

# Addroddiad Adolygu Dylunio Design Review Report

## Review Status: **Confidential**

Meeting date:	22nd April 2009
Issue Date:	30th April 2009
Scheme Location:	Foryd Harbour, Rhyl
Scheme Description:	Footbridge
Planning Status:	Pre-application

## Part1: Presentation

This proposal is for a pedestrian and cycle bridge over the River Foryd to provide continuity in the N Wales coast cycle route [Sustrans route no 5], and to complement the redevelopment of the area, including the Ocean Plaza mixed use development on the south side of the river and a proposed new marina to the north.

A design brief was developed which specified an iconic, landmark structure with low maintenance requirements. The subsequent design competition was won by Gifford and Dawnus, who propose a lifting/opening bridge with a 50 metre high 'mast' in the centre, made of modern materials [fibre reinforced plastic and stainless steel] and enhanced by a dramatic lighting scheme.

A number of issues remain to be resolved, as the competition entry is developed into a full Design & Access statement. These include the nature of the central pier or drum, the location and level of the new sea wall, and the layout of proposed adjacent developments.

The Local Authority [Denbighshire] have had limited involvement pre-application, but are broadly supportive of the principles of the scheme and the way in which it complements the regeneration programme. It should be noted that the Conwy / Denbighshire boundary runs down the middle of the River Foryd. A planning application is expected to be submitted in June 09 and completion of the project is expected for early 2011.

## **Summary of key points arising from discussion, to be read in conjunction with Part 2 of this report.**

The Panel appreciated the enthusiasm and commitment of the presenting team and we support the principle of a bridge in this location. We acknowledge that it needs to be a

strong landscape feature [although we would prefer to avoid the language of 'iconic'] and we understand the rationale for a bascule type of opening bridge. Our main concerns and recommendations are summarised below:

- We think the bridge appears inelegant and bulky in its opened position and we recommend that the proportion of the lifting sections be improved. The gap in the split deck could be narrowed and the deck lengths increased as far as possible, with the additional advantage of minimising supporting structures in the river.
- The top of the central pier or drum should be as low as possible, and a more elegant solution found to minimise the awkward disjunction between the bulk of the drum and the slenderness of the mast.
- The uncertainty surrounding the proposed adjacent developments will lead to temporary solutions which may conflict with an optimal long term resolution and integration of different elements to create a strong sense of place. A high quality scheme in its temporary state is still required.
- The environmental implications of material specification and procurement routes should be acknowledged, justified and compensated for by additional environmental benefits, such as renewable energy generation. Any tropical hardwood used should be FSC certified.

## **Part 2: Discussion and Panel Response in Full**

The justification for a new bridge in this location was explored. The existing 'blue bridge' close by is a listed structure and could not easily be adapted. In addition there is a need for a direct link between the proposed new marina and Ocean Plaza where new residential units will be developed.

The 'theatre' of the opening operation is seen as a positive attraction by the client, and this led to the preference for a 'bascule' bridge rather than a swing bridge. We were told that the latter option would block the navigable channel and impact on existing moorings, and the energy savings would be marginal. In this context we noted that the CGI images provided were inaccurate in that they assumed that the surrounding development was in place and the channel had been dredged.

The Panel considered that in its normal closed position the bridge would appear slender and elegant, at least above the central pier, but that in its open position it would appear bulky. The split deck is required to accommodate the shrouds and stays necessary to support the central mast, but has the effect of increasing the deck width and the amount of balustrading. We wondered whether the gap could be made narrower and at least one section of central balustrading omitted, which would improve the proportion and appearance of each section in its lifted position. The detailed design of the balustrading, and its relationship to that 'on-shore' is important in this respect.

The proportions would also be improved if the length of the deck was increased, so appearing taller when the bridge was opened. An increased deck length would have the added advantage of reducing the number of interventions in the river, and could be supported directly on the new sea wall or on a cantilever.

The appearance of the central drum caused us major concern, especially at low tide when its perceived height would be about 8 metres. We have no objection to the proposed sheet piling, but we would like to see the height reduced as much as possible and the bulk of the pier adjusted, so that the juxtaposition of the slender mast with the bulky support structure appears less awkward.

The lack of certainty relating to the proposed marina and Ocean Plaza developments poses difficult questions for this structure and how it meets and relates to the land on each side. It is likely that interim arrangements will be needed to enable the cycle route to continue across the dunes and link up with the existing path to the north. Temporary structures may also be necessary to facilitate the bridge operation and these should be planned carefully to minimise impact on the public realm. Good access and legibility should be achieved without signage.

The environmental credentials of composite plastics need to be assessed in relation to alternative materials, especially given the sustainability requirements of the brief. The client stated that low maintenance was an over-riding concern and in this respect plastic wins over steel. It is also easily repairable in situ. However, the specialist manufacturer of these components is located in the Isle of Wight and the transportation involved will inevitably increase the overall environmental impact. As a positive compensation for this strategy, the project could be self-sufficient in energy requirements by installing dedicated PV panels or wind turbines. The client agreed to explore this and referred to the energy strategy for Rhyl being developed by WAG and the Hyder masterplan for the area, which includes an EIA.

The hardwood rails proposed for the stainless steel balustrading should not be tropical hardwood unless FSC certified. It was confirmed that the surface finish of the bridge deck would be non-slip, and that plant for the lighting scheme would be located in the central drum.

**The Design Commission for Wales Design Review Panel and staff welcome further consultation and will be happy to provide further feedback on this report and/or where appropriate, to receive further presentations. Thank you for consulting the Commission and please keep in touch with us about the progress of your project.**

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

## **Appendix 1: Attendees**

Asiant/Client/Datblygwr:  
Agent/Client/Developer

Denbighshire County Council  
[Robert Humphreys, Paul Smith]

Pensaer/Architect:

Gifford [Ian Hunt, Andy Marginson]  
Dawnus [Martin Peet]

Awdurdod Cynllunio/  
Planning Authority

Denbighshire CC [Ian Weaver] and  
Conwy CBC

Y Panel Adlygu Dylunio:

Design review panel:

Alan Francis [Chair]

Cindy Harris [Officer]

Ed Colgan

Elfed Roberts

David Harvey

Phil Roberts

Lead Panellist:

Ed Colgan

Sylwedyddion/Observers:

David Hughes [WAG, DE&T]