### ABERDEEN CITY COUNCIL

COMMITTEE Audit, Risk and Scrutiny

DATE 27<sup>th</sup> September 2016

DIRECTOR Interim Depute Chief Executive (Director of

Corporate Governance)

TITLE OF REPORT 3<sup>rd</sup> Don Crossing

REPORT NUMBER CG/16/108

CHECKLIST COMPLETED Yes

### PURPOSE OF REPORT

The purpose of this report is to provide an external view of the contractual arrangements that were put in place to construct the Third Don Crossing, now known as the Diamond Bridge. The remit of the review was to establish why the overall project was delivered late and over budget and to identify key lessons learned that the Council should consider in relation to such contracts in the future.

It is important at the outset of this review to acknowledge that any construction contract of this nature carries an element of risk for the Council and that indicative budget costs set out at the beginning of process are just that – best estimates that will be refined and clarified as the specification is developed and the tendering exercise is completed.

As part of their ongoing review of Capital Projects, the Council's External Auditors have selected this project for review as a traditional capital project (i.e. funded by borrowing). The External Auditor has advised that their review will include ensuring that the contract and the overall project price was let in line with financial regulations and an assessment of the project management approach adopted by the Council. The results of that will be included in a report from the External Auditor that will be considered at this meeting.

With that in mind, the aim of the review contained within this particular report is to concentrate specifically on:

- the commercial aspects of the arrangements
- the approach that the Council took at the time to develop and manage that contract and associated contractual relationships: and
- to highlight areas for improvement in this regard.

### 2. RECOMMENDATIONS:

The Committee is asked to:

- (a) refer the report to the Strategic Asset Capital Board to develop an Action Plan based on the conclusions contained in the report; and
- (b) request that officers submit a report on the Action Plan to this Committee in 6 months time.

### FINANCIAL IMPLICATIONS

There are no financial implications arising directly from this report.

### 4. OTHER IMPLICATIONS

There are none arising directly from this report.

### 5. BACKGROUND/MAIN ISSUES

The 3<sup>rd</sup> Don Crossing is Aberdeen's biggest major new bridge infrastructure for 30 years since Queen Elizabeth II Bridge. Opening in June 2016, the Crossing was the culmination of many years of discussion, consultation, planning and decision making. This was a complex and challenging project involving the construction of two new bridge structures, three large retaining walls, 1.5 miles of connecting roads on both sides of the River Don, with re-alignment and widening of existing roads carrying live traffic, the creation of cycle paths and pavements and landscaping works. The project also required extensive interaction with existing underground utility apparatus that called for significant diversionary works.

The timeline of this project shows that it started on 16 April 2003 when an outline programme for the delivery of the Crossing was submitted to Council. Following a period of review, consultation, route options appraisal and initiation of the planning application process, the bridge designer was appointed in August 2010. Following a final decision on the delivery mechanism for the Crossing at the Council in March 2013, another contractor was appointed in May 2013 to provide an independent check of the bridge designs in line with the appropriate technical approval standards for highway structures.

The contract opportunity was advertised in the Official Journal of the European Union in May 2013 and, following the evaluation of potential bidders technical and financial capabilities via a pre-qualification questionnaire process, a tender was issued for the works in May 2014. The contract for delivery of the Crossing was subsequently awarded to the main contractor on 14<sup>th</sup> July 2014.

The Crossing opened in June 2016 some 7 months behind schedule and at an additional cost of £4m over the estimated cost at the outset.

## Approach used in the review.

The review work has been carried out largely using desk research considering papers provided by Council officers supplemented by papers available from the Council's website. In addition, a series of meetings with key individuals involved in the project were also held to gain further insight into the details and to seek their input into "lessons learned".

For the purposes of this review, the starting point is the meeting of the Full Council on 19<sup>th</sup> December 2012 at which Members called for a report to the next Council meeting on the most efficient procurement options to deliver the Third Don Crossing. In March 2013, such a report was tabled to the Full Council where it was decided that a stand-alone works only contract would be progressed.

# Main findings and key conclusions

## **Procurement Options Appraisal Process**

The initial decision to progress on a works only contract basis was considered by the Full Council on 6 March 2013 (Report EPI/13/022). The report considered the merits of delivering the Crossing as a standalone 'works only' contract versus a 'design and build' contract as part of the wider Aberdeen Western Peripheral Route (AWPRB-T) arrangements.

It is not clear if any other alternative mechanisms were considered or how opportunities for the supply market to provide innovative solutions were encouraged. The report states that the 'works only' approach is how road improvement projects have been "traditionally delivered". It would have been useful to see a broader range of procurement options considered. For example, a stand-alone design and build contract that was not incorporated into the AWPR project? In addition, it would appear from the documentation provided that there was limited consideration, perhaps because of time constraints, of any detailed market analysis or benchmarking /research done with other public sector bodies who have similar requirements.

The report identified that the works only approach would require the Council taking on a greater share of the project's financial risks but then focuses largely on the risks involved in the design and build approach. It appears to be very light on the detailed analysis of the risks that a 'works only' approach might expose the Council to and what mitigation measures would be used to manage them effectively.

Good practice would suggest that a range of inputs and perspectives from across different specialisms should be taken into account in developing such procurement options and assessing risks. Whilst there is evidence that a number of resources were involved in the development of the options, including legal, there was limited/ no direct involvement of the Commercial and Procurement Services Team (C&PS) in this instance. Given the specialist knowledge and experience that the CP&S Team have of developing and managing commercial arrangements combined with the strong networks that they have established with other public sector bodies across Scotland and the UK, it would have been helpful to have had their input into the development of the options and the identification of risks at an early stage as the procurement strategy was being developed.

It is encouraging to note that the Council has since implemented a much more corporate based, category management approach (see note 1 at Appendix 1) to how it manages spend with third parties. Involvement of key resources like this in a project team for works of this nature should strengthen the approach that the Council takes in the future and provide a more comprehensive view of procurement options and risks involved covering commercial as well as technical and operational risks.

It was also reassuring to see an overview of the structure, processes and documentation that have been introduced through the Corporate Project Management Toolkit, developed by the Programme Management Office (PMO) (see note 2 at Appendix 1). Had these more robust processes and customer focussed, financial reporting approaches been in place, a number of the issues that have given rise to the delays and overrun of costs could have been avoided.

**Conclusion** 1 – The Council should ensure that it identifies a broad range of procurement options and sets out a more balanced approach to the analysis and reporting of procurement options appraised and their risks to committees. Benchmarking and/or active networking with others who have similar requirements should also be considered for all major construction projects of this nature.

**Conclusion 2 -** The Council should also continue to support the category management model as the corporate way of doing business and mandate its use to ensure that future proposals reflect best practice across a range of technical, legal and commercial specialisms and that robust procurement strategies and risk registers are developed for major contracts.

**Conclusion 3** -The Council should also continue to develop, support and promote the PMO approach that has been implemented to ensure that projects are developed in a consistent, robust and well documented manner. The allocation of clear roles and responsibilities is key requirement in delivering successful contracts.

### Contract structure and term and conditions

It is my understanding that, at the time, the contract structure and the choice of the commercial terms and conditions rested largely with the Service Dept. within the Council. In this instance, a review of the proposed conditions was carried out by the Legal Team but it is my impression that this was more of a brief final check rather than as a result of the Legal representative having had a role as an integral part of the project team with a full understanding of the nature, scope and risks associated with the project. Again, this may be as a result of time and resource pressures – perceived or real.

The contract structure that was used in the invitation to tender was on the basis of a re-measurable contract in accordance with the industry standard Infrastructure Conditions of Contract (ICC) with the tender price being the total sum established from the information provided by a bill of quantities as priced by the contractor. The bill of quantities specifies all elements of construction and other associated works to be completed and based on this, the contractor submits monthly claims for his work which the Council's representative(the Engineer) has 21 days to assess and amend prior to notifying the contractor of his adjusted payment. The original specification and bill of quantities was compiled from a number of technical inputs, both internal and external using the Manual of Contract Documents for Highway Works (MCHW) as a base which is the documentation typically used by local and trunk road authorities.

Typically contracts for civil engineering works allow for additional claims, under various headings to be submitted and considered by the Engineer as the work progresses. Such claims can include unforeseen events (such as utilities or unexpected ground conditions etc), inclement weather or errors within the supplied information.

It is unclear what options were considered in the decision making process regarding style of contract and, to an extent, the choice of commercial terms and conditions. It is also unclear how often the commercial terms are routinely reviewed and refreshed and whether the appropriate staff are trained in how to understand and apply the conditions.

As with the comments on the procurement options appraisal in the previous section, good practice would suggest that a project team approach involving procurement and legal expertise (as well as other specialisms as appropriate) should be adopted for such projects. It is good to note therefore that restructuring of activities across the Council have resulted in a number of the Commercial Lawyers being embedded in the Commercial and Procurement Services team to provide a one stop shop approach. By integrating these activities and having CP&S working much more closely with the Service Departments as part of their project team, it will be easier to ensure that a much more commercially focussed, total cost of ownership approach is adopted. This should also ensure that contracts are developed with robust key performance indicators and reporting requirements and "contract specific" terms that supplement the industry standard conditions that are used form both a commercial and a technical perspective.

**Conclusion 4 –** The Council should continue to support and endorse the expanded role of the CP&S team and ensure that it is structured and resourced to support projects of this nature.

**Conclusion 5 –** As part of the new CP&S structure, consideration should be given to a review and refresh of the existing terms and conditions available across the Council and the development of a central suite of terms and conditions that are "held " by the CP&S team rather than by individual Service Depts. Experience would suggest that this type of consolidation makes it easier and more efficient to:

- Review and refresh conditions of contract on a periodic basis
- Ensure a consistent approach to how the council does it business is applied
- Enable lessons learned are shared across the Council with ease
- Avoid duplication of effort and inconsistent commercial approaches to develop
- Develop and deliver appropriate training for Service Departments.

# Approach to the market for the main contractor for the works

A full EU tender exercise was commenced with advertisement of the contract opportunity in the Official Journal of the European Union (OJEU) in May 2013. A pre-qualification questionnaire (PQQ) was issued to assess financial standing and technical capabilities of interested parties and 6 responses were received in June 2013. One potential bidder withdrew and the contract document was issued to the remaining 5 bidders who had satisfied the measures in the PQQ stage on the 1<sup>st</sup> May 2014 on the conclusion of the legal processes associated land for the project

Four tenders were returned by the closing date of 13<sup>th</sup> June 2014 with values ranging from £14.33m to £21.73m.

Based on the premise that an evaluation of the technical and financial capabilities of the potential bidders had been undertaken at the PQQ stage, the basis of the tender evaluation and contract award was "lowest price submitted". The tender returns were reported to the Finance, Policy and Resources Committee on 19 June 2014.

Given the complex nature of the project, the risk factors involved and the high value of the works, the turnaround time for bidders to submit their offers seems relatively short. In such circumstances, there is a danger that bidders are not able to fully assess the contract risks or to work with their supply chains to develop alternative approaches or innovative solutions for the Council to consider. The time permitted for bidders to respond to such requirements is something that the Council may wish to review for future works of this nature and complexity.

It is also surprising that the bids were assessed on the basis of price only. The assessment of technical capabilities and financial standing at the PQQ stage tend to be generic in nature and the opportunity to investigate any specific issues or concerns about quality, project management, resources, sustainability etc. would be carried out at the tendering stage in relation to the specifics of the contract requirements in question. Given that the evaluation on this project was only on price, it is difficult to see how these important quality and "total cost of ownership" aspects could be taken fully into account in the evaluation. Given that the category management model has been implemented across the Council and the role of the CP&S team in supporting Service Departments in these areas has been clarified, many of the issues highlighted above will be addressed during the development of the procurement strategy for such works. The use of corporate systems to manage the procurement processes will also provide further consistency and transparency.

**Conclusion 6** – Continue to support the category management model and ensure that roles and responsibilities are clearly defined and communicated. Working in this more corporate, "cross functional" way will ensure that a consistent strategic sourcing approach is followed and that a broader range of critical factors other than just price are assessed during the evaluation process. To support this, the Council should ensure that these roles and responsibilities are adequately reflected in job profiles and in the identification of training needs for staff involved in such projects.

# Relationships

Having considered some of the relationship dynamics within the Council, it is worth giving some thought to the relationships with external partners and how they might have impacted on delays and/or cost overruns and how they might be improved for the future. Given the nature of the project, the various contracts involved and the number of external players who played a role, there are a number of areas that are worthy of consideration.

It was reported that uncharted utilities were a problem which caused both delays and additional costs. Those involved from the Council at times found it difficult to manage these relationships, had to cope with changes of scope on several occasions and struggled to get the utility companies to respond in a timely manner. Given this and the frequent interaction that the Council has with the utility companies it may be worth considering how these relationships can be improved by, for example, introducing a more frequent interaction at a senior level across the organisations involved.

The further area of relationships in with regard to the contractual links between the bridge designer, the bridge checker and the main contractor. One of the issues that arose during the construction phase related to the design of the bridge in relation to the bearings. The focus of the Service Department at the time was on finding a practical solution to the technical issue to keep the bridge project on time. A decision was taken not to make any recourse to the rights and obligations in the contract at that time as it was felt by the Service that this could have resulted in a shift in focus of the designers and possibly them considering their technical and professional positions with their insurers rather than the solution. If the category management approach had been in place at the time, it is likely that this decision would have

involved a broader range of stakeholders. It may be worth conducting a detailed "lesson learned" session with that broader group of stakeholders to review this decision (with the benefit of hindsight) and also to ensure that the rights and obligations within each of these three contracts are aligned, leave no gaps and offer maximum protection to the Council to pursue the correct party for the additional costs incurred.

A final comment on external relationships relates to the level of collaboration and networking that key staff within the Service Department are involved in. In my experience, involvement in national groups, benchmarking clubs, networking and industry forums provides a useful means of keeping abreast of developments, encourages sharing of best practice and helps to develop new ways of thinking. Consideration should be given to supporting this type of approach if it is not already in place.

**Conclusion 7** – Consider a review of key relationships and develop an action plan to improve them along the lines outlined above. Encourage and support key staff to be actively involved in national groups to ensure that market developments, new and innovative ways of working are being routinely considered and a culture of continuous improvement is embedded in how the Council does business with third parties.

#### Resources and structures

It is clear from my discussions that some of the difficulties arose from resource issues. A key officer who was at the head of the project and operated on a very hands on basis maintaining tight controls on processes and procedures, went off on sick leave very suddenly. This traditional style of management combined with the "silo" approach that was in place across the Council at that time with regards to developing and managing contracts, is likely to have had an impact for a period while those responsible for the project got up to speed with the project and take on additional duties at such a critical stage.

It is encouraging that many of the organisational issues that arose have been or are being addressed within the Council. The category management structure that has been implemented means that there is better use of expert resource and provides a more resilient business model. In addition, the "Triple Aims" cultural change programme that is currently underway will go some way to addressing the issues via the work that it is doing to encourage senior managers to become more visible to the workforce and to adopt management practices which ensure that staffs are well informed, consulted and engaged in the wider organisation. Whilst the sudden absence of key personnel is always challenging, the changes that the Triple Aims programme is seeking to make will help better equip staff to cope.

To help support this, it might be useful for the Council to consider undertaking a refreshed training needs analysis of those involved in such major projects and to develop an appropriate training plan to meet any gaps identified. I was not aware of any specific use or reference to the Scottish Government's Construction Procurement Manual – a useful document that provides a range of guidance on matters such as

roles and responsibilities, Value for Money, procurement strategies and financial aspects as well as health and safety, design quality and sustainability.

**Conclusion 8** – Consider carrying out a refreshed training needs analysis and developing an appropriate training plan and ensure that key personnel are aware of the Scottish Government's Construction Procurement Manual.

## **Update on the Internal Audit Report**

A final observation is in relation to this review relates to an audit carried out by PWC and reported on in April 2015. <a href="http://committees.aberdeencity.gov.uk/documents/s46414/Procurement/20in%20Construction%20Report\_AC%20FINAL.pdf">http://committees.aberdeencity.gov.uk/documents/s46414/Procurement/20in%20Construction%20Report\_AC%20FINAL.pdf</a>

The purpose of the report was to give the Council a view on their state of readiness to cope with the recommendations made in the Scottish Government' report on Construction Procurement. Section 4 of the report highlighted some requirements that at that point the Council was unable to meet. Based on some of the recommendations and actions included within this report, it might be helpful to revisit the PWC report and ensure that any outstanding recommendations have now been fully implemented.

**Conclusion 9** – Officers ensure that all the outstanding recommendations of the audit have been fully implemented.

# Summary

There was no one specific element that resulted in the late delivery and cost overrun on this project however, as the report highlights, there were several factors that influenced that situation. The conclusions drawn in this report suggest ways in which these factors can be addressed in future projects to ensure that there is a more appropriate balance between technical and commercial aspects of such contracts and that the Council has identified and mitigated appropriately the range of risks that are inherent in such works .

Like all change processes, success will be driven by the provision of clear leadership, adequate resources with the right skills and a clear action plan. From my discussions with a number of stakeholders it is clear that many of these building blocks have already been established or are actively being rolled out across the organisation therefore implementation of the recommendations included here can be aligned to existing programmes ongoing within the Council. It is recommended that the Council considers establishing a small group of key players with an Executive sponsor (Strategic Asset Capital Board (previously the Strategic Infrastructure Programme Board) to develop an appropriate action plan, timescale and reporting regime to ensure that these lessons are learned and the necessary changes are implemented across the Council.

**Conclusion 10** – This report be referred to the Strategic Asset Capital Board and request that the Board develop an Action Plan in response and that progress against the Action Plan be reported to a future meeting of this Committee.

### 6. IMPACT

Implementing and monitoring the recommendations of this report will lead to Improving the Customer Experience, the Staff Experience and our use of Resources, whilst providing the Council with guidance on the future approach that the Council takes in developing and managing contracts and contractual relationships. The crossing is included in the Strategic Infrastructure Plan which is reflected in Aberdeen-The Smarter City.

### 7. MANAGEMENT OF RISK

Implementing and monitoring the recommendations of this report will provide the Council with guidance on the future approach that the Council takes in developing and managing contracts and contractual relationships and the associated risks therein. The specific risks for this project and others contained in the Strategic Infrastructure Plan are monitored by CMT.

### 8. BACKGROUND PAPERS

Research undertaken by Dorothy Cowie Internal Audit carried out by PWC and reported on in April 2015. <a href="http://committees.aberdeencity.gov.uk/documents/s46414/Procurement/20in%20Construction%20Report\_AC%20FINAL.pdf">http://committees.aberdeencity.gov.uk/documents/s46414/Procurement/20in%20Construction%20Report\_AC%20FINAL.pdf</a>

### 9. REPORT AUTHOR DETAILS

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Appendix 1

## Note 1. - Category Management Approach

The implementation of a "category management" approach for, high value/high risk spend areas across the Council (in partnership with Aberdeenshire Council) ensures that there is a much more consistent and corporate approach to how the council manages its supply chain in these areas.

In this model, the procurement and ongoing management of supplier performance and supplier relationships is structured and managed by category and not by department. The approach is much more strategic and longer term in nature than a traditional procurement approach and requires Council staff to work in cross functional teams (led by the Category Manager) and including key stakeholders from Service Departments, Legal, and Finance etc. This approach allows value lessons learned to be shared much more easily than traditional departmental ways of working and ensures that a broad range of views are taken into account in the development of plans for such key spend areas.

Supported by common systems and a corporate strategic sourcing methodology, this approach enables the Council's CP&S team to develop category experts who, in addition to having sound commercial skills, are able to develop an in depth market knowledge and understanding of market developments, industry cost drivers, supplier capabilities and performance levels.

This ensures that the Council maximises the opportunities it has to gain economies of scale from its entire spend in the category, to secure additional social value such as community benefits and to work much more collaboratively with suppliers and other public sector partners in those areas to deliver added value, improve performance and develop innovative ways of working

### Note 2 – Programme Management Office

The programme management approach and governance arrangements in ACC is designed to give assurance at all levels by providing appropriate visibility and information of programmes and projects, giving the relevant groups an understanding of linkages and interdependencies between projects and the potential impact of arising risks and issues. This enables the relevant groups to give strategic direction and prioritisation, and provides them with the necessary information to make key decisions. The programme management approach is built around consistent and standard documentation, tools and practices, as well as agreed roles and responsibilities.