



Facing a seismic  
**STRENGTHENING** project –  
technical and professional input


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26 October 2016

CQ Hotel  
Wellington

 Body  
Corporate  
Chairs'  
Group

 Absolutely Positively  
**Wellington City Council**  
Me Heke Ki Pōneke

  
INNER  
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This seminar is jointly presented by the Body Corporate Chairs' Group, the Wellington Inner City Association and the Wellington City Council.

Please note that these slides do not represent legal advice but are provided on the basis of best intentions to provide commentary on aspects of the relevant Acts and from experience. Any suggestions for change or other comment are welcomed.

## Programme outline

- Geotechnical, structural engineering and project management input
  - Coffey and ISPS
- A developer's perspective
  - Ian Cassels
- Mediation: resolving disputes collaboratively
  - Fairway Mediation
- Update on EQP legislation
  - Steve Cody, WCC
- Questions
- Outline of future seminars

# Geotechnical, structural engineering and project management input

Nick Clendon (Coffey)  
Manos Bairaktaris (ISPS Consulting Engineers)



# Earthquake strengthening Seminar 4 - Technical and Professional Input

When you think with a global mind  
problems get smaller

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**ISPS** | CONSULTING ENGINEERS

**Facing a Seismic Strengthening Project**  
Managing the Project from a Technical Perspective

*Presented by Coffey in collaboration with ISPS*


  
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## Earthquake strengthening Seminar 4 - Technical and Professional Input

  
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### Introduction & Overview

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#### Presenters

Nick Clendon – Coffey (Associate Engineering Geologist)  
Manos Bairaktaris – ISPS (Structural Engineer & Director)

#### Overview

- Detailed Seismic Assessment
- Project Initiation / Project Manager
- Concept / Preliminary Design Stage
- Detailed Design Stage
- Building Consent Stage
- Tender Stage
- Construction Stage
- Sign-off

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### **Presenters**

Nick Clendon - Nick has over 12 years' experience as an engineering geologist gaining experience in the UK and New Zealand. His work has included carrying out site specific geotechnical investigations, assessments and remediation works and/ or geotechnical design works for a range of environmental and geotechnical problems. Nick has experience in design of a broad range of foundation systems for commercial buildings and infrastructure projects. He has undertaken site specific seismic response assessments and seismic strengthening projects in Wellington and Lower Hutt. These projects have benefited from Coffey's cutting edge in-house software which has allowed conventional design solutions to be refined resulting in significant construction cost savings for these projects.

For more information about Coffey and the services they offer, please visit [www.coffey.com](http://www.coffey.com)

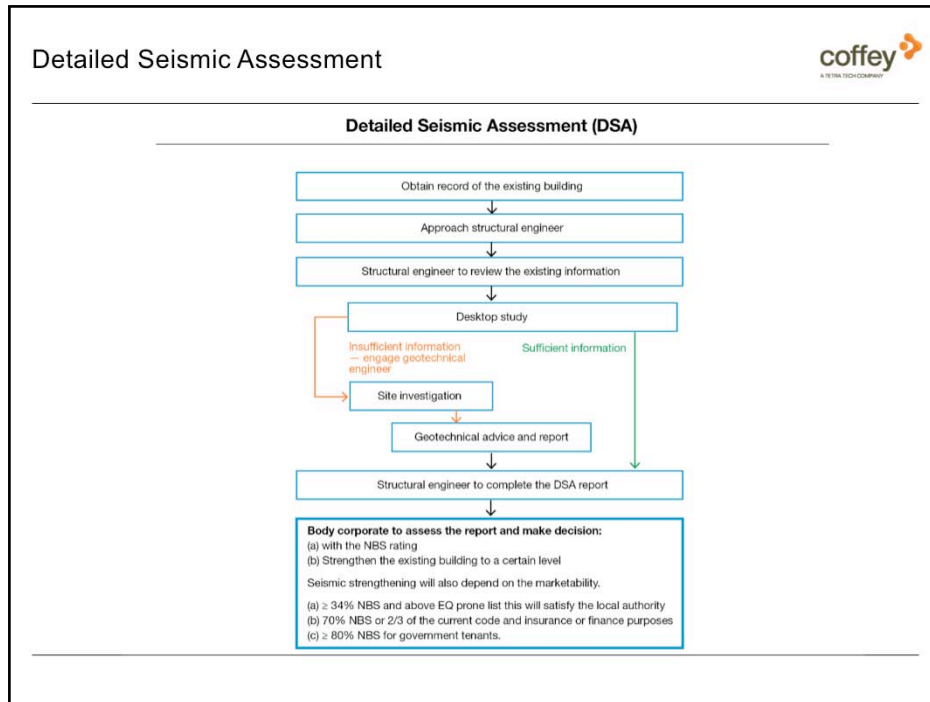
Manos Bairaktaris – M.E. CPEng MIPENZ is the Director of ISPS Consulting Engineers NZ Ltd. Manos is also registered/ chartered in Greece where he received the 1<sup>st</sup> prize for graduate civil engineers in 2000. He has been the lead design structural engineer for significant projects like stadiums, museums, hospitals, bridges and tunnels. Manos has participated in two international research projects (MEMSCON and Monico) and developed the methodology and software for the real-time health monitoring of buildings and tunnels.

For more information about ISPS and the services they offer, please visit [www.isps.co.nz](http://www.isps.co.nz)

### **Overview**

The overview list the sections of the Detailed Seismic Assessment (DSA) and Seismic Strengthening Process Flowcharts of which will be used as the focal point for our presentation.

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### Detailed Seismic Assessment (DSA)

#### 1. Approach Structural Engineer

Supply the information of the building to the structural engineer.

#### 2. Obtain records of the existing building

Obtain as much information as possible.

-Archive documentation from the local authority, the Archives New Zealand, New Zealand Historic Places Trust or other sources.

-Soil (geotechnical) reports, if any.

#### 3. Structural Engineer to review the existing information

The structural engineer will require to review the information of the existing building and perform site inspection(s).

#### 4. Further Investigations (if required)

-If the archives do not contain soil report or if the soil report does not provide adequate information, engage Geotechnical Engineer.

-Structural investigation which includes non-intrusive (e.g. structural scanning, etc.) and intrusive (e.g. concrete core sample, expose steel joint connection, etc.) investigations.

#### 5. Structural engineer to complete the DSA report

-The structural engineer will have to gather all of the information and perform the detailed analysis of the building.

-The DSA report covers the performance of the building structure and also include the secondary elements (such as precast cladding, canopy, verandah, parapet, etc.)

-A high level recommendation for strengthening the building to a higher rating may be included.

#### 6. Body Corp to assess the report and make decision

The Body Corp shall assess the outcome of the detailed seismic report.

-The NBS rating of the building may affect the insurance premium, etc.

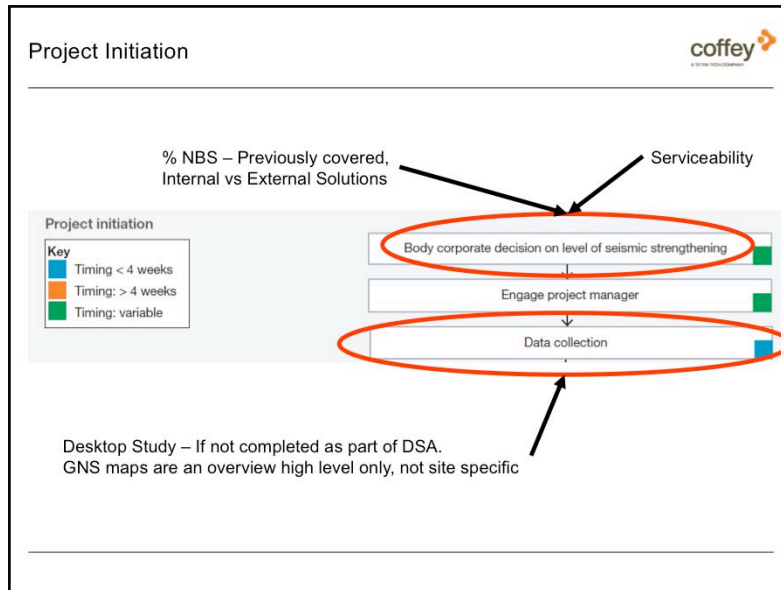
-Strengthen the existing building to a certain level. A decision influenced by both safety and investment perspectives.

-A fire and an accessibility report are always required.

-If along with the strengthening the Body Corp decides to renovate the building an architect will be required.

-A change of use will trigger a requirement for strengthening to a near as reasonably practicable to 100% NBS (refer Building Act, cl.112)

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### **Body Corporate Decision on Level of Seismic Strengthening**

This topic has been covered in a previous presentation

### **Engage Project Manager**

Cover on next slide

### **Data Collection**

Desktop study of publically available data. Can include council archives, published geological maps, NZ Geotechnical Database, Regional Council Information – Hazard Reports, and studies / research on the local geology or hazards, such as GNS reports.

### **Question: Why aren't the GNS Maps and existing information sufficient? Why do you need to complete geotechnical investigations?**

The Executive Summary of the "Its Our Fault" report that presents the GNS maps states: "The maps presented in this report are intended only to be used as an initial guide to ground conditions in the Wellington CBD and should not replace site-specific investigations. These maps are based on the best information available at the time of compilation and are subject to revision as more information becomes available in the future."

Site Subsoil Class has been constructed from 1,025 boreholes along with measured and pseudo low amplitude natural periods, or site periods. The map is a starting point and should not replace the need for site specific geotechnical investigations. They just do not provide enough information to inform and assist a strengthening project. One note that should be carefully looked at is the uncertainty boundary. This is between Site Class C and D where the worst case and best case 0.6 second period boundary is proposed. At these locations, it is pertinent to either complete site specific assessments to prove a Class C; otherwise, a Class D is generally accepted.

Completing a ground investigation serves two primary purposes:

- 1 - Providing data for analysis and design.
- 2 - Reducing uncertainty about ground conditions to reduce construction cost variations (i.e. control of risk).


The amount, location and method of ground investigation should be selected with these two aims in mind. Each dollar spent on ground investigations reduces the risk of unforeseen conditions that may result in project delays and cost over-runs. But quantifying this value at the start of a project is often difficult, and it is recommended that meetings are held between all consultants and the Body Corp to ascertain the real value a ground investigation will bring.

Unforeseen ground conditions often have a significant impact on the success of a project, be it a new build or a strengthening project. The extent of unforeseen conditions and the resultant capital cost increases are commonly linked to an under investment in site investigation. International research shows strong correlation exists between low spend on ground investigation and high capital cost over-runs. This under investment occurs for a number of reasons including:

- 1 - Clients are awarding tenders geotechnical services on lowest price conforming, not best value.
- 2 - Site investigation scope is being impacted by inappropriate procurement methods.

You should use an appropriately qualified geotechnical engineer to tailor the site investigation requirements to meet the projects objectives and risks. And, the Body Corp and wider consultant team should recognise that site investigations are needed to gain a good understanding of the sites geological history, likely future behaviour and variability.

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**Project Manager**

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- What is a PM – A **project manager** is an individual who is responsible for the planning, organization, resource **management**, and discipline pertaining to the successful completion of a specific **project** or objective.
- Challenge & implementation
- Potential/ perceived issues:
  - Conflict of Interest (individual vs BC)
  - Time & Availability (PM on a strengthening project is very time consuming)
  - Experience (previous experience very important)
  - Mail Box PM
  - Trust
  - Leadership
  - Relationships (existing with the industry)
  - Insurance
  - Liabilities / H&S

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### What is a PM?

See slide response.

### Challenges and Implementation?

BC opting to use one of its owners as PM would still be expect to complete all PM duties (availability, timeliness of responses, ability to manage/approve/get approvals for variations, etc.) eg, experience of mging similar project, working with the other parties, insurance, references?? these are probably the obvious ones, but are there any others?

### Why does a Body Corp need to engage a Project Manager?

We have been to these presentations and there has always been discussion around does a PM need to be engaged? There's been experiences both positive and negative with engaging a PM; but again, not the answer you want to hear – but it is a case by case basis. There is no tried and true system to follow.

If you have a dedicated member of the Body Corp who wishes to manage the consultants, they can. Architects are capable of managing the strengthening process from start to finish, pending on the size of the project. Smaller strengthening projects (say < \$0.5M in total) can generally be managed by a representative from the Body Corp, if they have the relevant skills; or by the architect.

For larger projects however, we recommend that a PM is engaged purely to ensure that “all ducks are in a row”, from commissioning consultants, liaising with local authorities, acting on behalf of the Body Corp with your vested interests at heart, through to tender and managing the Contractor, and to certification.

There are a number of pro's and con's of engaging a PM:

#### Pro's:

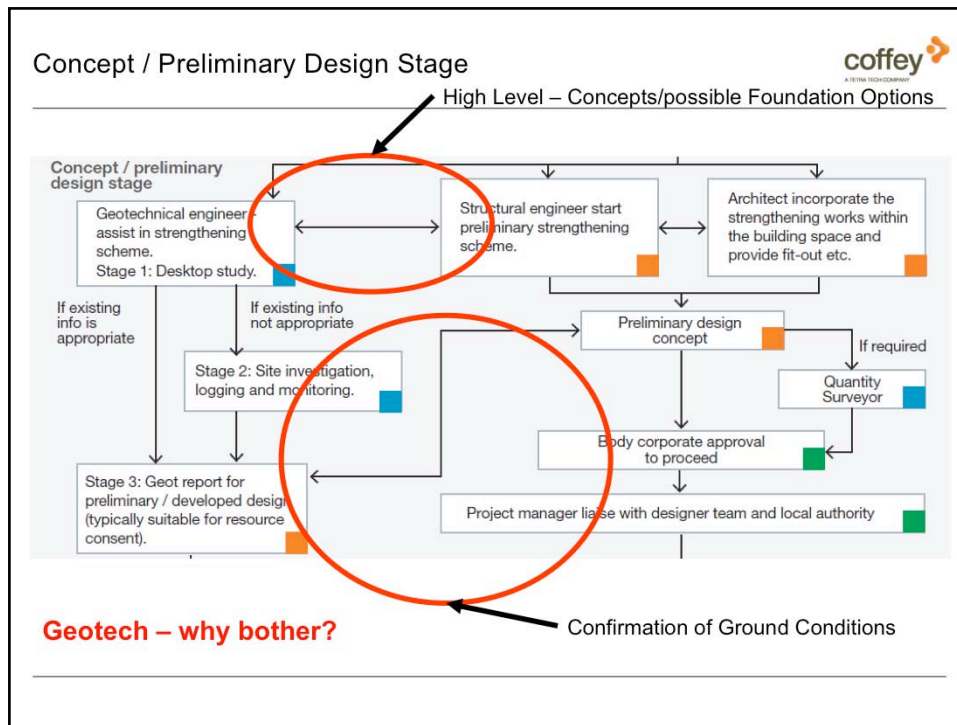
- Acts as the go-between for BC, consultants and Contractor
- Translate technical terms into laymen's terms and prioritise project elements to meet programme demands
- One point of contact for the BC and relieves pressures off BC
- Allows streamline communication and speed up workflow
- Source and engage consultants and contractors on behalf of BC
- Trouble-shoot plans/ specifications
- Maintains cost flow and handle consenting/ permitting process.
- Allows the consultants to focus on their respective jobs (structural, geotechnical, architectural etc) rather than PM'ing the job for the BC
- PM's can do the “hard” selling and work.
- Allows BCs to focus on the “soft” work, i.e. engaging neighbours, providing support, compensation to neighbours etc

#### Con's:

- Can potentially create hostile environment as they shift/ direct blame between consultants, contractor
- May prove to increase fees when they may not actually be doing anything.



## Earthquake strengthening Seminar 4 - Technical and Professional Input



### **Stages**

Stage 1 - High Level – Foundation Concepts – Shallow vs Deep. Identification of areas of high risk

Stage 2 - Site Investigation – Confirmation of Ground Conditions & Suitability of Design

CPT's, Boreholes, Trial pits, Scala's, Geophysical Methods, Shearwaves, Magnetometers

Structural will provide an indication of load and building tolerances through the process to help guide the geotech

Stage 3 – Reporting to client/engineer and document preparation for Building Consent

### **Question: What type of strengthening works/ options are available for foundations?**

There are a number of different types of strengthening options for foundations, these may include anchors, micro-piles, jet grouted columns, deep soil mixing, ground beams, reinforced piles, to name a few.

### **Question: How much does the soil influence the strengthening options of a building?**

It doesn't really. Whatever strengthening option is developed for the building above the ground, geotechnical engineers can develop/ design a solution that can adequately cater and transfer the structural loads to a suitable bearing stratum. However, this will likely require significant investment to design and construct. It's preferable for all team members to get together at the start as we can often eliminate unnecessary/ inadequate solutions and agree on suitable solutions for each design/ strengthening option.

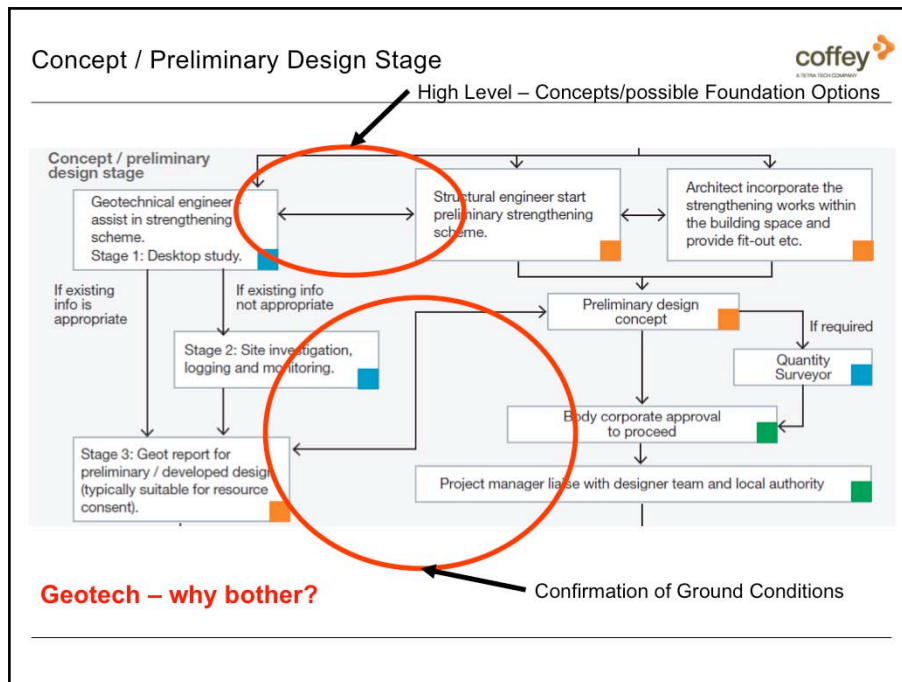
### **Question: Why engage a geotechnical engineer?**

When facing a strengthening project, many developers, Body Corps, architects etc look at a building and think "we need to engage a structural engineer" as they only see the building, or the above ground structure. Often, when the initial assessments are completed, there are many assumptions made on the foundations integrity, capacity, type and the material supporting the foundations.

If these assumptions are carried forward and followed through to the detailed design and construction phases, it may lead to major cost over-runs, programme delays and change in designs as the "assumptions" have not been appropriately verified. A geotechnical engineer can be engaged to verify these assumptions and to assist in the strengthening solution.

The building you want to strengthen is sitting on material that we can't see or reliably predict, without reviewing existing/ historical information or completing appropriate site investigations. If site investigations are required, these are intrusive investigations at the site (or surrounding area) to allow the geotech to "feel, touch and play" with the soil and/ or rock to enable them to assess and evaluate its behaviour. The behaviour of the material will allow us to assign geotechnical design parameters, which are often used in the final strengthening process.

## Earthquake strengthening Seminar 4 - Technical and Professional Input



**CONTINUED from previous slide:**

### **Question: What type of investigations do geotechnical engineers complete?**

Geotechnical site investigations can be varied, and are often agreed upon during the scoping stage with the intent to gather appropriate information to inform the strengthening solution. Site investigations we may complete, by way of engaging contractors, may include:

- Boreholes (BH) including sample collection, in situ testing (SPT and sDMT), groundwater monitoring and down-hole geophysical tests (such as shear wave velocity).
- Cone Penetration Tests (CPT) and Seismic CPT (sCPT) with and without pore water pressure measurement.
- Test Pits (TP)
- Geophysical techniques from the surface, i.e. MASW, SPAC etc
- Laboratory testing of samples collected during the site investigations.

Ground investigations are a risk assessment and management process, and, as such is sometimes undertaken in an iterative manner. Risks are identified, investigated, and the outcome of these investigations determine the next steps. It should also be noted that additional investigations might be needed during design or construction as new “known unknown, and unknown unknown” risks are identified.

On top of the intrusive investigations, we complete desktop studies/ reviews of existing information, from geology maps, archival data, GNS maps, NZGD. Recently, MBIE and EQC have created the New Zealand Geotechnical Database. This has been created on the back of the Canterbury and Auckland databases for NZ wide. From all of this information, we form a picture and build a model of the material (soil and rock) that supports the building and how it behaves and interacts with the structural elements and vice versa.

### **Question: What does the Technical Team need from the BC?**

Reasonable access to the site to complete inspections, as-built drawings/ plans/ specifications etc; responsiveness (this is a two way street) to queries.

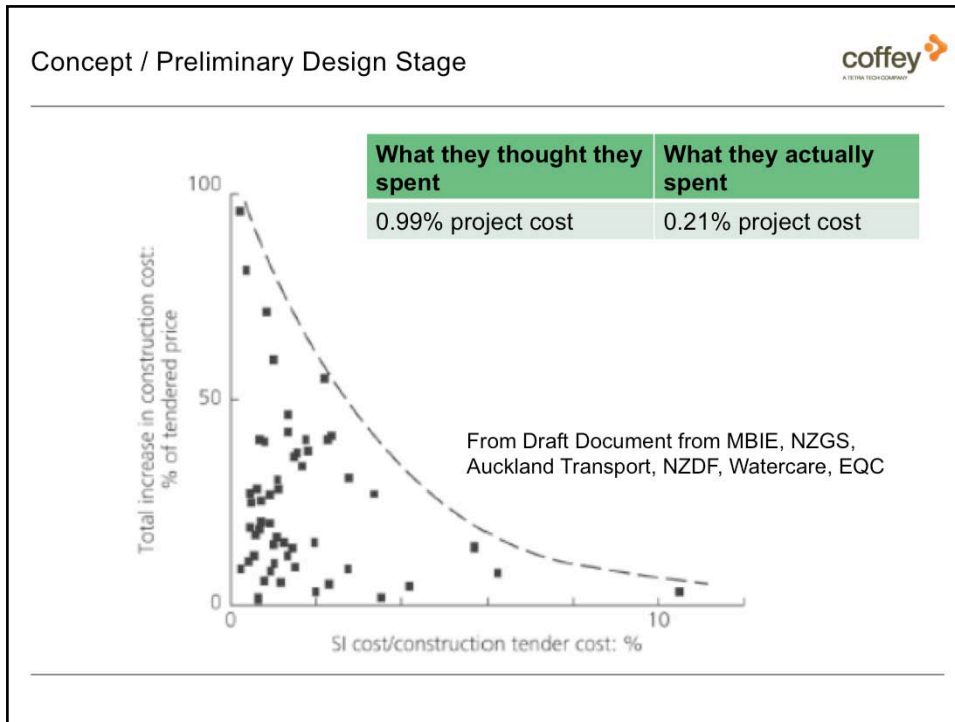
### **Question: What type of investment considerations should the BC consider for a project?**

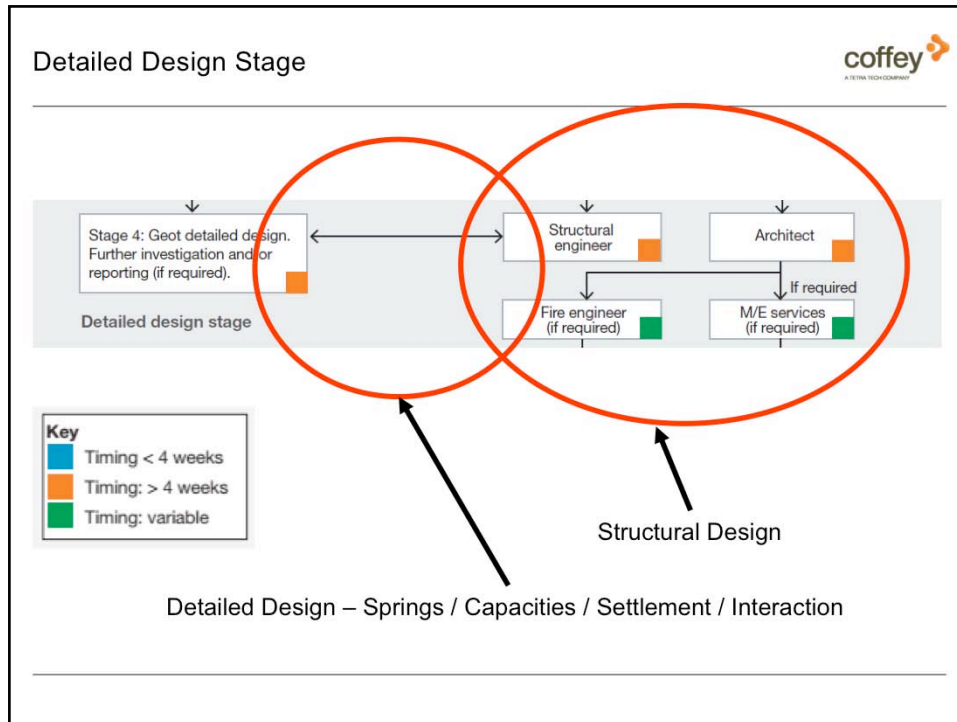
There is no magic bullet for this. Geotechnical consulting fees may range from \$1,500 for a simple desktop study to provide an appropriate level of confidence on the sites performance to inform the strengthening design, all the way up to ~ \$75,000 in fees for detailed design, development of specifications and drawings, construction monitoring and certification.

Contractor costs to complete the geotechnical investigations also range considerably, however they can typically be between \$5,000 to \$50,000, depending on the types/ depths of investigations required.

There can be tension between the desire of the geotechnical engineer to perform technically optimised foundation design with more ground data through site investigations and the desire of the building owner or developer to minimise cost, particularly at the early stages of a project. Therefore it is imperative that an agreement is made on appropriate site investigations. A project manager may be able to assist in this case.

The Body Corp should allow an adequate level of site investigations to be completed. They should view site investigations as an investment capable of improving designs, hence adding value to a project. Don't under-invest in site investigations, and don't overlook site investigation costs in a project.





### **Detailed Design Stage**

The structural and the geotechnical engineers along with the architect (if required) will start finalising the preliminary design scheme.

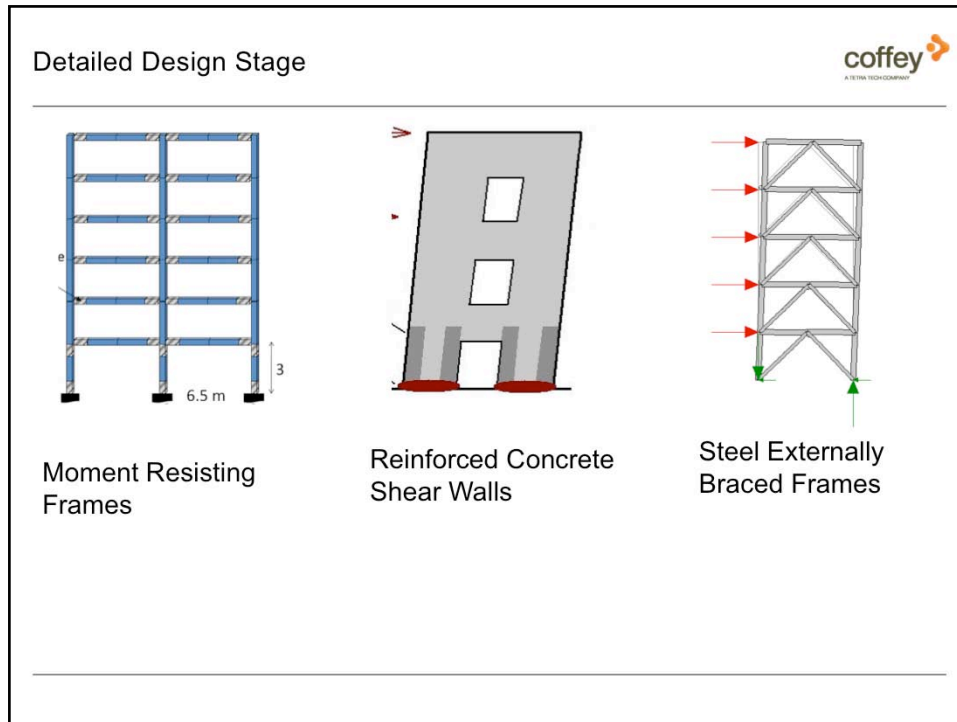
Engaging a contractor before the Detailed Design Stage can assist with the “calibration” of the strengthening scheme to achieve lower costs. This is a delicate decision as it may become an obstacle to proceeding to tender at the end of the detailed design stage.

The input from the geotechnical engineer at this stage of the structural design is necessary. The geotechnical engineer will be able to provide more accurate information required for the foundation system of the building which will be incorporated in the design analysis of the superstructure. This can potentially reduce the design requirements of the superstructure and the cost for the geotechnical engineering will potentially result in significant construction savings. A structural engineer will have adopt conservative assumptions if the geotechnical information is incomplete.

### **Options for Strengthening:**

Always depend on various factors, e.g.:

- Type of building (material, stiff or flexible)
- Occupancy: a vacant building allows for more efficient design and easier



### Detailed Design Stage

#### **Types of Strengthening:**

##### •Reinforced Concrete:

- Moment Resisting Frames
- Shear Walls (including spayed concrete walls)
- Mixed System

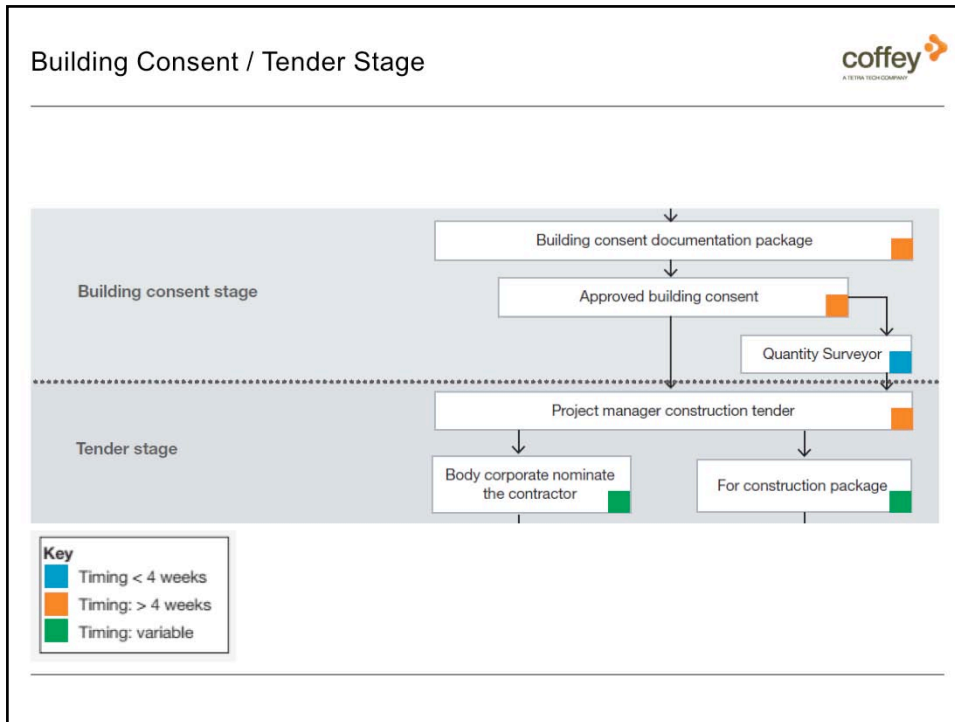
##### •Structural Steel:

- Moment Resisting Frames
- K-Braces (two types – look similar but perform differently)
- Cross Braces
- Buckling Restrained Braces

##### •FRP systems (Fibre Reinforced Polymers)

- Diaphragm strengthening
- Concrete Column wrapping (e.g. for non-ductile columns)

The structural engineer will work along with architect to finalise the structural and



**Building Consent Stage**

**Compile the building consent documentation**

- 1.Design Features Report which provide the overview of the structural and geotechnical design of the seismic strengthening works.
- 2.Structural calculations, drawings and specifications.
- 3.Producer Statement (PS1)
- 4.The architectural drawings and specifications (if required).
- 5.Fire and accessibility reports.
- 6.Producer Statement (PS2) (Peer Review) from an independent chartered professional engineer (if required by the Territorial Authority).

The building consent process will normally take up to 20 working days, excluding the time that it takes for the consultants to reply to Requests for Further Information (RFI).

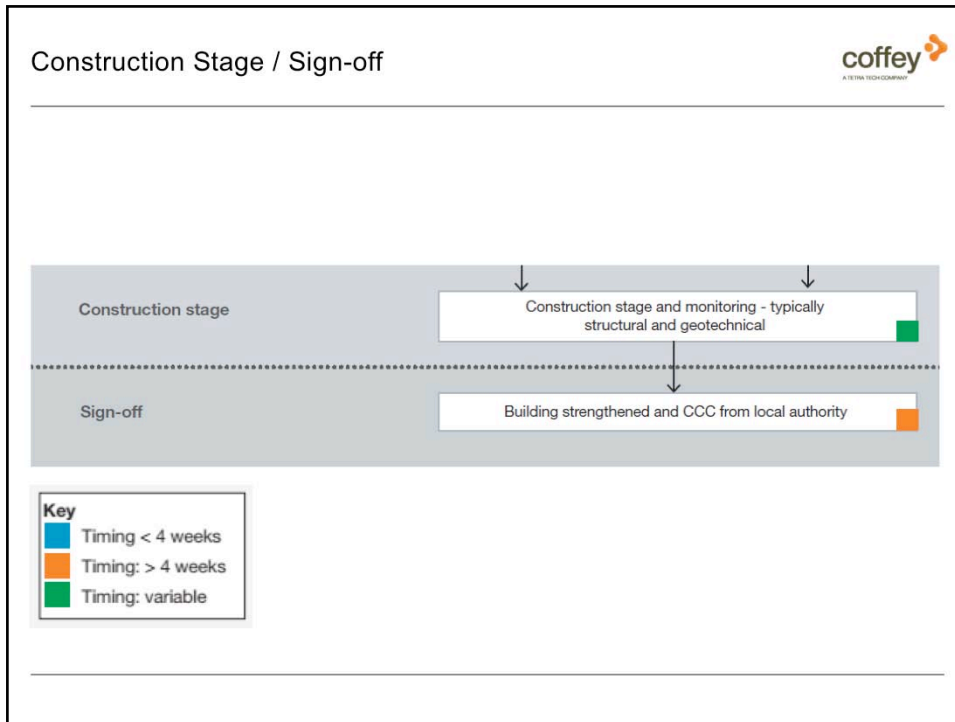
**Quantity Surveyor (QS)**

A quantity surveyor prepares the bill of quantities and performs an independent calculation to estimate the total construction cost.

**Tender Stage (Optional)**

After receiving the approved building consent, the project manager can prepare a set of the construction tenders which will be distributed to different contactors. In the meantime, the consultants will have to update the drawings and specifications for the construction package.

It is common to prepare the tender documents in parallel with the building consent application if the time frame is tight. Any modification which may arise during the building consent review process will have to be recorded as a variation to tender documents.



### **Construction Stage**

The following process will take place during the construction stage:

1. Both structural and geotechnical engineers will require to perform a regular site inspection.
2. The Contractor will need to contact the council for inspection.
3. The Project manager will organise a regular site visit and record any variation works (if any)
4. In some cases, the engineers may require to adjust the proposed details due to unforeseen condition. This is common for older buildings.

### **Sign Off**

The project manager shall supply the Producer Statements PS3 and PS4 from the contractor and the engineers respectively.

The code compliance certificate (CCC) will be issued by the Territorial Authority when

### Case Study – Coffey



#### Body Corporate Strengthening Project

##### History of the building(s) and Initial Concerns:

- Designed and constructed in late 1990's / early 2000's.
- 5 blocks ranging in 3 to 4 stories high.
- Settling of building observed, leading to tilting of one side.
- Tenants vacated to allow releveling works.
- During settlement assessments, it was determined that the existing foundations were under capacity, and assessed as earthquake prone, and requires remediation.
- Foundation system was not assessed as part of building performance (%NBS) during releveling works.

##### Geotechnical Investigations:

- Original investigation (during design) – comprised only Scala's (to 3m depth) & 2 test pits (to 2.2m depth). Note, the report at the time stated *"it was anticipated that the foundation design parameters could be reliably established without the need for an extensive geotechnical investigation."*
- Piles built to depths of between 3m and 4.5m.
- No as-builts records available, nor detailed construction records.
- Recent geotechnical investigations completed included 7 BHs to depths of 7.5m to 14m; supplemented by 9 WSSs to depths of 2m to 6m.



### Case Study – Coffey



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#### **Body Corporate Strengthening Project**

##### Remediation

- In addition to levelling works, remediation to increase strength of foundations includes ~ 90 anchors to varying depths.
- Designs provided for 80% and 100% NBS, to allow construction costs comparisons – i.e. is there value in targeting 100% over 80%?
- Anchors proposed at outside of building at each existing pile location presented increased/ unfavourable torsion effects in the existing concrete slab.
- Anchor locations favourable when in "pairs" at each existing pile location. Small pile caps/ ground beams required with appropriate connections.
- Final design nearing completion and consenting/ tendering to commence in parallel due to programming requirements.

##### Summary

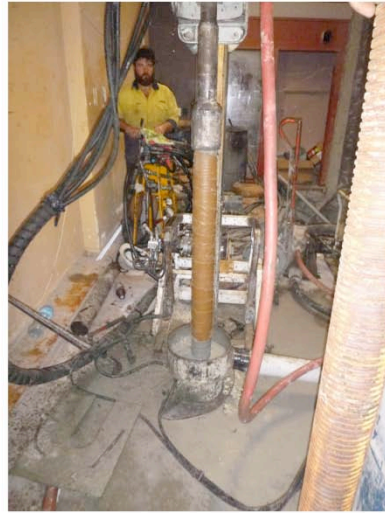
- A desktop study at the start of the design (in late 1990's/ early 2000's) should have been completed. Geological maps indicate the site is on an alluvial channel – which generally has "variable" ground conditions.
  - \$10,000 - \$25,000 would have been sufficient to reduce risk and allow for appropriate design.
  - Strengthening works of foundations, including design fees, investigations, consenting, tendering and construction in the order of ~\$500,000.
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Case Study – Coffey



**Body Corporate Strengthening Project**

Example of rig drilling and installing anchors on ground floor level of building



Case Study – Coffey

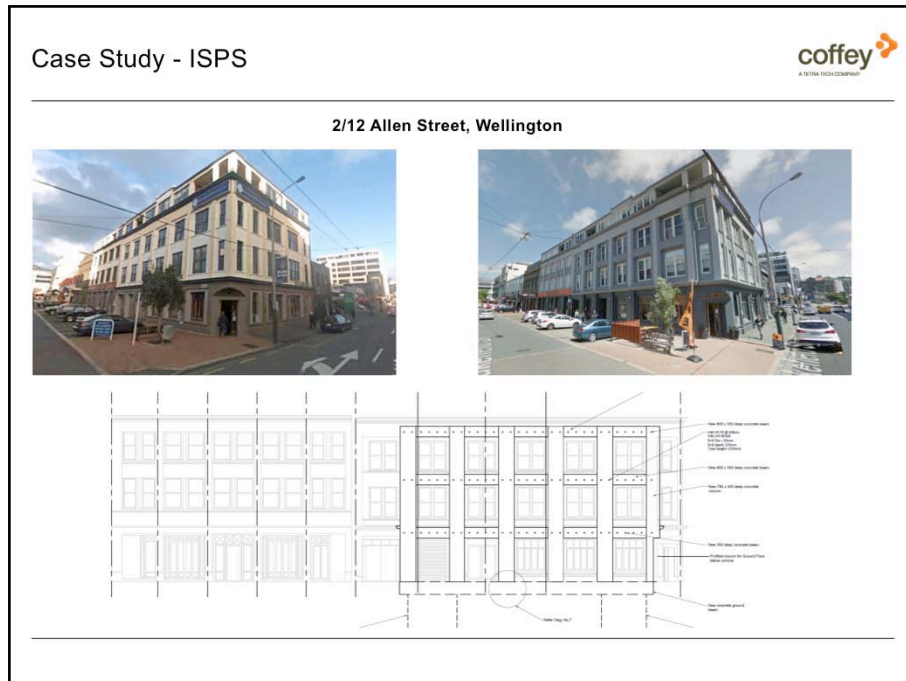


**Body Corporate Strengthening Project**

Example of a testing apparatus for anchors to prove design capacity



## Earthquake strengthening Seminar 4 - Technical and Professional Input



### Project: 2-12 Allen Street

#### Description

The building at 2-12 Allen Street is in a special character area of Wellington and comprises two 3-storey Edwardian masonry warehouse buildings. In 1996 a lightweight additional level was added to the top of the building. The existing structure consists of solid unreinforced masonry brick walls to the west and south, and transversely through the building. The north and east elevations to Wakefield and Allen Streets respectively are unreinforced masonry facades. Timber floors are supported on steel beams and cast iron columns. The building had been strengthened transversely in the past however the longitudinal direction had not been strengthened.

#### Brief

ISPS were initially engaged to identify the existing seismic capacity of the building. We determined by assessment that the stiff brick wall at the rear of the building was attracting more load than it could successfully carry and the building was subject to torsion due to the position of the existing bracing structures. In light of the 2013 Seddon Earthquakes, the owner wished to increase the strength of the structure from the assessed strength of 45% New Building Standard (NBS) up to 70% NBS for due diligence and to ensure that existing and prospective tenants would want to occupy the space.

#### Outcome

Numerous strengthening options were looked at to mitigate the problem of torsion and insufficient strength longitudinally, including steel "K" braces and sprayed concrete against the brick work. But for the project to be economically viable, the strengthening works had to be conducted whilst the building was tenanted, which meant the works could not be intrusive. The final solution was an external sprayed reinforced concrete ladder across the front of 2-6 Allen Street. The stiff concrete frame was a compatible strengthening element to complement the existing brick walls at the rear and its position at the front façade offset the torsion effects. The stiffness of the new front frame attracted load away from the rear wall so the brick was capable of sustaining the induced forces. The contractor worked through the construction details with the design team to ensure the concrete frame could be installed efficiently. A sprayed concrete shear wall was installed at the centre of the building at ground and first floor level against an existing unreinforced masonry wall. Otherwise strengthening incorporated additional steel straps at the floor levels to transfer load to the new structural elements.

The new concrete facade was formed and detailed to match the existing building which satisfied a peer review from a heritage architect and enabled a Resource Consent to be granted within the Courtney Place Heritage Area. Another challenge of the project was obtaining an encroachment licence from The Wellington City Council for extending the new concrete facade and footings into the footpath. The Design Team worked closely with the council to address their concerns, amending the design several times before all parties were satisfied. On the interior of the building the one vacant floor enabled the floors above and below to be largely strengthened without having to gain access and disturb established tenants which included a bakery and a restaurant.

The construction work was carried out over the space of 4 months with minimal interruption to the tenants. In addition the character of the building in respect to the Courtenay Place Heritage Area has been maintained through successful collaboration between Wellington City Council, Contractors and the Design Team.

#### Award

This project won the 1<sup>st</sup> award for Seismic Strengthening at the NZSEE Conference in 2015.

### Summary

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- Good / clear communication channels
  - Relationships are important – being able to work together / challenge each other
  - Good communication is key to getting the most out of your Structural / Geotechnical Engineer
  - Good data saves money and time (reduces variations)
  - At some point you will pay for the ground works – paying up front will cost less in the long run
  - Geotech's are there to support the structural design process, minimise complications/ variations, and identify the most suitable solution for the foundation system
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## A developer's perspective

Ian Cassels  
The Wellington Company





Ian Cassels, Director of The Wellington Company, opened his presentation saying that he had 26 years' experience in property development and had a great deal of sympathy for Wellington owners facing seismic strengthening.

These notes are a summary from the meeting.

## Horses for Courses

- Engineers vary hugely in assessment of various types of buildings.
- Best to select engineers that are recommended for experience in the type of construction.

It's important to know where you want to end up before you start, ie by working out the likely outcome. Otherwise you can find yourself going down one route only to find that it is no good and having to start over.

It's best to collect as much information as you can about the building. Buildings are often a lot stronger than first thought.

This information should be supplied to the engineer. The choice of engineer is important because the assessments vary greatly for various types of buildings. Good engineers focus on how strong the building is; bad ones focus on how weak the building is and what you cannot do. Therefore it is best to select engineers who are recommended for their experience in the same type of construction as your building.



# Early Engagement

- Establish maximum efficiency (code vs cost)
- Identify and survey likely engineer and builder to pre-estimate cost, snags, availability.
- Each BC member will have different views and needs. Retail vs residential vs commercial. Some must strengthen some can't afford it.

Ian stressed the importance of early engagement with all parties – owners and professionals.

He considers it unreasonable to strengthen a brick building to 100% of code. Instead it is best to establish maximum efficiency, ie code versus cost (the sweet spot). An early estimate of costs is needed before starting the work and that is why it is important to know what the outcome looks like. If one does not do this there is a danger of having take several shots to get things right.

This is not helped by having to work through the body corporate where each owner may have a different view, especially between residential and commercial/retail unit owners. Even among residential unit owners, some may want sell to a developer because they cannot afford the cost whereas other want to strengthen, making it difficult to corral members of the body corporate.

## De-committee-ise

- Many failed landing attempts.
- Agree budgets and finance.
- Mandate a small committee of two or three.

In order to avoid many failed “landing attempts”, budgets and finance must be agreed. You should not have too many people involved. It is best to mandate a small committee of two or three persons to make decisions, but it’s better to take more time in order to address all the issues and consult widely. Otherwise, it may end up as a failed landing attempt requiring the body corporate to start anew.

# Hurdles

- Peer Review.
- Consenting process.
- Cost escalation.
- Division of cost.
- Division of benefit.
- Escalating codes.

The body corporate will experience endless hurdles, including:

- peer review
- long consulting process
- cost escalation
- division of cost
- division of benefit
- escalating codes

Ian thought that the last hurdle could be overcome by the government committing to a particular code.

## Possible Council Help

- Ideas for consideration.
  - Already exists on heritage buildings.
- Council supported loans based upon voluntary rate increase.
  - Potential for WCC to purchase land.

There is already, albeit limited, assistance with heritage buildings.

However, because of the number of heritage and non-heritage buildings affected, a large segment of society needs assistance. An option could be for Council-supported loans based upon a voluntary rates increase. In the worst cases there should be potential for the Council to purchase the land

# Best Development Model

(buy and sell back)

- When the BC is unable to undertake seismic strengthening – sell to a developer and repurchase some units?

Developers do not want a lot of people involved. When a body corporate is unable to undertake seismic strengthening itself, the land and buildings could be sold to a developer with previous owners having the ability to repurchase some or all of the units.



# Mediation: resolving disputes collaboratively

Bill Rainey & Dianne Johnson  
Fairway Resolution



Whether your body corporate is in a dispute with itself, with a unit owner/occupant, or an external party, the dispute will be negatively impacting your time and finances.

Taking a dispute through the courts might seem like the right approach, but this presents stresses of its own.

Resolving disputes can happen much earlier, and as soon as all parties are ready. With mediation, for example, you can avoid waiting years for the dispute to work its way through the court system while you worry about winning or losing thousands of dollars. The outcome of your mediation stays confidential to the parties. Unlike the court, mediation doesn't happen in the glare of publicity.

Using the assistance of a specialist dispute resolution practitioners helps resolve the dispute collaboratively.

FairWay's approach is different in that when facilitating complex situations, or resolving difficult disputes, its people focus strongly on maintaining commercial and personal relationships.

One particular value in this approach means we can assist with the "in house" relationships and communication so that the body corporate as an entity has a strong voice when dealing with difficult external matters.




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## Outline

- Why are you here?
- What's the problem?
- How can you operate differently?
- What will you achieve?



## Why are you here?

- As Chairs and members of Wellington's body corps, you are responsible for committees that oversee the management of a significant number of properties.
- You are expected to effectively lead body corps through extreme complexity.



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## What's the problem?

- You wouldn't be here if life for a body corp chair was simple and easy.
- What are your concerns?
  - EQ strengthening?
  - Internal complaints, concerns and dysfunction?
  - Health & Safety compliance?
  - Unit Titles Act? Building Act? WCC?
  - Others?

From our work in building and construction disputes over the past 10 – 15 years, we are well aware of the extent and complexity of issues that body corporates face.

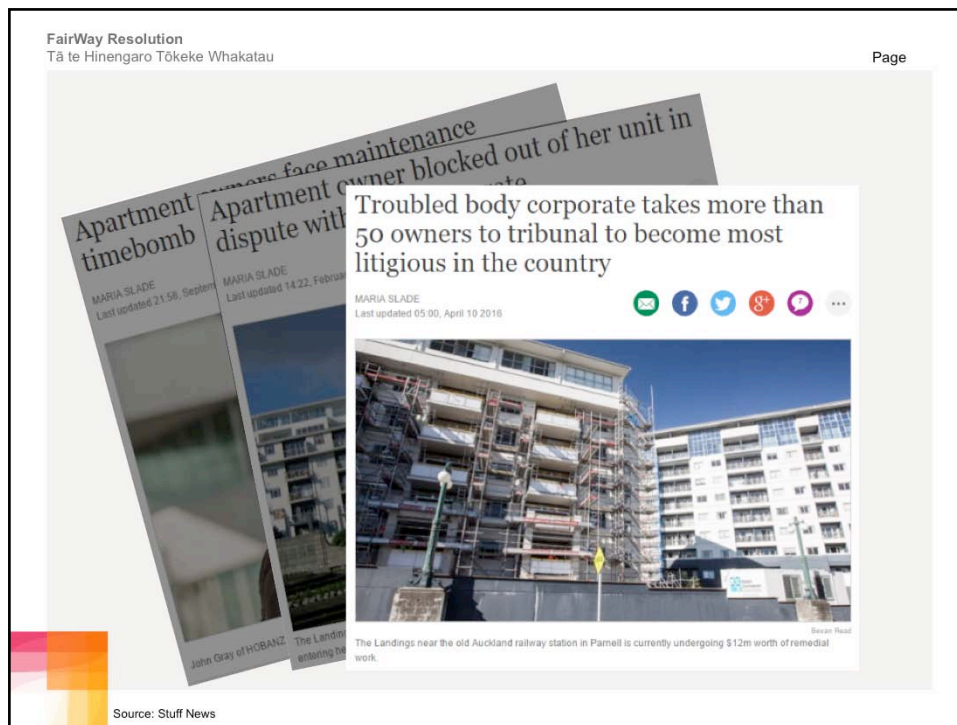
- Your obligations and authority to undertake building works under different legislation may differ.
- The time frame for undertaking building works are defect dependent.
- Often the default resolution process involves lawyers and courts.

With multi-unit living becoming more popular by the day, and the regulatory landscape more complex, we believe the time is right for body corporates to reassess how they approach dispute resolution.

## Typical issues faced by body corporates

- The effect of behaviour of an owner or occupier on the other owners and occupiers of the unit title development
- Non-compliance with body corporate operational rules
- Non-payment of body corporate levies
- The repair, maintenance and replacement of common property
- The governance of a body corporate

## Earthquake strengthening Seminar 4 - Technical and Professional Input



Such issues are not uncommon, some gaining notoriety within the media.

<http://www.stuff.co.nz/business/money/77041497/apartment-owner-blocked-out-of-her-unit-in-dispute-with-body-corporate>

<http://www.stuff.co.nz/business/money/78571563/Troubled-body-corporate-takes-more-than-50-owners-to-tribunal-to-become-most-litigious-in-the-country>


<http://www.stuff.co.nz/business/small-business/81078560/new-body-corporate-sector-group-scanz-aims-to-reign-in-rogues>

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## How to change?

- What are the benefits of a different approach?
- What can body corps do to change how they manage tensions, conflicts and dispute more proactively?




- Improved relationships within the body corp community
- Improved understanding of advice from outside professional
- Improved value for money when procuring services and benefits that meet the need of the body corp community
- Improved communication about when, by whom and what services are being undertaken by the body corp of the common property/areas

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## Way forward

- How can you get through all this complexity in a way that maintains relationships and provides the best solutions for owners, at the least cost?

A photograph showing two people shaking hands. The person on the left is wearing a red and blue plaid shirt. The person on the right is wearing a white shirt. The background is blurred, showing what appears to be an outdoor setting with greenery and a wooden structure.

No surprises

Diverse needs, financial resources and understanding of the body corp member's interests require different levels of communication

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## How can FairWay help?

- Facilitated meetings
  - Between individuals and the body corporate
  - Whole group issues
- Facilitated negotiations
- Dispute Resolution Board
- Mediation, adjudication and arbitration



We can help individuals solving issues with the body corp and vice versa by facilitating meetings

We can also facilitate meetings of the whole group to help reach consensus on issues of concern which includes helping chair meeting,s generate options and reach consensus to move forward

We can facilitate negotiations and contract performance with external providers

We can provide a Dispute Resolution Board process (see: [https://en.wikipedia.org/wiki/Dispute\\_board](https://en.wikipedia.org/wiki/Dispute_board)) and/or members for a Dispute Board to facilitate the successful completion of major contracts.

We can provide mediation, adjudication and arbitration services relating to weathertight, remediation, repair and rebuild strategies.




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## Facilitated meetings

- Providing a clear direction
  - problem solving
- Keeping healthy
  - stop fighting amongst each other
- Unpicking toxic and damaging relationships



It's a way to get things sorted out quickly – a facilitated meeting can be set up much more quickly than other processes.

It's less formal than going to Court – facilitation agreements are made with all parties being fully informed of all their rights and responsibilities, and there is a clear understanding of what the agreement means.

You decide between you what will happen – you don't get told what to do. When people contribute to the decision themselves, they are likely to be more committed to making it work than to a decision imposed by someone else.

It's confidential – no one else has to know what you said in your meeting.

**We can come to you and “see” what the issue might be and help with resolution “on the spot”.**

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## Value of independent facilitation

- It's a way to get things sorted out quickly
- It's less formal than going to Court
- You decide between you what will happen
- It's confidential

**Quickly**  
**Less formal**  
**You decide**  
**Confidential**

FairWay Resolution  
Tā te Hinengaro Tōkeke Whakatau

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## What can FairWay offer?

- Independence
- We will help you take a proactive approach
- We have experience doing this throughout NZ
- We've got specialist dispute panels, mediators, adjudicators and arbitrators if it all goes to custard

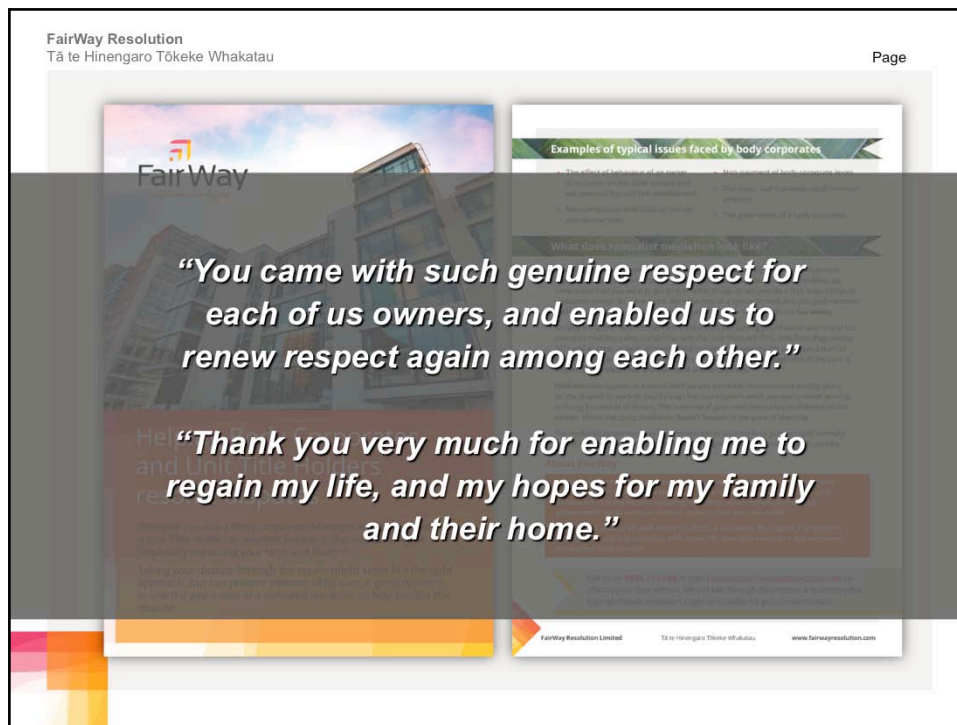


You are not alone and your concerns are probably similar to those of another body corp that we have been working with.

Our people understand the pressures that come with living in a community but we do not have the emotional barrier of dealing with our neighbours and in regard to our own home.

We can come to you and see, hear and understand the unique dynamics of your community.

# Earthquake strengthening Seminar 4 - Technical and Professional Input






Our expert building and construction facilitators can quickly help you gain valuable understanding and clarity about the following important questions:

1. What advice do individual body corps need? One size does not fit all!
2. Have you got the right consultants on board?
3. Have all options been considered for your particular situation?

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## Next Steps – let's talk



- Join us for further roundtable conversations 5.30pm on **either 9 or 30 November**
- Speak to our building and construction team: experienced and nationally recognised mediators, adjudicators and arbitrators



**Sign up interest – these working sessions will be limited to 20 people**

This is an opportunity to find out more about how you might use a more proactive process to resolving disputes affecting your body corporate.

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Tā te Hinengaro Tōkeke Whakatau

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## Profiles

- Bill Rainey – Dispute Resolution Practitioner  
<http://www.fairwayresolution.com/about-us/our-people/bill-rainey>  

- Dianne Johnson – Dispute Resolution Practitioner  
<http://www.fairwayresolution.com/about-us/our-people/dianne-johnson>  


Bill Rainey

**Dispute resolution practitioner**

Member (NZLS), Panel Mediator (AMINZ)

[bill.rainey@fairwayresolution.com](mailto:bill.rainey@fairwayresolution.com)

021387260

Expertise: Building and construction disputes, Commercial and private disputes

Bill is a barrister and commercial mediator with over 35 years commercial, organisational, property, environmental and family dispute resolution experience. He has also consulted with many senior leaders and teams in NZ and the UK, helping guide them through complex business transformation and change.

Bill is a member of the NZLS and mediation panel of AMINZ. He's been a Weathertight Homes Tribunal mediator, vice-chair and board member of LEADR NZ and Independent Hearings Commissioner (RMA). He co-authored the ADR section of DSL Environmental Law Handbook.

Dianne Johnson

**Dispute resolution practitioner**

[build-disputes@fairwayresolution.com](mailto:build-disputes@fairwayresolution.com)

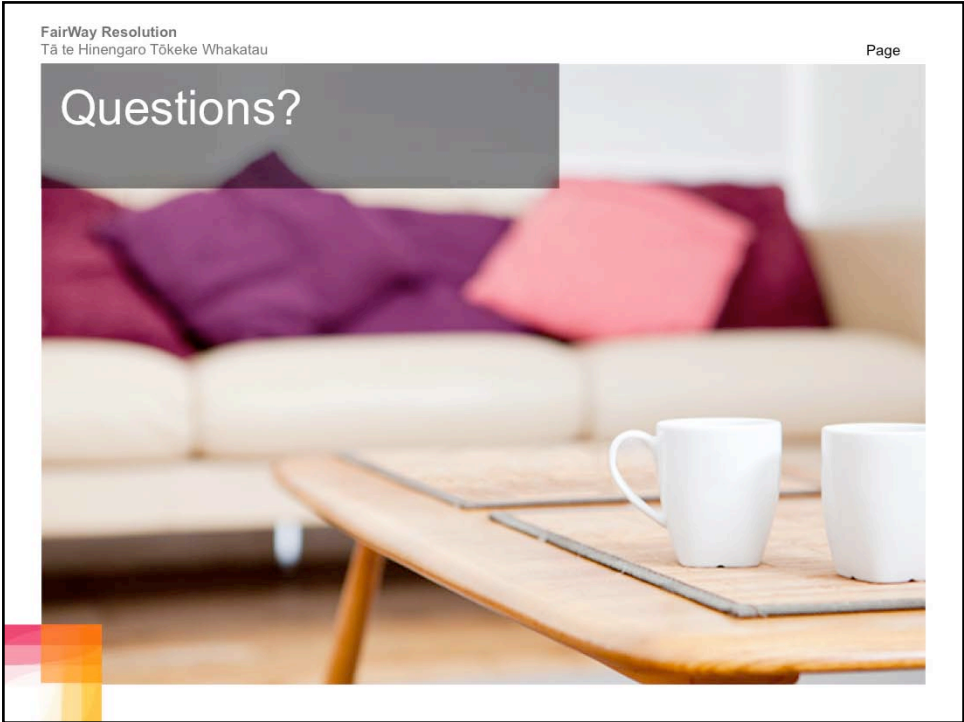
0272007944

Expertise: Building and construction disputes

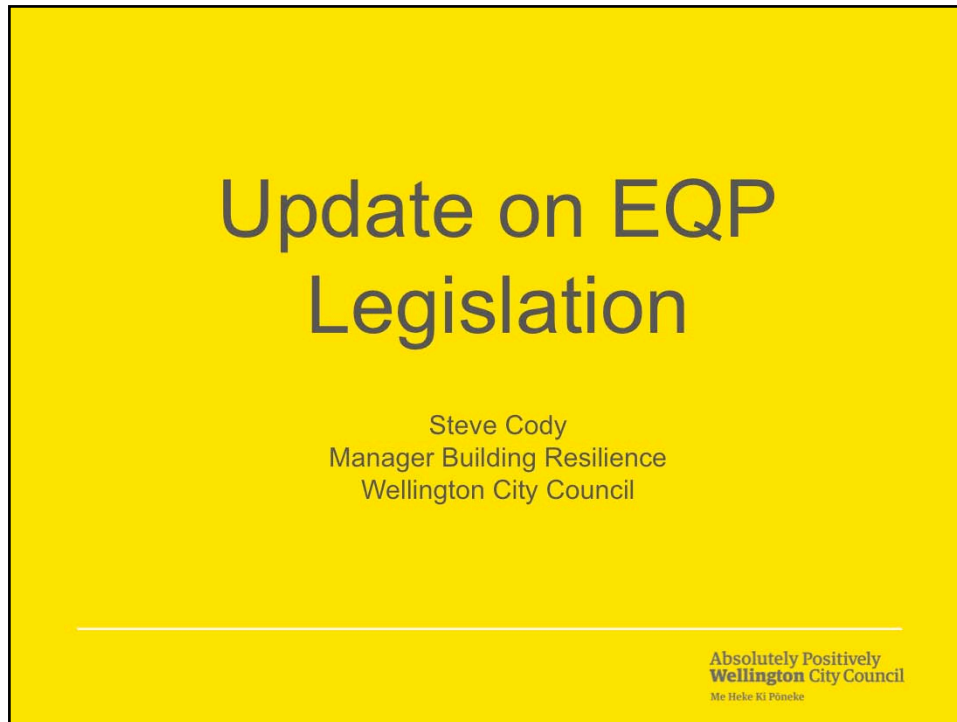
Dianne's focus is on residential and light commercial construction and in particular on building legislation, product installation and building failure. The majority of her work is related to helping to resolve disputes. This might be as simple as discussing a matter on site or as complex as acting as an expert witness in the High Court.

She is a member of the NZ Institute of Building Surveyors, Women in Construction, RICS, LEADR and Society of Construction Law. She is the inaugural winner of the NZIBS Innovation Award for a paper which she co-authored for the ICBEST International Conference (Aachen 2014). The paper entitled *A Weatherproofing Risk Matrix for Multi-Storey Buildings* was also published in BUILD Magazine in December 2014. She is passionate about the building industry and strive to help participants to get it right first time rather than having the need for third-party intervention.









## Intro

Manager Building Resilience and one of my responsibilities is the implementation of the Councils EQP policy. This policy has been in place since 2006.

Like all Councils, Wellington City Council was required under the Building Act 2004 to develop and implement an EQP policy.

There were recent changes to the Building Act and the existing council EQP policies are to be replaced by a single national policy.

The slide features a dark grey background with the title 'WHERE WE ARE AT' in yellow. Below the title is a bulleted list of three items. At the bottom right, there is a logo for Wellington City Council with the tagline 'Absolutely Positively' and the Māori phrase 'Me Heke Ki Pōneke'.

## WHERE WE ARE AT

- Legislation passed by Parliament
- Consultation- Regulations & Methodology closes 15 December 2016
- Implementation expected 1 July 2017

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Me Heke Ki Pōneke

As per the slide, the new legislation was signed off by Parliament earlier this year. Included in the legislation is an expectation that the new legislation will **not** take effect until supporting regulations are developed and implemented.

MBIE has been working on the development of the regulations and they are now consulting on the make up of the regulations and also the methodology for assessing EQP buildings.

The consultation process has been running since early September 2016 and closes 15 December 2016.

**EQP REGULATIONS**

**Regulations & Methodology to define how legislation will work. Includes:**

- Identification of EQP buildings
- Type of engineering assessments
- Criteria for accepting engineering assessments
- EQ rating categories
- EPB notices

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Wellington City Council  
Me Heke Ki Pōneke

Methodology refers to the draft methodology being developed by NZ Society Earthquake Engineers. Methodology will assist councils and engineers in the identification and assessment of EQP buildings.

Proposed process is different to process followed by WCC. WCC process looked at all buildings built before 1976. New process will focus on:

URM buildings, Buildings of any height built prior to 1935

Concrete /steel framed buildings 3 or more storeys built after 1935.

Some building types will be excluded- This is likely to include:

- timber framed buildings
- certain monuments
- Retaining walls not integral to a building
- bridges, wharves

Proposed councils use building information to identify potentially EQP buildings. Owners will be contacted advising them their building is potentially EQP and will have 12 months to provide info to support or refute this status. Info could include IEP, or DSA supplied by an engineer.

MBIE and NZSEE developing advice to; assist councils accepting engineering advice and set expectations with engineers on provide info to a TA. Aim is to improve consistency in the ID and decision making process.

MBIE looking to introduce a rating system for EQP buildings. Proposed there will be 3 types of notices for EQP buildings.

Buildings with a NBS rating 20- 33% NBS Buildings with a NBS rating of less than 20%

Buildings that were assessed under the current legislation.

## NEXT STEPS

- <http://www.mbie.govt.nz/info-services/building-construction/consultations/consultation-earthquake-prone-building-regulations-and-methodology?searchterm=earthquake>
- Upload information to MBIE
- Update notices
- Option to consult on strategic routes

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Me Heke Ki Pōneke

If you would like to view the proposals and also download the submission documents you can either go to the Ministry of Building Innovation and Employment website or copy the link on this slide into your computers web browser.

These slides will be uploaded to the Inner City Association and Body Corp Chair Groups websites so you can get a copy of the link.

Subject to the regulations being introduced:

WCC will upload its list of EQP buildings onto the proposed MBIE website.

Update existing notices to the new format. Where applicable timeframes will also be updated to reflect the maximum 15 year timeframe . This timeframe is applicable to the highest seismic zone. Lowest seismic zones will have 35 years.

Not expected that existing notices with timeframes that currently have less than 15 years will be extended . However expect existing notices with more than 15 years will be adjusted back to reflect the new maximum timeframe.

Identify and consult on high traffic routes. Waiting to see further advice from MBIE on this definition.

Decide if we will consult on strategic routes.

## Future EQ seminars

- **Seminar 5** – 22 Nov, discussion on new Building Act EQ Regulations and Methodology
- **Seminar 6** – April Expo day?
  - To fit in with 2017 World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures
- Feedback needed:
  - [national.president@bccg.org.nz](mailto:national.president@bccg.org.nz)
  - [innercityassociation@gmail.com](mailto:innercityassociation@gmail.com)
  - [info@wcc.govt.nz](mailto:info@wcc.govt.nz)