ABSTRACT
This report details the options available for Dunlappie Bridge and recommends replacing the existing Listed structure with a 'Bailey Bridge' type structure with a life expectancy of 25 to 30 years.

1 RECOMMENDATIONS

This report recommends that the Committee agree to:-

(i) note that the Director of Roads and the Director of Finance have investigated the funding issue regarding Dunlappie Bridge, and whilst there has been some additional funding made available for the roads network that this is insufficient to meet the shortfall in the budget available for a permanent replacement bridge given other priorities with the road network and the limitations of the Council's capital budget;

(ii) either of the two feasible options identified within the Report, namely:-

(a) approve the replacement of the Listed structure with a permanent 'Bailey Bridge' type structure with a life expectancy of 25 to 30 years, subject to a Notice of Intention to Develop and Listed Building Consent being approved;

or

(b) approve the continuation of the closure of the bridge for an indefinite period of time.

2 INTRODUCTION

Members will be well aware of the issues surrounding Dunlappie Bridge and will recall that the bridge has been closed to vehicle traffic since 4 June 2000.

The closure of the bridge was followed by a Report No 910/00 presented to the Roads Committee on 24 August 2000 detailing the options available to the Council. Briefly, these options were:-

Option 1 Indefinite Closure.

Option 2 Temporary Bailey Bridge on the line of the existing bridge pending the construction of a permanent bridge when funds became available.

Option 3 Semi-permanent 'Bailey Bridge' on the existing line and replacement with a permanent bridge within 30 years.

Option 4 Continuation of semi-permanent 'Bailey Bridge' on the existing line and replacement with further 'Bailey Bridges' every 30 years.
Option 5  Semi-permanent 'Bailey Bridge' upstream of the existing line, replacement with further 'Bailey Bridges' every 30 years, maintenance of the existing bridge (kept in place).

Option 6  Semi-permanent 'Bailey Bridge' upstream of the existing bridge and construction of a new permanent bridge within 30 years.

Option 7  Provide a new permanent replacement bridge in the short term.

The Committee decision in August was for further investigation into the provision of the necessary funding for a permanent replacement structure with continued closure in the interests of public safety.

DETAILED

Investigations by the Director of Roads and the Director of Finance have not identified any sources of additional resources for Dunlappie Bridge replacement. Avenues for funding from European sources have remained closed and suggestions of funding from Historic Scotland have not been positively received. Recent announcements by Scottish Ministers of additional funding for roads maintenance, lighting and bridges indicate that Angus Council’s share of these monies amounts to approximately £511,000 per annum over 3 years and this has been recognised in the overall budget provision allocated to Roads in 2001/02.

In the report (No. 910/00) to the Roads Committee on 24 August 2000 the Committee was advised that there was £120,000 of Roads and Transport Renewal and Repairs specific funding allocated to the project and £50,000 of not yet legally committed monies from the Department’s Capital Budget for 2000/01.

Since the project was not agreed to progress in 2000/01 the Capital Budget has been committed to other priority projects within the current financial year. Of the £120,000 Roads and Transport Renewal and Repairs Fund, some £20,000 has for the moment been committed for ongoing and future maintenance of the temporary diversion signing and repairs to the temporary diversion routes and associated staff costs. Maintenance of the temporary diversion route signing etc is estimated at £15,000 pa and is currently being undertaken by Tayside Contracts.

The estimated costs of replacing Dunlappie Bridge with a permanent structure is estimated at £425,000 assuming Historic Scotland grant Listed Building Consent to demolish the existing bridge.

As a result there is a current shortfall of funding of some £325,000 for a permanent replacement structure.

Considering the other priorities and the related cost demands within the Council and within the Roads Department it is not possible at this time to allocate £325,000 of the additional funding to a single structure.

The Committee is reminded that Report No. 656/00 presented to Committee on 8 June 2000 indicated over £1.5m back log of essential bridge maintenance on the Council bridge stock, and that there are considerable other demands for funding of other Roads projects.

In conclusion therefore there remains insufficient funding for a permanent bridge solution at Dunlappie.

This effectively rules out options 2, 3, 6 & 7.
Discussions with the Director of Planning and Transport following the closure of the bridge have indicated that demolition of the Listed structure may now be granted Listed Building Consent. The Committee will be aware that as a List Building, Historic Scotland are involved in the planning process and it is understood that the objections to the bridge being demolished and not reused in the permanent solution or re-sited elsewhere can now be resolved. This effectively removes the final financial constraint to the 'Bailey Bridge' option as the cost of re-siting the existing bridge would incur a cost estimated at in excess of £200,000, including refurbishment to give the bridge an adequate carrying capacity, removal from its existing site and re-erection at a new location, new foundations and on-going maintenance for the life of the structure.

However, it must be noted that the future progress of a 'Bailey Bridge' type structure is subject to a formal Notice of Intention to Develop (NID) process. It is considered inappropriate for officers to pursue an NID without prior approval of the Committee for the proposal.

Assuming that the NID receives approval and Listed Building Consent is granted there is no advantage to Option 5 which has additional costs estimated at £400,000 for the construction of new approach roads.

Therefore, the feasible options are Option 1 (retaining the closure), or Option 4 (providing a permanent 'Bailey Bridge' solution). The Committee is reminded that as noted in Report No. 910/00 the 'Bailey Bridge' option would have a weight restriction of 25 tonnes GVW and due to the physical width/alignment aspects this may restrict some larger vehicles.

Considering these options in detail:

**Option 1**

Retaining the closure indefinitely, has a low initial financial outlay (the erection of permanent signs at an estimated cost of £2,500). This would eliminate the current financial estimated requirement involved in maintaining the existing temporary signs, possible repairs to the temporary diversion routes and associated staff costs which are estimated at some £15,000 per annum.

Following an indefinite closure a Conversion Order would be required to change the use to a footway only and this would cost approximately £750 for advertising and making the Order.

Short to medium term the bridge would continue to deteriorate whereby works would be required in the interests of public safety to maintain the bridge. The bridge is currently assessed at being unable theoretically to carry its own weight when including the appropriate factors of safety in the assessment standards. The cost of these refurbishment works and associated fees is estimated at £80,000, and is considered to be required within 3 years.

In the longer term the bridge would require maintenance painting at approximately 15 year intervals and statutory inspections every two years.
Alternatively the bridge could be closed to pedestrians use and demolished. The initial costs would be similar at £2,500 and £750 for Stopping Up Order with deletion of the bridge from the List of Public Roads. Demolition of the bridge in a safe controlled manner would require a site establishment and working area for cranage as well as the actual taking down of the structure in a methodical manner. The costs including fees for this work is estimated at £40,000. Again the option of demolition would be subject to List Building Consent. Advice from the Director of Planning and Transport is that Government policy with regard to the demolition of listing buildings is that no worthwhile building should be lost to the environment, unless it is demonstrated beyond reasonable doubt that every effort has been exerted by all concerned to find practical ways of keeping it. Apparently the fact that a building, or structure, is no longer required is not, in itself, sufficient justification to demolish a building which has been deemed sufficiently important to merit inclusion in the statutory list of buildings of special architectural or historic interest.

**Option 4**

The estimated cost of a 'Bailey Bridge' structure is initially £118,000 (inclusive of demolishing and engineering fees) with a life expectancy of 25 to 30 years. This includes the supply of a new proprietary bridge which at the end of that bridge’s life span would be required to be replaced or fully refurbished. Statutory inspections would be required at intervals throughout the life of the structure, at costs similar to those previously incurred with the existing bridge.

This replacement option would remove the need for annual maintenance etc associated with the diversion routes and signage.

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**4 FINANCIAL IMPLICATIONS**

£118,000 of funding has already been made available within Roads and Transport Renewal and Repairs Fund.

The funding requirements for Options 1 and 4 are detailed below:

**30 Year Life Costs**

<table>
<thead>
<tr>
<th>Cost Item</th>
<th><strong>Option 1 Maintain Existing Bridge for Pedestrian Use £'000</strong></th>
<th><strong>Option 4 Replacement 'Bailey' Bridge £'000</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Signage &amp; Orders</td>
<td>3.25</td>
<td>-</td>
</tr>
<tr>
<td>Replacement Bridge</td>
<td>-</td>
<td>118</td>
</tr>
<tr>
<td>Repair Paint and Waterproof (between years 1 and 5)</td>
<td>80</td>
<td>-</td>
</tr>
<tr>
<td>Maintenance Painting (year 15 to 18)</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>113.25</td>
<td>118</td>
</tr>
</tbody>
</table>

*Subject to NID/Listed Building Consent and a 25 tonne GVW.

Experience to date indicates that maintenance of the replacement 'Bailey Bridge' will incur only nominal spend on an annual basis and accordingly the difference in costs of Option 1 and 4 are negligible when considering 30 year estimates.
The expenditure for either of the above options could be contained within the Roads and Transport Renewal and Repairs Fund.

There are no loan charge repayments associated with Renewal and Repairs funding.

CONSULTATION

The Chief Executive, the Director of Law and Administration, the Director of Finance and the Director of Planning and Transport have been consulted in the preparation of this report.

HUMAN RIGHTS IMPLICATIONS

There are no Human Rights implications arising as a consequence of this report.

CONCLUSION

Due to insufficient funding being available both now and in the short/medium term, there is no current finance available to provide a permanent replacement bridge at Dunlappie.

The Committee is therefore asked to consider the options of an indefinite closure of the bridge or the provision of a permanent 'Bailey Bridge' structure with a weight limit and life expectancy of 25 to 30 years subject to Notice of Intention to Develop and Listed Building Consent.

The costs of the two options are similar, being in the order of £113,000 to £118,000.

The provision of a 'Bailey Bridge' structure has the advantage of restoring the transport link for vehicular traffic between Edzell and Dunlappie.

Dr Bob McLellan
DIRECTOR OF ROADS

NOTE

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

Report No. 656/00 – Angus Council Roads Committee – 8 June 2000
Report No 910/00 – Angus Council Roads Committee - 24 August 2000

IAC/JSG
24 January 2001
REPORTS/dunlappie.8 mar.01