

# Design Review Report

Museum of Military Medicine,  
Cardiff

**DCFW Ref: N145**

Meeting of 13<sup>th</sup> July 2017



**Review Status**

Meeting date  
Issue date  
Scheme location  
Scheme description  
Scheme reference number  
Planning status

**PUBLIC**

13<sup>th</sup> July 2017  
21<sup>st</sup> July 2017  
Cardiff  
Museum  
N145  
Pre-application

## Declarations of Interest

---

Panel members, observers and other relevant parties are required to declare ***in advance*** any interests they may have in relation to the Design Review Agenda items. Any such declarations are recorded here and in DCFW's central records.

None declared.

## Consultations to Date

---

A statutory public consultation process was recently completed.

## The Proposals

---

The site is currently public realm (vacant), and is located adjacent to the Travelodge in Cardiff Bay and the Red Dragon Centre (an indoor entertainment venue), completed in 1997. The site is close to the cultural and entertainment centre of Cardiff Bay, and well located for public transport. Little remains of the original dockland context, other than the listed Cardiff Bay railway station opposite, and the nearby "D-Shed", an original docks store which has been converted into an art gallery, although it is not in its original location.

The scheme is for a Museum of Military Medicine, which is an established institution currently located on barracks in Aldershot. Located 'behind the wire', it is currently limited in opportunities for visiting and expansion. A site search has produced a favourable response from Cardiff Council and Welsh Government, and the site on Lloyd George Avenue is being made available.

The museum has an established collection, including display items as well as artefacts and documents that require archive conditions.

## Main Points

---

This project offers an exciting opportunity to showcase the Museum of Military Medicine's significant collection, making it more accessible to interested members of the public and researchers alike. It is also a chance to enhance the tourism offer of Cardiff Bay and make positive changes to the built environment on and around the site.

For these reasons, it is important that the design process and proposal make the most of the opportunities to maximise value and benefits to the museum organisation, the city and the public. The proposal presented at the review included some interesting and valid architectural concepts, but was not yet resolved in terms of environmental design and performance, public realm design, structure and detail.

The ramp, glazed foyer and screening 'veil' are those design elements that offer the best opportunities for improving the scheme to maximise value and long-term sustainability (environmental, economic, social and cultural).

The following points summarise key issues from the review and should be considered to inform any further work ahead of a planning application being submitted:

### **Scale, viability and operational costs**

The ambitions of the client team to create an accessible home for the collection and a new visitor attraction in Cardiff Bay are commendable. The support and fundraising programme described by the team are positive and should be clearly communicated alongside explanation of the design process. If the viability and justification for the scheme from a financial and design point of view can be set out clearly, it will provide greater confidence to the local planning authority, Welsh Government and other stakeholders.

Although the ambition for the project is positive, the client must be sure that a project of this scale is both deliverable and sustainable to run in the long term. Operational costs will be linked to staffing levels, energy demands (heating, cooling, ventilation, lighting), visitor experience, maintenance requirements and revenue-making potential, all of which are impacted upon by the design of the building and so should inform the design process. The business plan - capital and revenue requirements - and the design brief should be closely linked.

By clearly setting out revenue-making and operational requirements the client and others would be able to assess more easily how well the building design responds. Without this level of explanation, it is difficult to assess how viable the project is and to what extent the risk of quality being compromised through cost savings is increased.

### **Collection, curation and visitor experience**

The curation and programming of the collection within the museum will be particularly important for attracting and engaging visitors and providing a good overall experience. There are likely to be different types of visitors to the museum – those undertaking focussed research as well as interested tourists and local visitors. Some exhibitions might be temporary, whilst others remain in place longer term. Although a long-life-loose-fit approach is being taken to the display and curation and is valid, it would be

useful to see examples showing how the building could accommodate different types of exhibition, experience and events. There may be a handful of key exhibits for which it would be sensible to design in a specific place within (or outside) the building. The curatorial and service needs of exhibition change-over, archive management, touring and research facilities should be fully considered.

As well as admission fees, museums offer the opportunity for a range of other revenue-making activities such as conferences, lectures, educational programmes, event hire, shop and food and beverage offers. It is important that the building is designed to facilitate these activities and the associated flow of visitors through them. Based on the business plan, functional requirements for these should be set out in the design brief and responded to in the design process.

It may be beneficial to appoint a museum specialist to work with the design team to help coordinate curation, architectural design and revenue potential.

There may be useful national and international precedents which the team could learn from in terms of designing for contemporary curatorial practice and current expectations for museum visitor experience, as well as fully accommodating a collection of this nature.

### **Addressing the urban environment**

The Commission encourages the design team to collaborate with the local authority on the design of the public realm around the building. Including areas where the landscape and urban design falls outside of the 'red line' boundary for the project, it would be positive for the design team to suggest proposals which integrate the museum with its surroundings. Good landscape and urban design of the surrounding public realm which is integrated with the building design will add value and should address the following:

- Positive pedestrian arrival experience
- Outside amenity space
- Arrival and orientation from the train station, bus stops and car parks
- Coach party drop off, including school parties
- Integration with the existing Travelodge Hotel and future expansion plans
- Legibility/identification and desire lines to building entrance
- Servicing and deliveries to the museum
- Security measures
- Views to and from the building
- Contribution of active frontages to streetscape
- Marketing/signage
- Environmental/ecological benefits.

### **Integrated environmental design and structural design**

Given the public prominence of this building, it should be an exemplar of sustainable design. If it is delivered in the 2020s, it should be super-low-carbon. This will require an ambitious and well tested environmental strategy, embedded early, at the heart of the design. The environmental modelling and testing which is currently being undertaken should have a significant impact on the architectural aspects of design. The client and design team should allow sufficient time, resources and flexibility for an

iterative process of testing and revisions of the proposal to take place in order to achieve the optimum solution.

It is crucial that the environmental design strategy is fully resolved before a planning application is made, as it will be difficult, costly and time-consuming to make changes later.

The Commission is concerned that the current proposal suggests high energy demands and running costs attached, particularly in relation to the glazed entrance foyer. As it is currently drawn, it suggests issues with glare and overheating, as well as creating significant maintenance challenges. Inadequate consideration of matters relating to maintaining the extensive glazed elements will also introduce the potential for the key architectural concept to be diluted and weakened and needs particular focus at an early stage.

Integration of structural design in the foyer and ramp areas will be particularly important to achieving good quality. If large items are to be suspended in these spaces, access for cleaning/change alongside the structural load capacity must be considered now, as retrofitted structure would compromise quality. The structure shown in the material presented at the review does not appear substantial enough. The choice of glazing system will also have a significant impact on the qualities of the space and the structural strategy, and it is not yet clear which approach will be taken.

The nature and positioning of the external screening to the glass foyer and ramp will have an impact on views out of and to the building, as well as maintenance, and could play an important role in controlling solar gain and glare. The Commission would like to see careful consideration of these issues in the design of this part of the scheme to provide the best visitor experience, comfort and efficient running of the building.

Overall the architecture does not appear to have been informed by an environmental strategy and creates challenges or barriers to good energy performance and visitor and occupant comfort.

### **Procurement and delivery for quality**

This scheme is likely to set the tone for future development in this part of the city. Therefore, it is important that the delivered project is excellent quality and makes a positive contribution to the site and context.

The success of this project will be particularly reliant upon a commitment to delivery of high quality material selection and architectural detailing. Therefore, it is crucial that the procurement process is approached in a manner that will deliver the quality demanded and proposed by the design team at planning stage. The level of detail in the Employer's Requirements and the nature of the role of the concept architects can help with this if a Design and Build route is taken.

In the interests of the long term success and sustainability of the project, the proposals should be fully tested against the capital, revenue, curatorial and functional requirements of a detailed business plan and design brief, including the revenue implications of environmental performance and energy consumption. A design quality

strategy should be considered at this stage so that essential elements of the concept and detail can be protected should a cost-cutting process be necessary.

**Comisiwn Dylunio Cymru Design Commission for Wales is the trading name of DCFW LIMITED, a Private Limited Company established under the Companies Act 1985 and 2006, Company No: 04391072 incorporated in England and Wales as a wholly owned subsidiary of the Welsh Government. Registered office: 4<sup>th</sup> Floor, Cambrian Buildings, Mount Stuart Square, Cardiff CF10 5FL T: 029 2045 1964 E [connect@dcfw.org](mailto:connect@dcfw.org). The comment recorded in this report, arising from formal Design Review through our Design Review Service, is provided in the public interest for the consideration of local planning authorities as a material consideration, and other users of the Design Review Service. It is not and should not be considered 'advice' and no third party is bound or required to act upon it. The Design Review Service is delivered in line with DCFW's published protocols, code of conduct and complaints procedure, which should be read and considered by users of the service.**

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

## Attendees

---

Agent/Client/Developer:	Jason Semmens & Phil Hubbard, Museum of Military Medicine Paul Williams & Rhian Davies, Welsh Government
Architect & Consultant:	Neil Macomish & Athina Kokla, Scott Brownrigg Robin Williams, Asbri Planning Lee Harrison, Hoare Lea
Local Planning Authority:	Richard Cole, Cardiff Council
Design Review Panel:	
Chair	Jamie Brewster
Lead Panellist	Toby Adam Lynne Sullivan Angela Williams Stephen Smith Amanda Spence, Design Advisor, DCFW Jen Heal, Design Advisor, DCFW
Observing:	Matt Thomas, Vectos John Lloyd, Hoare Lea Krystyna Williams, Swansea CC Rhys Rigby, PINS Chris Jefford, GFA Simon Baston, DS Properties Phil Jones, Tony King Architects