

# WHITCHURCH BRIDGE COMPANY TOLL APPLICATION DATED 31<sup>st</sup> OCTOBER 2008

## Further Information: Bridge Maintenance Management

### **1. Introduction**

1.1 The purpose of this document is to give more details of how Company has managed the maintenance of the Bridge since 1997.

### **2. Background to the Appointment of Oxfordshire County Council (Bridge Department) as its Consultants on Bridge Engineering matters.**

2.1 Oxfordshire County Council (OCC) formally objected to the Company's 1992 Toll Application. Because of their and others' objections, a Public Inquiry was held on 19<sup>th</sup> – 21<sup>st</sup> January 1993.

2.2 As a result of OCC's submissions at the Public Inquiry and the Inquiry Inspector's Report, the Company undertook a review of its arrangements for procuring advice on Bridge Engineering matters. During this review the Company held discussions with OCC, and in 1997 decided to appoint OCC as its advisers in place of Howard Humphreys Consulting Engineers.

2.3 The Company signed a formal Memorandum of Agreement with OCC on 7<sup>th</sup> April 1997.

### **3. Inspection Regime**

3.1 As part of OCC's services, A General Inspection is carried out on Whitchurch Bridge at 2 year intervals. Every 6 years, replacing every 3<sup>rd</sup> General Inspection, a Principal Inspection is carried out.

3.2 A Special Inspection is carried out if there is a specific issue which requires attention between programmed General Inspections, eg a Bridge element which requires more frequent inspection, or if the Bridge is subjected to any abnormal damage eg a collision from river craft.

3.3 The Bridge is currently subject to a Special Inspection annually because of live cracks in the pier capitals: the Special Inspection Report dated March 2008 is included as a separate document (Document Ref 6)

3.4 An Underwater Inspection is carried out approximately every 8 years as part of a specialist contract let by OCC for all its river Bridges.

3.5 OCC produce a written report for the Company after each Inspection of Whitchurch Bridge, with recommendations on any work required and the likely cost.

3.6 After approval by the Company, OCC arranges for the required work to be carried out (normally through competitive tender), and supervises the contractor.

3.7 Work carried out since 1997 as a result of the OCC Inspection regime is shown in para 5 below.

### **4 Risk Management**

4.1 As part of its work programme, OCC carries out periodic Risk Assessments of the Bridge. The latest Risk Assessment was carried out in April 2009, and is shown in Appendix F.

**5 Bridge Capital Works carried out since 1997 (ie since OCC's appointment as Consultants on Bridge Engineering matters).**

| Item  | Reason  | Date      | Cost (inc VAT)        |
|---|---|-----------|-----------------------|
| Installation of jack arch weep holes                                  | To enable trapped water which enters the deck because of failure of the waterproofing membrane to drain away                          | 1997      | £2,950                |
| Full repainting of Bridge   | Previous paint system life expired  | 1998      | £42,000               |
| Improved Lighting   | Safety and amenity  | 2000      | £4,000                |
| Remedial painting   | Localised areas of failure of new paint system  | 2001      | £5,000                |
| Training wall works to protect Pangbourne abutment                    | Bank erosion compromising structural safety of abutment foundations   | 2003      | £14,000               |
| Embankment work to protect Whitchurch abutment                        | Bank erosion compromising structural safety of abutment foundations   | 2003      | £34,662               |
| Installation of downstream fenders and strengthening upstream fenders | Risk management – reducing risk of impact damage to Bridge from river traffic.  | 2005      | £56,231               |
| CCTV systems  | Protection of Company employees, Bridge users and Company assets  | 1999/2008 | £5,000                |
| Pier cap Special Inspections (originally biennial, now annual)        | Inspections reveal that cracks in pier caps are active and propagating. Annual inspections now required for structural safety reasons | 2008      | £8,000 per inspection |

Note: this table excludes:

- a) capital works on other Company Assets including the Toll House, the Toll Booth and the roadways.
- b) capital works associated with Bridge reconstruction.

**6. Regular Minor Maintenance**

- 6.1 The pavements and gutters are swept on a monthly basis by a specialised contractor (Cannon Hygiene)
- 6.2 The drains and gulleys (12 in all) are cleaned on a 6 – weekly basis by a specialised contractor (Isis Accord)
- 6.3 The parapets and other accessible parts of the Bridge are cleaned annually by water pressure-jet washing.
- 6.4 Minor patch painting is carried out as necessary
- 6.5 Weeds are removed as necessary.
- 6.6 Lights are cleaned and repaired as necessary.

## **7 Planned Major Maintenance Work 2008 - 2013**

7.1 Maintenance work from now until the planned reconstruction of the Bridge in 2013 is being managed so as to minimise expenditure on items which will be included within the reconstruction works.

7.2 In particular, the following works which would otherwise be carried out will be held back for inclusion in the reconstruction works:

- Full repainting
- Replacement of pier caps and possible installation of new bearings
- Installation of a new waterproof membrane to protect the decking
- Replacement of the pier caps
- Replacement of the expansion joint at the Pangbourne end
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## **8. Summary**

8.1 Through its Contract with OCC, the Company has in place robust arrangements to ensure that the Bridge is inspected and maintained to the appropriate safety and other standards in a cost-effective manner

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