

# HAMPSHIRE COUNTY COUNCIL

## Decision Report

<b>Decision Maker:</b>	Executive Member for Environment and Transport
<b>Date:</b>	25 September 2018
<b>Title:</b>	Refurbishment of A35 Redbridge Causeway
<b>Report From:</b>	Director of Economy, Transport and Environment

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### 1. Recommendations

- 1.1. That the Executive Member for Environment and Transport gives authority to utilise existing contractual arrangements with the Hampshire Highways Service Contract (HHSC) supplier, Skanska, to implement the proposed major refurbishment works to the A35 Redbridge Causeway structures once the necessary consents have been received and funding is in place, as set out in this report.
- 1.2. That approval is given for the project appraisal for work package 2 (Redbridge Viaduct and Redbridge Road).

### 2. Executive Summary

- 2.1. The purpose of this paper is to seek authority to engage with HHSC supplier Skanska for both early contractor involvement and delivery of major refurbishment works estimated at £20million on four bridges on the A35 Redbridge Causeway. The scheme involves extensive concrete repair works and installation of an impressed current cathodic protection system in concrete columns, crossheads and other supports.
- 2.2. Approval is also sought for the project appraisal for Work Package 2 (Redbridge Viaduct and Redbridge Road).

### 3. Contextual information

- 3.1. Redbridge Causeway to the west of Southampton carries the A35 dual carriageway over the River Test, the Southampton to Romsey railway line, and Redbridge Road. This is an extremely busy route which carries in excess of 60,000 vehicles per day.
- 3.2. The older eastbound carriageway has two three span bridges, Redbridge West, and Redbridge East and one single span bridge, Redbridge Road. The more recent westbound carriageway built in 1966 is carried by a 270m long twenty span structure known as Redbridge Viaduct (See Fig 1).

- 3.3. Issues with these structures were identified during routine bridge inspections and comprehensive testing. Inspection and assessment has been undertaken over the past few years. This has shown that the Viaduct structure is in the worst condition, with some of the critical elements being rated as very poor. Unless significant repairs are carried out, traffic restrictions will need to be implemented on this important route.
- 3.4. The design of remedial works is subject to a number of complex constraints including: high traffic flows, significant bus use, adjacent grade-separated junctions, proximity to Highways England and Southampton City Council networks, a Network Rail railway line, and two scheduled ancient monuments, as well as environmental constraints (the site adjoins SAP, SAC and SSSI sites and crosses the River Test, which is important for salmon and trout).
- 3.5. In November 2017 and February 2018, replacement of 21 carriageway joints and resurfacing was successfully completed by Skanska across Redbridge Viaduct (Work Package 1).

#### **4. Finance**

- 4.1. A bid to Transport for South East (TfSE) was submitted in June 2018 for repair to all the Causeway structures, and for cycle improvements leading up to the Causeway, and the outcome of this bid is awaited. Further bidding opportunities may arise in the future if the DfT decides to run additional Challenge Fund bids, in which case these will be pursued. If funding is not forthcoming, repairs beyond Work Package 2 (Viaduct and Redbridge Road) are unlikely to go ahead, and this will leave a significant maintenance liability until alternative funding can be found. Whilst this situation remains, serious consideration will need to be given to implementing weight restrictions and/or lane closures.
- 4.2. The Viaduct repairs are a priority, and as such the County Council is prepared to underwrite these. However, if this should prove necessary, and TfSE funding is not awarded to the scheme, the County Council will have to allocate funding to these essential repairs from other critical maintenance schemes within the existing programme.
- 4.3. On the 9<sup>th</sup> July 2015, the Executive Member for Economy, Transport, and Environment agreed an approach to procuring the Hampshire Highways Contract to include a proportion of Capital Improvement Schemes and the possibility of using the contract as necessary to deliver schemes within the Local Transport Plan and Structural Maintenance programmes. This is the proposed approach to procuring the works for Redbridge, as set out in section 5 below.
- 4.4. Work package 2 will have no Revenue implications as the work is repair of existing concrete supports.

#### **5. Procurement**

- 5.1. Existing contractual arrangements will be utilised to engage Skanska for this work. Three quotes will be required for each aspect of work and these will be benchmarked against previous work of a similar nature by the County

Council's own Quantity Surveyors to ensure value for money. This approach will be applied to both work package 2 and any future Causeway work.

- 5.2. Skanska have previously, and successfully, delivered other major schemes on this basis in Hampshire, namely the Whitehill and Bordon link road in East Hampshire and also Work Package 1 at Redbridge Causeway.

## **6. PROJECT APPRAISAL – WORK PACKAGE 2 (Viaduct and Redbridge Road)**

### 6.1. Work Package 2 Details

The Redbridge Viaduct works consist of the following:

#### Substantive works

- a) Breaking out of defective concrete in agreed sequence and cutting of chases for impressed current cathodic protection (ICCP) wiring on 106 columns and 7 solid piers.
- b) Concrete and steel reinforcement repairs/replacement.
- c) Installation of ICCP wiring, electrodes and control boxes.
- d) Testing of ICCP system.

#### Enabling works

- a) Mooring of open barges adjacent to marine work areas to enable plant and materials to be safely contained.
- b) Installation of access scaffolds and walkways under the Viaduct.
- c) Installation of props around supports.

Redbridge Road bridge works consist of:

- a) Breaking out of defective concrete on bridge abutments/deck, grit blasting and coating.

### 6.2 Programme

It is anticipated that construction will commence in summer 2019.

The contract is expected to be of 52 weeks duration with work being carried out simultaneously on land based and marine areas. Tidal work will dictate some parts of the programme. A detailed programme will be prepared by Skanska in the coming months.

Traffic management in the form of lane closures on the A35 may be required for some operations and it is anticipated that phased closures of Old Redbridge Road will be necessary for repairs to the Viaduct cantilever pier supports and Redbridge Road bridge. These works can be carried out simultaneously as the bridges are adjacent to each other on Old Redbridge Road.

### 6.3 Finance

<u>Estimates</u>	<u>£'000</u>	<u>% of total</u>	<u>Funds Available</u>	<u>£'000</u>
Design Fee	750	9	County Council Structural Maintenance Funding	8,400*
Client Fee	50	0.6		
Supervision	155	1.8		
Construction (Viaduct)	7,100	84.5		
Construction (Redbridge Road)	345	4.1		
Land	0	0		
<b>Total</b>	<b><u>8,400</u></b>	<b><u>100</u></b>	<b>Total</b>	<b><u>8,400</u></b>

*\*Includes £4.2m of one-off funding from the County Council for identified capital priorities as agreed by Cabinet and County Council in February 2018*

<u>Revenue implications</u>	<u>£'000</u>	<u>% Variation to Committee's budget</u>
Net increase in current expenditure	0	0.000%
Capital Charge	808	0.505%

The numbers entered above represent the position if the County Council underwrites the cost of Work Package 2 in the event that bids for funding are unsuccessful. However, this would be at the expense of other maintenance schemes.

### 6.4 Community Engagement

Collaboration is ongoing with Southampton City Council, Highways England, and the Environment Agency in order to consider traffic management arrangements, network management programming issues and environmental mitigation measures.

Local Councillors, residents, and local businesses were all contacted prior to the joint replacement and surfacing works, and comprehensive communications were undertaken. The same process will be followed for Work Package 2.

## 6.5 Statutory Procedures

Forward planning notices under the New Roads and Street Works Act for booking road space have been completed.

## 6.6 Land Requirements

County Council land to the north of the Causeway bridges will be utilised for the site compound.

Land under the Viaduct at the eastern end is owned by Southampton City Council and the City has undertaken to make access available to the County Council when necessary for the works to take place.

## 7 Other Key Issues

- 7.1 Due to working within tidal, river and sensitive ecological locations, consent is required from the Marine Management Organisation (MMO), Environment Agency (EA), and Natural England (NE). A number of Ecological reports have been completed and discussions are ongoing.

## 8 Future Direction

- 8.1 Work package 1 (carriageway joints and surfacing) has been completed, and Work Package 2, comprising concrete repair and cathodic protection on the Redbridge Viaduct, and concrete repair to Redbridge Road bridge, is planned for summer 2019, subject to approval of this report's recommendation. Future plans involve concrete repair, waterproofing, joint replacement and surfacing work on the remaining two eastbound bridges.

**CORPORATE OR LEGAL INFORMATION:****Links to the Strategic Plan**

<b>Hampshire maintains strong and sustainable economic growth and prosperity:</b>	yes
<b>People in Hampshire live safe, healthy and independent lives:</b>	yes
<b>People in Hampshire enjoy a rich and diverse environment:</b>	yes
<b>People in Hampshire enjoy being part of strong, inclusive communities:</b>	yes

**Section 100 D - Local Government Act 1972 - background documents**

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

Document

Archive and scheme working files

LocationEngineering Consultancy  
Hantsfile

## **IMPACT ASSESSMENTS:**

### **1. Equality Duty**

1.1 The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act;
- Advance equality of opportunity between persons who share a relevant protected characteristic (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, gender and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

**Due regard in this context involves having due regard in particular to:**

- a) The need to remove or minimise disadvantages suffered by persons sharing a relevant characteristic connected to that characteristic;
- b) Take steps to meet the needs of persons sharing a relevant protected characteristic different from the needs of persons who do not share it;
- c) Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity which participation by such persons is disproportionately low.

### **1.2 Equalities Impact Assessment:**

Closure of Redbridge Road to allow work on the Viaduct cantilever piers and Redbridge Road bridge could negatively impact on pedestrians, and particularly those with disabilities, such as wheelchair users, by requiring them to take long diversions along busy roads. To avoid this, Skanska will be required to keep a protected pedestrian route available along Old Redbridge Road under the bridges.

### **2 Impact on Crime and Disorder:**

2.1 The scheme will have no impact upon rates of crime or disorder.

### **3 Climate Change:**

a) How does what is being proposed impact on our carbon footprint / energy consumption?

The use of cathodic protection to prevent corrosion of reinforcement in the substructures is expected to eliminate the requirement for further major maintenance work, and will hence reduce future carbon footprint and energy consumption.

b) How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

Undertaking the repair work now will avoid the need for traffic restrictions, which would lead to congestion and delays on the adjacent road networks.