

WIRRAL COUNCIL

CABINET – 24 JUNE 2010

REPORT OF THE DIRECTOR OF TECHNICAL SERVICES

DELL UNDERPASS BRIDGE REFURBISHMENT CONTRACT VARIATION (BROMBOROUGH AND ROCK FERRY WARDS)

1.0 EXECUTIVE SUMMARY

- 1.1 This report advises Members that the contract for the refurbishment of the Dell Underpass Bridge has had to be varied for technical reasons to ensure the successful delivery of the contract pursuant to Contract Procedure Rule 16.2.

2.0 BACKGROUND

- 2.1 Dell Underpass is a 3-span reinforced concrete bridge carrying the A41 dual carriageway Rock Ferry Bypass across The Dell in the Rock Ferry District. The bridge has been affected by leaking expansion joints leading to corroded steel reinforcement and spalling concrete in the crosshead supports.
- 2.2 Maintenance works to the bridge estimated to cost £117,000 were identified in a Principal Inspection report carried out by Babbie Consulting Engineers, Maintenance Agent of the Highways Agency, in 1999, when the A41 was a trunk road.
- 2.3 A bid was made by Wirral Council in 2007 as part of the LTP2 Primary Route Network (PRN) structures maintenance block for £261,000 (representing the 1999 cost estimate plus an allowance for inflation, contract preliminaries, design fees and risk/contingency). Grant funding was subsequently received from DfT for 2009/10, ring fenced to this structure.
- 2.4 A further Principal Bridge Inspection and Feasibility report conducted for Wirral Council by Scott Wilson Consultants in 2009 concluded that the bridge could be repaired at an estimated works cost of £230,000 providing that independent temporary support was not required, which could only be verified by further assessment calculations when the extent of concrete removal was ascertained. However, it was expected that the risk of independent supports being required would be reduced if the concrete patch repairs could be carefully phased.
- 2.5 Tenders were invited by the Council and a contract was awarded to Volkerlaser Limited in April 2009 under delegated Authority in the sum of £274,318.22.

3.0 VARIATION TO CONTRACT

- 3.1 Once concrete removal for repair had commenced on site it became evident that the south crosshead was so badly degraded that the capacity of the bridge to support its own weight might be compromised if all affected concrete on the upper surface was removed, even if concrete removal was phased as originally proposed under the contract.
- 3.2 Independent structural calculations by the Council's project engineer, Atkins Limited, have confirmed that temporary supports are required during the repair operations.
- 3.3 Prior to commencement of the works on site, the need for temporary supports could not have been reasonably foreseen. The provision of temporary supports is essential to the successful delivery of the contract.
- 3.4 A contract variation order has been issued by the Engineer for the temporary support works which will result in the contract price exceeding the contract sum by

more than 10% or £50,000 and the Director of Finance has been informed pursuant to Contract Procedure Rule 16.1.

4.0 FINANCIAL IMPLICATIONS

- 4.1 The required variation works will involve a complex arrangement of temporary steel supports and jacking equipment supported on the existing concrete bridge columns in areas of sound concrete. The works are currently being designed and costed by the contractor and the Engineer will determine a fair valuation for the works in due course.
- 4.2 The likely current estimated contract final account outturn, having regard for the probable cost of the temporary support works, together with other minor contract variations and omissions, is now expected to be approximately £475,000 representing an increase to the contract sum of £200,681.78, or 73%. This is inclusive of prolongation costs for approximately 6-8 weeks delay to the contract.
- 4.3 Members should note that, had the scheme been originally tendered as a contract requiring temporary supports, the likely costs would have been no greater than those currently anticipated. Alternatively, had the variation order not been issued and the scheme re-tendered at a later date, the total costs would have been expected to be greater than those currently anticipated.
- 4.4 The Director of Technical Services has written to the Department for Transport requesting supplementary approval for additional funding towards the current LTP PRN structures allocation and is hopeful of a positive response. However, if this application is not approved, provision exists within the current year's Highways Capital Programme to fund the additional works and associated costs including staff time and consultancy fees.

5.0 STAFFING IMPLICATIONS

- 5.1 The contract will continue to be managed by existing staff in the Technical Services Department supplemented by assistance from the Council's Framework Consultant, Atkins Limited.

6.0 EQUAL OPPORTUNITIES/EQUALITY IMPACT ASSESSMENT

- 6.1 There are no implications under this heading.

7.0 HEALTH IMPLICATIONS/IMPACT ASSESSMENT

- 7.1 There are no implications under this heading.

8.0 COMMUNITY SAFETY IMPLICATIONS

- 8.1 Repairing the bridge will ensure its continued safe use as a vital strategic infrastructure asset. Carrying out the temporary support works during the contract will enable the repairs to be undertaken in a safe manner without compromising the structural capacity of the bridge.

9.0 LOCAL AGENDA 21 IMPLICATIONS

- 9.1 There are no implications under this heading.

10.0 PLANNING IMPLICATIONS

- 10.1 There are no implications under this heading.

11.0 ANTI-POVERTY IMPLICATIONS

11.1 There are no implications under this heading.

12.0 SOCIAL INCLUSION IMPLICATIONS

12.1 There are no implications under this heading.

13.0 LOCAL MEMBER SUPPORT IMPLICATIONS

13.1 The bridge is located on the border of the Bromborough and Rock Ferry Wards.

14.0 BACKGROUND PAPERS

14.1 No background papers have been used in the preparation of this report.

15.0 RECOMMENDATIONS

15.1 That Members note that the contract has been varied for technical reasons to ensure the successful delivery of the contract pursuant to Contract Procedure Rule 16.2.

DAVID GREEN, DIRECTOR
TECHNICAL SERVICES