Title of Report:	**REMEDIAL WORKS TO REDBAY HARBOUR**
Committee Report Submitted To:	**ENVIRONMENTAL SERVICES COMMITTEE**
Date of Meeting:	**8TH DECEMBER 2020**
For Decision or For Information	**FOR DECISION**

Linkage to Council Strategy (2019-23)	
Strategic Theme	Protecting and Enhancing Our Environments & Assets
Outcome	Our natural assets will be carefully managed to generate economic and social returns without compromising their sustainability for future generations.
Lead Officer	Head of Capital Projects, Energy & Infrastructure

Budgetary Considerations	
Cost of Proposal	Saving
Included in Current Year Estimates	**YES/NO**
Capital/Revenue	Estimated at **£1,416,000**
Code	N/A
Staffing Costs	Saving

Screening Requirements	Required for new or revised Policies, Plans, Strategies or Service Delivery Proposals.		
Section 75 Screening	Screening Completed:	Yes/No	Date: N/A
	EQIA Required and Completed:	Yes/No	Date: N/A
Rural Needs Assessment (RNA)	Screening Completed	Yes/No	Date: N/A
	RNA Required and Completed:	Yes/No	Date: N/A
Data Protection Impact Assessment (DPIA)	Screening Completed:	Yes/No	Date: N/A

REMEDIAL WORKS TO REDBAY HARBOUR	8th December 2020

Background

Deterioration of Redbay Harbour has been identified in the area of the outer pier which comprises sheet pile wall. The original pier was erected in 1847 with the sheet pile wall being constructed in the early 1980's. The harbour provides a berthing and landing facility for several local fishing vessels and aquaculture operations. In addition, the RNLI are currently using the pier to assist with operations of their All-weather Lifeboat moored off their Redbay station. Income from the moored vessels berthed alongside is circa £1700 per annum.

Recent inspections have been carried out from the seaward side of the pier, which raised serious concerns regarding the steel sheet piles supporting the integrity of the pier. A detailed conditions survey / inspection has subsequently been carried out as a result of these concerns. This condition survey took place on the 1st October 2019 which led to a detailed report on the condition with recommendations for essential remedial works necessary for the continual safe use of the pier.

The recommendations for remedial works are summarised in the table below including budget costings.

Summary of Options

Immediate Remedial Works Recommendation		**Estimated Budget Costs**
Impose Load Restrictions and Monitor for further movement	Essential work to reduce likelihood of immediate collapse.	**Immediate Remedial Works** Re-locating existing Armco barrier £2,500 Monitoring for movement £2,500 annually.
Long-Term Remedial Works Recommendation		**Estimated Budget Costs**
Option 1: **Monitor and Do Nothing (abandon the asset)**	If no action is taken there is a significant risk of structural failure and wall collapse. This would cause disruption to pier users and potentially have detrimental impacts on the Waterfoot MCZ. Therefore, do nothing is not considered an appropriate option.	**N/A**
Option 2: **Do Not Repair the pier - but place rock armour around the pier to meet environmental conditions**	**The rock armor around the pier would allow the asset to be effectively abandoned. This arrangement would have a much longer life span than a repair and thus no future replacement of steel sheet pile would be required.**	**£1,010,000**
Option 3: **Plate Repairs and Corrosion Protection System**	There is a significant risk that the sheet piles are too severely corroded for plate repairs to be a viable option. Therefore, Plate Repairs and Corrosion Protection System is not recommended as a suitable remedial works strategy.	**N/A**

Option 4: **Reinforced Concrete Facing**	This option could protect the sheet piles from further deterioration but will not restore the full structural capacity of the original walls. It would also require steel reinforcing bars welded to the sheet piles which will be difficult to achieve due to the condition of the piles. Therefore, reinforced concrete facing is not recommended as a suitable remedial works strategy.	**N/A**
Option 5: **Re-Build New Sheet Pile Wall**	The recommended option is to re-build a new sheet pile wall. This option would provide 60 year plus design life and can be designed to modern loading standards.	**Total** (excluding VAT) **£1,416,000**

Recommendations

It is recommended the Environmental Services Committee approve the progression of this project to Stage 2 of the Capital Programme (produce tender documentation and bring back a tender report for members consideration), based on Option 5, Replacement of Sheet Piled Wall and Concrete Decking with an estimated value of **£1,416,000**