

NB. This report was confidential when it was seen at pre-application stage and relates only to the version seen at that stage. It has been made public since the planning application was submitted

# Addroddiad Adolygu Dylunio Design Review Report

## Review Status: **Public**

Meeting date:	19th January 2011
Issue Date:	1st February 2011
Scheme Location:	Pont Briwet, Gwynedd
Scheme Description:	Transport
Planning Status:	Pre-application

## Part1: Presentation

This proposal is for a new road and rail bridge to replace the existing listed bridge, which has exceeded its design life and is in need of major maintenance. It is unable to take HGVs and emergency vehicles, and there is no separate provision for pedestrians and cyclists on the narrow carriageway. The high costs of replacing most of the structural timber members, if the existing bridge were to be retained, makes a replacement bridge a financially attractive option.

A recent public consultation exercise showed overwhelming support for this proposal. Local residents see it as a lifeline to connect them to essential services, and their only concern was any temporary road closure which might be necessary during construction. The closure of the railway will be kept to a minimum of 4-5 days.

The current design proposal has emerged from consideration of 15 design options. The deck spans and number of piers have been chosen to improve waterflow and have least impact on the river bed. A concrete structure will enable greater span lengths to be achieved, compared to steel. The line of the new bridge is a hybrid solution, partly using the existing footprint and partly downstream, which will reduce potential environmental impacts. The site is included in a SAC (Special Area of Conservation) and is close to an SSSI.

The Local Authority support the proposal in principle and await the justification for demolition of a listed structure. They emphasised the environmental sensitivity of the site and the fact that it is a gateway to Snowdonia National Park, and therefore design quality will be crucial.

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

The Panel recognises the transport and infrastructure benefits of this proposal and supports the principle of improving traffic flow and maintaining the coastal railway line. We are also very aware that the sensitive landscape setting, its importance as an area for tourism and the proposed replacement of the listed structure, all demand a high quality design solution, and we think that major revisions are necessary to achieve this. In summary:

- The pragmatic, technical and environmental constraints have been well explained and responded to, but we think that other design aspects have been neglected and need immediate attention.
- A variety of disciplines will need to be involved, but we think it is essential that the visual design aspect is developed further before issuing tender documents, in order to ensure that the contractor is fully aware of the client's commitment to design quality.
- This strategic design input would help clarify and justify choices of construction method and materials, and should help meet the higher expectations of the Local Authority for the replacement of a listed structure.
- The design of the approaches to the bridge will be important and we recommend that a landscape architect is involved to integrate this aspect with the rest of the scheme.
- The pedestrian experience of using the bridge should be considered and this will affect selection of materials, balustrade details, the quality of handrails, and the protection of views across the estuary.
- More illustrations of the overall visual impact will be necessary including photomontages from key viewpoints. This visual testing should be an integral part of the iterative design development and for this reason needs to be done urgently.
- We are pleased to note the positive and flexible attitude of the Highways department in agreeing to a reduced road width in this location.

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

The Panel noted the lack of any documented justification for demolishing the listed bridge, and suggested that it could be retained as a pedestrian/cycle route. This option has been considered by the team, but would mean that the preferred route as defined above could not be followed. This would increase the overall footprint for rail realignment and the consequent environmental impact, as well as impinging on the existing sewage works. In addition, retention of the existing bridge would entail considerable maintenance costs, and the financial case for a new bridge would no longer be viable.

The Panel found the technical and pragmatic arguments in favour of these design choices to be convincing, but we thought that the input of an experienced bridge architect and landscape architect was noticeably missing. The team stated that the designer, TGP, had been selected through competitive tender and on the basis of their relevant experience. Hyder had also been involved at an early stage. We thought that it was essential that further design expertise was introduced into the development of this project as soon as

possible, so that a beautiful and elegant structure is achieved, while still satisfying all the engineering requirements. This is particularly important given the proposed demolition of a listed structure, the sensitivity of the site and its gateway location. These design considerations are not 'add-ons' that can be applied once the technical solutions have been agreed, but need to be developed in tandem with all other aspects of the proposal to ensure a well integrated and sustainable solution, which should form the basis of a planning application.

The development and refinement of the design concept should refer to the particular qualities of the listed bridge, as well as the wider context. In our view, more information should have been provided on the visual impact of the proposal in its context, taken from key public views. We were informed that this work is being undertaken as part of the Environmental Assessment, and that the team is aiming for the slenderest possible solution, with as few spans as possible, a low profile, and a simple uniform construction. This simple, minimal solution may well be appropriate, but this judgment cannot be made without a holistic design strategy.

The Panel emphasised that the treatment of the approaches to the bridge, including the highway improvements and bridge abutments as well as the pedestrian experience of crossing the bridge, are as important as the proposed structure in terms of the overall impact, and should be properly considered by a landscape architect. This could include the creation of seating or view points off the shared cycle and pedestrian path. Soft landscaping should be repaired and remediated and be appropriate in relation to the surrounding landscape, so that the immediate after-effects of construction are minimised. We were informed that the appearance of the existing rockface on the side of the approaches would be maintained and all imported stone will be sourced from a nearby quarry on the Llyn peninsula. The extent of the rock embankment to the north has already been minimised with hidden pilings.

Details such as the design, height and materials of the balustrades are particularly important, and we accepted the reasons given for the difference in parapet design on either side of the bridge. The exact profile, surface finishes and colour of the concrete are all details which should be developed by a bridge architect and controlled by the local planning authority. The team stated that increasing the number of piers would not significantly alter the side view or the beam depth.

The procurement method will be Design & Build, based on an agreed outline design and any planning constraints. This is intended to give flexibility on construction methods, while protecting the essential qualities of the design, as well as giving greater financial certainty. The Panel stated that design and construction are more intimately connected and cannot be treated in isolation. In our view the design proposal submitted to the planning authority for listed building consent and sent out to tender, should be the equivalent of RIBA stage D, plus key details developed further. The proposed use of RIBA stage C information is not appropriate for this project.

The team confirmed that the new road will be able to accommodate HGVs. The standard width of 7.3m has been reduced by imposing a 40mph speed limit for the approaches and bridge to justify the proposed width of 6.1m. This is considered acceptable given the nature of a link road and the 40 mph speed limit which will be imposed.

The Llandecwyn halt, will be retained but moved slightly, by 4m in one direction and by 3m in another. However, the platform will be reinstated with new surfacing and a new shelter. There will be no car parking, but cycle racks will be provided and possible bus routes are under consideration. Parking may be made available near the toll house which could become an interpretation centre. We suggested that the timbers from the listed bridge could be incorporated into the scheme or landscape to maintain the historic link.

**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	Gwynedd Council (Dafydd Williams, Geoff Doherty, Megan Hughes) Network Rail (Daniel Recchia, Shaun Thompson)
Pensaer/Architect:	Tony Gee & Partners
Consultants:	n/a
AwdurdodCynllunio/ Planning Authority	Snowdonia National Park Authority (Gwilym Jones)
Y Panel Adlygu Dylunio: Design Review Panel: Ewan Jones [Chair] Cindy Harris [Officer] Steve Smith	Richard Parnaby Simon Carne Andrew Linfoot
Lead Panellist:	Simon Carne
Sylwedyddion/Observers:	Victoria Jones (Design Wales) Angharad Williams (research student, University of Bath)