
NON-EXEMPT

HAVANT BOROUGH COUNCIL

CABINET

28 October 2020

LANGSTONE FLOOD & COASTAL EROSION RISK MANAGEMENT SCHEME

FOR DECISION

Portfolio Holder: Cllr Turner, Cabinet Lead for Finance & Coastal Communities

Key Decision: YES

Report Number: HBC/018/2020

1.0 Purpose

- 1.1 To update Cabinet on the progress of the Langstone Flood and Coastal Erosion Risk Management Study.
- 1.2 To seek cabinet decision on the outline designs and route alignment options in order to allow the project to progress into the detailed design stage.
- 1.3 To seek approval to procure professional services for the detailed design contract and to seek approval for delegated authority on the contract; with an estimated value of £250k- £400k for professional services support.

2.0 Recommendation

That Cabinet:

- a) *Notes the positive progress of the outline design study and the notable success relating to securing or identifying funding to take it forwards into detailed design.*
- b) *Notes the Community Infrastructure Levy contribution from Havant Borough Council to protect the main road access onto Hayling Island from flooding. This is critical for delivery of the Local Plan however, the funding also forms an important part of the solution to reduce flood risk to the Langstone community.*

- c) *Approves the outline design and recommended route alignment options, noting the polarised community views on some stretches of the frontage.*
- d) *Delegate authority to the head of coastal partnership, acting in consultation with the portfolio holder, S151 officer and monitoring officer, to appoint professional services and approve Change Events to the NEC Professional Services Contract, given that the total contract value (estimated to be £250k - ~£400k) exceeds individual sign off limits in this case. All in compliance with procurement requirements.*

3.0 Executive Summary

- 3.1 Havant Borough Council's (HBC) coastal engineers, the Eastern Solent Coastal Partnership [ESCP], have been working in partnership with AECOM (professional consultant) to develop the leading technically, environmentally and economically viable flood risk management options for Langstone.
- 3.2 The outline design stage of the project has now been completed and was seed funded by the Southern Regional Flood and Coastal Committee (SRFCC) levy (£301k) and HBC Community Infrastructure Levy (CIL) (£75k).
- 3.3 Hayling Island, to the south of Langstone has approximately 17,500 residents and over 1000 Small Medium Enterprise businesses (B2B marketing dataset). Visitors are attracted to the island's beaches and holiday camps and the A3023 forms the only road linking the island with the mainland via a bridge, where all major utilities and services are situated.

Therefore, one of the primary focuses of the scheme is to protect the A3023 from flooding and erosion and protect the interests of Hayling Island. The A3023 runs through the centre of Langstone, with the heart of the historic village located on the east side of the road and the Sailing Club and Mill Lane residential area located on the west side of the road. To the south of Langstone, the road passes across the road bridge.

- 3.4 The Langstone area, including the A3023, is at risk from tidal flooding and is only 0.7 miles south of the major road junction, connecting the A3023 to the A27 Trunk Road and to the B2149 access to Havant Town Centre.

Should the road be inundated by the sea at Langstone, the one and only road transport link to Hayling Island will be disrupted and the island would be 'cut-off' from the mainland for a period of time. This also has implications for the health and safety of residents on Hayling Island because emergency service access to the island would be

restricted or severed. With climate change and sea level rise the occurrence of such events is set to increase significantly.

A recent example of the type of disruption that can be caused by flooding or road closure occurred on the 14th June 2019. A water main burst on the A3023 on the southbound carriageway right by the entrance to the Langstone Bridge. This resulted in a lane closure which had profound impacts on the entire regions road network with gridlock on many roads in the area including the A27 and A3 for up to 4 hours during peak rush hour.

- 3.5 Another primary focus of the scheme is to reduce flood and erosion risk to life and property in Langstone. For the present day there are 72 residential properties at risk from a 1 in 200 year (0.5% AEP) tidal flood event. There are also 4 non-residential properties at risk of flooding from the same return period event. Due to sea level rise, in 100 years' time 122 residential properties and 9 non-residential properties are expected to be at risk from a 1 in 200 year (0.5% AEP) event (See **Appendix 1** for present day and future 1/200 yr. flood mapping).
- 3.6 Many of the current defences along the Langstone frontage are also in poor condition and have residual lives of less than 5 years without significant maintenance. Ground and structural investigation works (2018/19) found that many of the defence lengths have no foundations and are being undermined, placing the properties only meters away at risk of erosion or falling into the harbour.
- 3.7 The total value of the detailed design phase costs is estimated at £600,000 - £700,000, while it is anticipated that the external professional services will account for approximately (£250,000 - £400,000).
- 3.8 A core scheme has been identified through the outline design study. At present it is estimated that the cost of this scheme is in the region of £4.5 – £5.1 million (cash costs including risk and appraisal costs). This cost will be refined and finalised during the detailed design stage of the project.
- 3.9 A further Council Decision will be required, following the approximate 24-month detail design phase, before appointing a contractor and moving into the construction phase of the project. At that point there will be more certainty over the construction and ongoing maintenance costs associated with the project.
- 3.10 An economic appraisal has been developed for this study in line with the HM Treasury and Environment Agency FCERM Appraisal Guidance (FCERM-AG, 2010).

The do-nothing cash damages for a 50-year scheme are £28.7 million (cash) for all frontages. Section 6 provides an overview of the direct and indirect benefits of undertaking a scheme at Langstone.

- 3.11 The core scheme however, does not include erosion protection to Langstone sailing club, which is estimated to cost an additional £400k. The core scheme does not include protection to a group of private residents at Mill Lane which would be an estimated additional cost of approx. £2 million. The project team are working closely with the sailing club, landowners and residents in the hope that they can raise the required funding to be part of the construction phase of the scheme.
- 3.12 Therefore, the do-nothing cash damages for the proposed 50 year core scheme are 24.6 million (Cash). These are traditional flood and erosion damages and do not include the other wider benefits discussed in section 6.
- 3.13 There has been significant engagement on the project since it started in 2018 (further detail below in section 12). However, in response to some of the leading options at certain locations the Save Our Shore Group was formed by a group of 6 concerned residents.

The project team has met subsequently with the group along with representatives from the wider residents and key stakeholders. As part of that process the project team re-examined options along the Royal Oak frontage, the frontage from the end of Langstone High Street to the Ship Inn, along with a resident proposed option of a harbour barrage structure.

- 3.14 There is clear agreement in the community that flood and erosion risk should be reduced with wide support for a project. However, there has been a polarisation of opinion over the options and route alignments at the Royal Oak. Although it still exists, there is less division over the High street to Ship in frontage leading options.
- 3.15 Many of the leading options are constrained by industry guidance and aspects such as habitat regulations and the conservation and heritage aspects of the location. A full appraisal of all the options available has been undertaken and the most technically appropriate, environmentally sustainable, financially affordable and socially acceptable options have been arrived at.
- 3.16 Key regulators have been involved in the development of the options including Natural England, The Environment Agency, Historic England, The Local Planning Authority, Langstone Harbour Board and Chichester Harbour Conservancy.
- 3.17 This report seeks a cabinet decision to support the leading options being proposed and take them forward into detailed design.

4.0 Additional Budgetary Implications

- 4.1 There are no budgetary implications as a result of the decisions set out in this report. Funding for the Detailed Design stage has been fully secured through HBC Community Infrastructure Levy. See resources section 8 for information on costs and funding.

5.0 Background and relationship to the Corporate Strategy and Directorate Business Plan/s

- 5.1 HBC as the coast protection authority is not legally required to do anything to protect against flooding and erosion however, it has permissive powers to carry out such works where there is a wide public benefit, clear economic benefit and an achievable solution.
- 5.2 Private landowners are responsible for flood and erosion protection on their own land. They must act within statutory planning regulations and other applicable legislation.
- 5.3 The Flood and Coastal Erosion Risk Management (FCERM) process is built around a hierarchy of plans and schemes which enable Local Authorities, such as HBC, to plan their work to manage coastal risks. In England there is a 3-tiered approach to coastal management: Shoreline Management Plan (SMP); Coastal Strategy; Coastal Scheme.
- 5.4 The first East Solent SMP was approved and adopted in 1997, setting out the strategic management options to manage coastal risk to people, the developed, historic and natural environment over 100 years. The preferred management policy along the Langstone frontage was to 'Hold The Line'.
- 5.5 This SMP was updated with the North Solent Shoreline Management Plan (SMP2), adopted by HBC (Full Council), and approved by the Environment Agency in 2010.

The SMP2 management policy for the Langstone frontage, over the next three Epochs (100 years) is 'Hold the Line'.

- 5.6 In order to manage and understand how to implement this SMP policy the Environment Agency (EA), with support from HBC, developed the Portchester to Emsworth FCERM Strategy which recommended sustaining the flood protection to Langstone to a minimum 1 in 75 year (1.33% AEP) standard of protection over the next 100 years. This was adopted by HBC (Cabinet) in March 2013 and approved by the Environment Agency the same year.

5.7 The Langstone FCERM Study and Scheme is recognised as critical to the delivery of the Draft Local Plan, to ensure safe access and egress onto Hayling Island by protecting the road from flooding and erosion. As such it is the number 1 priority project on the Community Infrastructure Levy list of projects in terms of receiving funding.

5.8 The Langstone Scheme supports the following Pre-submission Local Plan Policies

C2 Tourism
DR2 Regeneration
E13 Historic Environment and Heritage Asset
E14 The Local Ecological Network
E15 Protected Species
E16 Solent Special Protection Area
E17 Solent Wader and Brent Goose feeding and roosting sites
E2 Health and Wellbeing
E4 Development on the Coast
E5 Chichester Harbour Area of Outstanding Natural Beauty
IN1 Effective Provision of Infrastructure

6.0 Scheme Benefits

6.1 Direct - Flood and Erosion Risk

An economic appraisal has been developed for this study in line with the HM Treasury and Environment Agency FCERM Appraisal Guidance (FCERM-AG, 2010). This is available on request.

The do-nothing cash damages for the 50-year core scheme are £24.6 million (or £10.5 million in discounted present value terms). **Appendix 2** provides an overview of the direct and indirect benefits of undertaking a scheme at Langstone.

6.2 Indirect - Commuter Disruption

Over 70% of those of working age commute off and onto the island using a car and 84% of those living on the island use a car as their main form of transport (2011 CENUS Data). As part of an adjacent study a Gross Value Added (GVA) assessment has been undertaken to estimate the economic damages caused by flood disruption to commuter journeys along the A3023 from Hayling Island.

In summary, the economic damages associated with disruption to commuters is estimated to be almost £20 million over the next 100 years (£4million in discounted present value terms).

Although 55% of those leaving the island are travelling to other areas of Havant, several other locations are listed as destinations (from a resident survey) including Chichester, Fareham, London, Portsmouth and Southampton, which demonstrates the large spatial economic impact of the A3023 flooding.

6.3 Indirect - Impact on business

The first round and dynamic economic impacts of the do-nothing scheme option scenario have been calculated to highlight other local economic impacts as part of the evidence base. The results showed that over the next 10 years the existing business disruption to the 2 public houses located adjacent to the frontage could collectively amount to £231k through loss of earnings. Not taking into account the displacement of employees.

6.4 Indirect - Tourism and Recreation Disruption

The potential impact of flooding on tourism and recreation around greenspaces within Langstone has been estimated using Exeter University's Outdoor Recreation Valuation (Orval) tool and an analysis of coastal visitor surveys which were conducted within Langstone. ORVal estimates showed that there is an average of 43,147 visits to Langstone each year for outdoor recreation, worth a welfare value of £178,147. Doing nothing would amount to losing this value on an annual basis.

6.5 Recreation and coastal access are also of huge importance to the local community and the scheme will improve coastal access in line with present day regulation around accessibility.

6.6 Indirect - Mental Health Benefits

The project team engaged with the EA's Flood & Coastal Risk Management Research team to investigate how emerging guidance on mental health benefits could be applied to Langstone. The Flood Hazards Research Centre calculated the additional losses that the new mental health data would produce, using all of the different possible applications of the mental health data. The most likely technique that will be approved in any updated FCERM funding guidance showed the potential for an additional £398,627 of additional economic losses in relation to mental health if nothing is done.

6.7 Indirect - Heritage and Conservation

Langstone sits within a conservation area and is of huge historical importance to the region. Preserving this for future generations is an important driver for the scheme. It is noted by HBC's Conservation officer that intervention in the form of a scheme may serve to protect heritage impacts in Langstone more than doing nothing – a scenario where heritage features would be lost to erosion and flooding.

6.8 Indirect - Non-Quantified Spill over Impacts:

Flooding and erosion are likely to lead to a number of additional impacts to the local economy which have not been quantified as part of the GVA assessment for this study. These impacts are known as 'spillover' impacts and include:

Agglomeration impacts: should FCERM measures be put in place at Langstone to reduce the flood and erosion risk, this could incentivise the existing businesses to remain in their current preferred location and

benefit from the productivity gains associated with proximity to other similar businesses, for example, sharing ideas, knowledge, supply chains etc.

Interdependencies: FCERM measures will not only protect homes and businesses they will also protect the key public infrastructure on which businesses and the local economy relies upon. FCERM measures would therefore help to avoid disruptions associated with power outages, transport (affecting workers, customers or deliveries), communications and water supply.

Business confidence: an increase in flood risk could affect business confidence which in turn could lead to decreased business investment and reduced productivity (or increased investment and productivity if FCERM measures are implemented).

Insurance: FCERM measures could lead to a reduction in the cost of insurance which in turn can affect credit because flooding insurance (in certain locations) is often required by lenders. At the time of writing this report further national research and guidance is required to investigate the link between FCERM measures and insurance to gauge the significance of this.

7.0 Options considered and recommendation

- 7.1 A full suite of options was tested in line with the FCERM Appraisal Guidance and in collaboration with the regulators. The following sections set out the leading options per shoreline frontage and where relevant sets out the alternative options explored following the further detailed engagement undertaken following concern from some parts of the community.
- 7.2 The strategic proposed approach is to develop an adaptive FCERM scheme with a 50yr design life and which offers a present day 1/200yr standard of protection. At the end of the design life, if sea levels rise at the rate currently predicted, the scheme will offer a 1/75yr standard of protection.
- 7.3 This approach is in line with the Portchester to Emsworth Strategy which recommends a minimum 1 in 75 year Standard of protection and to take an adaptive approach to Flood risk at Langstone. Towards the end of the 50 year design life the approach for the next epoch will need to be considered, along with the latest understanding and records of the impacts of climate change, and the solution adopted may be different at that time. It is worth noting that the difference between a 1/75 and 1/200 year standard of protection, in terms of still water levels within the harbour, is within the range of 7-10cm (present day).

- 7.4 Do Nothing is a baseline option considered for all FCERM schemes to understand the impacts so that they can be compared to the Do Something options.

Doing Nothing was discounted as an option early on in the study process because it does not deliver the objectives of the adopted SMP or the adopted Portchester to Emsworth FCERM Strategy. It also does not meet the criteria or intent under which the funding was provided by the Southern RFCC and HBC CIL to undertake the study.

However, if no agreement can be reached or no decision is made to take the project forward this would be the default position for HBC. In this instance residents and landowners would, as is currently the case, be responsible for managing their own risks in terms of flooding and erosion. Under a Do Nothing scenario any future failure or maintenance of the defence here is not and would not be the responsibility of HBC under the current legislation.

- 7.5 The Leading Options for cabinet approval are listed / presented in the following sections. **Appendix 3** depicts a map with the frontage unit names and **Appendix 4** shows visualisations (where available) and alignments of the leading options. For the purposes of the study the frontage was broken down into Option Development Units (ODU) and then further sub sections dependant on the most appropriate defence types for that location.

ODU 1: Langstone West, between the east bank of the Langbrook Stream to the edge of the formal defences at the northern end of Langstone Spit

ODU 2: Sailing club and Langstone Spit, including the spit, sailing club and A3023 revetment

ODU 3; Langstone East, between the Ship Inn car park and the Old Mill slipway

ODU 4: Old Mill and Mill pond, between the Old Mill slipway and the slipway to the north east of the Mill pond.

- 7.6 **ODU1 – Langstone West**

ODU1a – Setback Earth Embankment

OCU1b – Capital refurbishment of existing wall

Recommendation to approve the leading outline design options for the entirety of ODU1 and carry forward into detailed design.

Noting that this entire unit does not form part of the core scheme and will only be constructed subject to securing additional funding from the private landowners or an alternative source.

7.7 **ODU2 - Sailing club and Langstone Spit**

ODU2a – Rock Armour

ODU2b – Earth Embankment (south section) and raised footpath (north section)

Recommendation to approve the leading outline design options for the entirety of ODU2 and carry forward into detailed design.

Noting that ODU2a frontage does not form part of the core scheme and will only be constructed subject to securing additional funding from the private landowners/Sailing Club or an alternative source.

7.8 **ODU3 – Langstone East**

This is the most contentious frontage in terms of polarised community views on the options and where the most additional investigation has been undertaken to reach a decision on recommended leading options. Where alternatives have been explored an explanation of them is given alongside a rationale as to why those alternatives were not selected. In general there was good support for the options which relate to the Ship Inn.

ODU3b – Flip Up Barrier or flood gate across the Ship Inn Car Park.

ODU3d/e – Flood Wall with glass top

ODU3f/g/h – Flood Wall with board walk (or similar structure)

The options along ODU3f/g/h received mixed views from the community engagement undertaken. During the public consultation events in Jan 2020 49% (of the 86 responses) supported or partially supported the leading options, 38% partially did not support or did not support at all and 13% were undecided.

The current leading options are constrained by the environmentally designated foreshore and in places property boundary walls to the rear.

Encroachment onto the intertidal habitats is not acceptable under the habitat regulations if an alternative option exists (such as the

boardwalk or similar structure), so a widening of the footpath is not appropriate or acceptable to the regulator Natural England.

Utilising or rebuilding the existing properties boundary wall is not believed, at this outline stage, to be technically possible due to the varying ground levels to the rear and the poor structural integrity of the existing wall. However, during the next stage of the project this will be tested further to see if the wall can be used and if it can this will reduce the need for the footpath/boardwalk to encroach out into the harbour. The look, feel, finish, materials used for the footpath or similar structure will be decided at the next stage of the project in collaboration with all parties.

When rebuilding the prom and the flood wall at the back of the path the recommendations in the Department for Transport's Guidance Inclusive Mobility (2005) promote a foot pedestrian path width of 2.0m, and minimum of 1.5m. These widths are best practice and the disability discrimination act requires that reasonable adjustments need to be made. New building or modifications are a way to plan and deliver this adjustment. HBC should use the refurbishment as an opportunity to make those reasonable adjustments and the Inclusive Mobility Guidance indicates what levels of adjustment should be made.

Given that encroachment into the foreshore is not acceptable a boardwalk or similar structure is proposed to maintain access and maintain path width. Whilst this still encroaches or shadows the foreshore it does so less to less of a degree than a solid structure.

The ability to build a solid footpath structure outward onto the foreshore, given the perceived Heritage Impacts of a boardwalk by some parts of the Langstone community, was re-explored with Natural England, the Local Planning Authority and the conservation officer at HBC at a meeting on the 28th April 2020. Their collective advice remained that the boardwalk or similar overhanging structure was the appropriate option along this frontage to maintain access and the Public Right of Way. They confirmed that a no path option is not acceptable, a wider footprint structure is not preferable on environmental grounds (which in this location would not be outweighed by heritage concerns). Therefore, weighing up the evidence, the boardwalk or similar structure proposal is the most appropriate option available to take forward.

Maintaining access was raised as a high priority by the community as an outcome of any scheme, a point which was re-iterated at the residents workshop held in March 2020. Removing the footpath entirely would not be acceptable to many and is something Natural England would not be able to support given it would direct foot traffic onto the designated foreshore.

The recommendation to cabinet is therefore to approve the current leading option of a floodwall and boardwalk/footpath, or similar structure, as the deliverable option in this location.

ODU3i – *Flood Proof Existing Building or Flood Wall and Boardwalk (detail to be confirmed during the detailed design stage of the project)*

ODU3j – *Flood Gate*

ODU3k – *Frontline Floodwall in front of the Royal Oak to Slipway*

ODU3k has been one of the most contentious frontages given the potential visual impacts of the 1.1-1.3m high floodwall on top of the existing quay wall proposed in front of the Royal Oak and properties here.

During the public consultation in Jan 2020 34% (of the 82 responses) supported or partially supported the leading options, 60% partially did not support or did not support at all and 6% were undecided.

Following a further public workshop on the 9th March with the Langstone SOS group, frontline residents and other key stakeholders the option of diverting the flood defence behind the Royal Oak and cottages along this frontage was suggested. As part of this option the promenade in front of the Royal Oak would be built as an erosion protection structure only. Working with the professional services consultancy AECOM the project team undertook further appraisal work to explore this alternative option at additional cost to the project.

Appendix 5 illustrates the additional potential route alignments which were evaluated.

These included

- A - The current leading frontline option which provides flood and erosion protection to all properties. Cost ~ £4.5 - £5.1 million, present value benefits ~£10.5 million.
- B - An option to leave the Royal Oak Frontage out of the scheme completely but continue to provide flood protection to the majority of Langstone Village. No change visually but accept over time the defences would fail and the responsibility for flooding and erosion to the properties behind remains the responsibility of the landowners. Cost ~£3.7 - £4.2million, present value benefits ~ £9.4million.
- C - An option to run between the high street properties into the field behind and to only provide erosion protection to the Royal Oak and Cottages but continue to provide flood protection to the

majority of Langstone Village. Cost ~ £4.2 - £4.9million, present value benefits ~ £9.7million.

To ensure the wider communities views on the options being investigated were taken into account in the decision-making process nearly 500 leaflets were dropped to the properties of residents in Langstone with questionnaires giving them the opportunity to indicate their preference in terms of the options listed above. The questionnaire and website information and links were also sent out to the Langstone Stakeholder Working Group Members, frontline residents and SOS group via email so that they could ensure the wider community were made aware of the questionnaire should it be overlooked or not received. Some reported not receiving the leaflet, where ESCP were made aware further leaflets were issued.

Out of the 108 responses received

- 61% said their preference was Option A (Projects leading option)
- 16% said their preference was Option B (No protection to royal Oak)
- 13% said their preference was Option C (Erosion protection only to Royal Oak)
- 10% said they did not support any of the options.

The frontline residents in the cottages along this frontage are concerned about flood risk and do not support being left out of the flood protection scheme. However, whilst some of them strongly support option A, others do not support any of the options.

Members of the SOS group and some residents reported to the project team that they did not intend to respond to the consultation because they felt it was potentially misleading without further detail. This was unfortunate given that no further detail exists at this stage of the project and given that the scope of the project was extended considerably in response to the request to investigate alternative options along the Royal Oak frontage.

A meeting was held with Greene King, owners of the Royal Oak pub on the 6th May 2020 to explore their views on the options. They have been involved in the project and the development of the options since it began. Their view is that having a new quay wall with a flood wall on top offers the best outcome for the Royal Oak pub, accepting there will be some impacts on views. This was confirmed formally in writing. They are keen to be further involved in the Detailed Design stage to understand how the impacts on views from the Royal Oak can be managed and how they can contribute.

It is recognised that there are polarised views within the community. However the regulators Natural England, The Local Planning Authority, Chichester Harbour conservancy and HBC's Conservation officer are supportive of the preferred options and as previously noted the Conservation officers view is that intervention in the form of a scheme may serve to protect heritage impacts in Langstone more than doing nothing – a scenario where heritage features would be lost to erosion and flooding.

The recommendation to cabinet is therefore to approve the current leading frontline option in this location which provides flood and erosion protection to all properties.

This is based on a balanced consideration of the higher return on investment in terms of benefits provided, the support of the some of the frontline residents who live along this frontage, the Royal Oaks preference on the options, the views of the regulators and the wider community views sought through several engagement exercises.

Whilst it is a complex frontage with many different views on the right solution a Cabinet decision will provide clarity for the project and the next stage and avoid uncertainty and additional costs of change in the future as the project progresses. Throughout the detailed design stage every effort will be made to minimise the impacts on views and heritage in close collaboration with the community and residents affected, the LPA and conservation officer, Chichester Harbour conservancy and the Greene King.

ODU3i - Setback floodwall (footpath section) and earth embankment (field area)

Recommendation to approve the leading outline design options for the entirety of ODU3 and carry forward into detailed design.

7.9 **ODU4 – Old Mill and Mill Pond**

Following engagement with the landowner options were explored for this frontage but do not form part of the core scheme.

ODU4a - The leading options for this frontage are Demountable Defences and Property level protection for the Old Mill

ODU4b – Floodwall

Any further investigations of works to this frontage will remain the responsibility of the landowner.

No recommendation to cabinet as this frontage will not form part of any future public works.

7.10 **Wider Strategic Options**

A resident and former member of the Langstone SOS group lobbied for the option of a harbour wide barrage to be reconsidered as a more strategic option. In response, and to demonstrate that HBC is open to ideas from the community, the project team commissioned AECOM to re look at this option and a technical note was produced which showed that whilst it was technically possible, the prohibitive cost and detrimental environmental impacts of the option meant it was undeliverable under the current framework; which was why it was originally discounted as a credible option.

Both Natural England and The Chichester Harbour Conservancy wrote to the project team to indicate that they would object to such an option.

The background to the work, all of its outputs and the letters from Natural England and the Chi Harbour Conservancy are all available at - <https://www.escp.org.uk/Community-Proposed-Options>

8.0 Resource Implications

8.1 Financial Implications

8.2 A core scheme has been identified. At present it is estimated that the future cost of this scheme is in the region of £4.5 – £5.1 million (cash including appraisal costs).

8.3 The outline design stage of the project has now been completed and was seed funded by the Southern Regional Flood and Coastal Committee levy (£301k) and HBC CIL (£75k). This funding has been secured and spent. Additional allocated CIL funds have also been spent to undertake further engagement with concerned residents and to investigate alternative defence alignments and options following concerns raised by the SOS group. Approved CIL spending set out in Full Council Meeting minutes - 27th February 2019.

8.4 To undertake the detailed design and construction of the capital project stage, the project team have identified or are actively seeking the following funding sources of funding.

£2,550,000 HBC CIL – Secured. To undertake detailed design (estimated ~ £600k) and contribute towards construction.

£191,000 Southern Regional Flood and Coastal Committee Levy – Previously allocated but subject to business case after detailed design.

£600,000 Southern Regional Flood and Coastal Committee Levy – allocated following a bid in April 2020.

~£600,000 Flood Defence Grant in Aid – Allocated subject to business case after detailed design.

£250,000 – Hampshire County Council (HCC) have responsibility for a right of way and own some sections of the shoreline at Langstone, alongside having highway responsibility for the road bridge onto Hayling Island. There have been very positive conversations with HCC who have written to the project team to commit to contribute towards the scheme given its positive impact on protecting the highway infrastructure, the bridge to Hayling and the public right of way from flooding and erosion. The figure stated is to be re-confirmed following Covid -19 impacts on budgets. HCC are also hoping to contribute in kind by offering free compound space during construction.

£400,000 Highways England EDF – 2nd round application submitted, awaiting decision. Given the potential impact of flooding on their strategic road network.

TBC - Public House Brewery Contributions; currently engaging with 2 Breweries. At present their contribution is likely to be through waiving any compensation they may be entitled too during construction. In kind figures to be determined as detailed design progresses but likely to be in the region of £50-100k.

TBC – Utilities companies whose assets will be protected by the scheme in certain locations inc; Portsmouth Water, Southern Water, BT, Scottish and Southern Electric and Southern Gas Network. After significant engagement many of them have provided in kind free mapping and advice, value to TBC. At the construction stage Portsmouth Water have indicated they may waive relocation or diversion costs as it offers them an opportunity to undertake works.

TBC - Resident and private landowner contributions; being engaged.

- 8.5 At present the core scheme requires an additional £650k – £1.25m. We recognise that the scheme costs will only be certain at the end of the detailed design stage and when we submit our outline business case to the Environment Agency for grant. So, these estimates of cost may go up or down, but it is important to have the funding secured and profiled at the right time to bring certainty to the scheme and gain buy in from all funding partners.
- 8.6 There will be continuing discussion with all funding partners throughout the detailed design stage of the project in order to close the current funding gap and seek contributions towards the construction and ongoing maintenance costs for the 50 year design life of the scheme. Once there is certainty on project costings the funding partners will be engaged again directly to seek funding contributions.

8.7 Future maintenance of structures and the operation of flood gates will be necessary. Where HBC construct new defences on private or land of unknown ownership clear arrangements will need to be made as to who is liable for ongoing maintenance of structures. This will be determined during the detailed design stage of the project. Generally, however, where defences are constructed by a Risk Management Authority the future maintenance of those structures becomes their responsibility in terms of health and safety and also in ensuring that they operate as intended.

8.8 As a Landowner, HBC have a duty of care to their neighbouring landowners.

9.0 Human Resources Implications

There are no Human Resource implications

10.0 Legal Implications

10.1 HBC as the coast protection authority is not legally required to do anything to protect against flooding and erosion, however it has permissive powers to carry out works where there is a wider public benefit, clear economic benefit and an achievable solution. For example, protecting the only road bridge onto Hayling from flooding and erosion whilst also protecting an existing Langstone community.

10.2 Private landowners are responsible for flood and erosion protection on their own land. They must act within statutory planning regulations and other applicable legislation.

10.3 Any future works will be carried out under the Land Drainage Act 1991, or Coast Protection Act 1949, where Havant Borough Council have permissive powers to act in the public interest; doing so only when there is:

- a clear economic benefit;
- an appropriate engineering solution can be achieved; and,
- no contravention of environmental legislation.

10.4 The Council is required to comply with procurement regulations when carrying out the procurement of public contracts; this report proposes entering into a contract for a value exceeding the EU procurement threshold and therefore the exercise must comply with the full EU regime. This report proposes to utilise an existing EU framework arrangement which will appropriately manage and greatly reduce any risk of non-compliance.

11.0 Risks

- 11.1 The risks of Doing Nothing are presented in section 6 above.
- 11.2 The detailed design works will comply with the latest Construction, Design & Management (CDM) regulations.
- 11.3 Risks to the Council will be minimised by the normal contract procedures and requirements for any future works.
- 11.4 Any current health and safety risks are being managed through regular inspections monitoring of the condition of the structure. However, this will become increasingly difficult to manage as defences continue to deteriorate.
- 11.5 As is currently the case HBC have no responsibility for maintaining structures in private or unknown ownership. Private owners also have no obligation to maintain their own defences. There is an increasing risk that if no further design or construction work is progressed it is expected that many of the structures could be at risk of collapse and significant failure requiring an emergency response and with potential loss of buildings, infrastructure and possibly life.

12.0 Design Contract

- 12.1 In order to deliver the detailed design stage of the work a design consultant will be appointed through the Coastal Services Professional Services Framework Agreement
- 12.2 The Professional Services Framework Agreement is a multi-supplier framework which is available to 22 contracting authorities on the south coast to procure services in relation to FCERM. The framework commenced in May 2016 with an initial term of 4 years and optional extensions of up to 8 further years. This has currently been extended by 18 months.
- 12.3 The framework has been procured following a full OJEU compliant procurement as detailed in Contract Notice No. 441754-2015-EN (Dec 2015) and Award Notice No. 300561-2016-EN (Aug 2016). The frameworks have been set up and are managed by the Eastern Solent Coastal Partnership, with Portsmouth City Council acting as the host authority.
- 12.4 A mini-bid for professional services is intended in Autumn 2020 for the detailed design phase of the project. The HBC Capita Procurement Service will support ESCP throughout the tender process.
- 12.5 It is intended to procure this contract using the NEC Professional Services Contract using Option G (term contract). Option G allows for work activities to be called off a priced task order schedule. Where

work is procured that isn't included in a task order a priced schedule of rates is used to determine the activity's value.

- 12.6 This type of contract enables a degree of flexibility as well maintaining access to the Detailed Designer throughout the construction period.
- 12.7 With this option it is anticipated that the total contract value will change as the project progresses. Cost and Time changes are managed through Change Events which are approved through the project governance process. It is important that the project team are able to respond in a timely manner to such change events, which occur as a normal part of any contract.
- 12.8 As such specific delegation to the Head of Service for Change Event approval is being requested given that the total contract value will exceed individual sign off limits in this case.
- 12.9 The total value of the detailed design phase costs are estimated at £600,000 - £700,000, while it is anticipated that the external professional services will account for approximately £250,000 - £400,000.

Recommendation to delegate authority to the head of coastal partnership, acting in consultation with the portfolio holder, S151 officer and monitoring officer, to appoint professional services and approve Change Events to the NEC Professional Services Contract, given that the total contract value (estimated to be £250k - ~£400k) exceeds individual sign off limits in this case. All in compliance with procurement requirements.

- 12.10 A further Council Decision will be required, following the approximate 24-month detail design phase, before appointing a contractor and moving into the construction phase of the project. At that point there will be more certainty over the construction and ongoing maintenance costs associated with the project.

13.0 Consultation

- 13.1 Community views form an important part of the wider overall assessment of FCERM options which also includes investigating what's technically possible, environmentally acceptable and financially affordable. Given differing vested interests in coastal projects there are often polarised views of what is acceptable in terms of change at the coast.
- 13.2 Extensive public and statutory consultation was undertaken for the 1997 Shoreline Management Plan and the updated 2010 Shoreline Management Plan.

13.3 Extensive consultation took place as part of the Portchester to Emsworth FCERM strategy (2013).

13.4 The Outline Design stage of the project has been guided by a detailed communications and engagement plan. As part of this work a Langstone Stakeholder Working Group (LSWG) was set up at the start of the project made up of key parties in the community, landowners and the public houses.

The LSWG was made up of representatives from - Langstone Residents Association, Langstone Village Association, Civic society / Solent Protection Society, Langstone Sailing Club, Langstone Conservation Group, Langstone Cutters rowing club, Chichester Harbour Conservancy, Langstone Harbour Board, Greene King, Fullers, HBC and HCC Cllrs, private landowners and individuals.

13.5 The group had a Terms of Reference with an aim to - Create a collaborative partnership between key stakeholders in the Langstone area and the project team at the Eastern Solent Coastal Partnership (ESCP)/ Havant Borough Council (HBC) to represent the local community through the Langstone Option Appraisal Study.

13.6 3 meetings and workshops were held at key project stages to seek views and feedback from the community to inform and influence option development. The intention was that the representatives of the group would act as a conduit for information between the project and the public and vice versa, to create a culture of no surprises. It is acknowledged that this did not work as hoped and the group was unable to manage individual voices and priorities from making separate representations.

13.7 Public exhibitions were held in November 2018 to show the shortlisted options to the public and seek their views. The results of this were used to shape the selection of the leading options.

13.8 All frontline homeowners and landowners were met on an individual basis within their homes to show them the leading options and talk to them about their views on the proposals, before wider public exhibitions were held. This consisted of 11 individual meetings.

13.9 In Nov 2019 the SOS Langstone group was formed by 6 residents in response to concerns from some parts of the community over the options being presented. They produced a website and brochures and held a public meeting.

13.10 Public exhibitions were held in Jan 2020 to seek public views on the leading options. Leaflets, brochures and online questionnaires were produced.

- 13.11 In Jan 2020 the project team and the HBC deputy leader met with the SOS Langstone group to further understand their concerns and subsequently a community workshop was held on the 9th March to re-examine the options and concerns and set out to the community the process which has been followed. This was a positive meeting and there was agreement that some of the options be re-examined to be certain that the right options are taken forward.
- 13.12 In June 2020 a survey was developed to seek further community views on the alternative alignment options for the Royal Oak frontage (refer to section 7.8).
- 13.13 All of the engagement and consultation has been thoroughly taken into account when developing, shaping, determining and finally recommending the options set out in this report for Cabinet Decision.
- 13.14 Despite extensive liaison and discussion with concerned residents some do not agree that the correct guidance has been followed in determining scheme options, that the natural environment must be prioritised over heritage due to environmental law, or that a harbour wide barrage is not deliverable. Despite extensive follow up work to understand these concerns and provide evidence and re-assurance these views remain.
- 13.15 Whilst the community views remain polarised along some frontages, 76% (out of 85 responses) from the consultation in Jan 2020 agreed that there was a need to reduce flood and erosion risk to the Langstone community.
- 13.16 Following the exhibition events in January 2020 and workshop in March 2020, detailed reports and the community responses can be found on our webpage <https://www.escp.org.uk/langstone>.
- 13.17 Given the strongly polarised views within the community there may be future challenges to the planning process at the end of the detailed design stage of the project. This will be mitigated through engagement with regulators and the community.

14.0 Communication

- 14.1 The communications and engagement plan will be further developed for the detailed design stage of the project and remain a live document.
- 14.2 The coastal partnership maintains a webpage providing further details on the history, progress, plans for the Langstone Scheme.
- 14.3 There will be continued liaison with the Langstone Community throughout the detailed design stage via letters, brochures, exhibitions and workshops at key stages.

Appendices:

APPENDIX 1	Present day and Future Flood Mapping
APPENDIX 2	Direct Do-Nothing Flood Damages Infographic
APPENDIX 3	Option Development Unit Map
APPENDIX 4	Leading Options per Option Development Unit
APPENDIX 5	Alternative Route Alignments Considered for Royal Oak Frontage
APPENDIX 6	Public Engagement and Consultation Outcomes

Previous Background Papers:

- ***Cabinet Meeting – 20th October 2010. Recommendation to adopt North Solent Shoreline Management Plan Policy and Action plan Items.***
- ***Council Meeting– 15th December 2010. Decision to adopt North Solent Shoreline Management Plan Policy and Action plan Items.***
- ***Cabinet Meeting – 20th March 2013 – Recommendation and decision to adopt the Portchester to Emsworth FCERM Strategy coastal management options.***
- ***Cabinet Meeting Minutes –13th February 2019 – Recommendation for CIL spending on Langstone Study / Scheme and Hayling Strategy.***
- ***Council Meeting–27th February 2019 – Recommendation to approve CIL spending on Langstone Study / Scheme and Hayling Strategy.***

Relevant Websites:

North Solent SMP

<http://www.northsolentsmp.co.uk/>

Portchester to Emsworth FCERM Strategy

<http://www.escp.org.uk/portchester-castle-emsworth-strategy>

Langstone Project Website

<https://www.escp.org.uk/langstone>

Environment Agency FCERM Guidance

<https://www.gov.uk/guidance/flood-and-coastal-defence-appraisal-of-projects>

Agreed and signed off by:

Monitoring Officer: Daniel Toohey & David Brown (21/08/2020)

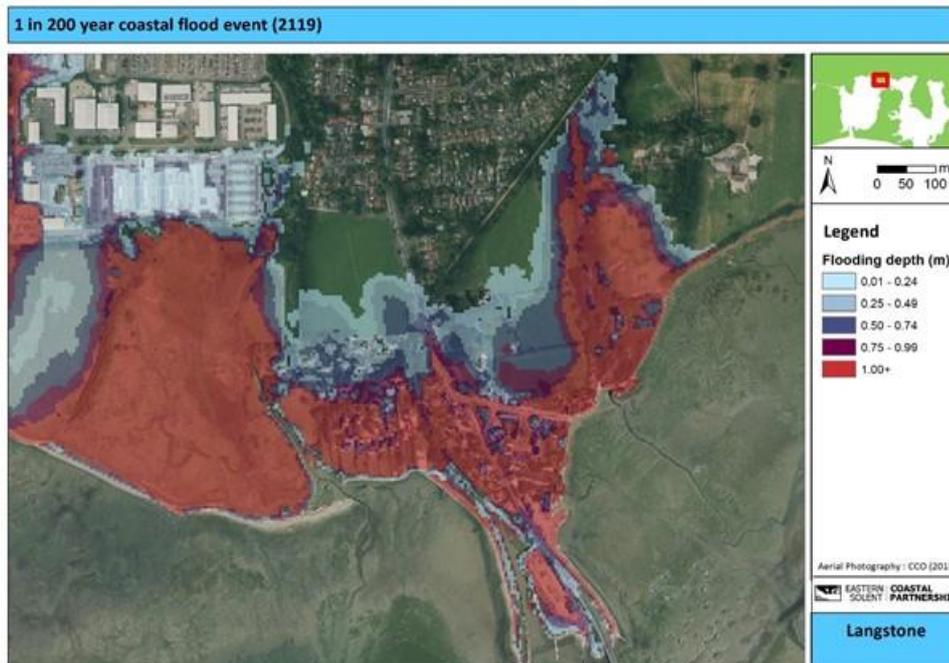
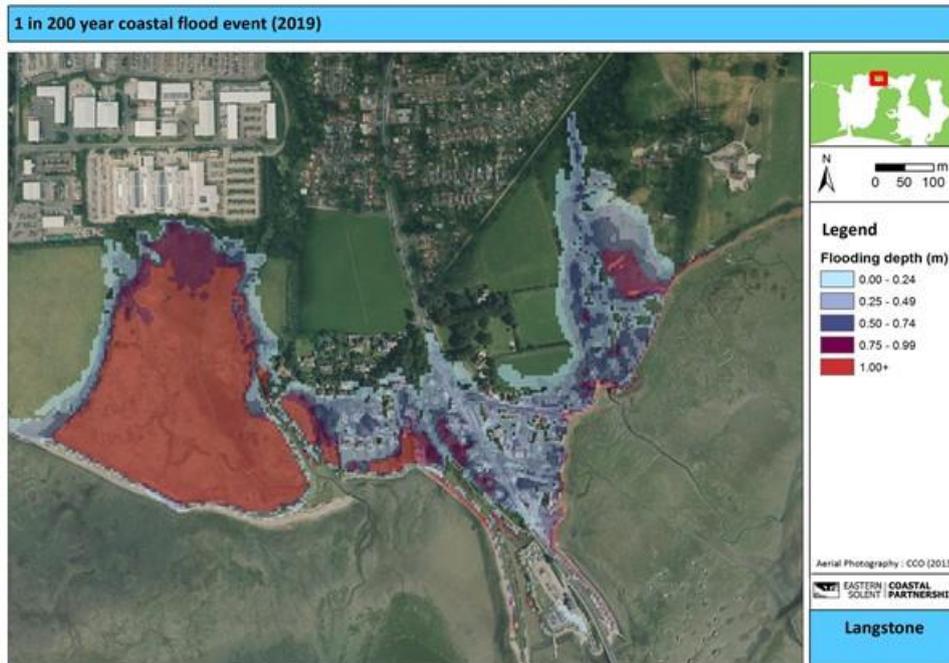
S151 Officer: Lydia Morrison (24/08/2020)

Director: Simon Jenkins (06/07/2020)

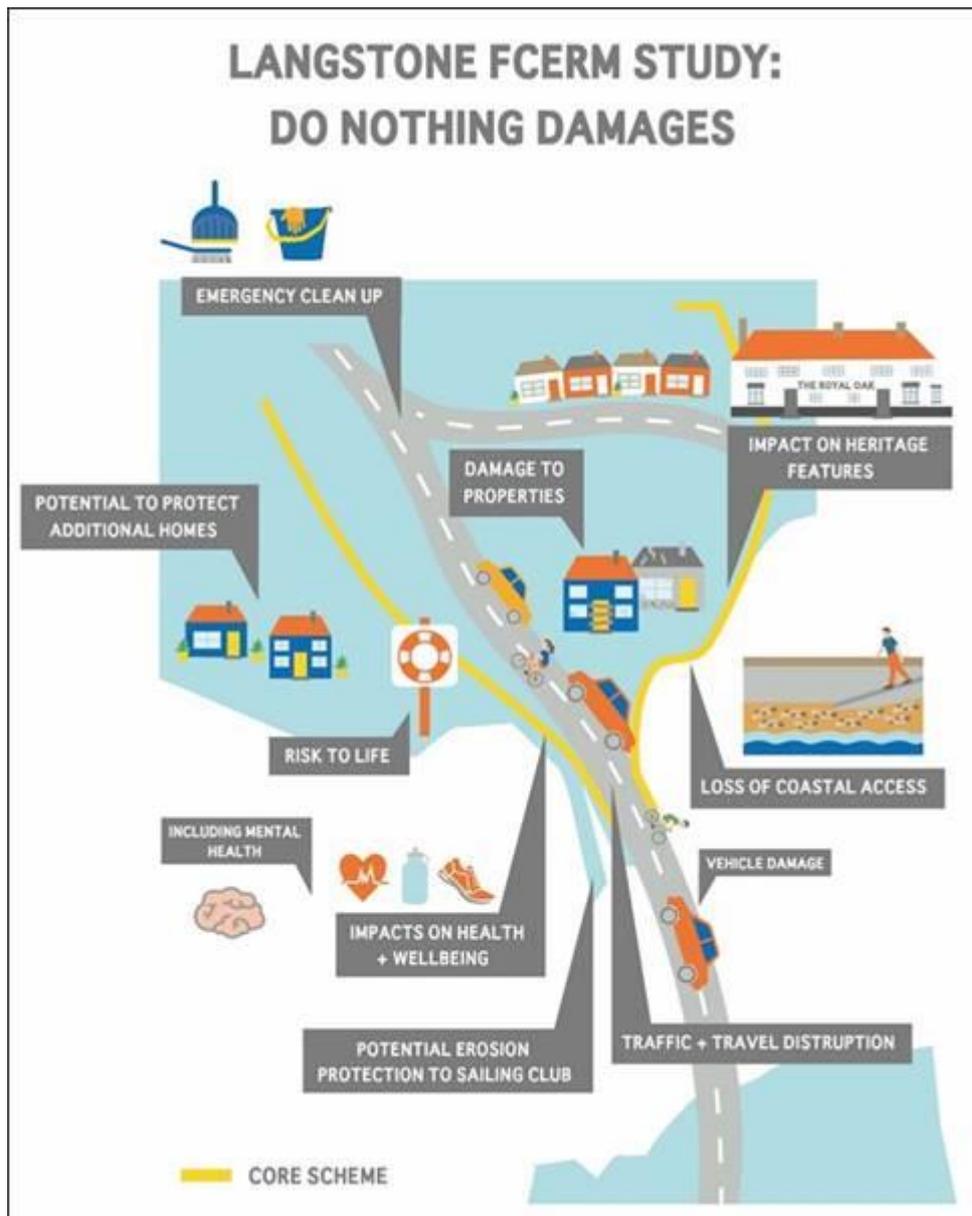
Portfolio Holder: Cllr Turner (16/07/2020)

Contact Officer: Mark Stratton
Job Title: Coastal Policy, Strategy & Environment Team Manager
Telephone: 02392 446009
E-Mail: Mark.Stratton@Havant.gov.uk

APPENDIX 1 Present day and Future Flood Mapping

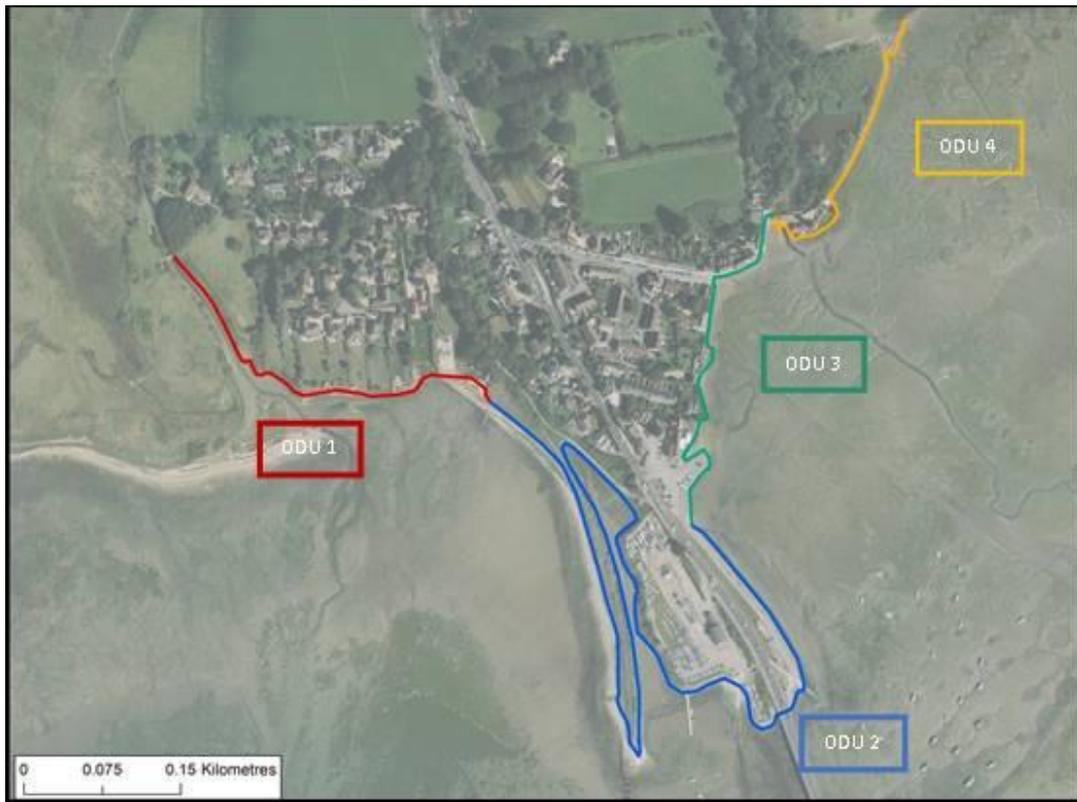


Present day with present management and future 1/200 yr flood mapping with no defences in place

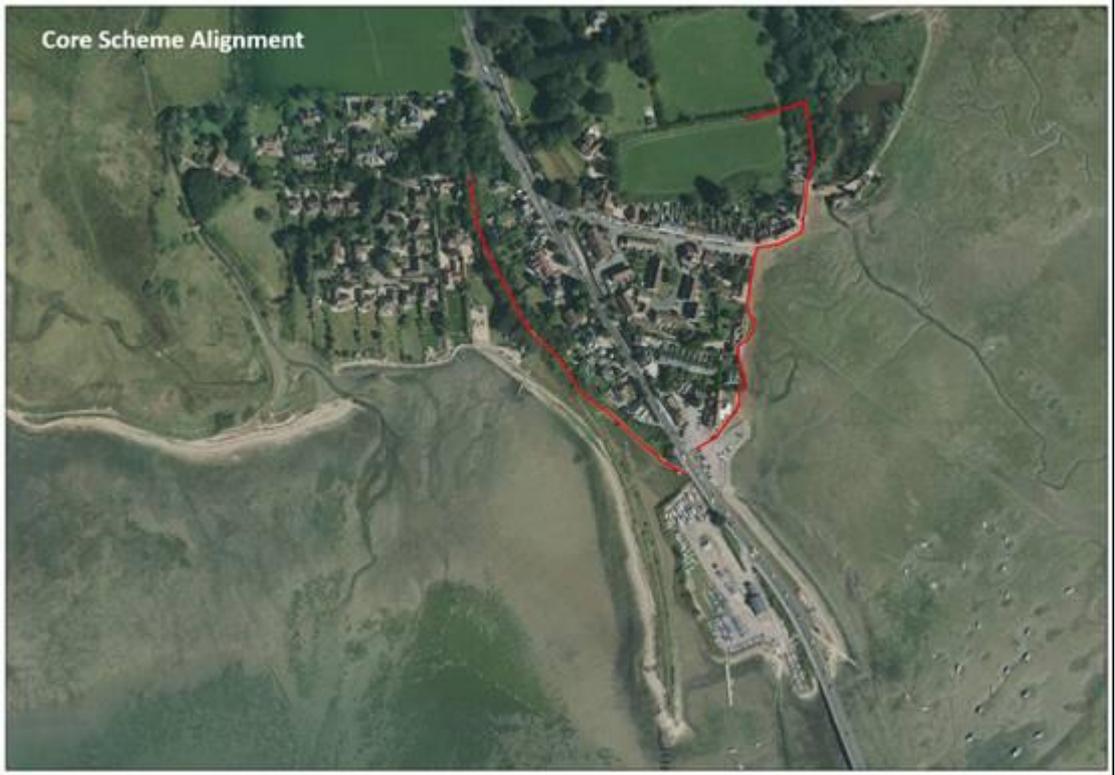


APPENDIX 3

Option Development Unit Boundary Maps



Options per ODU



Core Scheme Alignment



ODU 1 – Mill Lane and Harbourside 1a-b

Figure 1: ODU 1 Location map and alignment

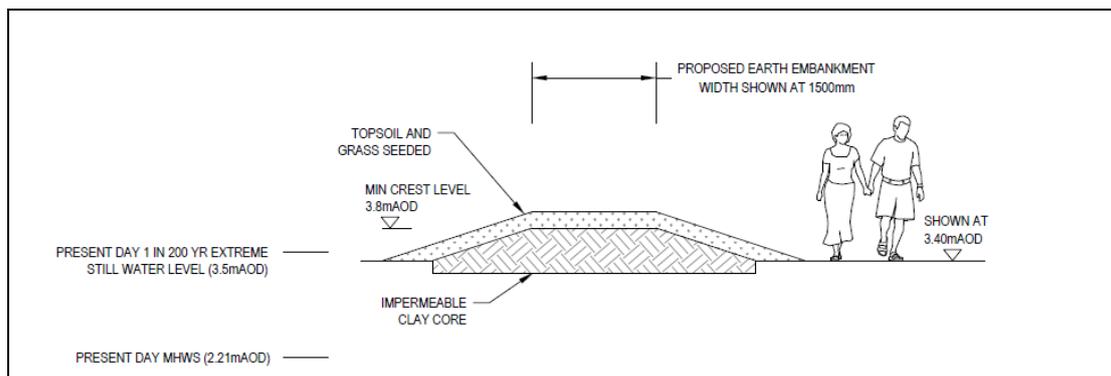


Figure 2: Sketch showing indicative earth embankment cross section (not to scale) in ODU 1a set back alignment

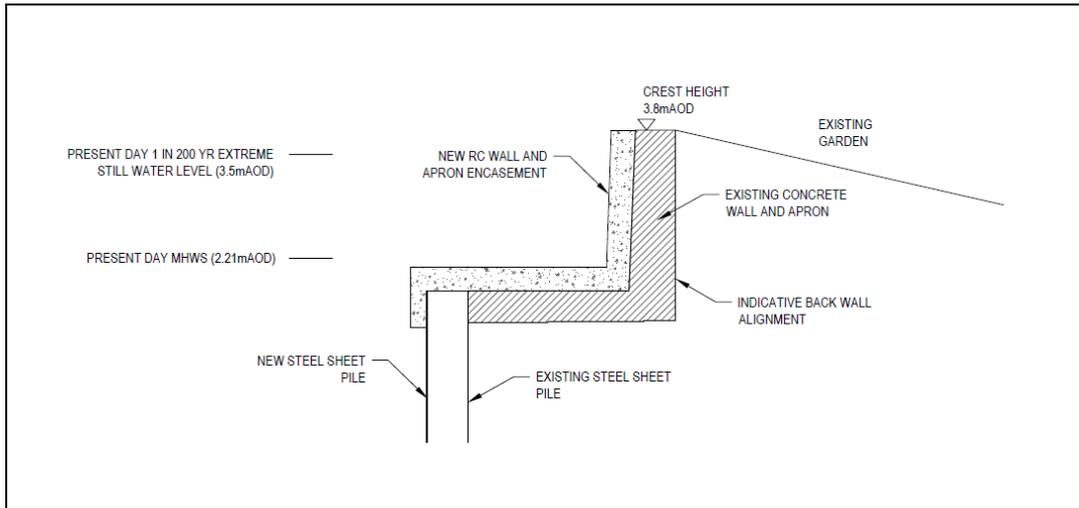


Figure 3: Sketch of indicative cross section of encasement (capital refurbishment) of seawall in ODU 1b

ODU 2 – Langstone Sailing Club and Langstone Spit (2a-b)

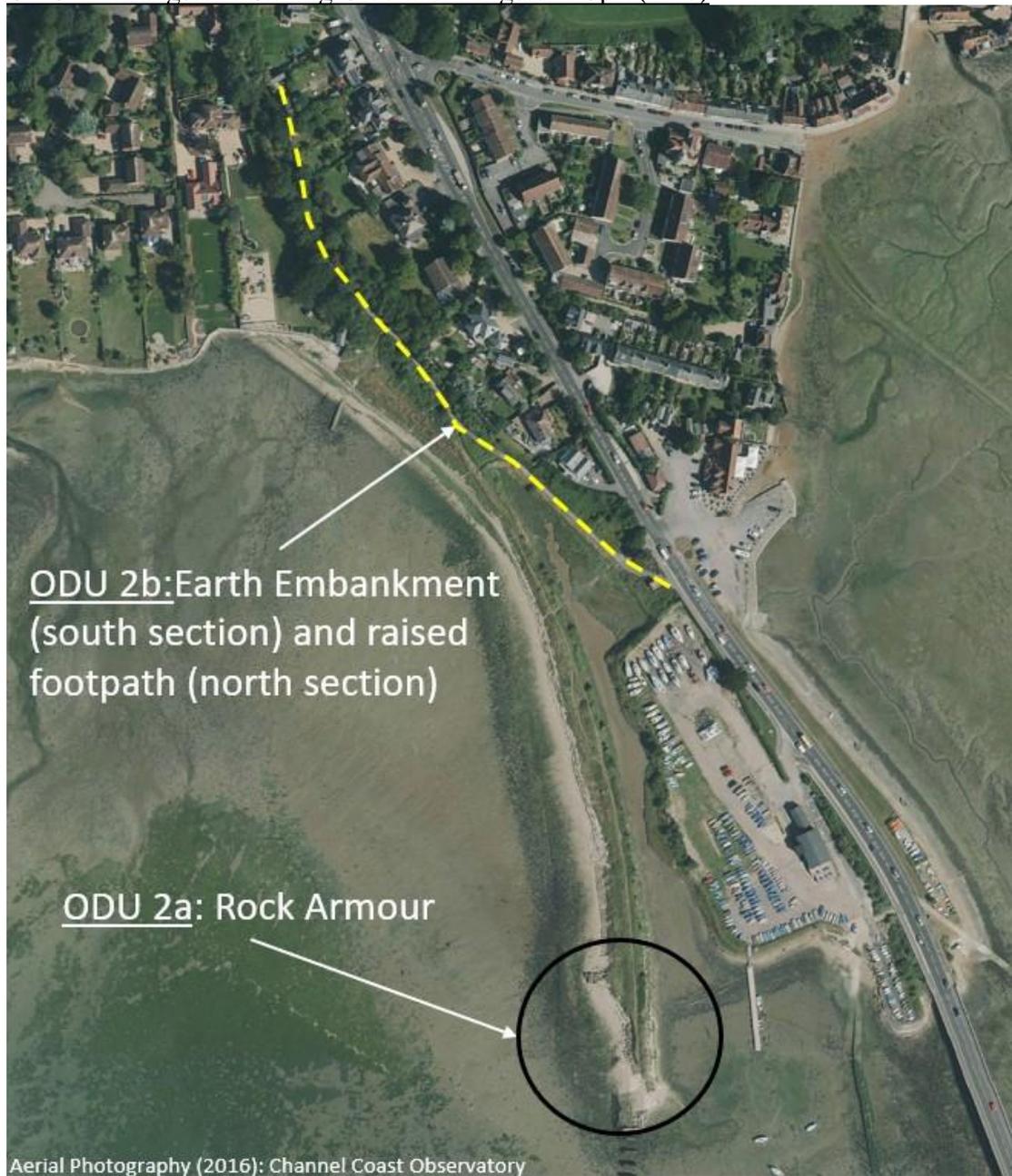


Figure 4: ODU 2 Location map and final alignment

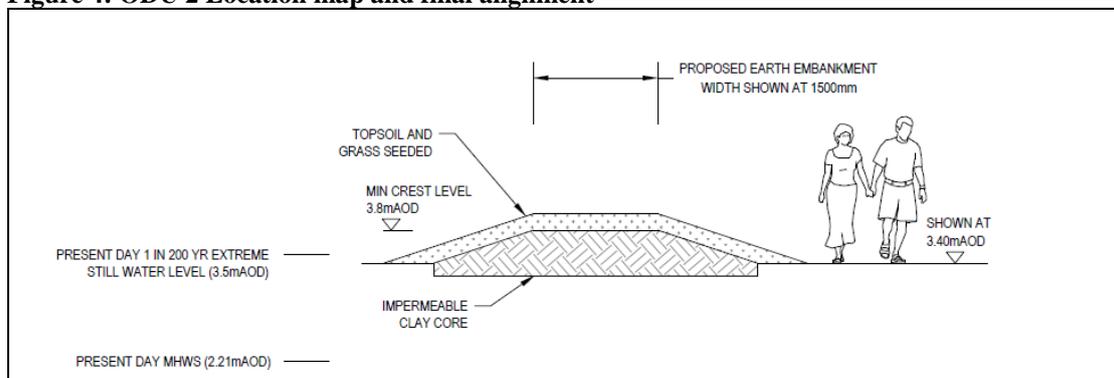


Figure 5: Sketch showing indicative earth embankment cross section (not to scale) in south section of ODU 2b

ODU 3 Langstone Village – The Ship (ODU 3b-3c)



Figure 6: ODU 3b-c Location Map and final alignment

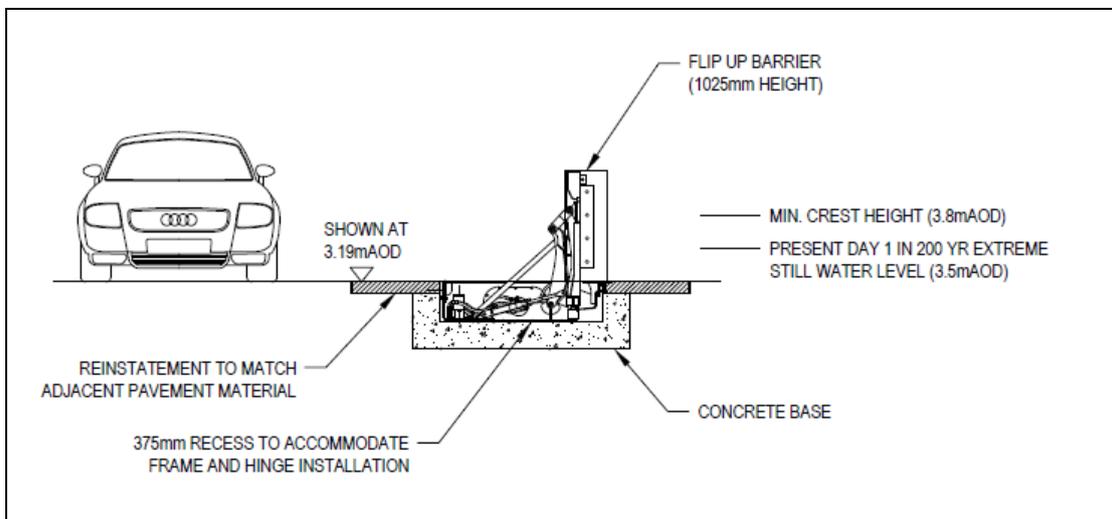


Figure 7: Sketch of indicative flip-up floodwall across car park in ODU 3b (not to scale)

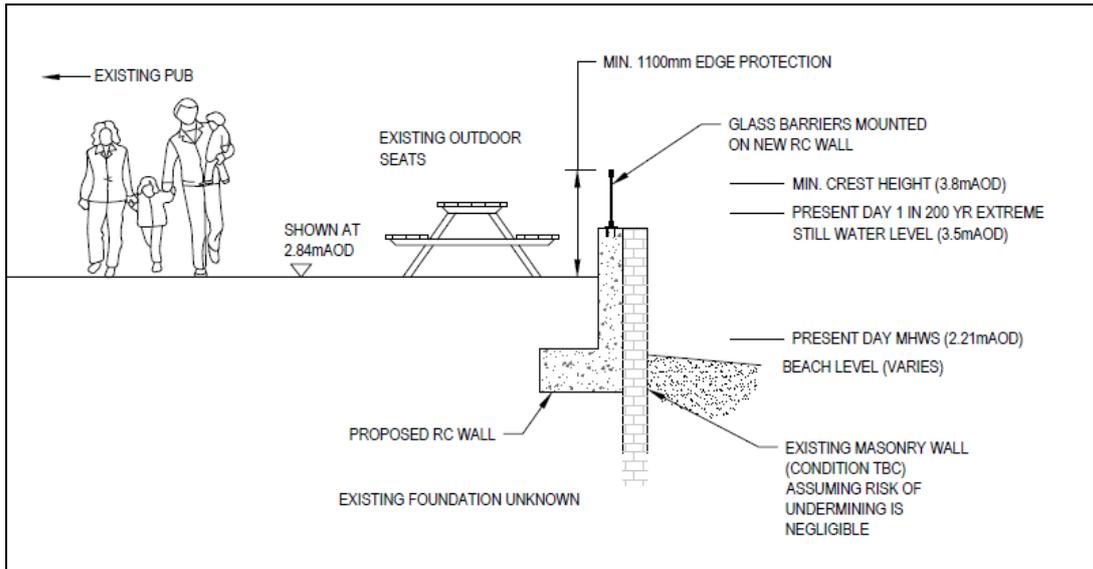


Figure 8: Sketch of indicative glass topped floodwall cross section for ODUs 3d-3e (not to scale)



Figure 9: ODU 3d-e Design visuals of the glass-topped flood wall and Flip-up floodwall (visualisations are purely examples and should not be taken literally at this stage)

ODU 3 Langstone Village – Coastal Footpath (ODU 3f-i)



Figure 10: ODU 3f-i Location Map and final alignment

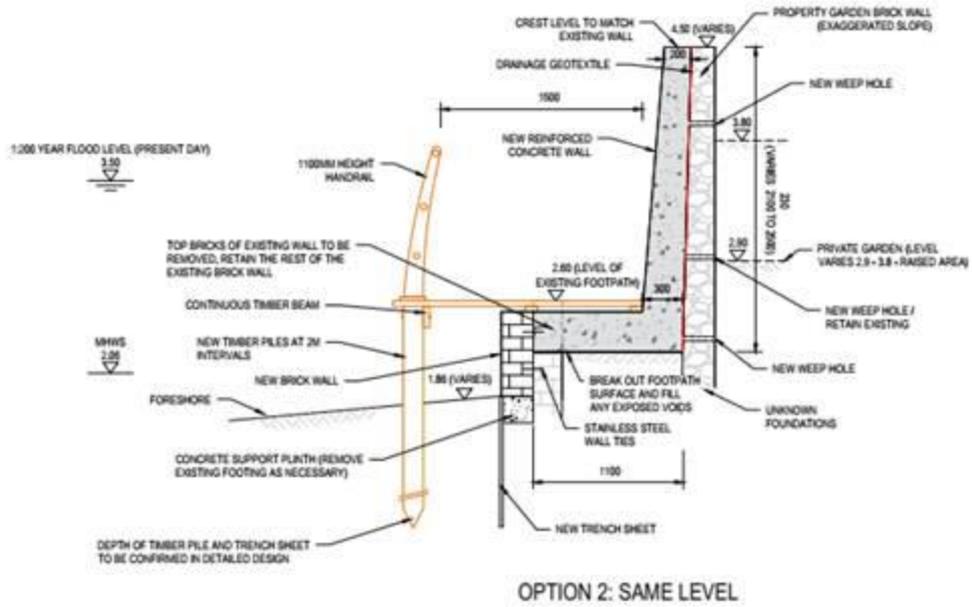


Figure 11: Sketch of indicative boardwalk and floodwall cross section in ODU 3f-h, using timber piles (not to scale)



Figure 12: ODU 3f-h Design Visuals of the setback flood wall with boardwalk (visualisations are purely examples and should not be taken literally at this stage)

ODU 3 – Langstone Village – Royal Oak (ODUj-k)

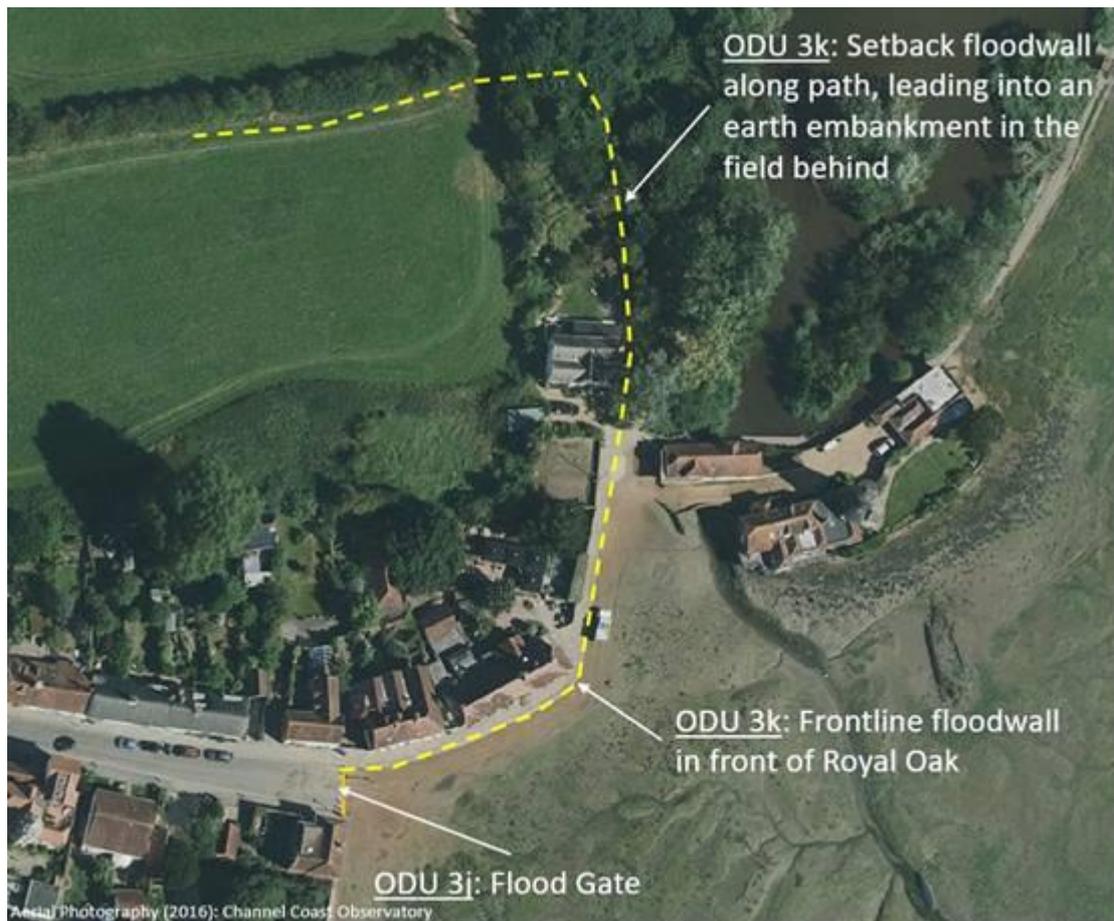


Figure 13: ODU 3j-k Location map and final alignment

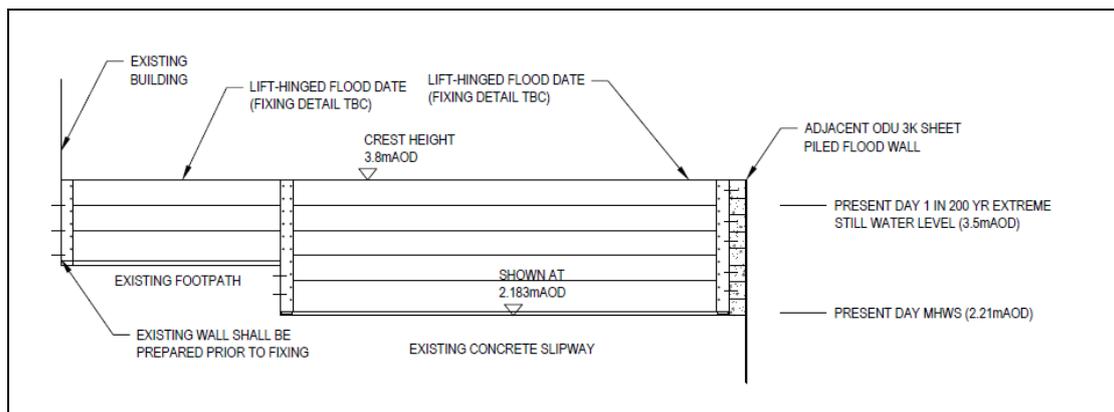


Figure 14: Sketch showing indicative elevation drawing of the flood gates at ODU 3j (not to scale)

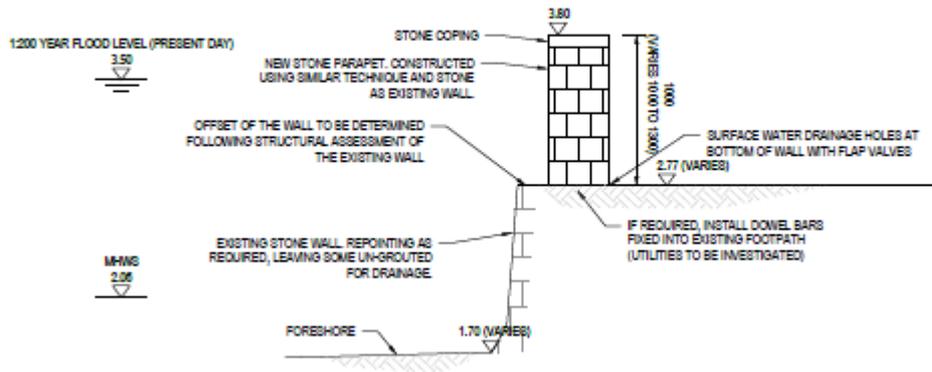


Figure 15: Sketch showing indicative cross section of frontline floodwall at ODU 3k (not to scale)



Figure 16: ODU3k Design Visuals of the Seawall around the Royal Oak frontage (visualisations are purely examples and should not be taken literally at this stage)

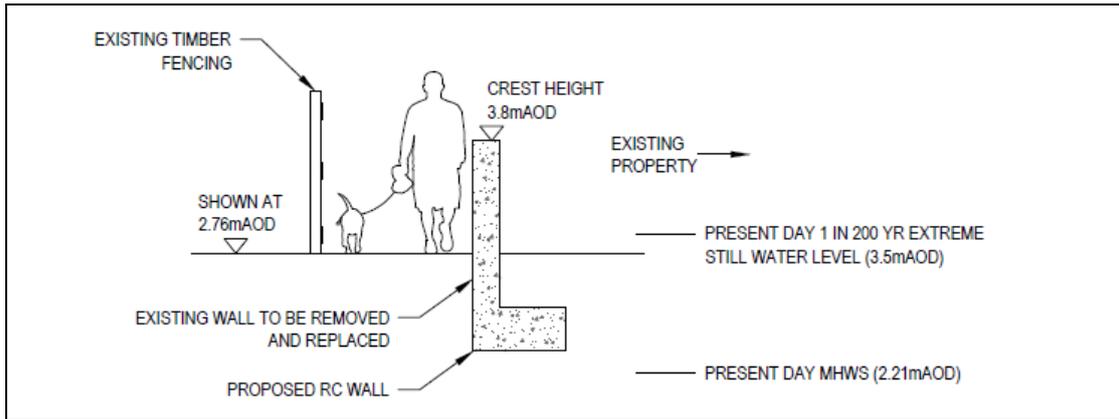


Figure 17: Sketch of indicative floodwall cross section along the footpath (looking south) (not to scale)

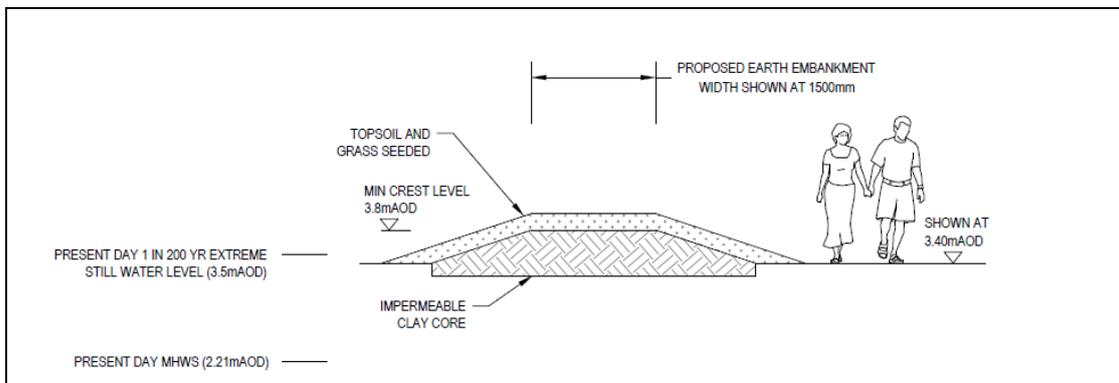


Figure 18: Sketch of indicative earth embankment section (through field) not to scale

APPENDIX 5

Alternative Route Alignments Considered for Royal Oak Frontage



Figure 19: Leading option and alignment, comprising of a flood gate across Langstone High Street, replacement of quay with new sea wall around the Royal Oak and flood wall and embankment to the north

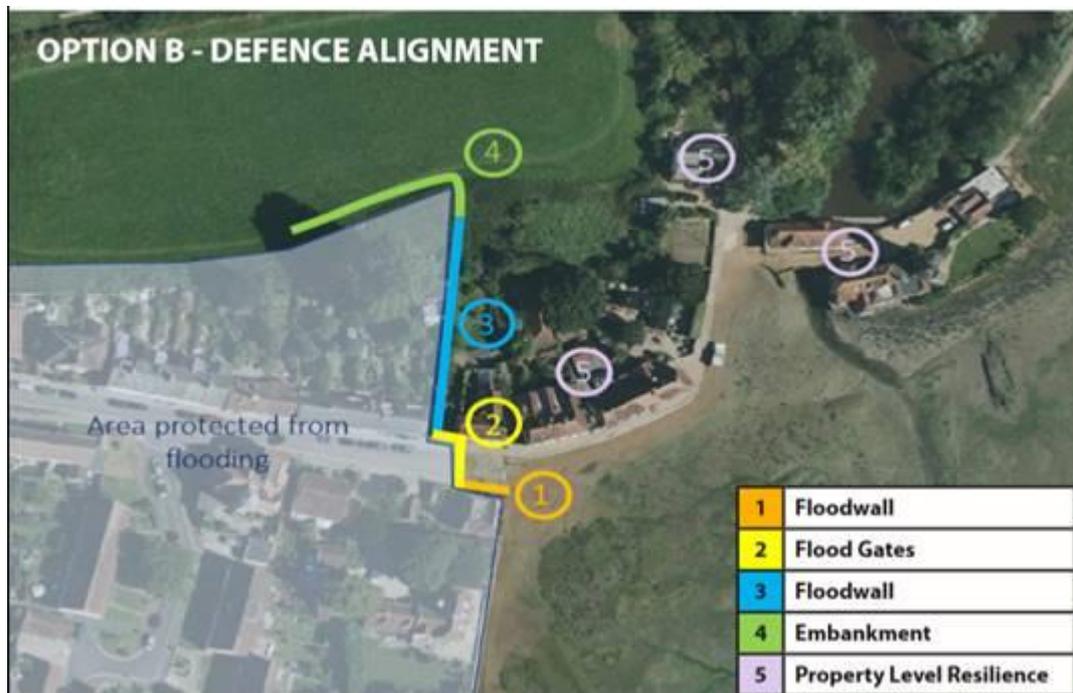


Figure 20: Alternative alignment comprising a floodwall adjacent to the Winkle Market leading to flood gates in Langstone High Street, a floodwall extending north from the High Street leading to an embankment in the field to the north. No defence works undertaken along the Royal Oak frontage

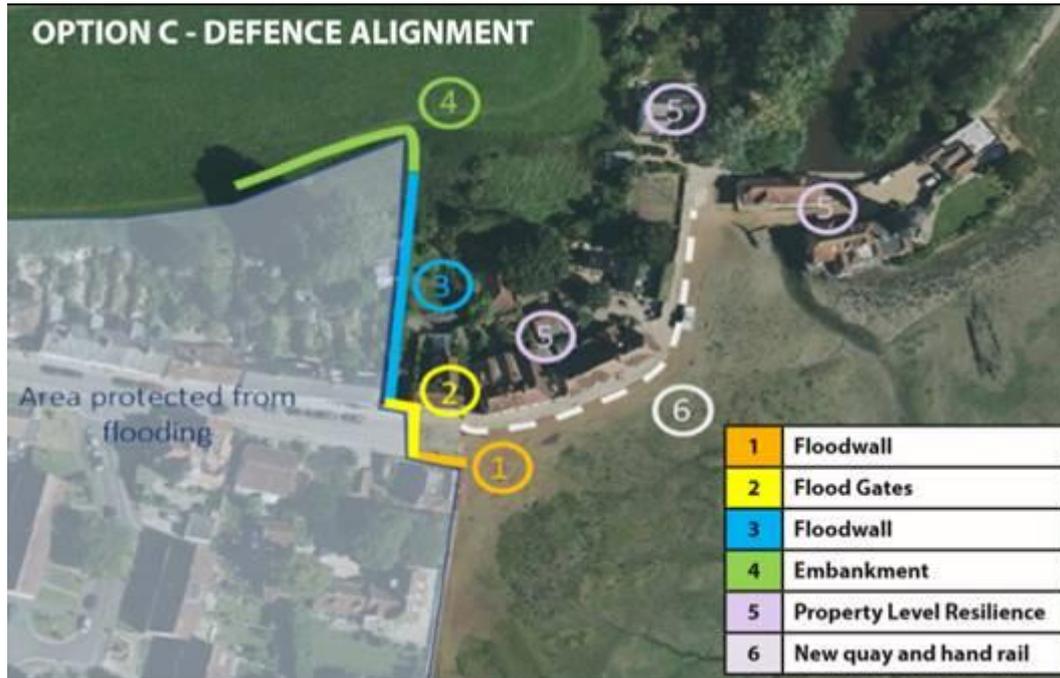


Figure 21: Same as Alignment B, but with a new quay wall fronting the Royal Oak and adjacent cottages for erosion protection. The possibility of a handrail would be needed to meet current health and Safety.

APPENDIX 6

Public Engagement and Consultation Outcomes

<https://www.escp.org.uk/langstone>

https://www.escp.org.uk/sites/default/files/Langstone%20Exhibition%20Report%20Final_REDACTED.pdf