

# Addroddiad Adolygu Dylunio Design Review Report

## Review status

**Public**

Meeting date	8th March 2012
Issue date	20th March 2012
Scheme location	St Fagans National History Museum
Scheme description	Culture/Civic / leisure
Planning status	Pre-application

## Declaration of interests

1. Ashley Bateson declared that Hoare Lea is working with Feilden Clegg Bradley on a separate project. He is not directly involved.
2. Carole-Anne Davies, Chief Executive of DCfW, is a Trustee of Amgueddfa Cymru and attended as an observer on 19 January 2012

## 1.0. Introduction

1.1 This document reflects an overview of the long term, open and strategic engagement between the Commission and Amgueddfa Cymru on Creu Hanes: Making History, the nationally significant development of St Fagans National History Museum.

1.2 Creu Hanes: Making History is a complex and ambitious project on a historically significant site. Amgueddfa Cymru and their design and delivery teams continue to work through the iterative design process working closely with the statutory consultees in the planning application process, in order to achieve their aspirations. The approach to engagement with DCfW by Amgueddfa Cymru and their design teams has been exemplary and demonstrates their commitment to a very high quality project.

1.3 The Creu Hanes: Making History project at St Fagans National History Museum represents an exciting opportunity to update existing facilities at the museum and

expand on its existing offer throughout all aspects of its activities and visitor experiences. An upgrade of the existing Grade II listed main building is envisaged, including roofing over the existing courtyard and the provision of a new extension. A new building of approximately 1000 m<sup>2</sup> will provide a 'hub' for the open air archaeology sites and encourage direct engagement with the museum's collections and artefacts. The landscape strategy is based on improving circulation and orientation around the site to enable visitors to appreciate and understand the context of the whole site, and to support the creation of an open-air archaeology zone in the woodland area. The Museum's overarching policies on sustainable development are to be embedded in the project as a guiding principle and central organising factor.

1.4 The Design Review Panel of the Design Commission for Wales provided client support to Amgueddfa Cymru throughout the early stages of scheme development for Creu Hanes Making History at St Fagans, National History Museum. The process has been a mutually beneficial one, fully embraced by the Museum directorate and project teams.

1.5 Five formal Design Review meetings have been interspersed with two additional meetings, focused on specific areas of design development of the two architectural projects.

1.6 The structure of the reviews allowed a focus on four key areas of linked design issues. The Review process consistently scrutinises design proposals from a strategic level down to the detail of how the proposals will be realised. This approach ensures that the vision and brief for the project informs the detailed resolution of design, providing a sustainable design solution for each element of the project as a whole.

1.7 This final Design Review report at RIBA Stage D, reflects an overview of the long engagement process and is issued following the review meeting of 8 March 2012 and immediately prior to the submission of the planning applications.

1.8 The report summarises considerations that have shaped discussion around the four key areas. It will be made available via public platforms to coincide with the submission of planning applications and as the teams continue to work through detailed design and through statutory consultation processes.

1.9 Timeline: Inception, Review & Interim Meeting Dates:

Client meetings: Inception 31 March and 3 May 2011

Design Review: 6 July 2011

Design Review: 14 September 2011

Design Review: 30 November 2011

Interim meeting: 7 December 2011

Interim meeting: 2 February 2012

Design Review : 19 January 2012

Design Review: 8 March 2012

## **2.0 Landscape**

2.1 In July 2011 the importance of the landscape strategy was emphasised along with the design development of the site, as a strong framework underpinning all other aspects of the project. The status of the 1908 Pettigrew plan was subsequently clarified as the main driver for the strategy, particularly the layout of the woodland area and the siting of buildings within it. Emphasis was placed on the need for landscape and curatorial strategies to be well integrated to deliver a holistic interpretation of the strategic vision for the site. Greater clarity could be achieved, enhancing visitor experience and immediate understanding, on arrival, of the importance of the landscape setting.

2.2 The impact of design proposals on the Grade I registered landscape has been indicated by the inclusion of an interpretation panel in the space adjacent to the new building. There remain further opportunities for interpretation to be fully developed and integrated with curatorial strategy. Improvements to movement and wayfinding have been clarified by the production of photomontage views along the spine route and 3D visualisations. A co-ordinated approach between the landscape design and wayfinding strategy is required to meet the stated objective of dispersing visitors successfully throughout the site.

2.3. The rationale behind the decision made in January 2012 to relocate the Celtic Village and Llys Rhosyr following discussions with Cadw and Cardiff Council was accepted by the Panel, although it was felt that this was at odds with the original design intent of Pettigrew. If this solution is to be pursued, it should be recorded in the interpretation strategy.

2.4 The nature and quality of the visitor arrival experience, from the main entrance and immediately adjacent to the main building, has been a recurring item, in particular the scale of parking proposed in front of the existing building, and the tree-lined route leading to the main entrance. We are concerned that insufficient space has been allowed for the trees in the area to grow and flourish over time.

2.5 The experience of arriving by bus and cycle requires careful consideration to ensure all associated facilities are of the highest quality and that they support the delivery of the sustainable transport objectives of the Museum. It is considered that an approach which re-uses the existing bus shelter, as opposed to including a new high quality facility within the scheme, is a limited response.

2.6 Detailed landscape design information is required for the exit route from the main building, reaching the point at which a choice is required by the visitor to turn left or right to enter the museum grounds. Greater clarity is needed in the landscape design approach, on how visitors will be encouraged to disperse and explore the route to the castle.

2.7 Proposals for the play area are welcomed and we were assured that they are affordable within the budget, and that the museum is aware of the potential

maintenance commitments. The layout has been further revised to respect root protection zones.

2.8 Adjacent to the new building, a revised seating layout and landscape treatment for the 'amphitheatre' was considered to be harsh and urban in comparison with the earlier design iteration. The client team agreed to revisit their briefing requirements and review the approach with the designers.

2.9 Concern remains over retaining the strength of the vision for the design of the landscape as a 2012 contribution to the design development of the Pettigrew plan. The identified budget capacity for delivery and maintenance of the proposed landscape works must be retained. We understand that there has been some (unspecified) increase in the landscape budget which currently stands at circa £1 million.

### **3.0. Sustainability**

3.1. Throughout, the Panel highlighted the importance of a coordinated approach to site-wide sustainability such as water, drainage and waste. In September 2011 we recorded our concern that the development of an overall, site-wide sustainability strategy was insufficiently developed, and in November 2011 we could see no tangible progress. In January 2012 we received more information on the environmental performance of the two buildings in the form of BREEAM pre-assessment reports. However, we emphasized our view that opportunities were being missed through the absence of a site-wide sustainability strategy, able to deliver important synergies for cost savings, operational efficiencies and carbon reductions, now and in the future.

3.2 At the same meeting we were pleased to see that BREEAM Excellent remained an achievable target for both buildings, and anticipated the more detailed evaluations of CHP, biomass and air source heat pumps (ASHPs) which would be necessary for a planning application.

3.3 Subsequently in March 2012 the Museum provided its site-wide sustainability strategy for the project, exhibiting a holistic approach including sustainable transport which committed to a 5% modal shift by 2017, the use of indigenous materials and a high proportion of recycled content, financial stability and enhanced biodiversity. The high level objectives were welcomed, and the implementation and monitoring of these, during and after project delivery will be critical.

3.4. As an innovative project, we were surprised at the reliance on conventional heat sources and absence of attempts to exploit locally available, renewable timber resources. Indicators of energy efficient construction such as U-values and air leakage rates, typify *good practice* rather than *best practice*, and we look forward to seeing these improved, so as to maximise client benefits such as maximising comfort and reducing costs.

### **4.0. Main Building: Grade II Listed Refurbishment**

4.1. Initially we welcomed the developing layout for the main building, including the introduction of visitors and active uses to the courtyard, and a more logical and interesting route through the building for visitors. We were concerned that the developing design appeared diagrammatic and unresolved in the relationship and junctions between new and existing elements.

4.2. In November 2011 the emergence of the 'cranked' form for the new element of the building was thought to be insufficiently well justified as a design approach, emerging from the design ethos of the existing listed building.

4.3. These issues were addressed at a further meeting in December 2011, when the need for a clear articulation of the design approach and philosophy driving the 'cranked' element was emphasised. We thought that opportunities existed to simplify the treatment, to enhance and resolve some challenges with the roof and daylighting, as well as to better position stairs and lifts, and to clearly demarcate spaces and their function. We also understand that the client supports the new cranked form.

4.4. The Panel appreciated the changes that were made in response and we thought that the Conservation Management Plan should be used to better inform and justify the developing design. In January 2012 there was still a need for further work on the articulation of the new element and the ways in which it has been influenced by, and evolved from, the existing listed building.

4.5. The ground floor circulation and flow of visitors up to the first floor appeared problematic at that time. The internal layout should clearly direct visitors to the upper level without any apparent option for exiting directly to the west. In March 2012 the lift and stairs had been relocated to a better position and care needs still to be taken to avoid compromising the relationship between the existing building and new extension. The design team agreed to consider moving both lift and stairs slightly further north.

4.6. The high-level walkway in the courtyard needs to demonstrate a lighter touch similar to a floating plane, set apart from the perimeter of the building, and the graphical representation should convey that impression. The inclusion of a simple portal frame to support the new roof that encloses the original courtyard which DCfW had previously suggested, was welcomed, and this should sit within the line of the original brickwork, so as to appear as an obvious insertion.

4.7 The provision of a south facing outdoor seating area for the cafe was welcomed, especially in view of our earlier reservations about the whether the outdoor seating area facing north west would be an attractive or comfortable place to sit.

4.8 The large brick facades when viewed from the north west would be impressive, and will require the highest quality detailing to be successful. We thought that the proposed planting in front of the north wall was unnecessary and would potentially detract from the simplicity of the elemental design approach.

## **5.0. New Building**

5.1 The original design concept of a 'pavilion in the woods' with a floating roof over a largely transparent substructure was attractive. However, we commented at an early stage that a floating roof form over a transparent shell would be compromised by cellular division and internal partitions, as well as by a multiplicity of uses and demands for flexibility.

5.2 The original design concept was progressively modified to respond to the emerging brief, and required a fundamental re-evaluation of its functional capacity. A change in the lighting/lux level requirement between Stages C and D led to a revised design with a more opaque envelope and a closed panel system, rather than curtain walling, as discussed and explored at an interim meeting held with the design team in February 2012.

5.3 The relationship of the building with its immediate landscape setting was identified as an issue of importance early on, and this became increasingly challenging as the client brief for the wet activity area and outdoor classroom was developed, in turn impacting upon the legibility of the main entrance. The current March 2012, suggestion of a timber panel on the north side of the outdoor classroom to direct visitors towards the entrance is indicative of this challenge and insufficient use of the building form and layout as a means of providing inbuilt legibility.

5.4. We accept that there are significant challenges within the design paradigm, given the poor orientation, on a triangular site. Thorough analysis of how the existing woodland and sun path will impact on the amenity value of the north east facing outdoor seating area would be useful to ensure detailed design delivers the best space possible.

5.5 The roof 'prow' over the outdoor classroom requires further resolution, particularly regarding the design and location of any supports. Integration with the Pettigrew plan and proposed amphitheatre should be considered a priority.

5.6 Our early doubts about the usability of the triangular main exhibition area remain. However we were assured that these are intended as activity spaces which take advantage of views out into the landscape.

5.7 Innovative construction methods using local renewable materials as a practical demonstration of low impact sustainable development were urged. Not all these opportunities have been pursued and a conventional steel frame solution is being pursued with the semi-gridshell roof. We are however aware of budgetary constraints.

## **6.0. Planning and Delivery**

6.1 Throughout the consultation process, attention has been given to budgetary constraints and the capacity to meet functional requirements and achieve good quality and sustainability.

6.2 Planning applications will be submitted on 23 March 2012, and Martin Morris as Cardiff Council case officer, has agreed the format of the submission. We understand that the first package will cover planning permission and listed building consent, and includes the main building (including selective demolition), landscape and parking enhancement. The second package includes the new building coupled with the two open air archaeology projects of the Celtic Village and Llys Rhosyr. Each package will include its own Design & Access Statement. A third application is likely to cover the requirement for temporary overflow parking to the north west of the main access road.

6.3 We understand that Section 106 discussions have focussed on transportation and access improvements.

6.4 The Heritage Lottery Fund bid will be submitted on 19 March 2012, with a decision expected in July 2012.

6.5 A Procurement Strategy, prepared by Focus, has been agreed with the client. We understand the construction work will be delivered by a single contractor under a traditional contract. This will maximise opportunities for efficiency and cost savings. The landscape will be integrated with the building works apart from some elements which will be done in-house. All design teams will be retained through to RIBA Stage F/G.

6.6 A best value selection process for choosing tendering contractors will consider quality and cost equally weighted. The Commission suggests that better long term value would be gained by giving quality a greater weighting than cost, and the client agreed to revisit this. An emphasis on good quality now, will mitigate costly maintenance or repair later.

6.7 A start on site date of September 2013 is envisaged with completion of the majority of works by 2016, excluding specialist exhibition works and fit out.

## **7.0 Statutory Consultations**

7.1 We understand that the main concern expressed by the local authority at the beginning of their consultations, related to whether sufficient weight had been given to the architectural and historic aspects of the existing building, in the design process. This included retaining a sense of outdoor space in the courtyard, and a justification of the extent of the proposed demolition.

7.2 We understand that Cadw was concerned at the absence of a Conservation Management Plan until a relatively late stage in the design process, which in their view should have been used as a major driver during early design development.

7.3 More recently meetings have been held with both bodies, and these have generated positive feedback which has informed the design consolidation.

7.4 In March 2012 the local authority representatives stated that they are now broadly content with proposals for the courtyard which retains the character of an external space. The detailed design of the glazed wall to the west should take its cue from the original, rather than just tracing its memory. More detail is required on the construction of the walkway to confirm that the lightness shown on the drawings is achievable. The exact location of the lift should be explored further.

7.5 The local authority officers would benefit from greater articulation and explanation of the cranked form, while accepting that this is now fixed, as it appears to complicate concourse layout.

7.6 More detail is required on the changes to the seating layout in the external amphitheater and its relationship with the new building. Current proposals appear somewhat harsh and urban.

7.7 The local authority agreed with DCfW's suggestion to lighten the 'prow' roof form of the new building and to better integrate the two columns. They emphasise the need for the reflective/mirrored panels to avoid unwanted glare. To work well this element should dissolve into the background.

End

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***Mae copi iath Gymraeg o'r adroddiad hwn ar gael ar ofyn.  
A Welsh language copy of this report is available upon request.***

#### **Atodiad 1/appendix 1 Mynychwyr/attendees**

Asiant/Client/Datblygwr  
Agent/Client/Developer

Amgweggfa Cymru (Elfyn Hughes,  
John Williams-Davies)

Pensaer/Dylunydd Trefol  
Architectural/Urban Designer

Feilden Clegg Bradley Studios  
(Jonathan Bassindale)



	Purcell Miller Tritton (Jamie Coath, Luke Brennan) TEP (Graeme Atherton) Hayley Sharpe (Alisdair Hinshelwood)
Ymgynghorwyr/Consultants	Arup (Elaine Veaudour) Nathaniel Litchfield Partnership (Andy Cocket)
Trydydd Parti/Third Party	n/a
Awdurdod Cynllunio/Planning Authority	Cardiff Council (Gareth Harcombe, Sandy Williams)
Y Panel Adolygu Dylunio/ Design Review Panel Cadeirydd/Chair Swydog/Officer Prif Banelydd/Lead Panellists	Wendy Richards Cindy Harris Andrew Linfoot Ashley Bateson Kieren Morgan Toby Adam
Apologies	Judith Alfrey (Cadw) Richard Aston (Focus)

**The Design Commission for Wales Design Review Panel welcomes further consultation and we will be happy to provide further feedback on this report and/or where appropriate, to receive further presentations. Please keep us informed of the progress of your project. Thank you for consulting the Commission.**