

EAST AYRSHIRE COUNCIL

DEVELOPMENT SERVICES COMMITTEE – 29 JUNE 2004

MOSSHOUSE BRIDGE – C22 COAL ROAD, CRONBERRY

Report By Executive Director of Development & Property Services

1. PURPOSE OF REPORT

- 1.1 To inform the Committee about the sudden collapse of one of the parapet and retaining walls on the Mosshouse Bridge at Cronberry, and the emergency repair works being undertaken.

2. BACKGROUND

- 2.1 Mosshouse Bridge is an old masonry arch bridge, which spans the Bellow Water on C22 Coal Road, the only access road between Cronberry and the A70.
- 2.2 On 12 May part of the upstream parapet and retaining wall collapsed. The road was immediately shut to vehicular traffic as a safety precaution, the damage assessed, and on 18 May, only 4 working days after the collapse, a local specialist contractor, W.I. & A Gilbert had mobilised resources and started the demolition and reconstruction works on site.
- 2.3 The initial demolition work also allowed the Council's Bridge Engineers to have a closer examination of the internal condition of the structure and to determine the full extent of the reconstruction necessary.
- 2.4 The cause of the collapse is not known but was most likely triggered by heavy vehicle impact. The bridge had a routine biennial visual inspection in November 1999. It was visually inspected again in May 2001, and again in January of this year, following concerns expressed by local residents. Although a number of defects were noted on each occasion, none were indicative of imminent failure of the parapet wall, and the general condition of the bridge and parapet walls was on a par with many other bridges of similar age and construction.

3. CURRENT SITUATION

- 3.1 All efforts have been concentrated on organising repairs and minimising the inconvenience to the Cronberry residents due to the closure of the access road, which necessitated a longer diversion route. Pedestrian access has been maintained throughout.
- 3.2 The age and condition of the bridge is such that major reconstruction work is now unavoidable. It has been necessary to completely demolish the damaged wall down to ground level which necessitated the removal of the existing road makeup and stone infill over the bridge. A reinforced concrete slab will then be constructed over the arch to reduce future loading on the side walls. The parapet and side walls on the downstream side are also showing signs of bulging and weathering and have been patched with a variety of brick and stone over the years. After close examination it was clear that the downstream parapet would also have to be demolished and rebuilt to avoid having to return later to deal with similar problems

involving the downstream parapet, and also having to then excavate into the new slab and road surfacing.

- 3.3** W.I & A Gilbert have been instructed to proceed with the necessary works, which are now well underway. The contractor has dedicated resources to complete the work as expeditiously as possible. There is a lot of masonry work involved, which is time-consuming and requires reasonably dry weather but, at the current rate of progress, the contractor should complete the work by mid-July.

4. LEGAL IMPLICATIONS

- 4.1** A temporary order to close the road was raised at the time of the initial collapse. This expired on 23 June and a further Temporary Road Closure Order has since been raised to cover the further period of time required for completion of the works.

- 4.2** The road and bridge are the responsibility of East Ayrshire Council.

5. FINANCIAL IMPLICATIONS

- 5.1** W.I & A Gilbert were initially instructed to undertake the necessary works on an emergency basis under the Director's delegated authority in terms of the Council's Standing Orders for Contracts. This action was based on their initial estimate of the total cost of the works being in the region of £25,000. The company specialises in this type of works, and has previously carried out similar operations to a high standard for East Ayrshire Council. Their initial estimate was considered to be realistic and comprehensive, based on all known information at the time, and was also considered to be competitive.

- 5.2** However as the initial demolition and reconstruction works progressed it soon became apparent that the extent of works required to secure full reinstatement of the bridge, as detailed in paragraph 3.2, was significantly greater than originally anticipated and revised estimated costs were advised to be approximately £50,000.

- 5.3** In view of the urgency of the situation the Chief Executive, on receipt of a report from the Executive Director of Development Property Services, authorised that the contractor be instructed to carry out all necessary works to the estimated value of £50,000. This action was taken on 11th June, 2004 in accordance with the Chief Executive's emergency powers in terms of the approved Scheme of Delegation and followed appropriate consultation between the Chief Executive, the Leader of the Council, the Chair of Development Services and the Solicitor to the Council.

- 5.4** It should also be noted that suspending the works to allow for competitive tenders would have resulted in an unacceptable prolongation of the road closure.

- 5.5** Accordingly, the Council is now being asked to homologate the action taken by the Chief Executive to address the urgent situation which arose and to formally approve the completion of the necessary works in accordance with the revised estimate of £50,000. Any further variation in the final cost will be addressed in accordance with the Council's Standing Orders for Contracts and the Scheme of Delegation, although at present there are no grounds to anticipate that there will be any further significant variation.

- 5.6** As the total revenue budget for Bridge Maintenance 2004/05 is only £50,000, all of which is committed, or will be required, for ad-hoc repairs throughout the year, there is no spare capacity in this budget for unprogrammed works on this scale.

5.7 However, as the work involves major reconstruction of the bridge it would qualify as Capital expenditure. The full cost of the works can be accommodated within the Bridges Capital programme, by substituting it for the Birkhill Bridge reconstruction on the C134 near Darvel. The Birkhill Bridge scheme also involves the replacement of a collapsed parapet and retaining wall. The collapsed section of retaining wall has been temporarily repaired with sprayed concrete, and temporary fencing is in place across the gap in the parapet. Some land acquisition is required to accommodate the reconstruction and it is proposed to proceed with the land acquisition in the current year to allow the works to be carried out early in the 05/06 financial year. In the meantime, the temporary repairs at Birkhill are holding up and these will be monitored regularly.

6. RECOMMENDATIONS

6.1 The Committee is asked to agree to:-

- i) homologate the action by the Chief Executive in authorising the completion of the required works in terms of a negotiated contract with Messrs. W.I. & A. Gilbert at an estimated cost, including contingencies, of £50,000
- ii) approve the proposed re-alignment of the Bridges Capital Programme as set out in paragraph 5.6 of this report in order to fund these works
- iii) remit to the Executive Director of Development Property Services to bring forward a report to a future meeting of the Committee advising of the final outcome of this matter, and
- iv) otherwise note the contents of the report.

James Lavery
Executive Director of Development & Property Services
8 June 2004

LIST OF BACKGROUND PAPERS

Nil

For further information please contact Sandy Gillatt on 01563 576310

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