

## **BRIEFING REPORT FROM THE PRINCIPAL ENGINEER, BRIDGE MANAGEMENT**

**SUBJECT: HIGHWAY BRIDGES AND STRUCTURES**

**AUDIT COMMITTEE: 8<sup>TH</sup> DECEMBER 2014**

### **Reason for Report**

1. At its meeting on the 20<sup>th</sup> May 2013, the Committee received a briefing on the implementation of the Principal Bridge Inspection Programme for Highway Bridges and Structures, as it had been highlighted as a significant matter in the Annual Governance Statement for the previous financial year. Members received assurances that the risks were being managed but felt it appropriate to receive an update after 12 months.
2. This briefing aims to provide Members of the Audit Committee with an update of information regarding the implementation of the Principal Bridge Inspection Programme for Highway Bridges and Structures. The programme has this year commenced the third year of the six year programme.

### **Background**

3. The code of practice for the “Management of Highway Structures”, published in September 2005 provides guidance to highway authorities regarding how highway structures should be managed to ensure that they are “Safe for Use and Fit for Purpose”.
4. The CoP confirms a best practice inspection regime which includes General Inspections 2 yearly and Principal Inspections 6 yearly.
5. This regime follows the requirements of the Highways Agency & Welsh Government on the Motorway and Trunk Road Network.
6. General Inspections are by definition and overview inspection without gaining special access to areas of the structure inaccessible from either ground level or entering confined spaces.
7. Principal Inspections are a detailed inspection of all elements of the structure and may involve the use of access platforms, or the use of specialist divers to enter confined areas in low bridges and culverts.
8. The Highway Authority is responsible for 493 structures in Cardiff. This comprises 1 Tunnel, 5 Viaducts, 231 Bridges, 62 Subways, 108 Culverts and 86 Retaining Walls.
9. Prior to the implementation of this rolling programme, the last programme of detailed inspections was as part of the Bridge Assessment Programme circa 1998 to 2000, following the introduction of 44 tonne vehicles on the highway network. However it should be noted that that programme did not include bridges constructed post 1975, hence many of the newer PDR structures were not included.

### **Issues**

10. Prior to 2010 Principal Inspections were only undertaken on an ad hoc basis with no specific budget allocation to enable a programme to be put in place.
11. The non compliance with the Code of Practice was identified as a major risk to the Authority.

## **Item 5.1 – Appendix B**

12. The practice of not undertaking Principal Inspections led to a reactive maintenance regime and is not aligned to the principals of Asset Management.
13. The programme is such that structures on the main routes (A48 & A4232) into Cardiff have been prioritised. One major Viaduct has been included each year in order of age since construction; other structures are divided such that a proportion of each group is undertaken each year.
14. Work is currently ongoing to develop in co-ordination with ADEPT Wales a methodology of prioritising Principal Inspections and varying their regularity depending on their current condition and network criticality. Programming of the next cycle of PI's utilising this approach will commence 2018/19.
15. The first two years of the inspection programme has inspected approximately one third of the council's highway structures asset. These inspections have identified £1,065,000 of remedial works that need to be prioritised and undertaken to maintain the structures asset in a steady state condition.
16. The works identified in the inspections have been incorporated in the evaluation of the Capital Works bids for 2015/16.

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