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Design Review Report

Llanfoist to Abergavenny Footbridge

DCFW Ref: 118

Meeting of 10th August 2016

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.

Review Status	**PUBLIC**
Meeting date	10th August 2016
Issue date	22nd August 2016
Scheme location	Llanfoist/Abergavenny
Scheme description	Footbridge
Scheme reference number	118
Planning status	Pre-application

Declarations of Interest

None Declared.

Consultations to Date

The local planning authority and Natural Resources Wales (NRW) have been consulted. Public consultation is planned for later in the autumn of 2016.

The Proposals

The proposal comprises a new footbridge over the River Usk to the east of the existing road bridge and connecting footpaths. The scheme aims to improve connectivity for cyclists and pedestrians between Llanfoist and Abergavenny town centre.

There are a number of statutory constraints on the site. The River Usk is a SAC and SSSI. The Abergavenny Bridge, 600m from the proposed site, is Grade II* listed and a Scheduled Ancient Monument. The scheme falls within the Abergavenny Conservation Area boundary and is in proximity to two Historic Parks and Gardens (Abergavenny New Cemetery and Linda Vista Gardens). The Castle Meadows, which surrounds the site is a SSSI. The site is within a flood plain.

Main Points in Detail

The following points summarise key issues from the review, and should be considered to inform work ahead of making a planning application or engaging in further review.

Improving connectivity
The local authority's ambition to improve connectivity between Llanfoist and Abergavenny town centre for non-motorised users is welcome, as is their consideration of increased opportunities for active travel. The existing stone bridge does not provide a safe and attractive route for cyclists, so it is important that any new bridge is both safe and attractive to pedestrians and cyclists. The route and position must provide a

convenient connection so that cyclists choose it over the existing bridge. The location and alignment of the proposed bridge, its connections with Llanfoist and Abergavenny town centre and the experience it provides for users will be crucial to improving connectivity.

The Active Travel (Wales) Act places an obligation on local authorities to improve connectivity for cyclists and pedestrians. Although work on the Act is not yet fully synchronised with this project, the authority's Integrated Network Map and any consultation on the Act should inform this project.

It is understood that there are other studies underway which look at improvements to access in the wider area. It would be helpful if the location and design of the bridge was set and presented within this wider study so that its successful integration into a footpath and cycle network can be clearly demonstrated.

Other opportunities for this project to improve connectivity should be explored. For example, the site is close to an existing National Cycle Route and smaller footpaths already run alongside the river. Any opportunities for connecting into existing routes should be identified as they could add value to the scheme. New and future development should also be considered, such as new housing on the south side of the river which would benefit from improved connections to the north. Connection through the existing housing estate should be explored.

A diagram showing wider connectivity would be useful for consulting stakeholders and the public and would demonstrate whether all opportunities have been considered.

User experience

As well as positioning the new bridge and linking it with other routes, the design of the user experience will also be crucial to it successfully improving connectivity and ensuring a positive enhancement for the location.

As a minimum, all users should feel safe and comfortable using the proposed bridge route. A width of 3m is Sustrans' recommended *minimum* width for a shared cycle/pedestrian path. It is important that the design team fully consider how the bridge and connecting paths will be used immediately and in the future when increased capacity may be required. A 3m wide bridge would not allow for people to stop on the bridge to enjoy the views and landscape or for family use to be properly accommodated – it would require stilted journeys with frequent stops on the route for others to pass. A path which is too narrow will be frustrating for cyclists who are forced to slow down or stop to navigate around other users, and they may then choose to use the road as a more convenient route. The Commission urges the team to fully consider the benefits of widening the proposed bridge and/or providing wider stopping and viewing points on the bridge.

The materials and detailing of the bridge structure and the surface of the paths will be important contributing factors to user experience.

Response to site

As with all built environment projects, it is important that the immediate site and wider context are fully analysed and understood at an early stage in the design process.

Analysis should identify opportunities (for adding value to the scheme) and constraints (which will need to be addressed through good design); these should inform the design process. A new bridge on this site presents the opportunity to attract visitors and to enhance people's experience of the local environment. New views of the old stone bridge would be possible and the scheme could enhance visitors' enjoyment of the heritage structure.

The site identified for this project is particularly interesting in terms of heritage and environment. Informative analysis of these aspects in particular will be important for explaining the design story and justifying the proposal.

Analysis should identify key views of and from the proposed structure which will be important to consider in the testing of different options. Thought should be given to where the old and new bridges will be seen together and how they complement each other. It will not be possible, nor desirable, to 'hide' a new bridge. A well designed structure could be a positive addition, enhancing the setting as well as providing a functional new route for pedestrians and cyclists. Views during and directly after construction, which may involve removal of further tree coverage over and above that of the bridge footprint, should also be fully considered.

Environmental context

According to the team's presentation, there are a number of environmental constraints driving the scheme, with flood risk be the most dominant.

The team is in consultation with Natural Resources Wales (NRW) who recommend a series of further studies. Whilst the environmental conditions are important, they must be addressed in the context of other constraints, ambitions and opportunities. A balanced approach is needed and testing different options will help to find an appropriate solution. A sound design response is required, not simply an engineering solution.

The proposal presented in the pre-review material showed a bridge engineered to raise the deck above a 1:1000 flood risk level, requiring vast lengths of access ramps at each side. This approach is not logical as the approaches to the access ramps would be underwater in the event of such a flood. The large ramps would add significant cost and maintenance burdens. They would collect debris during a flood event, and would make the route long and inconvenient to use. Visually, the ramps shown in the drawings do not demonstrate a good design response to the context and setting of the bridge in the wider landscape. It is crucial that the bridge is designed to be functional and appropriate to its setting and this may require flood mitigation to be facilitated elsewhere.

There are a number of existing trees on and around the site which could be affected by the proposed development. The Commission would like to see the survey of the existing trees used to inform the design proposals, both in terms of numbers of trees, their condition and their value to the landscape. The existing tree canopy on the south side of the river could be used as an asset. If a high level connection is made it could pass through the canopy, adding interest to the route. The impact of the construction process on existing trees and consequently on views, should be fully understood and communicated. Evidence for decisions taken throughout the design process should come from environmental surveys and wider site analysis.

Heritage context
The site falls within the Abergavenny Conservation Area boundary and is in close proximity to two Historic Parks and Gardens. Therefore, it is important that the conservation context is fully explored and an informed design approach is clearly communicated.

In the selected location, the proposals *will* have an impact on the setting of the Grade II* listed Abergavenny Bridge, which is also a Scheduled Ancient Monument. It is essential that a positive relationship between the old and new structures is formed and design quality of the new bridge is essential.

The project offers an opportunity to for better awareness and appreciation of local heritage assets.

Positive project vision
Whilst there are significant constraints which this scheme must address and respond to, it is important that the team does not lose sight of the opportunity to make a positive impact. Defining a positive project vision will help with this.

The vision or architectural concept should concisely set out what will make it special. The vision should start with what the local authority and design team would like to achieve, not with a response to the constraints. Having the vision clearly set out from an early stage will help to guide design decisions throughout the process whilst locking in value. It is unlikely that the proposals presented in the pre-review material would fit with a positive vision or architectural concept that is developed for this site.

The Commission suggests that the appointment of a structures architect to work with the existing design team would add significant value at this crucial stage in the project, by keeping the vision in focus throughout the design and delivery. The appointment of a landscape architect would also be beneficial. Both these appointments would add value and ultimately achieve a more cost and maintenance efficient outcome.

Structural options
It is important that all structural options are considered and tested so that the team can demonstrate that the best solution has been chosen. Different solutions will have pros and cons which will need to be weighed up in light of the overall vision. The issues which will need to be considered include, but are not limited to:

- Structural efficiency
- Costs – materials, construction, maintenance
- Visual relationship with context – views to and from, composition with surrounding landscape and heritage structures
- User experience – accessibility, attractive & convenient to use
- Buildability

Cable-stay and through-girder options were not shown in the presentation material and should be explored. It may be possible to locate the cable stay column amongst the trees.

Options which include a pier or piers in the water should also be explored and tested against environmental criteria and flood risk.

Materials and maintenance
The choice of materials for the construction of the bridge will depend, to a certain extent, on the structural system. However, it will also be important to consider long term maintenance requirements and processes for their cost and impact on the local and wider environment.

The materials should also be selected in response to the context and in line with the overall architectural vision.

Inclusive design
The Design Commission expects to see equality and provision of an inclusive environment as an integral part of the design process rather than a 'compliance' approach. The design of connections to and from the bridge and the surrounding public realm should also be fully considered. It will be useful for the team to consult the local access group identified.

Further Review
The Design Commission would welcome the opportunity to review this scheme again, once designs have progressed, but well before a planning application is made.

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

Attendees

Agent/Client/Developer	Christian Schmidt, Monmouthshire County Council
Architect/Planning Consultant	Gavin Lewis, Associate Town Planner, WSP/PB Stephen Heaney, Senior Bridge Engineer, WSP/PB Zane Ulhaq, Highways Engineer, WSP/PB

	David Probert, Senior Highways Engineer, WSP/PB
Local Authority	Amy Longford, Heritage Manager, MCC Andrew Jones, Senior Development Manager, MCC
Design Review Panel	
Chair	Jen Heal, Design Advisor, DCFW
Lead Panellist	Andrew Linfoot Cora Kwiatkowski Amanda Spence, Design Advisor, DCFW Carole-Anne Davies, CE, DCFW
Observing	Lindsey Brown, Sustrans Wendy Maden