

Environment, Development and Transport Committee

Item No.

Report title:	Great Yarmouth Third River Crossing Procurement
Date of meeting:	19 January 2018
Responsible Chief Officer:	Tom McCabe – Executive Director, Community and Environmental Services

Strategic impact

The County Council, at its meeting in December 2016, agreed a motion stating that the Council 'recognises the vital importance of improving our transport infrastructure and that this will help to deliver the new jobs and economic growth that is needed in the years ahead'. In addition the motion makes clear that the Council 'also recognises the importance of giving a clear message of its infrastructure priorities to the government and its agencies, and so ensure that there is universal recognition of their importance to the people of Norfolk.' Three projects were identified as priorities for the coming years: the Great Yarmouth Third River Crossing; Norwich Western Link; and the Long Stratton bypass.

A new river crossing at Great Yarmouth will help us meet this priority. It offers a direct route into the town from the south, provides the link between the trunk road network and the expanding port and the South Denes Enterprise Zone sites, and overcomes the problem of limited road access to the peninsula of Great Yarmouth. The Third River Crossing is vital to the economic prosperity of Great Yarmouth. Great Yarmouth is part of a larger economic sub-region with a strong economic heritage including manufacturing, food and drink processing, tourism and leisure industries. Great Yarmouth is highlighted as a key growth location within the Norfolk and Suffolk Strategic Economic Plan.

It is essential that an effective procurement exercise is undertaken in order to secure best value for money for the project. Having the right contract in place will substantially reduce the risk in the delivery phase.

Executive summary

Norfolk County Council adopted a preferred scheme for the Great Yarmouth Third River Crossing in 2009, comprising an opening bridge over the River Yare to connect the trunk road network (from the A47 Harfreys Roundabout) to the southern peninsula near to the port and Enterprise Zone sites.

Committee approved an Outline Business Case (OBC) for the project that was submitted to the Department for Transport (DfT) on 30 March 2017. The Autumn Budget 2017 allocated a Government contribution of £98m to support the Crossing and programme entry was confirmed by the Department for Transport by letter of 28 November 2017.

EDT Committee received a report on the Stage 2 public consultation results on 10 November 2017.

So that the procurement can commence, this report asks committee to approve the

placing of the Official Journal notice that will commence the procurement.

Once this notice is placed, the evaluation criteria and procurement route will be fixed.

Recommendations

Committee is asked to:

- a) **Approve the contracting strategy outlined in this report.**
- b) **Agree the proposed approach to social value.**
- c) **Agree the proposed evaluation criteria set out in this report.**
- d) **Agree to form a Member working group to consider in more detail:**
 - e) **the evaluation model;**
 - f) **mitigation of risk.**
- g) **Delegate to the Executive Director of Environmental and Community Services authority to agree the detailed evaluation criteria, in consultation with the Chairman and Vice-Chairman of the committee and the Head of Procurement.**
- h) **Agree that the Head of Procurement may issue an Official Journal Contract Notice, which will commence the procurement exercise.**

1. Context

- 1.1. An Outline Business Case (OBC) for the project was submitted to the Department for Transport (DfT) on 30 March 2017. The Autumn Budget 2017 confirmed a Government contribution of £98m to support the Crossing and programme entry was confirmed by the Department for Transport by letter of 28 November 2017.
 - 1.1.1. It is important to maintain the delivery programme as submitted to DfT. The next stage is a procurement process to appoint the main contractor, and this will need to be advertised via a contract notice in the Official Journal of the European Union (OJEU). This report seeks permission to place that notice, commencing the formal procurement programme.

1.2. Commercial viability

- 1.2.1. It is important that the tendering process attracts sufficient capable bidders. The scheme will require a complex mixture of skills, and this will mean that each bidder may need a number of supply chain partners.
- 1.2.2. We have consulted industry, with initial engagement via a Prior Information Notice (PIN) placed on 18 May 2017, leading to a market engagement day held in Great Yarmouth on 4 July 2017, attended by 29 potential bidders and supply chain partners.
- 1.2.3. Subsequent meetings and site visits have been held with eight contractors, in some cases accompanied by potential sub-contractors. We are satisfied from these meetings that we should receive sufficient applications from bidders wishing to be shortlisted.

1.3. Contracting strategy

- 1.3.1 The contracting strategy sets out how the crossing will be procured, the form of contract and the approach to other significant commercial issues.

- 1.3.2. In arriving at the proposed approach, we have kept a sharp focus on the need to minimise risk and achieve excellent value for money for the council, as well as applying industry best practice.

Procurement approach

- 1.3.3. The proposed procurement approach is set out in the table below.

Issue	Approach	Rationale
Procurement route	Two-stage design & build. The preferred bidder will receive a fee to work up the detailed design in parallel with the statutory orders process, and to provide technical input to that process. Insofar as that process requires design changes compared to the initial design, these will result in the price being varied.	<p>Making the contractor responsible for the design places the onus on it to develop a design which is 'buildable', rather than multiple changes being required to allow the design to be built, all of which result in the contractor having the opportunity to revise its price.</p> <p>Under two-stage design and build, if there is no change in the client's requirements (the 'Scope') the Contractor must resolve any necessary design changes.</p>
Division into lots	Single lot	<p>The two-stage design and build approach requires that design and works are let under a single contract.</p> <p>Sub-dividing the works – for example, separating the highway works from the construction of the bridge – would be likely to lead to problems at the interface between the two projects, and to a culture of "finger-pointing" between the contractors. There is significant risk associated with coordination of this interface which could result in significant additional cost to the project delivery.</p>
Procurement procedure	Competitive Dialogue procedure	<p>There are three possible routes: Restricted procedure, competitive dialogue and competitive procedure with negotiation.</p> <p>Restricted procedure is ruled out as it allows no substantive discussion with bidders. This would be very high risk in a project of this complexity.</p> <p>There are few substantive differences between the two competitive procedures, but competitive dialogue is slightly more flexible in the closing stages, is the council's standard approach to complex procurements, and is well understood by the industry. It is therefore the lower risk option.</p>

Degree of flexibility regarding form of bridge	<p>Leave open two options, a bascule and a swing bridge, for discussion with the bidders invited to initial dialogue. We will:</p> <ul style="list-style-type: none"> • have a performance specification that applies to both types of bridge, covering matter such as navigable span, air draft and opening and closing times; • prepare specifications for both types of bridge, for those aspects where the specification differs; • invite views from the bidders taken to initial dialogue; • take a final view during initial dialogue and require the bidders who are taken through to detailed dialogue to all prepare their designs on the same basis (swing or bascule). 	<p>The decision between the two bridge forms which meet the requirement for unlimited air draft is a close one. Whilst the reference design is a twin-leaf bascule, a swing bridge may be able to offer the required level of performance at a lower whole-life cost, or may have other advantages in terms of its operation.</p>
Basis of selection questionnaire	<p>We will base the selection questionnaire (used to arrive at a shortlist of 5-6 bidders) on PAS91:2017, <i>Construction prequalification questionnaires</i>, with suitable project-specific supplementary questions.</p>	<p>This publicly available specification (PAS) is the latest version of the industry standard and is suitable for this project. Using it will minimise bidders' costs.</p>
No. of bidders to be taken through to initial dialogue	<p>Five bidders to be taken through (six if fifth and sixth bidders very close)</p>	<p>Under procurement law, the initial selection is based on capability and track record, rather than on what the bidders propose to do for our specific project. So we need to take sufficient bidders through at this stage to give us a qualified pool from which to draw.</p> <p>Experience in previous procurements shows that narrowing the field too much at this stage leads to poor results.</p>
No. of bidders to be taken through into detailed dialogue	<p>Three bidders to be taken through</p>	<p>We need sufficient bidders in the detailed dialogue to maintain competition and manage the risk if one bidder drops out.</p> <p>But if we have more than three bidders at this stage, potential bidders may decline to take part because they will see the odds of winning as too poor to justify the bid costs. From our point of view, having four bidders at this stage would increase our costs, lengthen timescales and be hard to manage.</p>

Payment of bidders for design work	We will pay each of the three shortlisted bidders a contribution towards their design costs, provided that they submit a valid tender.	We will be using the design proposals worked up during the competitive dialogue to help inform our submission to the DCO process. In recognition of this we will defray a proportion of bidders' costs, to encourage adequate competition and avoid deterring bidders.
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Contractual form and scope

1.3.4. The proposed contractual form and scope is set out in the table below.

Issue	Approach	Rationale
Form of contract	NEC4 Engineering and Construction Contract (ECC)	<p>We consulted the industry about use of the NEC contract suite versus other contract forms. There was overwhelming support for NEC because other forms of contract are not well understood in the industry.</p> <p>We similarly lack understanding of the other forms of contract, which would introduce risk.</p> <p>The NEC3 contract was introduced in 2005 and superseded by NEC4 in June 2017. NEC4 deals with a number of issues with the NEC3 contracts, which we would otherwise have to manage by introducing our own variant clauses. The introduction of variant clauses is likely to be more risky than using the new form of contract, which has undergone extensive expert review based on experience of NEC3.</p> <p>NEC4 also has the advantage that it eliminates the concept of a working area overhead¹ which, based on experience on the NDR project, can lead to commercial issues associated with project costs.</p>
NEC4 main option for stage one	We propose to use Option A (priced contract with activity schedule) for stage one (the design and approvals stage), but will dialogue on this with bidders. Some aspects of stage one may be better suited to option E (cost reimbursable contract)	Option A is the recommended option where the client is able to define its requirement accurately. In this instance, the requirement is clear: in essence, to design the works in accordance with the performance specification

¹ Broadly speaking, working area overhead is a percentage charge applied to the cost of people employed within the actual site intended to cover minor costs that need not be individually justified.

NEC4 main option for stage two	<p>We propose to use Option C (target cost) for the works.</p> <ul style="list-style-type: none"> • A target cost will be agreed at the end of stage one. • Any 'pain' or 'gain' in the final costs will be shared between council and contractor, on a pre-agreed basis, to incentivise both parties • A gain-share mechanism will be put in place to encourage the contractor to work with us to reduce the target cost during stage one, through detailed design and the tendering of subcontracts. 	<p>This approach provides for an incentivised arrangement that drives all involved in the project to reduce costs.</p> <p>Whilst this approach does not 'fix' the cost of the project, or avoid budget increases, a key part of the project analysis will include a detailed review of risk allocation as part of the target cost development, to which we will apply the lessons learned from the NDR. Independent consultants have been appointed to assess this as part of the project development.</p> <p>As the NDR nears completion we will continue to review and apply learning from this project to the target cost and commercial management of the third river crossing project.</p> <p>A fixed price contract would see a significant allocation of risk included in the upfront cost of the project, which would be paid whether all those risks occurred or not.</p>
Form of contract for stage one (design)	NEC4 ECC option X22	<p>There are two options for stage one: to sign a separate NEC professional services contract, or to use the X22 option within the main NEC4 contract.</p> <p>The X22 option allows us to instruct the contractor to proceed with stage two once the target cost is agreed, provided that that cost is satisfactory. Using this built-in option is simpler than writing two contracts and attempting to integrate them.</p>
Specification	<p>Based on the DfT <i>Specification for Highway Works</i>.</p> <p>Because this is a design and build contract, the contractor's designer will be responsible for completion of aspects of the works specification in accordance with its design. It will do so in conformance to the performance specification developed by the council and its advisers.</p>	<p>The DfT specification is the industry standard and is an integrated system including the standards for the works and the approach to testing.</p>

Operation and maintenance and defects period	<p>Bidder to operate and maintain the structure for the first year and to be responsible for its maintenance for a further two years.</p> <p>Completion of the works and the passing of tests will constitute sectional completion. At that stage, the council will take over the bridge and the one year operation and maintenance phase will begin.</p> <p>At the end of that year, the further two years of maintenance will commence. This period will coincide with the defects period.</p>	<p>Experience suggests (and our advisers confirm) that most faults and snags will become apparent in the first year. Having the contractor responsible for operation and maintenance for that year removes any opportunity for 'finger-pointing' and means that the contractor has an on-site team in place to deal with any snags and to train-up the long-term operators of the bridge.</p> <p>It is logical for the further maintenance period to correspond with the period during which the contractor must correct any defects.</p> <p>The approach proposed provides for an overall defects correction period of 3 years, which is considered sufficient to ensure the overall reliability of the bridge in its early years of operation.</p>
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Other commercial issues

1.3.5. Our approach to other significant commercial issues is set out below

Ultimate holding company guarantee	We will require an ultimate holding company guarantee	An ultimate holding company guarantee protects us against a contractor avoiding its liabilities by winding up the company that would otherwise be liable.
Delay damages	We will require delay damages to cover the cost of keeping our project team mobilised for any delay period.	A delay in completing the project does not have a direct monetary impact on the authority, other than the cost of its project team.
Performance bond	We will not require a performance bond.	The premium for a performance bond is significant and would be passed on to the authority. In practice performance bonds are heavily caveated and hard to claim against. The cost is therefore judged to exceed the benefit.
Retention	We will not retain any part of the price	Retentions have a significant impact on cash flow and as such are usually limited such that they are of limited effect. This means that the administrative burden outweighs their effectiveness.

1.4. Social Value

1.4.1. This is a works procurement and as such is not subject to the Public Contracts (Social Value) Act 2012. Nevertheless, it is appropriate to consider how social value (the economic, social and environmental well-being of the area) might best be promoted via the scheme.

1.4.2. Great Yarmouth contains areas of significant economic and educational deprivation. We propose therefore that apprenticeships and employment should be at the centre of the

social value requirements under the contract. It will also be important to include adequate provisions for environmental protection and to manage the impact of construction work on local residents and businesses.

Local employment and apprenticeships

- 1.4.3. We propose to dialogue with contractors on the appropriate level of apprenticeships to be delivered under the contract and then set a common standard across bidders.
- 1.4.4. We propose that the promotion of local employment and local sub-contracting forms part of the award criteria.

Environmental considerations

- 1.4.5. The scheme will bring environmental benefits through encouraging walking and cycling between the residential areas west of the river and the employment and retail areas to the east; through reducing congestion and associated pollution; and through supporting low-carbon electricity generation through the offshore wind industry.
- 1.4.6. Construction work has the potential for significant environmental impacts. This will be considered as part of the evaluation of the construction methodology. High minimum standards will be set.

1.5. **Evaluation Criteria**

- 1.5.1. The proposed evaluation criteria for tender award are as follows.

Technical
Engineering design methodology (including proposed structure of design team, minimising whole life cost, innovation, financial robustness, and achievement of strategic, maintenance and operational objectives)
Construction methodology (including proposed structure of construction team, traffic management, logistics, minimising port disruption, testing and commissioning, environmental management).
Experience and qualifications of key personnel (including design, construction, commercial, niche specialists); approach to retaining those personnel through the project
Project controls including quantitative schedule risk assessment, risk register, risk management approach, programme management approach
Financial management systems to allow verification of costs actually incurred by the Contractor
Stakeholder management and engagement strategy
Collaborative approach
Health and safety management approach
Commercial
Completed price workbook and activity schedule including estimating

assumptions and contingency and risk allowance – Stage One
Completed price workbook and activity schedule including estimating assumptions and contingency and risk allowance – Stage Two
Fee percentages
Preliminary items
Risk
Contractual compliance
Programme robustness

1.6. Procurement timescales

- 1.6.1. The estimated procurement timescale from placing of the Official Journal notice is as follows.

	Weeks	Cumulative weeks
Advertise opportunity in the Official Journal of the European Union	0	0
Receive Pre-qualification Questionnaires & shortlist to 4-6 bidders	8	8
Start dialogue - bidders develop & present their Outline Solutions and prepare their Outline proposal	7	15
Receive Outline Proposal and shortlist to 3 bidders for dialogue	3	18
Bidders develop their tender design & price it and dialogue on the other contract schedules	14	32
Prepare for and dialogue on design & price	3	35
Dialogue closes and bidders prepare their best & final offer	2	37
Receive Best & Final Offers and evaluate	2	39
Provisional award decision and approvals process	4 ²	43
Standstill period	2	45
Contract Award	0	45
Mobilisation begins		45

2. Financial Implications

- 2.1. The Outline Business Case submission to DfT set out the project cost of circa £120m. The Autumn Budget 2017 has confirmed a Government contribution of £98m to support the GYTRC and Programme Entry was confirmed by the Department for Transport by letter of 28 November 2017.

3. Issues, risks and innovation

- 3.1. We have strengthened our procurement arrangements, utilising specialist advice, to develop a contract and commercial strategy that best meets the County Council's requirements. The design and build approach is part driven by the need for specialist

² Subject to alignment with committee dates

bridge engineering, but in requiring the contractor to provide the design we have given ownership and responsibility for the full delivery, thereby lessening the risk of change.

- 3.2. We will incorporate mechanisms to both drive and enforce improved contractor performance, particularly in the areas of financial reporting and programme delivery, to address issues previously experienced with records, financial monitoring, and weather-related works delivery.
- 3.3. Noting the protracted nature of finalising third party accommodation and utilities requirements, we are advancing the necessary project explorations to ensure that all matters are suitably catered for within the works scope prior to award, again mitigating a sizeable risk.
- 3.4. We are working closely with Peel Ports to agree how construction will interact with port operations.
- 3.5. Our approach to the DCO will seek a less-prescriptive outcome. This will enable the works to be carried out in a more-flexible manner to take account of the conditions found when works start.
- 3.6. We are carrying out extensive ground investigation so that ground conditions are known to all bidders.
- 3.7. A robust risk management strategy is in place to identify, quantify, manage and review risks. A project risk register was produced during the development of the OBC submission. The risk register is reviewed and updated by the project team and reported to the Project Board on a monthly basis.
- 3.8. Other key risks which could result in cost escalation still remain as presented to Committee on 17 March 2017. These were:
 - Planning Process: not obtaining planning consent; or receiving unexpected and onerous requirements from the Development Consent Order.
 - Construction: difficulties in securing access for surveys and preliminary construction; the construction schedule of the A47 Harfreys roundabout, or other A47 schemes, conflicting with the bridge works programme; or adverse weather conditions causing delays/damage to construction.
 - Port operations: the number and type of vessels changing significantly between now and construction, resulting in reduced traffic benefits or greater mitigation requirements; the need to alter the bridge to accommodate port operations; or the bridge affecting the river sedimentation regime affecting port operations and maintenance.
 - Design/Scope change: vessel simulations show a need for a bridge wider than 50m clear span; variations from current geotechnical and topographical assumptions impact on the design; or unexpected statutory services are located, particularly if they are under water/anticipated pier and fender locations.

3.9. **Other Implications**

Legal implications

- 3.10. This is a significant procurement exercise and care will need to be taken to comply fully with procurement law.

Equality

- 3.11. No significant equalities issues directly associated with the procurement have been identified.
- 3.12. The contract will contain appropriate clauses to mitigate risks associated with equalities in the workforce.

Human rights implications

- 3.13. No human rights issues are directly associated with the procurement
- 3.14. The contract will contain appropriate clauses to mitigate risks associated with modern slavery in the supply chain.

Health and safety issues

- 3.15. Any construction contract on this scale requires a rigorous approach to health and safety at all stages. Appropriate advice will be obtained from the health and safety team.

4. Background

- 4.1. In 2009 Cabinet adopted a preferred route for the scheme by way of a dual carriageway link utilising a 50m span bascule bridge over the river, it authorised purchase of properties the subject of valid Blight Notices served upon the Council and agreed further study work should be undertaken into funding and procurement options.
- 4.2. Since then, £2.8m has been invested by the Council to acquire properties and land.
- 4.3. Following the submission of the OBC in March 2017, which sought funding from the DFT as part of its fast track Large Local Major Transport Schemes fund, local work has continued to be delivered in line with the overall programme. The Autumn Budget 2017 has confirmed a Government contribution of £98m to support the GYTRC and Programme Entry was confirmed by the Department for Transport by letter of 28 November 2017.
- 4.4. Reports were presented to EDT Committee on 15 September 2017 and 10 November 2017 to provide an update on progress since the submission of the OBC.
- 4.5. **Background reports:**

Cabinet 7 December 2009 - Follow this [link](#) (see item 22)

EDT Committee 20 May 2016 – Follow this [link](#) (see item 9 page 28)

EDT Committee 17 March 2017 - Follow this [link](#) (see item 11 page 43)

EDT Committee 15 September 2017 – Follow this [link](#) (see item 15 page 98)

EDT Committee 10 November 2017 - Follow this [link](#) (see item 10, page 91)

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer name : David Allfrey **Tel No. :** 01603 223292

Email address : david.allfrey@norfolk.gov.uk

Officer name : Al Collier **Tel No. :** 01603 223372

Email address : al.collier@norfolk.gov.uk



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