# A605 KINGS DYKE LEVEL CROSSING CLOSURE-SELECTION OF PREFERRED OPTION AND PROCUREMENT

То:	Economy and Environment Committee		
Meeting Date:	19th April 2016		
From:	Executive Director: Economy, Transport and Environment		
Electoral division(s):	Whittlesey North & Whittlesey South		
Forward Plan ref:	2016/025 Key decision: Yes		
Purpose:	To update members on the development of King's Dyke level crossing bypass and bridge and to seek approval to tender the detailed design and construction using Eastern Highways Framework contract.		
Recommendation:	Committee is recommended to:		
	<ul> <li>a) Note the Planning Committee approval and current position in relation to the King's Dyke level crossing bypass and bridge;</li> </ul>		
	<ul> <li>b) Approve the use of the competitive process within the Eastern Highways Framework Contract (EHF2) for the detailed design and construction, as detailed in Section 2 of this report, and</li> </ul>		
	c) Note that, subject to approval to use the EHF contract, approval to award the Design and Construct works package will be sought at a future meeting of the Economy and Environment Committee		
	<ul> <li>d) Note that once the detailed costs become clear the proposed funding arrangements will be brought to E&amp;E Committee and, should additional funding be required, to the General Purposes Committee for approval before contractual arrangements are finalised.</li> </ul>		

	Officer contact:
Name:	Brian Stinton
Post:	Team Leader Major Infrastructure Delivery (Highway)
Email:	brian.stinton@cambridgeshire.gov.uk
Tel:	01223 728330

### 1 INTRODUCTION & BACKGROUND

- 1.1 The A605 between Whittlesey and Peterborough carries over 12,000 vehicles per day and there are some 120 daily train movements across the level crossing. The resulting closure of the King's Dyke level crossing barrier causes significant delay to traffic. Future plans by the rail industry to increase the number of trains along the route would further increase delays.
- 1.2 The situation is exacerbated in wetter periods, when local flooding closes North Bank, an alternative route to Peterborough, for long periods of time. The additional 5,000 vehicles a day using the level crossing at these times doubles the average delay per vehicle.
- 1.3 At its meeting on 3rd February 2015, the Economy and Environment Committee considered the response to a public consultation and an Options Assessment Report (OAR) and selected a preferred option to progress to the submission for planning approval. The Committee also approved a procurement strategy using Early Contractor Involvement (ECI) in a two stage Design and Construct Contract and the negotiation of land and rights acquisition required for the delivery of the scheme, including the preparation of Compulsory Purchase and Side Road Orders.
- 1.4 The planning application was submitted in December 2015 and was unanimously approved by the County Council's Planning Committee on the 10<sup>th</sup> March 2016.

#### 2. PROCUREMENT OF DETAILED DESIGN AND CONSTRUCTION

- 2.1 Recent consideration of larger infrastructure procurement has indicated that early involvement of a contractor can minimise construction risk, lead to a more readily deliverable design, and allow more innovative construction methods to be utilised. When the Economy and Environment ( E and E) Committee approved the procurement strategy in 2015, contractual options were limited and it appeared that a full European tendering process would be necessary. However, the County Council has been leading on the procurement of the Eastern Highways Framework (EHF2), a contract shared by 11 local authorities in the eastern region. The contract can deliver schemes costing up to £20 million, which places the King's Dyke improvement within its scope.
- 2.2 The EHF2 procurement has been awarded and will be available for delivery of this scheme. The procurement process has been designed to ensure that all contractors appointed are suitable to undertake design and build schemes of this scale and scope. Six suppliers have been appointed to the framework.
- 2.3 The framework is a four year contract and it seeks to establish good relationships between the contractors and the clients throughout the whole contract life. Use of the framework will reduce procurement and contract preparation time as the pre-qualification and tendering process have identified

suitable contractors under a competitive process and the legal basis of the contract is already established. A further competitive process within the framework, where the selected contractors are invited to compete for the scheme will ensure that best value is obtained.

- 2.4 Procurement options were considered at the King's Dyke Project Board in January, where it was felt that the work undertaken in ensuring that the EHF2 provided a competitive and suitable mechanism to deliver the scheme and that the time savings in procurement had sufficient benefits to justify this route. It is therefore recommended that the scheme is delivered using the EHF2 contract.
- 2.5 The ECI two stage Design and Construct contract brings the contractor into the project team early, with the team working together through the design and construction phases. This provides benefits of ensuring that the contractor can use his experience in the design phase to reduce overall project risk and ensure buildability. There are some significant differences compared with the single stage approach that provide a greater level of cost control and certainty.
- 2.6 Most importantly, although an ECI contract would be awarded for design and construction, the process is divided into two parts, the first phase covering the detailed design and consents process, with construction as a second phase. Once the initial target cost and quality submissions from the contractors have been assessed, E and E Committee will be asked to approve the award of the design and construction work package. There is a presumption that the scheme will be delivered as a single package, but there is no guarantee that the contractor will move directly from detailed design to construction. This would be conditional on satisfactory performance and agreement of a construction target cost based on the detailed design. Should the construction target cost be significantly higher than expected, it will be reported to the E and E committee for further consideration. The contract will give ownership of the design to the County Council, so that in the rare event that a target price cannot be agreed, it may be used to re-tender the construction.

#### 3. COSTS AND FUNDING

- 3.1 Scheme funding of £13.5m is currently included in the Business Plan. This was based on the early stage of the scheme's development.
- 3.2 The estimated cost of the scheme is currently £16.9 million. This includes Optimism Bias at the highest level to reflect risks and assumptions made at the early stage of the design. It is possible that this cost will come down as greater certainty over construction details and work required emerge during the detailed design and as value engineering exercises are undertaken. However, this cannot be guaranteed. The cost will be become clearer when a contractor is appointed and a target cost is established based on a more fully developed design.
- 3.3 Currently £11.5 million will be secured from external sources, meaning that the County Council contribution would be a maximum of £2m to meet the figure included in the business plan. However, the Committee should note

that if no additional funding sources are found and significant risks materialise increasing the cost, the County Council may to need borrow more than the amount included in the current business plan.

- 3.4 Members are therefore asked to note that the current estimated cost of £16.9 million remains higher than the Business Plan allocation of £13.5 million and that a greater call on County Council capital funding than currently assumed in the Business Plan may be required. The Committee should also note that it may be asked to approve a request for additional borrowing from the County Council's General Purposes Committee if the contractor's target price indicates that the scheme costs will exceed the amount in the current business plan. Once the detailed costs become clear a report will be brought to this Committee and then General Purposes Committee asking for approval for the proposed funding arrangements prior to finalising the contract.
- 3.5 The preparation of the planning application required some amendments to the design, which has taken longer than anticipated. Less funding will therefore be required in 2016/17, with the majority of the expenditure occurring in 2017/18, subject to land acquisition and Network Rail consents. The tendered target price and the contractor's programme will inform a detailed revised programme and funding profile.

### 4. **PROGRAMME**

- 4.1 Following the approval by Planning Committee in March, information and a specification for the design and construction work is being prepared. This should be completed in July and the contractor will be asked to compete for Design and Construction with the work awarded to the successful contractor in Sept/October. It is anticipated that the Design and Construction will take approximately 16 to 18 months, indicating that the earliest completion date will be late 2017 or early 2018. This assumes that land is acquired by negotiation with no requirement for a Public Inquiry into the acquisition of land.
- 4.2 If land cannot be acquired by negotiation and there are objections to Compulsory Purchase Orders then this will have an impact on the programme while the objections are determined. It has been indicated that this process may take a year to complete.
- 4.3 It should be noted that the construction programme will depend on the method of construction chosen by the contractor and the requirement to secure possessions from Network Rail to work over and close to the railway. Possessions, which require closing the railway, have a substantial lead time, sometimes up to two years. Discussions are continuing with Network Rail so that provisional possessions are agreed as soon as possible to minimise programme risks.

#### 5. LAND ACQUISITION

5.1 The King's Dyke level crossing bypass and bridge scheme will require the acquisition of land. Whilst every reasonable effort will be made to acquire the necessary land and rights by negotiation, a Compulsory Purchase Order and

a Side Roads Order are proposed to ensure the necessary land and powers are available to deliver the scheme. The Orders would be made under the 1980 Highways Act. It should be noted that committee has already approved exercising these powers in order to deliver the approved route.

#### 6. SIGNIFICANT IMPLICATIONS

#### 6.1 **Resource Implications**

• When the scheme estimate was prepared the cost included a standard rate of Optimism Bias of 65% to reflect the preliminary design stage. With further development of the design there will be a reduction in optimism bias and opportunity to reduce overall costs. In the event that this is not the case, additional borrowing may be required or additional funding sources identified.

If additional borrowing is required to meet the scheme costs, repayment of the borrowing from County Council revenue will increase accordingly. As an example, to meet the currently estimated maximum scheme cost of  $\pounds 16.9$  million, the additional annual repayment will be  $\pounds 220k$ 

- Funding for the scheme is being provided from a range of contributions. These include; Growth Deal Funding, £5m; Local Transport Body, £3m; County Council residual capital £3.5m. Currently only a relative small contribution of £275k has been informally offered by Network Rail. It is considered that this does not reflect the benefits that Network Rail will gain from the scheme and negotiations will continue to pursue a contribution that reflects the potential benefits.
- Additional funding sources will continue to be investigated

#### 6.2 Statutory, Risk and Legal Implications

The following bullet points set out details of implications identified by officers:

- The cost of the scheme will be affected by a number of factors, which will be fully identified as the detailed design and construction progress. These are captured and managed in the project risk register and will be carefully monitored as the scheme progresses. Issues will be reported though the Project Board to this Committee. It is important that officer resource allocated to the project reflects these requirements.
- Land and rights need to be acquired. The acquisition of land and rights carries with it risk and increased opportunity for legal challenge. These risks are identified in the project risk register and are being managed by the project manager and monitored by the Project Board.
- In seeking to construct a bridge over the rail lines the Council will need to enter into a set of agreements with Network Rail both for the development and construction of the project. These agreements can be difficult to obtain and early engagement has commenced.

 All project risks are included in the Project Risk Register which is regularly updated and will be reported at each Project Board Meeting.

### 6.3 Equality and Diversity Implications

There are no significant implications.

### 6.4 Engagement and Consultation Implications

The following bullet points set out details of implications identified by officers:

- Public consultation has been a key factor in the identifying a recommendation for a preferred option.
- Further public consultation and community engagement has been undertaken as part of the planning process.
- Updates for stakeholders and the public will be provided during the next stages of the scheme.
- The Project Board draws upon local members both for steering the project and local knowledge of issues.

## 6.5 Public Health Implications

• There are no significant implications

Source Documents	Location
Kings Dyke Level Crossing Replacement - Initial Investigation Report	Rm 308 Shire Hall Cambridge
-Engineering Options Feasibility Report	
-Consultation Response summary	
-Options Assessment Report	
Economy and Environment Committee 16 <sup>th</sup> September 2014 and 3 <sup>rd</sup> February 2016	
Planning Committee report 10 <sup>th</sup> March 2016	