

## Somerset Rivers Authority Board Paper to note

### Taunton Strategic Flood Alleviation Improvements Scheme (TSFAIS)

#### Purpose of the item

This paper summarises the current status of Phase 3 of the Taunton Strategic Flood Alleviation Improvements Scheme (TSFAIS).

#### Background and context

To protect existing property in Taunton and to allow the town to develop safely, a holistic and strategic solution is required. Somerset West and Taunton Council (SWTC) and the Environment Agency are working together to provide a long-term strategic solution to reducing flood risk to Taunton and, where possible, to the wider catchment.

**Phase 1:** Studied flood risk and identified a combination of (i) improved flood defence walls in the town and (ii) an area for storing flood water upstream, to provide capacity for the long term (100 years). This study was completed in 2014. This solution required major engineering work to provide the desired level of protection. The capital cost and ongoing maintenance of this was estimated to be upwards of £50million.

**Phase 2:** Provided a Project Delivery Plan (PDP) with phased local intervention solutions that provide a useful increase in flood capacity pending the longer-term delivery of the larger flood risk reductions identified in Phase 1. The local interventions are a combination of flood defences and storage which provide protection for:

- an extreme flood event today, where a significant amount of water enters the river system and would cause severe flooding, this is called 1% annual exceedance probability (AEP) or a 1 in 100 Years flood event and has a 1% chance of occurring in any one year;
- significant changes in water levels as a result of climate change in the medium term, that could see peak flows in the river increased by 20% compared to what we would experience today in an extreme flood event; and
- significant changes in water levels as a result of long-term climate change, that could see peak flows in the river increased by 30% compared to an extreme flood event we would experience today.

The local interventions also have:

- no significant impact to third parties, including on the Levels and Moors;
- recommended timing of delivery or “triggers” for delivery (short, medium or long term);
- established benefits of the components, individually and together;

- estimated costs (capital and full life) and possible funding sources;
- potential alignment with other programmes/development.

Phase 2 work was undertaken between July 2016 and August 2019.

The Phase 2 deliverables were discussed with the SRA Technical Group in August 2019 and duly shared with the SRA Board in January 2020. Board members endorsed the TSFAIS recommended strategic and long-term approach to the management of flood risk in Taunton and confirmed their ongoing support of the project and its wider objectives.

SWTC Full Council on 26 February 2020 endorsed:

- the strategic and long-term approach set out in the Phase 2 works;
- continued partnership working with the Environment Agency to detail and deliver the TSFAIS short-term measures;
- £6million capital funding and dedicated project management capacity to support next steps;
- development of a future funding strategy.

### **Current status and next steps**

**Phase 3:** SWTC in partnership with the Environment Agency is progressing three of the short-term measures identified in Phase 2:

1. River Tone Left Bank Flood Defences – a combination of repair, replacement or new flood defences between Frieze Hill and Town Bridge to provide reduced flood risk to key transport routes including the A3027 Bridge Street, A3027 Staplegrove Road and the A3087 Station Road, and the North Town and Firepool areas of Taunton;
2. Firepool Lockgate and associated bund between the River Tone and Bridgwater to Taunton Canal – raising levels of the lockgates and the area around them in conjunction with creating an earthen bund defence between the canal and the river from Firepool to Obridge, which will prevent flows entering the canal. This provides reduced flood risk for Priorswood and Crown Industrial Estates and Bathpool;
3. Longrun Meadow flood attenuation improvements – optimisation of the existing flood storage area at Longrun Meadow through new embankments, inlet and outlet to remove excess water from the river and to control when the water is put back into the river. This reduces flood risk in Taunton town centre and further downstream including areas of North Town, Firepool, Priorswood and Crown Industrial Estates, Bathpool, benefiting tributary flows and reducing flood risk in

the Tangier area. There are a number of tributaries entering the Tone. At times of high water or flooding their ability to discharge into the River Tone is restricted and they can overtop their banks, causing localised flooding.

Delivery of these measures is collectively known as Phase 3.

A Collaborative Agreement between SWTC and the Environment Agency for the River Tone Left Bank Flood Defences is scheduled to be signed in March. Atkins will be formally awarded the contract for the design work and associated consents and permissions in March. The period of pre-contract on-boarding – where the contractor familiarises themselves with the history of the TSFAIS and the Project Brief – will be concluded at the end of February. This new Environment Agency framework approach allows for early discussions around the process, structure and requirements of the project which results in a smoother contract period and a more precise project pricing.

Project managers have been appointed to progress the Firepool Lockgate scheme which will be led by SWTC with Environment Agency support. A Project Brief has been completed and SWTC has issued invitations to tender which are due back on 5 March 2021.

The Longrun Meadow Optimisation scheme will be the third project to progress and project managers will be appointed in due course. This scheme will be led by SWTC with Environment Agency support.

The TSFAIS programme has a high profile within Somerset West and Taunton Council. It sits within the External Operations Directorate and is linked to the SWTC [Carbon Neutrality and Climate Resilience](#) workstream and the council's programme for the regeneration of Taunton town centre, the [Garden Town status](#) and [Taunton Vision 2040](#) which are part of the Strategic, Place and Planning Directorate.

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