

Whitesands Project - Response to Common Themes Raised During the Flood Order Process

Impact on Conservation Area

One of the biggest threats to the character of Dumfries Conservation Area is the vacancy and under-use of buildings. Frequent flooding in the Whitesands contributes to that threat. Dumfries Conservation Area Character Appraisal can be viewed at

<http://www.dumgal.gov.uk/CHttpHandler.ashx?id=17398&p=0>

The purpose in designating a conservation area is not to prevent development but to ensure that proposals are not detrimental to character even where alteration to existing fabric is required. The majority of the views and vistas within and from Dumfries Conservation Area will be maintained; there will be small legible changes to one significant historic structure; and, the proposal will create a high quality public realm space.

Historic Environment Scotland publish a series of guidance notes entitled Managing Change among which 'New Design in Historic Settings' demonstrates that contemporary approaches to new development in conservation areas can be very

successful. <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=9b50b83c-1e60-4831-bc81-a60500ac5b29>

Nunholm

Reference was made to the potential increase in water levels upstream of Devorgilla Bridge and as a result we asked our consultants to look at this in more detail and they produced a Technical Note based around the Nunholm area which confirmed there would be no increase in levels during flood events once the scheme is completed.

Flood Order Final Documents

With regard to the documents presented to Committee in December the Committee were aware that documents were in a final format but may be subject to minor technical or drafting amendment following a review of all Flood Order documentation prior to publication.

Flood Order Consultation Process

The corrected documentation was made available for a full 28 day period once the error in uploading documents was discovered. No representations were discounted and the Project Team contacted all those who had made representation to advise they could review and resubmit their representation or let their original comments stand.

Use of Common Good Land

Approval to the scheme was granted by the Dumfries Common Good Sub Committee on 27 October 2014.

Dredging

Computer modelling has shown that the benefits of dredging the Nith would be insignificant in flood events and that dredging would not stop flooding on the Whitesands. It has also been suggested that the gravel islands should be removed but these only form a very small percentage of the river channel and even if completely removed would only lower water levels in flood events by a few millimetres. Due to the nature of the river both the dredged areas and islands would quickly fill/reform and further repeated dredging would be required to remove them again. A key factor which also underpins the decision to rule out dredging is that there are protected species present within the Nith and without justification (because dredging does not reduce flood risk), a licence to carry out this type of work would not be granted. Whilst it is acknowledged that dredging has been undertaken in the past it is likely this was done to maintain a navigational channel or win gravel and not to address flooding.

Loss of Views and Visual Impact

In devising the scheme the Council has been mindful of the need to balance the visual impact of the flood defences with achieving the highest standard of protection possible. To

achieve that balance, the promoted scheme has a maximum 'solid' height of approximately 1.4 metres, with glass panels on top of this along the length, and then demountable to achieve the full height which will only need to be installed when severe flooding is predicted. It should be noted that whilst views from the road and shops are impacted there will be uninterrupted views from the raised walkway in the section between Devorgilla Bridge and Assembly Street, and the retained riverside path and cycleway. The removal of the public toilets from the north end of the Whitesands will further improve views of the Devorgilla Bridge.

Impact on Devorgilla Bridge

The Council is aware of the sensitivity of working on this historic structure and has had extensive discussions with Historic Environment Scotland throughout the process to date to ensure any alterations are in keeping with the historic setting. These discussions have been positive and an application for Scheduled Ancient Monument consent will be made to alter the access onto the bridge following any confirmation of the flood order. It is the case that any flood protection scheme will need to physically connect with the bridge to ensure continuity of the defences. The new arrangements will result in the removal of the existing steps (which are not part of the original historic structure) and will see the addition of a new stepped arrangement directly onto the bridge as well as a gently sloped ramp providing access for all users. The existing toilet block and bus station will be removed (and replaced nearby). It is considered that this will improve both the current setting of the bridge and the view of the bridge from the North. Toilet facilities and bus stances will be relocated on the Whitesands.

Cost

As the scheme has progressed from concept to outline design, the estimated costs have risen to account for the development of the design and as a result of further refinement, such as the need to improve the drainage system and to dispose of material to open up the eastern most arch of the Devorgilla Bridge. The increased costs also include an additional £4 million contingency sum to manage unknown elements e.g. weather or ground conditions. This is standard practice in major projects. The final cost will be determined by a competitive tender process which will ensure value for money.

Alternative Schemes

The concept of public realm improvements, flood protection and regeneration stems from direction given by elected Council Members in 2011 and developed further through the Charrette process that engaged with multiple stakeholders in 2012. Alternative schemes have been considered and costed but ruled out through an iterative process which has involved extensive engagement and direction from the Elected Members leading to the preferred scheme that has been developed. The final solution did reflect feedback from public engagement events including reduction in embankment height and replacement of all lost parking, for example.

Loss of Car Parking

It was one of the key principles of the scheme that there would be no overall reduction of car parking for the town. The main car park on the river side will be used to site the raised walkway element of the defences but many of these spaces will be re-provided across the road on the D&G Homes pay and display site which is being purchased by the Council and made a free car park. The Greensands car park will also be formalised and extended with an entry to it via a ramp from the former Arts College car park. The existing spaces in front of the shops on the Whitesands will be retained as will the majority of those at Dock Head. Further spaces will be provided across the town by removing existing waiting restrictions.

Money Should Be Spent Elsewhere

Scottish Government funding for the scheme is based on a contribution of 80% and includes design costs, construction costs and compensation payments. The grant funding is for flood

protection only and cannot be used on other Council works e.g. road maintenance, town centre improvements etc.

Effect on Shops and Businesses

There is provision under the Flood Risk Management (Scotland) Act 2009 for claims for depreciation or damage as a consequence of any operation (i.e. the construction of the Flood Defences). In the longer term it is expected that the regeneration element and improved environment will lead to an enhanced visitor experience with increased footfall and consequential benefits to the local businesses.

Maintenance Issues

The Flood Risk Management (Scotland) Act 2009 places duties upon the Local Authority to inspect and maintain the defences comprised in the scheme. They will therefore be kept in good condition and repair and to do so an operational and maintenance procedure will be developed and implemented. All the defences involved in the scheme are designed and will be constructed to appropriate industry standards. The raised walkway will have an impermeable core and foundation preventing water from passing through. The slopes and planting will be robust with erosion control matting and suitable plant species. If there is a significant flood there may be some superficial damage, which would then be repaired, but the defences will be designed to remain intact. The walls and glass panels are designed to withstand the impact of high floods. The scheme uses tried and tested techniques and materials and the experience of specialist flood protection product companies.

Increased Flooding Elsewhere

Since 2011 when the scheme was reported to Committee, Members sought assurance that construction of defences would not make flooding worse for anyone outwith the scheme extents. Because the defences contain the flow the velocities increase only slightly and thus in general flood levels do not increase outwith scheme extents. The only exception is upstream of Devorgilla Bridge where levels rise slightly but this has been fully mitigated by the removal of gravel build up under the eastern arch of the Devorgilla Bridge. Increasing the waterway area completely removes the slight (approximately 50mm) upstream increase.

Upstream Storage and NFM

The Whitesands Project team investigated the use of land upstream of Dumfries for the storage of floodwater during the more frequent flood events but found it offered no benefit for the larger flood events. Even at the more frequent flood events, the use of upstream storage did not negate the requirement for engineered defences within Dumfries, only dropping flood levels by an insignificant amount. With regard to Natural Flood Management (NFM), the Scottish Environment Protection Agency (SEPA) look at how this can help, as part of a group of measures, to reduce the impact of frequent flooding. Natural flood management makes use of the environment to store or slow down flood water. The planting of woodlands, wetland creation and river restoration are some of the measures that can help. In addition to benefitting flood control, NFM can also increase biodiversity, water quality, be more resilient to climate change and offer chances for recreation. SEPA continue to assess these measures but it is the considered view of modelling hydrologists that any benefits in NFM will not be sufficient to avoid the need for comprehensive flood defences on the Whitesands.

Robustness of Defences

The earth embankments will be designed in accordance with national and international standards for these types of structures. The presence of a concrete founded wall within the embankment will prevent any percolation of water during periods when flood flow is contained. All walls, glass panels, demountable sections, and flood gates will meet with the required regulations and industry standards.

Drainage Issues

During flood events the surface water and sewage system cannot discharge into the river which causes it to back up and flow out onto the Whitesands. The Whitesands Project includes measures to improve the drainage system and this includes the installation of underground pump stations and storage. A similar situation also occurs with the piped watercourses – the Millburn and Loreburn – that outfall at the foot of Nith Place and again a pump station is proposed here to address this.

Disruption During Works

The Council will endeavour to minimise disruption by working with contractors to replace car parking prior to the start of construction of the scheme and to phase the works in such a way so as to accommodate the movement of traffic, shoppers, and visitors. Compensation for demonstrable damage / loss is available for those impacted by the scheme in the manner specified by the 2009 Act.

Lack of Engagement or Listening to Views

The Whitesands Project has been developed over a number of years, with major consultation events involving the community held on a regular basis. Throughout the process the Council and Whitesands Project team have sought input and feedback from the community and Council Members as it has reviewed and developed the Project. The amendments and improvements made to the design have sought to address the main concerns raised by the local community and the Elected Members within technical, budgetary and other constraints, whilst still achieving the required level of flood protection for the Whitesands area of Dumfries.

Health and Safety

All aspects of the scheme will comply with the relevant regulations and standards including provision of lighting and CCTV. Health and safety will be a particular consideration during the detailed design stage.

Do Nothing

If the protection scheme does not go ahead then this would result in a continuation of flooding of the Whitesands area, which is predicted to increase over time as a result of climate change, leading to continued disruption and potentially further decline of the area. It is considered unlikely that funds would be available to undertake any regeneration work without this being done in conjunction with a flood scheme and any significant investment in the area would be unlikely given the ongoing risk of flooding.

Relocation of Buses

The bus stances are being re-provisioned nearby on the northbound carriageway, close to the existing interchange and the bus stop on the shop side at the north end will remain. A new toilet block is proposed at the entrance of the D&G Homes car park which has the benefit of facing onto the Whitesands, opposite the new bus stances, and closer to the Town Centre and car parking on the shop side of the road.

Toilets

The existing toilet block will be removed and relocated nearby (with the likely location being at the entrance to the DG Homes car park). This will result in a new facility which will be more accessible to the Whitesands, the relocated bus stances, and the town centre itself.

Fairs

The Fair will have to be relocated temporarily during the construction of the works and discussions have been held with the Fair operators to look at how it can be accommodated on the Whitesands once the flood defences are in place.