

## ELY SOUTHERN BYPASS-PROCUREMENT STRATEGY

### 1 Background

On the basis of advice taken from a contractual expert and lessons learned from the Guided Busway Delivery review, procurement using a two stage ECI Design and Build Contract with target price was approved by the E and E committee in November 2014. The committee recognised the need to learn from the experience of the Guided Busway contract and that this contractual arrangement would ensure a reasonable level of cost certainty throughout the process and apportion the risk appropriately. The report outlined a provisional programme for procurement of the design and construction of Ely Southern Bypass.

#### PROVISIONAL PROGRAMME AT NOV 2014

• 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

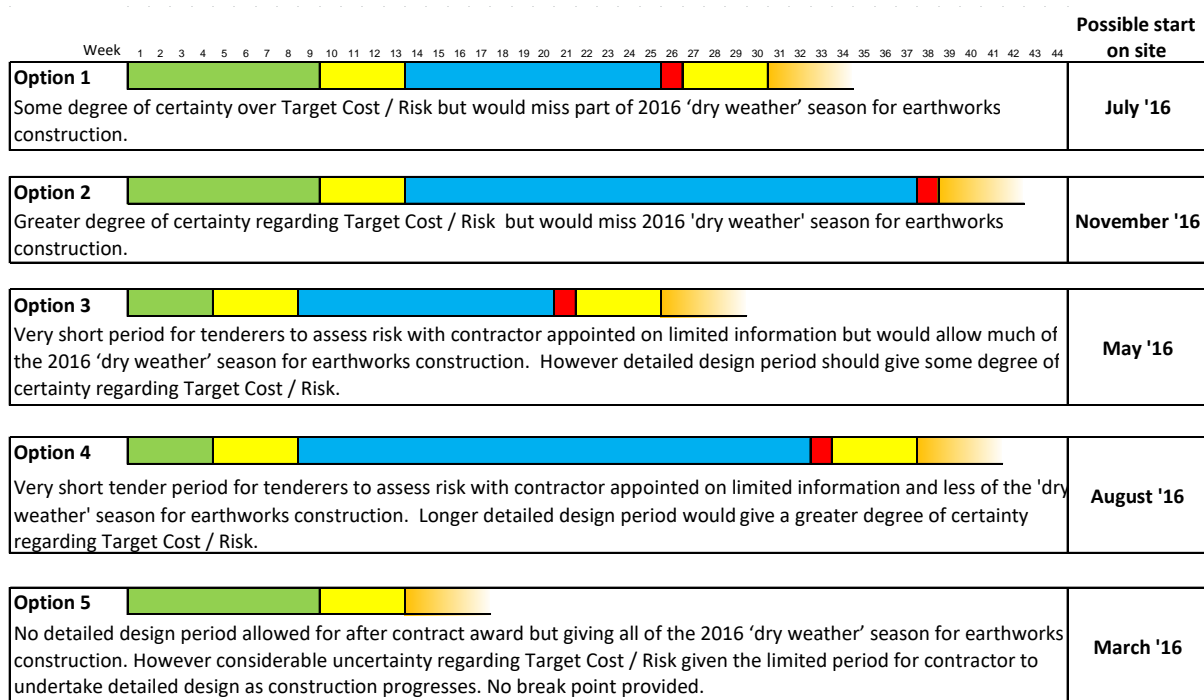
The preparation of the tender required specialist expertise that would normally be provided through the Highway Services Contract, but the provider declined to undertake the work as preparing the contract tender would preclude them from bidding for the main contract. An additional procurement exercise was therefore undertaken to secure this expertise in contract preparation. Despite limited interest in this element of work from the industry, an appointment was made and the tender documents are close to completion.

A change in procurement regulations, requiring a full set of contract documents to be available at the Pre-Qualifying Questionnaire (PQQ) stage, rather than at the tender stage, has also extended the programme as the process of preparing the works information can no longer run in parallel with the PQQ.

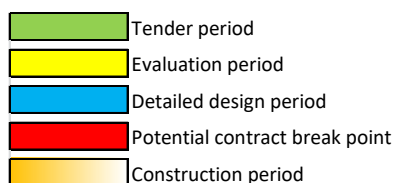
### 2 Procurement Strategy

As part of the tender preparation the consultant has been asked to advise on procurement strategy, bearing in mind the committee's view on learning from previous contracts and the need to identify and apportion risk appropriately. Five potential timescales for procurement were developed, ranging from a minimum time to comply with legal requirements to longer periods to allow contractors to fully understand the scheme, to produce target prices that provide the highest level of confidence at both the award of tender and at the breakpoint after detailed design which would help to minimise cost risk. The diagram below shows various options with a broad summary of the pros and cons :

## Procurement options-time lines



### KEY



The tender period is the time when potential contractors will consider the scheme detail in the tender documents and develop target costs for the detailed engineering design and provide an estimated target cost for construction based on this information. When the detailed design is completed and methods of construction are developed, the construction target cost is revised and, subject to approval, construction allowed to commence.

Advice from the consultant preparing the contract has suggested that a 9 week tender process followed by a six month design period would provide the highest degree of certainty (option 2) and is recommended.

### 3 PROJECT BOARD VIEW

The procurement strategies were considered at the Project Board, where the members of board considered the speed of delivery to be of primary importance and risk in cost uncertainty was off-set by the benefit of possible early delivery. To this end, members of the Board proposed a shorted tender period of 5 weeks and detailed design period of 3 months.

Risks in undertaking a shortened process were highlighted to the members and it was agreed that a view of this proposal was sought from the consultants.

#### **4 COMMENTS ON SHORTENED PROCUREMENT PROCESS AND DETAILED DESIGN PERIOD.**

##### **Consultant's comments**

The comments in response to the Board's reduced procurement schedule are shown below:

##### **Pros**

- Programme would allow much of the 2016 'dry weather' season for earthworks construction.

##### **Cons**

- 5 week tender period is a very short tender period for tenderers to review and take on board the plethora of scheme information that would accompany the tender. (Given that all Contract Document information is made available at PQQ stage, Contractors could take the opportunity to get up to speed with the project 'at risk').
- Insufficient time within the tender period for start-up workshop, mid-tender submission & workshop, and risk allocation clarification as proposed in WYG's preferred procurement option. (WYG's understanding is that CCC has been advised to adopt the 'Welsh Model' (recommended by the reviewer of the CGB delivery) in future tenders given 'issues' in the past - a 5 week tender period is insufficient time for this process).
- A 5 week tender period would mean that CCC would be appointing a contractor based on very limited information. The intention with WYG's preferred procurement option is that Contractor's would undertake some design work during the tender period, and responsibility for 'risk' would be largely clarified during the tender period. Contractors would submit a detailed design fee together with a budget construction cost estimate at the end of the tender period. The construction budget cost estimate would then form the basis for Target Cost 'negotiations'. A 5 week tender period is insufficient for a contractor to undertake an appropriate amount of design work, which is likely to result in a significant amount of risk being incorporated within their construction budget cost estimate. Some contractors might decide not to submit a tender given the short tender period.
- Contractors may wish to 'move the goalposts' at Target Cost stage in the event that their budget cost estimate at tender stage was low compared to the 'actual' construction cost of the scheme.
- A 5 week tender period would not allow time for a Contractor to assess alternative construction methods that might result in cost savings, especially with respect to structures.
- Compared with WYG's preferred procurement option, a 5 week tender period and 3mth detailed design period increases the risk of failing to obtain Network Rail

acceptance of the Railway Bridge design and the risk of failing to agree Railway Possessions required to facilitate construction.

- A 6 month detailed design period would be preferable to a 3 month detailed design period to allow a contractor more time to assess alternative construction methods, undertake additional ground investigation (if necessary) and prepare an 'accurate' detailed design. (A 3 mth design period is considered an absolute minimum for a project akin to Ely Southern Bypass).

In addition we have contacted contractors who have previously expressed an interest to CCC in tendering for the Ely Bypass scheme, and received the following feedback:

- A 5 week tender period is too short. A minimum tender period of 8 weeks would be expected for a scheme of this nature.
- It will be difficult for CCC to compare budget construction costs obtained from contractors at tender stage given that they would have differing approaches to allocation of risk. (Contractor's would have to 'take a view' on risk given the limited amount of design that could be undertaken during a 5 week tender period).
- Contractors would wish to undertake their own Ground Investigation (GI) for the scheme to fill in 'any gaps' in GI provided by CCC given that they would be responsible for design of the scheme. (A 3 month period is not enough time to undertake additional GI and complete a detail design for pricing).

Given the above, in the event that the Project Board decides to proceed with contract procurement for Ely Bypass based on a 5 week tender period and a two week tender evaluation period, we would strongly recommend that they allow a 6mth design period to allow the contractor time to prepare an 'accurate' detailed design to mitigate potential risks during construction.

### **LGSS Procurement officers' comments**

The procurement process is run through the LGSS procurement team who continue to provide advice in formatting the PQQ and tender documents and the suggested tender timescale has been discussed. The comments are summarised below:

Although the legal minimum tender period is 28 days, the EU procurement regulation requires that a reasonable tender period is afforded to bidders. It was felt that for a contract of this value and scope a tender period of 8-10 weeks would be considered reasonable and expected. Along with the pricing difficulties highlighted above, less than 8-10 weeks is likely to result in requests for extensions in time, which it was considered would be difficult to resist. Refusal to allow additional time may give rise to legal challenge.

## **5 SUMMARY AND COMMENTS**

Consultant's advice, LGSS procurement and contractors' comments all confirm that a 5 week tender period is insufficient for the detail of the scheme to be adequately

considered to enable a reliable target cost for construction to be submitted at the tender stage. An extension to the tender period being requested is likely and legal challenge possible. Both of these events would extend the procurement stages for undetermined periods of time. Allowing a reasonable tender period (at least 8 weeks) would mitigate against these risks.

Three months is considered by the consultant to be the absolute minimum detailed design period, but is still considered limited with respect to allowing the appointed contractor to complete the necessary design work and establish construction methodology to provide a reliable confirmed target price. However, it is expected that design work will be undertaken in the tender period so this may provide some scope to reduce the design period from 6 recommended months and a design period of 4 months offers some compromise. A 3 month design period carries the risk that a contractor will seek additional time for the design if the programme is unachievable.

The NEC contract and ECI arrangement in particular, promotes a cooperative approach between contractual parties. Establishing a good relationship with the supplier will be fundamental to successful delivery and placing unrealistic requirements on a contractor from the outset risks developing such a relationship. This can lead to contractual disagreements and difficulty in resolving them.

The estimated construction programme is between 12-18 months, but this will depend on the design detail and construction methodology used by the successful contractor. For the purposes of estimating dates, 18 months has been generally used as the longest likely construction period. Allowing sufficient time in the tender and design periods will allow the contractor opportunity to explore and adopt the most efficient delivery method, providing greater opportunity to minimise construction time.

Allowing an 8 week tender period and a 4 month design period would potentially result in construction being completed in early 2018. If the construction period is reduced to 16 months delivery would be completed late in 2017, in line the provisional programme from November 2015.

On the basis of the comments from the consultant, the Procurement Team and comments from contractors there is a significant increase in risk both in cost and delivery time as issues that may have been identified with during the tender and detailed design phases, are arise and require resolution during the construction period.