

## CHAPTER 4: ALTERNATIVES

### Introduction

- 4.1 A statutory requirement for inclusion in an ES is the reporting of the consideration of alternatives in the development of a proposal. Schedule 4 of the EIA Regulations states that an ES is required to provide:

*'An outline of the main alternatives studied by the applicant or appellant and an identification of the main reasons for his choice, taking into account the environmental effects.'*

- 4.2 This chapter describes the alternatives that were studied for the proposed development and the process of design evolution in response to the EIA process.
- 4.3 Firstly, the chapter considers the alternative sites that were considered for the development proposals in advance of the selection of the application site and the reasons for selection are discussed.
- 4.4 The chapter also considers the 'no development' option, which describes the likely conditions at the site in the absence of implementing the proposed development.
- 4.5 The applicant and the design team have undertaken a continuous review process to improve the design, taking into account the views of IOACC, CCW, key stakeholders and the public. This design evolution process is described in detail and the reasons for the selection of the preferred option stated.

### Alternative Sites

- 4.6 The selection of the preferred site for the proposed development has been based on a series of criteria developed by the applicant, which are essential components of delivering a successful development. These are set out in the bullet points below:
- The site has to be of sufficient scale to enable a viable development with an all year round leisure offer to be created which includes wide ranging facilities and high quality accommodation in a sustainable location;
  - To effectively compete with other tourism destinations in the UK, Land and Lakes require a site in a coastal location on Anglesey which provides safe accessibility to beaches. The requirement for a coastal location is fundamental and is Land and Lakes "USP" for the development and without it, a sustainable and viable business model which can compete with other tourism destinations in the UK cannot be created;
  - The site has to be accessible by a range of transport modes via existing infrastructure to ensure a maximum catchment within a 3 hour travel distance;
  - The site has to be situated in a sustainable location with good accessibility to enable the local population to fulfil the local employment opportunities that will be created; and
  - The site has to be located within a 30 minute travel time of a major construction project. The delivery of temporary construction workers

accommodation for the Wylfa nuclear power station enables a deliverable use to be created in the short term which assists the funding of the tourism development and its wide ranging facilities.

- 4.7 Planning Policy Wales (PPW), at paragraph 5.5.6, sets out the tests planning applications for major developments in National Parks or AONB's should address. The paragraph states:

*"In National Parks or AONBs, special considerations apply to major development proposals which are more national than local in character. Major developments should not take place in National Parks or AONBs except in exceptional circumstances. This may arise where, after rigorous examination, there is demonstrated to be an overriding public need and refusal would be severely detrimental to the local economy and there is no potential for locating the development elsewhere or meeting the need in some other way. Any construction and restoration must be carried out to high environmental standards. Consideration of applications for major developments should therefore include an assessment of:*

- *The need for the development, in terms of national considerations, and the impact of permitting it or refusing it upon the local economy;*
- *The cost of and scope for providing the development outside the designated area or meeting the need for it in some other way;*
- *Any detrimental effect on the environment and the landscape, and the extent to which that could be moderated."*

- 4.8 In accordance with the second bullet point above, the applicant has undertaken an assessment of alternative sites. The assessment was based on the site search criteria described above.

- 4.9 In assessing alternative locations, it is important to recognise that the success of the tourist and leisure destination relies on access to the beach and coastal areas. Because of this important requirement, only sites in a coastal location have been assessed. Given the purpose of the assessment, only potential alternative sites outside of the AONB on Anglesey Island have been considered. In total there are six alternative sites:

- Breakwater Country Park, Holyhead;
- Land East of Wylfa Power Station, Wylfa;
- RAF Valley, Valley;
- The Former Shell Octel Site, Amlwch;
- Land at the former Dynamex Ferodo Site, Caernarfon; and
- Newborough Forrest, Newborough.

#### ***Breakwater Country Park, Holyhead***

- 4.10 The 42ha site is in use as Holyhead Breakwater Country Park with an associated information centre and hard-surfaced car parking area serving approximately 45 cars. The area is characterised by rolling pastoral fields with dry stone walled boundaries, heathland, and cliff-lined coastline. The topography of the site is predominantly flat with the exception of the coastline which is steep cliff line and is largely inaccessible.
- 4.11 The site is owned by IOACC and following discussions with the Councils Leisure Services department it is not available for commercial leisure development. IOACC have aspirations to develop the Country Park in line with the sites Physical Infrastructure and Environment allocations in both the Adopted Local Plan and the

Stopped UDP. Planning permission for change of use of a dwelling near to the existing visitor centre has been granted recently by IOACC for an all year round café.

- 4.12 The local highways network serving the site is of a limited capacity and has several physical constraints including low bridges and single lane carriageways. Access to the site would also require traffic to travel through Holyhead. There are also several statutory environmental designations at the site including:
- The Holy Island Coast Special Protection Area for birds in accordance with the EC Birds Directive of 1979;
  - The Holy Island Coast SSSI;
  - Partly within Anglesey AONB; and
  - The Holy Island Coast Special Area of Conservation (SAC).
- 4.13 In addition, the site is also in close proximity to the Heritage Coast designation which is situated to the north-west of the site around Holyhead Mountain.
- 4.14 The site is owned by IOACC and is not available for commercial development. IOACC have aspirations to develop the Country Park in line with its allocation the Local Plan and Stopped UDP. The site is also not suitable for the proposed tourism development because the coastal area is defined by rugged, inaccessible cliff line which does not provide any accessibility to safe sandy beaches. Furthermore, significant off site highways improvements would be required to the local highways network to ensure that the site can be appropriately accessed in a safe manner.

#### ***Land East of Wylfa Power Station, Wylfa***

- 4.15 The 102ha site is characterised by fields in agricultural use with dry stone walled boundaries, elements of heathland, and rugged coastline with two sand and pebble bays. With the exception of the two bays, the coastline is defined by a rugged cliff line that makes the sea inaccessible and difficult to reach for visitors. The topography of the site is generally undulating, with a modest level change apparent from the higher ground inland at the south to the sea at the north.
- 4.16 The A5025 is situated to the south of the site. The east of the site borders the town of Cemaes. The north of the site is made up of the coastline and bay with the Irish Sea beyond. To the west, the site is dominated by Wylfa Nuclear Power Station's main reactor and associated infrastructure. A small wood provides a buffer between the west of the site and Wylfa Nuclear Power Station. Part of the site also covered by the Tre'r Gof SSSI. The site is also in close proximity to the Heritage Coast which begins after the 'Wylfa break' north of Cemaes Bay.
- 4.17 The site's close proximity to Wylfa Nuclear Power Station makes the development of a tourism destination in this location unsuitable. The Nuclear Power Station will reduce the attraction of the tourism destination to potential visitors making it an unsustainable and uneconomical proposition for Land and Lakes or any other commercial leisure developer.
- 4.18 The site is not sustainably located due to its peripheral location at the north of Anglesey Island and is relatively remote from the strategic highway network.

#### ***RAF Valley, Valley***

- 4.19 RAF Valley is a Royal Air Force station located to the south west of Holyhead. The base provides advanced training for RAF pilots as well as being a key base for the

RAF's Sea King Search and Rescue helicopter squadron. It has been in continual operation since 1941. Commercial flights are also served from RAF Valley, with two daily flights between the base and Cardiff International Airport. The site covers some 356ha.

- 4.20 Due to the site being a functioning RAF base, it is characterised by buildings and structures associated with aviation activities. The runways, aircraft hangars and other associated infrastructure therefore dominate the site. Cymyran Beach directly adjoins the site to the south. Access to the base is off Minffordd Road.
- 4.21 The coastal area of the site is covered by the following statutory environmental designations:
- The Cemlyn Bay and The Skerries SPA; and
  - The Ynys Feurig SSSI.
- 4.22 The site is not available for development and is unlikely to be in the future. It is an operational RAF base and a strategic site of high importance to the UK's defence capabilities.

#### ***The Former Shell Octel Site, Amlwch***

- 4.23 The 30ha site is located north of Amlwch and adjoins the Irish Sea. The oil terminal on site was originally built and operated by Shell for the extraction of bromine from seawater and for the unloading of crude oil tankers. American based liquefied natural gas (LNG) company CANATXX bought the site after it was closed in January 2004, with former owner Great Lakes moving its bromine sourcing to the Dead Sea.
- 4.24 Canatxx have obtained planning permission from IOACC to build and operate a LNG regasification plant at the site. To fuel this process it is proposed that the Amlwch site is to be fed by LNG-carrying tankers. The gas would then be pumped through an undersea pipeline to Preesall in Lancashire, England and be linked to the national gas grid via a pipeline. It is understood that the development has stalled due to the Preesall underground gas storage site failing to obtain planning permission; however, Halite Energy Group is currently applying to the Infrastructure Planning Commission for the storage of the gas in Preesall.
- 4.25 The site has planning permission for a LNG plant which is understood to be a committed commercial development. Furthermore, the site size of 30ha is not of sufficient scale to enable a tourism development to be created which can sustain the wide ranging facilities required to create an all year round destination. The site is served by a private access off Parys Road which runs through the centre of Amlwch. Access to the site is via the A5025, which is a slow moving road that is susceptible to congestion, and access to a suitable workforce is also poor, with Holyhead being over 20 miles away. The site is also highly contaminated due to its current and former industrial use and the area is not well served by the strategic highways network.

#### ***Land at the former Dynamex Ferodo Site, Caernarfon***

- 4.26 The 18.6ha site comprises the former Dynamex Ferodo facility located to the north-east of Caernarfon off the A487 adjacent to the Menai Straits.
- 4.27 The total site comprises some 18.8ha with three large commercial buildings and associated storage / parking areas located in the northern parcel of the site, an electricity sub-station and gas mains terminal to the north of the main site



building, a disused sewage works adjacent to the Menai Straits on its north-western boundary and open land and a former sports pitch occupying its south western limits. The south western portion of the site comprises a former licensed landfill facility (the Ferodo Tip) which ceased accepting waste in 1997.

- 4.28 The site is accessed directly off the A487 (Caernarfon Road) and is bounded by the Ystad Ddiwydiannol Griffiths Crossing Industrial Estate to the north, the Menai Straits to the north-west, the A487 (Caernarfon Road) to the south-east with open land to the south-west. A footpath and cycle path bisects the site in parallel with the A487, whilst a bus stop is located at the site access to Caernarfon Road providing links to the town centre.
- 4.29 The site's current levels of contamination require extensive remediation and the site is insufficient in size to justify a tourist destination. The site is also not situated in a suitable location for the nuclear workers accommodation given its distance from Wylfa. The travel time between the site and Wylfa is 50 minutes by bus which is more than the ideal travel time of 30 minutes (maximum). Furthermore, the site has poor beach access. As such, the site is not suitable for the proposed leisure development.

### ***Newborough Forest, Newborough***

- 4.30 Newborough Forest is a major feature in the landscape of southern Anglesey and is especially visible when viewed across the Menai Strait from Caernarfon. With the exception of the section of forest to the north of the A4080 the forest lies within the Isle of Anglesey Area of Outstanding Natural Beauty (AONB).
- 4.31 Newborough Forest is 951 hectares in size, of which approximately 689ha is currently wooded and the remainder is salt marsh, existing open areas and recreational facilities. 88% of the forest was established between the late 1940s and the beginning of the 1970s, with Corsican pine being the predominant species at 93% of the tree cover. Newborough Forest is managed on behalf of the Welsh Assembly Government by Forestry Commission Wales (FCW) and is unavailable for development.
- 4.32 Newborough Forest is of significant recreation and conservation value supporting over 170,000 visits each year to the beach car park and used all year round by local residents. The forest is increasingly seen as a tourist destination; facilities include car parks, toilets, interpretation boards, recreational paths and trails. There is access along the beach to the popular visitor destination of Ynys Llanddwyn (Llanddwyn Island), which is managed by IOACC and CCW.
- 4.33 The site is unsuitable for development given the afforestation that has developed on the site. It is also constrained by poor access via the A4080 – a slow moving route that is susceptible to congestion. Newborough Forest is a designated international, national and local nature conservation area with no opportunities for large scale redevelopment as part of a leisure led mixed use scheme.

### ***Former Lairds Site***

- 4.34 The Former Lairds works is a 14.6ha site at Beaumaris. The site is bordered to the north by residential dwellings and beyond that open countryside. The area is characterised by rolling pastoral fields with dry stone walled boundaries. The topography of the site is predominantly flat / undulating leading down to the coast. The site is located within the AONB and close to the Lleiniog/ Glennau Penmon SSSI.

- 4.35 The highways network serving the site appears to be of a limited capacity and to have several physical constraints. This is particularly apparent on the single carriageway roads linking the site with Beaumaris and beyond. Visitor traffic to a leisure development in this location would have to travel through Beaumaris town centre
- 4.36 The site is too small to accommodate the scale of the proposed 'Destination' development which requires at least 160 hectares. It is also located 50 minutes from the Wylfa B Nuclear Power Station which is not viable in terms of providing worker accommodation.

### ***Penrhos Coastal Park and Associated Land***

- 4.37 Whilst the alternative sites described above are not located within the AONB, it has been demonstrated that they are not available, suitable or viable for Land and Lakes proposed development. In contrast to the alternative sites assessed above, AAM's land is:
- Immediately available for development as a result of the closure of AAM's Aluminium smelting operation in 2009;
  - Situated in an attractive coastal location with easy access to Penrhos Bay which has a sandy beach. As previously highlighted, access to the coastal area is integral to the success of the new tourism destination on Anglesey otherwise the scheme will directly compete with other inland leisure developments elsewhere in the UK;
  - Highly accessible with excellent access by rail, road (with excellent links to the A55) and the sea. The existing road infrastructure is of good quality and deliverable off site highways works will be provided;
  - Within 30 minutes travel time of the Wylfa Nuclear Power Station New Build enabling a temporary workers accommodation complex to be created; and
  - Situated in a highly sustainable location on the edge of Holyhead which provides good accessibility to the local population to take maximum advantage of the employment opportunities that will be created.

### ***Summary***

- 4.38 For the reasons described in the preceding paragraphs, all of these sites were considered unsuitable for the proposed development. Accordingly, the Applicant progressed with the preparation of designs for the Penrhos sites.

## **No Development Option**

- 4.39 The 'no development option' evaluates the likely environmental considerations at the site in the absence of the proposed development. The evaluation of this alternative should include consideration of the future environmental conditions of the site as well as those currently present in order to identify improving or deteriorating trends in the environmental baseline. The consideration of these conditions may identify whether the proposed development will provide positive or negative environmental consequences in the long term.

**Loss of Public Access**

- 4.40 The Coastal Path and Coastal Park are located on private land owned by AAM. In the event that the leisure village development does not proceed, AAM are unlikely to continue the maintenance (current cost is £250,000 per year) of the site as they continue their withdrawal from Anglesey following the cessation of smelting works. In this event, the area would likely be closed to the public unless alternative funding could be sourced. Therefore, in the absence of the development, a valued local facility could be lost.

**Cessation of Ecological and Landscape Management**

- 4.41 Further to the potential loss of public access, AAM would also cease the programme of ecological and landscape management that they currently undertake. The long term management of the site is intrinsically linked to ongoing economic activity on the site that can generate income to pay for this maintenance.
- 4.42 In the absence of maintenance, there is the potential for increased wind damage to woodland and for some marginal habitats to decrease or disappear. The management of the site currently increases the biological value of the site for bird and other species and this would be reversed in the absence of the proposals.

**Deterioration of Historic Features**

- 4.43 The development proposals include the restoration of the Listed Buildings at Penrhos which are currently underused and in various states of deterioration. Without works to restore these buildings the current trend of decline would continue with the potential for features of heritage value to be lost.

**Loss of Socioeconomic Benefits**

- 4.44 Without the Penrhos project, and at a time when many other UK destinations are investing heavily in their tourism offer, Anglesey will have failed to capture additional tourism numbers, broaden its visitor profile and extend the visitor season– all of which are key local priorities. Tourism is one of the few potential growth sectors for Anglesey and opportunities need to be taken.
- 4.45 The winter and autumn months currently show a clear decline in visitor numbers compared with the spring and particularly summer months. Analysis shows a very limited pipeline of other likely tourism and leisure investments and no realistic chance of shifting Anglesey's visitor profile. Without the proposed development visitor numbers will be locked at broadly current levels.
- 4.46 In addition to the significant missed opportunity to redefine Anglesey's tourism offer, there could be additional harm to the local tourism market if the proposed development were not to proceed. The Cae Glas element of the Penrhos project is emerging as the front-runner candidate to house, on a temporary basis, construction workers for the proposed Wylfa B nuclear new build. Without it, or a suitable replacement scheme, then the Anglesey tourism market will be severely impacted as construction workers absorb a substantial share of the leisure beds and B&Bs. This could risk displacing existing visitors and could delay any wider investment plans of operators.
- 4.47 Anglesey's economic structure is relatively narrow, and apart from tourism the only other substantial likely growth sector is that of energy. Substantial new jobs are predicted in the energy sector as a result of the proposed Wylfa B nuclear new

build, off-shore wind and a number of other opportunities (collectively grouped under the Energy Island initiative).

- 4.48 Whilst valuable, these job opportunities should not be viewed as capable of solving all of Anglesey's economic problems:
- They are uncertain – with numerous investment and planning hurdles still to be overcome and the precise timing of the jobs benefits is still not known.
  - High levels of jobs "leakage" – as a result of the specialist skills, resources and components required within the sector. Many of the jobs will rely on "imported" labour.
  - The benefits are mainly in the construction phases - with the longer term operational benefits more modest.
  - The job opportunities are not suitable for all – for example, the energy sector employs relatively few women and entry level jobs are rarer than in other sectors.
- 4.49 The energy sector alone is not capable of reversing the fundamental economic challenges which face Anglesey. Complementary investments, of a similar scale and ambition, are required in other sectors.
- 4.50 Without the proposed development, and the job and housing opportunities which it will support directly and indirectly, the general trend for working-age population decline on Anglesey is likely to continue.
- 4.51 The average annual fall in working age population from 1992-2010 was -0.32%. In recent years this average annual decrease in working age population has grown to 0.37% (2001-2010), and to 0.66% (2005-2010). Cumulatively, this data points to a sustained erosion in the working age population across Anglesey with significant implications for the types of community that can be sustained on Anglesey.
- 4.52 There are very few other places in the UK where working age population is being lost at such an alarming rate, and quite rightly various policies and strategies have as a central objective stemming this flow. Quite simply Anglesey cannot afford to lose jobs and working age residents at the rate of the last decade. Further erosions will place additional burdens on public finances, at a time when the national economy can least afford it, and call into question the longer term sustainability of the Island's communities.
- 4.53 The presence of appropriate and accessible job opportunities will be the primary factor in persuading working age residents to stay in Anglesey, as will the presence of appropriate housing options. The Penrhos scheme is one of a very small number of opportunities to help reverse the trends of out-migration, and without it further generations of workers will leave the Island in search of alternative employment. The type of employment that the Penrhos project will be providing (i.e. housekeeping, grounds maintenance, general management, leisure management, catering, bar etc.) is very well aligned to the skill-sets available in the locality.
- 4.54 If the scheme did not proceed, this would also have a major negative effect on investor confidence and send out all the wrong signals about Anglesey's desire to encourage entrepreneurship, investment and growth. This could have a further dampening effect on the sentiment of those who might potentially be attracted as investors in to the island.

- 4.55 As described in the technical sections of this ES (Chapter 8 to 20), the potential environmental impacts of the proposals are primarily of negligible or minor adverse significance once mitigation measures have been taken into account. Therefore, the development itself is not considered likely to generate adverse impacts that would be of such a level of significance that they would outweigh the anticipated environmental, social and economic benefits. Accordingly, in the absence of the proposals, some minor adverse environmental effects would be avoided but at the expense of significant benefits to the residents of Holyhead.

### Alternative Designs

- 4.56 Through a continuous process of design review, environmental assessment and consultation with key stakeholder and consultees, the design team has modified the proposals over time to provide a development that offers benefits to the local population and minimises adverse environmental effects. As part of this process consultation has taken place with the following groups:

- IOACC
- CCW
- Cadw
- Environment Agency
- Welsh Water
- RSPB
- Holyhead Town Council
- Trearddur Bay Community Council

- 4.57 The following sections set out the process of design development for each of the three component sites.

#### **Penrhos**

- 4.58 Figures 4.1 to 4.3 show three versions of the evolving masterplan for the Penrhos site. The initial concept for the site is shown on Figure 4.1. Here, development is located very close to the Coastal Path and the majority of woodland is given over to lodge development. In these early plans, the cricket pitch was to be retained and parking was envisaged in the areas to the west of this pitch.
- 4.59 As is evident from Figures 4.2 and 4.3, the design evolved such that development was drawn back from the Coastal Path and out of the woodland. This was as a result of the information gathered through consultation with IOACC, CCW, and the public, who were keen to retain the southern areas for public access and maintain views of the headland. Furthermore, in order to retain the most valuable trees where possible, the density of lodges in parts of the woodland, such as to the east of the estate buildings, was reduced. However, in order to deliver the necessary number of lodges whilst maintaining public access to woodlands, the cricket pitch was relocated to the Cae Glas site and the central hub facility moved to this area.
- 4.60 The findings of the noise assessment identified that lodges should not be located in the southern area of Penrhos due to the noise from the Alpoco plant. Accordingly, it was necessary to relocate the lodges in woodland areas further north.
- 4.61 The findings of the landscape and visual assessment helped to influence the layout of the headland, with horseshoe shaped arrangements being proposed which maximised the green views into the site from the Coastal Path. This layout

was also designed to address points raised by CCW during the consultation process.

### ***Cae Glas***

- 4.62 Figures 4.4 and 4.5 illustrate alternative layouts for the Cae Glas site. The initial designs for Cae Glas included a large central building that would function as a dormitory block for nuclear workers accommodation before being reconfigured for an amenity block for the leisure village. This building was reduced in scale during the design process as a result of the findings of the landscape and visual assessment and in response to comments from consultees.
- 4.63 As stated above, the cricket and football pitches from Penrhos were relocated in order to provide the appropriate balance of public and private space on the Penrhos site.
- 4.64 Early proposals also included low impact lodges within the southern portion of the nature reserve. These lodges were removed from the proposals due to the perceived impacts upon species including birds in the Inland Sea and red squirrel.
- 4.65 The noise assessment identified the need for acoustic screening to the A55. Therefore, during the design process, a landscaped bund was incorporated along the entire northern boundary.

### ***Kingsland***

- 4.66 Alternative designs for Kingsland are shown on Figures 4.6 and 4.7. The proposals for Kingsland initially involved a significantly higher number of dwellings, with properties proposed on the eastern side of Kingsland Road and to the west of the public footpath. Properties were removed from these areas due to issues identified in the drainage study and landscape and visual assessment respectively.
- 4.67 Houses were also initially proposed in close proximity to the southern boundary. However, in order to provide sufficient clearance from the golf course and adequate screening of the development from sensitive viewpoints, a substantial band of woodland planting was incorporated in this area.
- 4.68 The density of the proposed development at Kingsland has decreased throughout the design process in response to CCW comments and the need to incorporate sufficient green infrastructure to enable the development to blend into the sensitive landscape.

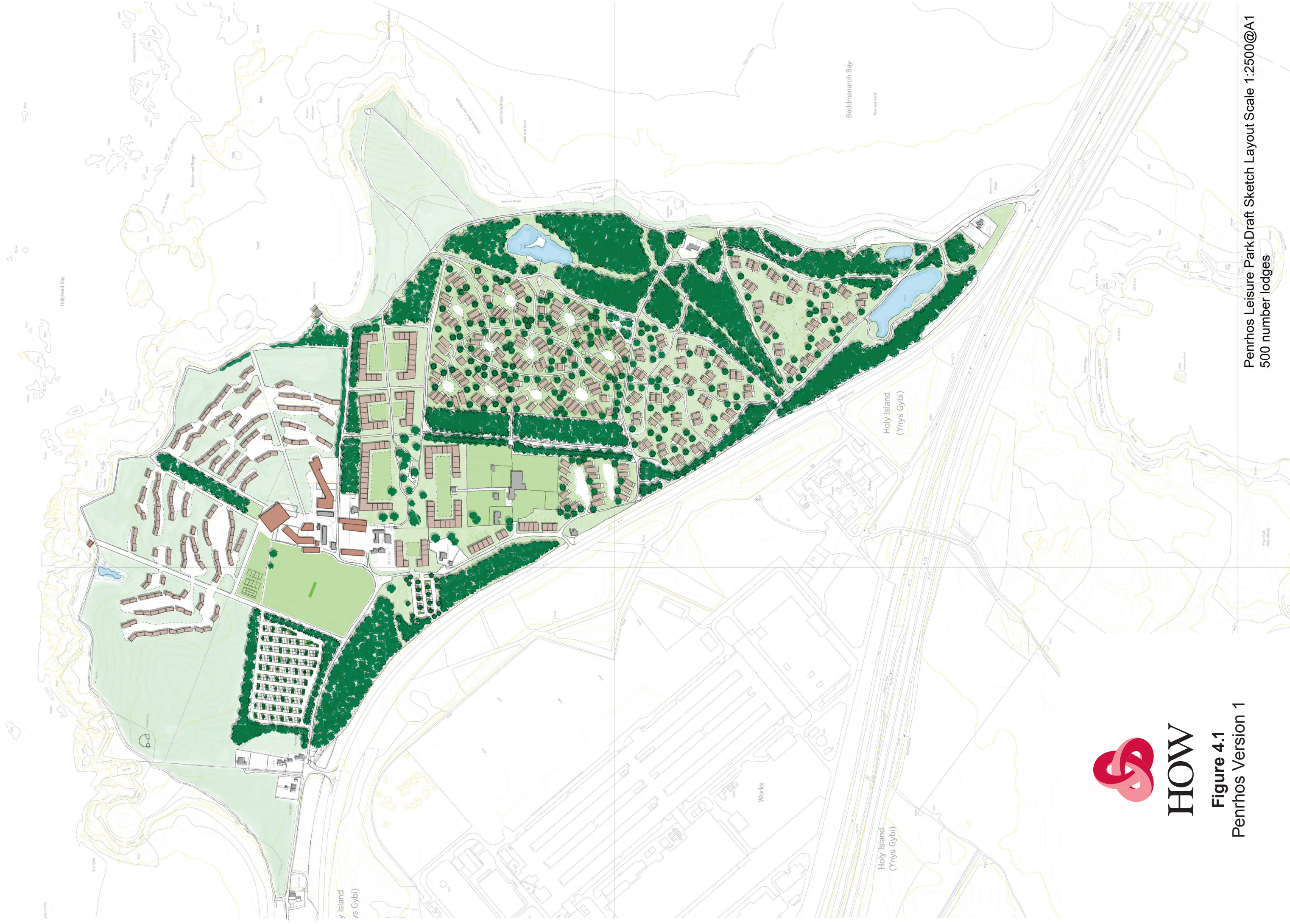
### **The Preferred Option**

- 4.69 The approach described above has led to the design which is presented in this ES and for which planning permission is sought. A full description of the preferred option is presented in Chapter 5: The Proposed Development.

## **Conclusions**

- 4.70 The consideration of alternatives has included the evaluation of a no development option, alternative sites and design choices. The design of the scheme has evolved through consultation with IOACC, key stakeholders such as CCW and the public and the findings of the series of studies that make up the EIA. A detailed description of the development proposals that have is presented in Chapter 5: The Proposed Development.





HOW

**Figure 4.1**  
Penrhos Version 1

Penrhos Leisure Park Draft Sketch Layout Scale 1:2500@A1  
500 number lodges





HOW

**Figure 4.2**  
Penrhos Version 2





HOW

Figure 4.3  
Penrhos Version 3





HOW

Figure 4.4  
Cae Glas Version 1





HOW

**Figure 4.5**  
Cae Glas Version 2









HOW

**Figure 4.7**  
Kingsland Version 2