

BOF RESEARCH PROJECTS

2006/07

Review of Bridge Inspection competence and training

- Contract commenced on 6 June 2008
- Successful tenderer – TRL
- Duration – 6 months
- Final report now issued (April 2009), recommending that a second phase of research be carried out to develop an accreditation programme for bridge inspectors. Report is with the Steering Group. (See Phase 2 below.)

Design of Masonry Bridge Parapets (Revision of BS6779 Part 4)

- BOF signed off specification on 16 December 2008
- Contract now awarded to AECOM (formerly Faber Maunsell) (March 2009). Inception meeting held on 23 April 2009.
- Duration of project 1 year.
- Steering Group held telephone conference on 11 June 2009. Agreed that next tasks on project are to research current codes of practice/industry guides, and to establish computerised models of vehicle and parapet behaviour.
- Steering group meeting held on 9 September 2009. Aecom reported that the literature review of existing guidance documents has now been completed. Computer modelling work is now in progress – there was some delay in commencing this, and ensuring that all relevant data was included in the model.
- A further steering group meeting took place on 23 November 2009, where it was reported that further work needs to be done on the modelling, and that the project would report to DfT early in the new year (we are currently awaiting this report and have chased AECOM for it). Next steering group meeting planned for 9 February.

Bridge deck slabs with non-metallic reinforcement

- Single tender procurement – Queen’s University Belfast
- Tender award letter now sent to QUB by DfT procurement (26 January 09).
- Contract duration – 2 years
- Some testing work has now been carried out on a sample bridge.
- *Awaiting update from Albert Daly (SG member)*

Carbon composites for the strengthening of steel structures

- Single tender procurement – Heriot Watt University
- Contract duration – 3 years
- Tender award letter sent to Heriot Watt University by DfT Procurement (22 January 09).
- An initial meeting has been held between the project steering group and Professor Ian May (Heriot Watt). The official start date was agreed by DfT as 1 September 2009.
- No further progress so far, due to difficulty in obtaining a UK visa for the research student. Difficulty now resolved, student arriving in UK on 14 January.

2007/08

Automating Bridge Inspections

- Procurement method – Framework – single tender awarded to TRL
- Contract awarded to TRL (March 2009). Inception meeting now held (May 2009).

- Contract duration – 1 year
- Agreed that first task is to select existing automated inspection systems for review.
- A Steering group meeting was held on 2 September 2009. TRL reported that 7 systems had now been identified for review. A review of the systems' capabilities is now in progress, including an assessment of the requirement for gaining access to structures, and of the way the data gathered is processed. The next stage in the project is for TRL to choose three of these systems for practical trials.
- The next steering group meeting took place on 22 December 2009. Three systems have now been shortlisted for the testing phase of the research.

NDT of macalloy bars tying prestressing beams (£146k)

- Project not currently in DfT research programme.

Scanning of HA Research Reports (£30k) – consultancy project

- DfT are waiting for the specification to be agreed by Cam Middleton and Neil Loudon.

Bridge Inspector Competence and Training Phase 2 (2009/10 project)

- Expressions of interest were invited in December, via the Office for Government Commerce (Buying Solutions) framework.
- One positive response has been received.
- The project specification has now been finalised following the Steering Group meeting on 22 December. The supplier who expressed interest via the Buying Solutions framework is now being invited to tender.

2010/11 – 4 projects prioritised for 2009/10 and resubmitted to DfT for 2010/11

Review of Road Restraint Systems for Local Roads

Best Practice for Specifying Long Life Road Surfacing for Bridges

Design, Maintenance and Inspection of Concealed Metal Connectors and Bearing Pins in Moving Bridges

Life-time considerations of FRP Strengthening of Bridges

These four projects have not yet been approved. They will be considered at a future UKRLG meeting, in the light of the new specification on the role of the UKRLG with regard to research. (See UKRLG November 2009 minutes, which refer to the UKRLG's support for the specification developed by DfT).

Depreciation of Highway Structure Components (not a BOF project)

Procurement method – Framework – Tenderers Atkins and Faber Maunsell

Tender award letter to Atkins – 22 December 2008

Contract duration – originally 6 months, now extended by another 6 months

Final report expected in April 2010

Steering Group chaired by Stephen Pottle, TfL, and including Neil Loudon, HA.