, are very likely to notice changes to the landscape. The effects of such changes are however likely to be tempered by the context of the viewpoint: the foreground of such views is dominated by the surrounding townscape (see photograph 15). They are thus assessed as being of intermediate susceptibility to changes in the view. Consequently, sensitivity is described as medium.



Photograph 15 taken from Dyffryn Road, the main road through Pentrebach, outside Greenfield school.

However, the proposed buildings and associated structures are unlikely to be noticeable to the vast majority of sensitive receptors, as viewpoints are more than 1.5km away from BPW. Furthermore, the proposed buildings and structures will be viewed against the backdrop of a well-wooded hillside of complex texture and pattern. Existing buildings at BPW can hardly be made out.

The toilet block, lodges and pods are proposed within an area of woodland and are finished in muted natural tones. Despite the removal of a certain number of trees and shrubs and the raising of certain lodges above ground level,, it is unlikely that the installation of these buildings will have a noticeable effect on views except at night in winter.

Of significantly greater prominence in existing views are the vehicles and shipping container. The proposed increase in extent of parking and the expansion into the more exposed scrub area is likely to be noticeable from Merthyr Common especially to those very familiar with the view. Similarly, certain areas of the existing parking and the proposed overflow parking are likely to be noticeable with the removal of a significant area of screening woodland and relatively little proposed screening along its north eastern edge. The distance will reduce the magnitude of effects substantially but views will be adversely affected. This will reduce in time as proposed screening planting grows.

The overall effect on this view has been assessed as not being significant. It will however be assessed in section 8.0 for how the effects can be mitigated as the view of BPW is clear and the integrity of the woodland around BPW is an important character of that view and its preservation considered important.

5.3.8 Visual Receptor: Users of public areas within Pentrebach and adjacent built-up areas

Value of view: high
Susceptibility of receptor: low
Sensitivity of receptor: low
Size, duration and reversibility of effect: minor, long term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect: not significant

The effect on users of public areas of Pentrebach and surrounding areas is likely to be similar to residents (see 5.3.4 above) except in the following respects:

- Users are less likely to be very familiar with the view
- Users are unlikely to be stationary and unlikely to be focussed on the landscape
- Users within public open spaces may have a clearer view of the hillside around BPW than residents within dwellings and private gardens.

The overall effect on this view has been assessed as not being significant. It will not be assessed for how the effects can be mitigated.

5.3.9 Visual Receptor: residents of the farm north of BPW

Value of view: high
Susceptibility of receptor: low
Sensitivity of receptor: medium
Size, duration and reversibility of effect: minor or none, long-term and unlikely to be reversed
Magnitude of effect: low or negligible
Likely overall effect: not significant

The farm adjacent to BPW is private property and was not visited as part of this study.

The judgements contained in the above table assumes that the view of BPW and the area proposed for development from the farm is either non-existent or very restricted.

The overall effect on this view has been assessed as not being significant. It will however be assessed in section 8.0 for how any possible effects can be mitigated as the property is very close to BPW and any adverse effects on views will need to be addressed.

5.4 Summary

Significant effects on views are limited to those within and near to BPW and the proposed area for development. Other views will however be considered in the assessment of mitigation as the setting of BPW is considered to be of such high value and its preservation of some importance.

6.0 CUMULATIVE EFFECTS

6.1 General

Gethin Woodland Park has been developed as a cycle centre in a relatively short period of time. Residents and users of the area are likely to view the development in its totality and not as series of discrete increments. A judgement based on the total development, existing and proposed, will reflect their likely experience and impressions more accurately.

This totality of effects is described as the cumulative effects on the landscape. This section will review the proposed developments assessed in this document *alongside* all previous developments since the facility established in 2012.

Cumulative effects relevant to BPW can be described in two ways:

- i. Landscape effects: qualitative or quantitative combinations with other similar developments
- ii. Combined visual effects: the ability to see the development in conjunction with other similar developments in the same view.

Prior to the establishment of the mountain bike facility in 2012, the site comprised an informal car park set in woodland and rough pasture with an access road connecting it to the A470. The aerial photograph below shows the site in 2001.



The existing development (implemented since 2012) is outlined in pink on the Existing Site Plan as “previously developed area”. The relevant applications are as follows:

Planning Application P/12/0235

The first successful application, granted permission in October 2012 comprised:

- a main visitor centre
- 17 forest bike trails
- campsite (including 5 timber camping pods)
- shower block
- additional car parking
- landscaping works

Planning Application P/13/0214

Permission for development was granted on the 5th August 2013 for the erection of a single storey extension (plant room) to the main visitor centre.

Planning Application P/16/0055

Permission for development was granted on the 7th April 2016 for the retention of revised car parking layout, including the provision of additional parking spaces and the erection of two wood clad huts.

The key consideration in assessing the cumulative effect of the combined developments is a judgement of whether the effects of the proposed development (assessed in previous sections of this report) are increased or extended when the the entire development, existing and proposed, are assessed together.

6.2 Landscape baseline

The Visual Impact Statement (VIS) of 15th May 2012, by the same author as this report, gives an outline of the landscape baseline before the development of BPW. It can be viewed on Merthyr Tydfil Borough Council’s website as part of **Planning Application P/12/0235**. The description of the site was however less comprehensive, in line with the nature of the report.

The section on mitigation in the VIS anticipated that, *“In general, cars, because of their colours and shiny angled surfaces, are more likely than proposed buildings to adversely affect views into the site”*. This proved to be the case and is likely to be the case with the proposals outlined in this assessment. However the VIS gave limited consideration to the visual effects on users of the site itself. It concentrated instead on users of the wider landscape. Consequently, mitigation dealt only with reduction of effects on these visual receptors. Differences between the findings and mitigation described in the VIS and this assessment should thus not be used as a measure of the effects of each set of proposals as the two studies not only differed in the proposals but in scope.

6.3 Significance

The following sections will reconsider the effects of the proposed developments alongside the existing development since 2012 in order to assess whether the effects are extended or intensified compared with the findings in 5.0 Analysis of Effects.

The cumulative effects will be considered for each likely significant effect in turn. Those effects not considered significant in section 5.0 above, will be reconsidered for significance. Those effects considered significant in section 5.0, will be reconsidered for their *degree* of significance.

6.4 Cumulative effects on landscape receptors

6.4.1 Landscape Receptor: landform and geology NO CHANGE

The main adverse effects of the proposed development on landform are the excavation of the bank to allow construction of the bike hire building and the groundworks associated with the overflow, van, and motorhome parking areas. The effects on landform of the existing development were similar in character but, considered together, greater in extent. The judgement on the size of the effects would not however be increased beyond moderate and the significance criteria not increased beyond moderate adverse.

Cumulative effects summary

Value: High (LANDMAP)
Susceptibility: Medium
Sensitivity: Medium
Size, duration and reversibility of effect: Moderate in size, long-term, permanent
Magnitude of effect: Medium
Likely overall effect on landscape character: Significant

6.4.2 Landscape Receptor: landscape pattern and history NO CHANGE

It is not considered that the effects on pattern and history would be changed in considering existing and proposed together. The overall effect would still be significant and the significance criteria moderate adverse.

Cumulative effects summary

Value: high (LANDMAP)
Susceptibility: Medium
Sensitivity: Medium
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: medium
Likely overall effect on landscape character: Significant

6.4.3 Landscape Receptor: woodland NO CHANGE

It is not considered that the effects on woodland would be changed in considering existing and proposed together. The overall effect would still be significant and the significance criteria moderate adverse.

Cumulative effects summary

Value: High
Susceptibility: high
Sensitivity: high
Size, duration and reversibility of effect: moderate in size, long-term and unlikely to be reversed
Magnitude of effect: moderate
Likely overall effect on landscape character: Significant

6.4.4 Landscape Receptor: scrub/grassland NO CHANGE

It is not considered that the effects on **scrub/grassland** would be changed in considering existing and proposed together as the existing development does not directly affect the area . The overall effect would still not be significant.

Cumulative effects summary

Value: low
Susceptibility: medium
Sensitivity: low
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: moderate
Likely overall effect on landscape character: Not significant

6.4.5 Landscape Receptor: Waterways and waterbodies NO CHANGE

It is not considered that the effects on **waterways and waterbodies** would be changed in considering existing and proposed together as the existing development does not directly affect them. The overall effect would still not be significant.

Cumulative effects summary

Value: low
Susceptibility: medium
Sensitivity: medium
Size, duration and reversibility of effect: moderate in size, long-term and reversible in the long-term
Magnitude of effect: medium
Likely overall effect on landscape character: Significant

6.4.6 Landscape Receptor: access NO CHANGE

It is not considered that the effects on **access** would be changed in considering existing and proposed together as the existing development and proposed developments are likely to have very similar effects. The overall effect would still not be significant.

Cumulative effects summary

Value: high
Susceptibility: moderate
Sensitivity: moderate
Size, duration and reversibility of effect: Moderate in size, short-term duration and reversible
Magnitude of effect: Minor
Likely overall effect on landscape character: Not significant

6.4.7 Landscape Receptor: culture CHANGE

The combined effect of existing and proposed developments on the cultural aspect of the site is likely to be different from the proposed development considered in isolation. The introduction of buildings and a significant change in the degree and nature of activity in the Gethin Woodland Park is considered to have a noticeable effect on the aesthetic and perceptual aspects of the cultural landscape.

It is likely that there would be a change in susceptibility from low to moderate and a consequent increase in sensitivity to medium. The size of effect would increase to moderate and consequently magnitude would increase to medium.

The effect would be judged significant with a moderate adverse significance criteria. It will now be assessed in section 8.0 for how the effects can be mitigated.

Cumulative effects summary

Value: moderate
Susceptibility: moderate (previously low)
Sensitivity: medium (previously low)
Size, duration and reversibility of effect: moderate (previously minor), long-term and unlikely to be reversed
Magnitude of effect: medium (previously low)
Likely overall effect on landscape character: Significant (previously not significant)

6.4.8 Landscape Receptor: sensory aspects CHANGE

The combined effect of existing and proposed developments on the sensory aspects of the site is likely to be different from the proposed development considered in isolation. With the exception of the existing car park, the combined existing and proposed developments introduce a number of new elements into the landscape compared with the pre-2012 baseline. The introduction of buildings and a significant change in the degree and nature of activity in the Gethin Woodland Park is considered likely to have a noticeable effect on the sensory landscape.

It is likely that there would be a change in susceptibility from low to moderate and a consequent increase in sensitivity to medium. The size of effect would increase to moderate and consequently magnitude would increase to medium.

The effect of the cumulative development would be judged significant with a moderate adverse significance criteria. It will now be assessed for how the effects can be mitigated.

Cumulative effects summary

Value: moderate
Susceptibility: medium (previously low)
Sensitivity: medium (previously low)
Size, duration and reversibility of effect: moderate (previously minor), long-term and unlikely to be reversed
Magnitude of effect: medium (previously low)
Likely overall effect on landscape character: Significant (previously not significant)

6.4.9 Landscape Receptor: light CHANGE

No study was carried out at night so effects have been estimated.

The hillside in which BPW is set, prior to 2012 had almost no street lights, buildings or other elements that were lit at night. Use of the car park at night was limited. In terms of conservation, wildness and sensory appeal it had a high value. Susceptibility to changes in the night scene caused by cumulative development of the site is high. Sensitivity is thus judged to be high.

The magnitude of the effect on light is judged to be major as the marked increase in the adverse effect of headlights, the lights from buildings and pathside and other outside lights on the darkness of the hillside is substantial.

The effect of the cumulative development on the site's darkness is likely to be significant with a moderate adverse significance criteria. It will thus be assessed for how the effects can be mitigated.

Cumulative effects summary

Value: high (previously medium)
Susceptibility: low (previously low)
Sensitivity: high (previously low/moderate)
Size, duration and reversibility of effect: major (previously minor), long-term and unlikely to be reversed
Magnitude of effect: high (previously low)
Likely overall effect on landscape character: Significant (previously not significant)

6.4.10 Cumulative Landscape effects: overall character

It is considered likely that the overall landscape character would be changed by the proposed and existing developments taken together. The character is judged to be substantially different in character from the pre-2012 baseline.

The size of the cumulative development, though large in relation to the pre-2012 car park, is however not of a scale that is likely to significantly change the character of the aspect area sufficient to create a new landscape type or sub-type.

6.5 Cumulative effects on visual receptors

6.5.1 Visual Receptor: users of PROWs and Access Land in and around BPW NO CHANGE

The combined effect of the existing and proposed developments are likely to have very similar effects on users of the site in that the sensitivity of the receptor and overall magnitude of effect would both remain high, the likely overall effect would be significant and likely to have a major adverse effect reducing to moderate in time as screening planting matures

Cumulative effects summary

Value of view: medium
Susceptibility of receptor: high
Sensitivity of receptor: high
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: high
Likely overall effect: significant

6.5.2 Visual Receptor: users of Merthyr Common NO CHANGE

The combined effect of existing and proposed developments on views from Merthyr Common is unlikely to be changed from that of the proposed development alone.

Cumulative effects summary

Value of view: high
Susceptibility of receptor: high
Sensitivity of receptor: high
Size, duration and reversibility of effect: minor, long term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect: not significant

6.5.3 Visual Receptor: users of the Trevithick Trail and other PROWs on the eastern valley flanks NO CHANGE

The combined effect of existing and proposed developments on views from the Trevithick Trail and other PROWs on the eastern valley side is unlikely to be changed from that of the proposed development alone.

Cumulative effects summary

Value of view: high
Susceptibility of receptor: high
Sensitivity of receptor: high
Size, duration and reversibility of effect: minor, long term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect: not significant

6.5.4 Visual Receptor: residents of Pentrebach (views from dwellings) NO CHANGE

The combined effect of existing and proposed developments on views from dwellings in Pentrebach is unlikely to be changed from that of the proposed development alone.

Cumulative effects summary

Value of view: high
Susceptibility of receptor: intermediate
Sensitivity of receptor: medium
Size, duration and reversibility of effect: minor, long term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect: not significant

6.5.5 Visual Receptor: Users of public areas within Pentrebach and adjacent built-up areas NO CHANGE

The combined effect of existing and proposed developments on views from users of open space and publicly accessible areas in Pentrebach and adjacent built-up areas is unlikely to be changed from that of the proposed development alone.

Cumulative effects summary

Value of view: high
Susceptibility of receptor: low
Sensitivity of receptor: low
Size, duration and reversibility of effect: minor, long term and unlikely to be reversed
Magnitude of effect: low
Likely overall effect: not significant

6.5.6 Visual Receptor: residents of the farmhouse north of BPW NO CHANGE

The combined effect of existing and proposed developments on views from the adjacent farmhouse is unlikely to be changed from that of the proposed development alone.

Cumulative effects summary

Value of view: high
Susceptibility of receptor: low
Sensitivity of receptor: medium
Size, duration and reversibility of effect: minor or none, long-term and unlikely to be reversed
Magnitude of effect: low or negligible
Likely overall effect: not significant

6.5.7 Conclusion: cumulative effects on visual receptors

The visual effects of the combined proposals are considered to be similar to those assessed for the proposed development alone: visual effects on users of BPW and the immediate area are considered to be significant and severe adverse reducing to moderate in time. Effects on receptors beyond the site are not considered significant.

6.6 Mitigation of cumulative effects

The mitigation identified as being necessary following assessment of cumulative effects is very similar to that identified as being necessary for the proposed development alone. Mitigation of cumulative and proposed developments will thus be combined and presented together in section 8.0 below.

7.0 CONCLUSION

7.1 Planning Policy

Certain aspects of previous planning conditions have not been met. These will be addressed in section 8.0 Mitigation.

The development appears to follow policy in most respects. It does not however follow it in terms of biodiversity and protection of the environment.

7.2 Landscape Character

A number of landscape receptors would be significantly affected by the developments proposed. The cumulative effects of proposed and previous developments would increase the number of significant effects on landscape receptors.

It is not considered likely that the overall landscape character would be altered by the proposed development and aspect areas covering BPW are able to receive the development without noticeable changes to their *overall* character.

7.3 The Visual Landscape

There are likely to be significant effects on views within and near to BPW. Longer views are unlikely to be significantly affected.

The cumulative effects of proposed and previous developments would not increase the number of significant effects on visual receptors.

8.0 MITIGATION

8.1 General

Earlier drafts of this assessment identified potential adverse landscape and visual effects. The design has been refined by a series of amendments to avoid or minimise these effects: the design as presented is thus significantly different from the original concept.

Certain adverse effects, as outlined in sections 5.0 and 6.0, still remain. The following section attempts to mitigate these effects. It encompasses conditions and proposals not completed from earlier planning decisions. Mitigatory proposals are incorporated into or described on the Masterplan (appendix 5.0).

Adverse effects that cannot be fully mitigated are summarised and quantified in section 9.0 Likely residual effects following mitigation.

Proposals for mitigation are offered as follows:

8.2 Woodland

The likely effects of the development on woodland are described in section 5.0.

Mitigation of a number of the effects is discussed in other sections that follow. Those that are not are discussed below:

Damage to canopies of significant trees by construction process during construction of buildings, bunds and two-way access road.

A full method statement for avoidance of damage should be prepared in writing and agreed before implementation commences. It should include specific details of machinery sizes and types (machinery should be tracked and small). It should describe procedures for working in close proximity to mature trees and should also include measures for surgery to trees that are accidentally damaged or need to be trimmed to allow construction. Plastic or steel heavy-duty temporary ground guards should be employed in areas beneath tree canopies likely to be heavily trafficked.

The areas of hard surfacing between pods and lodges within woodland should be reduced to the minimum required for access to reduce damage to tree roots and maintain as much space for wildlife as possible. The spaces between clusters of buildings could be retained for social use with picnic tables etc. but without hard surfacing.

The woodland should also be re-assessed for opportunities to increase the planting of trees and shrubs within it once pods, lodges and paths have been constructed. The aim should be to increase screening, especially at edges, and to increase opportunities for wildlife.

The loss of tranquility and wildness associated with the woodland can only be partly mitigated by the proposed planting. Loss of space for biodiversity can also not be fully mitigated on site.

8.3 Access Drive

The route of the access drive avoids the majority of mature trees but proposes the removal of a group of C category trees near to the western end of the east-west section near to the shower block.

The (verbally) proposed specification for roads describes a 600mm deep construction profile. In general however, the excavation depth to formation will be c.150mm with 450mm of the construction above the existing ground level. This is likely to affect the roots of nearby trees but damage in most cases is unlikely to be severe.

It is very likely that the root systems of trees growing along the informal track through the woodland in which pods and lodges are proposed, extend beneath the track. As described above, the 150mm construction depth of the proposed north-south section of the drive along the route of the track is unlikely to cause significant damage to these trees. The overburden on roots is however very likely to have an adverse effect.

The depth and level of the ditch soakaway along the west side of the north-south section of the proposed drive are not described. In order to avoid damage to significant tree roots, the level of the base of the ditch should be at existing levels or no more than 150mm below existing levels.

Where access drives are constructed (or existing tracks increased in width) beneath or close to the canopy of significant trees or where they coincide with the root protection zone of surveyed trees, the road should be constructed using a no-dig construction method using a plastic cell base layer (such as cell web). Where the existing substrate is not reasonably firm in such areas and needs to be excavated below the existing ground level, the surface should be carefully reduced by small increments under close observation by a second person standing immediately adjacent to the work area. Where significant tree roots are encountered, the landscape architect or arboriculturalist should be consulted to advise on the appropriate action. This may be to cut the root, to provide a consolidated substrate around the root or to amend the alignment or width of the road.

The source material for road construction should be an acidic or neutral stone. Limestone or similarly basic stone should not be used. The specification should not however compromise the free-draining nature of the stone described by Bingham Hall.

8.4 Footpaths and other pedestrian surfaces

The (verbally) proposed specification for footpaths proposes a 150mm deep construction profile. Where footpaths are constructed beneath or close to the canopy of significant trees or where they coincide with the root protection zone of surveyed trees, the path should be constructed using a no-dig construction method using a plastic cell base layer (such as cell web). Where the existing substrate is not reasonably firm in such areas, the process described for roads should be followed except that excavation should be carried out by hand and not machine.

The source material for path construction should be specified as a non-acidic stone as per the recommendations for roads above.

Access for recreation across the site will not be affected in terms of routes except in the short term but the setting of footpaths will change especially compared to the pre-2012 baseline. Some mitigation of adverse effects is likely with planting shown on the masterplan and with planting described in the section on General Character etc below.

8.5 Buildings

The proposed lodges are likely to be visible along the south east edge of the woodland in which they are proposed. The standard and feathered trees proposed will help soften the outline of the lodges but will not screen them completely. A greater area and density of planting including shrubs is required to improve screening. This should be planted along the south eastern boundary within the woodland. The possibility of planting within the adjacent field was investigated and rejected because of the high ecological value of the adjacent field.

The maximum depth below existing ground level of the formation layer for the base pads of lodges 4 and 5 has been estimated as 600mm. This will cut through all feeder roots that coincide with the footprints of the lodges.

The author is not qualified to comment on suitable alternative foundations except to suggest that a foundation design based on a series of piles, carefully located to avoid damage to significant roots would be likely to be less damaging than pads. A proper investigation of this or similar foundations should be made and applied to the pods and lodges if deemed suitable and affordable. Proposed location of lodges should be adjusted on site to minimise damage to roots and if alternative bases are not deemed suitable then the excavation depths required for the concrete pads should be reduced as much as possible by, for example, using cut and fill rather than just cut subject to engineering advice.

The timber supports proposed for lodges 1, 2 and 3 are not specified but would probably be less damaging than concrete pad foundations.

Barge boards on the lodges are proposed in white. These should be specified in a darker more muted colour to reduce the impact on views and character.

8.6 Proposed van parking area

The planting shown on the masterplan around and within the van parking area is only effective in mitigating some of the adverse effects on the area of scrub in which it is proposed.

Headlights in winter will continue to have an adverse effect on the night-time landscape. The users of footpath 110/71 will continue to suffer permanent adverse effects though these will reduce as shrubs and trees grow.

Actions to mitigate the loss of scrub are discussed in the Ecological Assessment.

8.7 Landform and geology

The main adverse effects on landform and geology are the excavation of the bank to allow construction of the bike hire building and the groundworks (excavations and construction of bunds) associated with the overflow, van, and motorhome parking areas.

Mitigation of the adverse effects on landform and geology are only partially possible (screening planting already proposed) as both will be significantly altered as an integral part of the development proposals.

8.8 Proposed overflow parking area

The following actions are proposed in the area of the overflow car park:

- removal of a significant area of woodland
- ground modelling (cut and fill) extending beyond the footprint of the proposed car park shown on the masterplan
- construction of a dry macadam surface
- introduction of parked vehicles

These will cause a deterioration in the views from the bridleway/access drive above (south west of) the proposed overflow parking area. Views from footpath 110/71 (on approaching Webber's Pond) and Access Land immediately below (and to the north east of) the overflow area will also be adversely affected. They will also have an adverse effect on landscape pattern and history.

The adverse effects on views will be slightly reduced but not eliminated by the proposed feathered and standard tree planting as it matures. The possibility of using gabions to reduce the area of cut & fill (and thus the area of trees proposed for removal) was investigated and rejected because of cost.

Adverse effects on near and long views from the footpath and Access Land below could be further mitigated by the planting of a greater number of trees and shrubs along the north eastern edge of the parking area, though space is limited. The possibility of additional screening planting within the adjacent field was investigated and rejected because of the high ecological value of the adjacent field.

Views from the bridleway/access drive above could be improved by reinforcing planting within the strip of retained woodland between the drive and parking area. Establishment would be problematic however below the canopy of existing trees. Yew and holly (both native evergreens) would provide year-round screening and would be easier to establish being relatively tolerant of shade. Indeed, unless evergreens are used, screening would be unlikely to be fully effective in this area, even in the long term.

8.9 Services and drainage

Services are in general unlikely to have an adverse effect on the site except for those proposed within the woodland area surrounding the proposed pods and lodges. The following section deals with mitigation to services within this area of woodland.

All services are proposed for burial in trenches. Within the woodland, foul drainage, water, electricity and communications trenches are in general proposed beneath or close to the proposed main footpaths. Branches from the main service routes below the main footpaths should also, where possible, be laid below footpaths.

The proposed depth of services below “ground level” ranges from telecoms at 350mm to water at 900mm. Installation of services at this depth below existing ground level will cut through almost all tree roots coinciding with the routes. This is likely to have a significant adverse effect on mature trees especially where trenches skirt the edge of canopies (mainly east of the north-south drive).

The route of electrical trenches along the east-west path cannot be altered from that illustrated as a number of lit bollards requiring an electrical supply are arranged along the path.

The following changes to the proposals should also be made:

- The exact route of fresh water, communications, foul drainage and surface drainage trenches should be determined on site by the landscape architect or arboriculturalist to reduce damage to tree roots. Excavation beneath the canopies of significant trees and those surveyed individually in the tree survey should be carried out with care, in small increments, under close observation by a second person standing immediately adjacent to the work area. Where significant tree roots are encountered, the landscape architect or arboriculturalist should be consulted to advise on the appropriate action. In general, any significant roots encountered should remain and be allowed to bridge the trench where possible. Ducting, pipes and cables should be installed with care below retained roots. Backfilling should be completed as soon as possible after excavation, preferably on the same day.
- Trench depths should be below **finished** levels. Reduce the proposed depths of excavation below **finished** levels for electricity to **400mm**, and fresh water pipes and all drainage pipes to **600mm**.
- All services should be run under proposed drives and footpaths where they follow the same route to reduce the overall trench depth (unless advised otherwise by landscape architect or arboriculturalist on site as above). In the case of the electricity cable, a depth of footpath construction of 150mm largely **above existing levels** and a depth of excavation of 400mm below **finished levels** for the ducting trench, would mean that the total depth of excavation below **existing levels** would be 250mm. This reduces the potential damage to tree roots significantly when compared with the 450mm below “ground level” previously proposed. In the unlikely event that trenches would need to be re-excavated in the future, the routing of services below paths and drives would make them easier to locate and would reduce damage to roots and vegetation in general
- Warning tapes should be installed along all electricity trenches. An as-built record of service depths and locations should be made and subsequently made known to all maintenance staff and included in all health and safety information and method statements etc.
- Services proposed to run beneath east-west access drive should be run along the centreline of the carriageway to establish maximum distance from trees (existing and proposed).

Damage to roots by services within woodland will only be partially mitigated by the above actions however.

Changes to the water table by trenching, excavations and installation of soakaways cannot be mitigated by landscape.

8.10 Pollution prevention, Waterways and waterbodies

No written details were provided to describe measures to be taken to avoid the spillages of fuel and other deleterious materials during construction and during the operation of the site to prevent incidents of watercourse pollution from chemical and petrochemical substances, oils, grease and wash downs of apparatus.

No written details were provided to describe how materials are to be delivered and stored within the site prior to and during construction to prevent contamination of watercourses etc and methods to be operated to remove traces of contamination after construction.

A written method statement should be produced before construction commences and closely followed thereafter.

8.11 Landscape management

Details of landscape management were submitted with the application currently under consideration but were restricted to the area of planting around the Bike Hire Building.

A more comprehensive management programme should be provided and implemented to ensure establishment of planting into the long term and to lay out the management of woodland and other areas essential to preserve and enhance biodiversity, views and landscape character.

8.12 Light

The cumulative effect of the existing and proposed development is likely to have a significant adverse effect on landscape character. No study was carried out at night so the effect has been estimated.

Considering existing and proposed development (cumulative effects), adverse night-time effects are likely to include:

- The installation of outside lighting within the site generally
- Light from lodges and pods for use by campers and thus beyond the normal opening hours
- Light from all other buildings
- An increase in vehicular activity in the evening and at night

Lights within woodland (all sources) will be screened from long views in summer. In winter, screening will be much less. Extra planting should be proposed to help screen light from all sources in order to reduce adverse effects on all near and long views and on landscape character and sensory aspects of the woodland.

Outdoor lighting should be very low intensity. The proposed bollard spacing of c.9m should be increased. The bollards are solely intended to function as waymarkers and users of paths will be expected to have a torch to illuminate their way. Spacings can therefore be increased without compromising safety. Spacing of bollards should be increased to c.20m or restricted to path junctions, road crossings etc.

Lights within lodges and pods should be of very low intensity and windows should be provided with curtains/blinds. No outdoor lighting should be used on lodges and pods. Movement sensitive lighting is likely to be activated by leaves and wildlife so should not be installed.

The Ecological Assessment will also discuss light in terms of its effect on wildlife and will also suggest mitigation.

Light effects can only be partially mitigated.

8.13 Residents of the farm north of BPW

Planting along the northern boundary of the site is considered sufficient to mitigate any effect on views from the farm.

Any effects of increased disturbance caused by the intensification of use, and the extension of activities into the evening, that is likely to result from the use of motorhomes, camping pods and lodges, cannot however be fully mitigated by landscape.

8.14 Residents of Pentrebach (views from dwellings), users of Merthyr Common, the Trevithick Trail and other PROWs on the eastern valley flanks

The planting proposed in the latest masterplan will significantly mitigate and adverse effects on daytime summer views from Pentrebach and the PROWs and open areas above.

Wintertime daytime views may still be adversely affected in that vehicles being shiny and brightly coloured and possessing reflective, angled windscreens are likely to be visible in winter.

Similarly, effects on night-time views will be adversely affected by vehicle headlights and other light sources especially as evening and night-time use of the car parks and access drives will increase with the installation of motorhome parking and pods and lodges.

Shipping containers, tanks, plant and similar structures which might be visible in long views should be removed, relocated, screened by dense planting, painted in muted, matt colours or clad in natural timber.

The daytime, summer adverse effects on the above visual receptors will be almost fully mitigated in time as proposed planting matures. Nighttime effects can only be partially mitigated.

8.15 General character, cultural and sensory aspects of the landscape and views within the BPW area.

Increased activity on the site, and the intensification of activities into the evening that is very likely to come with the use of motorhomes, camping pods and lodges, is likely to cause adverse effects on the above. These will be most felt in terms of increased disturbance and a loss of tranquility and wildness.

The planting proposed on the masterplan will be effective to a certain degree in reducing the overall effects compared to the pre-1012 baseline.

More extensive mitigatory planting of trees and shrubs would further help by improving the screening of views within the site and in a limited way, return a sense of wildness and tranquility to it. Reinforcement of planting between, and adjacent to, existing parking areas will be particularly effective in this respect.

Other areas not already shown on the masterplan as being planted should also be assessed for suitability for additional planting. Those areas which have seen some reduction in mature tree condition and numbers since 2012 or have not been planted in accordance with previous proposals or planning conditions, should also receive additional planting.

Installation of bunds within certain areas to accompany planting would enhance its screening effect. Such bunds should not, in general, be located beneath existing tree canopies.

The effects on general character and the above landscape receptors cannot however practically be fully mitigated by landscape.

8.16 Biodiversity

The adverse effects on biodiversity caused by the cumulative development will be partly mitigated by the proposals and the mitigatory planting described in 8.16 above. Other mitigation is offered in the Ecological Assessment which forms part of the overall EIA.

Conditions and recommendations of previous planning permissions not previously carried out should be completed where the layout and conditions allow.

The likely residual adverse effects on biodiversity following mitigation are described in the Ecological Assessment.

9.0 Likely residual effects following mitigation

9.1 General

The majority of adverse effects listed in previous sections will be substantially reduced or eliminated should the recommendations contained within the Mitigation section above and the proposals on the Masterplan be followed. However, certain adverse effects cannot be fully mitigated should the development be implemented in its current form. These effects, or the receptor that is likely to be affected, are listed below:

9.2 Landscape Receptor: landform and geology

Mitigation of the adverse effects on landform and geology are only partially possible with increased screen planting as both will be significantly altered as an integral part of the development proposals. Significance criteria will remain unchanged.

Effects remaining after mitigation

Value: High (LANDMAP)
Susceptibility: Medium (Not assessed in LANDMAP)
Sensitivity: Medium
Size, duration and reversibility of effect: Moderate in size, long-term, permanent
Magnitude of effect: Medium
Likely overall effect on landscape character: Significant - moderate adverse

9.3 Landscape Receptor: landscape pattern and history

Screening of the overflow parking area would be unlikely to be fully effective, even in the long term for users of footpath 110/71 and access land to the north east. Mitigation would however be likely to reduce the significance criteria to slight adverse as vegetation develops and screening in summer becomes moderately effective.

Effects remaining after mitigation

Value: high (LANDMAP)
Susceptibility: Medium
Sensitivity: Medium
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: medium
Likely overall effect on landscape character: Significant - slight adverse

9.4 Landscape Receptor: woodland

Changes to the water table by excavations and installation of soakaways cannot be mitigated by landscape and may have adverse effects on certain mature trees within the woodland.

Loss of space available for flora and fauna by construction of buildings, drives, parking and other infrastructure cannot be fully mitigated on site.

The overburden on roots from parking and drive construction will have a long-term adverse effect on the oxygen levels and drainage around the roots of larger trees. This will lead to some loss of vigour in all trees affected and may lead to the death of a smaller number.

Damage to roots by excavation of service trenches within woodland cannot be fully mitigated by the proposed re-routing and careful excavation.

It is considered that the significance criteria will remain moderate adverse.

Effects remaining after mitigation

Value: High
Susceptibility: high
Sensitivity: high
Size, duration and reversibility of effect: moderate in size, long-term and unlikely to be reversed
Magnitude of effect: moderate
Likely overall effect on landscape character: Significant - moderate adverse

9.5 Landscape Receptor: scrub/grassland

Loss of space available for flora and fauna by construction of drive and parking cannot be mitigated on site.

Effects remaining after mitigation

Value: low
Susceptibility: medium
Sensitivity: low
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: moderate
Likely overall effect on landscape character: Not significant

9.6 Landscape Receptor: culture

The effects on cultural aspects of the landscape of increased disturbance caused by the intensification of use, and the extension of activities into the evening, cannot be fully mitigated. It is likely that the significance criteria would remain moderate.

Effects remaining after mitigation

Value: moderate
Susceptibility: moderate
Sensitivity: medium
Size, duration and reversibility of effect: moderate, long-term and unlikely to be reversed
Magnitude of effect: medium
Likely overall effect on landscape character: Significant - moderate adverse

9.7 Landscape Receptor: sensory aspects

The effects on the sensory aspects of the landscape of increased disturbance caused by the intensification of use, and the extension of activities into the evening, cannot be fully mitigated.

It is likely that mitigation would however reduce the significance criteria from moderate to slight adverse.

Effects remaining after mitigation

Value: moderate
Susceptibility: medium
Sensitivity: medium
Size, duration and reversibility of effect: moderate, long-term and unlikely to be reversed
Magnitude of effect: medium
Likely overall effect on landscape character: Significant - slight adverse

9.8 Landscape Receptor: light

Nighttime light effects can only be partially mitigated. It is not possible to completely prevent light pollution from the increase in number and activity of vehicles across the BPW area. Light pollution, especially in winter, will continue to have an adverse effect on night-time views.

The moderate adverse significance criteria would however be likely to reduce to slight after mitigation as vegetation establishes and adverse summertime light effects reduce.

Effects remaining after mitigation

Value: high
Susceptibility: low
Sensitivity: high
Size, duration and reversibility of effect: major, long-term and unlikely to be reversed
Magnitude of effect: high
Likely overall effect on landscape character: Significant - slight

9.9 Visual Receptor: users of PROWs and Access Land in and around BPW

The users of footpath 110/71 in the proposed van parking area will continue to suffer permanent adverse effects though this will reduce as shrubs and trees grow.

Screening of the overflow parking area would be unlikely to be fully effective, even in the long term, for users of bridleway 110/82, footpath 110/71 and Access Land to the north east.

The setting of footpaths compared to the pre-2012 baseline will continue to suffer adverse effects.

Overall the significance criteria is likely to reduce from moderate adverse to slight in time as screening planting matures though the effect will vary across the site.

Effects remaining after mitigation

Value of view: medium
Susceptibility of receptor: high
Sensitivity of receptor: high
Size, duration and reversibility of effect: major in size, long-term and unlikely to be reversed
Magnitude of effect: high
Likely overall effect: significant - slight

Appendices

- A1 Methodology including flow chart for assessing the significance of effects
- A2 Site context plan (including viewpoints)
- A3 Existing site plan (including viewpoints)
- A4 Landscape constraints Plan
- A5 Masterplan

Appendix 1.0: Methodology

A1.1 Overview

The purpose of this document is to accurately assess the most likely effects of the proposed development on the landscape and its users. Each effect is then assessed for its significance or not.

Though an evidence-based process, assessment of the effects of a proposed development is to a large extent, a subjective process in which a landscape professional uses their training and experience to make certain judgements about the landscape. In order to ensure that this is carried out in the most objective manner possible, this report follows the *Guidelines for Landscape and Visual Impact Assessment* 3rd edition produced by the Landscape Institute and the Institute of Environmental Management. It also uses information contained within LANDMAP and other resources which contain information agreed to be an accurate assessment of the existing landscape.

The potential impact of the development is considered in two discrete ways:

1. Landscape effects (likely effects on the **character** or the **quality** of a landscape caused by the proposed development whether or not such effects are visible or otherwise experienced by users of the site or users of the wider landscape)
2. Visual effects (likely effects on **views** caused by the proposed development where such effects are visible by users of the site or users of the wider landscape)

The process for establishing whether or not an effect is significant or not begins by describing the **landscape of the existing site** and its context in detail. The **proposed development** is then described and the possible effects of the proposed development on the site and wider landscape are assessed.

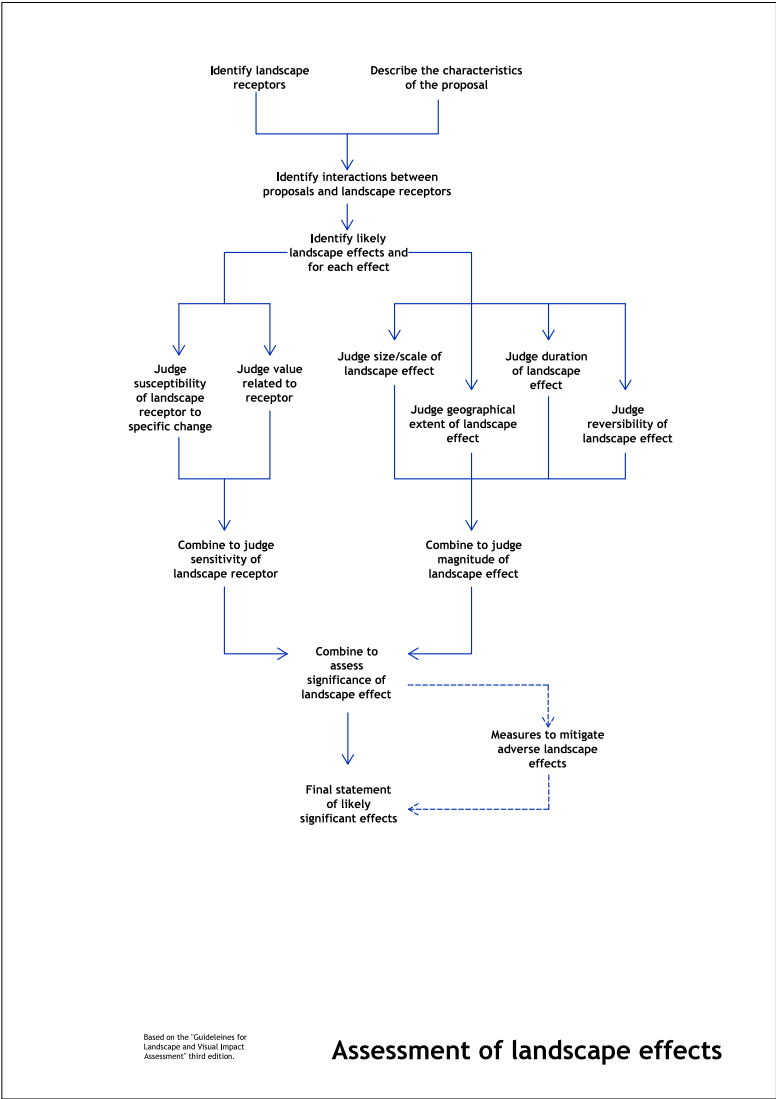
The elements of the landscape that might be affected are described as **landscape receptors**. The potential users whose view of the site might be affected by the proposed development are described. These are described as **visual receptors**.

Possible interactions between the proposed development and the receptors (landscape and visual) are identified. These interactions are then considered in order to assess the likely significance of the effect.

Assessment of visual and landscape effects follows roughly the same process but for clarity are described separately in the sections that follow.

A1.2 Assessing landscape effects

The following table summarise the process followed in assessing landscape effects:



The result of this process is to produce a description of the overall effect of the development of the site on the landscape and to identify which effects are significant.

Using this, a series of mitigatory measures are proposed which will help eliminate or reduce or offset any adverse effects.

The terms and processes used in the above tables are described in detail below:

Assessing susceptibility of landscape receptors to change

Susceptibility to change is defined in the GLVIA3 as *the ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or achievement of landscape planning policies and strategies.*

In general high quality landscapes will be more susceptible to change than low quality landscapes. This is also however affected by landform screening and other factors.

Judgements about susceptibility of the landscape receptor to change are described as high, medium, low or negligible/no change and may be defined thus:

High susceptibility to change: limited screening, largely undeveloped, cannot host the development without suffering major detrimental effects.

Medium susceptibility to change: some screening, some development, can host the development but with moderate detrimental effects.

Low susceptibility to change: moderate screening, moderate development, can host the development but with minor detrimental effects.

Negligible/no susceptibility to change: prominent screening, dominant development, can host the development with almost no detrimental effects.

Assessing value of landscape receptors

The value of a landscape may be ascertained by considering whether it is valued at a community, local, national or international level. Value may be inferred from designations attached to the landscape such as World Heritage Site, National Park, Conservation Area etc.

Undesignated landscape and features of that landscape should also however be considered where considered relevant.

Value may also be assessed by consideration of the following:

- Landscape Quality (intactness of the landscape and its individual elements)
- Scenic quality (appealing to the senses)
- Rarity (both landscape and features within it)
- Representativeness (representing a particular landscape or features of landscape)
- Conservation interests (botanical, zoological, geological, historical etc)
- Recreation value (where experience of the landscape is important)
- Perceptual aspects (tranquility, wildness etc)
- Associations (cultural)

Judgements about the value of a landscape receptor are described as high, medium, low or negligible and reflect the variation in the respective qualities described above.

Assessing landscape sensitivity of the receptor

Sensitivity of landscape receptors is assessed by combining the **susceptibility** of the landscape receptor to change with the landscape **value**.

Judgements about landscape sensitivity of the receptor are described as high, medium, low or negligible/no change and may be defined thus:

High sensitivity of receptor: largely undeveloped landscape, rich in valuable features, possibly with a national or regional designation.

Medium sensitivity of receptor: some development, some detracting features possibly with a county or district designation.

Low sensitivity of receptor: prominent development, many detracting features possibly with no designation.

Negligible/no sensitivity of receptor: development dominant, detracting features dominate, no designation.

Assessing size and scale of the landscape effect

Judgements on the size or scale of the change in the landscape that is likely to be experienced as a result of each effect should take account of:

- the extent of the existing landscape elements that will be lost, the proportion of the total that this represents and the contribution that this makes to landscape character
- the degree to which aesthetic or perceptual aspects of landscape are altered
- whether the effect changes a key characteristic of the landscape

The effect is described as either major, moderate, minor or none.

Assessing geographical extent of the landscape effect

Judgement of size and scale is related to an assessment of the geographical extent of the landscape effect. This should also be described as being, at a site level, affecting the immediate setting, affecting landscape type or character area or having an effect on a larger scale.

Assessing duration of landscape effect

This is described as short term (0-5 years), medium term (5-10 years), or long term (10-25 years).

Assessing reversibility of landscape effect

This assesses whether a development or part of it could be, or is likely to be, reversed within a specific timeframe.

Assessing magnitude of the effect on landscape

The magnitude of the effects of the development on landscape are calculated by combining their **size/scale, geographical extent, duration and reversibility**.

Judgements about magnitude are described as high, medium, low or negligible/no change and may be defined thus:

High magnitude of effect: the introduction of very prominent/uncharacteristic elements into the landscape or a marked deterioration/improvement in the landscape.

Medium magnitude of effect: the introduction of prominent elements into the landscape or a noticeable deterioration/improvement in the landscape

Low magnitude of effect: the introduction of minor elements into the landscape or a barely noticeable deterioration/improvement in the landscape

Negligible magnitude of effect/no change: the introduction of elements into the landscape that are almost/completely invisible or are compatible with the landscape.

Assessing overall significance of landscape effects

This study seeks to distinguish what are considered to be significant and non-significant effects. Whether or not a landscape effect is significant is assessed by drawing together, in narrative form, the separate judgements on the **sensitivity** of receptors and the **magnitude** of effects.

Where a receptor has a **high** or **medium** sensitivity and the magnitude of the effect is **high** or where a receptor has a **high** sensitivity and the magnitude of the effect is **high** or **medium** then the overall effect **will** be judged to be significant.

However, where a receptor has a medium sensitivity and the magnitude of the effect is medium then the overall effect **may** also be judged to be significant.

This is not presented in a tabular form as it is considered that such an approach is too rigid to provide reliable results in what is a largely subjective analysis. Any variation from the rule of thumb above however will be explained in the text.

The assessment of overall significance of landscape effects is summarised as an overall profile in tabular form following each assessment.

Each *significant* landscape effect is assigned a *degree* of significance reflecting the combinations of sensitivity and magnitude. These are severe, major, moderate and neutral and refer to adverse as well as beneficial effects. These are based on examples by Nicholas Pearson Associates and are defined as follows:

Significance criteria for landscape effects:**Severe adverse**

The proposed scheme would result in effects that are at a complete variance with the landform, scale and pattern of the landscape; would permanently degrade, diminish or destroy the integrity of valued characteristic features, elements and/or their setting; would cause a very high quality landscape, possibly of national importance, to be permanently changed and its quality diminished.

Major adverse

The proposed scheme would result in effects that cannot be fully mitigated and may cumulatively amount to a severe adverse effect; are at considerable variance to the landscape degrading the integrity of the landscape; will be substantially damaging to a high quality landscape, possibly of regional importance.

Moderate adverse

The proposed scheme would be out of scale with the landscape or at odds with the local pattern and landform; will leave an adverse effect on landscape of recognised quality, possibly of county importance.

Slight adverse

The proposed scheme would not quite fit into the landform and scale of the landscape; affect an area of recognised landscape character, possibly of local importance.

Neutral

The proposed scheme would complement the scale, landform and pattern of the landscape; maintain existing landscape quality.

Slight beneficial

The proposed scheme has the potential to improve the landscape quality and character; fit in with the scale, landform and pattern of the landscape; enable the restoration of valued characteristic features partially lost through other land uses.

Moderate beneficial

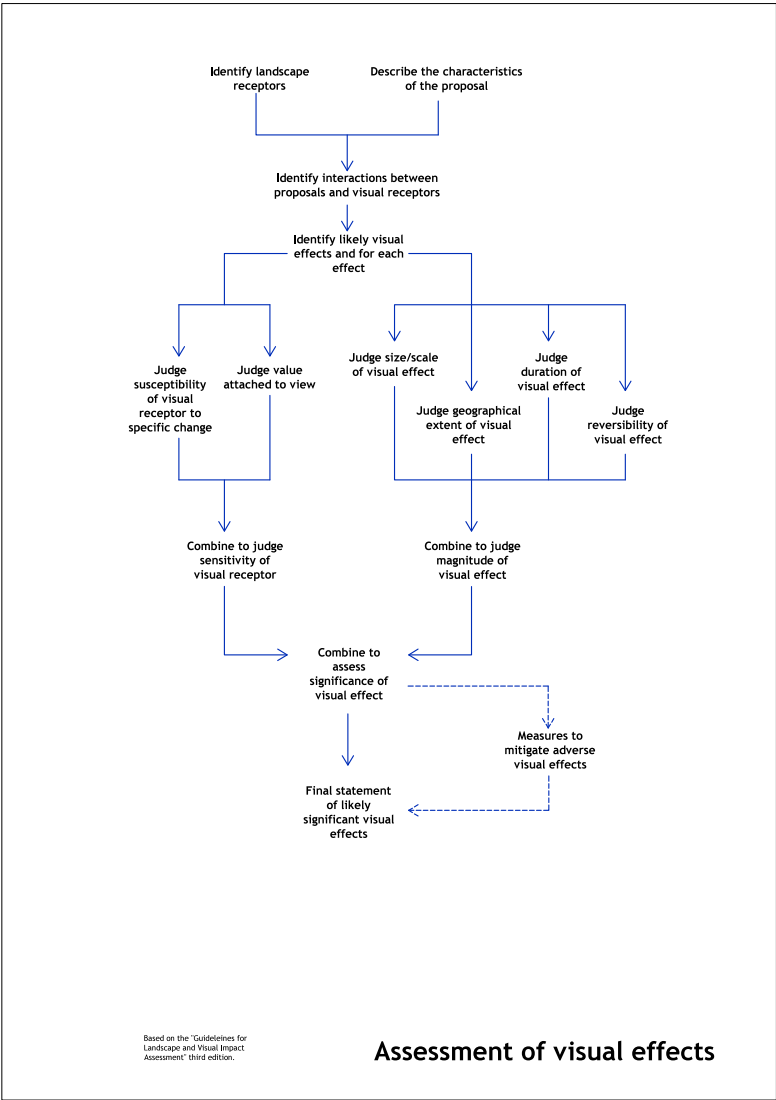
The proposed scheme would have the potential to fit very well with the landscape character; improve the quality of the landscape through removal of damage caused by existing land uses.

Mitigation

Where landscape effects are judged to be significant and adverse, mitigation is proposed that will prevent, avoid, reduce or offset the effects. It is described in narrative form and incorporated into the Masterplan.

A1.3 Assessing visual effects

The following table summarise the process followed in assessing visual effects:



The result of this process is to produce a description of the overall effect of the development of the site on views and to identify which effects are significant.

Using this, a series of mitigatory measures are proposed which will help eliminate or reduce or offset any adverse effects.

The terms and processes used in the above tables are described below:

Assessing susceptibility of the visual receptor to change

The susceptibility of visual receptors (users of the landscape) to change is a function of the **activity** of the viewer and the extent of their **focus** on or **interest** in the landscape.

In general those **most susceptible** to change are residents, cyclists, walkers and visitors with a particular interest in the landscape.

Of **intermediate susceptibility** are those travelling in vehicles, though tourists or users of public transport may be included in a higher category if they are specifically travelling in an area to view the landscape or features within it.

The **least sensitive** receptors include those involved in sport or recreation that does not depend on appreciation of the landscape and those involved in work that is the focus of their interest.

Judgements about susceptibility of the visual receptor to change are described as high, medium, or low.

Assessing value of the view

The value of a view may be ascertained by considering whether it is valued at a community, local, national or international level. Value may be inferred from designations attached to the landscape in the view such as World Heritage Site, National Park, Conservation Area etc. or from facilities associated with the view such as car parks, interpretive panels etc.

Views should also however be considered in their own right and may also be assessed by consideration of the following:

- Landscape Quality (intactness of the landscape and its individual elements)
- Scenic quality (appealing directly to the senses)
- Rarity (both landscape and features within it)
- Representiveness (representing a particular landscape or features of landscape)
- Recreation value (where experience of the landscape is important)
- Perceptual aspects (tranquility, wildness etc)
- Associations (cultural)
- Intangible appeal

Judgements about the value of views are described as high, medium, low and reflect the variation in the respective qualities described above.

Assessing visual sensitivity of the receptor

Sensitivity of visual receptors is assessed by combining the **suceptibility** of the visual receptor to change with the **value** of the view. Judgements about visual sensitivity of the receptor are described as high, medium, low or negligible/no change and may be defined thus:

High sensitivity of receptor: the landscape in the view possibly has a national or regional designation and is the focus of views. Receptors are slow moving and the landscape is the focus of their activity. Includes residents whose view is dominated by the site.

Medium sensitivity of receptor: the landscape in the view possibly has a county or district designation. Receptors are slow moving and the landscape is part of their activity. Includes residents for whom the site is a prominent element of their view.

Low sensitivity of receptor: the landscape in the view possibly has no designation. Receptors are faster moving and/or the landscape is a minor part of their activity.

Negligle/no sensitivity of receptor: the landscape in the view has no designation. Receptors are fast moving and/or the landscape plays no part in their activity.

Assessing size and scale of the visual effect

Judgements on the size or scale of the change in the view that is the likely result of each effect should take account of:

- the extent of the existing landscape elements that will be lost from the view, the proportion of the total that this represents and the contribution that this makes to the view
- the degree to which aesthetic or perceptual aspects of the view are altered
- the size, prominence, degree of contrast or integration of any new features
- whether views will be full, partial or glimpsed

The effect should be described as either major, moderate, minor or none.

Assessing geographical extent of the visual effect

Geographical extent reflects the following:

- the angle of the view
- distance of the viewpoint
- extent of the the changes relative to the existing view

Assessing duration of the visual effect

This should be described as short term (0-5 years), medium term (5-10 years), or long term (10-25 years).

Assessing reversibility of visual effect

This assesses whether a development or part of it could be, or is likely to be, reversed within a specific timeframe.

Assessing magnitude of the effect on views

The magnitude of the effects of the proposed development on views are calculated by combining their **size/scale, geographical extent, duration and reversibility**.

Judgements about magnitude are described as high, medium, low or negligible/no change and may be defined thus:

High magnitude of effect: the introduction of very prominent/uncharacteristic elements into views or a marked deterioration/improvement in the view.

Medium magnitude of effect: the introduction of prominent elements into the view or a noticeable deterioration/improvement in the view

Low magnitude of effect: the introduction of minor elements into the view or a barely noticeable deterioration/improvement in the view

Negligible magnitude of effect/no change: the introduction of elements into the view that are almost/completely invisible or are compatible with the existing view.

Assessing overall significance of visual effects

This study seeks to distinguish what are considered to be significant and non-significant effects. Whether or not a visual effect is significant is assessed by drawing together, in narrative form, the separate judgements on the sensitivity of receptors and the magnitude of effects.

Where a receptor has a **high** or **medium** sensitivity and the magnitude of the effect is **high** or where a receptor has a **high** sensitivity and the magnitude of the effect is **high** or **medium** then the overall effect **will** be judged to be significant.

However, where a receptor has a medium sensitivity and the magnitude of the effect is medium then the overall effect **may** also be judged to be significant.

The assessment of overall significance of visual effects is summarised as an overall profile in tabular form following each assessment.

Each *significant* visual effect is assigned a *degree* of significance reflecting the combinations of sensitivity and magnitude. These are severe, major, moderate and neutral and refer to adverse as well as beneficial effects. These are based on examples by Nicholas Pearson Associates and are defined as follows:

Significance criteria for visual effect***Major adverse effect***

Where the scheme would cause a significant deterioration in the existing view.

Moderate adverse effect

Where the scheme would cause a noticeable deterioration in the existing view.

Slight adverse effect

Where the scheme would cause a barely perceptible deterioration in the existing view.

Slight beneficial effect

Where the scheme would cause a barely perceptible improvement in the existing view.

Moderate beneficial effect

Where the scheme would cause a noticeable improvement in the existing view.

Major beneficial effect

Where the scheme would cause a significant improvement in the existing view.

No change

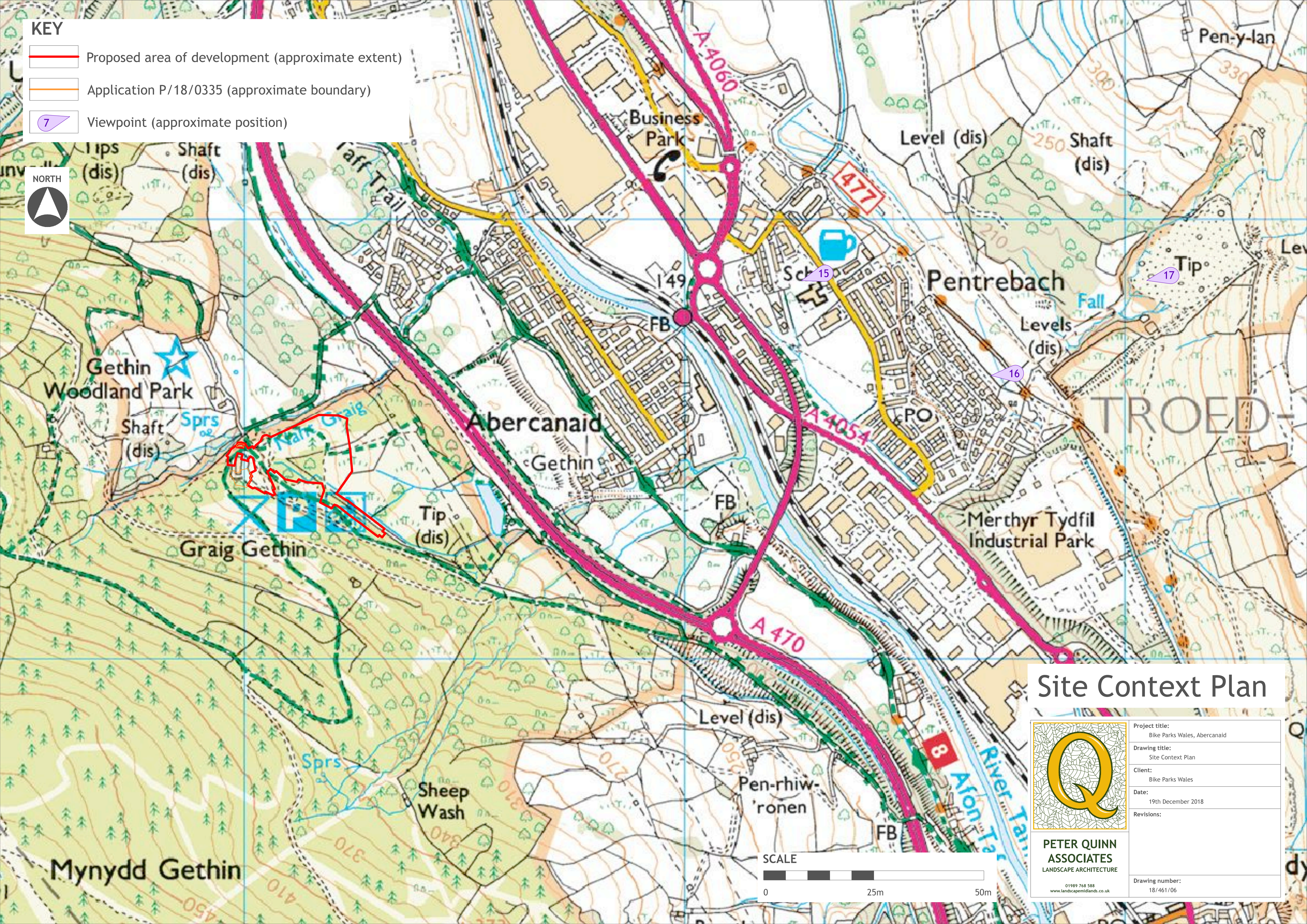
No discernible deterioration or improvement in the existing view.

Mitigation

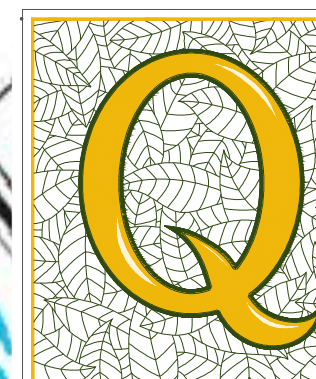
Where visual effects are judged to be significant and adverse, mitigation is proposed that will prevent, avoid, reduce or offset the effects. It is described in narrative form and incorporated into the Masterplan.

KEY

- Proposed area of development (approximate extent)
- Application P/18/0335 (approximate boundary)
- Viewpoint (approximate position)



Site Context Plan



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Project title:
Bike Parks Wales, Abercanaid

Drawing title:
Site Context Plan

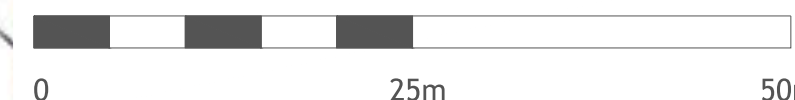
Client:
Bike Parks Wales

Date:
19th December 2018

Revisions:

Drawing number:
18/461/06

SCALE



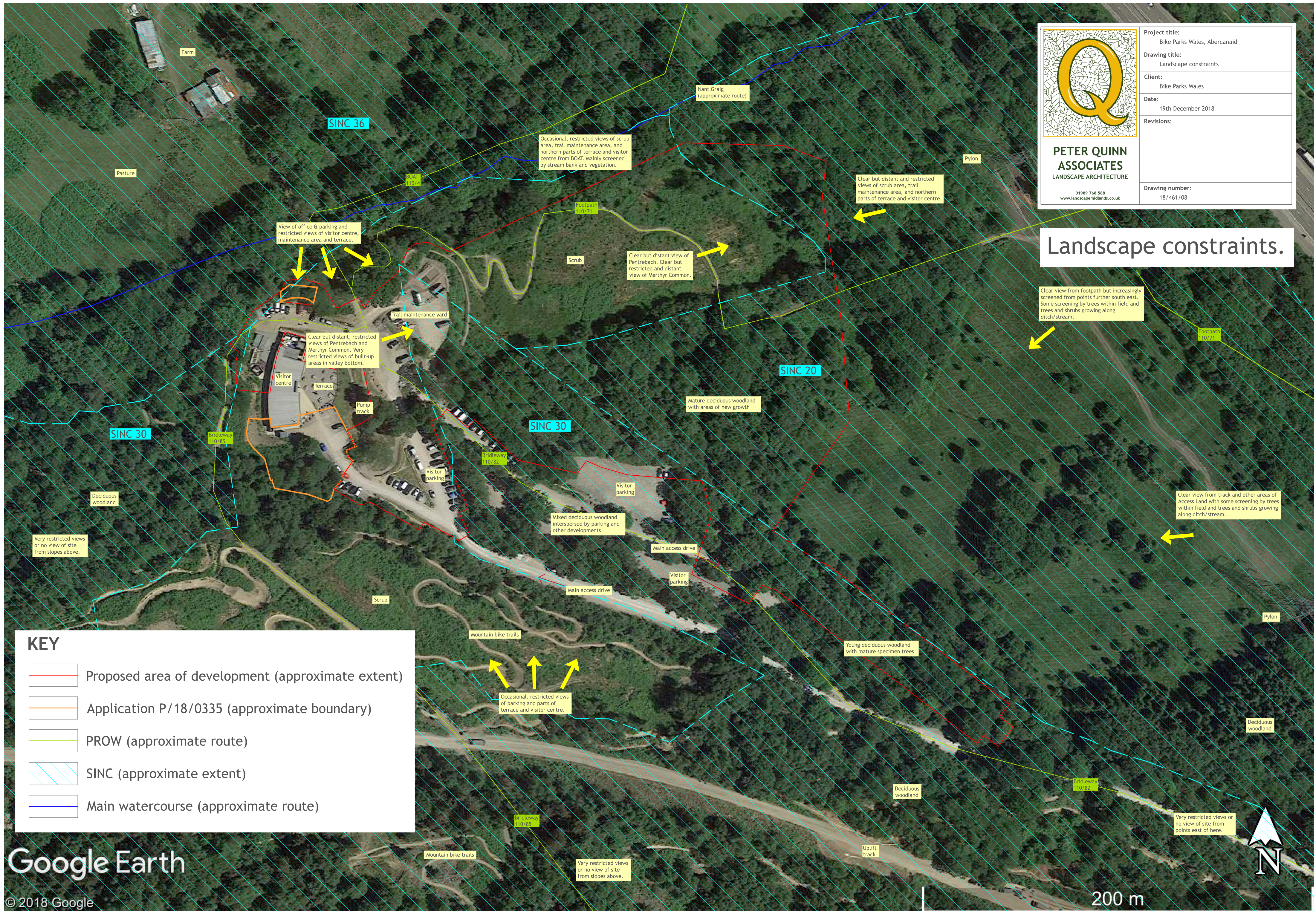


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Project title:	Bike Parks Wales, Abercanaid
Drawing title:	Landscape constraints
Client:	Bike Parks Wales
Date:	19th December 2018
Revisions:	
Drawing number:	18/461/08

Landscape constraints.



KEY

-  Proposed area of development (approximate extent)
-  Application P/18/0335 (approximate boundary)
-  PROW (approximate route)
-  SINC (approximate extent)
-  Main watercourse (approximate route)

General landscape
The landscape presented on this plan has been designed to respond to the existing landform and context. It will not only provide an attractive and appropriate setting to Bike Park Wales' facilities but will enhance the landscape beyond.
Extensive beds of native trees and shrubs are proposed throughout the development area and beyond to provide screening from distant views and to create an attractive woodland setting for the existing and proposed facilities. The planting will also provide a buffer zone in key areas around the site which will enhance visual integration and ensure protection of areas adjacent to the site.
The landscape proposals set out in this strategy will be specified further (species, size and planting numbers etc) via a detailed planting plan at a later stage.

Play area:
The play area will predominantly comprise a mixture of bespoke play features in natural timber, rope and stone designed to provide unsupervised fun for a range of ages and abilities. The existing topography will be put to good use and enhanced to expand the range of play opportunities and integrate the play area with its setting. Surfacing will be in sand, gravel or chipped bark.
The timber picnic tables and lawn at the top of the contour slides will allow adults to supervise children whilst themselves relaxing.
The location of the play area means that it will be safely accessible from the main terrace and motorhome parking area: with the exception of occasional vehicles accessing the farm to the north of Bike Park Wales, the area between the motorhomes, play area and terrace will be closed to motor traffic. The play area will also be directly accessible from the camping pods via a marked crossing. The road between the van parking and play area will be a shared surface: at c.5.5m wide it will be able to safely accommodate both traffic and pedestrians.

Van parking:
In order to maximise the retention of trees within the site, the main area of van parking has been proposed within the open scrub area between the woodland blocks. Where gradient allows, a series of bunds will be constructed between parking bays to reduce the visual impact of vehicles and to help visually integrate the parking into its hillside setting. Narrower ridges are proposed within the bays between the lines of parking. The bunds and ridges will be extensively planted with feathered and standard trees of species such as birch, alder, rowan and oak that flourish locally. Tree and shrub beds will also be established along the bunds and ridges and around the parking to further enhance screening and expand the area of native mixed woodland across the hillside.
In time, the tree and shrub planting will almost completely screen views of the parking from Pentrebach and the slopes above it, on the opposite side of the Taff valley (see also Long Views panel). The route of footpath 110/71 that currently crosses the area will be amended slightly to enable construction of the proposed van parking whilst limiting adverse impacts on the existing landscape.

Surface drainage:
Surface drainage will be as per Bingham Hall's details.
The self-binding gravel surfacing proposed for the majority of paths, parking and roads will allow a certain amount of infiltration. Soakaways will be installed along the lowest edge of all proposed parking areas and roads to collect any surface runoff. Stored water will then discharge to ground.
Full details of drainage proposals are provided by Bingham Hall.

Long views:
Significant long views of the site are restricted to those from the village of Pentrebach and the valley sides above, and part of Merthyr Common. The ridge of Mynydd Cilfach-y-necil marks the line of long views from the east.
The planting of large-growing trees and shrubs on bunds and elsewhere within and around the proposed parking areas will, in 5-10 years almost completely screen these areas and the vehicles using them from long views from Pentrebach and the lower reaches of the valley side. Higher up the slope towards the ridge, views will likely still be possible but will be heavily filtered. Planting below the terrace will also help filter views of the terrace and existing buildings.
Lodges, where visible, will become increasingly screened by tree planting along the south east edge of the woodland.
Overall, the new planting will harmonise with the adjacent existing woodland and will largely screen Bike Park Wales. Where the existing buildings remain visible, they will appear well settled in the landscape.

Footpaths and public rights of way:
With the exception of footpath 110/71, public rights of way that cross the site will be retained along their current route and enhanced by tree and shrub planting to provide screening and generally improve the experience of users. Public access will also be made safer by removing, where possible, conflicts with vehicles.
Informal desire lines will be surfaced and steps constructed where it is anticipated that use will continue after the site is re-developed. Certain other footpaths will be re-routed to accommodate the proposed changes to the site and provide more direct access. The network will be focused on the cafe and hire buildings and will conduct users to the terrace area avoiding roads and cycle tracks wherever possible. Where a crossing is unavoidable, the presence of the footpath will be marked by large stones at the side of the road. Where practical, the road will also be pinched at these points to around 2.5m wide to further reinforce the message for drivers to slow down.

Motorhome parking:
A motorhome parking area that can also be used by vans when not in use has been located where it is convenient for toilets and other site facilities. The cafe, terrace and play area will be directly accessible via traffic-free paths. Proposed planting will largely screen it from long views and from the terrace.

Proposed office building:
Native trees and shrubs will be planted around the office building to help set it in the landscape and provide screening from public rights of way immediately to the north east and elsewhere.

Trail crew area:
Located immediately behind the main cafe building, the trail maintenance yard will be screened from distant views and the majority of the site's users. Tree and shrub planting around the yard will also largely screen it from users of the brideway. This planting will also improve screening of the utility area to the rear (west) of the existing building. The foot of the bank along the western edge of the yard will be physically retained by stone-filled gabions. The free-standing wall between the yard and the brideway will be constructed in a similar way in order to harmonize the structure with its setting.
The location of the yard will allow the area east of the main cafe building to be almost entirely pedestrianised by enabling track maintenance vehicles to enter the yard directly from the hill above (west of the cafe).

Gabions:
Gabions will feature in a number of locations around the development. Whilst providing screening and retention, the gabions will also harmonise with the local vernacular style: in keeping with traditional local field boundaries, the stone will be laid in a coursed random style along visible facades. It will be sourced from site if suitable walling stone is excavated during the construction process, or from a local pennant sandstone quarry.
The structure of the gabions will also provide a large volume of excellent habitat for invertebrates and other small fauna.

Pump track:
This small practice track will be retained as it is except for a slight realignment of the circuit and the removal of a short section of track to enable the surfacing of the existing informal pedestrian access.

Terrace approach drive:
With the exception of disabled users and occasional bin lorries, the terrace approach drive will be reserved for cycles and pedestrians. This will be made clear by signage and will be controlled by a lockable bollard. The first clear view of the terrace, cafe and bike hire cluster by visitors approaching from this direction will be attractively framed by coursed dry stone walling in keeping with traditional local field boundaries. The wall will also provide a practical mustering and marshalling structure at the head of the pump track.
The wall will be constructed within gabion baskets to prevent accidental damage and match the structures elsewhere on site.

Landscape maintenance
A full maintenance regime will be described in a Landscape Maintenance Programme to accompany the Detailed Landscape Proposals described in the General Landscape panel above. It will outline works to ensure the swift establishment of trees and shrubs in a way which will help conserve and enhance the site's existing biodiversity. The focus will be on amenity and wildlife, and maintenance operations will in general allow trees and shrubs and the groundcover communities that become established within planting beds, to develop naturally, with use of herbicide restricted to the establishment period only.
The programme will include provision for like-for-like replacement of failures within the first five years after planting. Where grassland is proposed for retention, a mowing regime will be designed with the help of the project ecologist and followed to maximise habitat quality.
The programme will describe an ongoing 5 year cycle of maintenance that includes inspections by a landscape architect or landscape manager to refine the maintenance regime as appropriate in order to ensure the success of the proposed landscape, existing SNCs and other habitats into the long term.

Biodiversity and ecological enhancement:
Extensive beds of native trees and shrubs of local provenance are proposed throughout the site. These will add to the existing mosaic of woodland and provide a wide range of quality habitats into the future.
The arrangement of planting has been designed to aid in the movement of fauna and the spread of flora between the existing areas of woodland thus enhancing the interconnectedness of the site for wildlife.
Bat boxes will be installed in established woodland to significantly increase the number of bat roosting opportunities. The specification, location and number will be guided by the project ecologist. Similarly, bird boxes will be installed to increase the range of nesting opportunities for a broader range of bird species.
Any large diameter timber (>75mm) produced during clearance works will be retained on site and stacked. Timber habitat structures for reptiles, amphibians and other smaller fauna will be constructed using this material and located in line with the ecologist's recommendations.
Timber piles will also be constructed from felled timber to provide substrates for a wide variety of fungi. In order to maximise the number of potential habitats, and thus the number of species, piles will be located in a variety of situations such as damp, dry, deep shade, partial shade or partially buried in soil. Piles will also vary in source tree species and in diameter of timber to further expand the range of suitable habitats.
Dead or dying trees that have been assessed by the project arboriculturalist and found to be too dangerous for retention in their current form or other trees potentially made unstable by the works will, where possible, be left standing and made safe by the removal of any branches judged likely to fall and cause injury or damage. Typically the aim will be to produce a 'monolith' of around 4m. Dead or dying trees away from trafficked areas will be allowed to decay naturally and fallen branches and trunks allowed to remain where they drop.
Leaf litter gathered as part of general maintenance from the terrace, parking and other more intensively maintained areas, will be collected into large piles within woodland and allowed to decompose to further expand the range of habitats for fungi and fauna.
Grassland within SNCs will be retained wherever possible and managed by mowing and strimming to maintain and enhance the existing species mix and promote the growth of fungi suited to such a habitat.
This approach to habitat improvement will ensure that the existing ecological capital of the site will not only be conserved but significantly enhanced.

SINC's:
The proposed development will directly affect the two SINC's (20 and 30) on the site. Another SINC (No 36) lies adjacent to the northern boundary of Bike Park Wales but will not be directly affected. In order to mitigate for the removal of trees and shrubs from SINC's 20 and 30, the proposals include extensive areas of native trees and shrubs of local provenance.
The lower part of the area proposed for van parking is within SINC 20, Abercanal Fields. This will require the removal of the existing vegetation and topsoil. Until recently, part of the SINC designated area was planted with larch, and part, closely grazed grass. After the felling of the larch and removal of grazing pressure, the entire area proposed for van parking, including the area of the SINC, rapidly developed a cover of ruderals and scrub.
Extensive tree and shrub planting is proposed around and within the van parking area. The area of scrub between the proposed planting and the existing woodland of SINC 20 is to be left to develop naturally. It is anticipated that these proposals will mitigate for the loss of habitat within the SINC: planting will not only lead to an overall increase in the area of native deciduous woodland but will expand the range of species on the site from the locally occurring palette. It will also enhance the age structure and thus expand the range of habitats into the long term within the new and existing woodland.

Lodges and camping pods:
The location of lodges and camping pods has been selected to limit visual impact on surrounding areas and avoid damage to veteran trees. Their arrangement within the existing woodland has been guided by the arboricultural report in order to avoid the oldest and most valuable trees and to reduce the impact on trees in general. The route of footpaths has been designed in a similar way. Where it is not possible to avoid the canopy spread of larger trees, 'no-dig' construction (see Tree Protection panel) will be used. Vehicular access will be restricted to the proposed and existing roads through the site.
The forms, colours, finishes and materials of the proposed structures have been designed and selected to complement and harmonise with their setting. Standard and feathered trees will be planted within more open areas of the woodland to enhance screening and ensure a diverse canopy structure. Topsoil bunds and tree and shrub planting have been proposed around the perimeter of the wood to provide screening where it might be possible to see the pods and lodges from areas beyond.

Roads:
Proposed roads will in general be finished in self-binding stone from a local source to match the existing surfacing. Where gradient dictates, concrete or plastic cellular systems (such as Grasscrete or Truckpave) will be installed in discrete sections to stabilise the surface. This will allow grass and other ground over plants to grow and soften the appearance of the road.
Where it is necessary for footpaths and bike trails to cross a road, the crossing will be clearly marked by large stones and a constriction in the road carriageway. Where the road runs through the existing woodland (north-south section) it will follow the route of the existing vehicular track. The route will be amended slightly however to shift the carriageway away from veteran trees. Any excess surface water from this section of the road will be directed to soakaways. These will be excavated along the western edge of the road to reduce damage to existing mature trees.

Tree protection
Trees will be retained wherever possible and root protection zones established around veteran and other large trees by temporary fencing (to BS3837 2012) prior to the commencement of clearance and construction. Where paths are proposed within the root zone of significant trees earmarked for retention, no-dig construction will be carried out using a plastic-cell base-layer (such as Cellweb, Geocell, Hycell or similar). Other features proposed within tree root zones will be constructed using the smallest foundation area and depth possible to limit damage to trees.

Overflow parking:
Occasional parking of vans and cars is proposed within the wooded area of SINC 20, Abercanal Fields. The wood is largely composed of younger trees and shrubs but there are several older trees. Feathered and standard tree and shrub planting is proposed around the proposed car park to help mitigate the loss of trees and to help screen cars from the existing access driveway, from footpath 110/71 (as it approaches Webber's Pond) and more distant views.

- KEY**
- Significant trees to be retained (approximate position)
 - Woodland/shrubs to be retained (approximate extent)
 - Significant trees to be removed (approximate position)
 - Proposed native standard and feathered tree planting
 - Native standard and feathered trees proposed as part of earlier application
 - Proposed native tree and shrub mass planting
 - Native tree and shrub mass planting proposed as part of earlier application
 - SINC boundary
 - Proposed fencing
 - Proposed gabion wall with coursed stonework fill
 - Proposed topsoil bund
 - Existing retained building
 - Proposed building
 - Building proposed as part of earlier application
 - Existing parking
 - Proposed/amended parking or road edge
 - Proposed/amended path/track edge
 - Proposed overflow parking
 - Proposed timber picnic tables
 - Boulders
 - Other proposed features
 - Habitat structure/timber pile

SCALE
0 5 10 50m
Scale 1:500 printed at A1



Project title:
Bike Park Wales, Abercanal

Drawing title:
BPW Landscape Strategy

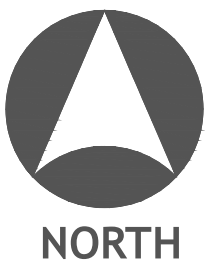
Client:
Bike Park Wales

Date:
8th January 2019

Revisions:
Rev A 12th Feb 19. Changes in line with revisions to masterplan (Rev C).
Rev B 11th March 19. Changes in line with revisions to masterplan (Rev D).

Drawing number:
19/461/05 B

BIKE PARK WALES: LANDSCAPE STRATEGY



- KEY
- Existing trees and shrubs (approximate position)
 - Proposed native tree and shrub planting
 - Proposed fencing
 - Proposed gabion wall with coursed stonework fill
 - Existing retained building
 - Proposed building
 - Building proposed as part of earlier application
 - Existing parking or road
 - Proposed/amended parking or road
 - Proposed/amended footpath/track
 - Proposed timber picnic tables
 - Boulders
 - Other proposed features
 - Habitat structure/timber pile
 - Site area (approximate)
 - Raised timber walkway/decking



NOTES ON THE LANDSCAPE PROPOSALS

The landscape shown on this masterplan has been designed to create a high quality amenity space that maximises habitat quality.

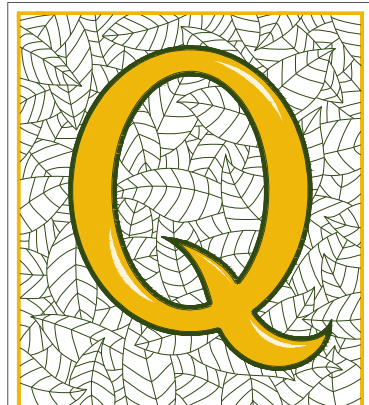
The design was created in order to fulfill the requirements for additional parking, buildings and other features associated with the expansion of facilities at Bike Park Wales.

The landscape proposals have evolved significantly, in response to adverse effects that were identified as being likely to result from the development of the site in line with the initial plans. The design presented is the result of series of refinements to layout and specification which are intended to avoid or reduce such effects.

SCALE

0 5 10 50m

Scale 1:500 printed at A1



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Project title: Bike Parks Wales, Abercanaid
Drawing title: BPW Landscape Masterplan
Client: Bike Parks Wales
Date: 6th November 2018
Revisions: Rev A: 8th November 2018 - arboricultural information updated and pods & lodges re-located. Rev B: 19th December 2018 - general amendments to features. Rev C: 17th January 2019 - re-design of van parking area Rev D: 4th March 2019 - refinement of van and overflow parking area and lodges.
Drawing number: 18/461/01 D

BIKE PARK WALES: LANDSCAPE MASTERPLAN



