

Environment Agency response to planning agenda item 10, Application No: 17/0946/03

(for planning meeting due to be held Monday 24 July 2017)

Introduction and Background

The Environment Agency are constructing a flood defence scheme in Exeter, in partnership with Devon County Council and Exeter City Council, to improve flood protection over the next 100 years. The scheme includes improvements to existing flood defences, and the construction of new defences which will increase the standard of flood protection to a 1 in 100 (1%) chance of flooding in any given year.

An important component of the scheme relates to the defence of the historic quayside in Exeter (The Quay) and Commercial Road which are connected by the historic Quay Bridge. In order to ensure continuity of the flood defence across the bridge, the currently consented design includes a headwall across the Higher Leat. The design also includes the demolition and reconstruction of both bridge parapets. The parapets would have reinforced concrete stems and foundations to withstand the applied hydraulic loads that would occur during the design flood event. The wall would be clad to match the existing structure.

Detailed investigations undertaken since the scheme was granted planning approval have enabled us to better understand buried utility services at Quay Bridge. We found a dense arrangement of existing pipes and cables that, together with the structurally fragile nature of the existing masonry bridge, meant that some parts of our consented proposals could not be built. Specifically, it was not possible to utilise the existing masonry bridge parapets, nor replace them with a stronger more modern equivalent. Discussions with the affected utilities companies indicated that many of the pipes and cables could not be practically diverted due to safety concerns, impacts of temporarily disconnecting supplies, likely traffic disruption and cost.

Planning application (Ref: 17/0946/03) is a variation to the approved scheme and describes our proposals for a revised design at Quay Bridge, to locate a new headwall and flap gate structure across the Higher Leat just south of the existing Quay Bridge. The proposed development is for the construction of a masonry-clad headwall with bottom-hinged flap gate, glass parapet and access walkway, together with a connecting demountable flood defence.

The briefing paper prepared for the planning committee meeting of 24th July recommends refusal of the Environment Agency's proposals due to insufficient evidence that other options have been considered that cause less harm to the historic environment. The planning team consider that an alternative option exists that would reduce the standard of protection to properties at the Quay, and maintain the 1 in 100 standard for the properties on Commercial Road whilst causing less harm to the historic environment. The Environment Agency and the professional parties assisting in delivering the flood defence scheme (CH2M (Halcrow) and BAM Nuttall) do not believe that the alternative arrangement as discussed in the briefing paper (which refers to a 'roller gate') is feasible due to the lack of space below-ground for adequate foundations. Therefore the Environment Agency cannot take this proposal forward. The committee is therefore asked to consider the application on its merits.

When preparing this planning application, the Environment Agency's approach has been to take all reasonable steps to consider all alternative options that do no harm, or less harm, to the historic environment when compared to the submitted design. Our investigations are documented in the Options Report submitted as part of this planning application, where 10 options, and further sub-options have been considered. Our conclusion is that the solution presented in the application is the only option that properly accounts for the practical constraints of the site whilst achieving the standard of flood protection (a 1 in 100 probability event)

Standard of Defence

If configured to provide the desired 1 in 100 probability Standard of Protection, the scheme can benefit approximately 100 properties, including sheltered accommodation at Shilhay. The standard of protection provided by the currently consented scheme achieves this, but we no longer believe that it can be built due to the presence of buried services. The revised design, as shown in the application, also provides the desired 1 in 100 standard of protection.

Throughout the design and development of the project, which commenced in 2010, the Project Board (consisting of senior staff from the Environment Agency and the partner organisations) have supported a continuous and consistent standard of defence throughout the defended area so that no part of the defended community would suffer a reduced standard of protection.

If the new proposal is refused, the only remaining option to reduce flood risk in the area would rely on using the existing non-structural parapet walls of Quay Bridge and the standard of protection would reduce to an approximate 1 in 75 probability, which could reduce further if the existing parapets collapsed due to the weight of flood water upon them. Damage to the parapet during a flood could lead to sudden, catastrophic failure which would inundate the Commercial Road area and could be a risk to life. As the condition of the parapet structure is uncertain due to its age, this remains a real possibility. Approximately 100 properties would suffer a reduced standard of protection, including 10 listed buildings and one Scheduled Monument if this option was taken forward.

Heritage Impacts

It is acknowledged in the application that the new headwall proposal does cause some heritage setting harm in two well defined views. Historic England have advised that this should not prevent the application being permitted if the committee is convinced on balance that it is the right proposal. The committee should note that the alternative option suggested in the briefing paper (a rolling flood-gate) would itself introduce a significant engineering structure into the foreground of an Important View as defined in the Conservation Area Appraisal, and therefore would cause harm to the setting of two Grade I listed buildings and the Conservation Area.

The planning application for the new downstream headwall has been developed by landscape and heritage specialist designers in consultation with Exeter City Council and Historic England. By using a mix of contextual and contemporary design methods, we believe that the proposed headwall will be in keeping with the Quay area and its heritage assets. Furthermore, the style of the structure, incorporating glass panels and steel, will be coordinated with Exeter City Council's own draft proposals for the replacement to the nearby Mallison Bridge.

Disruption

A key benefit of the submitted proposed headwall structure located south of the existing bridge is that construction access would be simpler and less disruptive to the surrounding area. Refusal of the application would commit the project to a prolonged temporary closure of the Quay Bridge during construction activities. Residents and businesses of the quayside and Commercial Road would be subject to further traffic disruption and the project partners would be subject to additional reputational damage from associated complaints.

The project aims to complete the defences at the quayside by end of March 2018. In order to achieve this challenging deadline, works to complete the design as submitted need to commence urgently. This must be either in accordance with the presented new planning application, or by falling back to the existing consented design and accepting a reduced standard of protection against flooding.

Any alternative to the proposal submitted would need to be submitted as a new planning application, which would all but certainly extend the construction programme for a further year. This would, in turn, increase project costs and commit the historic buildings, residents and businesses of the quayside to a further year of reduced protection from flooding, and further disruption due to construction works taking place over a third winter period.

Conclusion

In accordance with the existing agreement that the Exeter Flood Defence Scheme should reduce flood risk at the quayside to a standard consistent with the rest of the city, the Environment Agency seeks to build a scheme that provides the best possible protection for local businesses, residents and their properties. Refusal is being recommended on the basis that an alternative, less effective, proposal is possible. The Environment Agency is firmly of the view that this alternative is not viable and that the application should be permitted on the basis that the public benefits meet the requirements of Paragraph 134 of the NPPF that *"harm should be weighed against the public benefits of the proposal"*. The application also pays special attention and regard to the Conservation Area and Listed Buildings as required by the Exeter Local Plan First Review 1995-2011 policies C1 and C2.

The Environment Agency recognises the heritage impacts when working at Quay Bridge and has consulted with, and carefully developed the proposed solution with heritage and landscape design experts. We believe the new proposal balances the need to overcome technical challenges relating to working in close proximity to existing services and structures, whilst also being respectful to the historic setting and landscape amenity of this unique quayside location.

