



Appendix 1

Cwmcarn Forest Masterplan

Draft V1.3 - 17 February 2022

Tomorrow's Tourism
on behalf of
Caerphilly County Borough Council
& Partners



1. Context

Cwmcarn Forest can be at the centre of a rejuvenated offer that showcases and connects a range of important natural and heritage-led attractions, providing the hub for a new visitor destination in South East Wales.

This masterplan sets out a concept using 6 different elements to secure the future of Cwmcarn Forest. The concept is supported by the recent investment made in the Forest Drive which provides a unique and high quality experience in its own right. This plan, and the associated business case document, shows that a set of appropriate and linked investments can help Caerphilly County Borough Council and its partners drive new job creation, help business growth, improve health and other community benefits as well as substantially reposition the County.



The Council's Vision for Cwmcarn Forest

Caerphilly County Borough will become known as the green destination in the heart of Wales with a warm welcome and a unique set of connected destinations and outdoor attractions offering numerous active experiences, as well as a range of outstanding sustainable visitor accommodation suitable for all budgets.

Caerphilly County Borough Council (CCBC) and its partners wish to capitalise on Cwmcarn Forest, consolidating the site as a key regional destination and tourism hub, whilst also providing significant benefits for the local community in terms of informal recreation, health, leisure and inter-generational activity.

CCBC aims to develop Cwmcarn into a 'cost neutral' and environmentally sustainable hub for outdoor activity within a scenic natural setting that offers an authentic and local experience, whilst adding value to the local and regional economy.

The elements that are seen to be important for Cwmcarn Forest to deliver are also important for the wider County Borough, notably:

- Growing the visitor economy to CCB for the broader benefit of the community
- Raising the profile of CCB as a place to live, work and visit
- Jobs and income for local people
- Environmental enhancement and protection of core resources
- Financial benefits to the Councils concerned

Key Objectives of this work

- Develop the tourism industry, particularly the accommodation base, to contribute to the further enhancement and conservation of Caerphilly's cultural, natural and historic heritage and minimise damage to the natural and built environment.
- Build back a resilient, future-proof tourism sector, with the industry employing more UK nationals in year-round, quality jobs and that this workforce is adequately and appropriately skilled.

- Provide an inclusive and accessible offer that is open to all.
- Promote our tourism attractions to the creative industries for use by the UK's film, heritage, sports and music sectors.
- Make full use of digital, technology and data to engage new audiences, enhance the visitor experience and provide an offer that continues to meet consumer expectations.

- Primary:**
1. Growing the visitor economy to CCB for the broader benefit of the community
 2. Raising the profile of CCB as a place to live, work and visit
 3. Jobs and income for local people
 4. Environmental enhancement and protection of core resources
 5. Financial benefits to the Council
- Secondary:**
6. Health and wellbeing opportunities for local people and visitors
 7. Social and community benefits as a result of the facilities
 8. Educational and training opportunities for local people
 9. Supply chain development – local products and services

Cwmcarn Forest's Competitive Advantage

- Position, connectivity and catchment – proximity to the Capital, other major regional cities and 4.7m people within 90 minutes drivetime.
- A growing accommodation base in the area.
- Recent investment of £2m at the Forest Drive; a clear high quality USP.
- Established day visitor destination for loyal, local and regional visitors.
- Exceptional mountain bike trails and loyal mountain bikers market.
- Sustainable transport option with the station 1.6 miles from the site entrance and bike hire options available.
- A growing cluster of adventure related attractions in the area giving rise for joint marketing, joint itineraries and longer stays.
- Cultural heritage, industrial heritage and natural assets.

2. Strategic Approach



View of the site looking north east across the Forest Drive from above Car Park 7 (left)

The Forest area benefits from a range of woodland types, given even more variety by the enforced clearance of the Larch trees. The dramatic topography and self-contained quality of the core site area adds an extra dimension to the visitor experience and gives it a very distinctive character.

Nantcarn Valley viewed from the Forest Drive (between entrance and Car Park 1 (below))

The steep sides of the Nantcarn valley significantly constrain the development of new facilities. The strategy will need to incorporate facilities that can operate on – and benefit from – sloping sites.

Introduction

The strategic approach must:

- Respond directly to the key objectives outlined above;
- Create a development framework that can help deliver those objectives; and
- Build on the strengths and inherent qualities of the Cwmcarn Forest site.

The strategy should aim to maximise the benefits for the local community, increase visitor numbers (and visitor spend in particular) and in so doing, bring financial benefits to the Councils and NRW. This, in turn, will bring sustainability, viability and vitality to the Forest Park and the surrounding area.

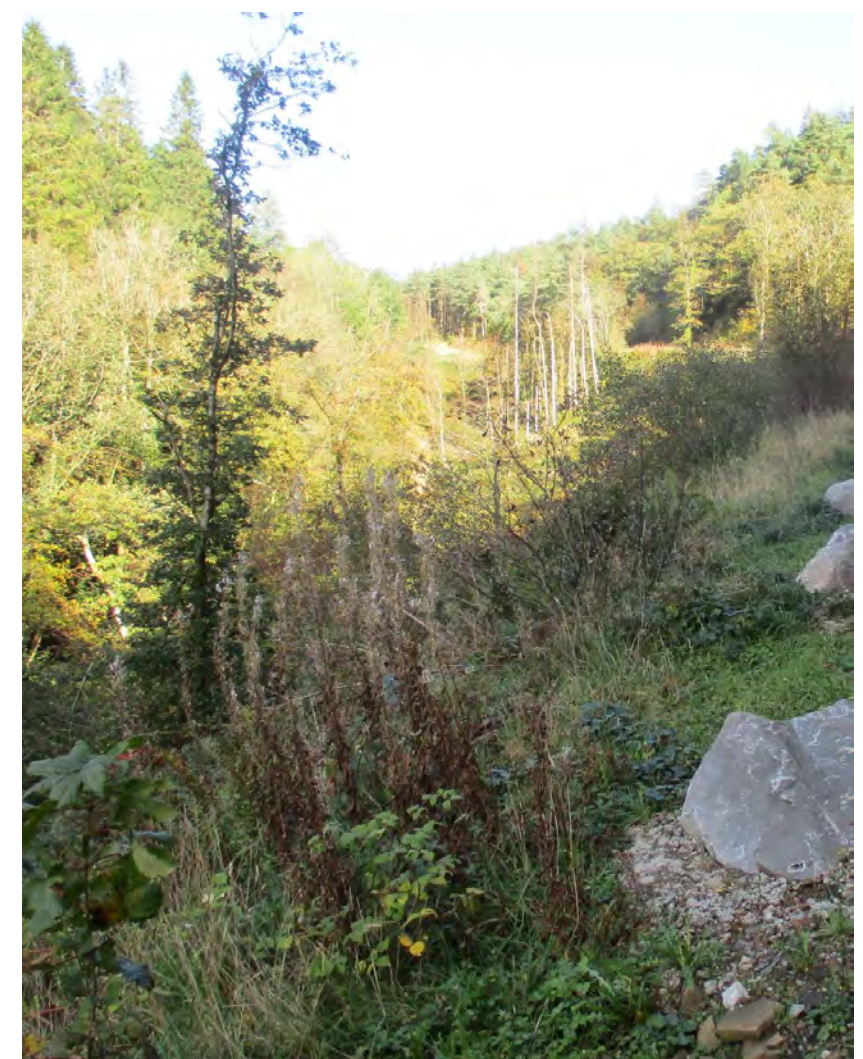
The clearest route to achieve these objectives is to create more attractions on the site, as well as reinforcing and strengthening the existing facilities.

The choice of those new attractions needs to be driven by a clear understanding of the qualities of the site.

- What makes Cwmcarn special and unique?
- What distinguishes it from other competing sites?
- What additional facilities can strengthen and support the existing successful activities at the site and give a solution that is ‘more-than-the-sum-of-the-parts’?

Development Context

The narrow and steeply-sided Nantcarn valley means that space is very limited for the expansion of existing or development of new facilities that are readily accessible. Away from the visitor centre, main car parks, lake and environs, areas of flat ground are rare, and where they occur are, for the most part, already in use as car parking areas that serve the Forest Drive.



2. Strategic Approach (continued)

Landscape and Environmental Fundamentals

The fundamental essence of the site is the quality of its landscape, natural environment and topography.

The topography creates a range of opportunities:

- The variety of views and vistas in a relatively small area gives a constantly changing perspective as one moves around the site;
- The intimacy, scale and configuration of the Nantcarn Valley creates a visually self-contained environment, within which there are few - if any - views to and from the surrounding areas of development;
- This contrasts with the longer reaching views from the western end of the Forest Drive, that create additional variety and interest; and
- The larch clearance, whilst being driven by unplanned and unwelcome disease, has left a legacy that opens up vistas through the site, offers new opportunities for habitat creation and diversity and creates a template for new, exciting developments at the site.

The strategic approach to future tourism development at the site, will seek to retain and reinforce these landscape and environmental fundamentals. They will not form constraints to development but rather should be seen as the core foundations upon which the strategy should be built.



Looking south west across the site (above)

The topography creates a self-contained and enclosed area with extensive views but, for the most part, limited views in or out, to or from the wider area of development and the adjacent settlements. This gives the site a very special sense of a hidden and almost secret valley.

Views to the wider landscape and Cwmcarn town (left)

From the western and south western extents of the Forest Drive, the topography allows excellent views to the wider landscape and the development that follows the Ebbw River corridor.



2. Strategic Approach (continued)



Hubs & Connections

Much of the enjoyment of the site is achieved through movement, be it by car, bike or on foot.

Many of the current activities at the site are based on different forms of movement: the Forest Drive; off-road bike paths; and footpaths.

The car parks along the Forest Drive provide focal areas and hubs but are relatively 'passive' in the activities and facilities that are available. Apart from the cost of access to the Drive, there are limited opportunities to increase spend at the site or broaden the range of experiences undertaken. A notable exception is the current accommodation that is on offer at the site. Building on the popularity of this, and enhancing the range, quality and scale of the accommodation is an important strand of the proposed strategy for the site.

It will also be important to create new hubs of activity - and connections between them - which relate positively and supportively to the existing networks of movement, and interacts with them.

The movement through the site by a combination of foot, bike and car is a major part of the experience of the site.



3. Development Principles

Protection of natural, cultural and intangible assets

Development Principles: Natural assets

The natural landscape is the foremost resource and basis of all activities at Cwmcarn Forest. The site contains a variety of habitats which support an important range of species.

The main types are:

- **Acid grassland** with small amounts of heath mainly on the lower slopes of both sides of the valley;
- **Broadleaf woodland**, mainly within the valley floor and on the lower slopes. Some of this is mature, including areas of ‘ancient woodland’ and has developed naturally while other areas relate to the reclamation planting of the 1970s and more recent regeneration;
- **Coniferous forestry plantation** managed by NRW. Considerable areas of this are on former ancient woodland sites and within the forestry there are individual old trees, notably beech, and pockets of native woodland; and
- **Wetlands** at Cwmcarn include the fast-flowing Nantcarn stream and the man-made lake that it feeds. There are also small ponds, springs and seepages with associated marshy areas.

The *Phytophthora ramorum* disease has affected almost all the larch trees at Cwmcarn. NRW have now felled all larch within the Forest, amounting to almost 80% of plantation trees. For safety reasons, the Forest Drive was closed to public vehicles during felling and re-planting, re-opening in Summer 2021.

There are no statutory environmental designations within the park area, although there are several Sites of Importance for Nature Conservation (SINCs) with a range of habitats and species regarded as significant. The SINCs have been identified using the Guidelines for the Selection of Wildlife Sites in South Wales, August 2004, which set out the criteria for identifying important local wildlife sites. The impact of any changes to these areas will need to be considered in any development proposals.



The entire park area within the Caerphilly Borough is categorised as a ‘Visually Important Local Landscape’ in the Borough Constraints Map.

It will therefore be critical that any development proposals support and reinforce this high-quality landscape environment.

3. Development Principles (continued)

Protection of natural, cultural and intangible assets

Cultural assets

The Twmbarlwm mound (within Caerphilly Borough) is a Scheduled Ancient Monument. The monument will need to be very carefully considered in any development proposals for the park area, particularly those that may impact on the visual setting of the area, such as a cable car and / or tower, which have been suggested as potential attractions at the site.

There are no protected historic remains actually within Cwmcarn Forest. There is, however, a variety of features of **local historic interest** within Cwmcarn Forest, and local knowledge about past activities in the area.

There are the remains of several **farmsteads** now subsumed in forestry, or enveloped by later mining activities. Dilapidated stone walls, distorted ancient beech trees, and old tracks and paths tell of former patterns of land management.



Views from Twmbarlwm mound offer magnificent views of the surrounding area

The Twmbarlwm mound is outside the NRW ownership, but can be accessed from the Forest Park site on foot. It is relatively close to car parks 4 and 7. It provides a unique and memorable destination as a focus for walkers and general visitors. The use of natural, simple and robust materials for the walkway and steps (images above) provides a good precedent for the treatment of infrastructure within the Forest Park, which is consistent with the attractive landscape design of the existing Forest Drive, following the recent refurbishment.



3. Development Principles (continued)

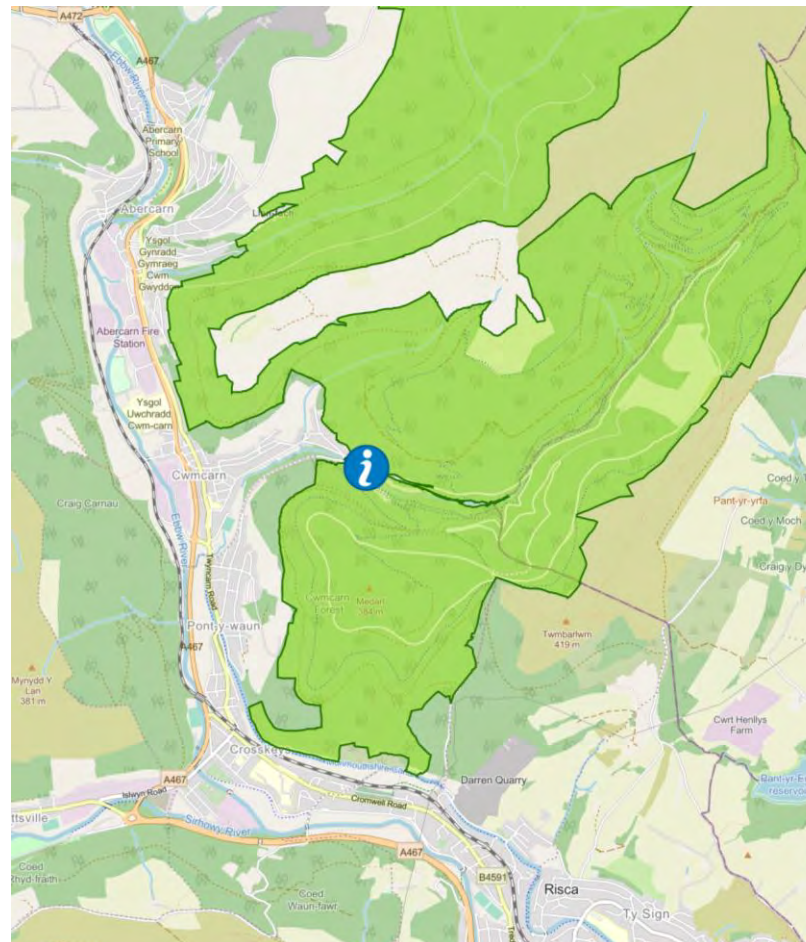
Integration of and support to the local community

An ex-industrial area, Cwmcarn Forest is surrounded by some of the most deprived wards in Wales. A high percentage of ethnic minority groups in Wales are resident in the catchment.

Developments in Cwmcarn Forest should align with the area's economic and social development, as well as the health and wellbeing of local people.

The political and strategic context is favourable to the continued sustainable development of Cwmcarn Forest – especially those which generate social and economic benefits for local people, workers and businesses and in particular for the area's more deprived communities. Alongside essential considerations around commercial viability and visitor appeal, CCBC will need to balance other issues such as environmental protection as well as the continued provision – and enhancement – of amenities and leisure opportunities for local communities that positively impact their health, wellbeing and quality of life.

Cwmcarn Forest is an important local leisure amenity. Currently the site sees very high repeat visits from the local community, who value the peace and tranquility, natural environment and views, clean, fresh air, activities and their physical and mental health benefits, connection with childhood memories, and value for money, among other things. It will be important to consider the impact of the proposed developments on these values and to ensure that the local community continue to be able to access the area, in terms of both physical and financial access.



Left: Map shows the proximity of the Forest and Visitor Centre to Cwmcarn village, highlighting the importance of including the community in the development of the site

During early consultation, the local community expressed interest in improvements in the following areas:

- Family and forest-based activities, and family bike trails
- Events, craft and food markets
- Varied and improved food and drink offer
- More for young children and teens
- More camping pitches
- Bike hire, e-bikes
- Electric shuttle service from station around Forest Drive
- Longer opening hours, especially in summer
- Non-bike / walking only areas and / or times
- Reduced price for local residents, annual parking permits
- More links with heritage e.g. through interpretation
- Walking maps and better signage
- Investment in Cwmcarn village

Left: Word cloud from a survey of residents when asked what facilities they would like to see in the Forest



Development of local economy and businesses

Business & employment analysis shows a healthy number of take away food shops, pubs, restaurants etc. While most will be sustained by the resident economy, currently around 25% are sustained by visitor spending. Much of the related activity takes place in informal businesses – such as self-catering accommodation.

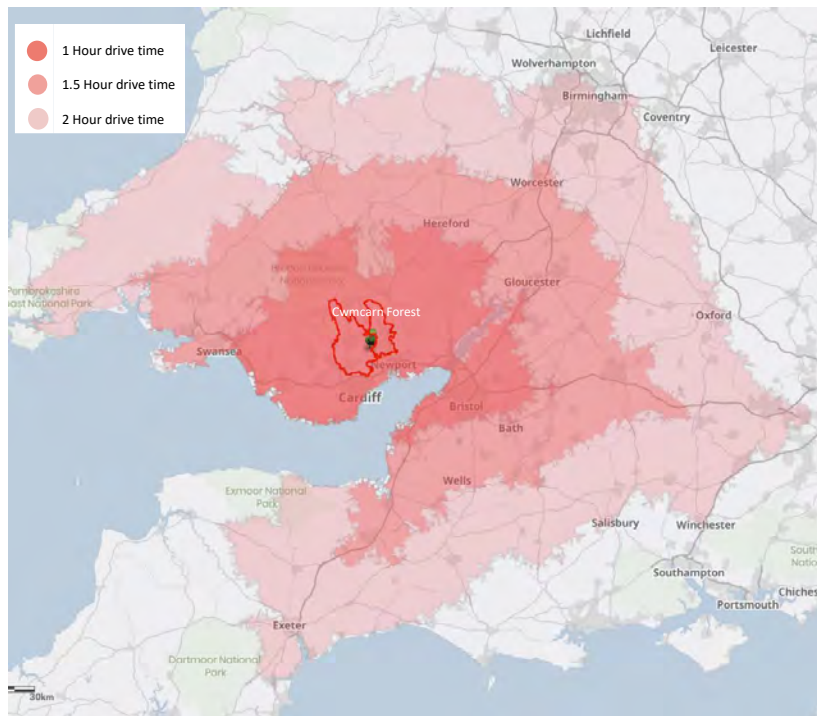
655 businesses are registered as operating in the visitor economy in CCB and Torfaen, the vast majority of which are micro or small and 60% of which are in the food and drinks sub-sector. We estimate that visitor spending is underpinning at least 25% of all these businesses. There are currently 1,875 FTE jobs in the visitor economy in Caerphilly and Torfaen.

If managed thoughtfully, the proposals have the potential to stimulate and provide direct and indirect opportunities for local people, including existing and new and businesses in food and beverage provision (onsite and in the surrounding areas); retail; outdoor activities; equipment hire; housekeeping and cleaning; maintenance; head office/operations; accommodation; transport. Furthermore, the development could support the growth of green skills and sustainable supply chains.

Modelling shows that the impact is likely to include:

- Increased direct visitor spending with a high local multiplier
- A minimum of 56 new FTE jobs
- Further indirect impact through the local supply chain as detailed above, particularly in the accommodation and food & beverage sectors
- An improved range of active amenities within a popular local leisure facility enabling health and other community benefits
- An increase in local pride and positive perceptions of Caerphilly more broadly.

4. Constraints and Opportunities Framework



Map showing drive time areas from Cwmcaern Forest Visitor Centre (Above)
Summit of Twmbarlwm (Below)

Location in a regional context

The population catchment is relatively high for Wales at 2.6 million within an hour's drive but it is typically lower than most of England. Proximity to Cardiff and other major regional cities is beneficial, with almost 5 million people living within 90 minutes drive time and 10 million within 2 hours. Cwmcaern's proximity to the M4 (20 minutes drive) is also an advantage, as it provides relatively direct access from a number of major population centres including, Swansea, Cardiff, Bristol, and even London.

There are just under 750 visitor attractions within a 50-mile radius of Cwmcaern Forest, representing significant competition, both in the immediate area and further afield. A number of new attractions are shortly to open in the area which can either be seen as complementary to Cwmcaern's current offer or indeed in competition with it. Some 30% of visitor attractions in the region have a similar theme or base offering to Cwmcaern Forest - natural areas, visitor centres or

related experiences. Many are owned by Natural Resources Wales and have similar inherent characteristics.

The market for activities and experiences within the visitor attractions sector has shown high growth over the past 5 years and this supports the case for offering a range and mix of activities that can appeal to a range of different segments.

Such an approach is also supported by the challenging commercial viability for iconic visitor attraction developments, both in terms of capital cost and operation. A range of different types of activities offered within a mixed-use facility could be more financially viable in the longer term.

Options appraisal matrix

An initial long-list of options was derived from the client, stakeholder feedback, and examples from comparable sites elsewhere. In an options appraisal matrix, the longlist was scored for suitability against a set of criteria using a traffic light system in order to identify the most appropriate options for Cwmcaern Forest (extract right). The criteria included: Commercial viability; Likelihood of funding; Feasibility; Fit with policy objectives; Visitor / user appeal; CCBC visitor economy; Local reputation, and; Sustainability (economic, socio-economic, social, and environmental). The resulting shortlist provides the basis for the following concepts set out in the subsequent pages.

CATEGORY	SUB-CATEGORY - PRINCIPAL OPTIONS LISTING	SELECTION CRITERIA	COMMERCIAL VIABILITY (e.g. initial cost - low/moderate/significant; maintenance and operational costs; payback period; return on investment; yield)	LIKELIHOOD OF FUNDING (e.g. for capital costs; running costs; public funding; grants; private investment)
Accommodation	Additional self-catering accommodation			
	Additional camping accommodation			
Food and drink	Food and drink - improved / expanded offer			
	New provision			
	Temporary Provision - mobile catering			
Activities	Nature, wildlife or bird watching			
	Walking / hiking / hillwalking			
	Horse-riding			
	Local food and drink experiences			
	Country pursuits e.g. archery, falconry, clay pigeon shooting, axe throwing			
	Bushcraft / survival skills / foraging / den-building / campfire cooking			
	Night-time walks / activities e.g. star gazing			
	Forest activities e.g. treetop rope course, tree trampoline adventure, disc golf			
	Orienteering			
	Environmental activities e.g. tree planting			
	Relaxation e.g. forest bathing			
	Segway tours (Forest Drive)			
	Tower			
Aerial / ground based forest coaster				
Cable car / access experience				



4. Constraints and Opportunities Framework (continued)

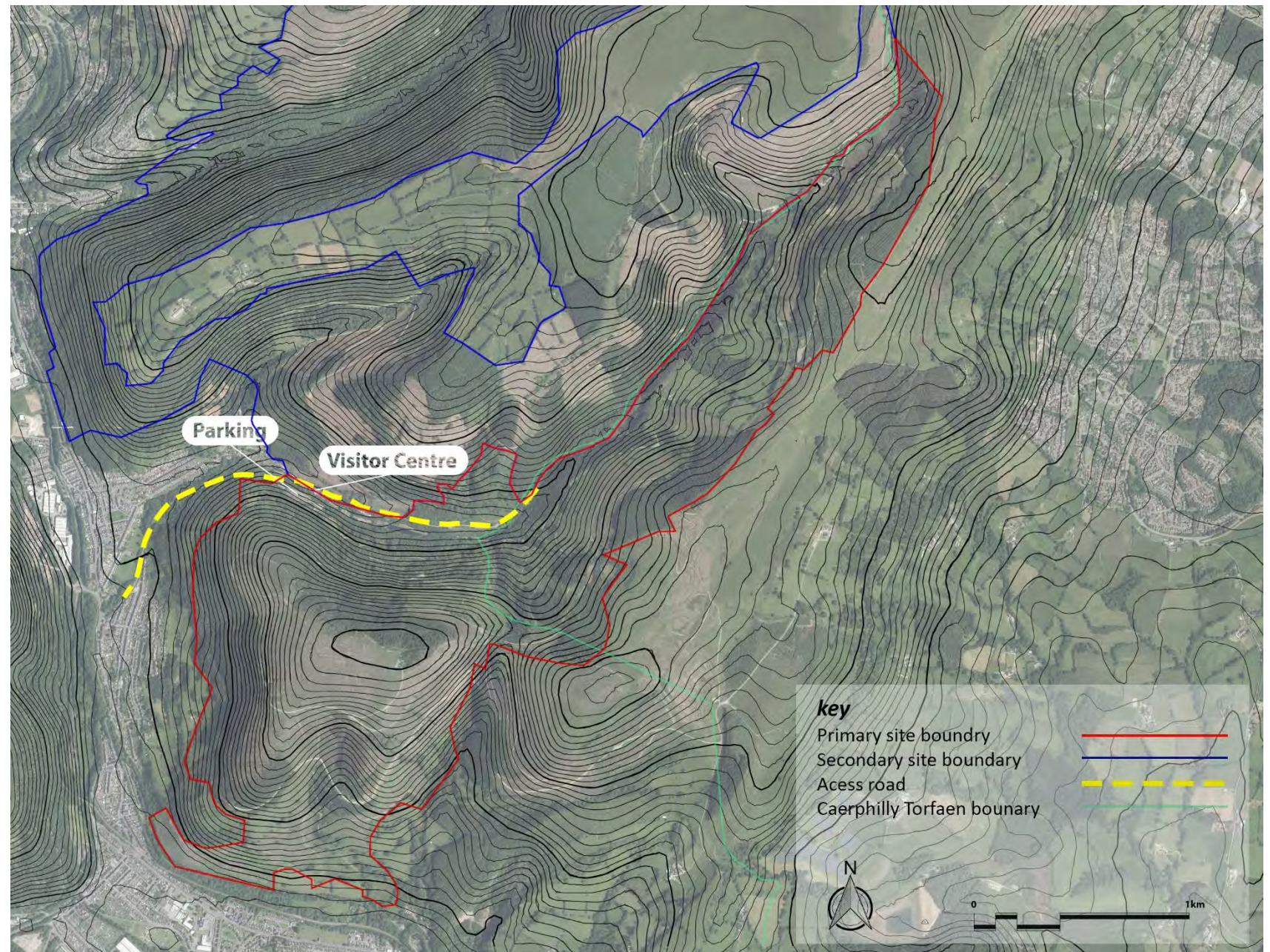
Topography

The site topography provides the fundamental and distinctive character of the site.

- It creates the opportunities for the cycle and pedestrian routes through the Forest Park and beyond;
- It forms the setting and context for the varied and dramatic views from within the site;
- It contributes to the secluded, peaceful and visually-contained nature of the core park area;
- It provides the habitat for the high quality and diverse natural environment within the park; and
- It has been part of the narrative of the site and its use of many centuries.

The topography of the site is a fundamental component of its character and special qualities (as seen below).

The subtle changes in orientation of the slopes results in varied and interesting views, that change constantly as one moves through the site.



Through the combination of these attributes the topography offers an excellent starting point and foundation for the formulation of new ideas and activities at the site. It also creates constraints to development.

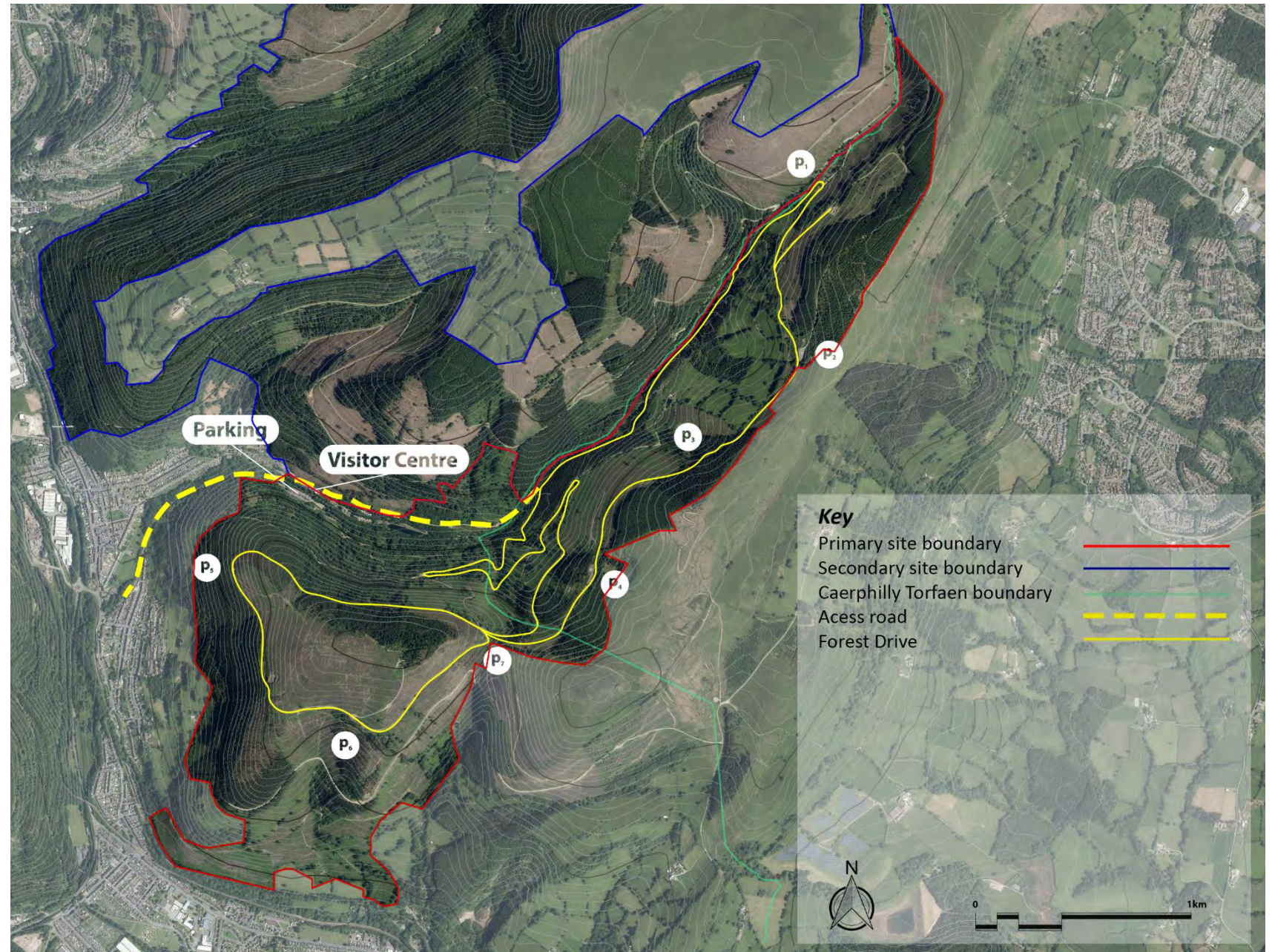
- There are very limited areas for activities that require relatively flat land, including car parking;
- Movement around the site for children and adults with mobility constraints are largely limited to the area around the visitor centre / lake and some areas close to the Forest Drive car parks. Extensive networks of footpaths and cycleways are limited except for the relatively fit. Opportunities for new routes for families and mixed groups will require some innovative thinking.

4. Constraints and Opportunities Framework (continued)

Access and movement: Vehicular

The newly refurbished Forest Drive is an important focus and 'differentiator' for the current range of visitor activities at the site. The seven car parks offer a varied range of environments and facilities. They provide the hubs for exploration of the wider area of the Forest Park.

A walk or cycle along the Forest Drive reveals the extent to which there are views, vistas and diverse natural environments along the route that are very difficult to experience from a vehicle. The nature of the one-way, narrow road inhibits spontaneous stops (other than the formal car parks) and the views and experience from the vehicle are sometimes limited or diluted.



The main park area is currently only accessible to vehicles that have paid to access the Forest Drive. Car parking along the drive is limited, and that, in turn, limits the numbers of vehicles and people who can use it at any one time. Additional car parking, to access additional facilities and activities is needed.

The topography constrains the provision of significant areas of car parking within much of the site. However, an existing freehold site has been identified as a site with relatively flat land. Acquisition of this area for lodges and as a springboard to a range of additional activities is an important strand of the later Masterplan.

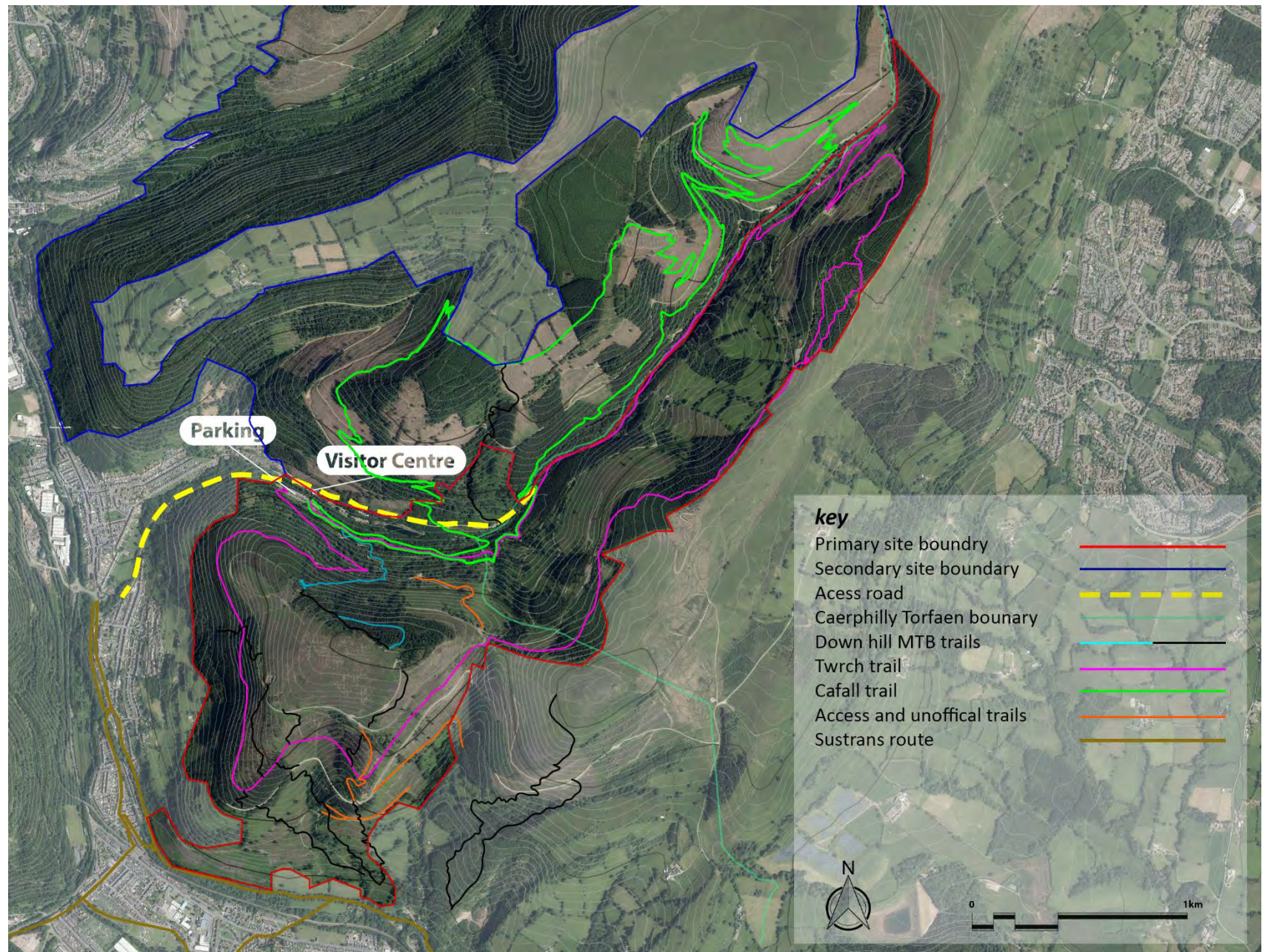
4. Constraints and Opportunities Framework (continued)

Access and movement: Cycle

There is an extensive network of formal cycle routes through the site as well as multiple sections of cycle track that have been constructed informally by enthusiastic off-road cyclists.

As highlighted in the commentary on topography, the lack of flat terrain limits the full range of cycle paths, particularly for children and less experienced riders. With competing cycle parks in South Wales, the cycling facilities at the Cwmcarn site are considered to be a great asset, but not a key driver for the future strategy for the site.

It is noted that the current landmark structure on the A467 roundabout (below), that is the principal access point into the site, is an off-road cyclist. In light of the strategy to extend the scope and range of visitor facilities, the consideration of a change, or addition, to this 'message' may be worthwhile.



The first of the cross-country trails (Twrch) opened in 2003 with the World-class extreme downhill trail of Y Mynydd) opening in 2005. The second cross-country mountain bike trail 'Cafell' and second downhill mountain bike trail 'Pedal hounds' opened in 2014. All trails start and finish at the main car park and utilise both sides of the valley. Despite being a popular mountain bike destination, there are few routes for family or children's cycling, largely due to the constraints of the topography.

4. Constraints and Opportunities Framework (continued)

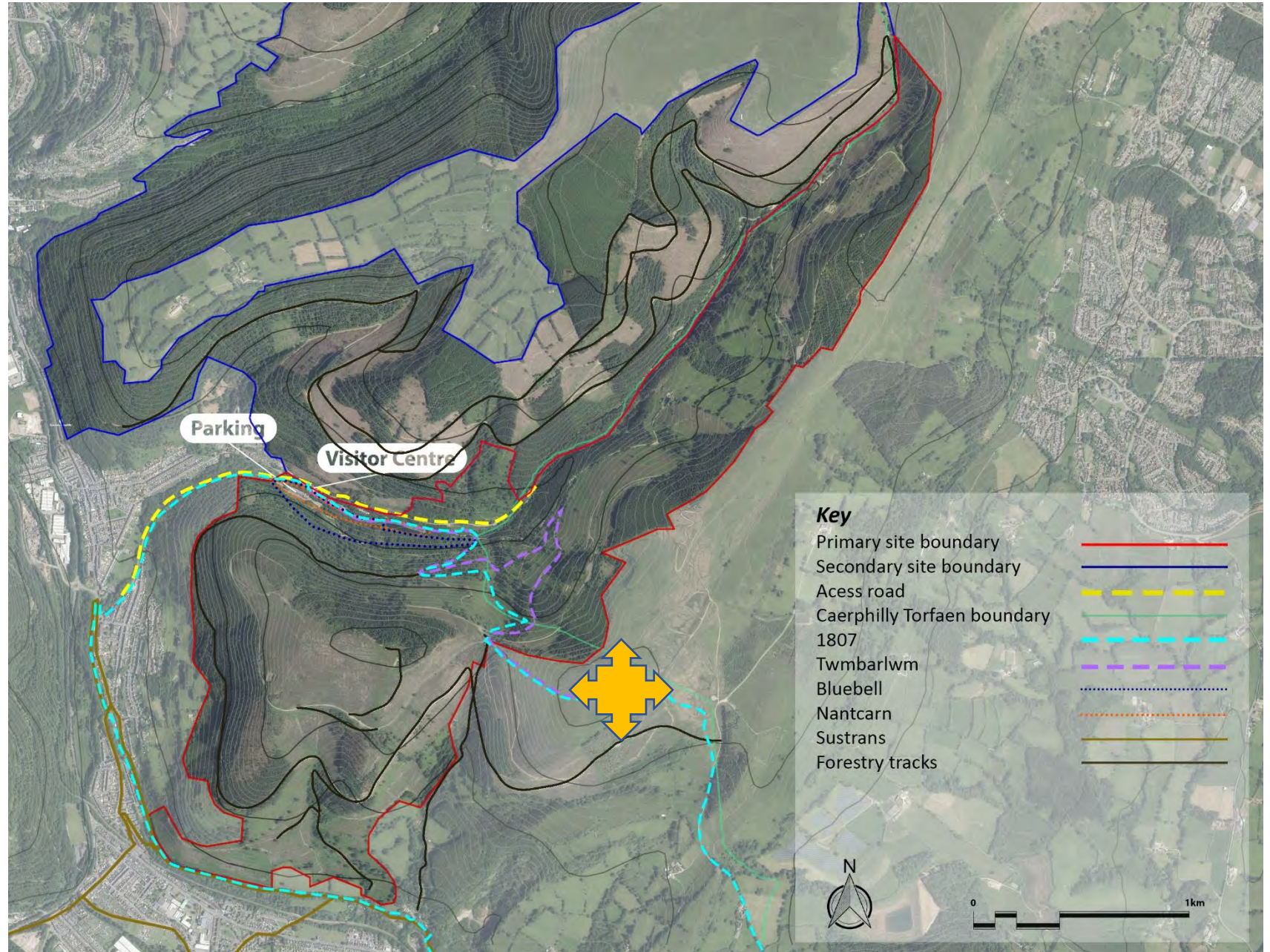


Footpath leading to the view point at Twmbarlwm (above) which is outside the NRW ownership.

Signage for the designated walks at the site (top)

Access and movement: Pedestrian

There are a range of designated walks at the site, some of which extend into the wider area. They range from 30 minutes to 6 hours in length, with the longer ones utilising land outside the NRW boundary. The topography inhibits the provision of more 'easy-walking' routes.



Twmbarlwm is a natural focal point and destination for walks in the area.

Additional walking routes could be considered that link between specific view-points (many of which could be readily identified at the site) and/or localised areas of interest within the Park. The car parks along the Forest Drive also provide focal areas and destinations in themselves.

4. Constraints and Opportunities Framework (continued)

Environmental and Landscape Character

The section of the map (right) indicates the areas of Ancient Woodland – both existing and ‘restoration’ areas, from the 2011 inventory. (The areas shown in orange on the plan). The long term objectives for these areas are stated as follows:

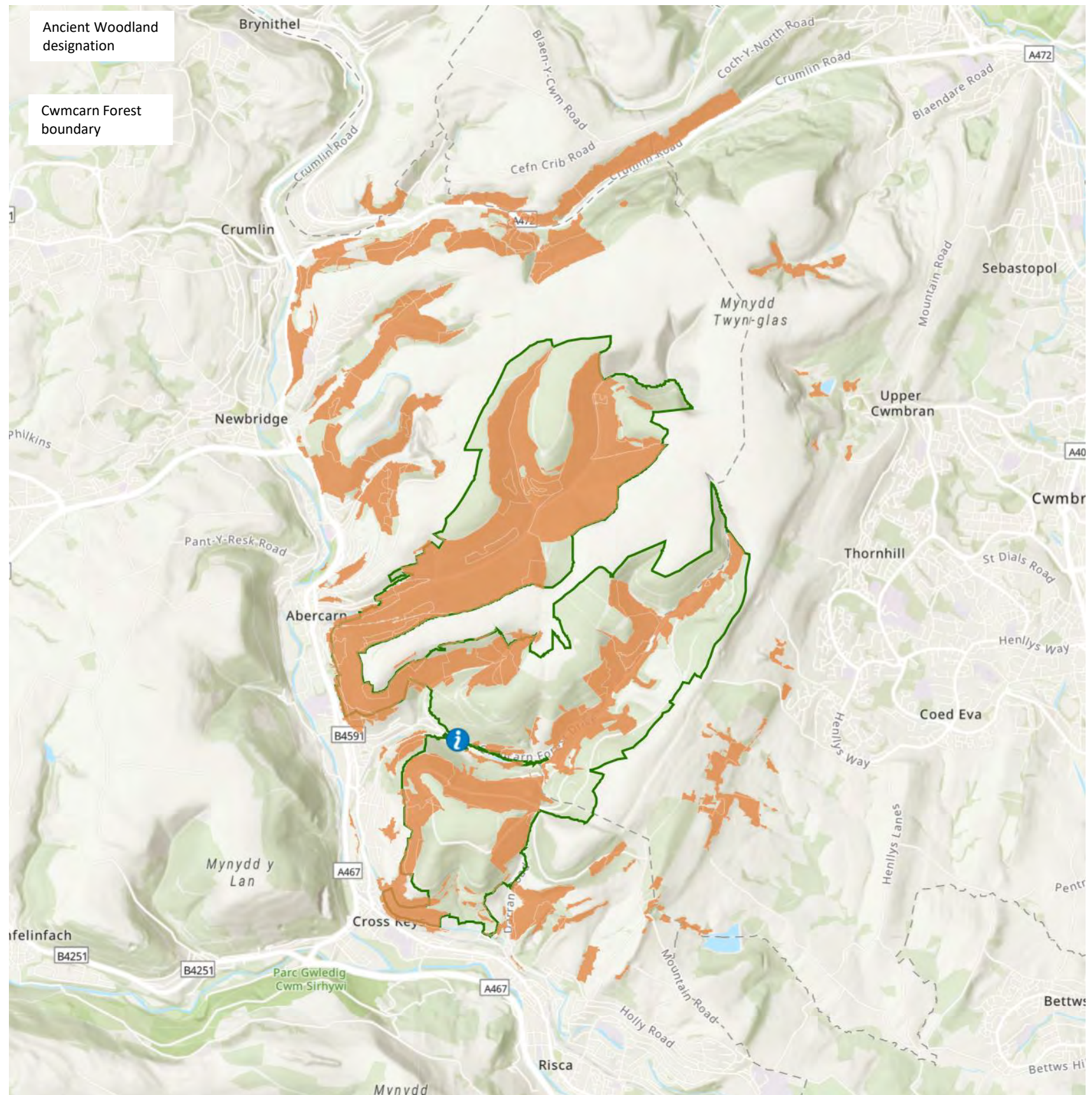
“In the long term, partial restoration (50% native broadleaves) will occur across the whole area. Some areas with greater potential will be restored fully (minimum 80% native broadleaves)”.

These areas should be protected as far as is practicable and any proposals for removal of trees will need to be carefully considered to ensure that mitigation and overall habitat restoration, enhancement and diversity is delivered.

The plan pre-dates the recent removal of Larch at the site which has significantly changed the overall character of the area.



The character of the woodland at the site provides the context and setting for many of the existing activities at Cwmcarn, such as the off-road cycle route in the photo above.



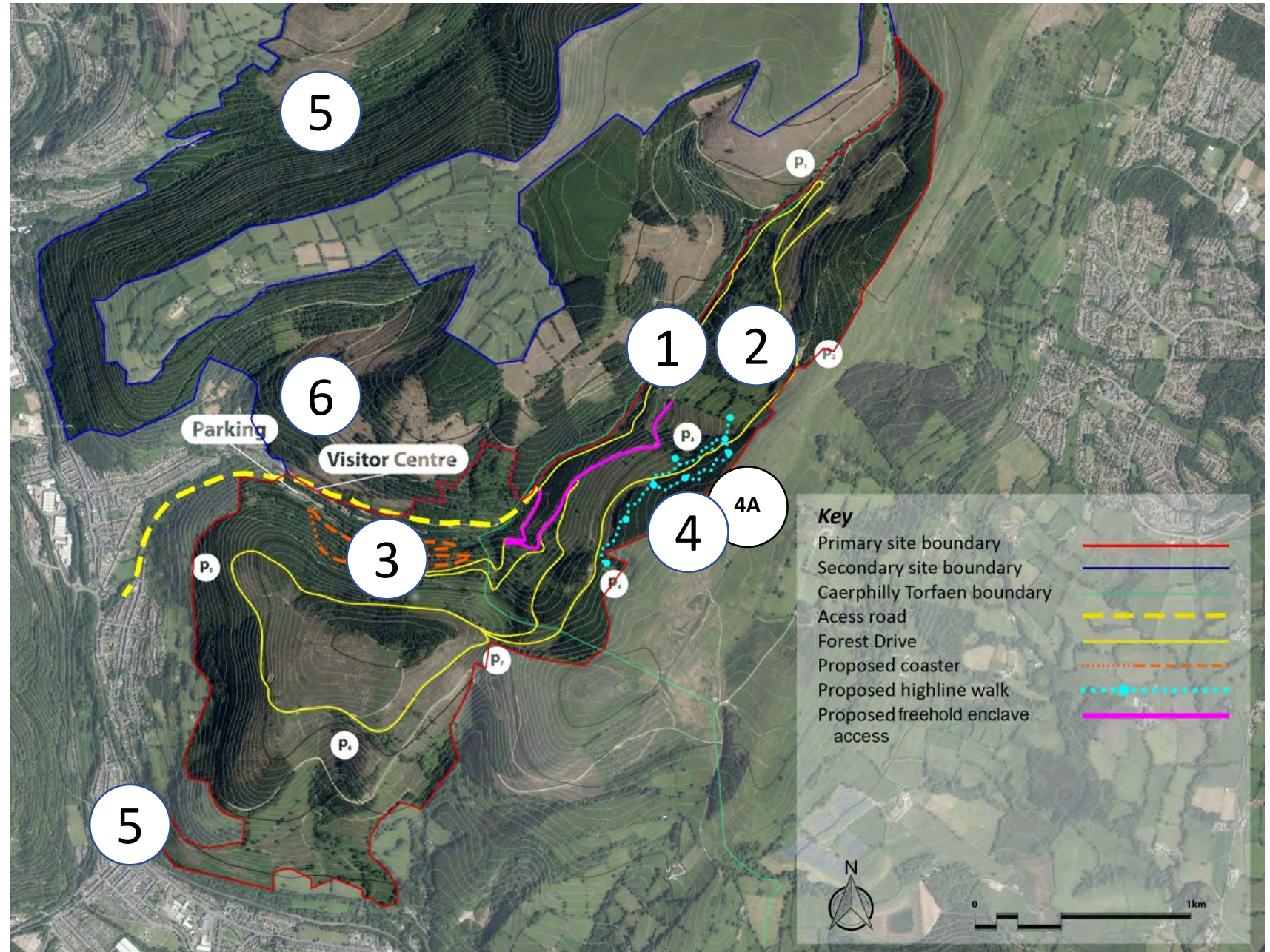
5. Masterplan Framework

Masterplan Vision

There is a wide range of potential new activities that could be attractive to the local and regional catchment and meet the Key Objectives. However, an analysis of the site has shown that there are significant constraints to development, and it is therefore vital that any activities are recommended are compatible with the physical and environmental issues outlined above.

Key drivers to the selection of options include:

- The need for several separate initiatives that can meet the needs of different market groups to provide diversity and resilience;
- The benefit for these initiatives to be independent and mutually exclusive, where feasible;
- The aspiration for activities and facilities that put Cwmcarn 'on the map' and provide something unique, special and highly memorable;
- Activities that can respect, preserve and reinforce the environmental qualities of the site with a 'light-touch' approach to development impact;
- Activities that are derived from the fundamental strengths of Cwmcarn;
- The opportunity to look wider than the site boundary itself and take advantage of the potential connections and linkages to the positive elements of the surrounding area (Canal, Sustrans routes, local settlements etc); and,
- The strategic role of the current freehold enclave in light of its central location at the heart of the site and the development opportunities it offers by virtue of its relatively flat topography in comparison to the NRW site as a whole.



Six key Priority Projects and Initiatives are identified to meet these criteria:

1. Acquisition of the freehold enclave
2. New accommodation within the heart of the site
3. A Forest 'Coaster'
4. & 4A - A broader range of activities in the form of a linked set of attractions both family orientated and adrenalin based
5. Activities and initiatives that extend to the wider area of the NRW ownership and beyond
6. Upgrade to the existing Visitor Centre

5. Masterplan Framework (continued)

1 and 2. Acquisition of the freehold enclave allowing new accommodation within the heart of the site

New accommodation can take full advantage of the high-quality environment within the Park area and provide a core of year-round users for paid activities within the site. The potential use of the freehold site is important to the success of the accommodation related element of this proposal.

3. A Forest 'Coaster'

A coaster offers proven appeal to a wide range of visitors including families and the local community as a whole. Whilst there are various approaches to the design of a coaster, it will be important that any such development at Cwmcarn sits gently within the forest landscape and minimises any negative impacts on the environment. A ground-level track that can weave through the forest setting can help to achieve this.

4. & 4A A broader range of 'Forest Activities' in the form of a set of linked activities

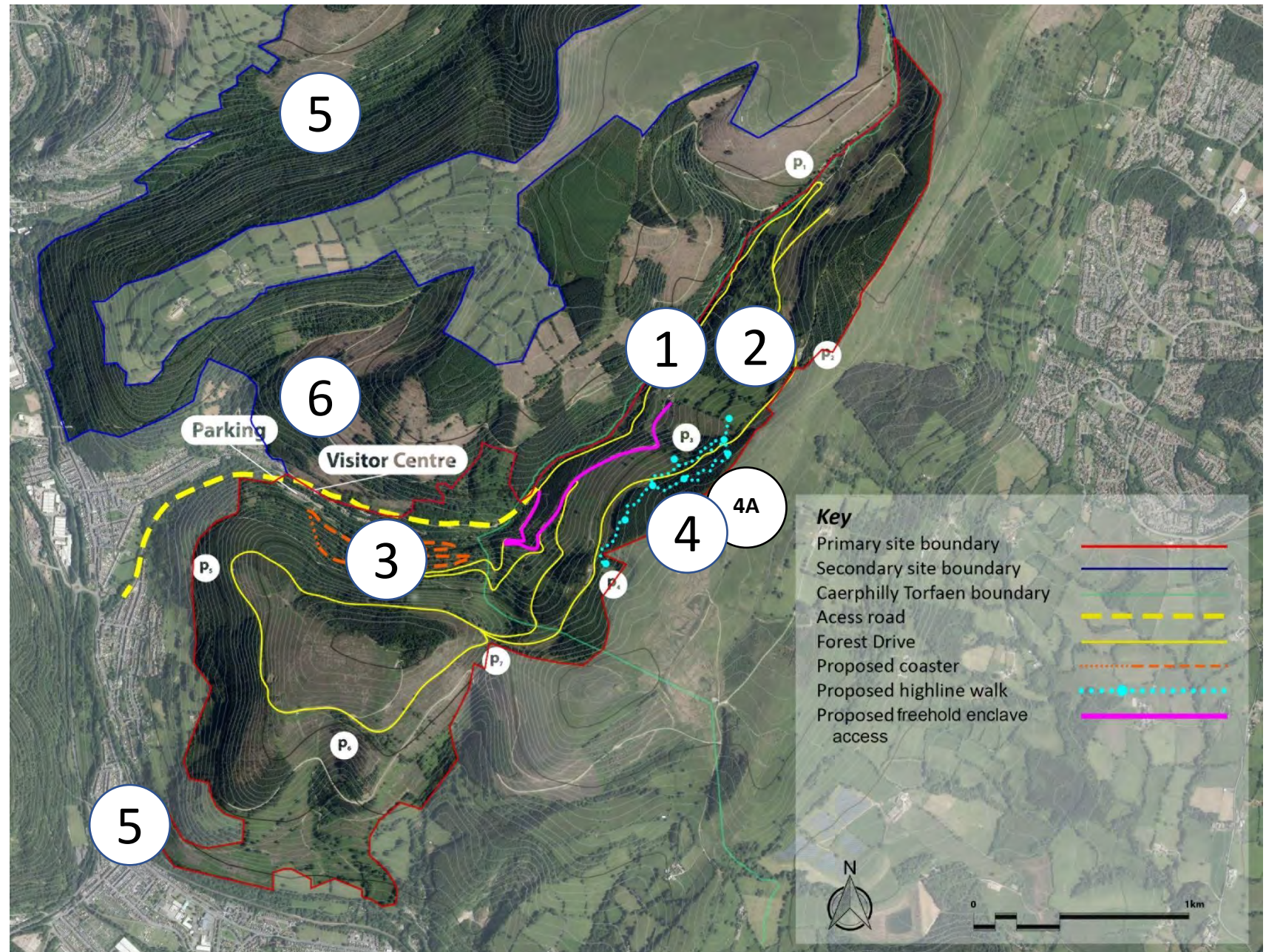
A series of activity nodes, (as opposed to a single, focussed area), will allow for a range of activities; better use of the Forest Park as a whole; and an activity / adventure route in itself. The addition of some 'Adrenalin' elements will increase the market appeal.

5. Activities and initiatives that reach out into the wider area of the NRW ownership and beyond.

The Park area is very self-contained but there is scope to make connections to the wider area where local settlements, the Canal, and existing Sustrans routes offer a framework within which to form integrated and holistic connections.

6. Review / upgrade of existing Visitor Centre

The proposed changes to the scale and scope of activities at the site will necessitate a review of the existing Visitor Centre and its facilities.



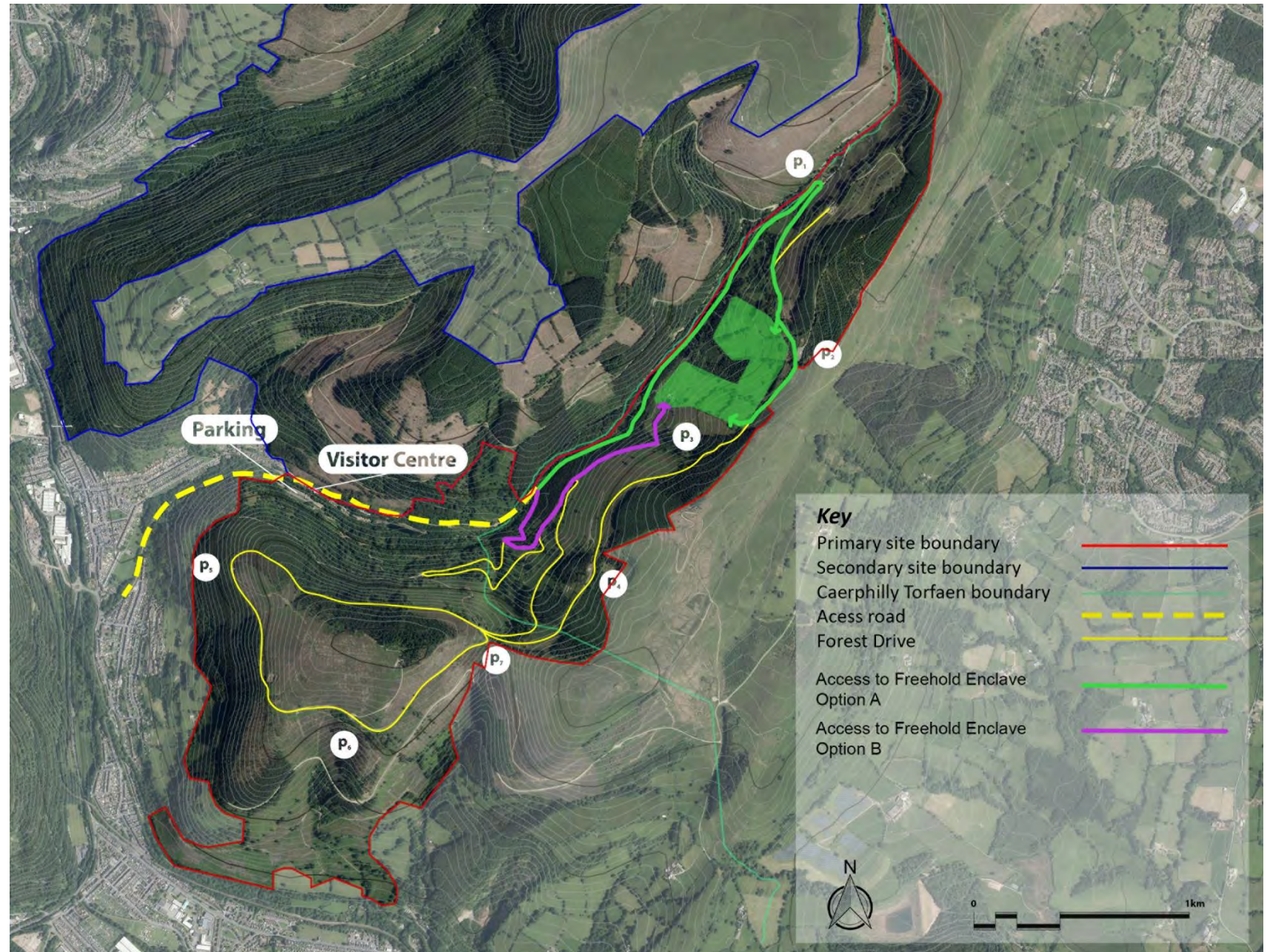
Although the Forest Park site is quite extensive, it is necessary to locate facilities where they can be supported by the appropriate levels of car parking. Without expensive - and potentially environmentally damaging - earthworks, there are few areas of the site with topography that allows any significant additional areas of car parking to be provided. The main exception is the freehold site (1 above), which is not flat but offers more manageable slopes as well as less constraints from existing vegetation. There is also substantial parking at the site entrance/arrival point, close to the Visitor Centre. Additional car parking in this area would be beneficial and could be achieved through a combination of: rationalisation of the layout to maximise the number of spaces within the existing car parking areas and an appraisal of all areas of level ground that are not in use as car parking, to assess scope for a change of use. For example, if the freehold site is to provide new accommodation, it may be beneficial to relocate all accommodation provision to that area and, in doing so, free up a substantial area for additional car parking. This can serve any increase in demand driven by the Forest Coaster proposal.

5. Masterplan Framework (continued)

Access to the freehold enclave

The topography of the site significantly limits the options for access and circulation. The existing Forest Drive provides the principal vehicular route around the site for visitors – and was completely upgraded in 2021.

To utilise the freehold site for accommodation and / or visitor facilities will result in a significant increase in vehicles needing to access the core park area. Two potential options are suggested for this access route.



OPTION B

Option B (purple line in the figure right) is a more direct route that requires improvement to the Forest Drive to allow two-way traffic along some sections of the Drive. More detail is provided in the slides below.

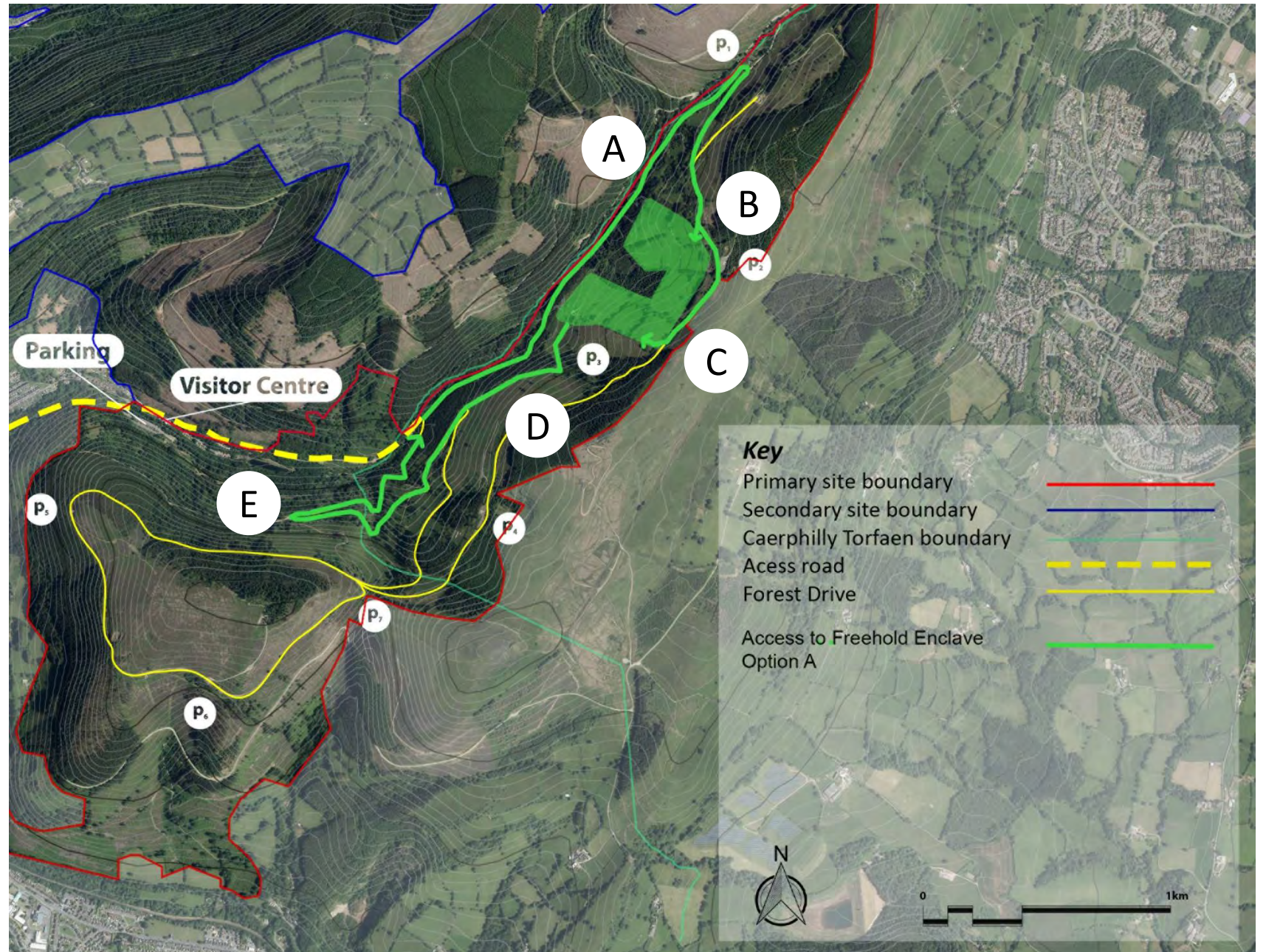
OPTION A - Preferred

Option A (green line in the figure right) utilises the existing Forest Drive circuit, with two potential new access points from the Forest Drive into the freehold enclave. Where access is shown - on the western side of the freeholding – the site is adjacent to the Forest Drive with modest level differences that can be overcome with a ramped access road. More detail is provided in the slides below

5. Masterplan Framework (continued)

Access to the freehold enclave – Option A

- A** The access route under Option A follows the existing Forest Drive route, which is a one-way road.
- B** A direct access into the freehold site is possible between car parks 1 and 2. This could be via a controlled security gate with number recognition cameras. This provides access directly into the heart of the proposed accommodation site
- C** A second access into the freehold site, between car parks 2 and 3, would allow direct access to the focal area for new visitor facilities, including car parking for the proposed aerial walkway.
- D** Exit from the site could be via the existing access track (which would need to be improved).
- E** It could then join the lower section of the existing Forest Drive to return to the visitor centre and site entrance.



Option A requires limited changes to the existing road network. It does require parts of the Forest Drive to be shared by visitors who are solely accessing the proposed accommodation site and / or those accessing the proposed new visitor facilities. However, security control gates and number-plate recognition technology should be able to resolve any conflicts.

5. Masterplan Framework (continued)

Access to the freehold enclave – Option B

Option B gives separation of those using the Forest Drive from those accessing the accommodation and activities at / near to the freehold site.

To do so will require some improvements and widening to the roads, which are currently one-way only. This is described in more detail below.

A The freehold site is currently accessed via a track from the south and uses the lower section of the Forest Drive, between points B and C, driving the 'wrong way' up the one-way Forest Drive loop. The relatively low volume of traffic to the freehold site makes this manageable.

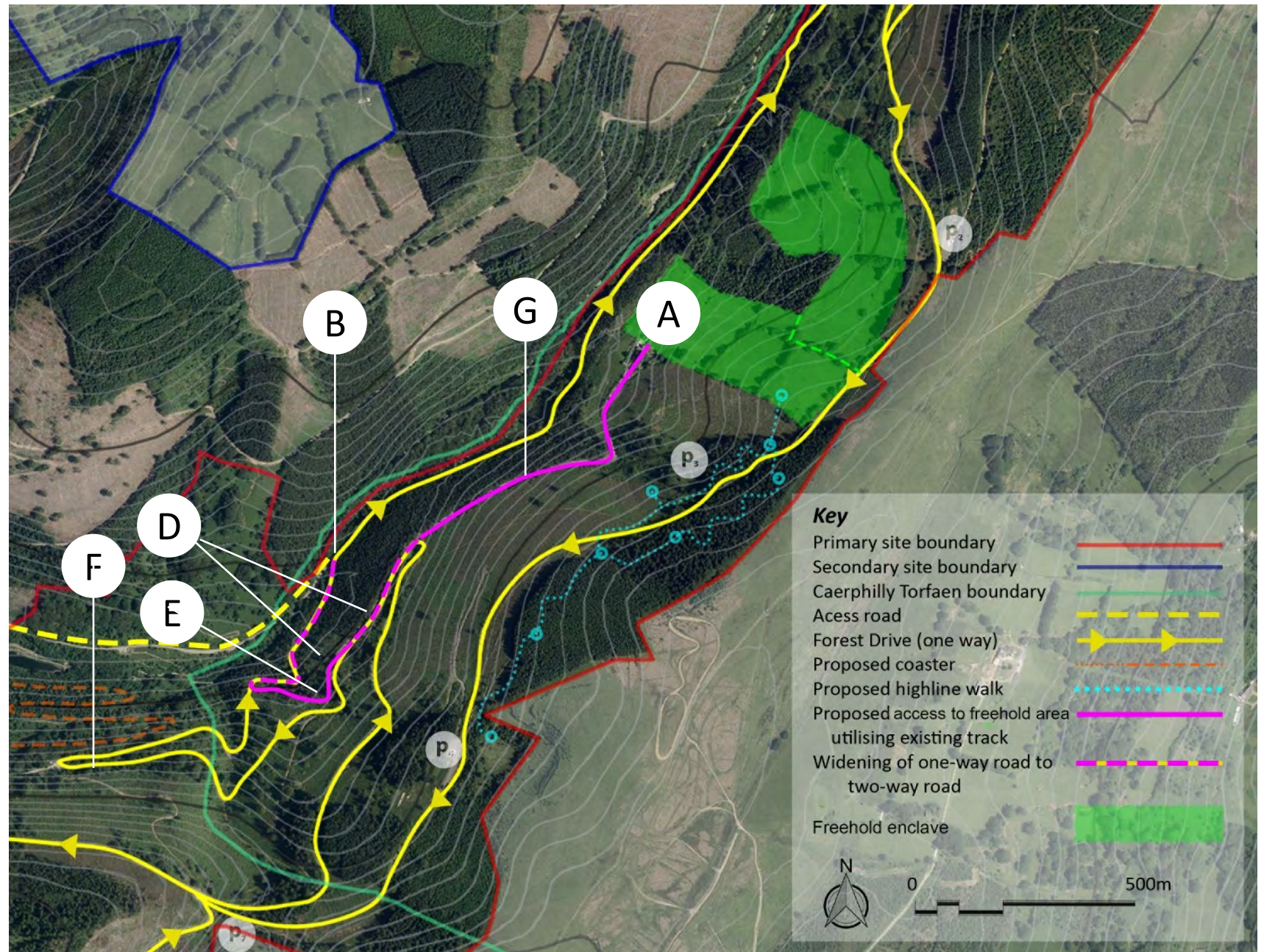
B The security gate that gives access to the Forest Drive is located at point B.

D The two sections of road (highlighted in yellow/pink) will need to be widened and / or provided with passing places to allow two way traffic movements. More detailed survey work is required to assess the most appropriate approach.

E A short section of Forest Track may be suitable for improvement to provide part of the new vehicular route to the freehold site. Topography may constrain its use, but it should be investigated as it minimises the need for two-way sections of road.

F The alternative is to utilise more of the existing Forest Drive as a two way road

G Both of the strategies for Option B described above allow access to the freehold site without compromising the effective operation of the Forest Drive. Both would utilise the existing access track (G) which would need to be improved.



The current one-way loop of the Forest Drive is accessed through a security gate (as it is a paid attraction).

Option B enables the Forest Drive to continue in its current form – whilst also allowing convenient access to the freehold without a long detour.

6. Key Components

Summary

The concept consists of 6 different elements that may be developed in different combinations subject to detailed survey. Some of the concepts are stand-alone although to maximise revenues all elements should ultimately be taken forward. The existing visitor centre facilities, particularly the café will also need to be enhanced in order to be able to cope with the increased volumes and expectations of visitors. Some elements, particularly the lodges and the alpine coaster will significantly contribute to revenues.

The accommodation concept is predicated on the acquisition and development of a freehold enclave in the middle of the primary part of the site where the Forest Drive loops around the holding. This part of the site is situated in Torfaen County Borough. It is assumed that this site may become available in the relatively short-term and that there is currently mains water, electricity and landline to the existing buildings with a domestic septic tank for effluent. If this does not become available a smaller number of lodges could be developed in other parts of the estate.

The concept elements and related high-level capital costs are detailed in a financial Business Case where various options are considered. A summary of high level costs is shown below.

1. Freehold Enclave

Securing the freehold interest in this site of some 47 acres of relatively flat and undulating pasture, enables a degree of flexibility and ultimately greater longer-term profitability. The preferred option is to use the entire site for lodge accommodation with a mix of circa 80 lodges along with a central facility which could include food & beverage and possibly other facilities.

2. Lodge Accommodation

The lodges can be pre-fabricated offsite with a high quality design – a mixture of two, three and four room units to be sited sympathetically in glades with tree planting to reduce any visual crowding. A central facility could include food and beverage and possibly other services. It is initially expected that the original buildings would be retained to provide servicing and other space. This might include a wellness facility which could fit well with the market and the overall natural offer.

3. Forest Coaster

The concept sees the longest Alpine Coaster in the UK so at least 1.1km in total length (including both the lift and the run). Two sites have been considered, on the slope to the south of the main car park and near the pit wheel. Both these sites are in Caerphilly County Borough.

4. Forest Activities & 4A Adrenalin Activities

The concept sees 3 or 4 activity points joined together by a two level elevated treetop pathway loop of some 1km in total length that traverses the Forest contours and starts near Car Park 3 on the Drive with a route towards Car Park 4.

Adrenalin activities, from a high tower that is part of the treetops pathway, such as a zip line and a helter-skelter, can complement the more family-based forest activities.

5. Extending the Forest's Reach

The legibility around the site will improve with the treetop walkway and the concept also sees activities being brought outside the current boundaries. Three options are considered here: 1) The joining up of Sustrans circular routes 465 and 466 using existing Forest Paths; 2) The development of a walking route that takes in the canal to the south and east of the primary site; 3) The development of an electric bike hire business that could be the subject of a competitive tender as the lease of the existing operator comes up.

6. Existing Visitor Centre

The additional visitors will require an upgraded catering offer. New management arrangements for the existing centre are likely to be needed to maximise potential.

Estimated Costs:

Lodge Accommodation (& site)	£12.2m
Forest Coaster	£ 2.2m
Forest Activities & Adrenalin Activities	£ 5.2m
Extending the Forest Reach & Existing Visitor Centre	£ 0.5m
Total	£20.1m

6. Key Components – Lodge Accommodation

Lodge Accommodation – concept and potential location

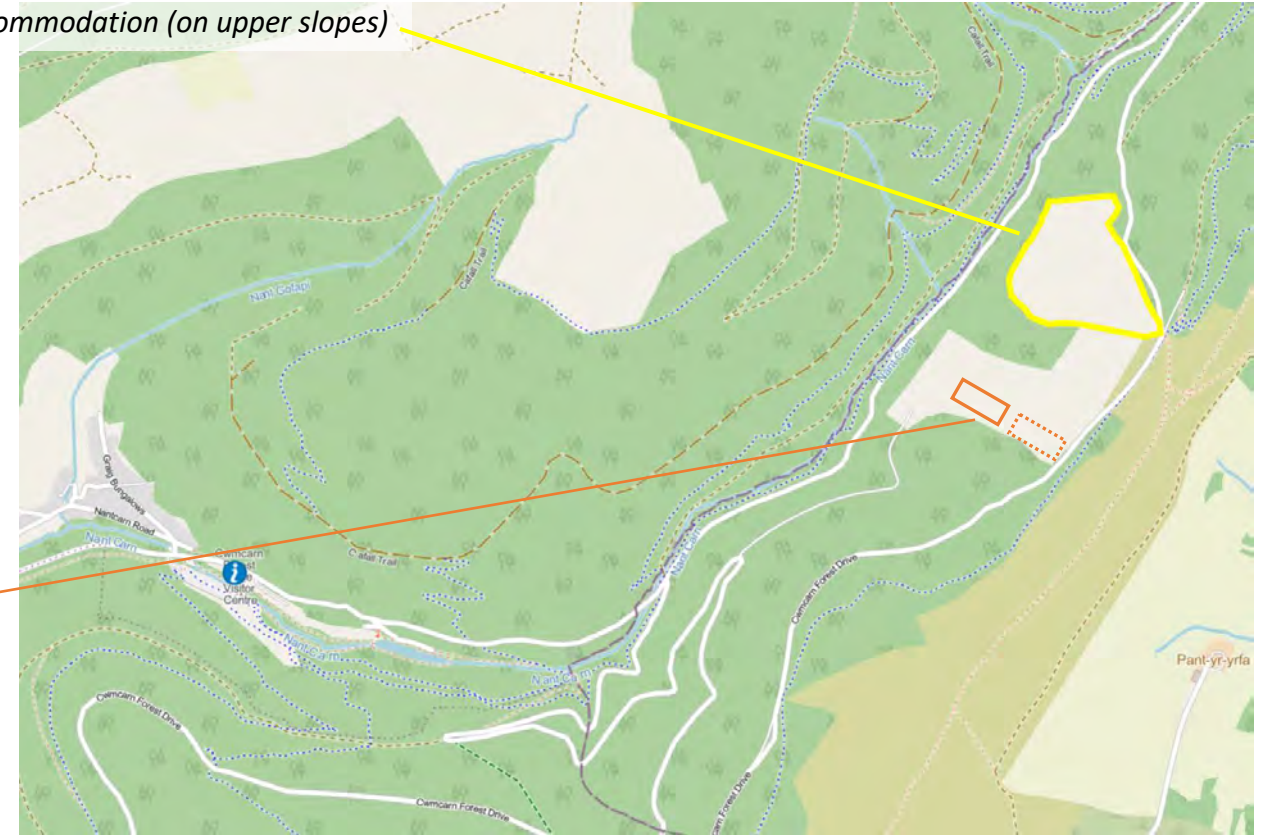
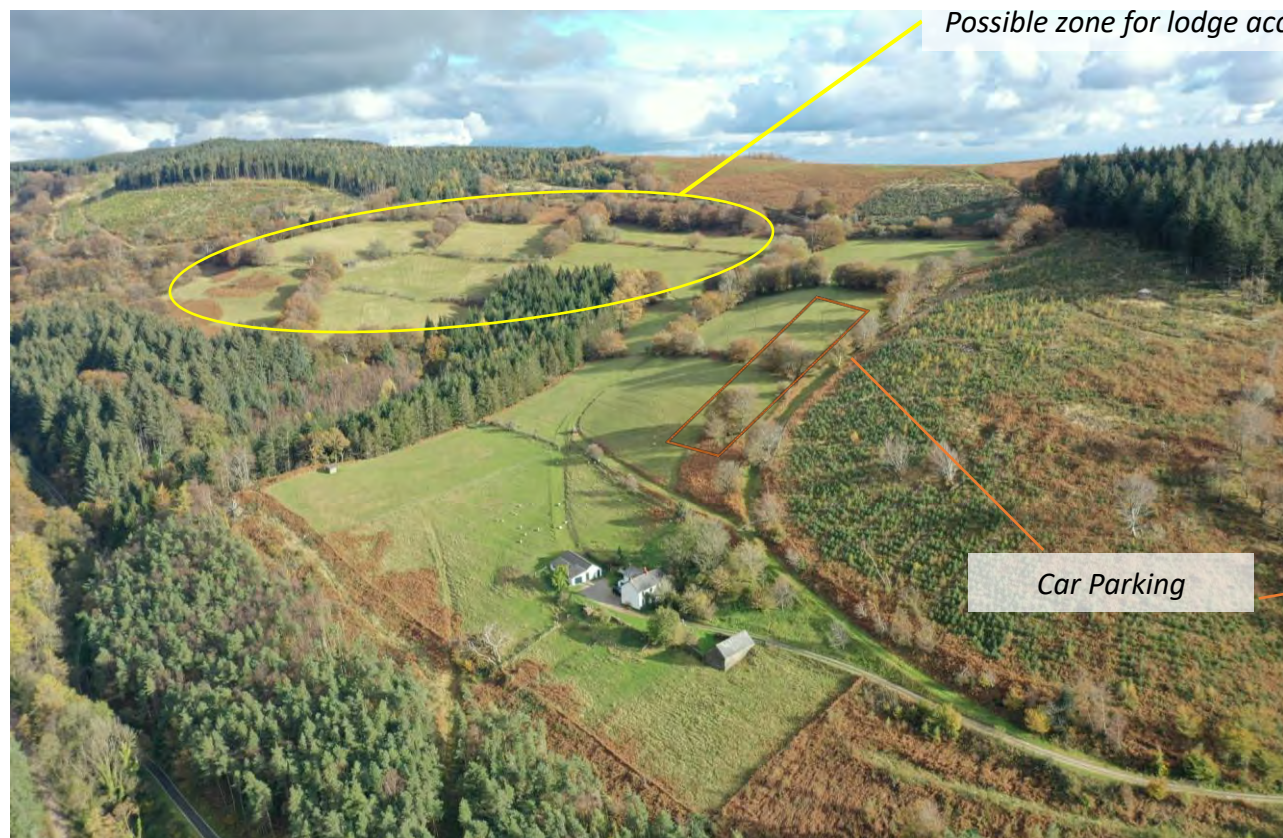
Pre-fabricated offsite with good quality design – approximately 80 lodges, in a mixture of two, three and four room units can be sited sympathetically in glades with tree planting to reduce any visual crowding.

A modest central facility is costed that could include food and beverage or shop. It is initially expected that the original buildings on the freehold site would be retained to provide servicing and other space.

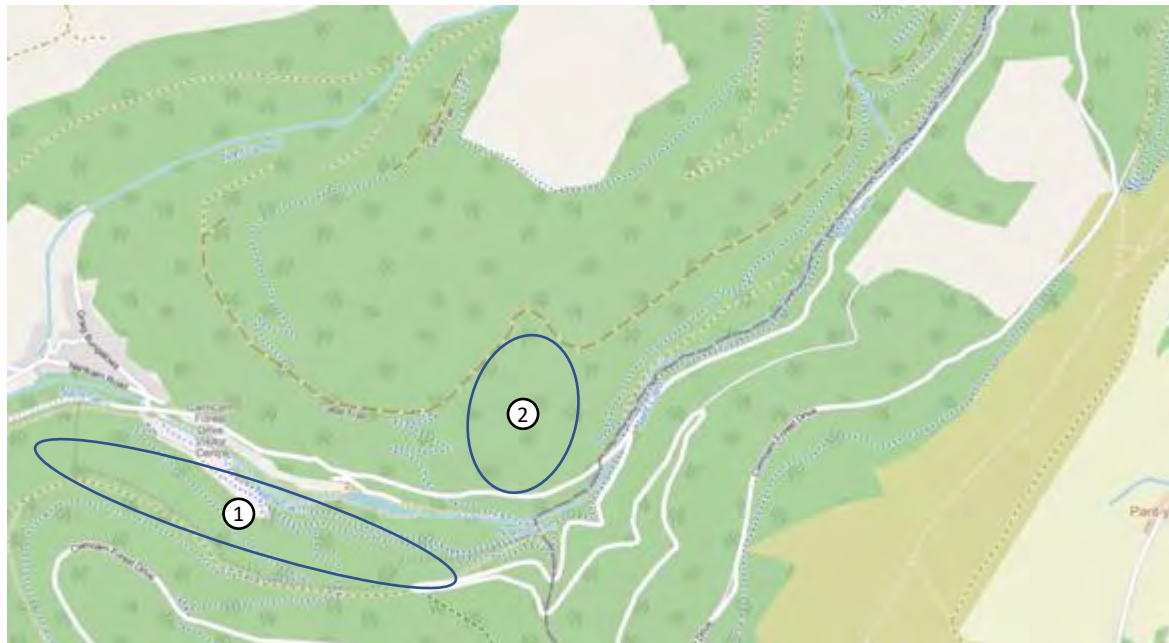
Phase 2 would typically include more lodges and a higher cost central facility with potentially a different food & beverage, wellness, plays-space or other options added in. This would typically be put in place when annual occupancy reached 75%. Car parking would be positioned as per the orange border with some 160 car spaces typically needed for the 80 lodges in Phase 1. The car park could be extended for visitors to the Treetops walkway who would access direct from the Forest Drive.



Example lodge accommodation (above). Sources: Coppergreen Leisure Resorts, Forest Holidays



6. Key Components – Forest Coaster



Location

A number of sites could be further considered including:

- ① On the slope to the south of the principal car park;
- ② To the north of the Forest Drive near the pit wheel, and;

Both options need further detailed survey work to see which is best in relation to a number of criteria, including:

- Terrain and slope
- Ground Engineering
- Parking
- Capital costs
- Impact on other activities
- Impact on existing users, residents and other stakeholders
- Operational costs

There may be other sites within the primary area that could be used although access and other issues for different options will need to be considered in greater detail.

Forest Coaster – features

The concept sees the longest Alpine Coaster in the UK which means it will be at least 1.1km in total length (including both the lift and the run).

The forest coaster is an all-weather toboggan which can be operated throughout the year. Utilisation is typically high in markets such as Germany with visitor numbers averaging 97,000 per year across 5 different sites.

The coaster lets users control the speed of their sled, designed for one or two people to whiz silently down the hillside at speeds of up to 30mph. There is a large market from children to grand-parents.

The tracks are elevated without the need for foundations, reducing the ecological impact. The track can weave into and out of forestscapes. The version below has a cover for protection against rain. Various solutions for storage and uphill transportation are available. Wood and other natural materials can be used as part of the build.

A capacity of approximately 500 people per hour and low staff and maintenance costs mean the coaster system can be more easily operated than many other visitor attractions. This sort of coaster typically needs 2 or 3 people for successful operation.

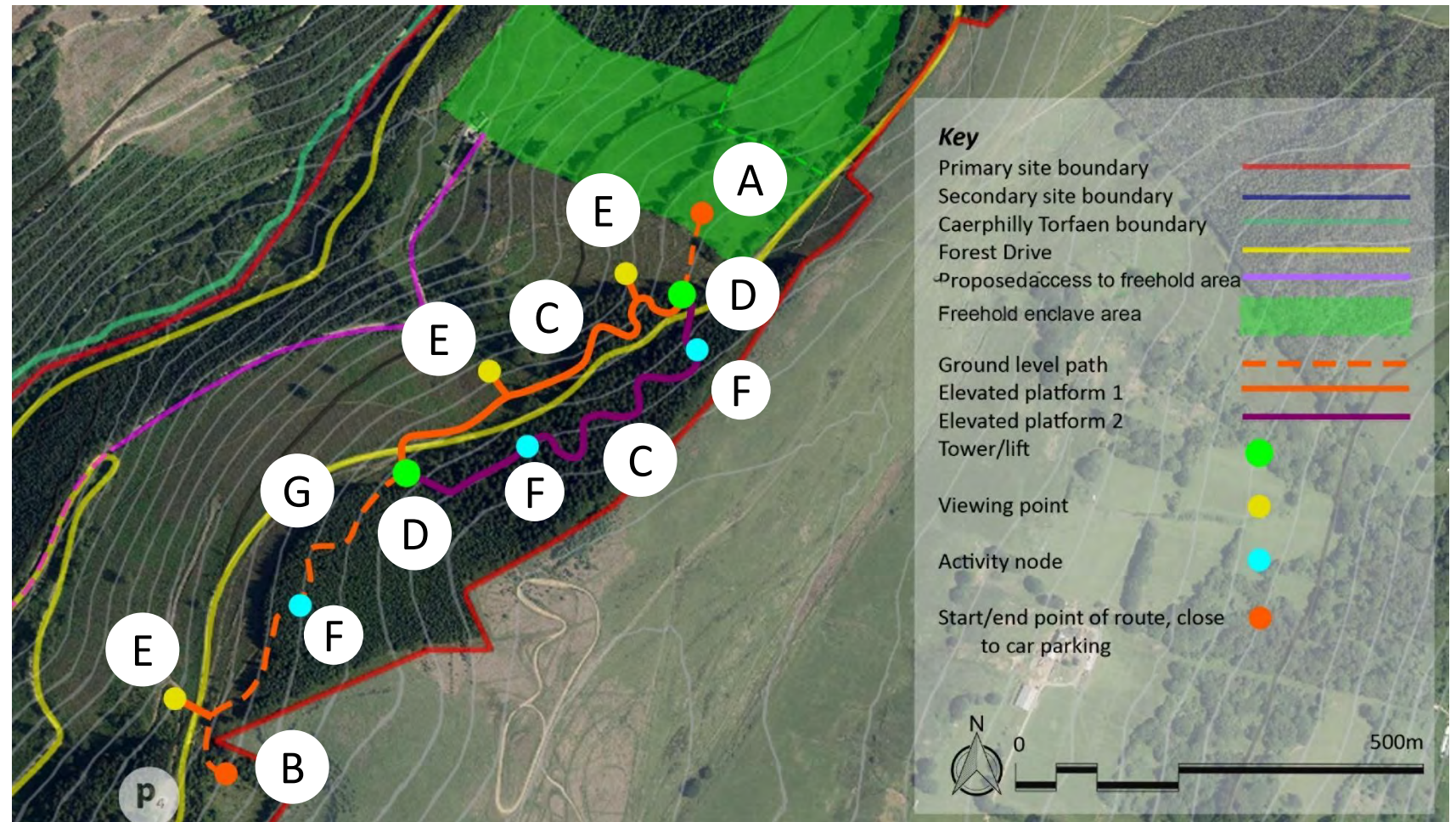


6. Key Components – Forest Activities – Including aerial walkway

Proposed route and facilities

The route illustrated and described here is an initial concept proposal, which will need to be refined following site surveys and more detailed design work. It is 'scale-able' in the sense that it has no fixed length or extent of facilities but can develop incrementally and / or to meet the demand. It is costed at 500 metres in length with dual levels. The proposal, as shown, is described below:

- A** The existing freehold site is the location for the main start point, where car parking can be provided. The location is at the south eastern area of the land, where it abuts Car Park 3.
- B** The southern end of the route is at Car Park 4, where there is existing car parking. This allows the route and activities to integrate with the Forest Drive.
- C** An elevated aerial walkway is proposed that provides a loop through the existing forest, with branches that connect to viewpoints. It is split into two parts, each providing a level path, that can be wheelchair accessible.
- D** Two towers are proposed that allow the incorporation of lifts to connect between the two levels of the walkway. The North tower will be higher to enable the jump off point for Adrenalin Activities.
- E** A series of viewpoints can take advantage of the extensive views to the valley that are possible from this part of the Forest Park.
- F** A series of nodes will punctuate the route, offering the scope for a wide range of Forest-based activities.
- G** The topography inhibits the use of an aerial walkway for the southern half of the route which can be at grade, but can still offer the scope for a very varied and interesting mix of facilities, activities and experiences.



6. Key Components – Forest Activities (continued)

Aerial walkway

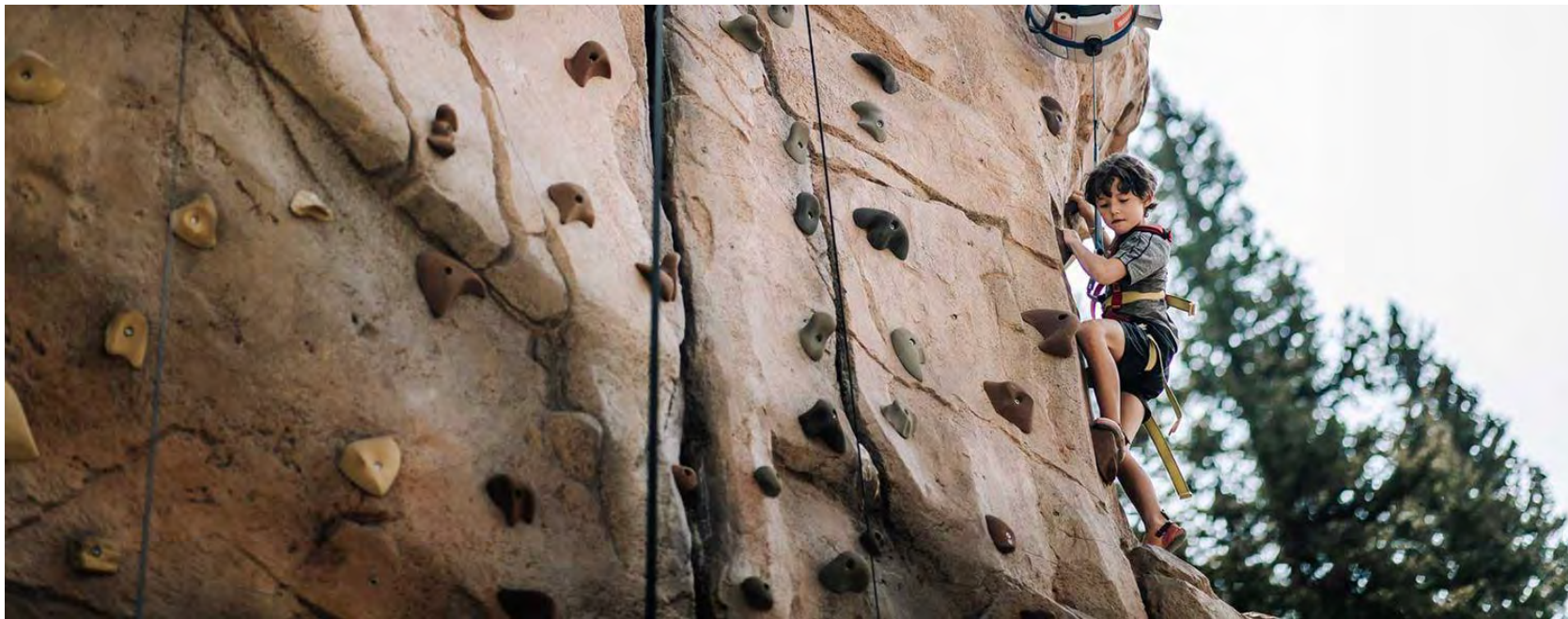
The proposed aerial walkway snakes through the existing forest area. It can combine both a high-quality contemporary structure with a sensitive design that respects the natural context. The ideas described here are very much a concept and further work will need to be done to refine them, but the proposal is for a loop, with towers at either end. The two halves of the loop are at different levels, allowing them to move through different parts of the forest area.

The towers connect the two levels. This allows them to be wheelchair-friendly and accessible by all users. Along the route, there is scope for a very wide range of adventure activities, both active and passive.

The route intersects with the Forest Drive and the Twrch cycle route, and these interactions offer opportunities for interesting relationships.



6. Key Components – Forest Activities (continued)

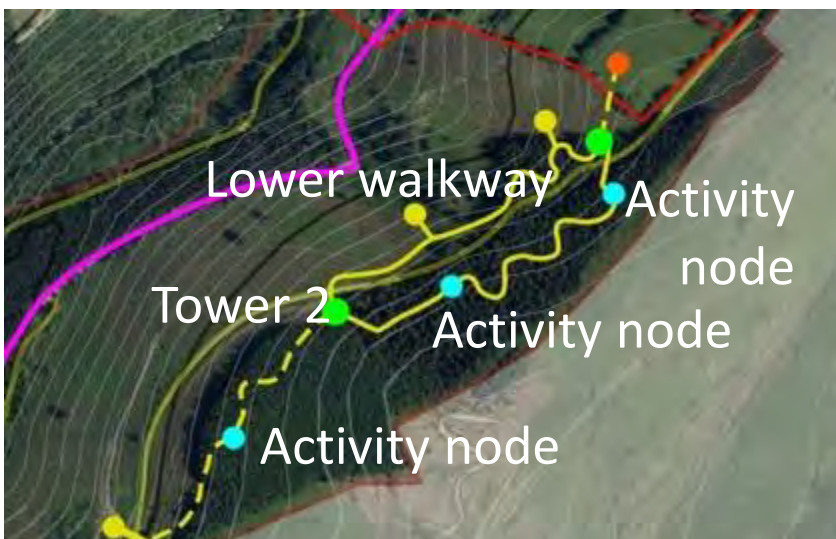


Activities and activity nodes

There are almost limitless opportunities for activities that relate to the forest setting, for all ages and for all levels of fitness. Although the plan shows notional locations for activity nodes, they could, be incorporated anywhere within the locality of the proposed Forest Activities area, if they are accessible and sensitively integrated with the existing environmental setting.

Tried and tested activities include:

- Treetop adventure walks & courses (Go Ape and similar)
- Children’s activities: den making, outdoor cooking etc
- Educational opportunities
- Small and medium scale performance spaces
- Climbing walls and structures
- Nature trails
- Boardwalks



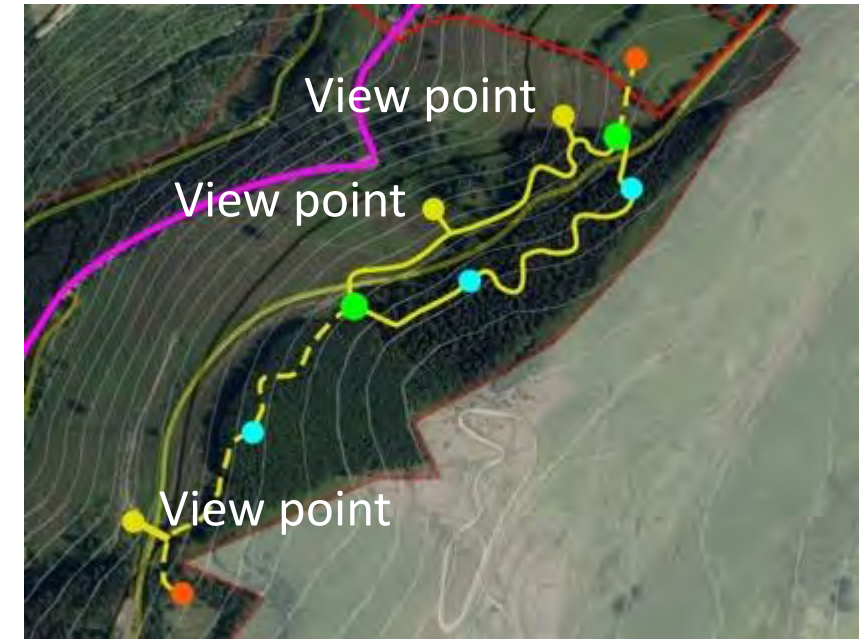
6. Key Components – Forest Activities (continued)

Look out / view point

Viewpoints along the walkway route can use the natural topography to create a dramatic setting, without the need for towers or steps. Cantilevering a platform above a steep drop will create an exciting location to take advantage of the multi-directional views that the Forest Park offers.

Contemporary and bold architectural designs can create great opportunities for memorable photographs and ‘selfies’ and give the Cwmcarn Forest site its own distinctive design brand. Exemplars include Norway, where tourism strategies for scenic locations have made a particular point of using high-profile designers and innovative designs to create memorable landmarks.

The slide overleaf shows a concept for Cwmcarn Forest.

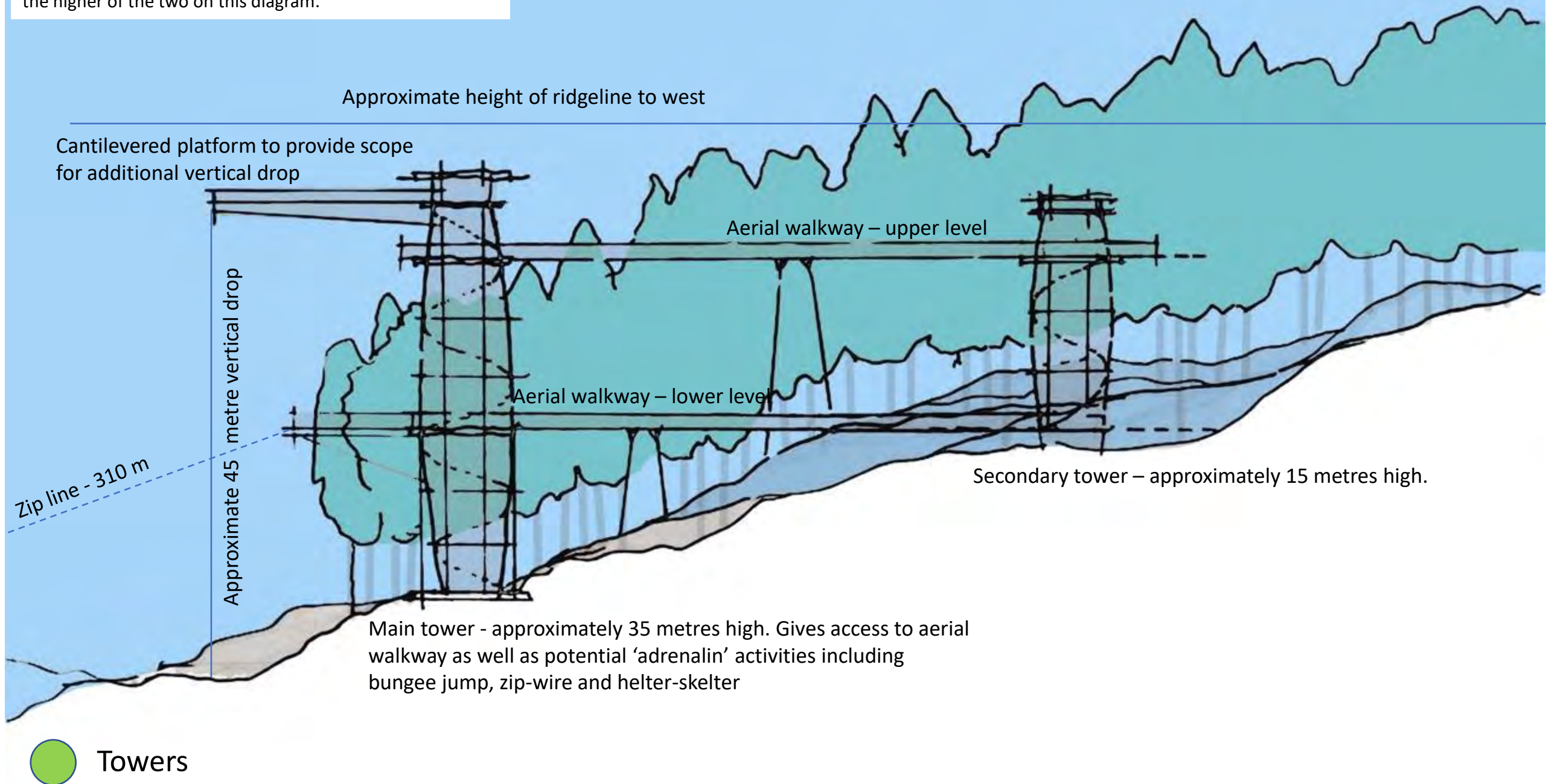


6. Key Components – Forest Activities (continued)



6. Key Components – Adrenalin Activities

A range of adrenalin activities are also considered that can include a zip wire, swing and helter-skelter amongst other options. These would be operated from the north tower – the higher of the two on this diagram.



The sketch diagram above indicates a provisional proposal for the height of the towers based on current information of contours, levels etc in the location of the proposed aerial walkway and towers. More detailed survey work and design will be required to refine the proposals. As shown, the proposal shows a main tower of 35 metres and a secondary tower of 15 metres. Each tower would incorporate a lift that would allow access between the two levels of the aerial walkway, that are shown 15 vertical metres apart. A cantilever from the main tower could allow additional vertical drop (shown here as an additional 10 metres, giving a total vertical drop of 45 metres). It will be important to keep the towers at a lower height than the adjacent ridge-line to ensure that views to and from the Scheduled Ancient Monument are not compromised.

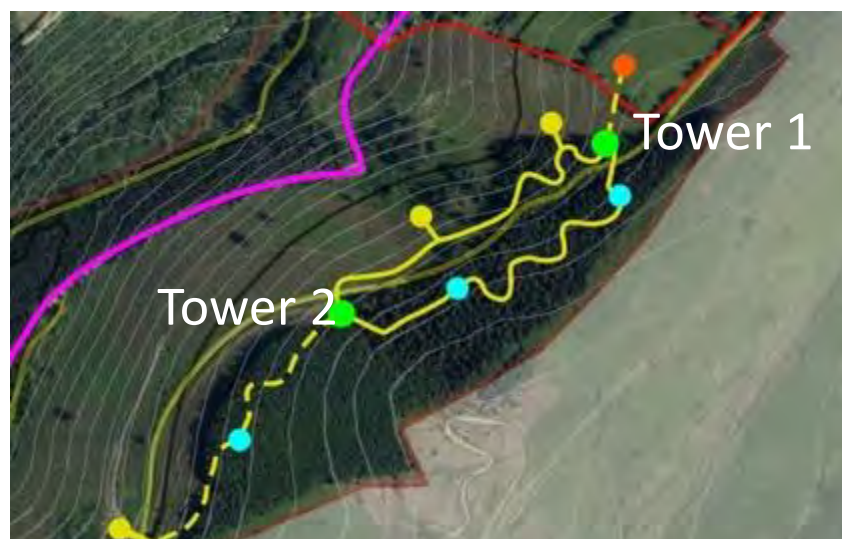
6. Key Components – Adrenalin Activities (continued)



Towers

The proposed towers are an important element for giving access to the aerial walkway, but also offer opportunities in their own right. As well as being visually striking and memorable, they can form the structure to facilitate the starting point for a zip wire, a cantilevered platform for bungee jumping, a launch pad for a dramatic treetop swing and the skeleton of a helter-skelter.

As well as providing active adventure opportunities, they offer scope for passive adventure and spectating by other visitors in and around the tower area.



6. Key Components – Extending the Reach

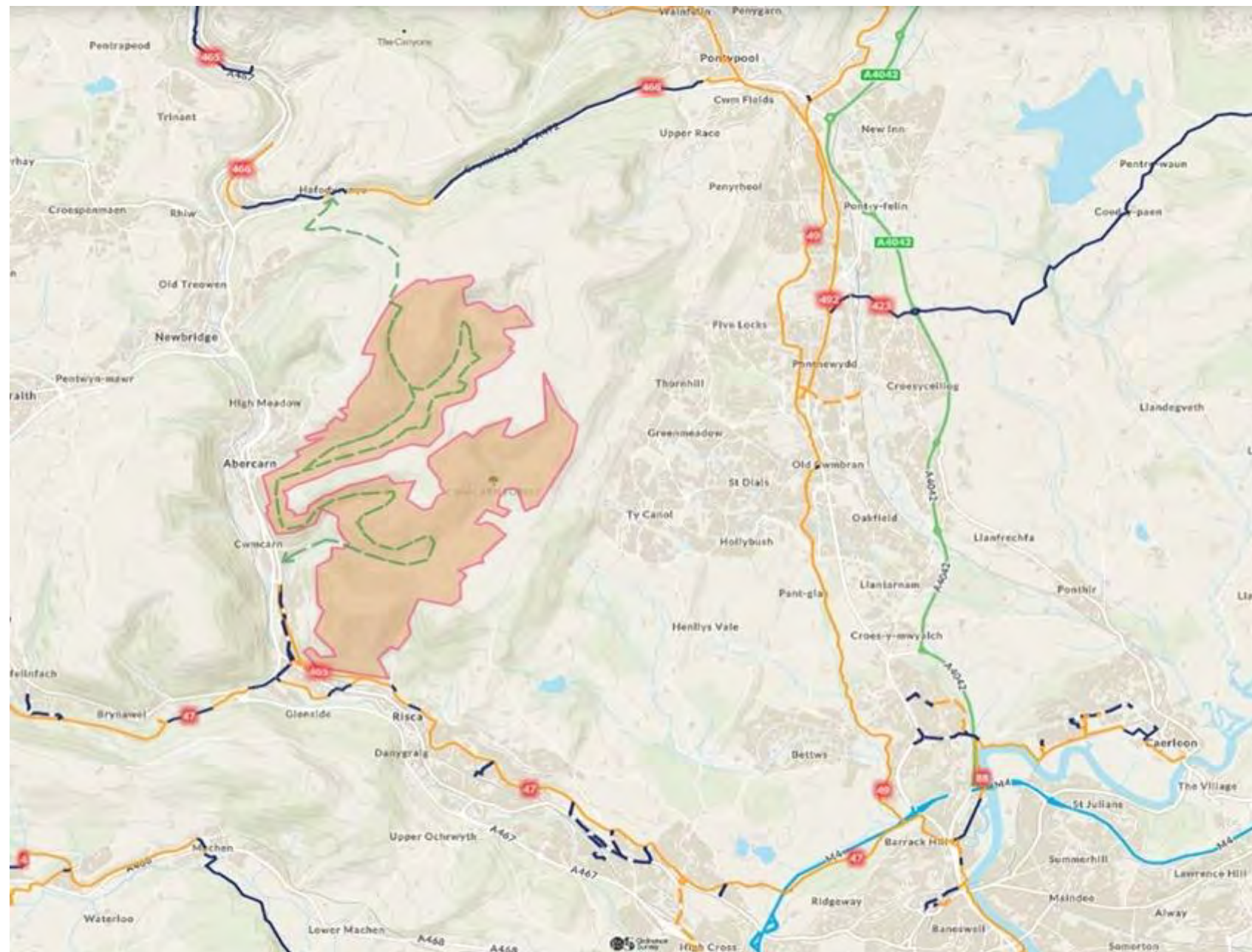
Extending into the wider area

There are other opportunities to place Cwmcarn Forest at the hub of a wider network of activities and facilities. This can:

- Increase the scope and range of attractions;
- Spread the economic and social benefits into local communities and businesses; and
- Increase site ‘capacity’ by utilising the larger area to absorb visitor numbers and spread visitor impact

The site itself is already a focus and attraction for walking and cycling. Close to the site there is an existing network of Sustrans’ routes, which are part of the National Cycle Network. The majority of these are in canal paths that are also very suitable for walking.

What is evident in looking at the map, is that the Forest area offers the opportunity to make a connection between the Sustrans routes 465 and 466. Route 465 ends/starts immediately opposite the entrance into the Forest Park and, apart from a short road section at the northern end, the connection can go entirely through the NRW Forest Park area (as shown in the map right).



The plan above indicates the existing Sustrans routes in the surrounding area. The Park area is also highlighted.

A potential connection is shown that provides a cycle link through the NRW land, utilising existing tracks. This, in combination with a short section of public road to the north of the Forest Park – provides the connecting element of an attractive and varied circuit, utilising canal paths, quiet rural roads and the Forest Park itself.

Additional forest tracks in the northern part of the NRW area could be identified to offer a network of routes. With the increasing use of electric bikes, the range of potential users of these tracks has risen considerably, with a particular need for routes that do not require advanced technical skills (such as those that are needed for Twrch), but still offer a challenging and varied route.

6. Key Components – Extending the Reach (continued)



The proposed circuit offers a varied and interesting route.

The three images in the top row are of the existing forest tracks, within the NRW ownership in the secondary site area. These offer the potential for routes and leisure circuits for electric bikes and provide part of the potential connectivity to link to the wider area and the Sustrans routes.

The three images in the bottom row show the varied and interesting character of the canal path which is a combined pedestrian and cycle route. It is fairly narrow in places, particularly around Newport, and signage through the Newport area where the continuity and clarity of the path is less clear, is poor in places. This could easily be rectified with simple signage.

6. Key Components – Existing Visitor Centre & Accommodation



Current Usage

On the ground floor the Visitor Centre provides a reception, a café with external terrace, a small retail unit and WCs. There are offices, exhibition and meeting rooms on the first floor. Some of the related infrastructure would benefit from immediate investment – such as the main staircase from the lower car park, shown above. Ideally the Visitor Centre should be able to cover its direct costs but due to COVID and the fact that the Forest Drive has not been open it has not done so over the last two years. This has an effect on viability - presented in more detail in the Business Case.

Existing Visitor Centre

The concept will see significantly more visitors on site and the café will be a key focal point which would benefit from enlargement in order to be able to increase throughput and maintain high levels of customer service.

Retail is often a challenge in visitor centres and current sales are understandably low at £4,400 (COVID-19 affected) but also relatively low in 2019 at £25,000.

The first floor could possibly be the location to house the HQ for the new management company or private sector partners involved in a larger operation.

The existing accommodation facilities nearby to the Visitor Centre are appropriate for the local market and could continue to run in parallel to any lodge development but with potential additional investment in Phase 2. For example an indoor play centre could be added later but as a community facility rather than a visitor facility. The current accommodation could be made to work harder in terms of units on site and mix of different accommodation types.

While the accommodation should continue in the short term the space also presents an option for additional car parking in the longer term and once the major visitor attractions are built. Current capacity in the existing car parks is not likely to be able meet peak demand once the new attractions are in place – shown in the graph to the right. This is dependent also on the extent of the new car parking arrangements at the Pit Wheel and the final location of the Coaster.

There are currently high quality shower and changing facilities for the mountain bikers in the car park near to the leased cycle shop and the business case sets out the opportunity to reinvest in that current facility to provide an electric bike hire operation that will also serve the lodge guests during their stay. This will create the means by which many types of visitors can access the wider site with ease in a sustainable way. It also opens up the opportunity to think bigger in the longer terms about prioritising walking and cycling on the Forest Drive.

