AGENDA ITEM NO 16

REPORT NO 286/11

ANGUS COUNCIL

INFRASTRUCTURE SERVICES COMMITTEE - 19 APRIL 2011

ARBROATH HARBOUR SLIPWAY ACCESS AND MISCELLANEOUS WORKS

REPORT BY DIRECTOR OF INFRASTRUCTURE SERVICES

ABSTRACT

This report seeks approval for the Head of Roads to implement proposals for the short and medium term for public access for launching and retrieving trailer mounted vessels within Arbroath Harbour. Also within the report, it is proposed to restrict vehicle access to the harbour via Danger Point during severe weather conditions and to undertake repairs to the slipway cradles.

1 RECOMMENDATIONS

1.1 It is recommended that the Committee:

(i) instructs the Head of Roads to implement a series of proposals as detailed in this report in order to allow public access for launching and retrieving trailer mounted vessels from the patent slip in Arbroath Harbour;

(ii) agree to the introduction of charges as described in this report for that use;

(iii) instructs the Head of Roads to implement restrictions on vehicle access to the harbour via Danger Point during severe weather conditions;

(iv) notes that repairs to the cradles on the patent slipway are required to maintain boat repair and maintenance operations at the harbour.

2 BACKGROUND

2.1 The possibility of constructing a new slipway at Arbroath Harbour, which would allow small, trailer-mounted vessels, such as sailing boats, small yachts, power boats, dinghies and other such vessels, to be launched and recovered was reviewed in detail and subject to public consultation in 2008 (reference Report No 1002/08). The outcome of the consultation was that the market research which was undertaken did not provide sufficient confidence that the level of demand would be such as to generate the income required to meet the running costs of a managed facility, notwithstanding the capital cost of such provision and concluded that the provision of a new public slipway facility at Arbroath Harbour should be not progressed at that time.

2.2 Following further interest in providing facilities for public access to the patent slip within the harbour, the Head of Roads has considered options to facilitate short term (early in financial year 2011/12) and medium term proposals to allow trailer mounted vessels access to a suitable slipway for launching/retrieving. Proposals are presented in this report having considered factors including location, accessibility, manageability, costs, timescales for delivery and risks.

2.3 The frequency of waves overtopping the south breakwater has been noted over recent years, particularly during winter storms that coincide with high tides. Waves overtopping the south breakwater present a significant hazard to harbour users. Warning signs have been erected to caution harbour users. However, given the likelihood of overtopping there is a risk to harbour users from this. Consideration has been given to controlling vehicular access to the harbour for safety reasons in the build up to and during storm events. Details are presented in this report.
3 DETAILS

3.1 Slipway Cradles

3.1.1 The existing patent slip and associated winch are owned and operated by Angus Council and held on the Roads Division account. The slipway within the boatyard is predominantly used for the maintenance and refurbishment of vessels. These works are most often undertaken by Mackay Boatbuilders (Arbroath) Ltd, who lease the adjacent Boatyard and Sailcloth Store from Angus Council (Reference Report to Angus Council 119/08). The slipway is not included within the boundary of the leased land. The ground floor units of the former Sailcloth Store and one office on the first floor are sublet by Mackay Boatbuilders (Arbroath) Ltd. (See plan attached to this report).

3.1.2 The current slipway has two cradles for use during refurbishment of boats. The bottom cradle is used most frequently for this purpose, whilst the top cradle is mainly used for larger boats requiring both cradles or on occasions when it is possible to accommodate two boats on the slipway simultaneously. The Harbourmaster and assistants are responsible for the hauling and launching of the boats using the cradles and the winch.

3.1.3 The lower cradle, which is more heavily used and more exposed to corrosive conditions than the upper cradle, has been subject to recent repairs following accident damage and the cradle is suffering from corrosion in places. Following a recent inspection of both cradles the lower cradle has been found to be suffering from corrosion to an extent which now requires structural repairs.

3.1.4 It is therefore proposed to swap the upper and lower cradles to redistribute the operational and environmental ‘wear and tear’ on the cradles, and to undertake remedial works to the steelwork corrosion to the current lower cradle. The costs of undertaking this work is anticipated to be £10,000.

3.1.5 The proposed swapping of the upper and lower cradles and repairs to the lower cradle steelwork, as detailed above, would take 2-4 weeks to complete. It is proposed that the implementation of these works be undertaken during financial year 2011/12.

3.2 Access to the South Breakwater

3.2.1 Vehicles and pedestrians can access the road along the south breakwater from Danger Point and pedestrians also over the walkover bridge at the slipway. The south breakwater provides protection to the harbour from wind and waves. The risks from the noted waves overtopping the breakwater have been emphasised by the recent occurrence of a vehicle which had accessed the harbour along the south breakwater during the storm conditions being washed into the outer harbour by waves overtopping the breakwater. It is therefore considered that access to the road along the south breakwater for vehicles is closed for safety reasons in the build up to and during storm events, at the determination of harbour staff.

3.2.2 During extreme high tides where overtopping is expected or occurring, it is proposed that access to the south breakwater for vehicles would be restricted. Warning signs are already in place for this risk, which it is proposed would be augmented with further signage associated with a vehicular barrier.

3.2.3 With respect to the installation of a vehicular barrier at Danger Point and appropriate signage. The following options have been considered:

a) Heavy Duty Manual Swing Barrier- a low cost solution in areas for locations or situations where a fully automated barrier entry system is either not a necessity or not cost effective. The barrier can be locked in either the open or closed position, providing security to any specified area when required. This would be less exposed to severe weather conditions than other options, but needs more space to open/close.
b) Heavy Duty Manual Raise Arm Barrier – a low cost solution in areas for locations or situations where a fully automated barrier entry system is either not a necessity or not cost effective. The barrier can be locked in either the vertical or horizontal position, providing security to any specified area when required. Exposure to severe weather conditions in vertical position may be a dis-benefit.

c) Automatic Swing Barrier – a fully automated barrier entry system controlled by keypad, proximity cards, voice/video intercom access, token acceptors, remote control fobs or key switch. This would require a dedicated power supply. This option would be less exposed to severe weather conditions than other options, but needs more space to open/close. It would be more prone to vandalism than a manual version.

d) Automatic Rising Barrier – a fully automated barrier entry system controlled by keypad, proximity cards, voice/video intercom access, token acceptors, remote control fobs or key switch. This would require a dedicated power supply. Exposure to severe weather conditions to access control and barrier in vertical position may be a dis-benefit. This option would be more prone to vandalism than a manual version.

e) Automatic Rising Bollards - two fully automated bollards with entry system controlled by keypad, proximity cards, voice/video intercom access, token acceptors, remote control fobs or key switch. This would require a dedicated power supply. Excavation would be required. Exposure to severe weather conditions to access control may be a dis-benefit. This option would be less prone to vandalism than other options. It would be less visible but could include lights to improve the visibility.

f) Automatic Rising Kerb - a fully automated rising kerb with a variety of access control options including proximity card, remote fob, token acceptor, keypad and intercom, working in conjunction with inductive loop sensors, ensuring safety and close function. This would require a dedicated power supply. More significant excavation would be required. Exposure to severe weather conditions to access control may be a dis-benefit. This would be less prone to vandalism than other options. It would be more visible and heavier duty than a bollard option.

3.2.4 Costs of vehicle barrier at end of South Breakwater

The costs of installation of a vehicular barrier at the end of the south breakwater and appropriate signage options have been estimated as follows:

a) Heavy Duty Manual Swing Barrier £3,500;
b) Heavy Duty Manual Raise Arm Barrier £3,500;
c) Automatic Swing Barrier £10,000;
d) Automatic Rising Barrier £10,000;
e) Automatic Rising Bollards £14,000; and
f) Automatic Rising Kerb £20,000.

It is considered that option a) is likely to present the most cost-effective solution, although it is proposed that option b) continue to be considered dependent upon installation issues.

3.2.5 Implementation of Controlled Vehicle Access to the South Breakwater

It is proposed that the Harbormaster or his staff in conjunction with officers based in Forfar, who receive meteorological data from SEPA will assess weather conditions and tide levels and will implement the closure of the roadway along the south breakwater as required.

3.2.6 The proposed installation of the vehicle access control to the south breakwater roadway as detailed above would take 1-3 weeks to complete. It is proposed that the implementation of these works be undertaken in the summer of 2011 in advance of the anticipated autumn and winter storms.
4 SHORT TERM PROPOSALS FOR PUBLIC ACCESS TO THE SLIPWAY

4.1 Proposal for access to the slipway for small trailer-mounted craft

It is proposed to allow controlled public access to the slipway through the existing vehicular gate adjacent to the walkover bridge and along an unsurfaced roadway onto the existing slipway under the supervision of the Harboumaster and assistants (see plans attached to this report).

4.2 Working Times

The boatyard carries out refurbishment of boats mainly during the week and during normal working hours, which often requires the use of the lower cradle. Public access to the boatyard during these working hours is not considered to be suitable for reasons of safety and could affect commercial activities in the boatyard. Use of the lower cradle may mean that access to the slipway for launching vessels is physically restricted at times. This would allow the public access to use the slipway only during the evenings and weekends, depending on the tide, and availability of the Harboumaster and assistants to supervise access.

4.3 Issues

4.3.1 The layout and orientation of the existing access gate to the slipway would require an owner manoeuvring a vehicle and trailer onto and down the slipway to take great care. It is though considered that this is achievable albeit with the exercise of the necessary care.

4.3.2 At the access gate, there is a water tank etc which is used for the washing down of boats, this is used to prevent pollutants from the boats entering the harbour waters. It is noted that consideration would have to be given to protecting this tank and associated pumps and pipework from vehicle damage (part of the council’s slipway assets).

4.3.3 It is noted that after launching their vessel from the slipway, users will have to take their trailer and vehicle to suitable remote parking and return on foot to their vessel.

4.3.4 Safety and security of the users of the slipway and the boatyard, and potential impact on commercial operations therein have been discussed with Mackay Boatbuilders (Arbroath) Ltd. These issues would be subject to further consideration as the management procedures for this proposal are finalised.

4.3.5 In addition, concerns over unregistered and uninsured boats accessing the outer harbour have been raised and would again need to be addressed as the management procedures for this proposal are finalised. This might include restrictions on the type of vessel permitted to use the slipway.

4.3.6 The rails on the patent slipway present a hazard to pedestrians through tripping and to vessels and launch vehicles and trailers. Similarly the vehicles and trailers would introduce a risk that the rails may be damaged (see 4.8 below).

4.4 Proposed Construction Works

4.4.1 There are no construction works proposed under this short term option.

4.5 Control of slipway

4.5.1 It is proposed that access to the slipway should be controlled by the Harboumaster and assistants. The following controls are proposed:

(i) Times will be made available on the internet and at the Harboumaster’s office of when the slipway is available which will be dependant on any operations being carried out by the boatyard operators.
(ii) Access will be supervised by the Harbourmaster or his assistants
(iii) Vessel owners who have pre-registered their insurance details with the Harbourmaster would be allowed to access the slipway without further checks on their insurance.
(iv) Other users would need to provide evidence of adequate insurance to the Harbourmaster or assistants prior to accessing the slipway.

4.6 Costs

4.6.1 It is anticipated that staff time only would be required under this option to control and manage the operation of the slipway subject to demand. Similarly it is anticipated that staff costs can be contained within the current Roads revenue budget on the basis that the operation of the slipway for public use will be subject to current availability of staff and consistent with such other duties as they are required to undertake.

4.6.2 It is further proposed that users be charged £10 per day (or part thereof) for use of the slipway for this purpose or that as an alternative a seasonal fee of £50 (June-September) be levied.

4.7 Timescales

4.7.1 It is anticipated that subject to committee approval these short term proposals could be implemented quickly, making public access available for the summer period commencing in June 2011.

4.8 Risk Management

(i) Due to the uneven nature of the ground at the slipway and the presence of the rails, there is a potential risk to pedestrians and vehicles. It is proposed that signage and supervision of users by harbour staff would manage this risk.

(ii) Day to day harbour operations are affected due to time spent by harbour staff controlling the slipway. It is proposed that access to the slipway would be suspended where harbour staff are required for other duties.

(iii) Potentially the presence of two boats on the slipway would prevent safe access to the slipway by members of the public. It is proposed that appropriate notice would be given on the internet and at the Harbourmaster’s office when such conditions apply.

(iv) Security of the boatyard and Sailcloth Store, Winch Shed and boats being repaired, and safety of members of the public require consideration. It is proposed that supervision of users by harbour staff would manage this risk.

4.9 Summary

4.9.1 It is considered that the risks associated with this short term proposal for public access to the slipway can be managed as detailed above and can be delivered within existing budgets, but subject to priority being given to other harbour duties. It is therefore recommended that this proposal be initially implemented for the summer months of June-September 2011 to establish the viability of the proposal and to allow the funding arrangements associated with the medium term proposals relating to continuing such use of the slipway, which are detailed below, to be considered.
5 MEDIUM TERM PROPOSALS FOR PUBLIC ACCESS TO THE SLIPWAY

5.1 Proposal for access to the slipway for small trailer-mounted craft

5.1.1 Following the initial operating period described above (June to September 2011) it is proposed that a further report be brought back to this committee to assess the merits and issues of continuing the practices as described or as may be modified, based on patronage, safety, convenience both to new users and established users and any other salient information gathered. The subsequent report would make recommendations regarding the provision of the further medium term measures in respect of the vehicle access to the slipway as are set out below.

5.1.2 In addition to the short term proposal detailed in section 4, it is proposed that the unsurfaced track to the slipway would be replaced with a formed surface, which may include physical protection measures to and from the slipway rails. In addition to this, it is proposed that a moveable security hoarding is erected to prevent unauthorised access to restricted areas within the boatyard, which may reduce the requirements for supervision by the harbour staff.

5.1.3 Working Times

As detailed in section 3.2 of this report, available access to the slipway would be subject to operational and physical restrictions during the working times of the boatyard and the Harbormaster and assistants to supervise access. Tidal conditions also need to be factored into the periods of availability.

5.1.4 Issues

The issues applying to the short term proposals, as detailed in section 4.3 of this report, also apply to the medium term proposals for slipway access as detailed in this section of the report.

5.1.5 Control of slipway

The controls as detailed for the short term proposals in section 4.5 of this report would also apply to these medium term measures. In addition, if the access control proposals for the south breakwater roadway as detailed in this report are adopted then these could be utilised to further control vehicular access to the slipway as well as vehicular access to the roadway on the south breakwater.

5.1.6 Proposed Works (slipway)

(i) The existing unsurfaced area between the access gate and the slipway is proposed to be excavated and replaced with suitable road construction. This will include any protection measures for the rails to the patent slip, and the tank, pumps and pipework of the wash catchment system.

(ii) It is proposed that movable security hoarding to be purchased and erected when required to inhibit unauthorised access to the boatyard areas.

5.1.7 Costs

The estimated cost for the above proposed works is £27,500, as summarised below:

(i) Excavation of existing surface and replace with road construction, including protection of rails to the patent slip, and tank, pumps and pipework = £25,000;

(ii) Moveable Security Hoarding = £2,500.
5.2 **Timescales**

5.2.1 The proposed medium term works at the slipway, as detailed above would take 4-6 weeks to complete. It is proposed that the implementation of these works is subject of review of the short term proposals detailed above which will be reported to a future committee meeting in late 2011. Subject to a successful review and committee approval, it is considered that these works could be implemented ahead of summer 2012 during financial year 2012/13.

5.5 **Risk Management**

(i) Due to the uneven nature of the ground at the slipway and the presence of the rails, there is a potential risk to pedestrians and vehicles. It is proposed to resurface the access to the slipway and install protection measures to and from the slipway rails.

(ii) Day to day harbour operations are affected due to time spent by harbour staff controlling the slipway. It is proposed that access to the slipway will be suspended when harbour staff are required for other duties.

(iii) Potentially two boats on the slipway simultaneously prevent safe access to the slipway by members of the public. It is proposed that notice of restrictions would be given on the internet and at the Harbourmaster’s office.

(iv) The security of the boatyard and Sailcloth Store, Winch Shed and boats being repaired, and safety of members of the public require consideration. It is proposed to erect security hoarding across the slipway to prevent unauthorised access to the boatyard area.

5.6 **Summary**

5.6.1 It is considered that the risks associated with this medium term proposal can be managed as detailed, but subject to priority being given to other harbour duties and the necessary funding being identified for the proposed works. It is therefore recommended that the proposed medium term works as detailed be prioritised and implemented during financial years 2011/12 and 2012/13 as described. The proposed medium term works shall be subject to a review of the success of the short term measures for facilitating access to the slipway for the stated purposes and committee approval of same, and could all be implemented ahead of summer 2012.

6 **FINANCIAL IMPLICATIONS**

**2011/12**

6.1 Staff costs for the proposed initial implementation of operation of the slipway to allow public access for launching and retrieving trailer mounted vessels within Arbroath Harbour, as detailed above in the short term proposals (see section 4) will be contained within the 2011/12 Road’s Division revenue budget.

6.2 The £10,000 cost of repairs to remedy the corrosion to the steelwork on the lower cradle (section 3.1 of this report) as well as the swapping of the upper and lower cradles, shall be funded from the Roads and Transport Repairs and Renewal Fund in 2011/12.

6.3 The installation cost of £3,500 for a manual raise vehicular barrier at Danger Point (section 3.2 of this report) and appropriate signage to control access during storm events shall be funded from the Roads and Transport Repairs and Renewal Fund in 2011/12.

**2012/13**

6.4 Subject to the successful review of the initial period of operation and the necessary committee approval as detailed above, the following works as detailed in the medium term proposals (section 5 above) could be undertaken at an estimated cost of £27,500 in 2012/13.
6.5 The £25,000 cost for resurfacing and repairs to the surfacing to improve access to the slipway for the public, can be provided for from the Roads Capital Budgets for 2012/13 subject to the operational review described. If approved, the project would require to be reflected in the 2012/13 Capital Plan.

6.6 The £2,500 cost to purchase of the movable security hoarding to provide security and safety to the boatyard, as detailed in the medium term proposals together with staff costs for the erection of the hoarding can be contained within Roads revenue budgets.

Charges

6.7 It is proposed that users be charged a nominal fee of £10 per day (or part thereof) for using the slipway for launching/retrieving trailer mounted vessels. An alternative seasonal charge of £50 for 2011 (June-September) is also proposed.

7 HUMAN RIGHTS IMPLICATIONS

7.1 There are no Human Right implications arising from the proposals in this report.

8 EQUALITIES IMPLICATIONS

8.1 The issues dealt with in this report have been the subject of consideration from an equalities perspective. An equalities impact assessment has been undertaken.

9 SINGLE OUTCOME AGREEMENT

9.1 This report contributes to the following local outcomes contained within the Single Outcome Agreement for Angus:

- Growth in tourism in Angus is achieved
- Resources are used effectively.

10 CONSULTATION

10.1 The Chief Executive, Director of Corporate Services, Head of Finance and Head of Law and Administration have been consulted in the preparation of this report.

11 CONCLUSION

11.1 It is recommended that the committee authorise the proposed implementation of short term proposals for the access to the patent slipway for trailer-mounted vessels at Arbroath Harbour for the summer period commencing in June 2011.

11.2 The issues associated with providing such access to the slipway for trailer-mounted vessels will be reviewed and reported to a future committee meeting in late 2011, with a view to recommending implementation of further medium term proposals.

11.3 It is proposed that access controls for vehicles using the road on the south breakwater during storm conditions be implemented.

11.4 Repairs are required to the steelwork on the lower cradle on the patent slip, which are to be undertaken to maintain harbour slipping operations.

ERIC S LOWSON
DIRECTOR OF INFRASTRUCTURE SERVICES
NOTE:

The background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information) which were relied on to any material extent in preparing the above report are:

Report 840/10 AHJCC Arbroath Harbour – Autumn Report - Infrastructure Services Committee on 19 November 2010.

Report 119/08 Proposed Lease of Boatshed and Sailcloth Store – Arbroath Harbour – Mackay Boatbuilders (Arbroath) Ltd - Corporate Services Committee on 31 January 2008

Report 1002/08 Arbroath Harbour Consideration of Provision of Public Slipway - Infrastructure Services Committee on 14 October 2008

ROADS/JG/WS/MD
APPENDIX 1
DETAILED PLAN

This plan is the correct version and is not the version that was submitted to the meeting of Infrastructure Services Committee (as shown on the next page of this report) and subsequently submitted to Angus Council on 12 May 2011