



With New Zealand's largest secondary school, a church, a shopping centre and residential homes, a seemingly simple road-widening exercise to accommodate the addition of an urban cycle way revealed hidden complexities.

East Coast Road

Client: North Shore City Council (NSCC)
Partial Funder: New Zealand Transport Agency (NZTA)
Design Consultants: GHD
Project Facilitators: Resolve Group
Publication Date: March 2010
Region: North Shore, Auckland
Sector: Transport Infrastructure Services – Major corridors
Total Project Value: \$12m Total
Current Stage: Tender
Procurement Method: Early Contractor Involvement (ECI) Modified
Form of Contract: NZ 3910:2003 adapted to accommodate interactive tendering process

A Road Less Travelled - Although only at tendering stage, this Pathfinder Project bypasses the traditional and takes a less travelled route to ensure client objectives are met.

Background

East Coast Road is one of North Shore city's major arterial roads, carrying more than 23,500 vehicles per day. The project will upgrade and widen a 1km stretch of road from Hastings Road to Rosedale Road to improve capacity and safety. Cycle lanes will be added in each direction, along with a median strip and intersection upgrades. Significant relocation of services, stormwater reticulation upgrades, and new retaining walls, new street lighting and footpaths are also part of the project. The project runs immediately adjacent to a diverse group of active Stakeholders.

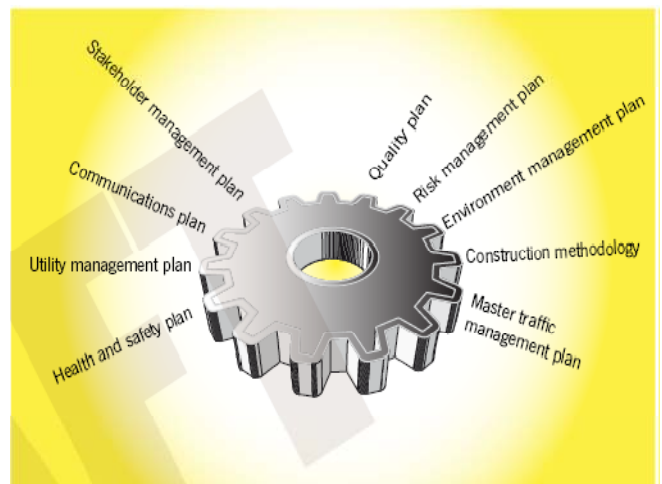
At the time of writing the article the project was at tendering stage. What makes this a project worthy of informing the industry is the decision made by the client to depart from the familiar and traditional path it was treading down and take a road less travelled. This decision was made so that the client objectives had a greater certainty of being met.

Alternative Procurement Process Helps to Resolve Gaps and Hidden Complexities

What seemed to be a simple road widening exercise to begin with revealed hidden complexities and ramifications associated with construction on a major roading corridor. This includes NZ's largest secondary school, a church, a shopping centre and residential homes.

Experienced client leads the process

On top of managing the full spectrum of stakeholder engagement, the project, which started its design phase 3-4 years ago, went through several project managers within North Shore City Council. It eventually landed on Benji Potvin's desk with an 'all go' tag. Thanks to Potvin's previous experience, both as a private client and contractor he delved below the surface and found many layers of complexity and unanswered questions.



Whole of Project Delivery Plan

Risk Management Workshop

Taking his recent learnings on the Northern Busway Stations Project (Pathfinder project 6) around collaboration and innovative process Potvin organised a risk management workshop with all internal Council stakeholders. This was the first time in the project that they met together in the same room.

With their combined knowledge and expertise they identified 42 key items of risk, particularly around areas that Council's past performance signalled a need for improvement, such as communication, infrastructure services coordination, traffic management and political engagement.

To assess the risks they used the Monte Carlo method which determined the level of risk for each identified scenario and put a dollar figure to that risk. These identified items of risk were particularly present during the construction phase and highlighted the need for the contractor to have a high level of understanding of the construction consequences and thereby involvement in the risk mitigation strategies.

The openness of communication experienced during the Northern Busway Stations Project convinced Potvin that a similar proposition was required to make this project a success.

This led to the decision for the need to depart from the traditional open tender process and adopt a modified Early Contractor Involvement (ECI) process whilst still maintaining the competitive tender process still part of the Council's policy.

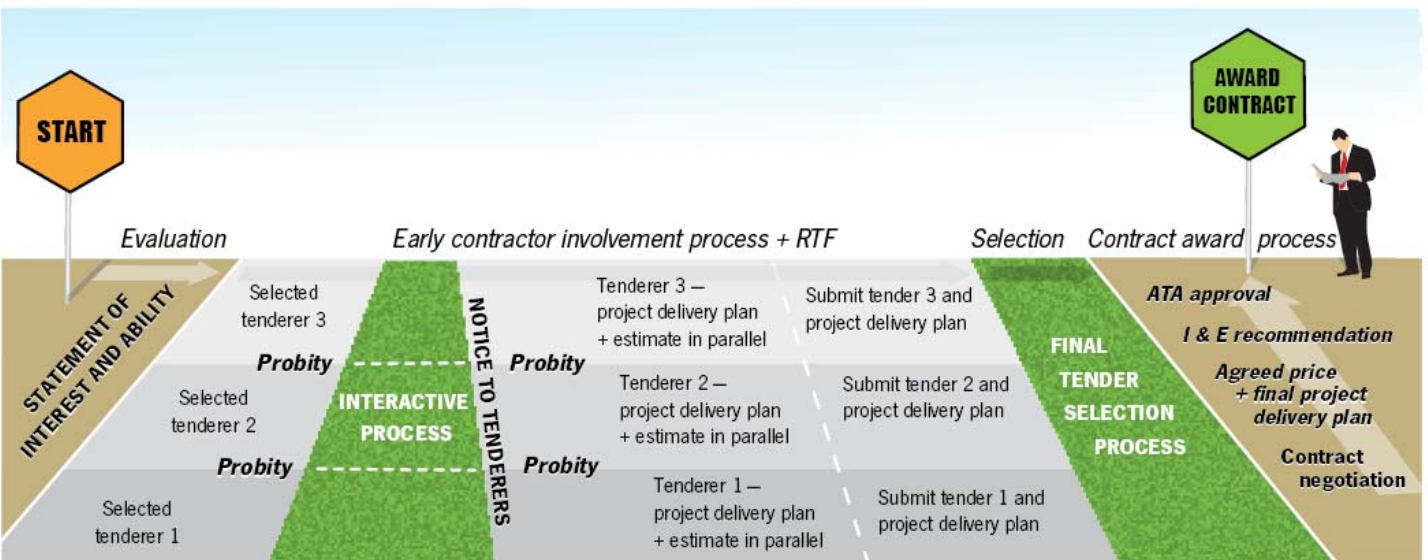
All it required was Council's support in adopting an untried procurement methodology midway through the project.

Way forward using modified process

A memorandum outlining a way forward was prepared for Council. Coincidentally, two days later at the launch of New Zealand Transport Authority's (NZTA) new Procurement Manual, Potvin talked through his ideas with Bernie Cuttance, NZTA's Principal Advisor on Procurement Strategy. Cuttance supported NSCC proposal and its adherence to the new procurement environment the NZTA is hoping to guide the industry towards.

The NZTA recommended strategies to deliver consistency and highlighted areas that required careful planning to maintain a fair tender process.

The modified Early Contractor Involvement (ECI) process used



As a significant funder towards this project, their active support helped pave the way for Council to accept this hybrid procurement process.

Typically, Early Contractor Involvement (ECI) is undertaken well before the detailed design stage and involves only one contractor. However, for this project the modified ECI methodology involved three competitive tenderers collaborating with the client, individually reviewing the 'specimen design' and producing each a comprehensive project delivery plan (PDP).

What makes it different from a traditional tender?

Interactive tenderer selection process

As part of the tendering requirements each tenderer was required to participate in an interactive tender, which involves meeting with the client and key players and stakeholders, and ongoing communication during the duration of the tender period.

Project Delivery Plan

As part of the tender package, each tenderer produces a Project Delivery Plan (PDP) demonstrating how they will achieve all the outcomes sought by the client and will include their methodology, timeframes, alternative solutions and pricing.

Whilst items within the PDP are generally requested by NSCC, the difference is in its cohesive approach, which demands a strategy that encompasses the entire programme, not just individual aspects in isolation.

All proposals are alternatives

For this project tenderers are invited to suggest alternatives to the complying specimen design to address the risks and optimise the construction process. Here, the particular focus for innovation was around minimising disruption to all road users and others affected by the works. The designers on this project are supportive of this approach. Whilst they see the design as complete, they also recognise that improvements can be made, particularly around the construction methodology. "We are willing to have changes occur, if it is best for the project – if the project is a success than everyone involved will benefit from that success" Tom Cripps, GHD Designers.

Extended duration of tender

Another key difference is the duration of the tender process, which is set at nine rather than three-weeks. During this extended time the tenderers have several opportunities to meet with the client and to organise other meetings with consultants and key stakeholders. This enables them to seek clarification on the documentation and gain insight into stakeholders concerns and needs.

At these meetings each tenderer is responsible to set the agenda and send out questions prior to the meeting to enable consultants to respond. The meetings are minuted and sent out to the individual tenderers. When items raised were of benefit to all the tenderers, the information was disseminated to the others unless deemed commercial and in confidence as determined by NZTA rules of probity.

Client briefs tenderers on key objectives

At the start of the tender period the client meets with each tenderer individually for the specific purpose of outlining the tender process, communication protocols, project issues and their key objectives. At each subsequent interactive meeting, the objectives are on display to act as reminders to all those attending.

Open communication

To assist the collaborative process, the Council is endeavouring to be as open as possible, such as by providing their internal risk register to the tenderers.

Part of the open communication is also informing other divisions within Council and key stakeholders. By involving them in the tender process, more people are informed and can contribute to the project which results in 'less surprises' at its commencement and potential subsequent delays. *"This process is a giant step forward in allowing people to talk to each other"* Tom Cripps, GHD Designers.

To promote open communication the Council adopted the web based ACONEX document control system which helped to share information between the different key players.

Cost

Each of the three shortlisted tenderers were required to produce a Lump Sum Tender Price as part of their tender package. Creating a more interactive and extended tender period supported the contractor in gaining a deeper understanding of the project, thus enabling a greater cost certainty of their tender price. A base estimate was provided as part of the tender package, as typical under the NZTA tender procedure.

Time

A significant deviation from the typical tender practice was to not set a prescribed time to deliver the project. Instead each tenderer is asked to propose what they believe is an optimum period for them to meet the clients objectives, supported by sound methodology. For example, one of the tenderers could suggest less time but cost more, but show how the shortened time more than compensates for the extra outlay.

Positive anticipated benefits

Removing a prescriptive approach and encouraging contractor initiative gains greater buy-in to the design and construction methodology. Other anticipated benefits are:

- Innovation and improvements proposed by each tenderer
- Better understanding of risk, leading to better allocation of risk and implementation of mitigation.
- Extended tender time gains greater certainty due to more time to understand and forward plan. Less "grey areas" in the tender returns.
- Tenderers are more knowledgeable of the project and therefore able to provide a better price with fewer tags, and the proposed tender price is therefore more accurate
- Set realistic timeframes for construction of the project
- Ability to build early relationships with key stakeholders and engage with community. Understand directly what their expectations are, concerns, and constraints that they need to take into account during construction.
- Minimise disruption to the road network through considered traffic management in collaboration with all key affected parties
- Functional continuity of utility services throughout the construction period
- Communication between the different divisions within Council and Councillors ensures greater awareness of project and its impact to the community – no surprise for Stakeholders,
- Clear methodology for successful tenderer at commencement of contract to enable optimisation of productivity, adequate resource allocation for the work and efficient sequencing and programming

Key principles for repetition

- A clear brief with client objectives outlined
- Clarity of client expectations in regards to contractor's performance
- Open communication between client, contractor and key players and stakeholders
- Clear assessment of the risk and set up ways to minimise the risk

Key Client Actions

A Well Informed Experienced Client Who:

- Led the change and initiated the innovative procurement methodology
- Acted fairly and transparently
- Followed established probity framework
- Developed comprehensive and cohesive Project Delivery Plan structure
- Organised internal risk management workshop
- Shared internal information with tenderers

Quality

The quality of construction was included within the key outcomes sought by the client. This included meeting expectations of the affected parties as well as meeting a certain level of standard in construction. To ensure that the quality met the expected standard set by the client all agreed alternatives initiated by the contractor will be peer reviewed by the designers.

Building relationships

Whilst still using the basis of the traditional NZ 3910 contract a different ethos has been incorporated - one around building relationships that start at the tender period. To help build these relationships tenderers are able to call meetings with consultants and gain clarification on issues or detailing. Plus they are able to meet with client and key stakeholders to ensure that they can address concerns. The contract supports a culture where people actively work together. *"When something goes wrong the culture has been set up so no one puts the shutters down, we all work together and find out how everyone can come through this in the best possible way"* Tom Cripps, GHD Designers.

To assist this process, a Project Steering Group has been formed from each team to deal with issues before they become potential variations. As the successful team enters the construction phase those key people are expected to continue to work together and deal with issues as they arise rather than apportion blame. One measure of the success of this project will be whether a problem solving mindset is evident when issues arise during the construction phase.

Treating tenderers fairly

Given the client's intention to collaborate with the tenderers individually it was important that they established prior to the tendering process a framework that resulted in fairness and transparency in their decision-making. Probity auditors were actively engaged to ensure that the clients were consistent with their communication. All correspondence was copied to the probity auditors. The auditors also attended the first meetings and the final tender interviews.

Acceptance of successful contractor

Following NZTA procedure, the successful tenderer will be evaluated in two stages. The first will be based on non-price attributes, such as their submitted PDP, and includes a presentation from each tenderer, plus an additional meeting to enable the client to ask any outstanding questions or concerns. Only after the tender panel has formally signed off this stage will the 'price' envelopes be opened.

Compensating unsuccessful tenderers who have good ideas

Set within the tender agreement is a clause that enables the client to purchase an idea from an unsuccessful tenderer and incorporate it into the construction methodology, if seen beneficial to the project.

Lessons Learned

As in all projects, there are always aspects which can be improved and which the team can take on board for future projects. Key lessons to take forward from this project have been identified as:

- **Stakeholder Engagement:** Council sought to find a better way to engage with community and recognised this alternative procurement process created more certainty within Council and Stakeholders.
- **Suitability:** This type of procurement methodology is not suitable for every project, but is beneficial to projects with a high degree of complexity and level of stakeholder engagement.
- **Earlier ECI:** Taking the lessons learned forward, the Council is aiming to introduce a similar approach to another project, but with the aim to involve the contractors earlier.
- **Clear Teamworking:** Clearly stating the need to work together as a team places positive pressure on everyone to be reasonable when things go wrong and work together for the benefit of all.
- **Clarity of Roles:** Ambiguities occurred between consultants as the new structure was not always clear around responsibility. However, when consultants became aware of an issue and notified the client, issues were quickly resolved.
- **Documentation:** A counter argument that was raised is that consultants should be able to provide same level of documentation as that which the tenderer proposes. Whilst true in theory, what is gained by this process is contractor buy-in rather than prescribing a set path.
- **Risk Management:** What is the ideal time for risk management workshops? It is important they are not too early nor too late in the design. The best time is just before preliminary design is finalised, as this gives people a chance to incorporate suggested changes into the design.
- **Clarity of Roles:** Too often clients select a perceived 'low risk' tender process by distancing themselves from the Contractors, limiting communication during the tender process. The traditional process avoids sensible negotiation with Contractors. The Council needs to be acknowledged for their willingness to be innovative and try a new approach.
- **Fairness and transparency** were key factors. As this was the first time in adopting this approach, a review of the process will be undertaken and lessons will be incorporated for future use. The challenge was to have 3 tenderers in a competitive process and work with them in a collaborative way to help each develop a proposal that best suited the client's outcomes, without losing the innovative ideas. The tender panel played an important role in maintaining fairness. The work involved to assess three tenderers provided challenges and significant additional input from the client.
- **ACONEX document control system**, whilst a great way to share information also has some teething problems as people learned to use it. It is important that size of documents be limited to avoid time consuming downloading of information.

On Reflection

- When setting up new structures it is important to have a clear understanding of all key players roles and responsibilities. For this to be successful all key players need to be involved in this process.
- With the extended timeframe and commitment given by each tenderer, the potential for reimbursement is an interesting question that is worthy of debate. Purchasers need to consider the total (nation resource) cost of their procurement processes. In particular they need to be mindful of the costs being imposed upon the supplier community.
- On completion of this stage it would be useful to review each of the tenderers views on the success of the process and whether it generated a better outcome.
- As clients gain maturity work towards an open book tender
- Feedback from the client would also be beneficial in whether they felt confident that they were able to run a fair process and whether 3 tenderers was appropriate.
- This alternative methodology could gain traction within councils as still provides competitive model with greater engagement by the contractors.

Attribute	Overall Attribute Weighting %
Relevant Experience	20 %
Track Record	25 %
Technical Skills	20 %
Management Skills	25% Personnel 10% Company Systems

Statement of Interest and Ability (SIA) Process Scoring Mechanism

Positive feedback so far

In early December, with only two weeks to go, the feedback from the three tenderers' was overwhelmingly positive. They appreciated the more collaborative, open process with the positive spin-off in programme and cost reductions and greater certainty and minimisation in risk. This has been generated by innovation and improvements proposed by the tenderers' which reduces the otherwise theoretical duration of the works, through introducing optimisation of productivity, construction sequencing, traffic and stakeholder management and appropriate resource allocation for the work.

For further information visit www.constructing.co.nz

Item:	Date:
SIA document available	Monday 07 th September 2009
SIA Site Visit	Thursday 10 th September 2009
SIA Submissions close	Monday 28 th September 2009 4PM
Short-listing Tenderers	Wednesday 7 th October 2009
Issue of Tender Documents	Thursday 15 th October 2009
Initial meeting with RFT Tenderers	Thursday 22 nd October 2009
Other meetings	TBA, as required
Outline Plan of Works lodged	Thursday 29 th October 2009
Tender close	Monday 14 th December 2009 at 4Pm
Tender Award	February 2010 (After February 2010 I&E meeting).

Programme

Conclusion

That a Council is willing to be innovative and adopt a new approach that looks to deliver value is a good sign that public organisations are prepared to change and move towards a new procurement environment that promotes best practice. The approach was supported by NZTA's proactive and efficient reviewing and processing of this innovative procurement alternative.

This hybrid methodology is potentially one of the stepping stones leading away from a culture that distances relationships between client, contractor and key stakeholders towards a culture of open communication, where everyone starts a project with their eyes wide open.

Let us hope that with the new Super City adoption just around the corner, we will continue to move towards this more cohesive approach. There has never been a better time for the Construction Industry to continue to lobby and show best practice through successful examples such as this one.

