

FAREHAM

BOROUGH COUNCIL

Report to the Executive for Decision 03 April 2017

Portfolio:	Planning and Development
Subject:	Hill Head Coastal Protection Project: Phase 2 – Award of Tender
Report of:	Director of Planning and Regulation
Strategy/Policy:	River Hamble to Portchester Flood and Erosion Risk Management Strategy and North Solent Shoreline Management Plan
Corporate Objective:	Protect and enhance the environment, Safe and Healthy place to live and work, leisure opportunities for health and fun.

Purpose:

This report is to seek approval of Phase 2 of the Hill Head Coastal Protection Project, the construction of a replacement seawall to secure the long term future of the sea defences at Hill Head.

Executive summary:

The Council owned coastal defences at Hill Head include the beach, groynes and seawall. Beach levels have fallen in recent years exposing the seawall to additional and increased wave action, leading to failure of the seawall at Hill Head in winter 2015. The seawall has also failed on a number of previous occasions since 2005 and, through exposure as well as natural deterioration with age, has now reached the end of its serviceable life, is unmaintainable and has a high risk of future failure in storm conditions.

The Hill Head Coastal Protection Project proposes to address the frontage issues through delivery of two phases:

Phase 1 improvements (beach recharge and groyne repairs) were approved at the July 2016 meeting of the Executive, and were completed in September 2016. This initial phase of works formed part of the long term solution for the frontage and allowed time for design work for the Phase 2 replacement sea defences to be carried out.

Phase 2 of the works, the subject of this report, is the construction of a replacement seawall to secure the long term future of the sea defences at Hill Head. Tenders have been received and assessed based on quality and price to identify the most advantageous offer for the Council.

The details set out in this report have been developed in collaboration with the Hill Head Ward Members Working Group, chaired by the Executive Member for Planning and Development.

Recommendation:

That the Executive:

(a) approves funding up to the sum of £649,834.60 including contingency, funded from Community Infrastructure Levy contributions, to deliver Phase 2 of the Hill Head Coastal Protection Project; and

(b) awards the contract for the Phase 2 works to the preferred supplier as set out in Appendix B (Confidential).

Reason:

With the seawall and associated promenade at the end of its serviceable life, the asset is at immediate risk of failure during stormy conditions which would render the 39 beach huts unsafe for use. If allowed to deteriorate, the toe of the cliff would become open to erosion, posing a longer term risk to Cliff Road (estimated in year 20) as well as the 10 residential properties to the landward side of the road.

The construction of a replacement seawall will secure the long term future of the sea defences and public promenade at Hill Head.

Cost of proposals:

The total cost of the proposals are indicated in confidential Appendix B and will be funded from Community Infrastructure Levy contributions.

Appendix A:	Location Plan & Cross Section
Appendix B:	Confidential – Tender Prices and Evaluation
Appendix C:	Exhibition Event feedback
Appendix D:	Project Timeline

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Executive Briefing Paper

Date: 03 April 2017

Subject: Hill Head Coastal Protection Project: Phase 2 – Award of Tender

Briefing by: Director of Planning and Regulation

Portfolio: Planning and Development

INTRODUCTION

1. Fareham Borough Council's (FBC) coastal team, the Eastern Solent Coastal Partnership (ESCP), propose to replace the FBC owned coastal defences at Hill Head. The Phase 1 improvements were approved by the July 2016 Executive, and were completed in September 2016. This initial phase of works formed part of the long term solution for the frontage and allowed time for design work for the Phase 2 replacement sea defences to be carried out.
2. This report is to seek approval of Phase 2 works, the construction of a replacement seawall to secure the long term future of the sea defences at Hill Head.

LOCATION

3. The FBC owned Hill Head frontage is located over an approximately 150 metre (m) length of open coastline, immediately East of Hill Head Sailing Club. A location plan is attached in Appendix A.

BACKGROUND

4. The existing sea defences on the frontage consist of a gabion basket seawall and a concrete bagwork seawall, both built approximately 25-30 years ago. These coastal defence assets are owned and maintained by FBC. FBC has carried out reactive maintenance on these defences in recent years to address several issues.
5. A series of failures have affected the frontage in the last 12 years. In 2005 a 30m section of the frontage failed completely and was re-built with similar materials. In 2014 a separate 30m section of frontage failed and was re-built and patched with similar materials.
6. The winter storms of 2013/ 2014 saw a series of severe storms in quick succession erode beach material from the frontage. Additional erosion losses of beach material occurred into 2015 when beach levels were observed to be up to 1.2m below 2012

levels. This exposed the coastal defences to increased and additional wave action leading to a further significant failure of the seawall in winter 2015/ 2016 which required urgent temporary repairs to keep the promenade open.

7. However, due to the extent of damage to the seawall over the years, remedial measures are not a long term solution. The seawall is unmaintainable with a high risk of future failure along this frontage in storm conditions.
8. Phase 1 works were carried out in September 2016 to replace the lost beach material and extensive refurbishment of the timber groynes to better protect the seawall from wave action over the 2016/2017 winter and allow for design work for a Phase 2 replacement seawall to be carried out.

LINKS TO STRATEGIES

9. The Hill Head frontage is within Shoreline Management Zone 3 (SMZ 3) of the River Hamble to Portchester Flood and Erosion Risk Management Strategy (the Strategy). The Strategy was adopted by Fareham Borough Council in 2015 and recommends, subject to funds, "Hold the Line - Maintain protection with scheduled maintenance and beach recycling to maintain beaches and prevent erosion."
10. The Strategy recommendation is in line with the North Solent Shoreline Management Plan Policy, which was adopted by FBC in 2010, which recommended a policy of Hold the Line.
11. Building on the Strategy, the ESCP have secured Flood and Coastal Erosion Risk Management Grant in Aid (FCERMGiA) to undertake studies leading to a Beach Management Plan (BMP) from Hill Head to Portsmouth Harbour entrance. The completed Phase 1 works and proposed Phase 2 works compliment these studies, which promote a holistic solution to coastal erosion issues within the sediment sub-cell, through the implementation of a Beach Management Plan. To better understand the coastal processes and sediment movement the BMP studies will include using tagged tracer pebbles to establish the long term sediment pathways within the sediment sub-cell.
12. The Strategy identifies Fareham as being fortunate in having relatively low numbers of residential and business properties at risk, however this leaves Fareham in the position of being very unlikely to benefit from FCERMGiA for construction works.

OPTIONS

13. A previous report to the Executive in July 2016 approved Phase 1 of works to protect the seawall by replacing the lost beach material and improve the beach groynes. However, the Phase 1 works cannot be expected to prevent erosion losses from the beach in storm events.
14. Therefore, the Executive also approved option appraisal and design works to be carried out for a replacement seawall. The options appraisal has confirmed the previous Executive report recommendations to replace the seawall.

15. **Do Nothing** – Wave action will attack the existing sea defences during storm events, drawing the beach down and exposing the seawall. The seawall is in a poor condition and the risk of failure under storm conditions is high. Annual failures along the frontage are expected.
16. Assets at risk from failure of the seawall include the public promenade which sits on top of the seawall, 39 beach huts which pay an annual rent to Fareham Borough Council. The public highway behind the cliff landward of the beach huts is at erosion risk 20-50 years after failure, up to 10 residential properties are at risk from 50 years after failure.
17. FBC, as the landowner, has a Health & Safety duty of care to the public, so would need to remove hazards and close the beach to the public as appropriate.
18. **Seawall Replacement** – The replacement seawall, see Appendix A for typical cross section, comprises of sheet pile wall with concrete cladding, safety barrier and beach access points. The design team (comprising the ESCP and consultant Ove Arup) examined the various configurations to agree the best design solution to meet the project objectives.

COMMUNITY FEEDBACK & PROJECT SUPPORT

19. The details set out in this report have been developed in collaboration with the Hill Head Ward Members Working Group.
20. A series of community exhibition events were held on 10th/11th & 14th November, where the preferred option was exhibited to the public. Approximately 200 members of the public attended the exhibition event and 83 attendees provided feedback on the proposed project through a feedback form.
21. Feedback from respondents show strong community support for Phase 2, seawall replacement, with 96% “strongly” or “mostly” supporting the leading option. See Appendix C for a summary of the community exhibition feedback. Further information on the exhibition events may also be obtained from the exhibition webpage at <http://www.escp.org.uk/news/Hill-Head-Phase2>.

BENEFITS

22. The selected seawall replacement option fulfils the project objectives.
23. It maintains and improves the promenade as a leisure asset to the local community.
24. The safety, security and well-being for residents who use the frontage is paramount. The potential for further failures would adversely affect public enjoyment of the frontage. The uncertainty regarding the current promenade seawall condition can cause risk-related anxiety for local residents, while beach hut owners in the area are at risk of flooding and may either be unable to obtain insurance or pay particularly high premiums. The seawall replacement is therefore likely to have a beneficial impact on human health in this respect.
25. Implementing the works will have positive sustainability benefits for Hill Head residents and beach hut owners, the environment, human health, accessibility and leisure. The selected option will provide increased protection to the beach huts from possible destructive damage caused by seawall failure and wave overtopping.

26. Seawall replacement reduces the potential for coastal erosion of the cliffs behind the beach huts.

LEGAL IMPLICATIONS

27. FBC as a Coastal Protection Authority can utilise its permissive powers under the Coastal Protection Act 1949 to undertake the proposed works. FBC will also need to comply with the appropriate legislation including, but not limited to, the Town and Country Planning Act 2015 and the Badger Protection Act 1992.

ENVIRONMENTAL IMPLICATIONS

28. The majority of the frontage is environmentally sensitive with nationally and internationally designated sites including the Solent and Southampton Water Special Protected Area [SPA], The Solent and Southampton Water Ramsar Site, the Lee on the Solent to Itchen Site of Special Scientific Interest [SSSI] and the Titchfield Haven SSSI present.
29. A legally protected badger sett is situated directly adjacent to the site.
30. The Meon River, which is an internationally important salmonoid migration route is directly adjacent to the frontage.
31. These designations are extremely likely to affect the working period allowed with no works likely to be permitted from October to June inclusive due to overwintering birds restrictions and badger sett restrictions. Additional working method restrictions are also likely to be imposed.
32. Potential impacts on these sites have been assessed, and it has been concluded that the impacts of the preferred option do not adversely affect the natural environment. This will be assessed through the planning and consenting process in consultation with the relevant environmental bodies.

FINANCIAL IMPLICATIONS

33. Funding for coastal protection works is allocated nationally through FCERMGiA and priority is given to schemes protecting risk to life, then large numbers of residences and businesses where flooding and erosion will likely cause significant damage. The Hill Head Coastal Protection Project does not qualify for funding via FCERMGiA.
34. It is proposed that the costs associated with this project will be fully financed by FBC from Community Infrastructure Levy contributions.
35. Following completion of the detailed design, tender documents were issued under an open tender. Tenders have been received and assessed on quality and cost to identify the most advantageous offer for the Council. The tendered cost to Fareham Borough Council for these proposals is included in the Appendix B (confidential).
36. A risk register has been developed for the works to cover unforeseen risks and residual risks following mitigation. This has been applied to develop a risk contingency sum as set out in Appendix B (confidential).

PROJECT TIMELINE AND FUTURE COMMUNICATIONS

37. The construction programme for implementation of Phase 2 is July to September 2017. See Appendix D for project timeline.
38. The implication of the environmental restrictions is that works will be carried out between July and September when the public are expected to use the beach more frequently. A comprehensive communications strategy will be planned and implemented to ensure the public are aware of the project timing and reasons for summertime working. Particular focus will be given to communicating with local residents and organisations, users of the beach and beach hut owners. Diversion routes and signage will also be established for the duration of the works.
39. Works will be carried out in a respectful manner to users, allowing as much access to the beach and amenity as practical, whilst taking all reasonable measures to restrict access to the beach in front of the works to keep the public safe.

COLLABORATIVE WORKING – GIBLET ORE PROPERTIES

40. Further to the east of Hill Head, beach levels also suffered during the 2013/2014 storms, leading to localised flooding of low lying properties at Giblet Ore, see Appendix A for location plan. A scheme to raise the groynes, to attempt to capture more sediment thus increasing beach levels and affording improved protection, has been proposed by the residents. This scheme will have an enhanced benefit to residents as the Hill Head Phase 1 beach re-nourishment has been implemented and there is additional sediment on the coastline to retain. FBC would benefit as there is more sediment potentially retained in the local area which could be used as a source of material in any future Beach Management Activities.
41. The ESCP has worked with the Giblet Ore properties for mutual benefit to identify opportunities for improved coastal defences. These private maintainers have coastal protection and maintenance issues which are their responsibility. FBC has engaged with the Giblet Ore residents to consider how their scheme relates to the FBC scheme.
42. The residents have so far raised £19,749.17 (ex VAT) for their scheme. The recommended Phase 2 Contractor has priced the works and if these works are requested they will be fully financed by 3rd parties. The procurement approach provides an efficiency and ESCP professional support.

CONCLUSION

43. The seawall has reached the end of its serviceable life and is at high risk of significant failure during future storm events.
44. This report to the Executive seeks approval for up to £649,834.60 including contingency as set out in Appendix B (Confidential), funded from Community Infrastructure Levy contributions, to deliver Phase 2 of the Hill Head Coastal Protection Project.
45. This report to the Executive also seeks approval for the Executive to award the contract for the Phase 2 works, to the preferred supplier as set out in Appendix B (Confidential).

46. The approval of Phase 2 seawall replacement works will address the long term coastal erosion risk, the safety and security of residents and visitors to the frontage and improve the promenade as an amenity asset to the local community.
47. A comprehensive communications strategy will ensure the public are aware of the project timing and reasons for summertime working.