

**Statws/Status:**

**Cyhoeddus / Public**

DESIGN  
COMMISSION  
FOR WALES  
COMISIWN  
DYLUNIO  
CYMRU

**Adroddiad Adolygu Dylunio:  
Design Review Report:**

**12 August 2005**

**Dyddiad Cyfarfod / Cyflwyno'r Deunydd:  
Meeting Date / Material Submitted:**

**3 August 2005**

**Lleoliad/Location:**

**Dan yr Ogorf Show Caves  
Glyntawe,  
Upper Swansea valley**

**Disgrifiad o'r Cynllun  
leisure/educational  
Scheme Description:**

**Geo-park -**

**Cleient/Asiant:  
Client/Agent:**

**The National Showcaves  
Centre for Wales  
[Ashford Price]**

**Pensaer/Architect:**

**Aedes Architects  
[Debbie Stephens]**

**Awdurdod Cynllunio:  
Park  
Planning Authority:**

**Brecon Beacons National  
[Eric Bowles]**

**Statws Cynllunio:  
Planning Status:**

**Outline permission applied for**

**Y Panel Adolygu Dylunio/Design Review Panel:**

**John Punter (cadeirydd/chair)  
Cindy Harris (swyddog/officer)  
Howard Wainwright**

**Ed Colgan  
Lyn Owen**

**Lead Panellist:**

**Ed Colgan**

**Sylwedyddion/Observers:**

**Gerard Ryan [DCFW Commissioner]  
Gillian Wulff [DCFW]**

### **Cyflwyniad/Presentation**

The concept of 'geo-park' originated with Unesco and is based on people using the geology of a particular area to stimulate the local economy. The local authority has applied for geo-park status for this area and the promoters would like to create an environmental centre as a focal point, to attract visitors and to provide educational and exhibition space to interpret the local environment and geology. An educational trust has been set up to attract funding and, because of tight budgets, it is vital to get the design of the building right from the outset.

The chosen site is at the end of the short drive that is the entrance to the attraction. The site is sloping and wooded and faces south east. It is hoped that the environmental centre will be a landmark, environmentally conscious building which would attract architectural students in the same way that the existing showcaves attract engineering students. The intention is to incorporate as many environmental features as possible and the brief calls for on-site renewable energy generation, as well as an adaptable, flexible building with low maintenance and running costs. Sketch drawings show a two storey, earth sheltered, green roofed building, designed to maximise energy efficiency and minimise visual impact, and organically curved to follow the contour of the hillside. This would entail excavating the hillside to a depth of 15 metres. The ground floor would be open to the public and include a 25 m<sup>2</sup> exhibition space. The first floor use would be primarily educational and it is possible [though not desirable] that its construction may be delayed to a later phase if funding is difficult to obtain.

The external finish would be local stone walling, with narrow vertical slot glazing for the ground floor. The first floor elevation, set back behind a green roof, would have full height glazed panels alternating with photovoltaic panels in a timber frame. The building would be highly insulated and energy and water use would be minimised.

An outline planning application has been submitted and the local authority is supportive of the concept of a geo-park in this location. However, they would like a carefully reasoned case to be made for developing this greenfield site. They recognise that it is potentially an exciting project but that its construction is dependent on raising the necessary funds. Much of the details are likely to be reserved.

### **Ymateb y Panel/Panel's Response**

Like the local authority, the Panel supported the geo-park concept, especially on a larger site which is already developed for leisure uses. However, the degree to which this could be a stand-alone attraction, next to an already popular visitor destination, was doubted. Ideally this centre would have dedicated parking provided, particularly for disabled visitors, at a lower level than the existing attraction, although the existing provision of parking and access is adequate to serve the proposed development.

The Panel applauded the environmental aspirations presented, but was doubtful that they could all be achieved within current costs. The developer stated that

cost estimates had been increased to a total of £2.3m. The problem of lighting the internal space without using any artificial light was discussed, along with the implications for future flexibility of reducing light levels on the ground floor by having very small window openings.

The Panel supported the design approach using an organic form, but thought that the back of the building should be brought clear of the hillside to minimise any future damp or maintenance problems. It was suggested that a more economic, but still sympathetic and sustainable, construction method might be a series of post-and-beam timber frames stepping down the hillside, with green roofs. Currently the ground floor elevation appears severe and unwelcoming. The internal layout of the first floor needs revision to give habitable rooms the benefit of full height glazing.

The Panel recognised the need for this building to be exemplary in terms of its environmental footprint and performance. We thought that the elevational treatment should be allowed to emerge from the environmental agenda.

From a planning perspective, a better strategy might be to submit a full application, rather than relying on reserved matters to deal with details. However, the developer explained that he needed to establish the principle of development to win confidence for fundraising. The Panel considered that the present scheme should be viewed as just one of the possible options and purely illustrative.

### **Crynodeb/Summary**

The Panel supports the principle of this development on this site, but would need to see detailed project development and accurate costings before supporting a particular design solution. However, we are satisfied that once the principle is established, then an acceptable design for this site can be produced. In particular:

- A design solution which minimises excavation and keeps the building clear of the hillside, possibly using stepped timber frames, would be more economical and equally environmentally positive.
- The ground floor elevation should be more transparent and welcoming
- The Panel strongly supports the environmental aspirations and particularly the use of green roofs in this context.
- Research should be conducted to identify successful precedents which could inform any new design.

### **Diwedd/End**

**NB A Welsh language copy of this report is available upon request.**