

FAREHAM

BOROUGH COUNCIL

Report to the Executive for Decision 07 February 2022

Portfolio:	Planning and Development
Subject:	Fareham Coastal Defence Study (Fareham Quay and Alton Grove to Cador Drive)
Report of:	Director of Planning and Regeneration
Corporate Priorities:	Protect and enhance the environment

Purpose:

To seek approval to undertake a coastal defence study to develop Flood and Coastal Erosion Risk Management (FCERM) scheme options for the Fareham Quay and Alton Grove to Cador Drive frontages, to reduce flood and erosion risk alongside the impacts of those risks on historic coastal landfill.

The project will also provide an opportunity to investigate additional broader outcome opportunities important to Fareham Borough Council (FBC) and the wider Fareham community relating not only to the environment, but also to the improvement of the public realm, regeneration, enhancement of amenities, improvement of recreation opportunities, access and community health and wellbeing.

Executive summary:

Fareham Quay is situated at the end of Fareham Creek in the north corner of Portsmouth Harbour (Appendix A), the frontage is tidally dominated, relatively sheltered and subject to wind driven waves.

Located within three kilometres of Fareham Quay, the Alton Grove to Cador Drive frontage, north of Portsmouth Harbour near Portchester (Appendix A), is fronted by a shallow intertidal foreshore. Given the exposure to the prevailing south and south westerly winds, the frontage is susceptible to wave overtopping when strong winds combine with high tidal conditions. Both coastal frontages and existing defences are owned and maintained by FBC and are now reaching the end of their serviceable life.

Across both frontages, a significant number of properties are at risk of an extreme tidal flood event during the next 100 years. Further to this, both coastal frontages are identified as historic coastal landfill sites. Continued erosion of defences in these locations could also risk exposing further landfill and potentially pollute the environmentally important Portsmouth Harbour.

The aim is to undertake a combined FCERM coastal defence study for the Fareham Quay and Alton Grove to Cador Drive frontages. The Study will assess and develop longer-term coastal management options, reducing flood and erosion risk and

addressing historic landfill issues, as recommended in the River Hamble to Portchester Strategy (RHPS) (2016) and the North Solent Shoreline Management Plan (2010).

The study will also put forward a proposal and outline design to try and secure further funding for detailed designs and to implement and construct the preferred option.

Recommendation/Recommended Option:

It is recommended that the Executive:

- (a) approves commencement of the Fareham Coastal Defence Study; and
- (b) agrees that the Director of Planning and Regeneration is given delegated authority to procure and deliver the works, subject to the award of contract being made through an Individual Decision of the Executive Member for Planning and Development.

Reason:

If no coastal defences were in place, 49 properties across both areas are at tidal flood risk from a 1/100-year extreme tidal event today, substantially increasing to a total of 400 properties at risk during the same event in 100 years (Appendix B).

Further to this, both sites are former landfill sites, with historical operation of landfill activities from as early as 1932. The RHPS, identified the Fareham Quay frontage as a 'medium risk' landfill site. The area is currently defended by a poor condition block wall which has several recent failures requiring remediation. The Alton Grove to Cadour Drive frontage has been identified as a 'high-risk' site as most of the area is undefended and subject to erosion with areas of poor condition concrete sandbag walls. Continued erosion of defences in these locations could also risk exposing further landfill and potentially pollute the environmentally important Portsmouth Harbour.

Due to the apparent risks at both these sites and following adoption of the RHPS, both Fareham Quay and Alton Grove to Cadour Drive were identified as priority sites to progress coastal flood and erosion risk management schemes.

Sea defence damage and failures present an on-going and increasing risk to public safety. Since 2012, various maintenance activities have taken place at both sites. If no future planned maintenance is undertaken, sections of the frontage at both sites will continue to fail, as recently seen during Storm Barra (7th December 2021) at Salterns recreation ground.

The Fareham Coastal Defence Study and associated schemes are included in the Environment Agency's Capital Investment Programme, although it is likely that limited grants will be available for the delivery of the schemes. Funding for the study was approved by the Southern Regional Flood and Coastal Committee (SRFCC) in December 2020 along with funding from FBC.

Cost of proposals:

£487,500 (incl. 30% contingency) of funding has already been secured for this study, £457,500 from SRFCC and £30,000 from existing coastal budgets at FBC.

A more detailed breakdown of the budget, costs and spending profile is identified in confidential Appendix C.

Appendices:

A: Study Location Plan

B: Flood and Erosion Risk

C: Confidential - Estimated costs of proposals

D: High level timeline

Background papers: None.

Reference papers:

North Solent SMP: Minutes of Executive meeting 08/11/2010

River Hamble to Portchester Coastal Flood Risk &

Management Strategy proposed for Adoption: Minutes of Executive Meeting 20/04/2015

SCOPAC Contaminated Landfills Study Report:

<https://southerncoastalgroup-scopac.org.uk/scopac-research/scopac-landfills-study/>

FAREHAM

BOROUGH COUNCIL

Executive Briefing Paper

Date:	07 February 2022
Subject:	Fareham Coastal Defence Study (Fareham Quay and Alton Grove to Cador Drive)
Briefing by:	Director of Planning and Regeneration
Portfolio:	Planning and Development

INTRODUCTION

1. Fareham Borough Council's (FBC) coastal team, Coastal Partners, propose to undertake a coastal defence study to develop Flood and Coastal Erosion Risk Management (FCERM) scheme options for the Fareham Quay and Alton Grove to Cador Drive frontages, to reduce flood and erosion risk alongside the impacts of those risks on historic coastal landfill.
2. The project will appraise and develop preferred options for coastal management and prepare an outline design for the preferred scheme option for each location. The study will put forward a proposal to try and secure further funding for detailed designs and to implement and construct the preferred option.
3. The project will also provide an opportunity to investigate additional broader outcomes important to FBC and the wider community, not just in relation to the environment, but also to improve the public realm, regeneration, enhance amenities, improve recreation opportunities, access and community health and wellbeing.
4. The study will carry out a number of tasks; reviewing the background data, carrying out surveys and investigations, coastal process review, option appraisal, environmental screening and scoping, stakeholder engagement, broader outcomes and identify beneficiaries / contributors to fund the detailed design and construction phase.

LOCATION

5. Both sites are located in the north of Portsmouth Harbour within 3km of each other (Appendix A), with a number of properties close to the foreshore and recreational grounds.

BACKGROUND

6. Fareham Quay is situated at the end of Fareham Creek in the north corner of Portsmouth Harbour (Appendix A), the frontage is tidally dominated, relatively sheltered and subject to wind driven waves.

7. Present day at Fareham Quay, with no defences in place, there are 29 properties at risk of flooding (1/100-year event). In 100 years' time (2115), with sea level rise, this increases to 163 properties at risk of flooding under the same conditions, with a further 5 properties at risk of erosion (Appendix B).
8. The majority of the scheme area is located over a former landfill site which lies immediately behind the seawall. Landfill activities have been identified from historical operations on the site from as early as 1932. The frontage was identified as a 'medium risk' landfill site as part of the RHPS Strategy. This area is currently defended by a poor condition masonry block wall. The current defences prevent erosion of the site at present, however as the area is within the tidal flood zone, it is unclear without further investigation whether leaching of landfill occurs through the wall during periods of tidal inundation, and what the chemical constituents of this leachate would be.
9. Located within three kilometres from Fareham Quay, Alton Grove to Cador Drive, North of Portsmouth Harbour near Portchester (Appendix A), is fronted by shallow intertidal foreshore. Given the exposure to the prevailing south and south westerly winds, the frontage is susceptible to wave overtopping when strong winds combine with high tidal conditions.
10. Harbour View Road Recreation Ground is defended partly by a section of poor condition sea wall, with the remaining frontages undefended. Landfill activities have again been identified from historical operations on the site again from as early as 1932. The frontage was identified as a 'high-risk' landfill site as part of the RHPS. Most of this area is undefended and is subject to erosion. There is also a section of poor condition concrete sandbag wall, presenting a risk of tidal flooding.
11. Present day at Alton Grove to Cador Drive, with no defences in place, there are 20 properties at risk of flooding (1/100-year event). In 100 years' time (2115), with sea level rise, this increases to 237 properties at risk of flooding from the same event, with a further 1 property at risk of erosion (Appendix B).
12. Across both frontages, a significant number of properties (400) are at risk of an extreme tidal flood event during the next 100 years. Further to this, both coastal frontages are identified as historic coastal landfill sites. Continued erosion of defences in these locations could also risk exposing further landfill and potentially pollute the environmentally important Portsmouth Harbour.
13. Sea defence damage and failures present an on-going and increasing risk to public safety. At both sites, sections of the sea wall are in a very poor condition. Continued deterioration of the existing defences threatens to expose the landfill behind and places both sites at increasing risk of flooding and erosion, which may result in the unknown contents of the landfill spilling out into the internationally environmentally designated Portsmouth Harbour. Both coastal frontages and existing defences are owned and maintained by FBC and are now reaching the end of their serviceable life. Given the present poor condition of the coastal defences, ad-hoc maintenance would be insufficient to mitigate health and safety risks associated with potential localised structure failure.
14. The 2017 SCOPAC Coastal Landfill Study, funded by SRFCC levy, identified both areas as key sites to protect from flooding and erosion given the level of risk posed by former landfill in these locations. Alternative options such as landfill remediation or removal were shown to be unaffordable.

15. The Fareham Coastal Defence Study will provide a case study to further develop the understanding regarding protecting coastal landfill sites in the Solent region. Through the SRFCC, the outcomes of this study will be used to inform future coastal landfill projects both locally, regionally and nationally, sharing learning on the challenges and opportunities of appraising and designing options where coastal landfill exists. It will also provide evidence for the need for further investment for the national challenge of protecting legacy landfill at the coast.

LINKS TO STRATEGIES

16. The study falls within two policy units in the North Solent Shoreline Management Plan, adopted by FBC in 2010 and approved by the Environment Agency in 2011.
17. Fareham Quay lies within policy unit 5a23 (A27-Fleetlands) of the North Solent Shoreline Management Plan (SMP2). The management policy for this unit is to "Hold the Line". The site also sits within Strategic Management Zone 2 (SMZ2) of the RHPS, adopted by FBC and approved by the Environment Agency in 2015. The Strategy makes recommendations to sustain a minimum 1:100-year (1% annual chance) Standard of Protection against flooding through phased implementation of new defences.
18. Alton Grove to Cador Drive lies within policy unit 5a21 (Farlington Marshes to Cador Drive) of the North Solent Shoreline Management Plan (SMP2). The management policy for this unit is to "Hold the Line". The site also sits within Strategic Management Zone 1 (SMZ1) of the RHPS. The Strategy makes recommendations to maximise the life of existing defences then sustain a minimum 1:100-year (1% annual chance) standard of protection from 2030 (phased) in addition to protecting or remediating currently eroding former landfill sites.
19. Following completion and adoption of the RHPS, both Fareham Quay and Alton Grove to Cador Drive were identified as priority sites to progress schemes development. As such, a modest sum of funding was secured from FCRM Grant in Aid to develop additional evidence at each location, with the aim to further understand the sites and help progress future appraisal work. The outputs of that work will support this study.
20. The sites were also identified as key priorities for the Borough during a Coastal Management Member Briefing workshop held on 20th January 2016.
21. The proposed study falls under the Fareham Borough Council Corporate Strategy 2017-2023. Specifically, the Corporate Objective to: Protect and Enhance the Environment.

LEGAL IMPLICATIONS

22. The land at both sites is predominately owned and maintained by Fareham Borough Council, with small stretches of frontage owned privately north of Salterns Quay recreation ground.
23. As landowner, Fareham Borough Council is responsible for flood and erosion protection, together with the management of the coastal landfill sites.
24. Any future defence works following this study will be undertaken under the Land Drainage Act 1991, or Coast Protection Act 1949, where Fareham Borough Council has permissive powers to carry out coast protection work, providing certain conditions specified within the Acts are met.

ENVIRONMENTAL IMPLICATIONS

25. The local area has inter-tidal habitats which have international (Portsmouth Harbour Special Protection Area (SPA) and Ramsar), and national (Portsmouth Harbour Site of Special Scientific Interest (SSSI)) designations of nature conservation importance. These designations cover habitats, plants, invertebrates and birds. Both sites are located nearby or within these sites which are designated in part for their importance for over-wintering birds.
26. As previously mentioned, both sites are located over a former landfill site, with historical operation of landfill activities from as early as 1932. Through the RHPS, the Fareham Quay frontage was identified as a 'medium risk' landfill site. The area is currently defended by a poor condition block wall. Along the frontage at Alton Grove to Cadour Drive, this has been identified as 'high-risk'. Most of the area is undefended and subject to erosion with areas of poor condition concrete sandbag wall.
27. Potential impacts on the site shall be assessed so that the impacts of the scheme do not adversely affect the natural environment. This will be assessed through the study and normal consenting process in consultation with the relevant environmental bodies.

FINANCIAL IMPLICATIONS

28. £487,500 (incl. 30% risk contingency) of funding was secured for this study. £457,500 of which was secured from the SRFCC in March 2021 allocated over a two-year period (2022/23,2023/24). This funding will be used alongside the £30,000 of funding contributed from existing FBC coastal budgets.
29. If risk is not realised, then there is an opportunity to reinvest this back into the project, to maximise value for money.
30. The secured funding is for this study only. There will be a further gateway / decision point for the council prior to the next stage (detailed design and construction) taking place, subject to securing funding.
31. Although Fareham Quay & Alton Grove to Cadour Drive are not directly adjacent locations, they are located very close together (3km), consequently there are significant efficiencies in delivering as one project, estimated as ~£162k.
32. At present, both schemes sit within the Environment Agency's capital investment programme. However, under current Defra rules, these future schemes are unlikely to be fully funded by Government.
33. Coastal Partners have been pioneering a more open approach since it formed in 2012 by truly working with others to facilitate place shaping and place making through the delivery of its projects.
34. When delivering our projects, we identify additional objectives shared with our partners rather than just constructing flood defences. This in turn enables opportunities to secure additional funding and enhancements to the projects being delivered. As part of this study, broader outcomes and additional funding will be investigated in order to deliver as wide a range of objectives as possible which not only delivers important flood and erosion protection but also looks to improve the area for the community in terms of amenity, recreation, access, heritage and community health and well-being.

PARTNER ENGAGEMENT

35. A Project Board will be set up to agree key project decisions and will comprise representatives from FBC, the Environment Agency, the study consultant (when appointed) and with additional support from FBC legal and financial assurance officers. The Project Board is accountable for the success of the project and will provide overall guidance and direction.
36. A steering group will be set up with a number of key partners and interested parties along this frontage including FBC officers, the Environment Agency, Natural England and Historic England.
37. A Stakeholder Engagement Plan is being developed as a live document that outlines a framework for engagement with project partners and interested parties throughout the development of the study.
38. A mapping exercise will take place in the spring this year with the Coastal Partners project team, FBC officers, and the Environment Agency, to identify potential partners and interested parties and gauge their level of interest in and support of the project to help plan engagement going forwards.
39. Early engagement with statutory consultees and key interested parties will be vital for the success of the project and targeted stakeholder engagement activities will also be key.
40. The Coastal Partners project team will integrate and collaborate with the FBC communications team throughout delivery of the study. Members will be kept up to date through papers and briefings as required.

PROCUREMENT

41. A Procurement Strategy to procure professional services for the study is in the process of being prepared, and it is recommended that the Director of Planning and Regeneration be given delegated authority to procure and deliver the works, subject to the award of contract being made through an Individual Decision of the Executive Member for Planning and Development.
42. Professional services, required for the execution of this project, shall be procured and managed through the **Southern Coastal Group: Coastal, Flood and Infrastructure Professional Services Framework - 2022-2026**.

PROJECT TIMELINE

43. Following procurement of consultant support, the study is due to start in July 2022 and run for approximately 18 months until December 2023.
44. The current high-level project timeline is included in Appendix D.

CONCLUSIONS

45. The approval of the commencement of the Fareham Coastal Management Studies by the Executive will allow the funded study to identify options for flood and erosion protection which are required to protect life, property and former coastal landfill sites.

46. The project will also provide an opportunity to investigate additional broader outcomes important to FBC and the wider community, not just in relation to the environment, but also to enhance amenity, improve access and community health and wellbeing.

Enquiries:

For further information on this report please contact Adam Sennitt, Project Manager, Coastal Partners (adam.sennitt@havant.gov.uk).