



**Construction
Clients' Group**
CONSTRUCTING EXCELLENCE

New Zealand Construction Client Protocols

May 2015



Establishing an industry recognised protocol that advocates best value and fosters strong working relationships between client and supply chain.

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CCG Steering Group members

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References:

1. UK Construction Clients' Group
2. Local Government Victoria: Department of Planning and Community Development – Partnerships and Projects
3. Innovation in the Australian Construction Industry – Making Better Use of Resources: Manley and Blayse
4. UK Egan Demonstration Projects
5. NZTA Procurement Guidelines
6. Guide to Integrated Project Procurement – ACIF
7. National Construction Pipeline Report – October 2014
8. Government Sourcing Rules, Ministry of Building, Innovation and Employment.
9. Construction Clients' Group Pathfinder Projects

The CCG Mission

The Construction Clients' Group (CCG) is dedicated to learning and sharing knowledge about building better, faster, safer and achieving better value for money for your construction procurement. The CCG supports both private and public sector customers of construction as well as organisations throughout the delivery supply chain. We recognise that our members need to work collaboratively to deliver more predictable and successful project outcomes.

The CCG supports all clients, regardless of their core business activity, by promoting best practice that will provide better value for their construction procurement and ultimately an improved built asset that continues to deliver on its design benefits throughout the life of the asset. Of equal importance, alongside our best practice role, the CCG provides its members with a credible voice to key industry stakeholder groups and Government agencies.

Our Mission

The Construction Clients' Group aims to deliver improved industry performance resulting in a measurably better built environment. We are a unique bridge between industry, clients and government. We are governed by our members with the involvement of other customers and stakeholders.



Arras Tunnel Week 132 , Aerial image

Foreword

Property Council is passionate about New Zealand cities. We are working towards vibrant centres and commercial hubs that bring people together in cohesive communities with quality amenities such as healthcare, educational and civic amenities. The construction industry is key to achieving this, and we're proud to support Construction Clients' Group Protocols which aligns with our vision. We have the ability to unlock New Zealand's growth potential and along the way, we must encourage the development of clients with effective leadership skills that drive good procurement principles.

One of these principles is to focus on quality, both in design and construction, which is highlighted within the Protocols. We encourage our property clients and property / construction industry peers to embrace this document, which will contribute to achieving better value in our market. On behalf of the New Zealand Property Council, it gives me great pleasure to endorse the CCG Construction Client Protocols.



Connal Townsend, Chief Executive, Property Council

Executive Summary

This document establishes a national set of protocols that advocates **'best value'** and fosters strong leadership from clients and strong working relationships between clients and the supply chain in the construction industry. These protocols are a dynamic set of guidelines, we expect them to encourage dialogue and generate debate so the concept of effective leadership in the construction and property industry may advance and the protocols continue to develop and reflect latest best practice thinking

The New Zealand construction industry is small in comparison to other western nations and suffers the tyranny of a 'boom-bust' cycle that affects productivity. Accordingly, there is a symbiotic relationship between suppliers and clients so that each can achieve their business drivers as and achieving the mutual goal of building a better built environment for present and future generations. Productivity gains can only be achieved through this cooperation and understanding of what it means to be a 'client of choice'.

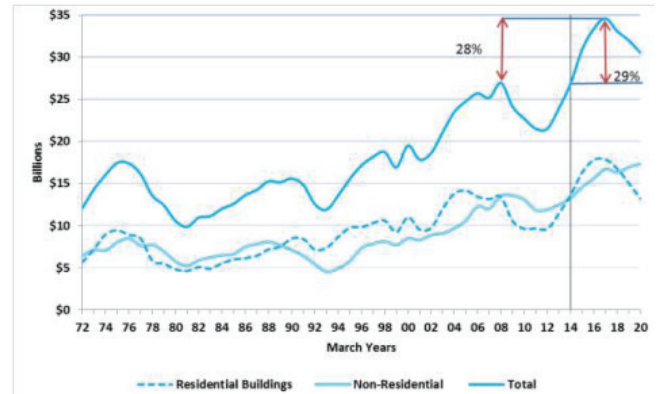
Strong and effective client leadership is the foundation for achieving 'best value'. Client leadership is vital to the success of any construction project, it is displayed by a clear vision, effective decision making, the right project structure and a commitment to best practice principles.

'Best value' is the outcome achieved when strong client leadership is combined with mobilising successful procurement strategies, a commitment to people and a commitment to quality. This document provides a simple yet effective framework for achieving better value by the fundamental principle of client leadership, focussing on a successful procurement policy, and achieving 'best value'.

The importance of **'best value'** cannot be overstated. Ensuring long term gains, increased productivity and cost reduction, is paramount to the sustainability of any business. The New Zealand Property and Construction industries need clients to take a more active role in projects they sponsor, to take ownership, to provide better leadership and ultimately to drive best practice. These actions will go a long way to delivering long term gains, increased productivity and cost reduction in our industry and towards achieving 'best value' outcomes.

Introduction

The New Zealand Construction Sector accounts for four percent of New Zealand's Gross Domestic Product (GDP). With such a contribution, it is imperative that the construction sector is efficient and does not become a drag on the economy by being unproductive. The sector has been defined as one that follows a boom-bust cycle, which is linked to economic growth and recession (see graph below). Unfortunately, the influences of the boom-bust phenomenon have had an impact on industry wide performance.



Graph showing 'Value of NZ Construction – Historic and forecast', source: Pacifecon/ BRANZ

The information age has seen the fracturing of the engineering profession like any other profession. With so much more information and research being made available, engineering practitioners have become more specialised instead of having to settle at being mediocre at all aspects. Unfortunately, this can mean that not all the disciplines involved in the design of a project are coordinated effectively to ensure that the end result actually performs as the client expects. Approaches addressing this dis-functionality like 'integrated design' are being utilised more and more in New Zealand. Also, tools like Building Information Modelling are helping to ensure information, relating to the eventual asset, is completely integrated from project start through practical completion and asset handover to the client's maintainers and operational staff.

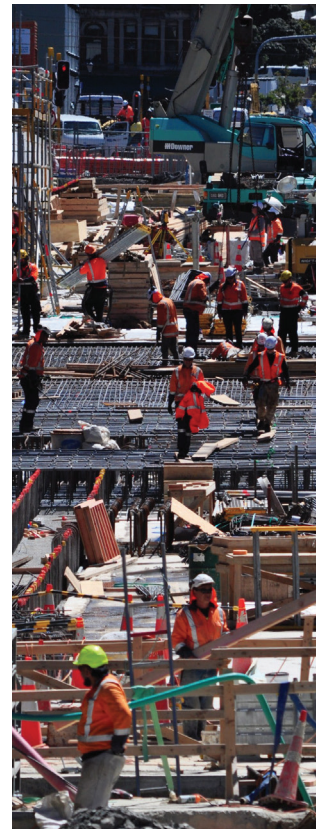
Outdated mentalities like 'best for project' have led the industry to being fixated on only project centric outcomes like time, cost and scope. When budgets come under pressure, this often results in having to 'value engineer' out aspects of the design that are seen to be too expensive upfront but actually have through-life benefits for the client by reducing the operational costs. Client satisfaction and project success not only comes from taking over an end product but receiving one that continues to deliver on its design benefits during its operational life. Given the construction industry is creating intergenerational assets, should there not be a change in mentality to 'best value' decision making?

A common and recurring challenge in the construction and property industry is achieving, or even understanding, 'best value'. Best value for one client or project will most likely differ from that for another, and so clients often find it difficult to establish a process that helps to ensure that they achieve best value for themselves. There is no industry-wide formula to follow. Additionally, for many businesses the property function is not core to the business despite being one of its more significant costs. As a result, lack of emphasis by business leaders on achieving 'best value', often leads to a 'lowest tender', 'lowest cost', 'cheapest solution' default approach. While this may achieve short term savings, the long term result is invariably of lesser value. It is not 'best value'.

Informed business leadership is crucial to implement a successful procurement process. As a client, this document provides a simple yet effective framework to obtain better value from construction procurement and to engage your supply chain partners more effectively in your project decision making process. Effective client leadership is fundamental in achieving this.

Rather than recreating something that has successfully been implemented in other parts of the world already, this document has been developed using the six chapters of the UK Clients' Commitments Best Practice Guide as a basis. The UK guide was adapted with reference to other international good practice guides and information to ensure it is more relevant to the New Zealand construction and property environment.

The protocols are a dynamic set of guidelines which can be adopted in full or adapted to suit the priorities of your business. Whilst reference is continually made to the construction industry, the protocols are generic principles that are intended to be applied to all facets of the construction, property, infrastructure and asset management industry. The NZ CCG welcomes ongoing input from the Government and industry to further develop these guidelines and to keep them relevant to industry practice as it evolves over time.



Arras Tunnel Week 79

Definitions

Client Protocols

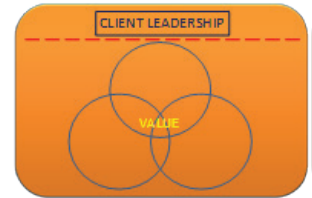
A set of conventions, principles and expectations that are considered good industry practice with regard to achieving best value outcomes.

Client Protocols, unlike defined processes and procedures, provide the opportunity for further evolution to address specific circumstances and requirements of projects and programmes of work. They provide a framework for solutions rather than the solution itself.

Supply Chain

The phrase is now more widely used in the New Zealand construction industry. For the purposes of this document, supply chain describes those individuals, companies or organisations who furnish a client with the goods and/or services required throughout the life of a project to achieve the desired outcomes of the project. If the client represents the demand side, the supply side typically includes a supply chain consisting of a managing contractor, architects and other consultants, specialists, design and other subcontractors, suppliers and manufacturers.

The term's applicability to architects and consultants means they may find themselves operating on the supply (contractors) side rather than, more traditionally, on the demand (clients) side.



Client Leadership

Client leadership is vital to the success of any project and enables the construction industry to perform at its best.

All clients anticipate a 'Best Value' project outcome – even if they don't consciously understand what that means.

A 'best value' project is one which provides real benefits. It is the outcome of good leadership, mobilising successful procurement strategies, a commitment to people and a commitment to quality.

What are the 'best value' benefits of good client leadership?

- Whole of life value from the construction project;
- Robust investment decisions;
- Control of risks;
- Predictability of cost, time and quality;
- Health, safety and environmental outcomes for people; and
- Sustainability objectives.

The diagram below shows how Client Leadership overarches the other components of a 'best value' project:



For a client to achieve a 'best value' project, a commitment to the provision of leadership to the project is required, especially in establishing the governance structure and culture within which the project team performs. A problem often encountered is that not all clients will have (or even wish to have) this capability to lead and to separate 'governance' and decision making processes from project management and delivery. The ability to influence a project's outcome is greatest at the inception and early stages. The leadership position must be understood and declared early. This avoids reliance on others in the supply chain, to which surrogate leadership responsibility will otherwise devolve. Leadership thus devolved is less effectively executed by delegation or accident.

How do I lead? What does this include for the project?

- The development of a clearly expressed and researched project vision with a sound business case that identifies the business benefits of the project and includes market engagement with the supply chain partners.
- Ensuring that the vision remains true and that attention is paid to directing activity towards its delivery.
- The identification and communication of a clear organisational structure with definition of responsibilities, in particular the separation of project management from project governance, to ensure clear accountability.
- A clear and effective client decision making process with a rapid turn-around capability.
- The provision of adequate resources that ensures client and supply chain understanding of risks, continuity and leadership before and throughout the project.
- The preparation of a detailed brief with sufficient technical detail, clear financial objectives, programme, and definition of success that supply chain partners can easily price thereby reducing the need to price in risk.
- A clear process for dealing with changes to the brief.
- A commitment to championing best practice working in design, construction, team working, innovation, health & safety, and sustainability.
- An insistence on the use of appropriately qualified workforce from supply chain partners and the use of clear, collaborative, integrated and appropriate procurement strategies.
- Be able to assess risks with all parties and demonstrably measure / monitor their management and reduction.
- Ensuring conformance and compliance with legislation and regulators' requirements.
- Insist that projects are commissioned and built for zero defects at Practical Completion.
- Insist on the adoption of collaborative behaviours by all parties (including clients), while avoiding conflicts of interest.
- Mechanisms to allow, and reward innovation and value add.
- Be generous in recognising success across the project team.

“Clients need to understand the contribution they can make”

What must I know?

To lead you must know enough to challenge your supply chain partners to demonstrate:

- A capability to collaborate with transparency and trust.
- A commitment to innovate and continuously improve performance.
- A commitment to integrated working throughout the supply chain.
- An ability to deliver to quality, time and budget against scope.
- An ability to manage risk and disputes.
- A solutions-focused approach to dealing with issues.
- A clear vision for the project.
- Effective decision making process.
- Effective communication process.

To play this full and vital role you will need to develop an ability to lead the project, and time must be spent understanding the best approach to procurement, design, and construction services. Clearly not all clients have the technical skills to achieve this in-house. External professional advice may need to be sought to demonstrate leadership ability in this area or to develop capability within your organisation.

Procurement and Integration

A successful procurement policy requires ethical sourcing, enables better value to be achieved from the scope development, design and construction phases and encourages the early involvement of the supply chain to form an integrated project team. The success of the procurement and integration processes depends on the extent to which a project team collaborates to achieve 'best value' i.e. the best possible solution in terms of design, buildability, construction method, health and safety performance and sustainable development.

A 'best value' project is one which provides real benefits. It is the outcome of good leadership, mobilising successful procurement strategies, a commitment to people and a commitment to quality.

What does a 'best value' Procurement & Integration Model include?

- Transparency in procurement decision making;
- Early contractor involvement;
- Integrated and collaborative working arrangements (CWA);
- Clear lines of responsibility and accountability;
- Non-adversarial ways of working;
- Selection of the supply chain on best value not lowest cost;
- Quality based assessment of all links in the supply chain;
- Equitable payment policies;
- Use of risk management principles; and
- Fair employment practices.

What are the benefits for the client?

Two sets of benefits are apparent. Benefits gained through efficiency and those gained through real or measurable improvements. Real or measurable benefits can be recorded through the use of a Key Performance Indicator model capturing data such as waste reduction, building operating efficiency, construction time and cost savings and so on. A condensed summary of benefits include:

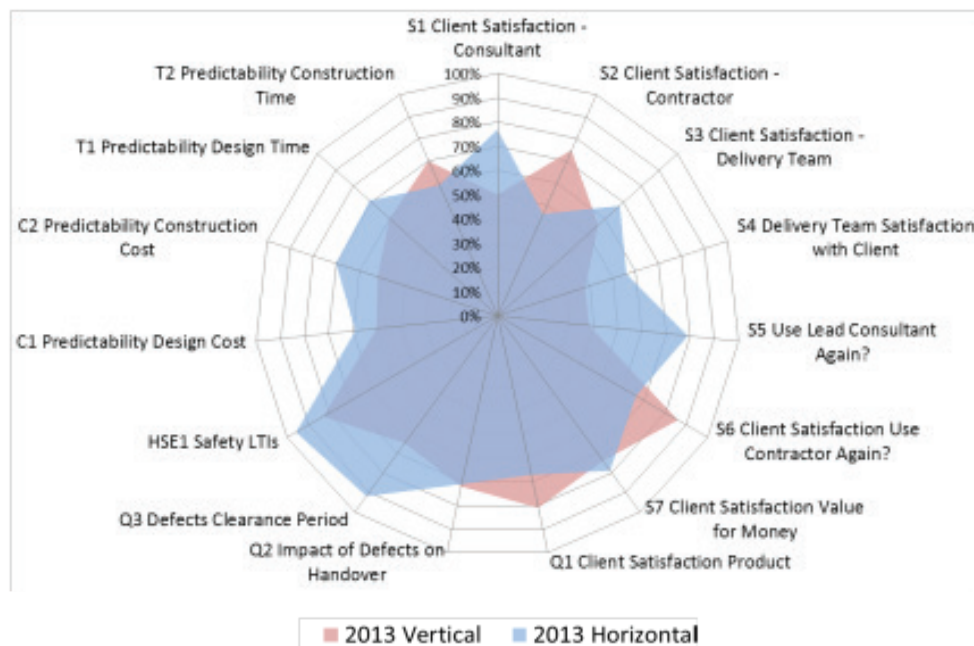
- Better whole of life value from the construction project;
- More certainty in investment decisions;
- Better control of risks;
- Enhanced predictability of cost, time and quality;
- Improved Health & Safety outcomes;
- Fewer disputes / claims and their associated costs and delays;

Yes, but how do I do it?

At the start of any project your procurement practices should be in place to engage the supply chain early in your decision making process. This will enhance your ability to achieve better value from the construction procurement and to get best performance from your supply chain partners. The following are actions you should take.

- Set the example by your own behaviours and performance;
- Understand the benefits of engaging your supply chain early in the decision making process;
- Select your supply chain partners on Best Value rather than lowest cost using evaluation criteria which enable transparent decision making;
- Assess and validate quality submissions as part of the supplier selection process;
- Use industry standard forms of contract with minimal special conditions that reduce the need for additional legal services.
- Use collaborative working principles on fair payment and risk;
- Maintain the cash flow of the supply chain;
- Take advice from specialist advisors;
- Create a business case and detailed brief for your construction project;
- Clearly identify and financially quantify risk and allocate in line with ownership and the ability to manage that risk;
- Develop informal and non-confrontational approaches to dispute resolution;
- Be aware of employment practices within the supply chain to avoid abuses;
- Establish business to business relationships so as to fully understand each other's high level business drivers so supply chain partners may be best aligned wherever practicable; and
- Establish performance indicators for measuring success:
 - Client Satisfaction
 - Defects
 - Cost Predictability
 - Time Predictability
 - Safety
 - Profitability

(see NZ National Construction Key Performance Indicators graph below showing industry results for vertical and horizontal construction projects in 2013)



Both the Client and all the Supply Chain should be involved in the measurement process. This process should include a feedback mechanism to ensure improvements are realised and learnings captured. The process should be extended to the maintenance cycles to include a Whole of Life Cost approach.

But how can I be certain of the Supply Chain?

Challenge them to demonstrate the following during the evaluation process e.g. non-priced attributes:

- Competence and leadership within their own disciplines;
- Capability and capacity to undertake your project;
- Successful past performance;
- Commitment to integration and Collaborative Working Arrangements;
- Ability to innovate;
- Communication methods and strategies;
- Change control methods and strategies;
- Understanding of sustainability issues;
- Openness and honesty;
- Transparency and trust;
- Ability to meet contractual payment practices;
- Ability to manage risk;
- Attitudes to managing-out disputes; and
- Guidance/policies/methodologies for objective tendering / evaluation.

Commitment to People

Valuing people and using supply chain partners who do, leads to a more productive and engaged workforce. It facilitates recruitment and retention of staff. It may engage local communities positively in construction projects which are otherwise controversial. It will help ensure a 'best value' approach. Early involvement of supply chain partners with the right culture and behaviour is critical to enabling good health and safety performance on site and involves a genuine desire to ensure that all supply chain partners 'go home safely each night' as a matter of concern for people not just project performance.

A 'best value' project is one which provides real benefits. It is the outcome of mobilising successful procurement strategies, a commitment to people and a commitment to quality.

What are the 'best value' benefits of a Commitment to People approach to you?

- Enhanced reputation of your organisation with the local community, particularly if there are no lost time accidents on site or unnecessary disruption to their lifestyle expectations;
- Enhanced return on your project through insisting on an investment in training and development throughout the supply chain;
- Good Citizen – Considerate Contractor' sites create good interaction with the local community;
- The development of collaborative behaviours with all supply chain people;
- Business benefits from pro-actively managing and minimising risk on and off site; and
- A more productive and more stable workforce.

"People and relationship management can make or break a construction business"



Mt Cook School's Kiwi Class names the 70-tonne crane, *Cranosaurus*

How do I do it?

- Pro-actively engage with the local community or stakeholders from the outset until the completion of a project;
- Ensure that supply chain partners have training and development plans in place to meet company, project and employee needs;
- Up-skill your own competence as a construction client or contract-in the expertise;
- Engage the supply chain to run the site with consideration to others and with minimum impact on the local community;
- Ensure the supply chain partners keep a clean and tidy site with quality facilities;
- Value construction employees by insisting on compliance with the site's safety plan, and actively check that this is being adhered to; and
- Stakeholder analysis and communications planning (incl. public participation where appropriate).

Regularly challenge the supply chain partners to demonstrate positive activity in all the above matters.

Assess success on the following attributes:

- Equal opportunities and diversity
- Training programmes in place and being taken up
- Development of qualifications and skills
- Employee satisfaction with project/site organisation
- Sickness absences
- Staff turnover
- Safety record – lost time accidents- near misses
- Working hours needed to meet programmes
- Employee pay satisfaction.



Arras Tunnel Week 138, Completed park from Sussex St end

Commitment to Quality

The New Zealand construction industry has struggled with quality issues for many years resulting in a significant cost to the economy, not least evidenced by the weather tightness issues with many buildings. Other economies including Australia, the USA and UK have demonstrated that these costs could be significantly reduced where the industry embraces the same concept of quality assurance that has been used with great success by many other business sectors and economies.

As clients, we need to have an understanding of what quality in design and construction means.

What it entails to achieve a functional and sustainable design constructed to appropriate quality standards and how we can ensure that the projects that we initiate are delivered to meet our practical and operational objectives and to the quality standards necessary to achieve 'best value'.

A 'best value' project is one which provides real benefits. It is the outcome of good leadership, mobilising successful procurement strategies, a commitment to people and a commitment to quality.

What are the 'best value' benefits of a Commitment to Quality approach to you?

- A clear brief produced by the client, before design commences;
- Designers and constructors are selected according to ability, quality and criteria appropriate to the scale and complexity of the project;
- Designs suit all practical, functional and operational requirements of the asset;
- Designs meet both the client's and users' needs;
- Open and transparent communication exists between client, designer(s) and constructor(s) any 'culture of blame' is eliminated;
- Embracing collaboration between client, designer(s) and constructor(s) and the 'best for project' decision making model;
- Communication and documentation focussed on cost certainty, reduced scope changes and variations;
- Embracing innovation in all aspects and at all stages of the project;
- Design and construction team(s) have appropriate quality IT-based assessment and approval tools, including third party reviews, in place and in use;
- Design and construction team(s) have robust risk management tools, including third party reviews, in place and in use;
- Construction materials selected achieve the performance standards required of them;
- Project team(s) have a pro-active approach to dispute resolution.
- Whole-of-life value is delivered by addressing buildability, maintainability and usability issues;
- The whole procurement approach takes into account the operation, maintenance and ultimate replacement of the building.

Quality in design and construction is not just about following ISO9001, the PDCA (**Plan, Do, Check, Act**) cycle, the building code, NZ standards or Codes of Practice – it is about embracing an approach that fosters a culture of design and construction quality amongst the project team, from the architect putting pencil to paper for the first time, to the electrician tasked with installing the light fitting outside the new entrance.

Yes, but how do you do it?

There are a number of options open to a client to achieve better quality standards. Construction projects are unique in that each one is different. Every project requires a quality plan that captures the needs of the project, includes a risk management strategy, have robust monitoring tools and a sound evaluation and reporting system. There are numerous international examples and templates that can be followed to compile such a plan. The essence of the plan is to define how the client will ensure that quality checking, inspection and testing occurs and that the completed project is reviewed against the originally briefed requirements. In summary then:

- Have clear criteria for selection of your design team;
- Take time to develop a clear and concise brief prior to design commencing;
- Ensure that the design meets the functionality planned for the asset;
- Take into account whole life principles and value in the design process;
- Enable the potential use of modern technologies and cost-effective solutions;
- Make sure that you use appropriate third party reviews to assess the design for your asset; and
- Make use of established Design Quality Indicators

In the end, commitment to quality is behavioural. The approach can make or break a project outcome and relies on each member of the project team performing their respective role to the fullest. The client's role in instilling and demanding a quality culture is essential and underpins the systems and processes put in place to drive successful project outcomes.

Best Value

'Best Value' is a somewhat nebulous term which has a strong dependency on how one defines "value". For our purposes the following definition offered by the United States' Defence Systems Management College is a reasonable assessment. The definition refers to the 'government' but of course the reference can and does apply to any organisation seeking 'best value' from a procurement process.

The definition offered is:

"The most advantageous trade-off between price and performance for the government. Best value is determined through a process that compares strengths, weaknesses, risk, price, and performance, in accordance with selection criteria, to select the most advantageous value to the government." Defence Systems Management College definition of terms

'Best value', therefore is structured around three key principles:

- Successful procurement and integration principles
- Commitment to People
- Commitment to Quality

With these three principles in place and strong and effective client leadership overarching them, the foundation for achieving 'best value' is well established. Implementation of the protocols, models, tools and guidelines set out in this document is at the discretion of practitioners; it is the intention of the Construction Clients' Group however that successful project outcomes will result from following these approaches.

The Construction Clients' Group intention in developing this protocol is to encourage dialogue, generate debate and promote the concept of effective client leadership and the pursuit of 'best value' in the construction and property industry.

Useful Links

For further details, supporting documentation and practical examples for implementing the recommendations from this document, a sample of links to useful websites have been provided:

Construction Clients' Group in New Zealand: <http://www.clientsuccess.org.nz/>

Constructing Excellence in New Zealand: <http://www.constructing.co.nz/>

Constructing Excellence UK: <http://www.constructingexcellence.org.uk/>

International Facilities Management Association: <http://www.ifma.org/>

Ministry of Building, Innovation and Employment (MBIE), Building and Construction Productivity Partnership: <http://buildingvalue.co.nz/home>.

Pathfinder Projects: <http://www.constructing.co.nz/resources/pathfinder-projects>

