

Portfolio Holder Decision

Broadwell Property Flood Resilience Scheme

Portfolio Holder	Portfolio Holder for Finance and Property
Date of decision	18 March 2022
	Signed 

1. Decision taken

- 1.1 *Approve the addition of the Broadwell Property Flood Resilience Scheme (PFR), total scheme estimate £140,750 to Warwickshire County Council's 2021/22 Capital Programme subject to The Flood Defence Grant of £122,750 being secured.*

2. Reasons for decisions

- 2.1 *Warwickshire County Council's (WCC's) Local Flood Risk Management Strategy (LFRMS) provides the structure for how it assesses local flood risk in Warwickshire. The associated Surface Water Management Plan (SWMP) provides the prioritisation for flood risk management work.*
- 2.2 *Both observed flooding and predicted modelling outputs confirm that there is a significant risk of flooding in Broadwell. Following a series of consultations with local residents and the detailed technical study the number of residential properties which will benefit from the proposed scheme is 15, including 13 properties at very significant risk.*

3. Background information

- 3.1 *Broadwell is a village situated within east Warwickshire approximately 8 miles to the south of Rugby. The bedrock geology is typical Rugby Limestone consisting of Mudstone and Limestone interbedded. The superficial geology in this location is alluvium consistent in areas with watercourses. Topographically the village sits within a bowl, with steep hills to the west and east. The valley is bounded to the north by the Rugby ridge and Lawford Heath, to the south by a low range of upland which forms part of the Northamptonshire/Warwickshire ironstone hills. This results in surface water problems, as it is difficult to drain the village. The most significant flooding in recent history occurred in 1998 and 2007, with 13 properties being reported as flooding and a further 11 properties reporting internal flooding in 2008. There have continued to be reports of*

smaller events and in 2013 attempts were made by Rugby Borough Council to construct a small balancing pond and a series of check dams. Regrettably there is still a residual risk, and these features quickly become overwhelmed in large events.

- 3.1 In 2017 JBA consultants were commissioned to undertake hydrological modelling of the flood risk and mechanisms in Broadwell, which included the potential implications of climate change on flood risk. A number of options were identified and a shortlist produced; Property Flood Resilience (PFR) to 15 properties was shown to be the most economically viable option which met the objectives of the project. These properties were identified from the flood risk modelling exercise and community engagement with residents. Individual property owners will be responsible for ongoing maintenance.*
- 3.2 Independent PFR surveys were undertaken in Broadwell in 2018, given the time elapsed these properties will require re-surveying, however this gives WCC confidence that PFR will be an appropriate method of intervention. Accordingly new independent surveys will be carried out on all of the properties to identify the requirements to prevent and limit the ingress of water. Reports for each property will be produced which make specific recommendations for PFR measures to be installed. The protection provided will be tailored to the specific needs of each property being better protected. Typical protection will include installation of flood doors, demountable flood barriers, sump pumps beneath floor level, anti-flood air brick and vent covers, and waterproofing to external walls and other porous surfaces.*
- 3.3 Subject to approval the scheme will commence in March 2022 and is likely to take 8-12 weeks for installation of Property Flood Resilience measures.*

4. Financial implications

4.1 The financial implications from this approval request are:

4.2 The total scheme estimate is £140,750 which includes internal staff time, property surveys and contract delivery;

£122,750 is coming from FCERM Grant in Aid and Local Levy

£18,000 is coming from re-profiled CIF bid allocation

4.3 The FRM team made a successful application to CIF which was granted in March 2020, however a number of factors including COVID-19 lockdown restrictions have delayed scheme delivery. In the interim the FRM team have secured further funding which has allowed the FRM team to seek approval to re-profile the CIF Allocation to protect more properties in more locations including Broadwell.

4.4 WCC FRM have issued the Outline Business case for approval in order to secure an allocation of £52,414 Flood Coastal Erosion Risk Management Grant in Aid (FCERM GiA) and £70,086 of Local Levy to deliver the Broadwell Property Flood Resilience Scheme. If funding is not secured from Flood Defence Grant in Aid the scheme is unlikely to progress.

4.5 Of all the options appraised, the provision of Property Flood Resilience measures (PFR) provided the most cost-effective solution and PFR surveys will be undertaken on 15 residential properties.

4.6 Procurement will be via the national EA PFR framework. The EA's national framework for PFR work enables us to efficiently "call-off" and deliver specialist PFR products for locations such as Clifford Chambers.

4.7 The ongoing maintenance responsibility will remain with the individual property owners and as such no future maintenance liability or cost will remain with WCC. A PFR Legal Agreement has been produced working with WCC Legal team, to outline the responsibilities of the homeowner for future maintenance.

5. Environmental implications

5.1 Flooding is part of nature and it is not technically feasible nor economically affordable to prevent all properties from flooding. The National Flood Risk Assessment, carried out by the EA recognises that a risk based approach to protecting properties must be taken. It also recognises that some traditional flood alleviation schemes can cause environmental harm or just move the problem elsewhere. As climate change is likely to increase the frequency and severity of flooding in the future, taking a risk based approach and ensuring further environmental damage is not caused will be essential to reducing the impacts of flooding.

5.2 PFR does not require large scale stripping of sites or construction methods to be used that may cause environmental harm. As such, there is unlikely to be any loss of planting, habitat or trees as part of the installation of PFR products as they designed to fit to, and become part of, the property construction. In contrast to traditional hard engineered flood embankments or walls, PFR also does not alter the natural topography of a location and as such is less likely to push flood water elsewhere. This is especially important in Warwickshire's rural catchments where topography is challenging, and alterations have the potential to increase flood risk to different parts of a community.

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Strategic Director	Mark Ryder Strategic Director for Communities
Portfolio Holder	Portfolio Holder for Finance and Property

Urgent matter?	No
Confidential or exempt?	No
Is the decision contrary to the	No

**budget and policy
framework?**

List of background papers

Members and officers consulted and informed

Portfolio Holder – Councillor Butlin

Corporate Board

Legal – Ian Marriott

Finance – Andrew Felton

Equality – Keira Rounsley

Democratic Services – Helen Barnsley

Councillors –

Local Member(s): Cllr Roberts