

Report to: Cabinet



Date of Meeting 5 June 2024

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Exmouth Sea Wall Emergency Repairs Update and Phase 2

Report summary:

Report to update emergency repairs to Exmouth Seawall phase 1. Report also explains various options for Phase 2 and sets out recommended alignment of phase 2. It also outlines the financial situation and gives an update on the Slipway repairs and cladding options.

Is the proposed decision in accordance with:

Budget Yes No

Policy Framework Yes No

Recommendation:

1. That cabinet approves the carrying out of further emergency (and permanent) repairs to Exmouth seafront in respect of phase 1, phase 2 and associated emergency works and grants delegated authority to the Director of Housing Health and Environment (initially and then to the new Director of Place) in respect of the project, in consultation with the Director of Finance and the Director of Governance and Licensing.
2. That cabinet approves total budget spend for the phase 1 and phase 2 works of £3.312m Note no additional budget from EDDC required over the £1.5m already approved. £1.812m obtained from external funding.
3. That cabinet supports the recommended option alignment and target start date for phase 2 seawall repairs. However due to ongoing investigations, the final alignment decision being with the delegated officers as per recommendation 1.
4. Given the emergency nature of the works, Cabinet notes the exemption to contract standing orders in respect of the design consultancy total spend for the sum of £300,000 has been approved by S151 Officer and Monitoring Officer as provided for in the Constitution. This is an increase from 6th March 2024
5. That cabinet notes the decisions made to date on repairing the slipway.
6. That cabinet notes the Outline Business Case submission to the Environment Agency for access to national funding.

Reason for recommendation:

Given the location of the failed and failing wall, it is not an option to do nothing and allow the sea to erode the seafront further. Therefore Phase 2 must start in September prior to the winter storms. Starting in September dictates the wall alignment. Further spend and costs have been incurred due to further storms in April.

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Portfolio(s) (check which apply):

- Climate Action and Emergency Response
- Coast, Country and Environment
- Council and Corporate Co-ordination
- Communications and Democracy
- Economy
- Finance and Assets
- Strategic Planning
- Sustainable Homes and Communities
- Culture, Leisure, Sport and Tourism

Equalities impact Medium Impact

Damaged wall is currently impeding a section of the long flat Exmouth seawall walk. Repairing the wall will restore this important link

Climate change High Impact

Risk: High Risk; Works are required likely due to climate change.

Links to background information [Queens Drive Sea Wall Exmouth OBC](#)

Link to [Council Plan](#)

Priorities (check which apply)

- Better homes and communities for all
- A greener East Devon
- A resilient economy

Report in full

1. Background

- 1.1. In late August 2023, EDDC engineers were made aware of cracks in the seawall in front of the sideshore development, and appointed Moffatt and Nichol to gain all the required permissions to carry out trial holes and carry out investigations.
- 1.2. However, a storm over the weekend of 28th/29th October 2023 significantly dropped beach levels and caused the wall to crack and slump, putting the wall at serious risk of collapse.
- 1.3. Emergency works were completed in the following days to shore up the wall through the next storm, with the wall surviving. Due to limited time, the works consisted of concrete blocks placed at the base of the wall, and lots of sand being placed on the wall. This kept the wall intact.
- 1.4. Following the storm, a large void opened out in the old lifeboat slipway and required fixing to enable access to the beach.
- 1.5. Further blocks and sand were placed prior to the next set of high tides.
- 1.6. Extra- Ordinary Full council on 6th March 2024 agreed to implement phase 1 and raised the budget to £1.5m
- 1.7. Phase 1 works started late March 2024
- 1.8. Early April 2024 a succession of late winter storms caused damage to the seawall in the phase 2 area and damaged the slipway.
- 1.9. The storm undercut the NCI training building adjacent to the slipway, rendering it a dangerous building, which was demolished soon after.
- 1.10. Further emergency works were done to shore up the phase 2 wall, and the slipway has been partially demolished to make safe.

- 1.11. Extensive damage was done to the Phase 2 area adjacent to Phase 1, and the phase 1 repairs have been extended to cover this.
- 1.12. Given the increased damage to areas in Phase 2, the required work must start in September before the winter storms to reduce risk to the highway and buildings from sea storm damage.

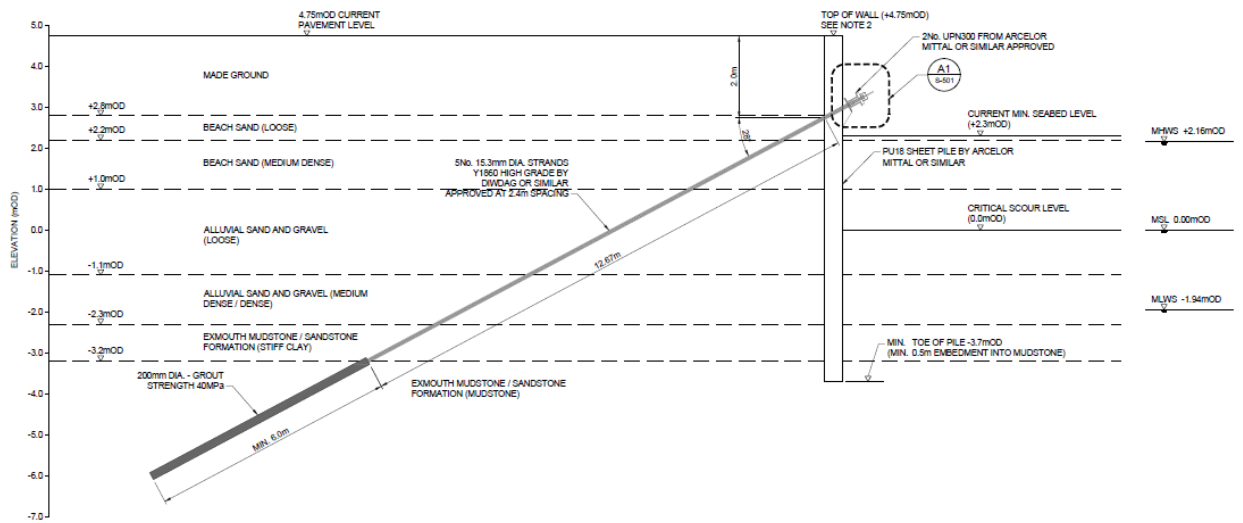


Image 1.12. Cross section of Phase 1 design.

- 1.13. As of 9th May 2024, all piling for Phase 1 has been completed, and the wall is generally complete with remaining proud piles to be cut to finish, and ties all completed.



Photo taken 9th May 2024

- 2. Phase 2 proposals.
 - 2.1. We are proposing to continue with the design of phase 1, throughout Phase 2, as it is the most cost effective, and will give a 100-year design lift, whilst allowing for future beach lowering. This is sheet piles finished flush with the promenade, with them tied back into the ground behind. This will leave an option to clad later.

- 2.2. At the time of writing, 2.1. is the preferred design, but we have recently discovered that sections of wall in phase 2 have been previously repaired. The extra thick concrete may change the wall alignment of the wall slightly.
- 2.3. Concession considerations:
- 2.3.1. For construction ease, and cost but also long-term viability, there is a logic in moving the concessions to a less vulnerable location.
 - 2.3.2. Both concessions have long lease agreements upon the land they sit (around 2040s)
 - 2.3.3. Although EDDC has no responsibility to protect the building from the sea, under the current lease, each building has a right to remain in current location.
 - 2.3.4. Although moving the concessions to less vulnerable positions would be the sensible approach, there are limited places the buildings could move, and EDDC would be liable for forcing concessions to move (demolition and rebuilding of buildings)
 - 2.3.5. If buildings were to be moved, planning permission for a new building in a new location would not be in place before September. This would be extremely risky for the concession to agree to be demolished but with no guarantee of being able to rebuild in a less vulnerable location.
 - 2.3.6. Both concessions rely on being beach side of the seawall, however given climate change, it may be challenging to gain planning permission for a new build in a similar location.
 - 2.3.7. One concession has been robustly built, and the other has less robust construction, which also reflects on their openness to move to another location (should one be suitable and have planning permission)
- 2.4. The main design choice on phase 2 is the full alignment of how we rebuild the seawall. They are outlined below.
- 2.4.1. Option A – The sheet pile wall will continue from phase 1 in the East to the slipway in the west, however it will stop short of each concession by 2m. Each concession will have improved sea defences such as rock armour locally. EDDC will have designs produced to allow us to complete the sheet piling to complete the seawall at a later date should the concessions move. The proposal will also include reinstating the plinth area of the former NCI training building with a sheet pile wall. This would allow building(s) to be replaced in this location, should that be wanted. Note, changing design around concessions, will cost EDDC more than a straight piled wall. This option will give a long standard of protection to the EDDC seawall, but not the 100 year design life of piles.





Red Dash – Proposed Pile Alignment
Red Area – Possible building removal to elsewhere

- 2.4.5. Option E – For completeness we have considered underpinning the phase 2 area, rather than sheet piles. This was a viable option prior to the April storms, however the further beach dropping encountered, and wall damage means this option is less suitable. It also will not give the 100-year design life to allow for future beach lowering, which also means it does not fulfil the central government funding requirements the outline business case is built on. Construction in poor weather is much more difficult than sheet piling, which as we plan to start in September, poor weather risk will only increase. It may still be an option in part, and we are not discounting however at the time of writing not favoured.
- 2.5. At the time of writing, officers are recommending a preference for option B, with option A also being viable. Further work is required on both options to see how best to protect the seawall long term and avoid expensive building repairs. Some explorations of the issues are below.
- 2.5.1. Both A and B would be outside MMO licencing area but would result in varying amount of biodiversity area loss. However, this may be balanced by the gain by the loss of the sloped revetment in Phase 1 and 2. However there is a risk if the loss is more than the gain, offsite credits may need to be purchased.
- 2.5.2. Both concessions have had various means used to defend from the sea, which may make installing new defences difficult, so close to the buildings.
- 2.5.3. EDDC would hold the risk of damaging the building or would be a large allowance in any contractor tender.
- 2.5.4. Tie backs of piles will be trickier around the concessions, so EDDC may need to accept a lower design life, or more expensive solutions.
- 2.5.5. Longer term – option B probably sets the precedent for keeping these buildings in a quite vulnerable position. Whilst extremes of sea level likely not an issue based on current sea level rise projections, beach lowering and sea level risk will increase wave overtopping, and this could get to levels which threaten the fabric of these buildings. Although EDDC would not be liable for damage to buildings from the sea, the concessions may surrender their leases/remove their buildings prior to the end of their leases. Therefore, EDDC would be left with two defended areas seaward side of the wall, which may take further funds to remove or turn into a suitable feature.
- 2.5.6. Option A leaves a weak spot in two locations, as sheet piling of option B is the only technique to give 100-year design life. If the concessions are removed, EDDC would need to carry out works to close the gaps. This design would be pre

prepared so should it become an emergency, works can start as soon as possible.

- 2.5.7. Option B carries significant risk of concession building failure, which worst case would require both buildings to be rebuilt.
- 2.5.8. Both option A and B keep the status quo and do not have major implications for any future place making.
- 2.5.9. Options C and D have been dismissed due to the lack of time before September to gain planning permission for relocations and negotiations over what each party would pay for.
- 2.5.10. Option E is still a consideration as part of option A and B. But unlikely to proceed, unless further wall investigations prove favorable.

3. Slipway damage and proposed works.

- 3.1. The slipway was damaged during the same storms that caused Phase 1 wall damage but was temporarily fixed with filling known voids with stone and concrete.
- 3.2. The April 2024 storms further washed-out material from under the slipway, causing huge voiding, making the slipway unsafe to use.
- 3.3. We considered again filling the slipway void with concrete but given the low beach we decided this would not give confidence of any safe use and give no longevity.
- 3.4. Therefore, the slipway was demolished, with rubble left in place to allow for construction plant tracking only.
- 3.5. The slipway is one of the most used in Exmouth and is essential for access for RNLI lifeguarding. The RNLI use it to tow their rescue jet ski with a quad bike to their lifeguarding point. Many of the lifeguards do not have the correct licence to drive the quadbike to other slipways, which limits the staff which can legally drive their equipment to the life guarding area. The slipway also provides direct access to the sea for the rowing club. They are currently using Carlton Hill slipway, by walking their boats down the busy shared use path and highway, which is not ideal especially with increasing summer footfall/traffic.
- 3.6. On inspection, it appears the slipway was extended at a later date and this lower section appears to be in better condition than the upper section, which has opened up more opportunities for a quicker repair.
- 3.7. The slipway ultimately needs a complete rebuild, however the design and permissions required would not be in place by September, let alone the summer.
- 3.8. There is also not currently any budget approved for a full slipway rebuild.
- 3.9. The future rebuild of the slipway should be a well-designed, planned and consulted structure with sufficient funding in place, which should wait for a future year. There could also be an opportunity to tie this to a future placemaking development.
- 3.10. Therefore, we are repairing the slipway to a 5-year design life standard, subject to storms and beach not lowering significantly.
- 3.11. This will allow the slipway to open to the public as soon as possible and allow time to plan for the replacement.
- 3.12. There is an ongoing risk it is damaged in future storms before 5 years.
- 3.13. We will aim to put a capital bid together for the slipway project prior to this Autumn's BSCAP.

4. Planning permission

- 4.1. Although the project is planned for September, it is still an emergency. We have to start in September to allow enough construction time before ever-increasing risk of winter storms. Therefore, planning will need to be retrospective.

- 4.2. We are proposing to put in for retrospective planning permission for both phase 1 and 2 after phase 2 is complete. This will not include a proposal for cladding, or the full slipway rebuild to allow flexibility and time for consultation going forward.

5. Phase 1 and 2 costs.

- 5.1. Below is a summary of costs to date a budget future costs, as well as income.

Expenditure		
Emergency works	£ 185	k
Phase 1 and 2 design costs	£ 300	k
Phase 1 construction cost	£ 1,050	k
Phase 1 risk budget	£ 100	k
Temporary Slipway estimate	£ 50	k
Phase 2 construction estimate	£ 1,160	k
Phase 2 client held risk	£ 417	k
Planning/consultation/cladding development	£ 50	k
Total	£ 3,312	k

Income		
EDDC capital expenditure	£ 1,500	k
FDGIA investigation grant	£ 90	k
FDGIA capital scheme grant	£ 1,722	k
Total	£ 3,312	k

- 5.2. Note these figures differ from the OBC, as the OBC does not include emergency works, and the OBC has a lower EDDC budget, to allow for EDDC to put further funds towards risk and developing any future cladding.

6. Future Procurement.

- 6.1. All work to date has been directly awarded due to the emergency requirement.
- 6.2. Given the break before phase 2 starts, we will tender the phase 2 construction works.
- 6.3. The current design consultant has been involved in the phase 2 design to date and given the lack to time to get to site, it seems prudent to keep them in contract.
- 6.4. Therefore, we are asking cabinet to approve increasing their commission to £300k to deliver Phase 2 and develop cladding options.

7. Ongoing Risk

- 7.1. The main risk is that the wall falls completely before we start with the end solution. This will increase temporary costs, put people and infrastructure at risk and likely mean more cost for the long-term solution.
- 7.2. The current proposal will mean that for the full 255m wall, the sloped revetment will be removed, leaving a vertical steel sheet piled wall, either indefinitely or until 2025 at the earliest. A vertical steel face is a change from the current masonry sloped revetment, and the required planning application, may require us to rebuild the revetment for aesthetics, or clad the vertical sheet piles, perhaps with recycling the current revetment stone, or another material such as timber. This would add additional cost to the overall project in 2025 or beyond.

8. Impact of construction/Timetable

- 8.1. Marine construction requires large equipment and materials, which require a lot of space.
- 8.2. It is anticipated that a similar sized compound used on phase 1 will be needed on phase 2.
- 8.3. The frontage cycle/footway will need to be closed for the duration of the works with pedestrians and cyclists needing to use the road and adjacent pavement.
- 8.4. There will be minimal beach works, so low impact on the beach and its use.
- 8.5. There will need to be road closures to allow for the works.
- 8.6. Works likely to begin September 2024 (pending contractor availability)
- 8.7. Working in September avoids the summer holiday season, and some local concessions will close the year, however there will be impacts on the concessions local to the works.

Financial implications:

The financial position and implications are clearly identified within the report and no further funding is being requested in this report.

Legal implications:

There are no substantive legal issues to be added to this report