



---

**REPORT TO: ECONOMIC DEVELOPMENT & INFRASTRUCTURE SERVICES  
COMMITTEE ON 13 OCTOBER 2009**

**SUBJECT: BRIDGES CAPITAL AND REVENUE PROGRAMMES 2009/2010**

**BY: DIRECTOR OF ENVIRONMENTAL SERVICES**

**1. REASON FOR REPORT**

- 1.1 To approve the Capital Budget for Bridge Assessments and Strengthening, the Capital Budget for Rail Bridge Assessments and the Revenue Budget for Bridge Maintenance for 2009/2010.
- 1.2 This report is submitted to Committee in terms of the Council's Administrative Scheme relating to the functions of the Council as Roads Authority.

**2. RECOMMENDATION**

**2.1 It is recommended that the Committee:**

- a) **approve the detailed plans for expenditure of funds allocated from the Capital Budget 2009/10 to Bridge Assessments and Strengthening;**
- b) **approve the detailed plans for expenditure of funds allocated from the Capital Budget 2009/10 to Rail Bridge Assessments;**
- c) **approve the detailed plans for expenditure of funds allocated from the Revenue Budget 2009/10. This expenditure forms part of the Roads Maintenance Capital and Revenue Works Programme 2009/10.**

**3. BACKGROUND**

- 3.1 It is recognised that a well managed transport infrastructure is vital to the economic stability, growth and social wellbeing of a country. Bridges and other highway structures are fundamental to the transport infrastructure because they form essential links in the road network. With this in mind and with limited resources, the following work has been identified for 2009/ 2010.

### 3.2 Bridge Assessments and Strengthening

Principal Inspections carried out in 2007 recommended replacement of the concrete deck side extensions to three masonry arch Bridges. These were to have been designed and built in 2008/09. Due to staffing commitments at the Reiket Lane Bridge in Elgin this has slipped to this financial year.

- 3.3 Two new culverts at Easterton and Lettoch are proposed. These will replace existing structures which are deteriorating badly.
- 3.4 The concrete deck of Boat o' Brig (50 metre span bridge over the River Spey at Orton) was inspected in May 2008 and testing was carried out to determine the extent and severity of the corrosion to the steel reinforcement. Results indicate that deterioration is not as severe as was thought at first. Preventative works carried out within the next few years should save major expenditure in future. The consultant's report has recommended major concrete repairs. It is proposed that a trial repair is conducted on one of the bridge panels to determine the viability and cost effectiveness of a full repair. This trial will provide information on the long term strategy for the bridge.
- 3.5 Arthur's Bridge (three span concrete bridge carrying the B9103 over the River Lossie near Loch Spynie) was assessed in 2002. Corrosion of the steel reinforcement was found in the supports for the centre span, however the bridge was capable of carrying normal traffic loading without restriction at that time. The deck was waterproofed and the expansion joints replaced (in 2002) allowing the deck to 'dry out'. A Principal Inspection of the bridge in 2007 noted continued corrosion of the reinforcing bars at the half joints. A further report was commissioned in April this year. The consultant concluded that the deck is beyond 'sensible and economic repair' and that replacement is the most economic option in the long term. This is now under review in the light of financial restrictions facing the Council and will be the subject of a future report.

### 3.6 Bridge Assessments & Strengthening: Proposed works for 2008/09 are:

A95 Braco Bridge, B9103 Auchroisk, B9014 Lower Towie – replacement of concrete deck extensions	125,000
U145H/10 Eastertown Culvert replacement	90,000
U117aH Lettoch Culvert replacement	90,000
B9103 Boat o' Brig – trial repairs	29,000
B9103 Arthur's Bridge – concrete repairs	15,000
<b>Total (Includes carry forward from 2008/09)</b>	<b>£349,000</b>

The above budget comprises £215,000 (Capital Programme 2009/10) plus that brought forward from the previous year.

### 3.7 Rail Bridge Assessments

There are two bridges at Tarmore, Keith that are in the Network Rail programme for strengthening (C72H Tarmore Railway and B9116 Keith Station) This work is now due to be carried out in 2010/11 and is being progressed by Network Rail and their term contractor. Network Rail is only obligated to strengthen bridges to carry 24 tonne vehicles. To strengthen the bridges to carry 44 tonne vehicles requires a contribution by the Council of 25% of the total cost of the deck replacement and associated works. An agreement with Network Rail will be concluded once costs are agreed. The sum of £297,000 has been allocated in 2010/11 and an additional allowance of £10,000 has been made this year for preliminary costs.

### 3.8 Bridges Revenue

The detail of both Capital and Revenue budgets is contained in the Roads Maintenance Capital and Revenue Programme 2009/10 approved by the Economic Development and Infrastructure Committee on 31 March 2009 (Para 14 of the minute refers) and is summarised below.

### 3.9 The proposed Works for 2009/10 are:

<b>Revenue</b>	
Minor repairs - unplanned work, accident damage etc)	25,000
Masonry arch bridge maintenance	128,000
Sweeping Bridges – remove grit and debris build-up	5,000
Bridge Principal Inspections	12,000
<b>Total</b>	<b>£170,000</b>
<b>Capital</b>	
A941/360 Spynie Canal – install permanent parapets	24,000
U131 Auchinroath – repairs to arch barrel	20,000
Fife Street, Dufftown - Retaining Wall – replace/ repair existing structure	40,000
Various major repair works – deemed to be outwith normal maintenance.	66,000
A941 Craigellachie Bridge – parapet refurbishment	74,000
<b>Total (includes carry forward from 2008/09)</b>	<b>£224,000</b>

- 3.10 The present Reserve List of outstanding works is in the order of £1.58m. This does not include major capital schemes such as Arthur's Bridge and Boat o Brig (see above). The list requires revising and costs updating. It is intended that this will be done as the inspection programme progresses.

#### 4. SUMMARY OF IMPLICATIONS

(a) **Single Outcome Agreement/Service Improvement Plan**

(i) **the ten agreed key priorities for Moray include:-**

**"Roads/Transport – Addressing the transport infrastructure and encouraging sustainable travel" The consequence of not adequately maintaining bridges, namely imposition of weight limits or closure, would detract from the Single Outcome Agreement's aims "to improve the roads/transport infrastructure".**

(ii) **the most recent Service Improvement Plan**

**Priority 5.2 refers to roads maintenance and asset planning – "to ensure that our assets are fit for purpose in terms of condition, sufficiency, suitability and accessibility".**

(b) **Policy and Legal**

**Statutory duties set out in the Roads (Scotland) Act 1984.**

**The maintenance of the bridge stock takes into account the code of practice set out in Management of Highway Structures published in November 2005. This forms part of the Service Improvement Plan agreed by the Environmental Services Committee of 26 April 2006 (Item 7 refers).**

(c) **Resources (Financial, Risks, Staffing and Property)**

**The proposals detailed in the report can be accommodated within the Capital Plan allocation for Bridge Assessments and Strengthening and Rail Bridge Assessments, and Roads Maintenance Revenue Works. These projects carry with them risks typical in this type of work. Construction market conditions and other inflationary pressures remain.**

**There are no staffing or environmental implications arising from this report.**

(d) **Consultations**

**Lorraine Paisey, Principal Accountant has been consulted and is in agreement with the financial implications.**

5. CONCLUSION

- 5.1 That the Committee considers the recommendations set out in Section 2 of the report as being the highest priority works identified for Moray bridges and structures in 2009/10.

Author of Report: Neil Fotheringham, Senior Engineer (Structures)

Background Papers:

Ref:

Signature: 

Date: October 2009

Designation: Director of Environmental Services

Name: Robert A Stewart