

SOUTHWOLD HARBOUR MANAGEMENT COMMITTEE

Monday, 24 July 2023

Subject	Southwold Harbour Investment Plan Study and options for replacement of the South Pier
Supporting Officer	<p>Madeline Fallon Senior Coastal Advisor madeline.fallon@eastsuffolk.gov.uk</p> <p>Nick Khan Strategic Director Nick.khan@eastsuffolk.gov.uk</p>

Is the report Open or Exempt?	OPEN
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Category of Exempt Information and reason why it is NOT in the public interest to disclose the exempt information.	Not applicable
Wards Affected:	Southwold

Purpose and high-level overview

Purpose of Report:

To provide an update on the final Southwold Harbour Study and Investment Plan and options to address the future function, operation, and survivability of the entrance to Southwold Harbour in the broader context of estuary management and the economic future of the harbour.

Recommendation:

That having considered the report the Harbour Management Committee supports the preparation of a Scope to go forward to an Outline or Detailed Design, including Environmental Assessments, and a Business Case for the preferred Option H6 to replace the South Pier with a breakwater.

Impact Assessment

Governance:

No impacts

Environmental:

If nothing was done to improve the condition of the South Pier, it is expected to collapse during a severe storm within the next 5 years. If the South Pier does not fail due to wave impact then failure from undermining (following erosion of the channel bed) might occur within 10 years.

Equalities and Diversity:

No impact

Financial:

The total initial capital cost of these works is £13.9 million, financial and funding details will be provided with the scope and business case.

Legal:

East Suffolk Council as owner of Southwold Harbour is required to maintain access to the Harbour.

Risk:

There are several risks around coastal erosion and flooding of businesses and properties in the harbour which can be addressed through the replacement of the South Pier. Full risk assessments will be provided with the scope and business case.

Harbour Business Plan Priorities

To be added when the plan is in place.

East Suffolk Council Strategic Plan Priorities

Select the themes of the Strategic Plan which are supported by this proposal:		
T01	Growing our Economy	<input checked="" type="checkbox"/>
T02	Enabling our Communities	<input checked="" type="checkbox"/>
T03	Maintaining Financial Sustainability	<input checked="" type="checkbox"/>
T04	Delivering Digital Transformation	<input checked="" type="checkbox"/>
T05	Caring for our Environment	<input checked="" type="checkbox"/>

Background and Justification for Recommendation

1 Background facts	
1.1	The South Pier is in a poor condition and at risk of collapse, and replacing it is expected to require substantial investment. The North Wall within the harbour is not well used for mooring, which may be due to wave disturbance, possibly linked to the poor condition of the South Pier.
1.2	The harbour entrance and the estuary defences are mutually dependent, so the future management of the estuary defences and potential changes in the tidal prism need to be taken into account when considering what needs to be done to improve or replace the South Pier and other harbour structures.
1.3	As well as providing a defined entrance to the harbour, the North and South Piers are control structures for the adjacent coast. If the South Pier was to collapse and not be replaced or repaired, this would increase the exposure of the North Pier, which would also fail. With the loss of both structures, erosion of the coastline would accelerate, and the form and location of the estuary mouth would be expected to change.
1.4	A further issue is flood risk to properties and businesses within the harbour. Access to the harbour is already restricted on high tides, with the condition of the Harbour Road deteriorating, and the frequency of flooding will increase with climate change. Investment in the harbour entrance structures will have less benefit if the harbour is no longer viable because of the frequency of flooding.

2 Current position	
2.1	If nothing was done to improve the condition of the South Pier, it is expected to collapse during a severe storm within the next 5 years. If the South Pier does not fail due to wave impact then failure from undermining (following erosion of the channel bed) might occur within 10 years.
2.2	Collapse of sections of the South Pier could block the entrance channel, restricting access to the Harbour and potentially causing a safety hazard.
2.3	Loss of the South Pier would enable increased sediment movement from south to north, accelerating erosion of the dunes and increasing the risk of tidal flooding to Walberswick.
2.4	Increased wave impact on the North Pier (this structure is not designed for direct wave impact).

3 How to address current situation

3.1	The preferred option for works to the South Pier is Option H6 – Replace South Pier with a breakwater. The total initial capital cost of these works is £13.9 million. A breakwater constructed of rock and/or concrete armour units would significantly improve wave conditions within the entrance channel and the inner harbour, reducing wave heights at the North Wall to about 0.5m during conditions expected to occur once every year on average. A rock and concrete armour breakwater is the option with the greatest benefits for wave conditions and is a more cost-effective solution than other long-term options.
3.2	It is also recommended that minor works to repair the North Pier should be undertaken at the same time as the replacement of the South Pier. These works would involve replacement of the broken Core-Loc concrete armour units over a length of about 25m at the seaward end of the North Pier, at a cost of about £1 million.

4 Reason/s for recommendation

4.1	If nothing was done to improve the condition of the South Pier, it is expected to collapse during a severe storm within the next 5 years. If the South Pier does not fail due to wave impact then failure from undermining (following erosion of the channel bed) might occur within 10 years.
4.2	Collapse of sections of the South Pier could block the entrance channel, restricting access to the Harbour and potentially causing a safety hazard.

Appendices

Appendices:

Appendix A	Southwold Harbour Study Final Report
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Background reference papers:

None
