BLURRING THE LINES WITH THE NEW PLYMOUTH DISTRICT COUNCIL PROFESSIONAL SERVICES COLLABORATIVE CONTRACT

David Langford, Infrastructure Manager New Plymouth District Council, New Plymouth. Luke Meys, Market Director - Water Environmental & Local Government, Opus International Consultants Ltd

Abstract

The NPDC Infrastructure Professional Services Collaborative Contract is a perfect illustration of the conference theme. It is a hybrid, blending the best of traditional, performance and alliance contracting models. Teams have been combined in new ways aligned with the NEC3 principal of working together in a spirit of mutual trust and cooperation.

This collaborative relationship began with an innovative approach to the consulting market and has continued to develop throughout the procurement and delivery phases. The presentation from both NPDC and Opus, the successful consultancy, will bring together their individual and collective perspectives on this best practice delivery model.

Key aspects of this collaborative approach include:

- A Target Price and Pain/Gail payment mechanism used to create shared ownership of objectives, including traditionally unilateral objectives such as profitability and cost control
- KPIs have been developed so that they can only be delivered by both parties contributing equally
- A strong focus on H&S that is designed to ensure a consistent and common culture and values
- Colocation integrates the teams and improves communication.
- Project briefs are jointly developed so they deliver clarity and early discussions around cost control and risk
- The NEC3 Early warning mechanism is used to collaboratively mitigate emerging risks
- The contract price schedule includes a Risk Premium that reduces with time to encourage innovation and de-risking the contract

Key learnings include:

- Early communication of the contract's intent and a willingness to listen helped build trust ahead of the tender process
- Don't underestimate the preparation and effort required for making and sustaining the culture change
- Openness and sharing of information, in particular the Consultant's tender strategy so that the client can help the Consultant deliver.

Key Words

Procurement
Smart Buyer
NEC3 Contract
Collaboration
Professional Services
Engineering
Infrastructure

Introduction

In June 2016 the New Plymouth District Council's (NPDC) roading engineering & professional services contract reached its full term. NPDC then entered into a new seven year contract for engineering and Infrastructure professional services called the Infrastructure Professional Services Collaborative Contract (IPSCC).

The IPSCC aimed to address a number of issues that had emerged from the previous contract. These issues materialised in a poor working relationship between NPDC and the incumbent consultant, Opus. These underlying issues included a:

- Perception by Opus staff of a master/servant relationship rather than one of equal partners
- Perception by NPDC staff of poor value for money
- Perception by NPDC staff of poor quality outputs
- Lack of supply chain leadership as the Opus acted as the management agent, supervising many of NPDC's engineering & maintenance contractors

It was considered that these underlying issues had developed over time due to the form and nature of the existing contract. This contract was based on the CCCS standard form of contract with a basis of payment that predominantly used lump sum payments that transferred most of the risk to the consultant.

The IPSCC was underpinned by a clear set of objectives:

- Bring some professional services back in-house to improve value for money
- Create a more direct relationship between NPDC and its contractor supply chain
- Create opportunities to up-skill NPDC staff

- Share risk between the contract parties
- Encourage innovation and continuous improvement
- Improve H&S outcomes

Designing the New IPSCC Contract

Designing the new professional services contract began with facilitated workshops. These were themed around the "Smart Buyer" principles established by the NZTA's Road Maintenance Taskforce and its review of Road Maintenance Regime 2012.

The taskforce identified that smart buyers typically have:

- An improved understanding of costs that better inform their decision making process
- An understand the impact of delivery models and supplier selection criteria can have on the value of contracts
- Robust forward work programmes that are communicated to the industry and supported by budgets that allows the work to be completed
- Knowledge of their infrastructure to determine treatments required based on physical evidence and supported by knowledge of the cost involved
- In-house expertise that aids the decision making process and allows acceptance of innovative solutions possibly with our without the involvement of consultants
- A clear understanding of risk and how it is allocated and managed
- A clear understanding that lowest price will not always delivered desirable outcomes
- An understanding that being prepared to pay more may result in enhanced whole of life value for money

From observations of the existing professional services contract and the way the NPDC roading team operated, it was evident that the team was behaving contrary to many of the smart buyer principals. For example, the supervision and management of contractors as well as asset management and forward works programming had been out-sourced to consultants. As a result the team's knowledge its roading network and how it performed had diminished greatly.

Furthermore, most physical works contracts were tendered on the basis of either, lowest price conforming or on weighted attributes where the price weighting was so high the tender evaluation became a semi-quasi lowest price conforming anyway. There was also a poor understanding of how delivery models could affect quality and value for money, with many physical works contracts frequently using lump sum basis of payment mechanisms.

In order to address the poor working relationship that had developed under the previous contract, the facilitated workshops helped the NPDC team to arrive at the following set of desired contract values:

- Transparency
- Open & Honest dealings
- Constructive challenge
- Flexibility to accept different approaches
- Joint ownership of KPIs and outcomes
- Professional and personal respect
- Mutual trust
- Credibility within the community
- Taking responsibility and ownership
- Continuous improvement
- A one-team approach
- Acknowledging success

In order to reinforce this culture, it was decided to incorporate a Joint Management Board (JMB) into the IPSCC. The JMB would comprise four members in total, two from each of NPDC's and the consultant's respective senior leadership teams. The objective was to provide governance and oversight to the operation of the contract. Most importantly the JMB was to continuously calibrate the behaviour of the collaborative team and ensure that the spirit and not just the letter of the IPSCC was applied to its management.

During the facilitated workshops the decision was also made to broaden the scope of the IPSCC beyond the previous roading only scope. It would include all infrastructure Projects, including three waters, solid waste and buildings projects. The objective was to achieve both the efficiencies of scope as well as scale and to reduce the ongoing procurement cost and effort for general professional and engineering services.

Bringing Services Back In-house

Taking note of the smart buyer principals, the services that were consulted-out as part of the new professional services contract were re-evaluated. The decision was made to bring back in-house all activities relating to:

- Supervision and management of contractors working on the roading network
- Asset management and works forward programming
- Access to the network (CAR/TMP approval, 50 Max permitting etc.)

The roading team was restructured into a refocused Transportation Team. This increased the internal staff budget by 4 Full Time Equivalents (FTE) to a total of 14. This additional cost was balanced with a reduced budget for consultancy fees. Overall changes to budgets resulted in a net saving of \$250k.

This change has created the opportunity for NPDC staff to rebuild their knowledge of our roading assets and how the network performs. With this improved knowledge, the team are able to take ownership of the long term asset management strategies and outcomes. It has also facilitated the building of closer working relationships with our contractors and supply chain partners. The NPDC team is able to act as an active supply chain leader rather than a passive client.

Target Price

The IPSCC uses the NEC3 standard form of contract with main option C (Target Price). This includes a pain/gain payment mechanism. Unlike pain/gain mechanisms used on many Alliance contracts, the NEC3 contract maintains

a link between the tendered schedule of rates and the calculation of pain/gain. This has the advantage of obtaining market rates from a competitive tender process without a perceived loss in value for money by maintaining price tension.

Individual projects are priced by calling off the tender schedule of rates to create a project Target Price. The consultant is then paid their actual costs based on tendered staff rates and actual hours worked. At the end of each financial year, the target prices for all completed projects are summed together and compared to the associated actual costs. If the total of the actual costs for these projects is lower than the total Target Price total then the difference is shared as gain. Conversely, if the actual costs exceed the Target Price then the additional costs are shared as pain.

This approach has had the effect of making the consultant's profitability, something that is traditionally a unilateral consultant concern, an objective that can now be shared by the NPDC team. If the consultant is profitably and completes the work below the Target Prices, then NPDC benefits from a share of gain.

The intention of this mechanism was to drive the combined NPDC/Consultant team to focus on two critical issues:

- Actively forecasting and managing the cost of undertaking a project rather than managing the price
- Ensuring a right first time, every time approach that minimises re-work and abortive work due to poor quality

Key to successfully fulfilling these factors is the effective scoping and communication of each project brief. Good quality project briefs that clearly articulate the expected outcomes reduce the likelihood of the consultant misinterpreting the client's expectations. They also allow for better estimation of the work required to deliver so that up-front discussions about methodology and efficiency can be held with the project manager. In order to facilitate this, the consultant was provided space to collocate in the NPDC office alongside the NPDC Infrastructure Team so that projects could be scoped and briefed jointly.

Risk Premium

During the design and scoping of the IPSCC it became evident that the pricing schedule would need to cater for projects that varied greatly both in terms of their scope and scale. It was also recognised that with such a notable change in NPDC's procurement practices of the past, the IPSCC could be perceived as being a risky venture for potential tenderers.

To address these concerns the concept of a "risk premium" was developed. The risk premium is an annual lump sum item included in the contract pricing schedule. Its purpose was to openly encourage tenderers to price in the cost of their perceived risk associated with the contract against a single item, rather than disbursing it throughout the rest of the activity schedule.

Once the IPSCC was awarded, the successful tenderer would be expected to deliver a risk reduction programme to the Joint Management Board (JMB) within the first 6 months of the contract. This risk reduction programme was to list the risks that were priced into the Risk Premium and identify mitigation measures for the JMB to consider implementing.

The IPSCC included a KPI for the consultant to offer an annual discount of 25% to the risk premium at the end of each financial year of the contract. The intention being that collaborative behaviour to actively de-risk the contract would be rewarded with a reduction in the contract's price.

Approach to Market

Conscious that smart buyers don't award contracts predominantly on price, the IPSCC was tendered using the Price Quality assessment method. Quality attributes were weighted at 80% with the remaining 20% allocated to price.

Prior to publishing the tender documents a pretender presentation was held. The intention was to socialise the new contract with potential service providers and provide clarity regarding the contracts intent. During this presentation, the key features of the contract were explained as well as the change in approach from the NPDC team. This was then followed by an open floor questions and answers session. During which, the potential suppliers provided feedback on their initial observations of the contract, including areas for improvement and their perceived levels of risk.

Following the pre-tender presentation, the feedback received was considered and the tender documents adjusted to incorporate some of the proposals. Letters were sent to all of the pre-tender presentation attendees thanking them for their input and summarising the feedback received and the changes it had prompted in the documents before they were published. This was a deliberate ploy to clearly signal that NPDC was a client that listened to its supply chain partners and to build trust with potential tenderers.

Thoughts from the Successful Consultant (Opus Ltd)

During the tendering period NPDC wanted to have a weighting on the price elements. This is somewhat difficult to do if the scopes of the future projects are not well known. produced a schedule which had elements that were relatively straight forward to price but had others that did not have defined scopes. The schedule also had a Risk Premium which also needed to be priced to account for the level of uncertainty and risk. As a bidder, we had initial concerns that the risks of the new model might put Opus in a difficult position. We had a great deal of internal debate before determining how to price our Risk Premium figure as it could have be argued logically to price it much higher or lower.

In the end, it came down to trust that the implementation would be open and collaborative so that the basis for the rates and inputs were clear and the intent applied fairly. All assumptions, including the logic used for the Risk Premium, have been openly discussed with the NPDC team and used to inform project briefs and Target Prices.

One of the really positive elements is that it has become clear that NPDC is invested in the consultant's success. This in turn motivates us as the consultant to going the extra mile to ensure that NPDC is also successful.

Often portfolios of projects have similar elements to them. Both parties have formally set out to continually capture learnings, both good bits and the bits that didn't go as well as we would like. In the preparation of the next project scoping, costing and timing we are taking these learnings and applying them.

Already we are seeing that the project managers from NPDC and from Opus are approaching the next generation of projects in improved ways due to the encouragement that they are receiving from the JMB and their managers. This is actually generating a sense of freshness and enjoyment. Certainly that is starting to be a feeling that is growing within the team.

Imagine a situation where either NPDC or Opus staff at more junior levels are being encouraged to share their thoughts as to how their inputs into a project could be done differently and where value can be added. When done well they feel they have a voice that is being listened to. This is often a management discussion but very few times is it seen to be actually implemented. The vision for this contract is turning these aspirations into tangible improvements

Imagine the difference when a project is not going well. Traditionally there would be a sense of trying to allocate blame and cost. The IPSCC simply captures the additional cost and the learning collaboratively. If the final project subsequently ends up more than the original Target Price, then this is acknowledged and we try to understand how we can avoid this next time. Ownership of the issues are carried by both NPDC and the Opus staff. This is again making a huge difference to creating a fresh collaborative approach compared to the previous contract.

Early in 2017 the first review of the IPSCC performance was undertaken. Although only six months into the relationship, the results of the review were very positive. The good will and collaborative nature of the relationships at all levels was found to be very strong. Considering the starting point of the unsatisfactory nature of the previous contract, the change was found to be startling and impressive. So much so that it raised the question at the February JMB meeting, what are the reasons for such a significant change over a relatively short period?

Like many similar questions the answer is both simple and complex.

The simple answer is, firstly, that the IPSCC encourages fair minded behaviours and win-win outcomes. The second part is that leadership has been required from both senior NPDC and Opus staff to ensure that the vision behind the intended approach permeates through to the whole team. The spirit of the contract is probably more important than its provisions. The NEC3 contract model supports and enables this collaborative approach rather than the contract itself being the silver bullet.

The complex answer is multi-layered, nuanced and detailed. This paper will describe only a few aspects of this, as it has taken many hours of planning, discussion, learning and implementation which cannot easily be captured in a short paper.

It is for these type of wider reasons that it became clear early on that the JMB was going to need some real decision making powers delegated from both the Council and from Opus. The JMB also needed some real management grunt to get the best out of these new arrangements and not simply be a token governance arrangement. It is therefore a warning to other Councils considering this approach that for these types of collaborative contracts to work, there needs to be firstly internal vision holders, and secondly these people be given the appropriate decision making empowerment.

Results

At the time of writing this paper, the IPSCC was 8 months into the first year of its term. Despite this relatively short timeframe, there are already a number of definitive and measureable results.

By bringing some aspects of professional services back in-house a \$250k net budget saving has been achieved. By broadening the scope of the contract to include all infrastructure professional services, rather than just roading, procurement efficiencies have been realised. Having ready access to a professional service provider, NPDC's normal procurement processes for preparing requests for quotes, evaluating responses and awarding small professional services contracts has been

significantly streamlined. It is estimated that a cost saving of \$390k has been achieved as well as circa 44 weeks of staff time saved.

During the joint preparation of a project brief for a storm water modelling project the NPDC and Opus project managers identified an opportunity to second the NPDC Asset Performance Analyst into the project team. This has allowed the Opus project team to provide the Asset Performance Analyst with on-the-job-training on how to build and interpret storm water, water and waste water models. Not only does this build NPDC's capabilities to self-deliver this type of work in the future, it also had the effect of lowering the total cost of delivering this particular project, resulting in a larger share of gain for both NPDC and Opus.

Learnings from the Infrastructure Professional Services Collaborative Contract are now being incorporated into other contracts that NPDC tenders. Currently NPDC runs a programme of water and waste water pipe renewals. Each individual pipe renewal is treated as a standalone projects and the physical works tendered under a separate contract. From 1 July 2017, all of these projects will be delivered through a single, 3 year term contract. It is estimated that over the 3 years, this approach will result in a further \$150k of savings due to procurement efficiencies as well as saving circa 7 weeks of staff time. Finally, by having a pre-procured contractor input on buildability and value engineering issues through an Early Contractor Involvement (ECI) process can be incorporated into the design processes and result in additional cost savings or enhancements in quality or value for money.

During the tender evaluation process for the NPDC 2016 to 2018 road resealing contract, the NPDC/Opus tender evaluation team noticed that all of the tenderers were proposing working their crews up to 70 hours per week, on top of them driving up to 5 hours from their home regions each week. With the interactions between people and the heavy road sealing equipment there was a concern that these long working hours would result in fatigue and create the conditions for serious harm incidents occurring. This issue was only recognised because of two factors:

- Bringing services back in house so that NPDC staff were more involved in the management of its contractors and supply chain partners, including during tender evaluation
- 2. NPDC's staff behaviour shifting to that of an active supply chain leader rather than a passive client.

The tender evaluation team requested all the tenderers to provide additional information on how they would address the issue of fatigue. Unfortunately, all of the responses were focused only on managing the effects of fatigue rather than on how it could be avoided in the first place. As a smart buyer, the NPDC team recognised that the root cause of this issue was its own competitive tendering processes. Competitive tendering had led to a drive for productivity which, in a price dominated evaluation process, had created unsafe conditions. Once a preferred tenderer was appointed, negotiations to cap the length of the working week to an average of 50hrs and a maximum of 60hrs began. This resulted in a variation to adjust the tenderers prices and compensate them for the lost productivity.

As a barometer of how the NPDC and Opus working relationship has transformed, within the first six months of the IPSCC a total of three joint training sessions have been held. These have

been valuable learning opportunities for the combined team to discover the new contract and become familiar with the NEC3 form of contract. They have also helped develop the required behaviours to make collaborative business relationships a success. By comparison, throughout the seven year term of the old professional services contract, not one joint training session was held.

Conclusion

By applying the smart buyer principles to the design of the IPSCC the NPDC has made a step change from being a passive client to becoming an active supply chain leader. The IPSCC has created the conditions for a collaborative business relationship between two equal partners to develop. This relationship is already providing mutual benefits, including efficiency gains, improved value for money, enhanced quality outputs as well as a transformed and positive working relationship.

This change has not been without its challenges. It has, and will continue to require sustained leadership effort and the courage to invite constructive challenge from partners.

We welcome any interest from other Councils that wish to know more about how this contract is set up and working and how they can apply its principals to their own activities.

Author Biographies

David Langford is the Infrastructure Manager and part of the New Plymouth District Council senior leadership team and is responsible for the district's municipal Infrastructure. David has transitioned into local government after 12 years working for Tier 1 contractors mainly in the roading sector. With his background he brings a wealth of knowledge regarding procurement and contract management best practice from both here in New Zealand and the UK.

As the Infrastructure Manager, David is responsible for providing strategic direction and leadership to the District Council's teams for Transportation, water, wastewater & storm water, solid waste & Recycling, infrastructure projects and asset management. Development of the NPDC Infrastructure Professional Services Collaborative Contract is part of David's aspiration to move NPDC from being just a Client to a supply chain leader.

Luke Meys is the National Water, Environmental and Local Government Leader for Opus International Consultants. He has been advising Local Authority clients throughout New Zealand on procurement options, contractual risk issues and as Engineer to Contract for many infrastructure projects over the last 25 years. His role includes strategic planning, commercial management, project setup and resourcing.

Luke was the bid manager and is on the joint Management Board of the New Plymouth professional services collaborative contract and was on the Alliance Leadership Team for the Clearharbour Alliance, a large sewer separation scheme in central Auckland. Luke was also bid manager and set up manager for the first and only Local Authority 10 year performance based roading contract for Western Bay of Plenty District Council.

Luke was a Board member of IPWEA NZ for nine years and was made a Life Member in 2016. Together with other Board members he has represented IPWEA NZ on national water issues at several government forums.