

TORBAY COUNCIL

Report No: **2/2006**

Title: **Brixham Harbour - Capital Repair Works.**

To: Harbour Committee

on 16th January 2006

1. Purpose

- 1.1 This report provides Members with details relating to necessary capital maintenance works at Brixham harbour. It provides the Harbour Committee with the relevant information to allow them to recommend certain variations to the Council's capital spending plan.
- 1.2 The works concern subsidence and relaying of paving on the Eastern Arm, replacement and improvements to the supply of electricity to the fishing industry and improvements to quayside fendering and vessel access arrangements.

2. Relationship to Corporate Priorities

- 2.1 This project will improve the safety of the working quayside for the fishing industry. It therefore impacts on the priority of 'Improving Torbay's Economy'. By supporting a sustainable fishing industry.

3. Recommendation(s)

That Council be recommended to:-

- 3.1 That vary the approved Capital Plan to include the Harbour Projects detailed in this report, to be funded from the Brixham Harbour Reserve.
- 3.2 That, following consideration of other demands on the Brixham Harbour Reserve, the decision to progress any of the schemes outlined in the report be delegated to the Director of Marine Services in consultation with the Chairman of Harbour Committee, and that the Director of Finance be requested to approve the use of the Brixham Harbour Reserve for these purposes.

4. Reason for Recommendation(s)

- 4.1 The Loading and Unloading of Fishing Vessels Regulations 1988 require the Harbour Authority to maintain quayside area in good order.
- 4.2 The Health and Safety at Work Act 1974 requires the Harbour Authority to generally secure the health, safety and welfare of people at work as well as protecting people other than those at work against risks to their health and safety arising out of other work activities. This includes the need to provide safe pedestrian walkways throughout the Fish Quay area.

5. Key Risks associated with the Recommendation(s)

- 5.1 The key risks associated with the recommendations and therefore proceeding with the capital works, relate to finance and harbour operations.
- 5.2 Financially the cost of the various works will inevitably lead to a reduced Brixham harbour reserve fund. The reserve fund balance at the end March 2005 was £924,000 and the outline costs associated with the capital works detailed within this report have a cumulative total of approximately £600,000. A Reserve Account contingency of £144,000 (based on 20% of turnover) together with a cash figure of £250,000 is required to provide financial cover to fund repairs and trading deficits without call on the Council's

General Fund. The target range of this reserve account based on the understanding of needs and risks is £394,000 to £1,000,000. Likelihood = 4. Impact = 3.

- 5.3 Undertaking such an extensive range of capital repair work will clearly impact on the operational efficiency of the harbour. However, this impact can be mitigated with careful planning and contract management. Likelihood = 3. Impact = 2.

- 5.4 There is therefore an intermediate risk associated with proceeding with this work, as can be seen in the table below. ($4 \times 3 = 12$)

Likelihood	6	6	12	18	24
	5	5	10	15	20
	4	4	8	x12	16
	3	3	6	9	12
	2	2	4	6	8
	1	1	2	3	4
		1	2	3	4
		Impact			

 Low risk
  Intermediate risk
  High risk

The "x" in the above matrix denotes where the author has assessed the level of final risk to fall.

- 5.5 There are also key risks associated with not proceeding with the recommendations in this report. These risks relate to health & safety, infrastructure serviceability and the general port business. In summary they have been assessed as having a likelihood score of 5 and an impact score of 3.

- 5.6 There is therefore a high risk associated with not proceeding with this work, as can be seen in the table below. ($5 \times 3 = 15$)

Likelihood	6	6	12	18	24
	5	5	10	x15	20
	4	4	8	12	16
	3	3	6	9	12
	2	2	4	6	8
	1	1	2	3	4
		1	2	3	4
		Impact			

 Low risk
  Intermediate risk
  High risk

The "x" in the above matrix denotes where the author has assessed the level of final risk to fall.

6. Alternative Options (if any)

- 6.1 The do nothing option would result in a gradual decline in the evenness of the quayside surface ultimately making it unsafe to use. Not replacing the electrical boxes would ultimately result in the loss of available shore side electrical power for the fishing industry. If the vertical hardwood fenders are not upgraded then damage to the quayside

and vessels will result, especially during periods of bad weather.

7. Background

7.1 Torbay Council in support of the Brixham fishing industry and indeed wider fishing activity off the south Devon coast built the fishing vessel basin thirty years ago.

7.2 The relatively deep water in the basin gives fishing vessels the opportunity to leave the harbour at any state of the tide and therefore affords increased fishing time. The FISHING VESSEL basin has therefore directly contributed to the current success of the local fishing fleet whilst providing facilities and services for fishing vessels located throughout the south West of England.

The quay consists of interlocking sheet steel piles driven into the bedrock. The structure was then back filled with sea dredged material (free draining granular fill) and capped with a flexible deck construction of interlocking brick pavers. Service pipes i.e. electrical/drainage were laid under the brick paved surface. In order to maintain an even surface the design is such that at intervening intervals the surface bricks can be removed, further granular fill added and the surface bricks re-laid to maintain an even surface.

The gradual loss of fill caused by settlement over the years since the quay was built and a loss of fill due to holes in the sheet piling caused by the effects of ALWC (Accelerated Low water Corrosion) has now necessitated a repair of the quay structure. The situation now is of a quay surface, which is completely uneven, and with surface drainage channels collapsed in some places.

7.3 Eastern arm subsidence, repaving works and electrical repairs

In order to progress these repair works a number of surveys have been carried by consulting engineers, on behalf of the Council. Plans have been produced which show existing details of how the quay has been constructed and with what materials. Other details included in the survey plans are items such as lighting columns, the LPG tank, water and electrical points, the fuel pumping station and refuelling points with their corresponding fuel, electric and mains water supplies.

Surveys for these works have now been completed, including provisional tender documents and outline plans for the reinstatement of the quay surface. Repair works will consist of lifting the block pavers, reinstating the quay levels, cleaning brick pavers and then relaying. At the same time all essential below ground services will be inspected and made good where needed. On completion of the repair works to the quay surface, specific vehicle parking spaces and pedestrian walkways will be marked out.

Whilst these repaving works are being carried out it is the intention of the Harbour Authority to replace all the power pillars around the basin, which supply electricity to the fishing industry. There are currently 12 pillars in total, which are inspected/tested on a 3 monthly basis by Havills Electrical Contractors as part of the Harbour Authority's statutory electrical testing responsibilities.

The electrical units within the power pillars, which also house water supply points, are in poor condition and whilst endeavours have been made to repair them over a number of years we have been advised by our electrical contractors that the units are now due total replacement. This is because the age of the units is making the sourcing of replacement parts increasingly difficult and the current older systems are in danger of failing to meet modern day safety testing requirements.

Survey works on behalf of the Authority aimed at a project of total replacement of power pillars in and around Brixham harbour are still needed to be carried out. Included in the survey at the same time will be an assessment of the current quayside lighting. The supply of electricity and water around the FISHING VESSEL basin is currently not metered and

consequently provided as part of an inclusive harbour charging system. The downside of this approach is the poor attitude of harbour users towards environmental savings in way of electricity and water. It is the intention of the Authority that the supply of electricity and water to the industry will, where possible, be a paid for service. It is expected that this approach will encourage better environmental usage and go some way towards funding the provision of electrical power and water service to the industry.

7.4 Vertical Hardwood Fenders

In 2001 whilst carrying out essential repairs to the fishing vessel basin a new fender system was installed on the quay walls. The purpose of any fender system is to provide the quay infrastructure with protection from the actions of vessels whilst they are manoeuvring or berthed alongside and during periods of bad weather. As a consequence of having a fender system vessels are also provided with an element of protection themselves.

The fender system in the fishing vessel basin at Brixham consists of vertical hardwood piles spaced at regular intervals around the quay. These piles were faced with a softwood sacrificial element which worked on the premise that the sacrificial element would be gradually worn away by the action of vessels berthed alongside the quay over a considerable period of time.

Experience has shown that the sacrificial element is not robust enough and has been removed by the action of vessels lying alongside the quay. The loss of the sacrificial element now means that during periods of bad weather boats are in some cases contacting with the steel capping of the quay edge resulting in damage to vessels and the quayside structure.

Marine Services are proposing to face the vertical hardwood fenders with robust 'D' shaped rubber fendering, which will provide both the vessels and the quay with adequate protection. Two years ago a small section of quay was faced with 'D' fendering and this has proved to be of good design. At the same time we also intend to replace all the steel ladders around the basin and to carry out repairs to the steel capping where necessary.

8 Costs of capital works

Refer to Annex 1 an exempt item by virtue of paragraphs 7 & 9 of Part 1 of Schedule 12a of the Local Government Act 1972.

Kevin Mowat
Director of Marine Services

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IMPLICATIONS, CONSULTATION AND OTHER INFORMATION

Part 1

These sections may have been completed by the Report author but must have been agreed by the named officers in the Legal, Finance, Human Resources, Estates and Property and Procurement.

Does the proposal have implications for the following issues? If "Yes" - give details. <i>delete as appropriate</i>		Name of responsible officer
Legal	No	Bill Norman
Financial – Revenue	No	Pete Truman
Financial – Capital Plan	Yes and subject to approval, the expenditure on these projects to be funded from the Brixham Harbour Reserve	Steve Warren
Human resources	No	Sue Wiltshire
Property	No	Sam Partridge
Procurement and Efficiency	No	Robert Valentine

Part 2

The author of the report must complete these sections.

Could this proposal realistically be achieved in a manner that would more effectively: <i>delete as appropriate</i>		
(i)	promote environmental sustainability?	No
(ii)	reduce crime and disorder?	No
(iii)	promote good community relations?	No
(iv)	promote equality of opportunity on grounds of race, gender, disability, age, sexual orientation, religion or belief?	No
(v)	reduce (or eliminate) unlawful discrimination (including indirect discrimination)?	No

If the answer to any of the above questions is "Yes" the author must have addressed the relevant issue/s in the main report and have included a full justification and, where appropriate, an impact assessment.

Part 3

The author of the report must complete this section.

	<i>delete as appropriate</i>	If "Yes", give details
Does the proposal have implications for any other Business Units?	No	

Part 4

Is this proposal in accordance with (i.e. not contrary to) the Council's budget or its Policy Framework?		<i>delete as appropriate</i>
		No
1.	If "No" - give details of the nature and extent of consultation with stakeholders and the relevant overview and scrutiny body. The repairs proposed in this report require a variation to the Council's approved Capital Plan.	
2.	If "Yes" - details and outcome of consultation, if appropriate.	

Part 5

Is the proposal a Key Decision?	<i>delete as appropriate</i>	If "Yes" - give Reference Number
	No	

Part 6

Wards

Berry Head with Furzeham

Appendices

Appendix 1 Costs of Capital Works (Exempt Item)

Documents available in Members' Room

Background Papers:

The following documents/files were used to compile this report: