

**ELY SOUTHERN BYPASS-PLANNING APPLICATION OUTCOME AND  
PROCUREMENT**

*To:* **Economy and Environment Committee**

*Meeting Date:* **25<sup>th</sup> November 2014**

*From:* **Executive Director: Economy, Transport and Environment**

*Electoral division(s):* **Ely North and East**

*Forward Plan ref:* **2014/039**      *Key decision:* **Yes**

*Purpose:* **To update members on the development of Ely Southern Bypass, to seek approval to procure the detailed design and construction using an Early Contractor Involvement (ECI) two stage contract and approve project governance arrangements.**

*Recommendation:* **Committee is recommended to:**

- a) Note the planning approval and current position in relation to the Ely Southern Bypass;**
- b) Approve procurement of the detailed design and construction of the Ely Southern Bypass through an Early Contractor Involvement Design and Build Contract as detailed in section 2.9 and 2.10, and**
- c) Approve the establishment of a Project Board as detailed in section 3.1 and**
- d) Agree the appointment of a member to the Project Board.**

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## **1. BACKGROUND**

- 1.1 In December 2012 Cabinet, reviewed a number of options to relieve congestion on the A142 in the vicinity of the level crossing and station at Ely. Cabinet approved the development of a route, submission of a planning application and publication of Draft Orders.
- 1.2 The planning application was submitted in Autumn of 2013 and was unanimously approved by the County Council's Planning Committee on the 8<sup>th</sup> of September 2014. On 25<sup>th</sup> September the Secretary of State confirmed that the application should be determined at local level and lifted a holding direction that he had issued. This allows the Committee's decision to be implemented.
- 1.3 A significant amount of preliminary design has been undertaken to secure planning approval. The next stage in the delivery of the scheme is to procure detailed engineering design and construction.

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

- 2.1 There are various contractual arrangements that could be used to deliver the scheme. To determine the most appropriate arrangement, it is important to take into account specific factors pertaining to a scheme. These include the type of infrastructure, the stage that the project is at in its development and importantly, the level of risk in the project and the appetite to accept or transfer it to a contractor. It should be noted that the tendered construction price will rise as the contract puts additional risk on the contractor. It is therefore very important that the risks in delivery are understood and a contractual arrangement adopted that places risks with the party best placed to deal with them.
- 2.2 A review, by an independent expert consultant, of the form and management of the Cambridgeshire Guided Busway contract was considered by the Economy and Environment Committee on the 16<sup>th</sup> of September 2014 and the reviewer subsequently attended a meeting to discuss the report with Spokespersons. Officers took the opportunity of this visit to discuss procurement options and gain expert advice specific to the Ely scheme. In the ten years since the procurement route was selected for the Busway there have been a number of refinements in the operation and forms of contract that address the main issues encountered on the Busway contract.
- 2.3 The size and nature of this scheme places it outside the scope of available framework contracts and the scheme will therefore be procured through a tendering process. Procurement will require a European tender procedure.
- 2.4 Forms of contract that are most commonly used are:
  - a traditional arrangement, where one contract secures a detailed design and specification for the construction, which is then tendered as a separate contract
  - a single stage Design and Build contract, where the design and construction are tendered as one package, with the successful contractor providing the detailed design.

- an Early Contractor Involvement (ECI) Two Stage Design and Build contract, where the design and build are again tendered as one package as in a single stage contract. However, this differs from a single stage Design and Build contract as there is potential to review the contractor's performance and construction target cost and stop the process at the end of the design phase if necessary.

2.5 Each of these arrangements has advantages and disadvantages, as outlined below.

### **Traditional separate contracts for design and construction**

2.6 The traditional arrangement allows close control of the design process by the client. However, as the construction contract is awarded on the basis of the completed design, there is limited opportunity for the successful contractor to input into the design. Although contractor input can be brought in during the design stage, it may not be relevant as the same contractor may not undertake construction. This form of contract can also limit the contractor's ability to use innovative construction methods which could result in savings and increased performance of the finished scheme. Separate contracts between the client and the parties providing the design and construction results in risks from any issues arising from the design resting, at least initially, with the client. This arrangement is more suitable for schemes that are well developed and hold lower or easily identified risks.

### **Single Stage Design and Build**

2.7 A single stage Design and Build contract places the design and construction in one package. The contract is awarded on the basis of a target cost for the design and construction of the works, based on an outline design. This was the approach used for the Busway contract. This arrangement does offer an incentive for the contractor to ensure that the design is buildable. Such a contract can also facilitate a quicker start on construction as work can commence before the design is complete, so long as it is sufficiently advanced. However, as the contractor must estimate the target cost based on relatively limited information there is a risk that the actual cost for construction is significantly different with the potential for contractual claims and disputes as occurred on the Busway contract.

### **ECI Two stage Design and Build**

2.8 This is a collaborative form of contract, which 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, however, that provide a greater level of cost control and certainty.

2.9 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. 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 price. 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.

- 2.10 The ECI two stage approach also mitigates against cost and programme overruns as there is much greater certainty over the design and understanding of the risks at the point the construction target price is agreed. Developing this understanding can result in a longer contract period, but one that is likely to be realistic. The situation encountered on the Busway where construction commenced before the design was sufficiently advanced would also be avoided. The reviewer of the Busway contract favours this Two Stage, ECI form of contract for the delivery of most major transport infrastructure projects.

### **Evaluation**

- 2.11 There are a number of risks around the Ely project, key amongst these are; earthworks, difficult ground conditions, construction of the bridge over the railway and river, liaison and coordination with the rail industry, diversion of statutory undertakers' plant and services and weather and flood risk.
- 2.12 With the exception of diversion of statutory undertakers' services and some weather and flooding events, the above risks would all be best placed with a contractor, who will have the necessary experience and expertise to manage them and coordinate construction activities with third parties appropriately. Service diversions are usually undertaken by the statutory undertaker on behalf of the client in advance of construction to minimise impact and conflicts in the programme.
- 2.13 The nature and location of the site means that weather and flooding may impact on the work programme. Advice suggests that placing all weather risk on the contractor is unreasonable and that a reasonable allocation of risk is to place the cost of weather and flooding events with the Contractor, but if the event was exceptional, then an extension of time only should be awarded.
- 2.14 Target Cost contracts are now the standard form of construction contract and can be used in any of the above forms of contract. They have been used successfully by the Council on a number of framework contracts and are credited with having helped to deliver the Olympic Games infrastructure. The benefit is that the contractor and client are incentivised to deliver the project on time and on budget as underspends (gain) or overspends (pain) are shared at the end in agreed proportion in accordance with the final cost.
- 2.15 The risk for the client, as occurred with the Busway, is that the client pays the actual cost of construction during the contract. However, since the Busway contract was let a number of mechanisms have been developed to limit this risk by either capping or only paying a proportion of actual cost above the target price. These are reported to be working effectively, but it should be noted that such mechanisms may be reflected in a higher initial target cost.
- 2.16 On the basis of advice taken from a contractual expert and lessons learned from the Guided Busway Delivery review, it is recommended that a two stage ECI Design and Build Contract with target price is adopted to ensure reasonable level of cost certainty and apportioning of the risk appropriately.
- 2.17 The contract will require expertise and advice in its preparation. This would usually be provided by Skanska though the County Council's Highways

Services Contract. However, Skanska has indicated that it would be keen to tender for design and construction, it would therefore be inappropriate for them to be involved in the contract preparation. It is proposed that this service is commissioned through other framework contracts available to the County Council. To provide best value, a competitive process is required, adding some time to the front of the programme. However the use of a framework will ensure that any delay is minimised.

### **3 PROJECT GOVERNANCE**

- 3.1 Strong project governance is necessary to oversee the continued development and delivery of the scheme and provide a forum for key issues to be considered. An earlier Project Board was established comprised of stakeholders and County and District Members. Following the recent change to committee structure at the County Council, it is necessary to re-establish the Board to report to the Economy and Environment Committee. It is proposed that the board includes; Senior Financial, Technical and Operational officers from the County Council, appropriate senior officers from East Cambridgeshire District Council, key stakeholders, e.g. Network Rail and a Member from both County and District Councils.
- 3.2 In order to ensure that the impact of the bypass scheme is considered in a broader transport and development context, it is proposed that regular updates are given to the *“Joint East Cambridgeshire District Council and Cambridgeshire County Council Member and Officer Steering Group for Planning and Transport”*. This group has been set up to discuss the development of the Transport Strategy for East Cambridgeshire and Community Infrastructure Levy. Other growth, infrastructure and planning issues are also discussed as appropriate. Committee is asked to nominate a Member to the Project Board.

### **4 PROGRAMME**

- 4.1 A provisional programme based on an ECI model is shown below:
- |                                    |                   |
|------------------------------------|-------------------|
| • Selection form of contract       | Nov 2014          |
| • Tender preparation               | Dec- May 2015     |
| • Tender period                    | Jun - Dec 2015    |
| • Award contract                   | Dec 2015          |
| • Detailed design and construction | Jan 2016-Nov 2017 |
- 4.2 Running in parallel with the above procurement programme, it is proposed that land entry early in 2015 will allow further investigatory work to be undertaken and, where possible, service diversions to commence in summer 2015.

### **5. COSTS AND FUNDING**

- 5.1 Based on the preliminary design used in the planning application, in 2012 the cost was estimated as £31 million. This is subject to construction inflation and is now estimated at £35 million at 2015 prices. The cost will be refined as the

detailed design and procurement progresses. Funding has been secured from the Local Transport Body (£ 6 million) and Network Rail has offered £5 million. A further bid for £16 million has been made to the Growth Deal fund. The draft business plan includes prudential borrowing of £25 million. Discussions with East Cambridgeshire District Council have secured agreement to allocate a proportion of Community Infrastructure Levy (CIL) receipts towards the project, but ECDC are unable to commit to a specific figure as there is no certainty about the level of receipts.

## **6. ALIGNMENT WITH CORPORATE PRIORITIES**

### **6.1 Developing the local economy for the benefit of all**

The following bullet point sets out details of implications identified by officers:

- The scheme will provide significant benefits to road users by reducing delays to road traffic, including commercial vehicles.
- It will provide significant opportunity for improvement to the station area by facilitating the introduction of East Cambridgeshire District Council's Station Gateway Master Plan.
- It will facilitate increased use of the railway line, especially freight traffic.

### **6.2 Helping people live healthy and independent lives**

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

- The scheme will reduce motorised traffic, improving access to the station area, encouraging more people to walk and cyclist between the station and the city centre/residential areas.
- Improvements to air quality will arise from reducing through traffic in the station area.
- The pedestrian routes will open up rights of way for leisure use
- The scheme includes measures to improve conditions for pedestrians and cyclists along the A142, facilitating cycling and walking from neighbouring communities

### **6.3 Supporting and protecting vulnerable people**

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

- Reducing traffic in the station area will improve accessibility to the station.
- Passenger Transport serving the station should become more reliable.

## **7. SIGNIFICANT IMPLICATIONS**

### **7.1 Resource Implications**

- The cost of the scheme will be affected by a number of factors, which will be fully identified as the 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.

## **7.2 Statutory, Risk and Legal Implications**

The following bullet point sets out details of implications identified by officers:

- The draft Compulsory Purchase Orders are programmed for publication by the end of 2014 and it is anticipated that land entry will be taken in in spring 2015.
- All project risks are included in the Project Risk Register which is regularly updated and will be reported at each Project Board Meeting.

## **7.3 Equality and Diversity Implications**

There are no significant implications.

## **7.4 Engagement and Consultation Implications**

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

- Two comprehensive consultations were undertaken during the development of the scheme and selection of the preferred route.
- A full consultation was undertaken as part of the planning application
- Updates for stakeholders and the public will be provided during the next stages of the scheme.

## **7.5 Public Health Implications**

- A reduction in through traffic will accommodate significant improvement to the environment and accessibility in the area of the station and the underpass. This will make journeys on foot and by cycle more attractive which together with the improved accessibility to public rights of way, is expected to result in more people cycling and walking.

<b>Source Documents</b>	<b>Location</b>
Planning Committee, 8 <sup>th</sup> September 2014 Agenda and Minutes Economy and Environment Committee 16 <sup>th</sup> September 2014- Report on Cambridgeshire Guided Busway Review.	Rm 308 Shire Hall Cambridge .