

REPORT 2
(1215/52/IM)

DRAFT EARTHQUAKE-PRONE BUILDINGS POLICY – REPORT BACK ON CONSULTATION

1. Purpose of Report

To report on the special consultative procedure carried out for the draft Earthquake-Prone Buildings Policy and to seek approval for the amended Policy to be referred to Council for adoption.

2. Executive Summary

The special consultative procedure has been undertaken for the draft Earthquake-Prone Buildings Policy as required by the Building Act 2004. 27 written submissions have been received and the Strategy and Policy Committee heard 11 oral submissions on 16 March 2006.

The purpose of the draft Policy is to ensure all earthquake-prone buildings are strengthened to at least meet the minimum prescribed standard (or be demolished) to reduce the potential of injury, loss of life or damage to other property in the event of an earthquake.

Issues raised in submissions include the following:

- Economic impacts and affordability
- Prioritisation for strengthening
- Timeline issues and uncertainties
- Adequacy of proposed LTCCP Heritage Incentive fund
- Approach to heritage protection
- Level of strengthening required.

Following consideration of matters raised in submissions some minor technical amendments and clarifications have been made.

Council has no discretion over the determination of whether a building is earthquake prone as the standard is defined by legislation. Accordingly Council's influence is focused upon ongoing control over the reasonable and consistent application of assessment procedures. Council will fund and have direct influence over the Initial Evaluation Procedure (IEP) process to ensure the reasonableness of any initial determination of earthquake-prone status.

The key point of Council policy discretion is the timeline for both conducting the assessments and setting the maximum timeframes to strengthen a building. Given Wellington's earthquake risk, it is proposed to complete the IEPs within three years.

The proposed maximum timeframes to strengthen a building identified as earthquake prone are 5, 10 and 15 years for high, medium and low priority buildings respectively. It is currently expected that around 270, 2356 and 948 buildings will fit the high, moderate and low priority criteria respectively.

While Council could consider longer maximum timeframes from a general perspective, the hearings process in step 6 of the draft policy provides a means to consider arguments for longer compliance periods on a case-by-case basis. This approach is considered more fair and effective than a blanket extension of maximum timeframes. The specific matters that may be considered for an extension in timeframe to complete strengthening work are contained in Attachment 2 of the Policy and include for example, recognition of heritage values and strengthening that may have already taken place.

The proposed eight-step procedure is a continuation of Council's past practice of working, wherever possible, with building owners to balance the achievement of public safety and heritage protection objectives at least economic cost.

The maximum timeframes are intended to prevent a long-term public safety risk. In order to minimise economic impacts on owners, the policy's preferred trigger for strengthening is at the time of undertaking other significant building work. This approach recognises that tenancy interruptions and making good is a major component of the cost of strengthening work.

The first review of this policy will take place no later than five years, by which time the IEPs will have been completed and the extent of the strengthening challenge for Wellington more accurately identified. No strengthening would have been required by the time of this review. Council will be able to reassess at this first review the proposed deadlines in the light of further information on the total economic costs.

3. Recommendations

It is recommended that the Committee:

- 1. Receive the information.*
- 2. Note that 27 written submissions were received during the special consultative procedure undertaken in accordance with the Local Government Act 2002 and Building Act 2004.*
- 3. Note 11 oral submissions were heard by Strategy and Policy Committee on 16 March 2006.*
- 4. Note that a Councillor workshop was held on 11 April 2006 to discuss key policy issues.*
- 5. Agree that issues raised by the written and oral submissions on the draft Earthquake-Prone Buildings Policy have been considered.*

6. *Note that final determination of heritage funding will not be known until LTCCP is adopted in June 2006.*
7. *Recommend to Council that it resolve to adopt the draft Earthquake-Prone Buildings Policy attached as Appendix 1, subject to any amendments, pursuant to the Local Government Act 2002 and Building Act 2004.*

4. Background

The Building Act 2004 requires Council to develop a policy to ensure all earthquake-prone buildings are strengthened to at least a minimum standard. The policy must state Council's approach, priorities and application to heritage buildings.

Council's has limited discretion over the determination of whether a building is earthquake prone as the standard is defined by legislation. Council's influence in this regard is focused upon ongoing control over the reasonable and consistent application of assessment procedures. Council will fund and have direct influence over the IEP process to ensure the reasonableness of any initial determination of earthquake-prone status.

Council agreed to consult on the draft Earthquake-Prone Buildings Policy on 8 December 2005 and the special consultative procedure was carried out between 1 February and 3 March 2006.

The consultation material was:

- publicly notified in The Dominion Post on 26 January, 16 February and 23 February
- provided directly to all of the identified stakeholders
- posted on Council's "Have Your Say" section of the website
- available at Council's libraries and service centres
- included in Building Consents and Licensing Services publication "On the Level" sent out to architects, developers and builders.

The consultation also included a feature article in The Dominion Post "Our Wellington" page and a summary of the draft Policy was sent to owners of all heritage buildings in the city. The draft Policy also received attention on TV1, TV3 and several radio stations.

27 written submissions were received and 11 oral submissions were heard on 16 March 2006. A Councillor workshop was held on 11 April 2006 to discuss key policy issues. Appendix 2 contains a summary of submission points and proposed responses. Generally there was support for the proposed policy.

5. Discussion

The following sections outline the main issues raised in the submissions and the officers' response.

5.1. Economic impacts on Wellington and affordability

10 submissions questioned the net positive economic benefits and affordability of the policy given the significant costs likely to be incurred. Costs listed included property devaluation, longer consenting processes and uncertainty awaiting the outcome of assessments. Ongoing uncertainties included the risk that strengthening in recent years to two thirds of NZS 1900 chapter 8 will fall below the new strength threshold. Affordability concerns were listed particularly with regard to low and medium income earners.

Officer's response is that legislators considered costs and benefits of the strengthening requirements on a nationwide basis prior to establishing the Building Act 2004 and Regulations. A cost benefit analysis was produced by the Department of Building and Housing. Central Government determined that public safety and disaster recovery benefits outweigh the costs of strengthening. Whether or not any particular building is earthquake-prone is a matter of legislative definition. Council's discretion can legally focus only on the assessment process timelines and not the need for strengthening.

Devaluation concerns result from market movements as a consequence of legislative definition, and not as a result of Council policy.

5.2. Prioritisation for strengthening earthquake-prone buildings

5 submissions raised issues around Table 1 of the draft policy and the prioritisation/timing of strengthening required for buildings identified as earthquake-prone.

The draft policy has been amended so that Table 1 provides a definition of "critical structural weaknesses" (CSW) and also that the "Critical Structural Weaknesses" Building Age and Condition category at Importance Level 3 ("Contain crowds or high value to the community") has been changed from low to medium priority.

Some submissions raised questions over the outcomes and adequacy of the Initial Evaluation Procedure (IEP). This procedure represents best available industry practice for the purposes of identifying potentially earthquake-prone buildings in a timely and cost effective manner. Step 3 of the policy process ensures, where appropriate, that more detailed information can be provided to enable a more accurate assessment. Past strengthening of buildings does not guarantee structural performance above the threshold level, but will be recognised in this process.

The IEP process will not generally identify buildings built post 1976 with potential critical structural weaknesses. As engineering knowledge expands, detailing deficiencies allowable under past structural design codes may be discovered. Investigation of specific buildings known to have these detailing deficiencies may indicate that they are affected to the extent that they are earthquake prone.

One submitter expressed concern over cost to owners of responding to Councils IEP in step 3 of the proposed process. The proposed policy provides for a reasonable level of assessment, with the IEPs, being fully Council funded. Only those owners of buildings

with marginal IEP scores will want to provide further information for consideration. It is not mandatory for owners to submit further information at this stage.

5.3. *Timeline issues and uncertainties*

Timing of strengthening deadlines in the draft Policy was largely based on a workshop held with engineers during the policy development process. Provision of a reasonable length of time to co-ordinate tenancy vacancies and construction details is the primary consideration.

The key point of Council policy discretion is the timeline for both conducting the assessments and setting the maximum timeframes to strengthen a building. Given Wellington's earthquake risk, it is proposed to complete the IEPs within three years.

The proposed maximum timeframes to strengthen a building identified as earthquake prone are 5, 10 and 15 years for high, medium and low priority buildings respectively. It is currently expected that around 270, 2356 and 948 buildings will fit the high, moderate and low priority criteria respectively.

While Council could consider longer maximum timeframes, the hearings process in step 6 of the policy provides a means to consider arguments for longer compliance periods on a case-by-case basis. This approach is considered more fair and effective than a blanket extension of maximum timeframes. The specific matters that may be considered for an extension in timeframe to complete strengthening work are contained in Attachment 2 of the Policy and include for example recognition of heritage values and strengthening that may have already taken place.

The proposed eight-step procedure is a continuation of Council's past practice of working wherever possible with building owners to balance the achievement of public safety and heritage protection objectives at least economic cost.

The maximum timeframes are intended to prevent a long-term public safety risk. In order to minimise economic impacts on owners, the policy's preferred trigger for strengthening is at the time of undertaking other significant building work. This approach recognises that tenancy interruptions and making good is a major component of the cost of strengthening work.

The first review of this policy will take place no later than five years, by which time the IEPs will have been completed and the extent of the strengthening challenge for Wellington more accurately identified. No strengthening would have been required by the time of this review. Council will be able to reassess at this first review the proposed deadlines in the light of further information on the total economic costs.

Past experience has shown a reluctance of some building owners to invest in upgrading their buildings. Of the earthquake risk buildings identified by the Council in the 1970's, 82 buildings still have not had their structural upgrading completed.

It is recommended that the policy note in step 2 of the procedure, Council's own three-year timeframe for proposed completion of the IEPs.

Concern that University houses used as offices will be prioritised by the policy as high priority, is resolved by citing the revision of the Importance level table in NZS 1170.1 These buildings will now fit the importance level 2 criteria and become medium priority with corresponding longer timeframes for strengthening.

5.4. *Heritage Buildings and LTCCP/funding adequacy*

A proposal for a new Heritage Incentive Fund of \$250,000 in 2006/07 and \$350,000 per annum thereafter was included in the Council's 2006/07 Long Term Council Community Plan. If agreed to, it would enable Council to assist heritage-building owners by providing grants for Heritage Management Plans and strengthening work. Concern was expressed in one submission that there is no certainty that any of the heritage funds will be available for strengthening purposes.

6 submitters wanted Council to provide more funding. Some submitters sought consideration of other funding approaches to both heritage and all buildings requiring strengthening including rates relief and waiving of consent fees. Council's preferred approach to financial support for public good reasons is to create a fund with clear criteria. This approach is more transparent and equitable than a range of fee and rates rebates.

As this funding proposal is included in the LTCCP, the final outcome will not be known until after this Policy is adopted. It is recommended that submissions received for this draft Policy relating to funding for heritage programmes be considered as part of the LTCCP process.

5.5. *Protection of heritage buildings*

Nine submitters discussed the heritage protection provisions of the policy. Points raised included requests for specific treatment of strengthening requirements, timeframe for heritage buildings and consideration of any previous strengthening. Heritage buildings pose a public safety risk in the same way as any other building, but there is greater public interest in maintaining these buildings. Strengthening work is required if the heritage fabric is to be preserved for future generations. A hearings process to consider requests for extensions of the time frames has been included as part of the proposed policy. This process balances the achievement of public safety and heritage protection objectives while seeking to minimise costs to owners.

Two submissions sought to extend application of heritage provisions from those buildings already listed in the District Plan or registered with the NZ Historic Places Trust to also cover buildings with likely heritage status under Council's agreed criteria. A significant number of buildings of this type exist with a list of 75 already identified by Council Planners, but not yet progressed through formal heritage listing procedures. The policy question is whether the policy can and should be used as a trigger for the identification of heritage status. It is proposed that Council's Built Heritage Policy and associated District Plan listing (refer Appendix Three, Attachment 3) be the sole process for initiating the heritage status of buildings. As the Built Heritage policy is implemented the number of earthquake-prone buildings with heritage status will therefore rise. A review of heritage listings is on the District Plan Team's work programme for 2007.

Submitters noted the potential misalignment of policy objectives to avoid earthquake risk and district plan heritage protection against demolition. A key question is the extent to which heritage is a community benefit that should be community funded. This is an LTCCP funding question that will be determined outside this policy.

5.6. *Level of strengthening required*

A number of submissions sought strengthening to levels higher than 34% of current standards. Council however can lawfully only require strengthening to 34% of the standard. Rewording of “greatest extent possible” in clause 3.2 is recommended to reflect this maximum required level, but to note that Council will encourage strengthening to higher levels.

Under the change of use clause (section 3.6) one submission sought definition of the “as nearly as is practicable” requirements of the Building Act to be defined as “67% of current standards”. The strengthening of buildings before their use is changed is dealt with under other provisions in the Building Act and falls outside the scope of this policy.

5.7. *Technical issues and rewording*

A number of minor technical and wording issues were identified in submissions including confusion over NZS1900 being a date rather than a reference to a design standard and the need to clarify section 3.4 applying to the cumulative value of multiple building consent applications. These amendments have been made.

5.8 *Information provision*

One submission suggested collaborative information gathering on ground conditions held by various consultancies be undertaken to enable better informed analysis of ground conditions which impacts on buildings performance. The Council could consider this as a future new initiative project.

A regional approach to policies was suggested in one submission. Meetings with our neighbouring Councils were held during the policy development phase. The scale and density of Wellington’s buildings in close proximity (less than 2k) to the fault line led to a different policy approach to the other Councils.

Earthquake risk information will be available on Land Information Memoranda. Council may need to consider web based information provision when the IEPs have been completed.

6. *Adoption of the Earthquake-Prone Buildings Policy*

The Building Act 2004 sets out that Council must adopt an earthquake-prone buildings policy by the end of May 2006.

The Policy will need to be reviewed at least every five years.

7. Conclusion

Following consideration of matters raised in submissions the draft Earthquake-Prone Buildings Policy, subject to some minor technical wording amendments and clarification is recommended for adoption.

Council's key point of discretion is the reasonableness of the timeframes set and not whether earthquake-prone buildings of any type, including heritage buildings, should be strengthened. The proposed eight-step procedure is a continuation of Council's past practice of working wherever possible with building owners to balance the achievement of public safety and heritage protection objectives at least economic cost.

Contact Officer: *John McGrath, Director, Policy*

Supporting Information

1) Fit with Strategic Objectives/Strategic Outcomes

This policy proposal aligns with the following Strategic Outcomes:

- (1) *More liveable*
- (9) *Safer*

2) LTCCP/Annual Plan reference and long term financial impact

Section 5.4 of this report outlines the LTCCP implications of implementing the Heritage provisions of this Policy. The LTCCP costs over 3 years of the Initial Evaluation Procedures were reported to Council in December 2005. The Policy relates to Annual Plan reference 1.4.2: Building Control and Facilitation

3) Treaty of Waitangi considerations

No specific Treaty of Waitangi considerations have been identified.

4) Decision-Making

This is not a significant decision as defined by the Wellington City Council Significance Policy.

5) Consultation

a) General Consultation

This report sets out the results of the consultation

b) Consultation with Maori

Specific consultation with Maori has not been undertaken.

6) Legal Implications

Legal advice was provided in the development of the draft Policy.

7) Consistency with existing policy

This report recommends new policy to replace the Building Safety Policy 1998.

EARTHQUAKE-PRONE BUILDINGS POLICY

EARTHQUAKE- PRONE BUILDINGS POLICY

MAY 2006

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Introduction

Wellington City is located in one of the most seismically active parts of New Zealand. Earthquakes are unpredictable events that occur infrequently and they can have significant consequences.

Earthquakes cannot be prevented, but their impacts can be mitigated. The Building Act 2004 (the 'Act') expresses the government's objective for earthquake-prone buildings to be strengthened to the appropriate seismic standards, or be demolished. It has an underlying objective to reduce the risk of injury, death or damage to other property that may result from the effects of an earthquake on buildings.

This Policy has been developed under the requirements set out in the Act. It outlines the Wellington City Council's approach to ensure earthquake-prone buildings are strengthened to the level required by the Act, or be demolished. This Policy replaces the Council's Building Safety Policy 1998.

Policy Objectives and Principles

POLICY OBJECTIVES

The objective of this Policy is to discharge the Council's responsibilities and obligations under the Building Act with respect to earthquake-prone buildings.

In doing so, strengthening work undertaken to comply with the Policy will reduce the potential for injury, loss of life and damage to other property in an earthquake. It will also reduce the potential social disruption and loss of productivity that may result from an earthquake.

It is the responsibility of building owners to ensure that buildings comply with the requirements of the Act. The Council can give no assurance or guarantee that any building is not earthquake-prone at any time, until approved strengthening work has been completed.

POLICY PRINCIPLES

This Policy has been developed considering the purpose and principles of the Act which seek to ensure that:

- people who use buildings can do so safely and without endangering their health
- buildings have attributes that contribute appropriately to the health, physical independence, and well-being of the people who use them
- buildings are designed, constructed, and able to be used in ways that promote sustainable development.

Key Policy components

ASSESSING EARTHQUAKE-PRONE BUILDINGS

Under Section 122 of the Building Act, the meaning of earthquake-prone building is

- (1) A building is earthquake-prone for the purposes of this Act if, having regard to its condition and to the ground on which it is built, and because of its construction, the building -
 - (a) will have its ultimate capacity exceeded in a moderate earthquake (as defined in the regulations); and
 - (b) would be likely to collapse causing –
 - (i) injury or death to persons in the building or to persons on any other property; or
 - (ii) damage to any other property.
- (2) Subsection (1) does not apply to a building that is used wholly or mainly for residential purposes unless the building –
 - (a) comprises 2 or more storeys; and
 - (b) contains 3 or more household units.

Moderate earthquake has the same meaning as section 7 in the Building Regulations 2005 where –

‘...moderate earthquake means, in relation to a building, an earthquake that would generate shaking at the site of the building that is of the same duration as, but that is one-third as strong as the earthquake shaking (determined by normal measures of acceleration, velocity, and displacement) that would be used to design a new building at that site.’

Buildings will need to be assessed to determine whether they are earthquake-prone. As a general guidance, **an earthquake prone building will have strength that is 33% or less of the seismic loading standard NZS 1170.5: 2004.**

STANDARD OF STRENGTHENING REQUIRED

Once a building has been classified as earthquake prone, strengthening work to ensure the building is no longer earthquake prone will require a building consent. When a building consent is sought then the Council will assess whether the level of strengthening is to the minimum levels required by law and will also encourage, but cannot require, strengthening to the higher levels, particularly for buildings serving a specific post disaster function.

The benefits for the building owner of higher levels of strengthening include:

- improved levels of safety for occupants, tenants and the public
- allowance for a change of use to occur to potentially better meet owner or market demand and realise a better return
- insurance against future changes in either the legislation or structural codes which may require higher levels of strengthening to be achieved
- leverage for improved insurance

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- reduced risk level of damage to the building, other properties in its proximity and lessen the impacts on business continuity.

There is also an advantage to the city in reducing the impacts for our community following an earthquake event by:

- preserving the fabric of our city, particularly heritage buildings
- lessening the economic impacts
- lessening the disruption of service.

PRIORITISATION TO STRENGTHEN EARTHQUAKE-PRONE BUILDINGS

Table 1 prioritises the order in which the buildings will be assessed and, if necessary, strengthened. The prioritisation seeks to balance the public risk associated with earthquake-prone buildings, the private cost of strengthening a building and the availability of people to undertake the strengthening work.

The prioritisation in Table 1 is determined by:

Importance Level – whether a building has a post-disaster function, serves a specific community purpose and is likely to cause injury or damage to other property. The complete list of Importance Levels, which is based on NZS 1170.0:2002 as revised in 2003, is included in Attachment 1.





Building Age and Condition – the likely structural performance of a building based on the structural code to which the building was designed or strengthened.

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Table 1: Priority for assessing and strengthening earthquake-prone buildings

IMPORTANCE LEVEL	BUILDING AGE & CONDITION		
	A Pre NZS1900 Chapter 8: 1965 Standard	B NZS1900 Chapter 8: 1965 Standard	C Critical structural weakness ₁
1: Low degree of hazard E.g. Farm buildings and isolated structures, fences, walls	Passive	Passive	Passive
2: Not in other levels	Moderate	Low	Low
3: Contain crowds or high value to the community E.g. Some schools, universities, medical centres	High	Moderate	Moderate
4: Highest with post-disaster functions E.g. Hospitals, civil defence centres, emergency shelters	High	High	High

Ranking:

 High priority	 Moderate priority	 Low priority	 Passive
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Notes: 1. Critical structural weakness is defined as individual buildings built post 1976 (NZS 4203 structural design code) with an identified detailing deficiency that renders it earthquake prone.

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MAXIMUM TIMEFRAME TO STRENGTHEN A BUILDING

Using the prioritisation established in Table 1, the maximum timeframes for undertaking strengthening work for a building that has been determined as earthquake-prone, are:

High priority	5 years
Moderate priority	10 years
Low priority	15 years
Passive	No maximum.

Buildings with earthquake-prone building notices issued under Section 66 of the Building Act 1991 will be reissued a notice under Section 124 of the Building Act 2004 requiring strengthening. Building work must begin within two years of the notice being issued.

When an application for building consent, or a series of building consent applications, relating to a building determined to be earthquake-prone is received from 1 June 2006 with a cumulative project value greater than one-third of the building's capital value (as defined in section 2(1) of the Rating Valuations Act 1998) for local government rating purposes the building owner will be required to undertake the structural design for strengthening and either include the:

- complete strengthening work in the building consent, or
- strengthening work to the area otherwise affected by the building work, and agree with Council on a programme to complete the strengthening works within the maximum timeframe set out above.

DEMOLITION OF EARTHQUAKE-PRONE BUILDINGS

Once a building is classified as earthquake-prone, the building owner may choose to strengthen it, or if appropriate, demolish all or part of the building. A demolition proposal may require a resource consent to be obtained from the Council.

CHANGE OF USE

The Building Act 2004 provisions regarding change of use are separate from the Act's provisions relating to earthquake-prone buildings.

When a change of use for a building occurs, then an upgrade of the structure of the building is required "as nearly as is reasonably practicable" with the Building Code. At this level of upgrade, a building will no longer be earthquake-prone.

The change of use provisions includes the establishment of a household unit where there was none before, and wherever there is a change in the classified use as defined in Schedule 2 of the Building (Specified systems, change of use, and earthquake-prone buildings) Regulations 2005.

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HERITAGE BUILDINGS

A heritage building includes all buildings listed as a heritage building in the Wellington City District Plan and/or those registered by the New Zealand Historic Places Trust as detailed in Attachment 3.

The Building Act requires that Council *must* ensure all earthquake-prone buildings are strengthened to at least meet the minimum prescribed standard (or be demolished) to reduce the potential of injury, loss of life or damage to other property in the event of a moderate earthquake. This Policy's approach to heritage buildings is to reduce the impact of any strengthening work required on the heritage fabric of the building so that for earthquake-prone heritage buildings:

- strengthening is required so that it is no longer earthquake-prone
- the maximum timeframes will apply, just as it does to all buildings
- a management plan outlining how strengthening will preserve the heritage fabric of buildings is to be provided by the owner as part of any building consent application for strengthening work
- demolition is not encouraged.

In addition, a new heritage incentive fund of \$250,000 in year one and \$350,000 a year thereafter is proposed as part of the Council's 2006/07 Long Term Council Community Plan for a range of heritage-related projects, including those that are required as a result of the adoption of the proposed Policy.

INFRASTRUCTURE

The management of Council's infrastructure, including roads, tunnels and water reservoirs, is also relevant to this Policy. Currently, Asset Management Plans set out how Council will meet its obligations under the Civil Defence and Emergency Management Act 2002, which places a duty on a local authority to plan and provide for civil defence emergency management within its district. It must also ensure that it is able to function, even at a reduced level, after an emergency such as an earthquake.

In addition, all works carried on infrastructure comply with the risk analysis, best practice and relevant standards as set out in the Asset Management Plan.

Other network utility operators are similarly covered by asset management plans which include provision for upgrading.

Identification of Earthquake-Prone Buildings

The following sets out the procedure Council will use to establish the earthquake-prone status of all buildings.

Step 1. Desk top review

A desk top review of Council files will be undertaken by Council to assess which buildings could be earthquake-prone. Buildings that will *not* require further assessment include those:

- designed or strengthened to the 1976 NZS 4203 and subsequent codes, unless they have a critical structural weakness
- isolated structures unlikely to collapse causing injury, death or damage to other property (refer Section 122 (1)(b) of the Building Act 2004)
- used wholly or mainly for residential purposes, unless the building comprises 2 or more storeys and contains 3 or more household units (refer Section 122(2) of the Building Act 2004)
- Council and other network utility operator infrastructure covered by an Asset Management Plan.

From the information gathered in this review, a database of potentially earthquake prone buildings will be established.

Step 2. Initial evaluation process

The Council will use the Initial Evaluation Process (IEP) set out in the New Zealand Society for Earthquake Engineering *Recommendations for the Assessment and Improvement of the Structural Performance of Buildings in an Earthquake* to determine the structural performance score of potentially earthquake prone buildings in relation to NZS 1170.5: 2004. Buildings with a score of less than 34 are considered to fall within the definition of an earthquake-prone building.

Buildings classified as High Priority after Step 1 above will be evaluated first, followed by those classified as Moderate and then Low Priority.

Council will, at its own cost, use appropriately qualified engineers, to undertake the evaluations proposed over a three year period.

Step 3. Advise of IEP Outcome

As the IEP evaluations are completed, the Council will write to owners of buildings with an IEP score of less than 34 advising that their building is potentially earthquake prone. The letter will also note any heritage listing and the consequent need for a Management Plan to preserve the heritage fabric of the building. Owners will then have six months to consider this advice and provide any additional information about factors that may affect the strength of the building or a detailed assessment of the structure. Relevant information could include:

- construction materials and detailing
- regularity of the building in both plan and elevation
- the type of soil the building is founded on.

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Council will use appropriately qualified engineers to review this information. Where the Council is satisfied that the building is not earthquake prone, the recorded status of the building will be changed and the owner will be advised of the Council's decision.

Step 4. Issue notice to strengthen building

Where, after consideration of any further information provided in Stage 3 above, the Council is satisfied that the building is earthquake prone it will advise the owner of the classification and issue a written notice under Section 124 of the Building Act 2004 requiring a building consent to be obtained and the structural strengthening work to be undertaken. As required by the Building Act, a copy of this notice for any building registered under the Historic Places Act 1993 will be forwarded to the NZ Historic Places Trust.

Step 5. Dispute of earthquake-prone classification of building

Should an owner dispute the classification of their building as earthquake prone, application for a 'Determination' may be made to the Chief Executive of the Department of Building and Housing. As set out in the Building Act 2004, the determination of the Chief Executive is binding on the Council.

Step 6. Request by building owner for extension in timeframe to complete work

The Council may consider individual submissions from owners through a hearing process requesting a longer timeframe (than set out in section 3.4) to complete the strengthening work. This may be appropriate in special circumstances where the building owner is unable to comply with the requirement to strengthen the building within the maximum Policy timeframes.

The hearing process will take the purpose and the relevant principles of the Building Act into consideration. It will consider the appeal of the building owner against the Council's requirement to reduce the risk to the public in the event of an earthquake. Specific matters that may be considered are set out in Attachment 2. The hearings will be established by Council and administrative costs to the building owner may apply.

Should the building owner be permitted to have a longer timeframe to strengthen the building, the Council may take action to ensure the public is aware of the earthquake-prone status of the building and the risk associated with occupying the building. This may include placing a notice on the building or putting up a hoarding or fence around the building. Any notice will be reissued to reflect amended agreed timeframes.

Step 7. Updates

As building consents for structural strengthening are received and the strengthening work completed, the database will be updated to reflect the status of the building as *not* earthquake prone.

Step 8. Enforcement action

If structural upgrading work has not been undertaken in accordance with the notice issued at Step 4, the Council will consider enforcement actions under the Building Act.

Availability of Earthquake-Prone Building Information

The database of potentially earthquake prone buildings is publicly available upon request and includes information that is already provided in Land Information Memoranda. The database will provide a summary of the data and also the current status of the building as potentially earthquake prone or earthquake prone. It will note whether this information is pending an outcome of an assessment to determine its correct status.

The information will continue to be included in property reports and Land Information Memoranda.

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Attachment 1

AMDT
No. 2
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2003

Importance Levels for Building types – New Zealand Structures

TABLE 3.2
IMPORTANCE LEVELS FOR BUILDING TYPES – NEW ZEALAND STRUCTURES

Importance level	Comment	Examples
1	Structures presenting a low degree of hazard to life and other property	Structures with a total floor area of <math><30\text{ m}^2</math> Farm buildings, isolated structures, towers in rural situations Fences, masts, walls, in-ground swimming pools
2	Normal structures and structures not in other importance levels	Buildings not included in Importance Level 1, 3 or 4 Single family dwellings Car parking buildings
3	Structures that as a whole may contain people in crowds or contents of high value to the community or pose risks to people in crowds	Buildings and facilities as follows: (a) Where more than 300 people can congregate in one area (b) Day care facilities with a capacity greater than 150 (c) Primary school or secondary school facilities with a capacity greater than 250 (d) Colleges or adult education facilities with a capacity greater than 500 (e) Health care facilities with a capacity of 50 or more resident patients but not having surgery or emergency treatment facilities (f) Airport terminals, principal railway stations with a capacity greater than 250 (g) Correctional institutions (h) Multi-occupancy residential, commercial (including shops), industrial, office and retailing buildings designed to accommodate more than 5000 people and with a gross area greater than 10 000 m ² (i) Public assembly buildings, theatres and cinemas of greater than 100m ² Emergency medical and other emergency facilities not designated as post-disaster Power-generating facilities, water treatment facilities and other public utilities not designated as post-disaster Buildings and facilities not designated as post-disaster containing hazardous materials capable of causing hazardous conditions that do not extend beyond the property boundaries

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4	Structures with special post-disaster functions	<p>Buildings and facilities designated as essential facilities</p> <p>Buildings and facilities with special post-disaster function</p> <p>Medical emergency or surgical facilities</p> <p>Emergency service facilities such as fire, police stations and emergency vehicles garages</p> <p>Utilities or emergency supplies or installations required as backup for buildings and facilities of Importance Level 4</p> <p>Designated emergency shelters, designated emergency centres and ancillary facilities</p> <p>Buildings and facilities containing hazardous materials capable of causing hazardous conditions that extend beyond the property boundaries</p>
5	Special structures (outside the scope of this Standard – acceptable probability of failure to be determined by special study)	<p>Structures that have special functions or whose failure poses catastrophic risk to a large area (e.g. 100 km²) or a large number of people (e.g. 100 000)</p> <p>Major dams, extreme hazard facilities</p>

Source: Standards NZ, Structural design actions Part 0: General principles, AS/NZS 1170.0:2002, Table 3.2

Note: There are no importance Level 5 buildings in the Wellington City area.

APPENDIX ONE

Attachment 2

Hearings Process

Specific matters that may be considered for an extension in timeframe to complete strengthening work

- whether people who use the building can do so safely
- importance of ensuring that each building is durable for its intended use
- importance of recognising any special traditional and cultural aspects of the intended use of the building
- costs of the building (including maintenance) over its whole life
- importance of standards of building design and construction in compliance with the building code
- need to provide for the protection of other property from the risk of physical damage
- need to facilitate the preservation of buildings of significant cultural, historical , or heritage value
- importance level of the building
- building structure and strength i.e. the code that was used to design and construct the building
- special characteristics of the building e.g. heritage or historic
- whether the building has already been strengthened along with the level it was strengthened to and when the work was done
- financial implications e.g. viability
- ramifications if the building were to be demolished rather than strengthened e.g. loss of heritage for future generations
- availability of the appropriate people to do the work.

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Attachment 3

Definition of Heritage Building

- Any building listed as a historic heritage item, is part of a heritage area or identified as a cultural site of significance to tangata whenua in any district or regional plan prepared under the Resource Management Act 1991.
- Any building within any registered historic place, historic area, wahi tapu, or wahi tapu area under the Historic Places Act 1993.
- Any building that is an archaeological site within the meaning of the Historic Places Act 1993.
- Any historic building or Actively Managed Historic Place listed in a Historic Resources Strategy or Conservation Management Strategy and Conservation Management Plan prepared under the Conservation Act 1987.
- Any historic building listed in a reserve management plan prepared under the Reserves Act 1977.
- Any building within a reserve established by the Maori Land Court under the Te Turi Whenua Maori Land Act 1993 for historic and cultural purposes
- Any building of importance to tangata whenua that has listed in an iwi management plan.
- Any structures or buildings associated with a historic cemetery or memorial.
- Any building managed for heritage purposes by agencies such NZHPT, Ministry of Culture and Heritage, Department of Conservation, and local authorities
- Any building or structure that is subject to a heritage order, heritage covenant or other protective covenant.

SUMMARY OF SUBMISSIONS

	Submitter • Submission Summary	Response	Issue Group*
		Note: * Refers to sections 5.1 – 5.8 of the report text	
1	Ian Cassells		
	• Increased costs without offsetting benefits.	Costs and benefits considered by central government. Consent processes have statutory timeframes.	1
	• Lengthening of consent processes.		3
	• Negative reputation impact on Wellington.		
	• Heritage is a community benefit and should be publicly funded. Rates relief suggested.	Annual plan question	4
2.	Anton Fischer		
	• Affordability concerns.	Central government has determined that public safety improvements outweigh affordability concerns.	1
3.	Frances Kemble Welch		
	• Potentially unfair allocation of strengthening costs under the Unit Titles Act. Wait until review of Unit Titles Act before requiring strengthening.	Legislated timetable does not provide for such a delay.	
4.	Mt Victoria Residents Association		
	• General support for policy.		
	• Concern over responsibility for costs when buildings are held as company shares or unit titles on common land with a body corporate.	This is apportioned by the rules of the company/body corporate and falls outside the scope of this policy	
	• Unclear whether the Heritage Incentive fund will be adequate.	Noted. Annual plan question.	4
	• Concerned that comprehensive costs and benefits or policy have been considered.	Central government has determined that public safety improvements outweigh affordability concerns.	1
5	Steve Dwyer		
	• Concern over adequacy of the Oaks Building.	Followed up as a complaint	

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6.	Kerryn Pollock		
	<ul style="list-style-type: none"> Owner of flat in 12 dwelling 3-storey block. Concern over costs of strengthening and seeks fund to assist low-medium income owners along with extended timeframes 	Central government has determined that public safety improvements outweigh affordability concerns.	1 & 3
	<ul style="list-style-type: none"> Heritage fund insufficient. 	Annual plan question	4
7.	Hannah's Factory Body Corporate (Elizabeth Crayford on behalf) Represents 30 separately unit titled apartments.		
	<ul style="list-style-type: none"> Seeks confirmation that strengthening in 1997-8 will be deemed sufficient and notes uncertainty for owners until the IEP confirms the EQPB status. 	Uncertainty noted. Buildings previously strengthened to NZS1900 Chapter 8 require further assessment	
	<ul style="list-style-type: none"> No timeline for completion of desktop and IEP assessments, with uncertainties in the meantime. Set timelines. 	Recommend that 3 year IEP time frame be noted in policy	3
	<ul style="list-style-type: none"> No certainty that the Heritage Fund will be available for strengthening purposes. 	Noted	4
	<ul style="list-style-type: none"> Council should fund any heritage management plan and its implementation. 	Annual plan question	4
	<ul style="list-style-type: none"> Misalignment of policy's strengthening requirements and resource consent conditions that may prevent such work. Council financial assistance sought. 	Noted. Extreme ultimate position is a mothballed building	5
8	NZ Historic Places Trust		
	<ul style="list-style-type: none"> Partial support. 		
	<ul style="list-style-type: none"> Seeks a wider definition of Heritage Building than the policies definition of all District Plan listed and NZHPT registered buildings. 	Policy question is whether Council wishes to use the Policy as a further trigger to completing the heritage status definition process otherwise undertake through the district plan.	5
	<ul style="list-style-type: none"> Supports increased heritage funding. 	Annual plan question	4
	<ul style="list-style-type: none"> Seeks removal of any previously strengthened building from 	Not lawful	2

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	earthquake prone status.		
	<ul style="list-style-type: none"> Seeks greater recognition of importance of heritage buildings. 	Primarily a District Plan process.	5
	<ul style="list-style-type: none"> Seeks a wider range of options for dealing with EQPBs to avoid demolition including: restricting public access, warning notices. 	Council's approaches are limited to those allowable under the Building Act to improve the strength of a building beyond the threshold level. As the use and occupancy of a building can influence the loadings the building must carry, owners have some flexibility in meeting the criteria.	5
	<ul style="list-style-type: none"> Seeks further flexibility with respect to ways to strengthen including flexibility in applying Building Act requirements. 		5
9	NZ Anglican Church Board		
	<ul style="list-style-type: none"> Confirmation required that the Building Act, Regulations, NZS1170.0:2002 and NZS1170.5:2004 apply on a national basis and that the priority assessment are national standards. 	Act, regulation and structural design standards apply nationally, although with some regional variation due to New Zealand's division into a number of seismic zones for determination of new building standards.	
	<ul style="list-style-type: none"> Confusion over NZS1900 being a date. 	Clarify in text	
	<ul style="list-style-type: none"> Section 3.7 of Policy is inconsistent with "proactive" approach recommended in statement of proposal. 	Policy is a balance of both proactive and "treat equally" approaches	
	<ul style="list-style-type: none"> Concern over potential strengthening costs / building value decline / insurance costs and therefore increased risk of sale to a developer. 	Central government has determined that public safety improvements outweigh affordability concerns.	1
	<ul style="list-style-type: none"> Heritage fund insufficient. 	Noted	4
	<ul style="list-style-type: none"> Confusing that "critical structural weaknesses" should be the lowest priority. 	Explain CSW. CSW under Importance level 3 should rise from low to medium priority.	2
	<ul style="list-style-type: none"> Proactive approach sought to heritage buildings as noted in statement of proposal. Further details sought on how demolition will be discouraged 	Heritage Fund proposed as part of LTCCP. A management plan outlining how strengthening will preserve the heritage fabric will be required as part of any building consent application.	5
10	Body Corporate 124 Wakefield Street		
	<ul style="list-style-type: none"> The heritage status of this building considered unjustified. 	A separate planning matter	5
	<ul style="list-style-type: none"> Greater heritage funding required. 	Annual Plan concern	4
	Uncertainty over the process and consideration of previous strengthening completed.	Uncertainty noted. Previous strengthening considered in Step 3 of the process, but not a guarantee of adequate structural performance	4
	<ul style="list-style-type: none"> Concern over cost to owners of responding to Council's IEP. 	Noted. Response by owners is not mandatory	2

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11	Alan Ritchie as owner of one Whitmore Apartment and as Whitmore Apartments Body Corporate Secretary		
	<ul style="list-style-type: none"> Concern over rule changes previously allowing strengthening to two thirds of NZS1900 chapter 8 requirements. 	New threshold strength levels have been set by legislation	2
	<ul style="list-style-type: none"> Earthquake risks not weighed against other everyday risks. 	Central government has determined that public safety improvements outweigh affordability concerns.	1
	<ul style="list-style-type: none"> Potential widespread de-valuation of buildings. 		1
	<ul style="list-style-type: none"> Seeks phased approach. 	Phased approach is proposed.	3
	<ul style="list-style-type: none"> Council should either allow demolition of heritage structures or fully fund their strengthening. 	Heritage Fund proposed as part of LTCCP. A management plan outlining how strengthening will preserve the heritage fabric will be required as part of any building consent application.	4
12	Capital Properties (NZ) Ltd.		
	<ul style="list-style-type: none"> Romulus submission (13 below) is made on behalf. 		
13	Dr Peter Johnstone, Romulus Consulting Group		
	<ul style="list-style-type: none"> 2,500 is considered an over-estimate of potentially EQPBs. 	3825 buildings are currently identified as requiring further assessment. It is expected the number will fall as a result of the IEPs.	2
	<ul style="list-style-type: none"> Concern that any “force based” assessment of ultimate capacity will over-estimate number of EQPBs, with unnecessary economic impacts. 	Agreed. IEP uses displacement measure.	2
	<ul style="list-style-type: none"> Earthquake risks are not weighed against other risk factors. 	Central government has determined that public safety improvements outweigh affordability concerns.	1
	<ul style="list-style-type: none"> Buildings are typically stronger than engineers calculate. 	Agreed. The IEP process is designed to factor this in.	2
	<ul style="list-style-type: none"> Seeks limitation of possible EQPBs to collapse hazard types, including “soft storey”, torsional and open-ground-floor buildings. 	The IEP scores these potential failure mechanisms as part of the assessment. Code comparison studies indicate that other buildings may also be earthquake prone.	2
14	NZ Property Council, Wellington Branch		
	<ul style="list-style-type: none"> Concern over interpretation of “greatest extent possible” in section 3.2. 	Proposed rewording	7
	<ul style="list-style-type: none"> Section 3.4 needs to more specifically refer to EQPBs only. 	Proposed rewording	7

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15	Margaret Bryson		
	<ul style="list-style-type: none"> Concern that buildings not posing significant risk may be listed. 	Proposed procedure is best available practice and includes methodology to ensure only those buildings likely to pose a risk are listed.	2
	<ul style="list-style-type: none"> Concern over commercial impacts, particularly on apartment market. 	Economic impacts have been assessed by DBH as part of the legislation development.	1
	<ul style="list-style-type: none"> Seeks focus on large, serious risk EQPBs. 	Desktop and IEP assessment are designed to provide this focus.	2
	<ul style="list-style-type: none"> Seeks Council action at building consent stage only. 	Proposed policy is largely passive, at building consent stage. Timeframes provide a longstop measure.	3
16	Kevin & Margaret Taylor		
	<ul style="list-style-type: none"> Policy is noted 		
17	Stuart Jameson		
	<ul style="list-style-type: none"> Policy is noted 		
18	Bruce Mitchell		
	<ul style="list-style-type: none"> Insufficient information provided by Council for a well-informed submission. 	No detail of information gaps is given. The consultation procedure is considered to have been robust. Refer to section 4 of the report.	
19	Dunning Thornton Consultants Ltd		
	<ul style="list-style-type: none"> Supports policy initiative to improve safety and allow reasonable compliance time. 	Noted	
	<ul style="list-style-type: none"> Recommends 70% of NZS1170.5 as the minimum-strengthening standard. 	Council cannot require strengthening beyond 33% and can only provide encouragement beyond this point.	6
	<ul style="list-style-type: none"> IEP not considered a robust methodology for unusual or irregular buildings. 	Noted and understood. The policy allows for owners to provide further information in response to any unfavourable assessment.	2
	<ul style="list-style-type: none"> Collaboration of consultants to provide historical testing records to develop a map of ground conditions is suggested. 	Suggest that WCC follow up as an Annual Plan initiative.	8
	<ul style="list-style-type: none"> Suggests strengthening required where a building consent proposes more than a 5% addition to the building mass. 	A possible point, but would be administratively complex to define and implement. Most of these	2

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		projects will be caught by the proposed project value criteria or by other provisions of the Building Act.	
	<ul style="list-style-type: none"> Suggests a regional approach to policies. 	Regional meeting took place during the policy development phase.	8
20	Holmes Consulting Group		
	<ul style="list-style-type: none"> Concern over adequacy of both desktop review and IEP process. Additional consideration needed of: <ul style="list-style-type: none"> Material type and detailing. Pre-cast concrete cladding & other building appendages. Performance of pre-cast concrete stair systems. Precast hollow core floors. 	IEP is best available professional practice to date and has been tested and refined to make more robust. Some of the newer buildings with detailing deficiencies will only be found with specific research. The CSW category has been included to cover these buildings.	2
	<ul style="list-style-type: none"> Council advocacy is sought to require strengthening of buildings with special post disaster functions (Level 4 buildings) to greater than 33%. 	Agreed. Rewording is proposed to clarify this intention	6
	<ul style="list-style-type: none"> Need to clarify “to the greatest extent possible” clause in 3.2, with a quantified definition. 67% of the strength of new building requirements is recommended. Uncertainty is noted however over whether Council can require strengthening beyond 33% of the current code. 	Rewording recommended to note encouragement, but not requirement, of strengthening beyond legal minimums.	6
	<ul style="list-style-type: none"> Strengthening timetable is supported except for a recommended low priority be given to buildings already strengthened under earlier legislation except where this strengthening was to only two thirds of NZS1900 Chapter 8. 	Proposal assigns a low priority to these buildings unless they are importance level 3 or 4.	2
	<ul style="list-style-type: none"> Change of use provisions: quantified definition needed of “as nearly as is reasonably practicable to the strength required for a new building”. 67% of current code is suggested. Some further flexibility is suggested for owners facing severe hardship. 	Change of use is covered by other provisions in the Building Act and falls outside this policy.	7
	<ul style="list-style-type: none"> Flexible approach to heritage buildings is proposed. 	Council has no legal authority to provide dispensations for heritage buildings beyond extension of timeframes	5
	<ul style="list-style-type: none"> Free web-based public availability of EQPB status is suggested along with public signage where no strengthening works are proposed. 	Already available on LIMs. Consider in future reviews. Possible only after issue of notice to strengthen.	8
21	Institution of Professional Engineers of NZ (IPENZ)		
	<ul style="list-style-type: none"> Policy intentions and proactive approach is supported. 	Noted	

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	<ul style="list-style-type: none"> Clarify “ the level of strengthening is to the greatest extent possible” 	Agreed. Rework	6
	<ul style="list-style-type: none"> Encourage strengthening above the required 33% of the current codes. 	Agreed. Rework	7
	<ul style="list-style-type: none"> Rework 3.4 to prevent owners splitting projects into separately consented work parcels to fall below the one third of rateable value requirement. 	Agreed. Rework	
	<ul style="list-style-type: none"> Council may need to encourage an agreed programme for work completion. 	Policy establishes a deadline only	
	<ul style="list-style-type: none"> Consider imposition of usage restrictions as an alternative to intrusive strengthening of heritage buildings. 	Owners may choose to change the use of a building to one with lower seismic loadings but the Council has no authority to require this.	5
	<ul style="list-style-type: none"> Make EQPB status available in Land Information Memoranda. 	Agreed	8
22	Telecom		
	<ul style="list-style-type: none"> Assessments of exchanges with a post disaster function are available to Council. 	Noted	
23	The Architectural Centre		
	<ul style="list-style-type: none"> 33% strengthening requirement is too low given Wellington’s seismicity. 	Council cannot by law require strengthening beyond 34%.	6
	<ul style="list-style-type: none"> Council needs to consider fire risk associated with Earthquakes as part of any assessment. 	There is no legal authority for Council to require this.	
	<ul style="list-style-type: none"> Definition of heritage buildings limited to those already listed is too narrow given number with merit but as yet unlisted due to resourcing constraints. 	Inclusion of heritage buildings not yet subject for formal listing procedures may not be defensible.	5
	<ul style="list-style-type: none"> Council should support research into appropriate strengthening techniques for heritage buildings. 	Noted	5
	<ul style="list-style-type: none"> \$350,000 heritage fund is inadequate. 	Annual Plan question	4
	<ul style="list-style-type: none"> Waive building consent fees for EQ strengthening work including heritage and all other structures. 	A heritage fund allows Council support to be made more transparent and equitable.	4
	<ul style="list-style-type: none"> Provide rates relief for all EQPBs. 		4
	<ul style="list-style-type: none"> Consider lengthening timeframes where buildings are unoccupied. 	Step 6 provides for consideration of longer timeframes	5

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		in these circumstances.	
24	Richard Burrell		
	<ul style="list-style-type: none"> Require priority-building owners to provide EQPB assessments at own cost. 	Council seeks to complete IEPs itself to ensure consistency of approach.	6
25	Greg Szakats (AC Consulting)		
	<ul style="list-style-type: none"> Strengthening to 70% of NZS1170.5 recommended, with some flexibility in certain (unstated) circumstances and never less than 50%. 	Council cannot by law require strengthening beyond 34%.	6
26	Colin Pannell (Oriental Bay Trading Co Ltd - Owner of Press House, 82 Willis St).		
	<ul style="list-style-type: none"> Potentially significant financial impact on apartment owners, with demolition likely to be preferred over a \$2-3m cost. 	Legislation has determined that public safety improvements outweigh affordability concerns.	1
	<ul style="list-style-type: none"> Policy is at odds with heritage protection policies. 		5
	<ul style="list-style-type: none"> Details sought on: <ul style="list-style-type: none"> Percentage of heritage contribution. Extent of heritage loss Council will tolerate. Extent of dispensations to avoid intrusive works. 	Heritage Fund proposed as part of LTCCP. A management plan outlining how strengthening will preserve the heritage fabric will be required as part of any building consent application.	5
	<ul style="list-style-type: none"> Allow non-compliant EQPBs to be used for non-residential purposes. 	No legal ability as building is still EQP	5
27	Victoria University		
	<ul style="list-style-type: none"> Affordability concerns resulting from preliminary assessment work identifying 5 large buildings costing \$5m in total and 30 houses used as offices requiring work costing \$100,000 per building. 	Central government has determined that public safety improvements outweigh affordability concerns.	1
	<ul style="list-style-type: none"> A five-year time requirement is too tight given extent of other works on campus. 	Step 6 of the process allows some timeframe flexibility	3
	<ul style="list-style-type: none"> Given similar usage density of houses used as offices, it is suggested these should be exempt. 	Noted. The citing of the revised importance table of NZS1170.1 will reprioritise these 'houses'	6

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INFORMATION PROVIDED IN THE SPECIAL CONSULTATIVE PROCEDURE

- **SUMMARY OF INFORMATION**
- **STATEMENT OF PROPOSAL**
- **CONSULTATION PLAN**

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SUMMARY OF INFORMATION IN THE STATEMENT OF PROPOSAL

The Building Act 2004 requires Council to adopt an earthquake-prone buildings policy to ensure all earthquake-prone buildings are strengthened to at least meet the minimum prescribed standard (or be demolished) to reduce the potential of injury, loss of life or damage to other property in the event of a moderate earthquake. This policy will have to be reviewed every five years.

Wellington City is located in one of the most seismically active parts of New Zealand and accordingly the draft Policy proposes a largely active approach to ensure buildings are appropriately strengthened, or if appropriate, demolished.

This Policy applies to all the buildings in Wellington City, except those used wholly or mainly for residential purposes unless they are comprised of two or more storeys *and* contain three or more household units.

The proposed Policy sets out

- the priorities for assessing and strengthening earthquake-prone buildings, which is based on their building type and use (for example, whether they serve a post-disaster function) and the building's age and condition
- the maximum timeframes required to undertake the upgrading work
- that owners of earthquake-prone listed heritage buildings must provide a management plan outlining how upgrading work will preserve the building's heritage fabric
- the procedure Council will undertake to determine the earthquake-prone status of buildings.

In addition, a new heritage incentive fund of \$350,000 a year will be proposed as part of the Council's 2006/07 Long Term Council Community Plan for a range of heritage-related projects, including those that are required as a result of the adoption of the proposed Policy.

The Council is keen to know what ratepayers and stakeholders think about the proposed Policy. The full Statement of Proposal to make the Policy is attached to this Summary of Information along with a submission form. It is also available online at www.wellington.govt.nz

Submissions open 1 February 2006 and close at 4pm 3 March 2006.

APPENDIX THREE

STATEMENT OF PROPOSAL TO MAKE THE EARTHQUAKE-PRONE BUILDINGS POLICY

CONTENTS

- 1. Introduction**
- 2. Background**
- 3. Key Policy Components**
- 4. Identification of Earthquake-Prone Buildings**
- 5. Availability of Earthquake-Prone Building Information**

APPENDIX THREE

1. Introduction

The Building Act 2004 ('the Act') requires Council to adopt an earthquake-prone buildings policy to ensure all earthquake-prone buildings are strengthened to at least meet the minimum prescribed standard (or be demolished) to reduce the potential of injury, loss of life or damage to other property in the event of a moderate earthquake. This policy will have to be reviewed every five years.

This policy outlines the approach Wellington City Council ('the Council') will take to require the owners of earthquake-prone buildings to have them strengthened, or if appropriate, have them demolished. A separate policy deals with dangerous and insanitary buildings.

2. Background

Earthquakes are unpredictable events that occur infrequently and they can have significant consequences. Wellington City is located in one of the most seismically active parts of New Zealand and accordingly the draft Policy proposes a largely active approach to ensure buildings are appropriately strengthened (or be demolished).

The draft Earthquake-Prone Building Policy will replace the Council's Building Safety Policy 1998.

A number of other statutes effect the assessment and management of earthquake-prone buildings. Relevant agencies can therefore take action under their own legislation but this does not effect the assessment of a building in terms of the Building Act.

3. Key Policy Components

3.1 Assessing earthquake-prone buildings and standard of strengthening required

The Building Act 2004 and Building Regulations 2005 define the meaning of an 'earthquake-prone building'. As a general guidance, **an earthquake prone building will have strength that is 33% or less of the seismic loading standard NZS 1170.5: 2004**. The standard has been published and is expected to be cited in the Compliance Documents for the New Zealand Building Code before the adoption of this Policy.

Once a building is classified as earthquake-prone, it will need to be strengthened, or if appropriate, demolished. Council will, however, encourage owners of earthquake-prone buildings to strengthen them to the greatest extent possible, particularly for buildings serving a specific post-disaster function.

3.2 Prioritisation to strengthen earthquake-prone buildings

Table 1 of the draft Policy prioritises the order in which the buildings will be assessed and, if necessary, strengthened. The prioritisation seeks to balance the public risk associated with earthquake-prone buildings, the private cost of strengthening a building and the availability of people to undertake the strengthening work.

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The prioritisation in Table 1 is determined by:

Importance Level – whether a building has a post-disaster function, serves a specific community purpose and is likely to cause injury or damage to other property, based on NZS 1170.0:2002.

Building Age and Condition – the likely structural performance of a building based on the structural code to which the building was designed or strengthened.

Comparative studies of historical structural design standards to NZS 1170.5:2004 have shown that buildings originally designed or strengthened to the:

- *pre-1965 codes* are likely to be earthquake-prone unless there are mitigating circumstances
- *2/3 NZS 1900 Chapter 8:1965 standard* are likely to be earthquake-prone unless there is a mitigating circumstance. This is the level to which most of the non-heritage buildings in Wellington City have been seismically strengthened
- *NZS 1900 Chapter 8:1965 standard (1965 code)* may meet the required strength criteria and will probably not be earthquake-prone
- *1976 NZS 4203 and subsequent structural codes* are not expected to be earthquake-prone, unless they have an identified critical structural weakness.

In terms of the prioritisation of buildings, they differ in their importance to the community, numbers of occupants and potential risk of structural damage and collapse in an earthquake. Earthquake-prone buildings could therefore be prioritised for strengthening on a number of bases, including by:

- location, for example, giving priority to the Central Business District or buildings located near a faultline
- use, for example, giving priority to buildings attracting large crowds, then retail, commercial, industrial and finally residential
- size of building, and therefore likely size of occupant loading
- structural code a building was designed or strengthened to, or
- engineering or risk basis, combining as assessment of the building's strength and the consequences of an earthquake.

The engineering evaluation has been chosen as the basis for prioritisation because it takes into account the importance of buildings to the community because of their post-disaster function, special purpose/use and the numbers of occupants. It also assesses the likely performance of buildings in earthquake events.

3.3 Timeframe to strengthen a building

Staggered timeframes to strengthen earthquake-prone buildings have been allowed for a number of reasons. They help ensure that there is sufficient resource accessible to do the investigation, design and construction work. For large buildings, long lead times may be required to re-negotiate leases to manage the vacating of areas necessary to undertake the work.

Strengthening a building can be expensive and building owners will have to determine if the strengthening is viable. This will include consideration of the benefits of

APPENDIX THREE

upgrading a building rather than demolition. On the other hand, a strengthened building may include an increase in market value of the building, increased demand in the rental market and more favourable insurance options.

The setting of maximum timeframes sets reasonable and transparent expectations and helps ensure that strengthening work will be undertaken without delay that might unreasonably compromise public safety. Using the prioritisation methodology outlined above, the maximum timeframes for undertaking strengthening work will be:

High priority	5 years
Moderate priority	10 years
Low priority	15 years
Passive	No maximum.

Buildings with earthquake-prone building notices issued under Section 66 of the Building Act 1991 will be reissued a notice under Section 124 of the Building Act 2004 requiring strengthening. Building work must begin within two years of the notice being issued.

When applications for building consents received after 1 June 2006 have a cumulative project value greater than one-third of the building's rateable value, the building owner will be required to undertake the structural design for strengthening and either include the:

- complete strengthening work in the building consent, or
- strengthening work to the area otherwise affected by the building work, and agree with Council on a programme to complete the strengthening works within the maximum timeframe set out above.

3.4 Demolition of earthquake-prone buildings

Once a building is classified as earthquake-prone, the building owner may choose to strengthen it, or if appropriate, demolish all or part of the building. A demolition proposal may require a resource consent to be obtained from the Council.

3.5 Change of use

When a change of use for a building occurs, then the structural upgrade of the building is required "as nearly as is reasonably practicable" with the Building Code. At this level of upgrade, a building will no longer be earthquake-prone.

3.6 Heritage buildings

A heritage building includes all buildings listed as a heritage building in the Wellington City District Plan and/or those registered by the New Zealand Historic Places Trust.

Section 4(2)(1) of the Building Act recognises the "need to facilitate the preservation of buildings of significant cultural, historical, or heritage value" and Council's Built Heritage Policy 2005 contains objectives that recognise and protect the city's built

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heritage. The Wellington City District Plan also requires a resource consent to alter or demolish a listed heritage building.

These factors need to be considered against the Building Act's requirement that Council *must* ensure all earthquake-prone buildings are strengthened to at least meet the minimum prescribed standard (or be demolished) to reduce the potential of injury, loss of life or damage to other property in the event of a moderate earthquake.

It is likely that some heritage buildings will be classified as earthquake prone under the Act. The impact on heritage buildings in the city could be significant if it is not financially viable to strengthen the building and demolition is favoured by the building owners.

The proposed approach in this Policy to heritage buildings is to reduce the impact of any strengthening work required on the heritage fabric of the building. Council can either adopt an approach that:

- treats heritage buildings the same as all others – this could result in a greater degree of proposed demolition to heritage buildings or
- proactively seek to protect heritage buildings – this would provide greater opportunities for their preservation.

A summary of the two options is outlined below:

	Treat Equally	Proactive
Specific requirements for heritage work to be completed	None above meeting minimum strengthening requirements.	In addition to meeting minimum strengthening requirements, require that upgrading preserves heritage fabric (possibly in the form of a management plan).
Timing to strengthen building	Maximum timeframes (section 3.4 of Policy) applies. Building owner can apply for extension in timeframe.	Provide for longer timeframe to upgrade building in Policy.
Funding	None.	Provide funds or a loan for detailed assessment, management plan and/or strengthening work.
Demolition	Demolition is an option for an owner, though is discouraged by the Council. Resource consent is required to alter or demolish.	Demolition is an option for an owner, though is discouraged by the Council. Resource consent is required to alter or demolish.

Under *Option 1* (Treat Equally), the maximum timeframes ensure public risk is minimised and with no specific heritage requirements to be met, allows the building owner to determine the best viable option for the building. Under *Option 2* (Proactive),

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while the risk to the public is increased, there are greater opportunities to ensure that heritage buildings are preserved. Option 2 places greater weight on Section (4)(2)(l) of the Building Act than Option 1.

The draft Policy recommends that a proactive policy apply, balanced against the fact that public risk also needs to be minimised. Therefore, the draft Policy sets out that for earthquake-prone heritage buildings:

- strengthening is required so that it is no longer earthquake-prone
- the maximum timeframes will apply, just as it does to all buildings
- a management plan outlining how strengthening will preserve the heritage fabric of buildings is to be provided
- demolition is not encouraged.

In addition, a new heritage incentive fund of \$350,000 a year is being proposed as part of the Council's 2006/07 Long Term Council Community Plan (subject to the new initiatives process). The fund will be available for a range of heritage-related projects, in accordance with the Built Heritage Policy, and *not* specifically for earthquake-strengthening related work. Building owners will be able to apply for funding for obtaining detailed assessments, completing management plans and a small amount may be available for any required strengthening work. However, the fund is not sufficient to make a significant impact on all earthquake-strengthening related work on heritage buildings expected throughout the city.

Council could fund all detailed assessments of heritage buildings, as it did under the Building Safety Policy 1998. However, that applied to a relatively small number of buildings and at an estimated cost of approximately \$750,000, contributing even a significant proportion of this is high.

3.7 Council Infrastructure

Asset Management Plans set out how Council will meet its infrastructural obligations under the Civil Defence and Emergency Management Act 2002, which places a duty on a local authority to plan and provide for civil defence emergency management within its district. It must also ensure that it is able to function, even at a reduced level, after an emergency such as an earthquake.

4. Identification of Earthquake-Prone Buildings

The draft policy sets out the procedure council will use to establish the earthquake-prone status of buildings. Sections 124 to 128 of the building act give the council recourse to a number of remedies if a building is classified as earthquake-prone. The process is as follows:

Step 1. Desk top review

A desktop review of Council files will be undertaken by Council to assess which buildings could be earthquake-prone. Buildings that will not require further assessment include those that are excluded by the definition of an earthquake-prone building in the Building Act 2004 and buildings built or strengthened to 1976 and subsequent structural code standards.

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From the information gathered in this review, a database of these potentially earthquake prone buildings will be established.

Step 2. Initial evaluation process

The Council will use the Initial Evaluation Process (IEP) set out in the New Zealand Society for Earthquake Engineering *Recommendations for the Assessment and Improvement of the Structural Performance of Buildings in an Earthquake* to determine the structural performance score of potentially earthquake prone buildings in relation to NZS 1170.5: 2004. Buildings with a score of less than 34 are considered to fall within the definition of earthquake-prone.

Buildings classified as High Priority after Step 1 above will be evaluated first, followed by those classified as Moderate and then Low Priority.

Council will, at its own cost, use appropriately qualified engineers to undertake the evaluations. This ensures that all IEPs are carried out, they carry out the evaluations consistently and they set the timeframe within which they are to be completed.

Step 3. Advise of IEP Outcome

As the IEP evaluations are completed, the Council will write to owners of buildings with an IEP score of less than 34 advising that their building is potentially earthquake prone. Owners will then have six months to consider this advice and provide any additional information about factors that may affect the strength of the building or a detailed assessment of the structure. Council will use appropriately qualified engineers to review this information.

Where the Council is satisfied that the building is not earthquake prone, the recorded status of the building will be changed and the owner will be advised of the Council's decision.

Step 4. Issue of notice to strengthen building

Where, after consideration of any further information provided in Stage 3 above, the Council is satisfied that the building is earthquake prone it will advise the owner of the classification of their building and issue a written notice under Section 124 of the Building Act 2004 requiring a building consent to be obtained and the structural strengthening work to be undertaken.

Council can adopt an approach that requires voluntary compliance on behalf of building owners with notices only being issued when it considers upgrading will not be undertaken. This approach is not recommended because:

- enforcement of the earthquake-prone building provisions in the Building Act 1991 resulted in most building owners with buildings identified as being earthquake-prone not undertaking the strengthening work. Notices were subsequently issued and the original agreed timeframes needed to be extended
- it provides no incentive to building owners to undertake strengthening (or demolish the building) as no action is required to be taken until a notice is served
- it provides no clarity about Council's requirements are to existing and future building owners

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- Council has a potential civil liability once it has identified earthquake-prone buildings, yet has taken no statutory steps to address that.

Step 5. Dispute of earthquake-prone classification of building

The Council has decided not to establish an appeals process against the classification of a building as earthquake-prone as the Building Act sets out whether a building is or is not earthquake-prone. However, should an owner dispute the classification, an application for a 'Determination' may be made to the Chief Executive of the Department of Building and Housing. As set out in the Building Act 2004, the determination of the Chief Executive is binding on the Council.

6. Request by building owner for extension in timeframe to complete work

The Council will establish a hearings process to consider individual submissions from owners requesting a longer timeframe than it has decided upon in the Policy (and section 3.3 above) to complete the strengthening work. This may be appropriate in special circumstances where the building owner is unable to comply with the requirement to strengthen the building within the timeframes set out.

The hearing process will take the purpose and the relevant principles of the Building Act into consideration. The hearings will be established by Council and administrative costs to the building owner may apply.

Should the building owner be permitted to have a longer timeframe to strengthen the building, the Council may take action to ensure the public is aware of the earthquake-prone status of the building and the risk associated with occupying the building. This may include placing a notice on the building or putting up a hoarding or fence around the building. Any notice will be reissued to reflect amended agreed timeframes.

Step 7. Updates

As building consents for structural strengthening are received and the strengthening work completed, the database will be updated to reflect the status of the building as *not* earthquake prone.

Step 8. Enforcement action

If structural upgrading work has not been undertaken in accordance with the notice issued at Step 4, the Council will consider taking enforcement actions under the Building Act.

5. Availability of Earthquake-Prone Building Information

The database of potentially earthquake prone buildings is publicly available upon request and includes information that is already provided in Land Information Memoranda. The database will provide a summary of the data and also the current status of the building as potentially earthquake prone or earthquake prone. It will note whether this information is pending an outcome or an assessment to determine its correct status. The information will continue to be included in property reports and Land Information Memoranda.

CONSULTATION PLAN

1. Consultation Focus

The consultation is focusing on obtaining views on the Council's draft policy for the management of earthquake-prone buildings.

2. Objectives

The objectives of the consultation are to:

- obtain feedback from a representative cross-section of building owners and members of the community

3. Key Issues And Messages

Before the Council makes any decisions on adopting the policy, it wants to know what the public and building stakeholder groups think.

Key Messages are:

- earthquake-prone buildings need to be strengthened, or demolished, to reduce the potential for injury, loss of life or damage to other property in the event of a moderate earthquake
- strengthening will need to take place on a priority basis determined by building type, use, age and condition
- the draft Policy is required by the Building Act 2004.

4. Target Audience

The consultation process is intended to encourage responses from both the general community and stakeholders identified as having a particular interest in this issue. The identified stakeholders are:

- Federation of Residents' and Progressive Associations
- Residents' and Progressive Associations
- Property Council of New Zealand
- Insurance Council of New Zealand

5. Consultation Techniques

Formal public consultation on the draft policy for the management of earthquake-prone buildings will be based around documents prepared for the consultation, which include:

- the proposed aims and objectives of the policy and how they meet legislative requirements
- the process Council will use to identify earthquake-prone buildings
- details of the procedures Council will use when buildings are found to be earthquake-prone

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- a freepost submission form that sets out questions about people's views of the aims and objectives of the policy, and how they would like to see the policy implemented.

The consultation document (including submission form) will be:

- publicly notified in the Dominion Post
- provided directly to all of the identified stakeholders
- posted on Council's "Have Your Say" section of the website, which will include the ability for people to submit their views online
- available at Council's libraries and service centres.

The consultation will be publicised via:

- a media release
- an article in "Our Wellington"
- advertisements in the community newspapers

Written comments on the proposal will be invited and submitters will also be given the opportunity to make an oral submission. Submitters will receive advice that their written submission has been received.

6. Consultation Evaluation

Written and oral submissions will be summarised and analysed. The result of the consultation will be reported back to the Strategy and Policy Committee in March/April 2006.

All submission writers will be notified of the results of consultation.

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7. Consultation Programme

DATE	TASK/TIME/PEOPLE
8 December 2005	Strategy and Policy Committee considers the consultation document.
1 February 2006	Special Consultative Procedure begins
1 February 2006	<ul style="list-style-type: none">- Consultation document and submission form on the Council's website- Information on the consultation published in the "Our Wellington" page- Document sent to stakeholders, libraries, and service centres.
3 March 2006	Special Consultative Procedure ends
March 2006	Strategy and Policy Committee hears oral submissions
April 2006	Submissions analysed and summarised into a report for the Strategy and Policy Committee to consider.
April 2006	Draft policy is amended if necessary.
30 May 2006	If the draft policy is adopted, the policy can be supplied to the Chief Executive, Department of Building and Housing.

BUILDING ACT SUMMARY

BUILDING ACT 2004 – KEY SECTIONS

The Building Act 2004

Key sections relating to earthquake-prone buildings

122 Meaning of earthquake-prone building

- (1) A building is **earthquake-prone** for the purposes of this Act if, having regard to its condition and to the ground on which it is built, and because of its construction, the building -
 - (a) will have its ultimate capacity exceeded in a moderate earthquake (as defined in the regulations); and
 - (b) would be likely to collapse causing –
 - (iii) injury or death to persons in the building or to persons on any other property; or
 - (iv) damage to any other property.
- (2) Subsection (1) does not apply to a building that is used wholly or mainly for residential purposes unless the building –
 - (a) comprises 2 or more storeys; and
 - (b) contains 3 or more household units.

Moderate earthquake has the same meaning as section 7 in the Building Regulations 2005 where –

‘...moderate earthquake means, in relation to a building, an earthquake that would generate shaking at the site of the building that is of the same duration as, but that is one-third as strong as the earthquake shaking (determined by normal measures of acceleration, velocity, and displacement) that would be used to design a new building at that site.’

124 Powers of territorial authorities in respect of dangerous, earthquake-prone, or insanitary buildings

- (1) If a territorial authority is satisfied that a building is dangerous, earthquake-prone, or insanitary, the territorial authority may-
 - (a) put up a hoarding or fence to prevent people from approaching the building nearer than is safe
 - (b) attach in a prominent place on, or adjacent to, the building a notice that warns people not to approach the building:
 - (c) give written notice requiring work to be carried out on the building within a time stated in the notice (which must not be less than 10 days after the notice is given under section 125), to-
 - (i) reduce or move the danger; or
 - (ii) prevent the building from remaining insanitary.
- (2) This section does not limit the powers of a territorial authority under this Part.

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- (3) A person commits an offence if the person fails to comply with a notice given under subsection (1).
- (4) A person who commits an offence under this section is liable to a fine not exceeding \$200,000.

131 Territorial authority must adopt policy on dangerous, earthquake-prone and insanitary buildings

- (1) A territorial authority must, within 18 months after the commencement of this section, adopt a policy on dangerous, earthquake-prone, and insanitary buildings within its district.
- (2) The policy must state-
 - (a) the approach that the territorial authority will take in performing its functions under this part; and
 - (b) the territorial authority's priorities in performing those functions; and
 - (c) how the policy will apply to heritage buildings.

132 Adoption and review of policy

- (1) A policy under section 131 must be adopted in accordance with the special consultative procedure in section 83 of the Local Government Act 2002.
- (2) A policy may be amended or replaced only in accordance with the special consultative procedure, and this section applies to that amendment or replacement.
- (3) A territorial authority must, as soon as practicable after adopting or amending a policy, provide a copy of the policy to the chief executive.
- (4) A territorial authority must complete a review of a policy within 5 years after the policy is adopted and then at intervals of not more than 5 years.
- (5) A policy does not cease to have effect because it is due for review or being reviewed.