

Eastern Road and Kendall's Wharf Coastal Defence Scheme

Pre-Construction Exhibition Report



14th August 2019

working together - protecting our coastline



EASTERN SOLENT | COASTAL PARTNERSHIP

Document title: Eastern Road and Kendall's Wharf Coastal Defence Scheme: Exhibition Report

ESCP QC & Approvals

Status: Final

Date: 28/09/2019

Project name: Eastern Road and Kendall's Wharf Coastal Defence Scheme

Report number: Version 2

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Date/initials check: RJ 02/10/19

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1. Introduction

This report summarises the public exhibition event, held to reintroduce the Eastern Road and Kendall's Wharf coastal defence scheme prior to construction. The project is being delivered by the Eastern Solent Coastal Partnership (ESCP) on behalf of Portsmouth City Council (PCC).

This report provides an overview of the publicity carried out prior to the event and a summary of the feedback received on the day from the attendees.

1.1. Project overview

New coastal defences are being built as part of the North Portsea Island Coastal Flood Defence Scheme, which have been designed to reduce the risk of coastal flooding and erosion to over 4,000 homes and nearly 500 businesses over the next century. The Eastern Solent Coastal Partnership have successfully gained approval and Flood Defence Grant in Aid funding for £58.5million to implement these works, which when constructed, will provide one of the highest standards of coastal flooding protection in the country. The implementation of the project has been split into five phases of works, two of which are complete, and the third phase is nearing completion.

Phase 4 is the next phase of works with a combination of two distinct sections: Kendall's Wharf and Eastern Road. The full length of the frontage is 2.4km (300m for Kendall's Wharf and 2.1km for Eastern Road). Construction is due to start in November 2019, with completion of the construction works by October 2022 excluding landscaping works which will be completed by February 2023.

2. Exhibition Event

2.1. Overview

A public exhibition was held on the 14th of August 2019 at the Great Salterns Mansion Harvester on Eastern Road. The aim of the event was to re-engage with the community in the lead up to construction, in particular the Harbourside Park residents and businesses along the frontage, and to display the designs and what will happen during construction. It was also an opportunity to get feedback from the public.

Furthermore, it enabled us to share an update with the public about the third phase of the North Portsea Island Coastal Defence Scheme, Tipner Lake. This phase is under construction and the path reopened in early October 2019. Therefore, we were able to share the progress and imagery with the visitors to the exhibition.

The venue was selected due to its close proximity to the Harbourside Park residents and businesses surrounding the scheme area. It is also an easy to find landmark for non-locals with parking and views across Langstone Harbour.

The event ran from 1pm –7pm and we were situated in the bar area which was next to the door as you came in the main entrance.

82 people attended the event, 46 of which were from Harbourside Park and a total of 42 questionnaires were completed either online or on paper at the event. In summary:

- 54% of those responding were either fully aware or somewhat aware of the need for new coastal defences in this area. 44% were not at all aware.
- 73% completely or partially support the new coastal defences at Kendall's Wharf. 20% do not support them at all.
- 65% completely or partially support the new coastal defences at Eastern Road. 28% do not support them at all. Some of those who selected do not support at all also provided additional comments to explain their answer which included that they would not support it unless a glass wall was included.
- The area of frontage that people mostly used was split between Tudor Sailing Club – Great Salterns Mansion Harvester frontage (29%), Great Salterns Mansion Harvester – Milton Common (28%), Milton Common (26%) and Anchorage Park (17%).

The full questionnaire responses are available in *Appendix A* along with a selection of comments.

2.2. Advertising and Publicity

The events were widely advertised to local residents and businesses with a comprehensive leaflet drop carried out. The leaflet provided the public with key information about the scheme and the details of the events (*Appendix B*). Leaflets were dropped off to the park warden at Harbourside Park dropped on 29/07/19 for distribution, as agreed with the site owner. Further leaflets were also delivered to a resident at Harbourside Park on 05/08/19.

Leaflets were also given out to Tudor Sailing Club, Andrew Simpson Watersports Centre and the Great Salterns Mansion Harvester to put in their foyer for passers-by.

Posters were put up at the Harvester, Tudor Sailing Club, Andrew Simpson Watersports Centre, Harbourside Park and a range of 42 local businesses in the PO3 and PO4 area displayed by Culture Calling.

In addition, the exhibition events were advertised on the ESCP and Portsmouth City Council websites, Facebook, Twitter and Instagram. It was also shared by Portsmouth City Council and local forums and pages such as Portsmouth Cycle Forum and Portsmouth Yimby. A press release was also sent out which reached local newspapers and websites. Figure 1 shows a variety of different media advertising the event.

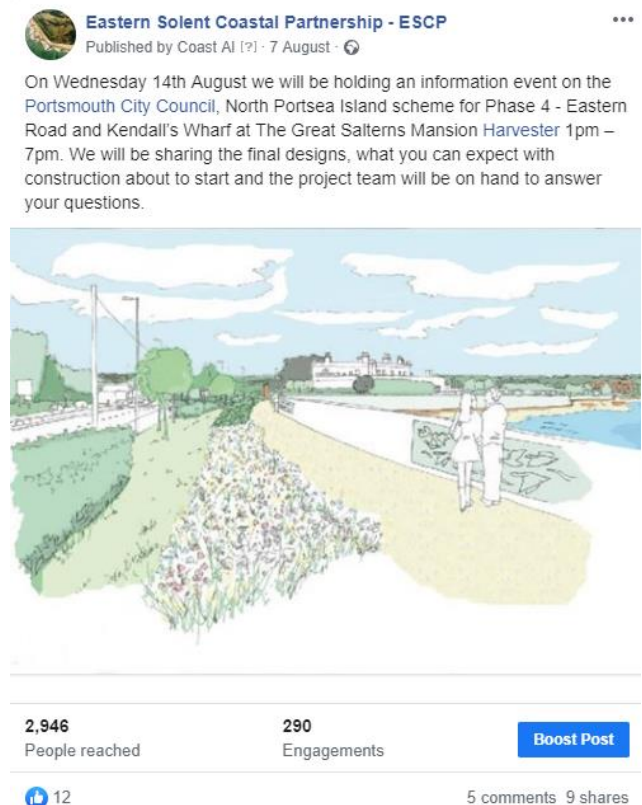
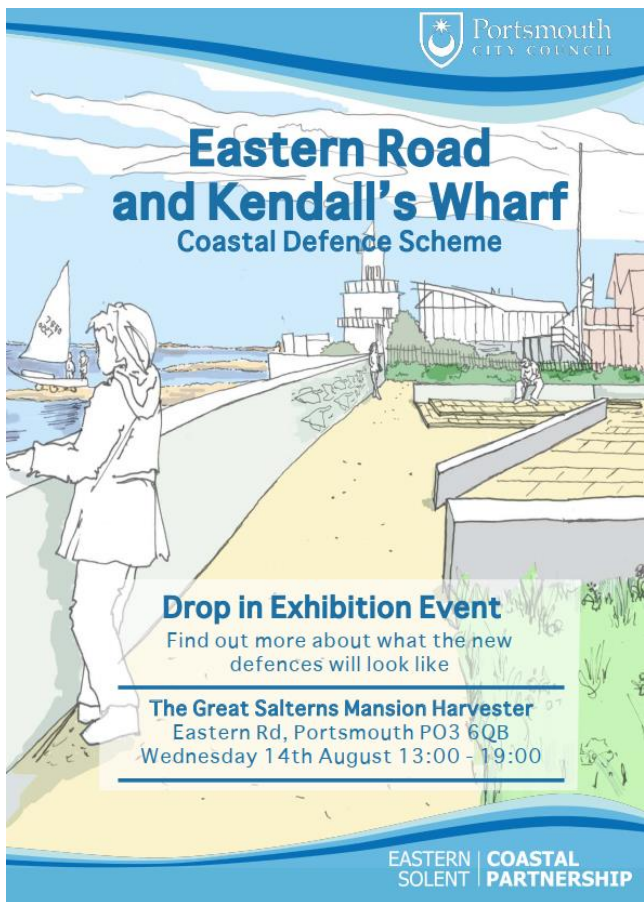


Figure 1 | Poster and example social media advertising the events.

2.3. Event Content

In total, 82 people attended the exhibition event. On arrival, visitors were asked to mark on a map where they came from. The spread of visitors is shown in *Figure 2*.

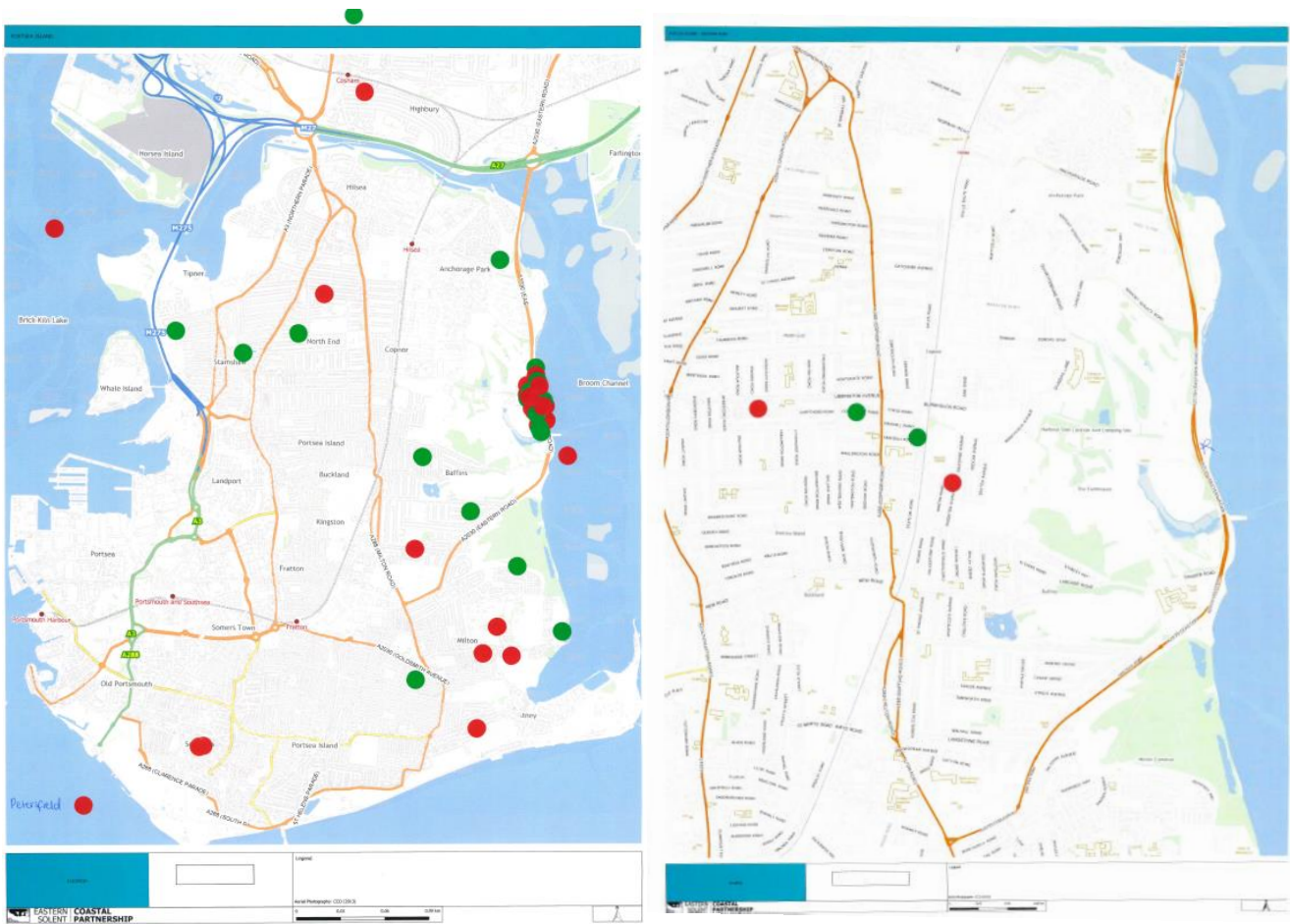


Figure 2 | Distribution of visitors

The content of the exhibitions was designed to communicate why the scheme is needed, considerations and constraints, and what the scheme will look like once built through a series of poster boards detailing;

- **Roles and responsibilities** of the ESCP, exploring flood and coastal erosion risk management and the impact of climate change,
- **Project introduction**, explaining why the study is necessary and how it came to be, looking at the shoreline management plan and the strategy as well as what is at risk if we did nothing,
- **Story so far** showing the work done to date including ground investigations, appointment of consultant, and licenses and consents,
- **What the scheme will look like** showcasing the artists illustrations for the area,
- **Environmental enhancements** detailing where improvements are being made to attract wildlife such as a bird island and textured seawall,
- **Project timeline**, detailing key stages of what the project team will be working on and approximate timescales
- **What to expect during construction** explaining some of the impacts of construction and what mitigation measures we are taking to reduce the impact.

Examples of the posters used at the event can be seen in *Appendix C*.

Some examples of comments written on the information event feedback part of the questionnaire have been listed in table 1. 69% of respondents felt that the information at the exhibition helped them to understand the coastal defence plans along Kendall's Wharf and Eastern Road and the potential impacts of the work.

We do not want to lose our view of the Harbour and would support a glass wall.
Awaiting decision of glass flood wall. We understand work is very important for environment.
Closing off areas of Eastern Road must be made but should allow for peak time traffic usage.
Concerned it will take 3 years, but accept it is needed. Wide path for runners, cyclists & walkers is an improvement. Hopefully the planting will be relevant to a coastal habitat. Bird Island is an excellent idea.
Concern over shared cycle path/walkers and that Bird Island is not too close to the path to be disturbed by walkers (I appreciate that dogs won't be able to access the island!).
As a Resident of Harbourside Park, I know that the sea defences need to be improved, but if I had known about this scheme to build a new 1.5m wall on top of the existing one and blocking the great view I have of Langstone Harbour there is no way I would have bought this property and pay the huge fees that I currently do.
Thank you for your continued support & ongoing communication. A glass wall would be a fantastic outcome for the residents of Harbourside Park.
Please keep Ward Councillors up to date.
A glass wall would make all the difference to our views & quality of life. Please, please save our view. We are all happy to clean & help maintain it. Thank you so much for even considering our views (there's a pun there!!).
Yes. Please do not forget the disabled friendly path.

Table 1 | Sample of comments left by visitors within the questionnaire

Exhibition visitors also had the option of providing their contact details to sign up to an e-newsletter which will be sent at various stages throughout the project construction. These contact details have been collated but have not been included in this report for data protection. The newsletter will include updates on the project progress and construction.

Appendix A – Feedback form results

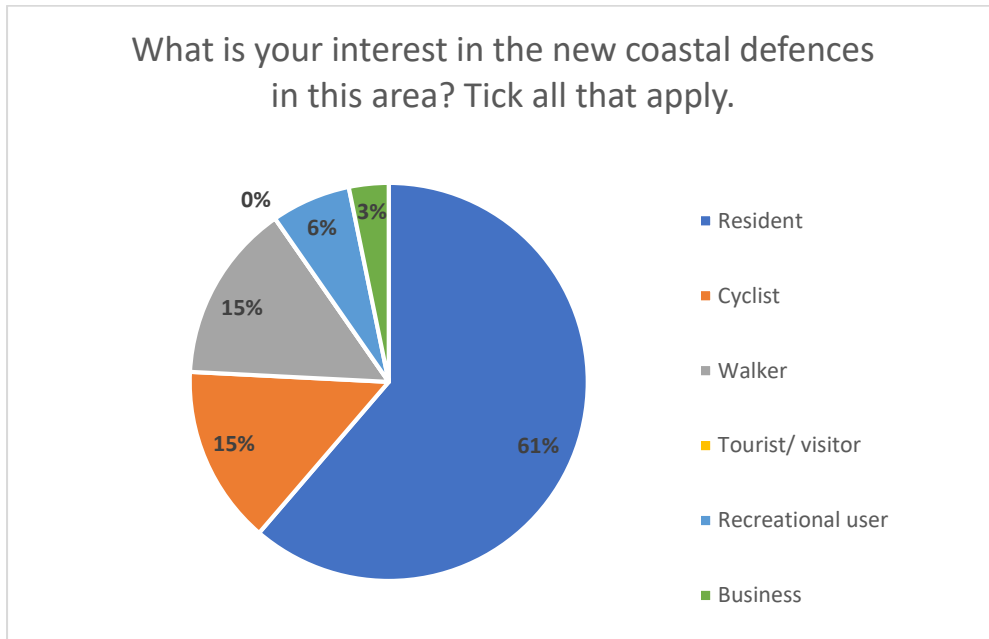


Chart 1 | Responses to question 1

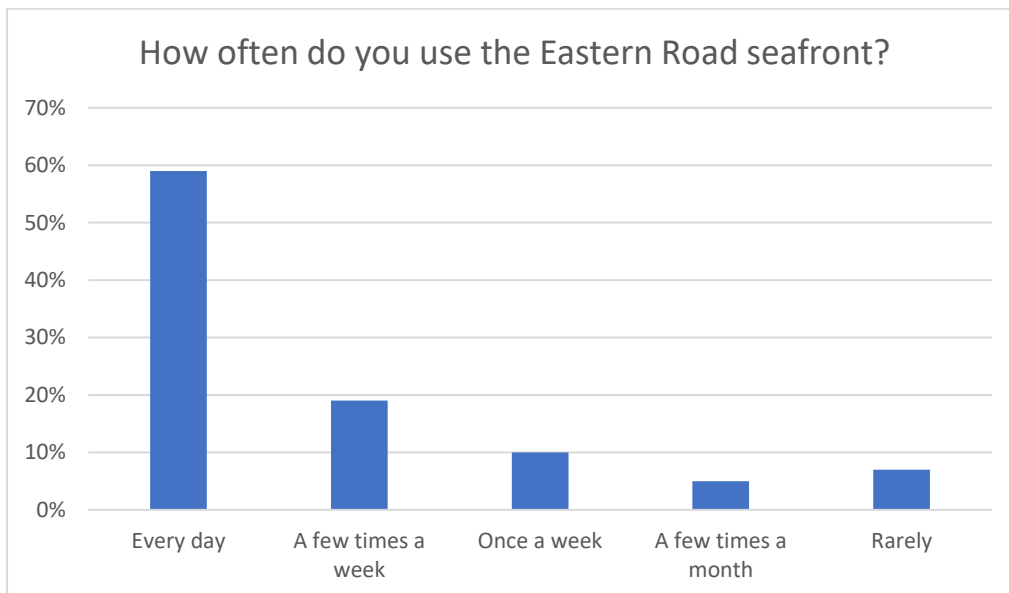


Chart 2 | Responses to question 2

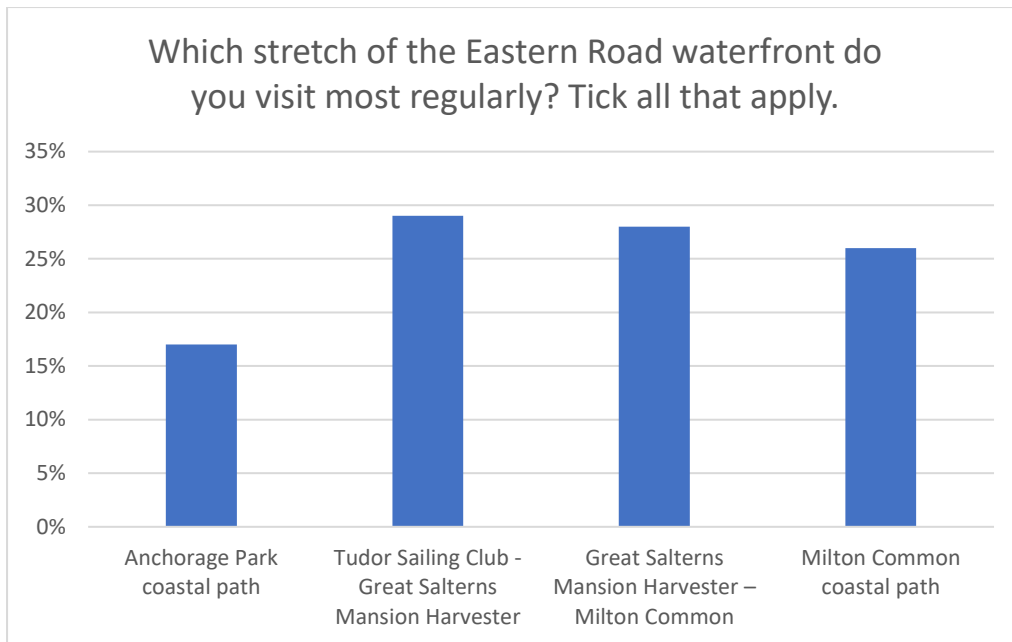


Chart 3 | Response to question 3

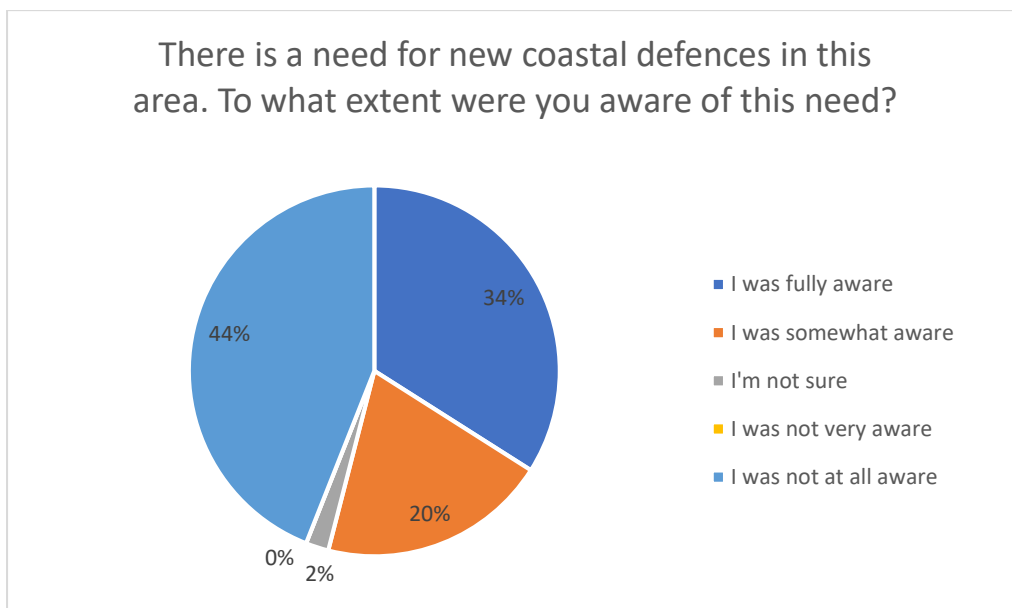


Chart 4 | Response to question 4

To what extent to you support the new coastal defence design in the Kendall's Wharf area?

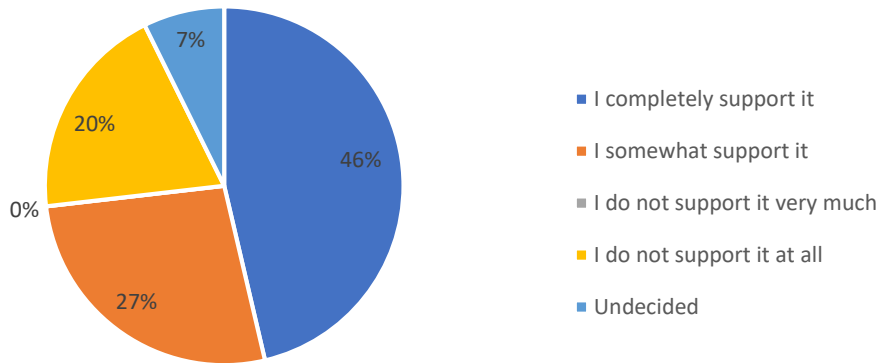


Chart 5 | Response to question 5

To what extent do you support the new coastal defence design in the Eastern Road area?

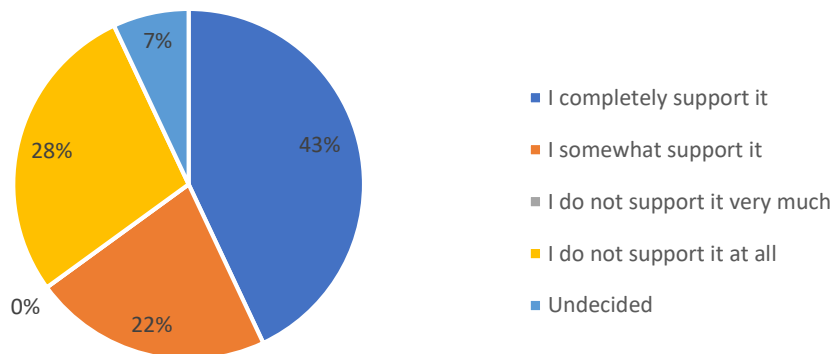


Chart 6 | Response to question 6

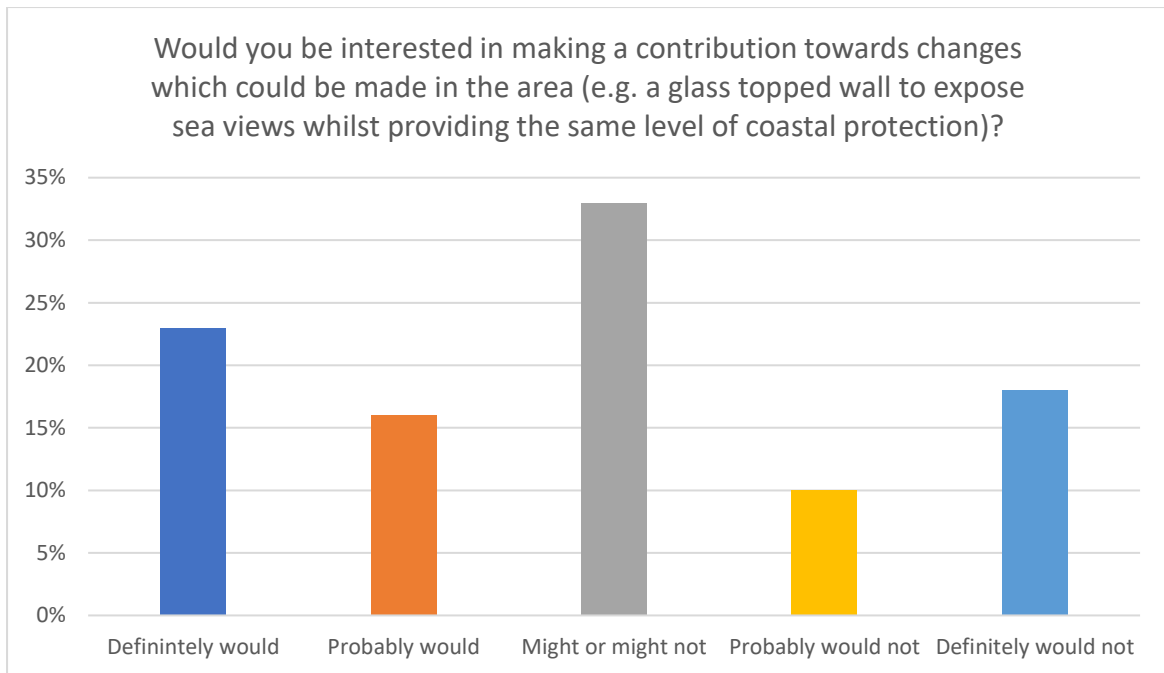


Chart 7 | Response to question 7

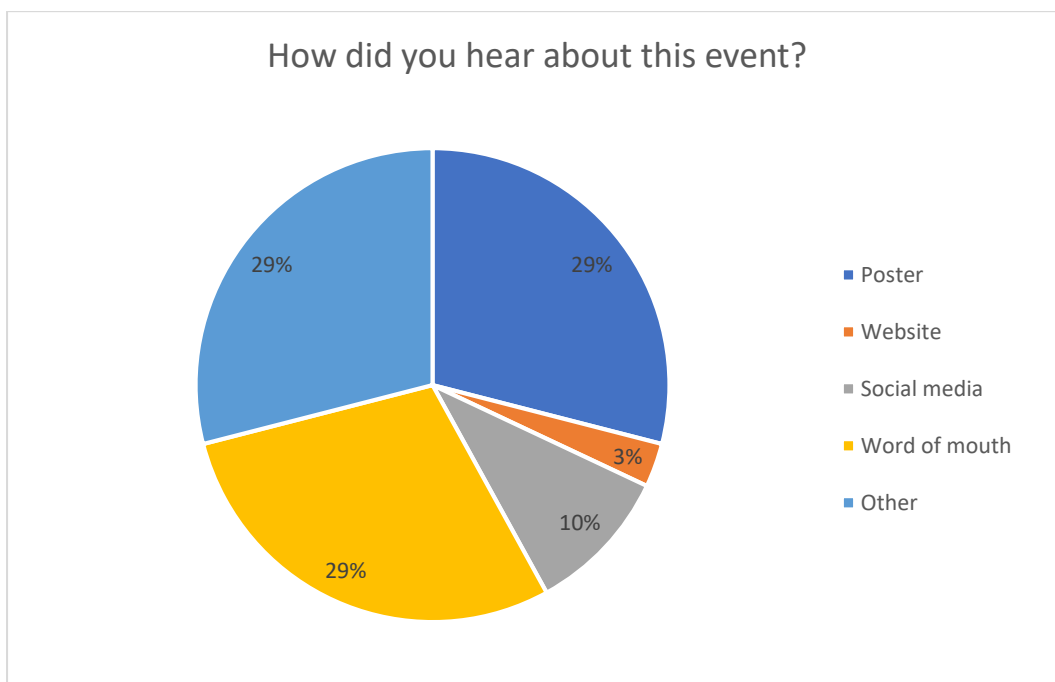


Chart 8 | Response to question 8

Answers to “other” include the following:

- Portsmouth News newspaper
- Letter drop
- Flagship magazine

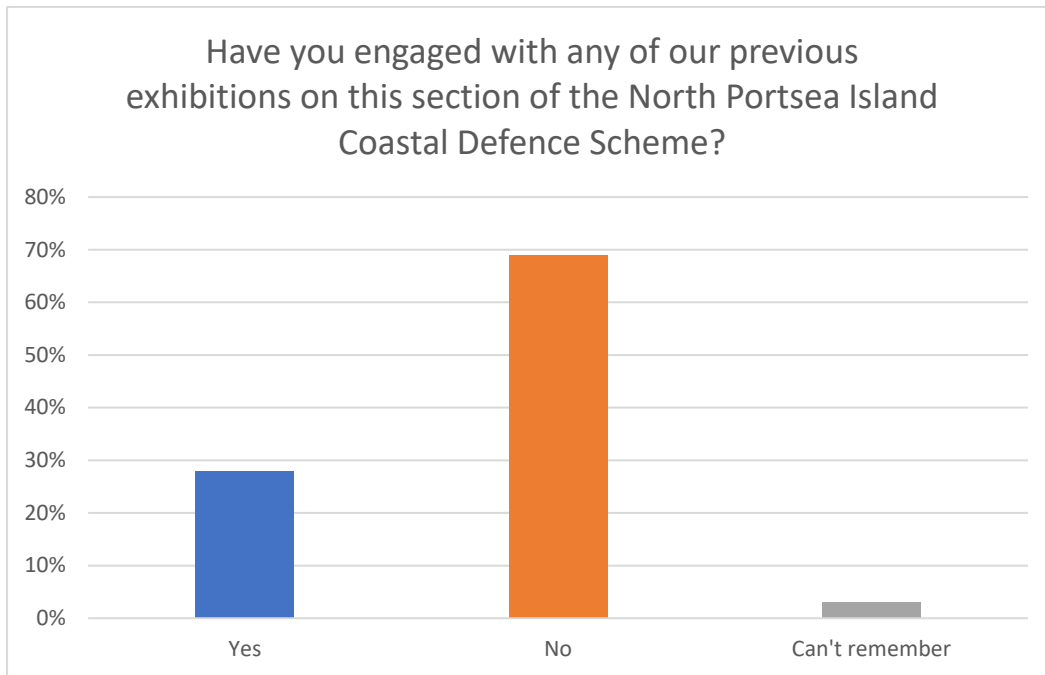


Chart 9 | Response to question 9

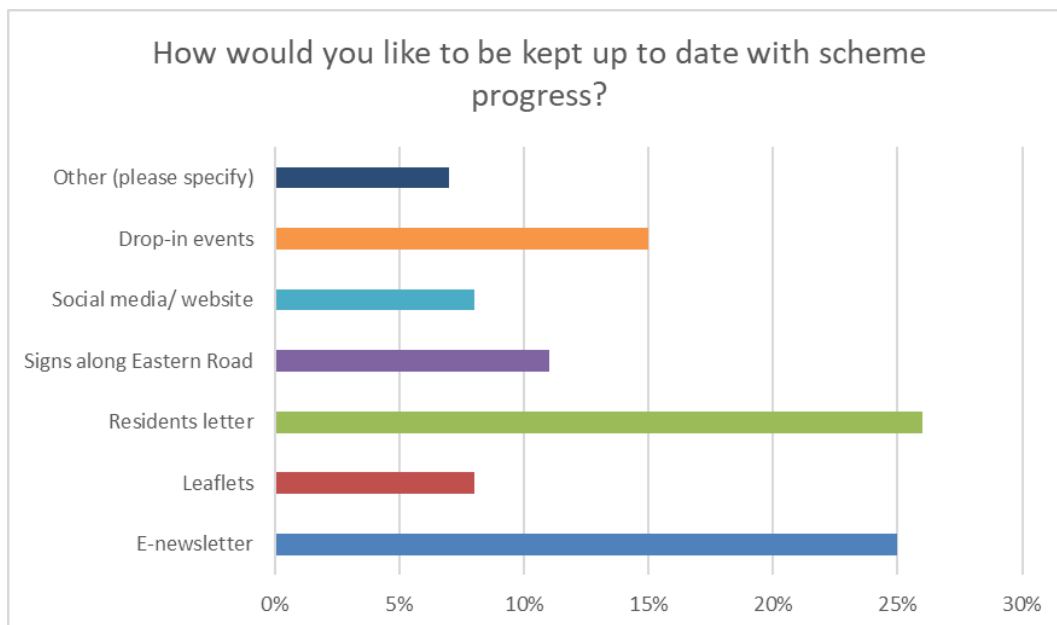


Chart 10 | Response to question 10

Has the information today helped you to understand the coastal defence plans along Kendall's Wharf and Eastern Road and any potential impacts of this work?

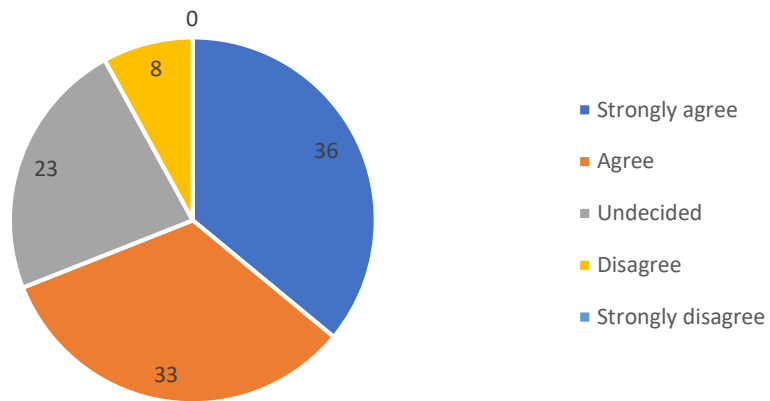


Chart 11 | Response to question 11

Appendix C – Examples of exhibition poster boards displayed at the events

Extent and Risk of Flooding

Present day **2115**

1,414 residential and 147 commercial properties are currently at risk from a 1 in 200 year tidal flood event. This increases to 4,234 residential and 490 commercial properties over the next 100 years.

North Portsea Island contains the only rail link and two of the three road links onto Portsea Island. 89 electricity sub-stations are also located within North Portsea Island. All of these assets are at risk from flooding during a 1 in 200 year tidal flood event.

The value of property and infrastructure within North Portsea Island is estimated at £642m.

Hazard map

This map indicates the level of risk from a present day 1 in 200 year flood event if the coastline was left undefended.

Definition of undefended flood hazard index as displayed on SFRA map set 1B

Classification	Description
Low	Exposure: Flood zone with shallow flowing water of deep standing water. Danger: Flood zone with deep or fast flowing water.
Medium	Exposure: Flood zone for some people (i.e. children). Danger: Flood zone with deep or fast flowing water.
High	Exposure: Flood zone for most people. Danger: Flood zone with deep or fast flowing water.
Very High	Exposure: Flood zone for all people. Danger: Flood zone with deep or fast flowing water.

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Feedback from residents

These results are from the three public exhibition events in November 2018, held to present the detailed design from Eastern Road and Kendall's Wharf coastal defence scheme.

100% of those responding to the exhibition were satisfied.

70% of those who said they would be happy to see the scheme.

85% of those who said they would be happy to see the scheme.

90% of those who said they would be happy to see the scheme.

95% of those who said they would be happy to see the scheme.

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Tipner Lake Progress

This phase of work is from the Mountbatten Centre, Tywford Avenue to the Ports Creek Roundabout and forms Phase 3 of the North Portsea Island Scheme. Construction started in April 2017, with completion expected in autumn 2019.

Project Timeline

- March 2017
- April 2017
- May 2017
- June 2017
- July 2017
- August 2017
- September 2017
- October 2017
- November 2017
- December 2017
- January 2018
- February 2018
- March 2018
- April 2018
- May 2018
- June 2018
- July 2018
- August 2018
- September 2018
- October 2018
- November 2018
- December 2018
- January 2019
- February 2019
- March 2019
- April 2019
- May 2019
- June 2019
- July 2019
- August 2019
- September 2019
- October 2019
- November 2019
- December 2019

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Phase 4: Eastern Road and Kendall's Wharf

The Eastern Road and Kendall's Wharf coastline represents the fourth phase of construction of new coastal flood defence as part of the North Portsea Island Coastal Defence Scheme.

This phase has two distinct sections: Kendall's Wharf and Eastern Road. The full length of the frontage is 2.4km (300m for Kendall's Wharf and 2.1km for Eastern Road). The work will cost approximately £14m and will take an estimated 6 months to complete at Kendall's Wharf, which will be followed by an estimated 3 years to complete seawall construction along the Eastern Road. Reinstatement, including planting and light landscaping works will continue after completion of the seawall.

The new defences are designed to significantly reduce the risk of coastal flooding over the next 100 years. On completion the scheme will offer protection against a 1 in 500 year coastal flood event, which is one of the highest standards of flood protection outside of London.

The design of the defences have been developed in collaboration with key stakeholders, including landowners, leaseholders and environmental and heritage advisors. It also includes ideas and aspirations received from the public during the option selection and consultation events held in 2014.

Artist's impression - view from Tudor Sailing Club

Artist's impression - view of Great Salter Quay car park

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What will the defences look like?

Kendall's Wharf

Embankment

The first c.150m of sea defence will be a raised earth embankment with a continuation of the 3m wide coastal path. This embankment will sit into the area of road raising landward of Kendall's Wharf, where the road will be raised by approximately 1m. The new defences will sit in with those built at Anchorage Park in 2016.

Illustrative cross-section - Embankment

Steel pile wall

South of the road will be 150m of steel sheet pile wall and will tie into the coastal defences at Eastern Road.

Slipways

The slipways at the Tudor Sailing Club will be improved as part of the scheme. The seawall ramp will be upgraded and be no steeper than the steepest part of the existing slipway. It will be possible to access the slipway from the sides in all states of the tide. The width will be increased where possible and a flood gate will provide the flood defence across the slipway crest.

Illustrative cross-section - Steel Pile Wall

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Environmental Enhancements

In addition to reducing the flood risk for North Portsea, this work is a prime opportunity to introduce environmental enhancements to the area.

Texturing - Greening the Grey

Using the texture of the seawall as an opportunity to encourage marine growth and habitation, we are using science-based designs that prove to enhance marine biodiversity. We are working with Glasgow and Bournemouth Universities, who are renowned experts in this field, to develop the design for texturing the seawall. Introducing different textures to the seawall provides pockets of shade and helps retain water on the seawall surface, which enables marine growth. Providing opportunities for marine habitat environments, which would otherwise be a grey concrete desert, improves the biodiversity of the area and in turn, the water body.

This will be the first intertidal textured seawall for marine habitat creation in the UK which we are hoping will set the standard for future seawall constructions both nationally and internationally.

Tidal pools

Small tidal pools will be introduced into the base of the seawall, which will offer a simple and resourceful solution that will encourage marine growth and habitation of molluscs, such as anemones, corals, small fish, cockles and worms. These pools will form part of the steps of the new defences.

Tangier Road realignment

At Tangier Road, the seawall alignment will be pushed seaward by 7m in order to accommodate a suitably wide footpath, providing safer distance between the path and Eastern Road.

In addition to the multifunctional creation of Great Salter Quay, the defence line is being further realigned landward to compensate for the habitat loss from the scheme, creating an additional 11.61m² of mudflat. Keeping encroachment into the harbour and reducing loss of environmentally designated habitat is a primary objective of the North Portsea Island Scheme.

Bird Island

Shore to create a high tide roosting site for Special Protected Area (SPA) bird species including Dunlin, Redshank, Black-tailed Godwit. The island will also have the potential to provide suitable nesting opportunities for seabirds including Terns. The seawall will create a barrier between the birds and the dogs walking on the path, allowing them to roam undisturbed.

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When will the work happen?

Construction programme

Subject to final approval of all relevant licenses and consents, construction is programmed to start autumn 2019 for the works to the road at Kendall's Wharf, off the Eastern Road.

Construction of the seawall is expected to commence spring 2020. The seawall construction is currently estimated to take three summers.

No construction works are due to take place over the winter period on the Eastern Road, due to environmental restrictions, however soft landscaping works will be undertaken during this time. The coastal path will be closed for the duration of the works and sections will reopen as works are completed.

North Portsea Island Construction Phasing

Construction network has been split into distinct phases which will be delivered over a period of nine years.

Map of scheme area

Estimated programme of works

	2018	2019	2020	2021	2022	2023
Kendall's Wharf	Construction works	Construction works	Construction works	Construction works	Construction works	Construction works
Eastern Road	Construction works	Construction works	Construction works	Construction works	Construction works	Construction works

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Engineering Jargon Buster

Earth Bund A sloped embankment or bank constructed from earth designed to resist erosion and prevent flooding.	Revetment A protective structure normally placed on an embankment to absorb wave energy by attrition, provide protection against erosion.	Setback Floodwall A new floodwall setback from the existing defence.
Flood Gate A watertight gate left open during normal conditions, but can be closed to form a flood defence where required.	Rock Toe Low structures of rock placed along the water's edge of a shoreline. The rock helps to absorb wave energy.	Sheet Pile Vertical steel sheets driven into the ground in place of, or as part of, the new defences.
Gabions A basket or cage filled with rocks and often stacked to create a wall.	Blagrow A structure, consisting of heavy material (steel) hoops, for protecting embankments against erosion.	Staged Revetment Same as a revetment, with extra ability to break up wave energy, stepped beach access and more use on open coast.
Beach Recharge Material is sourced from the normal beach sediment system and introduced nearshore.	Beach Recycling Material is sourced from beach/surf and returned to the nourished beach.	Grynes A low wall built out from the coast into the sea, to prevent the rapid movement of the waves from remaining beach material.
Demountable Defence A particular form of temporary defence with permanent bungs but with a temporary flood barrier that can be demounted.	Rock Armour Large boulders used to reduce wave energy reaching the shoreline.	

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What Can We Expect?

Key Dates...

Zone 1 - September 2019
Work starting at Kendall's Wharf

Zone 2 - April 2020
Work starting on Eastern Road

Previous NPI Schemes...

Phase 1 - Anchorage Park 2015

Phase 2 - Milton Common 2016

Phase 3 - Tipner Lake 2017 Present

How will it be affected?

As the construction works will be undertaken over a period of three years (Sept 19 and Sept 2022), they will be delivered in a phased approach to minimise disruption to the local community and ensure access is maintained where possible.

Working Hours

Normal working hours will be 9:00 - 19:00 Monday to Friday in order to reduce disturbance to residents caused by noise and vibration from construction work and machinery.

Due to the tidal nature of the works, it will be necessary to work some evenings and nights, to maximise tidal working windows.

Night works will not be permitted within 200m of a residential dwelling (including garages).

Road Access

Temporary access roads will be installed to ensure access to the road at Kendall's Wharf to maintain access to businesses such as Tudor Sailing Club and Andrew Simpson Watersports Centre.

Access will be maintained to all businesses throughout the works, and all businesses will be open as usual.

Construction Site and Access

The construction site will be set up to ensure public safety and allow the work to progress in a safe, efficient and controlled environment.

Site set up will begin in September 2019 for Zone 1, Kendall's Wharf works.

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Appendix D – Photographs from the event

