



Meeting: Harbour Committee

Date: 02nd May 2018

Wards Affected: All wards in Torbay

Report Title: Brixham Breakwater Improvements

Executive Lead Contact Details: Non-Executive Function

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1. Purpose

- 1.1 This report updates Members on the proposed improvements to Brixham Breakwater, the present funding position, and the complications introduced by the damage caused by storm 'Emma'.

2. Proposed Decision

- 2.1 **That the Harbour Committee supports the application for external grant funding to undertake capital works that will improve Brixham Breakwater;**
- 2.2 **That, the Head of Finance, in consultation with the elected Mayor, be asked to approve the application to the Marine Management Organisation (MMO) for a European Maritime and Fisheries Funding (EMFF) grant of up to £2m;**
- 2.3 **That, the Council is recommended to approve up to a £3.853m variation to the Capital Plan to undertake capital works that will improve Brixham Breakwater, to be funded from EMFF external grant funding and Council funding from the capital major repairs and renewals budget.**

3. Action Needed

- 3.1 To ask the Council to approve a £3.853m variation to the Capital Plan at its meeting on 14th May 2018. Continue discussions with the MMO in support of the application for external grant funding from the EMFF. If grant funding is successful and Council approval obtained, to appoint the contractor and commence improvement works on the Brixham Breakwater in June or July this year.

4. Summary

- 4.1 In January the Harbour Authority applied to the Marine Management Organisation (MMO) for a European Maritime and Fisheries Funding (EMFF) grant of £2m to contribute towards the proposed improvements to Brixham Breakwater, the costs of which were estimated to be approximately £2.6m; the additional £600k being funded by the Council.
- 4.2 Following a competitive tender process the cheapest bid was £3.853m, which is £1.253m higher than originally forecast and would take the Council's contribution to £1.853m. However, this figure can be mitigated in a number of ways:
- (i) The Environment Agency has agreed in principle to fund £100k (this is subject to final confirmation).
 - (ii) The contractor had factored in £400k contingency to account for likely weather-related delays if the work had taken place in winter. It has now been agreed that the work can commence in the summer, and the bid has been reduced accordingly.
- 4.3 The contractor has also costed £450k for concrete spraying of the remaining 70% of the breakwater's eastern face. Although this would reinforce the existing façade (which has cracked in places) the TDA's engineering advice is that this could instead be used to rock armour a further 10% of the breakwater's length. Alternatively the overall project cost could be reduced by this amount.
- 4.4 To fund the Council's contribution to this project (assuming the £500k savings identified in 4.2) it will be necessary to allocate £1.353m (or £903k if the savings identified in paragraph 4.3 are also taken) from the capital major repairs and renewals budget using the delegated authority provided to the Executive Head of Assets and Business Services to spend against this budget. (Council decision February 2016)

Supporting Information

5. Position

- 5.1 A number of previous engineering assessments of Brixham breakwater have commented that its outer face is too 'smooth' to dissipate wave energy, thereby increasing the risk of the breakwater being 'over-topped' by large waves during severe weather. Compounding this, sea levels are expected to rise by 0.4m over the next 60 years as a result of climate change (*UK Climate Projections (UKCP09) Report chapter 3*).
- 5.2 The most efficient means of overcoming both these concerns is to emplace large boulders to the breakwater's outer face so as to form a 'rough' 3 dimensional surface area to dissipate wave energy, and to raise the overall

height of the breakwater by 50cm. Initial estimates had calculated the likely cost for this project as being approximately £2.6m.

- 5.3 An opportunity to fund this presented itself at the start of 2018 when the EMFF invited applications for grant funding up to £2m for projects which inter alia improved the fishing industry.
- 5.4 With TDA assistance a bid was rapidly developed and submitted to the MMO. In parallel, a competitive tender process using Council procurement processes was undertaken to identify a suitable contractor to carry out the works. The cheapest return was £3.853m, but this included approximately £400k contingency to de-risk potential cost escalation due to poor winter weather (based upon the assumption that the project would take place in autumn/winter) and an additional £450k for concrete spraying of the remainder of the breakwater's eastern face.
- 5.5 Following a competitive tender process using Council procurement rules the cheapest bid was £3.853m. This was reduced by agreeing to commence the work in summer (obviating the £400k weather contingency money). Additionally the Environment Agency have indicated that they may provide £100k towards the project.
- 5.6 The funding shortfall can be met from the capital major repairs and renewals budget using the delegated authority provided to the Executive Head of Assets and Business Services to spend against this budget.

6. Items for consideration

- 6.1 The Brixham Breakwater acts as a sea defence for Brixham town as well as the harbour and the harbour estate.
- 6.2 Approximately £2m of damage was caused to the inner and outer faces of the breakwater during storm 'Emma'. This damage is the subject of an ongoing insurance claim and should be considered as a separate operational matter, which will not require a Harbour Committee or Council decision. That notwithstanding, there is an option (identified below) which sees any insurance pay-out diverted to funding the improvement works because it would greatly reduce the probability of further damage in future storms. This option is not recommended and is mentioned for completeness only.
- 6.3 There is engineering merit in either undertaking the concrete spraying or using the funds to emplace improved rock armour along an additional 10% of the breakwater's length, however the project's overall affordability must be sustainable.

7. Possibilities and Options

- 7.1 The Harbour Committee/Council could decide not to recommend proceeding with the project and withdraw the EMFF application. This would not mitigate any of the identified risks and there is a risk that this causes reputational risk with the MMO such that it prejudices any future bids. This option is not recommended.
- 7.2 The Committee could decide to divert the anticipated insurance pay-out for the repairs to the inner face. This would almost certainly invalidate any future insurance claim on the basis that the asset had not been kept in an adequate material state but would fund the improvement project and allow approximately 1/3 of the repairs to be undertaken. This option is sub-optimal but should be considered.

8. Preferred Solution/Option

- 8.1 As set out in the recommendations.

9. Consultation

- 9.1 No public consultation has been taken on these improvement works as they are urgent, necessary and beneficial.

10. Risks

- 10.1 There is a risk that the EMFF funding is not forthcoming. This would make the project financially unviable.
- 10.2 There is a risk that the Council do not approve the variation to the Capital Plan. This would prevent the project going ahead.
- 10.3 There is a risk that the breakwater's insurance will be invalidated if the Insurer decides that inadequate steps to protect the infrastructure (i.e. these improvements) are not undertaken.

Appendices: None

Additional Information

The following documents/files were used to compile this report:

Port Masterplan