



Determination 2014/034

Regarding the issue of an earthquake-prone building notice for a multi-storey building at 15 Hopetoun Street, Freemans Bay, Auckland

1. The matter to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations and Assurance, Ministry of Business, Innovation and Employment (“the Ministry”), for and on behalf of the Chief Executive of the Ministry.

1.2 The matter

1.2.1 This determination arises from the decision of the authority to issue an earthquake-prone building notice under section 124(2)(c) (“the s124 notice”); the s124 notice was issued because the authority considers the building to be earthquake-prone as defined in section 122 of the Act.

1.2.2 The matter to be determined² is therefore the authority’s exercise of its powers of decision in issuing the s124 notice.

1.3 In making my decision, I have considered

- the submissions of the parties, including
 - the report of the firm of structural engineers commissioned by the applicant (“the structural engineers”)
 - the recommendations of the firm of engineers commissioned by the owner (“the owner’s engineers”)
- the other evidence in this matter.

1.4 The parties

1.4.1 The parties to the determination are

- Alarm New Zealand Limited (“the applicant”), who is a lessee of one floor of the building and who is acting through a firm of barristers and solicitors (“the applicant’s legal adviser”)
- the owner of the building, 15 Hopetown Ltd (“the owner”), who is acting through two separate firms of barristers and solicitors (“the owner’s legal adviser”)
- Auckland Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.

¹ The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.dbh.govt.nz or by contacting the Ministry on 0800 242 243.

² Under sections 177(1)(b) and 177(3)(f) of the current Act

1.4.2 The application for determination was made by a lessee of one floor of the building. The applicant considers that it has made a valid application as a party under section 176(c). The owner of the building disputed that the lessee could make the application; the owner holds the view that the lessee is not a party as defined under section 176(c) of the Act because the lessee, as a commercial tenant, does not fall within the definition of “owner” in that provision. The term “owner” is further defined in section 7 of the Act and provides:

owner, in relation to land and any buildings on the land,—

- (a) means the person who—
 - (i) is entitled to the rack rent from the land; or
 - (ii) would be so entitled if the land were let to a tenant at a rack rent; and
- (b) includes—
 - (i) the owner of the fee simple of the land; and
 - (ii) for the purposes of sections 32, 44, 92, 96, 97, and 176(c), any person who has agreed in writing, whether conditionally or unconditionally, to purchase the land or any leasehold estate or interest in the land, or to take a lease of the land, and who is bound by the agreement because the agreement is still in force

1.4.3 The provision sets out that ‘owner’ means the person who is entitled to the rack rent, which is the full rent from the land. The definition also includes several additional types of interest set out in paragraph (b). The first of these is an owner of the fee simple and the second category concerns a limited extension of the definition of owner that applies only for the purposes of the listed sections. The reference to section 176(c) in paragraph (b)(ii) is a recent addition, having been added by the Building Amendment Act 2012.

1.4.4 The owner’s legal adviser submitted in a letter dated 15 May 2014 that the definition of owner in section 7(b)(ii):

[A]ddresses itself particularly to conditional or unconditional purchasers of which [the applicant] is not one of either the freehold land or a leasehold interest. Whilst the subsection refers to “take a lease of the land” [the owner believes] that this relates entirely to the estate as a leasehold interest not as a tenant under a commercial lease.

1.4.5 In a letter dated 20 May 2014 the owner’s legal adviser stated:

[S]ubsection (b) provides a gloss on subsection (a) and subsection (b)(ii) is a section that merely provides standing for a purchaser taking an interest in the land. ... The section must be read as a whole and as such, its sole purpose is to identify owners of the land or those who have an interest through contract or otherwise to have an ownership in the land. ...

[T]he phrase “or to take a lease of the land” must be read in conjunction with the remainder of this section that is that the lease is an ownership lease of the land (ie. a registered or registrable estate in the land), not a commercial lease tenanted interest in the land.

1.4.6 Paragraph (b)(ii) of the definition of “owner” applies to persons with a number of different ownership interests. I accept that the provision is not drafted as well as it could be but I must apply the provision as it appears in the Act. It applies to a person who has agreed in writing, conditionally or unconditionally, to purchase the land, to purchase any leasehold estate, or to purchase an interest in the land. The provision also applies to a person who has agreed in writing, conditionally or unconditionally,

to take a lease of the land. Finally, for paragraph (b)(ii) to apply to the categories of person I've just mentioned the agreement must still be in force.

- 1.4.7 In my view, the reference in paragraph (b)(ii) to a person who has agreed “to take a lease of the land” includes a person who has entered a lease agreement and that lease agreement is still in force. The words “agreed to take a lease of the land” are broad and would include a person who has signed an agreement to lease and a person who has entered a lease. There is no basis in those words for restricting their application to purchasers of a leasehold interest as the owner’s legal adviser contends. It would also not make sense for the provision to apply to a prospective purchaser of a leasehold estate or a person who has signed an agreement to lease, but to exclude the holder of a leasehold interest such as a lessee.
- 1.4.8 My understanding is that the categories of ownership interest covered by paragraph (b)(ii) are frequently applied by building consent authorities as they enable a lessee or prospective lessee to undertake building work relating to a leasehold premises. The references to sections 32, 44 and 92 of the Act enable a lessee or prospective lessee to obtain a PIM, a building consent, and, at the completion of the work, a code compliance certificate. The recent addition of the reference to section 176(c) corrects an oversight in the provision that allowed lessees and prospective lessees to participate in the building consenting process, but did not allow them to apply for a determination in respect of the consenting and certification decisions made by an authority regarding that consenting process.
- 1.4.9 In a further letter to the Ministry dated 21 May 2014, the owner’s legal adviser stated that:
- Owner is defined in section 7 and is, pursuant to paragraph (a) “the person who (i) is entitled to the rack rent from the land; or (ii) would be so entitled if the land were let to a tenant at a rack rent. If an entity falls within [paragraph (a) of the definition] the matters described in paragraph (b) of that definition apply. [The Determination] seems to want part of paragraph (b) to apply to [the applicant] but that is not correct and insufficient to render [the applicant] an owner.
- The [applicant] does not fall within the first part of the definition of owner in section 7, and does not fall within any other category of entity which could render it a party for the purposes of section 176.
- 1.4.10 In this submission, the owner’s legal adviser seems to be saying that it is an essential part of the definition in paragraph (b) that a person also comes within the definition in paragraph (a). I don’t agree that the definition of “owner” can be read in this way. The term owner means those persons who come within paragraphs (a)(i) or (a)(ii), and also include as an owner those persons who fall within paragraph (b)(i) or (b)(ii). To construe paragraph (a) and (b) as cumulative requirements would be internally inconsistent: the persons referred to in paragraph (b)(ii) who have agreed to purchase a leasehold estate or interest in the land are not persons who are entitled to the rack rent nor would they be entitled to the rack rent if the land were let to a tenant at a rack rent. The persons referred to in paragraph (b)(ii) could never be an owner under the definition contained in paragraph (a).
- 1.4.11 The submissions from the owner’s legal adviser also seek to draw some sort of distinction between those persons who “have an ownership in the land” or “an ownership lease of the land” and those who are tenants under a commercial lease. I am not persuaded that such a distinction exists in paragraph (b)(ii) of the definition of “owner”. The provision establishes certain requirements for the leases to which it applies in that they must be in writing, and the person must still be bound by the agreement because it is still in force. I do not consider it would be appropriate to read

in further requirements on the types of leases to which the provision applies as suggested by the owner's legal adviser.

- 1.4.12 I understand the applicant has a written lease agreement for an initial term of 10 years, which the applicant is bound by as it is still in force. Accordingly, I consider the applicant comes within the definition of "owner" in section 7(b)(ii) as a person who has agreed in writing to take a lease of the land and that agreement is still in force. I conclude the applicant is a party under section 176(c) and has made a valid application for a determination.

1.5 The application of section 183

- 1.5.1 Section 183(1) concerns the effect of a decision or exercise of power pending a determination. Section 183(1) states

Until the chief executive makes a determination on a matter, any decision or exercise of a power by any person referred to in section 177 that relates to that matter is suspended unless and to the extent that the chief executive directs otherwise.

- 1.5.2 By email on 13 May 2014, the applicant requested confirmation of whether the s124 notice was suspended under section 183. By email of 14 May 2014, the Ministry confirmed that the effect of the s124 notice was suspended whilst the application for determination was considered.

- 1.5.3 In a letter to the Ministry dated 21 May 2014, the owner set out its view that the Ministry's advice regarding suspension of the s124 notice was incorrect. The owner stated that

Section 183(1) does not have the effect of suspending the notice the subject (sic) of the application, it has the effect of suspending "any decision or exercise of a power by any person referred to in section 177 that relates to that matter". The person referred to in section 177 is the applicant ... The notice the subject (sic) of the application is not suspended.

- 1.5.4 I disagree with the owner's interpretation of section 183(1) that the person referred to is the applicant. In this case the matter being determined is whether the authority correctly exercised its powers when it issued the s124 notice for the building at 15 Hopetoun Street. The application of section 183(1) to this matter for determination means the s124 notice is suspended until the determination is made i.e. the effect of the notice (requiring building work to be carried out) is suspended while the matter is subject to determination. The Chief Executive has the express power in section 183 to direct that section 183 doesn't apply – in other words – that particular decisions or exercises of power are to have full effect notwithstanding section 183. No such direction has been made in this case.

2. The building

- 2.1 The building is 11 levels, with car parking at basement and ground floors, and offices on the remaining floors (levels 1 to 9). The building was constructed in 1986, primarily of reinforced concrete, and is founded on cast in situ reinforced concrete piles and ECBF³ material was filled to approximately eight meters below the basement floor.

³ East Coast Bays Formation

- 2.2 The basement covers the largest area and the footprint of each level steps inwards gradually from ground level to level two. There is a large step inwards at level three before the tower extends up to level nine within the same vertical plane; this step would be regarded as a significant vertical irregularity. An open deck serves level three and acts as the roof to level two.
- 2.3 The structure utilises a combination of concrete shear walls and reinforced concrete moment frames at the basement level, and reinforced concrete (“RC”) moment frames only from ground to the upper levels. This RC moment frame acts as both the lateral and vertical load support systems.

3. Background

- 3.1 On 30 May 2012, the Ministry⁴ wrote to the authority noting that the Ministry would provide a list of the buildings in central Auckland with non-ductile columns, and requesting that the authority then write to those building owners to draw that to their attention and advise that their building required an engineering assessment to determine whether or not it had any structural safety issues.
- 3.2 On 15 August 2012, the authority advised the then owner of the building that the building had non-ductile columns. This advice was based on a drawing review.
- 3.3 On 1 October 2012 the applicant entered into a lease agreement with the previous owner. The lease commenced on 21 October 2012 and was for 10 years plus renewal of 5 years.
- 3.4 On 15 November 2012, the authority wrote to the then owner regarding the possibility of release of information in the future in respect of buildings identified as having non-ductile concrete gravity columns or otherwise recommended for review.
- 3.5 On 7 October 2013 a resource consent application was submitted for a change of use from commercial offices to residential. The authority approved the resource consent on 2 December 2013.
- 3.6 On 11 December 2013 the current owner purchased the building subject to existing commercial lease agreements.
- 3.7 On 19 December 2013 the owner applied for building consent for the construction of three new levels to the top of the existing tower and conversion of the commercial spaces to apartments (a total of 91 apartments) with associated fit out, installation of balconies, and a new façade.
- 3.8 By email on 24 February 2014, the owner’s engineer wrote to the authority advising that they had carried out a review of the building and recommended to the owner that remedial works be undertaken to address issues with non-ductile columns and lack of anti-burst reinforcing on the concrete stairs. The engineer went on to state ‘We request that the [authority] consider providing a notice instructing these works be undertaken’. The attached letter set out the following issues noted on the LIM and the engineer’s recommendations:

⁴ The correspondence was from the Department of Building and Housing, which was later transitioned into the Ministry of Business, Innovation and Employment. The term “the Ministry” is used for both.

Issue	Description	Remediation
Non Ductile Columns	Columns detailed with insufficient transverse reinforcing may experience loss of vertical load carrying capacity in a seismic event.	Columns identified on Structural Drawings to be wrapped with carbon fibre to provide additional confinement to concrete core.
Concrete Egress Stairs	Lack of anti burst reinforcing at mid height landing.	New structural steel portal frame to be installed below mid height landing.

The owner's engineer concluded with the statement

We consider both of these issues to be critical structural weaknesses that should be rectified in the short term. This recommendation applies whether or not alteration[s] are made to the building.

- 3.9 The authority's records indicate an officer of the authority spoke with the owner's engineer on 25 February 2014. The authority determined 'there was sufficient and reasonable information to give [the authority] cause to issue earthquake-prone building notice'. The authority also recorded the following on 26 February: 'Earthquake-prone building notice issued - completion of the remedial work by 30 September 2014. The matter will be finalised when [the authority] issues the CCC under B2013/15247.'
- 3.10 On 3 March 2014 the authority issued an earthquake-prone building notice under section 124 (dated 27 February 2014). The covering letter stated the notice was issued 'in response to an email request dated 24 February 2014 from [the owner's] engineer'. The notice stated that the authority was satisfied that the building is earthquake-prone in accordance with section 122(a) and (b) and in an earthquake of at least moderate intensity would be likely to cause injury or death to persons in it or persons on other property, or damage to other property. The notice went on to state:
- [The authority] requires that you undertake the following building work, which [the authority] reasonably believes is necessary to reduce or remove the danger:-
1. Reinforced concrete gravity columns identified in the owner's engineers ... structural drawings annexed to Building Consent number B 2013/15247 are all wrapped with carbon fibre to provide additional confinement to the concrete core.
 2. A new steel portal frame to be installed below the mid height landing as specified in the Building Consent number B/2013/15247.
- The notice was to be complied with by 30 September 2014.
- 3.11 On 6 March 2014 the owner wrote to the authority regarding the s124 notice, noting the date of compliance and that an extension may be sought if necessary. The owner went on to state:
- We take the responsibility of building ownership very seriously. Ideally we want all tenants to vacate within an orderly fashion to allow the works to be undertaken safely. However, we note that [the authority] can require tenants to vacate and we seek your support if required.
- 3.12 The authority responded on 6 March 2014, stating that
- We cannot request the tenants to vacate unless there is an immediate danger and this is dealt with under a separate notice/provision under the Act. However, under the provisions specifically relating to this earthquake-prone building notice, we could, (if there is good cause so to do) consider putting up hoarding, a fence and or signage that will prevent people from approaching the building nearer than is safe.

- 3.13 On 11 March 2014 the owner sent a copy of the s124 notice to the applicant along with a notice issued under the lease requiring ‘full and uninterrupted access to carry out the work described in the [s124] notice’.
- 3.14 On 21 March 2014 the owner’s legal adviser wrote to the applicant noting that in order for the owner to comply with the s124 notice the building needed to be vacated.
- 3.15 The applicant wrote to the authority on 21 March 2014. The applicant raised concerns regarding the short timeframe for compliance with the s124 notice, and requested that it be extended to allow time for an independent engineering report to be done.
- 3.16 The authority responded by email on 24 March 2014, providing some background information leading up to the issue of the s124 notice. The authority stated that the owner’s engineer’s advice was that ‘the building has critical structural issues with columns and concrete egress stairs, that may be a potential problem during a seismic event’, and as a result the s124 notice was issued. The authority noted that the timeline of the notice would run concurrent with the building consent until such time that the code compliance certificate is issued.
- 3.17 The authority also noted that
- the proposed works in the building consent application addressed the two issues identified (non-ductile columns and lack of anti-burst reinforcing at mid-height on the stairways), and
 - it is the building consent works which affect the timeframes of the earthquake-prone building notice — the authority would review and may extend the timeframe.

3.18 The applicant’s engineer’s report

- 3.18.1 The applicant engaged a firm of chartered professional engineers (“the applicant’s engineer”) to undertake a review of the building’s earthquake-prone status. The applicant’s engineer carried out a visual inspection and reviewed the available property file; no exploratory investigations were carried out. The assessment was restricted only to the specific building elements that had been identified by the authority as earthquake-prone.
- 3.18.2 The applicant’s engineer’s report, dated 2 May 2014, provided a general description of the building and structural system (I have included this information in paragraph 2). The report noted:
- The owner’s engineer’s assessment notes that the detailing of the RC moment frames appears to be consistent with fully ductile design of the day, and that the ductility demand on the building at 100% NBS⁵ is approximately $\mu=3$.
 - The column confinement steel is sufficient to cater for at least 33% of the expected ultimate drift, and the expected column performance approaches 60% NBS.
 - The drawings show the top of the stairs is pinned, with the lower end able to slide; the stairs are 100% NBS as an isolated critical structural item.

⁵ New building standard for earthquake strength design.

- The building falls into a lower earthquake risk category (Class C grade 34 – 66% NBS)
- 3.18.3 The report concluded (in summary):
- The seismic performance of the existing building is expected to exceed 33% NBS, and may approach 60% NBS; the building should not be considered earthquake-prone and it does not pose an immediate risk to the public as set out in section 122 of the Act.
 - The strengthening work should be carried out to the columns and stairs, as those works will provide significant improvement to the building performance.
 - It is not necessary for the building to be vacated while the strengthening work is done.
- 3.18.4 In an email to the applicant’s legal adviser, on 26 May 2014, the applicant’s engineer stated
- We see no immediate danger as we have found the building to be not earthquake-prone by both our quantitative and qualitative methods of investigation. The columns have been found to be at least 60% of current day NBS and the stairs have been found to be well above this as the lower ends are not fixed allowing seismic building sway to occur without causing significant damage to the stair’s structural integrity.
- 3.18.5 The applicant’s legal adviser also emailed the Ministry’s Chief Executive on 28 May 2014 to confirm that the applicant’s engineer was of the view that a direct comparison between the subject building and the columns in the Canterbury Television building (“CTV”) was unfounded. Details of the columns in the two buildings were provided for comparison.
- 3.19 The application for determination was received and accepted on 9 May 2014.
- 3.20 The solicitor acting for the owner disputed the application on the basis that the solicitor considered the applicant as a lessee was not a party under section 176 of the Act.
- 3.21 On 19 May 2014 I advised the parties that for the purposes of section 7 and 176(c) of the applicant fell within the definition of a party and the application for determination was accepted.

4. The submissions

4.1 The applicant’s submission

- 4.1.1 The applicant outlined the background to the situation, noting that the authority had issued the s124 notice ‘at the request of the owner’, and that, as a result of incorrect assumptions as to rights and remedies in the notice, the rights of the applicant as a tenant had been affected. The applicant considers that there was no indication of an assessment process having been undertaken prior to the issue of the notice to establish whether the building met the criteria of an earthquake-prone building as set out in section 122 of the Act.
- 4.1.2 As a result of the s124 notice, the owner has proceeded to require vacant possession of the leased level. The s124 notice was in excess of the authority’s statutory power and without proper grounds, and it should be revoked as invalid.

4.1.3 The applicant also noted that

- in the owner's engineer's advice to the authority on 24 February 2013 there was no detailed analysis of the stairs undertaken when referring their opinion of critical structural weakness
- the report did not say that the columns or stairs brought the building within 33% or less of NBS nor that it would be likely to collapse in a moderate earthquake; the report did not classify the building as earthquake-prone
- the report by the applicant's engineer shows that the internal columns and stairs as originally constructed could withstand moderate earthquake forces, and the likely position is around 60% NBS with extra floors added to the building
- the s124 notice describes the building work 'required', which is the same building work as described in the building consent application and set out by the owner's engineer in the email letter of 24 February; this is beyond the requirement to 'reduce or remove' the danger; the notice was invalid for strengthening beyond 33% NBS
- in this case, the stairs and columns either were sufficient to make the whole building earthquake-prone or the test in section 122 of the Act was not met and the notice could not be issued; if an assessment should find specific vulnerability it would still not meet the tests under section 122
- the application for building consent includes structural strengthening work to bring the columns up to 100% NBS; the consent application was made before the s124 notice was issued and was part of the change of use renovations and not in response to the s124 notice.

4.1.4 In an email on 26 May 2014, the applicant stated that the strengthening work was 'required under the more stringent building standards for the developers change of use consent', and that the applicant maintains the view that there is no immediate safety issue, noting also that another tenant has remained in the building.

4.1.5 The applicant forwarded copies of:

- an undated record by the authority titled 'non ductile columns' which notes that the authority had not received a Detailed Engineering Evaluation (DEE) report or building consent application for any structural upgrade of the building (I note that it does not specifically identify the subject building)
- an application for resource consent dated 7 October 2013 for the conversion of the office tower into an apartment complex, and the authority's approval dated 2 December 2013
- an application dated 19 December 2013 for building consent (No. B/2013/15247) for the addition of three new levels to the top of the existing tower, addition of balconies, and complete architectural fit out and construction of a new façade
- the s124 notice, and the notice from the owner to the applicant dated 11 March 2014
- the authority's "Earthquake-prone, Dangerous & Insanitary buildings policy (2011-2016)"

- the Detailed Engineering Evaluation Report dated 2 May 2014 by the applicant's engineer
- judgements relating to earthquake-prone buildings⁶
- correspondence from the applicant's engineer to the applicant's legal adviser, including a drawing from the plans detailing the columns and two extracts from the technical discussion on the structural system of the CTV building⁷
- various other correspondence between the parties.

4.2 The authority

- 4.2.1 On 20 May 2014 I requested from the authority a copy of the owner's engineer's report referred to by the applicant's engineer (refer paragraph 3.18.2).
- 4.2.2 By email on 21 May 2014, the authority provided copies of documents pertinent to this determination including:
- the owner's engineer's report dated 24 February 2014, and covering email
 - the s124 notice dated 27 February 2014, and the covering letter dated 3 March 2014
 - recorded notes taken by an officer of the authority, dated 25 and 26 February 2014
 - some correspondence between the parties.
- 4.2.3 On 21 May 2014 I requested further clarification from the authority on what basis the s124 notice had been issued. The authority made no response to that request.

4.3 The owner

- 4.3.1 In a letter dated 15 May 2014 to the applicant's legal advisers, the owner set out its view that the application was not valid and noted the following

The [authority] has issued the section 124 Notice because to ensure the structural integrity of the building certain works must be undertaken (irrespective of any other alteration or conversion works that our client wishes to undertake). This is in accordance with structural engineering advice to [the authority] which [the owner] does not dispute.

I take this to represent the owner's view on the matter.

- 4.3.2 The owner opted to make no submission on the matter, with the legal adviser noting in an email on 30 May 2014 that the applicant was not a party for the purposes of sections 176 and 177 (refer also paragraphs 1.4 and 1.5).

4.4 The draft determination and subsequent submissions

- 4.4.1 A draft determination was issued to the parties for comment on 23 June 2014.

The authority

- 4.4.2 In a response dated 4 July 2014, the authority did not accept the draft determination, and submitted the following:

⁶ Insurance Council of New Zealand v Christchurch City Council [2013] NZHC 51, and University of Canterbury v The Insurance Council of NZ Inc [2013] NZCA 471

⁷ Canterbury Earthquakes Royal Commission Final Report – Part 3: Volume 6 Canterbury Television Building: Section 5: Technical discussion on structure, and Volume 6 Section 5: Post collapse investigations (29 November 2012)

- (1) [The authority] did not issue the section 124 notice at the request of the owner, although the owner's request precipitated action.
- (2) [The authority] issued the section 124 notice on the basis of the information supplied by the owner's engineer in his report dated 24 February 2014 [refer paragraph 3.8] and covering email, and also during a subsequent clarifying conversation with the owner's engineer on the 25 February 2014 [refer paragraph 3.9]
- (3) In light of the information available at the time, [the authority] is of the view that the section 124 notice was appropriately issued, while accepting that review of further information may warrant subsequent withdrawal.

The owner

4.4.3 By email on 5 July 2014, the owner's legal adviser stated that the draft was not accepted and submitted the following (in summary):

- The lessee does not fall within any part of the definition of owner in section 7 and so is not a party under section 176 and cannot be an applicant for a determination.
- Section 183 refers to a person referred to in section 177 which is the party making the application for determination. The s124 notice therefore cannot be suspended (refer also paragraph 1.5).
- The applicant's engineer's report (refer paragraph 3.18) is 'deeply and seriously flawed'.

4.4.4 The owner's submission included an article regarding the CTV building⁸ and a letter from the owner's engineer dated 2 July 2014. The letter from the owner's engineer made the following points (in summary):

- In 2012 a report using the IEP defined in the NZSEE guideline was undertaken by a firm of consulting engineers, with the outcome being a Seismic Grade of B (67-80%). The building score was factored down by a 0.5 factor to reflect the critical structural weaknesses. The building was assessed at 76% NBS subject to a detailed review of the critical structural weaknesses identified.
- The owner's engineer undertook a DEE as part of the building change of use from commercial to residential occupancy; however this would have been required regardless of any proposed upgrade. That DEE identified 'a number of critical structural weaknesses including non-ductile columns, deficiencies in stair reinforcing detailing, deficiencies in the structural floor diaphragms and seating details for concrete beams'.
- The analysis did not specifically determine the %NBS of each component of the structure, rather calculations were undertaken for the existing structure and where required, designed strengthening works were designed to ensure compliance at 100% NBS.
- For a change of use the building structure must be upgraded to comply as nearly as is reasonably practicable in respect of structural performance.
- The owner's engineer has not stated that the building is earthquake-prone, but recommends clarification be sought on this status given the presence of the critical structural weaknesses. In the owner's engineer's view, it is not possible to say that the structure is not earthquake-prone given those weaknesses, and it

⁸ The National Business Review: CTV engineer still to face music (*Chris Hutching*) Thursday July 03, 2014

is prudent to consider it earthquake-prone until such a time as the remedial works are complete.

4.4.5 The owner's engineer had also undertaken a review of the DEE report by the applicant's engineer. The owner's engineer reported the following (in summary):

- The applicant's engineer's report addresses the column and stairs only and did not undertake any 'global' structural analysis for the building, the structural floor diaphragms, or reinforced concrete beam seating.
- It is essentially agreed that some of the columns are non-ductile and require remediation. The authority has a separate policy for buildings with non-ductile columns which requires assessment and remediation irrespective of %NBS.
- Current industry standards require use of anti-burst reinforcing to prevent stair collapse; this issue relates also to the gravity load condition.

The applicant

4.4.6 By email on 7 July 2014 the applicant's legal adviser stated that the evidence of opinion of the owner's engineer should not be considered in the determination for two reasons: the determination assessment has to be based on what was before the authority at the time the decision to issue the s124 notice was made; and the opinion of the owner's engineer still falls short of the evidence required for the authority to issue a s124 notice.

4.4.7 I note here that under section 177 I am determining the exercise of the authority's powers of decision to issue the s124 notice, and that decision requires that I consider the information that was before the authority at the time of its decision. However, section 188 requires that I confirm, reverse, or modify that decision. Accordingly I consider that information put before me that was not available at the time the authority made its decision is relevant to whether the authority's decision is confirmed, reversed or modified in this determination.

4.4.8 In a further response dated 7 July 2014, the applicant accepted the draft subject to minor amendment.

4.4.9 On 14 July 2014 I requested from the authority a copy of the IEP report referred to by the owner's engineer. The authority responded the same day, noting that it did not have a copy of that report.

4.4.10 On 21 July 2014 the applicant forwarded an email dated 18 July from the applicant's engineers. The applicant's engineers noted they had not seen the IEP report referred to, but noted that the B rating reached in that report 'would have already taken into account the 0.5 'F' factor and so without these critical structural weaknesses this factor would tend towards 1.0 and an A+ rating would apply'. The email concluded that the applicant's engineers saw no evidence that the building should ever have been rated class D or earthquake-prone.

5. Discussion

5.1 The issue of the s124 notice

5.1.1 Section 122 sets out the meaning of earthquake-prone building as

(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 regulations⁹); 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

5.1.2 Section 124 sets out the powers of an authority that apply if the authority is satisfied that a building is earthquake-prone, including that the authority may ‘issue a notice that complies with section 125(1) requiring work to be carried out on the building to—(i) reduce or remove the danger’.

5.1.3 In line with the requirement under section 133, the authority has developed a policy on earthquake-prone buildings within its district. The terms of the EQPB policy and the way in which the authority followed the steps of its EQPB policy is an important aspect in terms of whether the authority exercised its powers consistently with the requirements of section 124.

5.1.4 Section 4 of the authority’s EQPB policy (Process detail) sets out a series of stages that include initial evaluations of the seismic performance (“IEP”) of the relevant buildings¹⁰ and notification to the owner to allow for additional information. Section 5 of the policy (Detailed Assessment) notes that the owner is required to carry out the detailed assessment, except where the authority chooses to do so, and that the assessment ‘should provide an accurate measure of the percentage of the [NBS] which will supersede any IEP scores held on file.’

5.1.5 The owner’s engineer has stated that an IEP was undertaken in 2012. Despite requesting a copy I have not seen the relevant report; however I note that the summary provided in the submission of the owner’s engineer indicates that the IEP did not find the building was earthquake-prone (refer paragraph 4.4.4, bullet point #1). By email on 14 July 2014 the authority confirmed that it does not have a copy of that report.

5.1.6 In this case it appears that the process leading to the decision to issue the s124 notice was not carried out in accordance with the authority’s own policy document and the NZSEE¹¹ IEP procedure (refer Appendix B). The authority merely accepted the request put to it by the owner’s engineer (refer paragraph 3.8). The s124 notice was

⁹ Refer Appendix A.2 for the relevant section from Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Regulations 2005

¹⁰ Based on assessment data obtained by using the New Zealand Society of Earthquake Engineering Assessment and Improvement of the Structural Performance of Buildings in Earthquake (refer Appendix B)

¹¹ New Zealand Society of Earthquake Engineers

- 5.1.7 issued by the authority based on the owner's engineer's recommendation that 'critical structural weaknesses that should be rectified in the short term'. I note that the owner's engineer did not state that the building was earthquake-prone in terms of the Act, nor was a calculation of the percentage of the new building standard provided.
- 5.1.8 The issue of the s124 notice, in particular the timeframe set out in the notice, was connected to the owner's plans to change the use of the building and the owner's engineer's recommendations regarding building work to the columns and stairs. The distinction between the requirements under section 115 regarding a change of use and the decision that the building is earthquake-prone was not clearly differentiated by the owner's engineer nor managed by the authority in its decision to issue the s124 notice.
- 5.1.9 I do not consider the recommendations of the owner's engineer at the time the authority made the decision to issue the s124 notice to be an adequate basis on which to issue a notice under section 124(2)(c). Given that the % NBS was not established by either the authority or in the communications from the owner's engineer prior to the authority's decision to issue the s124 notice, I am of the view the authority was incorrect in the exercise of its powers in issuing the s124 notice.
- 5.1.10 I accept the evaluation carried out by the applicant's engineer (refer paragraph 3.18) and I therefore consider there is no impediment to reversing the authority's decision to issue the s124 notice and there was no requirement to make a direction under section 183(2) whilst this determination was being made.
- 5.1.11 The owner's engineer has not stated that the building is earthquake-prone, but requests clarification on this status given the presence of the critical structural weaknesses (refer paragraph 4.4.4, bullet point #5). The owner's engineer maintains the view that 'it is not possible to say that the structure is not earthquake-prone given those weaknesses, and it is prudent to consider it earthquake-prone until such a time as the remedial works are complete'.
- 5.1.12 In response, I note that the authority has no statutory powers in instances such as this where the building has critical structural weaknesses but the building (or relevant part(s) thereof¹²) is above the threshold for being earthquake prone as defined in the Act and Regulation¹³ (commonly expressed as 33% NBS) unless the building is otherwise dangerous, insanitary, or there is a change of use under section 115. This does not prevent an owner making their own decisions about remediating a building with critical structural vulnerabilities even if it is not earthquake prone as defined in the Act.

¹² Determination 2012/043: Whether the special provisions for dangerous, earthquake-prone, and insanitary buildings in Subpart 6 of the Building Act that refer to a building can also be applied to part of a building (*Department of Building and Housing*) 7 June 2012.

¹³ Building (Specified Systems, Change of Use, and Earthquake-prone Buildings Regulations) 2005

6. The decision

- 6.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the authority incorrectly exercised its powers of decision in issuing a notice under section 124(2)(c) of the Act for the building at 15 Hopetoun Street, and I reverse that decision.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 15 August 2014.

John Gardiner
Manager Determinations and Assurance

Appendix A

A.1 Relevant sections of the Building Act 2004

Section 7 Interpretation

owner, in relation to land and any buildings on the land,—

(a) means the person who—

- (i) is entitled to the rack rent from the land; or
- (ii) would be so entitled if the land were let to a tenant at a rack rent; and

(b) includes—

- (i) the owner of the fee simple of the land; and
- (ii) for the purposes of [sections 32, 44, 92, 96, 97](#), and [176\(c\)](#), any person who has agreed in writing, whether conditionally or unconditionally, to purchase the land or any leasehold estate or interest in the land, or to take a lease of the land, and who is bound by the agreement because the agreement is still in force

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—

- (i) injury or death to persons in the building or to persons on any other property; or
- (ii) damage to any other property

...

124 Dangerous, affected, earthquake-prone, or insanitary buildings: powers of territorial authority

(1) This section applies if a territorial authority is satisfied that a building in its district is a dangerous, affected, earthquake-prone, or insanitary building.

(2) In a case to which this section applies, the territorial authority may do any or all of the following:

(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) except in the case of an affected building, issue a notice that complies with section 125(1) requiring work to be carried out on the building to—

- (i) reduce or remove the danger; or
- (ii) prevent the building from remaining insanitary:

(d) issue a notice that complies with section 125(1A) restricting entry to the building for particular purposes or restricting entry to particular persons or groups of persons.

...

176 Meaning of party

In [sections 177 to 190](#), party, in relation to a determination, means any or all of the following persons affected by the determination:

- (a) the territorial authority;
 - (b) the building consent authority;
 - (c) the owner or, if there is more than 1 owner, any of the owners:
- ...

183 Decision or exercise of power suspended until determination made

(1) Until the chief executive makes a determination on a matter, any decision or exercise of a power by any person referred to in section 177 that relates to that matter is suspended unless and to the extent that the chief executive directs otherwise.

(2) However, a requirement in a notice to fix issued under section 164 to cease building work for safety reasons remains in force until the determination is made

A.2 Relevant sections of the Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Regulations 2005

7 Earthquake-prone buildings: moderate earthquake defined

For the purposes of section 122 (meaning of earthquake-prone building) of the Act, **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.

Appendix B

B.1 Relevant extract from New Zealand Society for Earthquake Engineering: Assessment and Improvement of the Structural performance of Buildings in Earthquakes

3.2 Outline of the Process

...

An outline of the Initial Evaluation Procedure is shown in Figure 3.1.

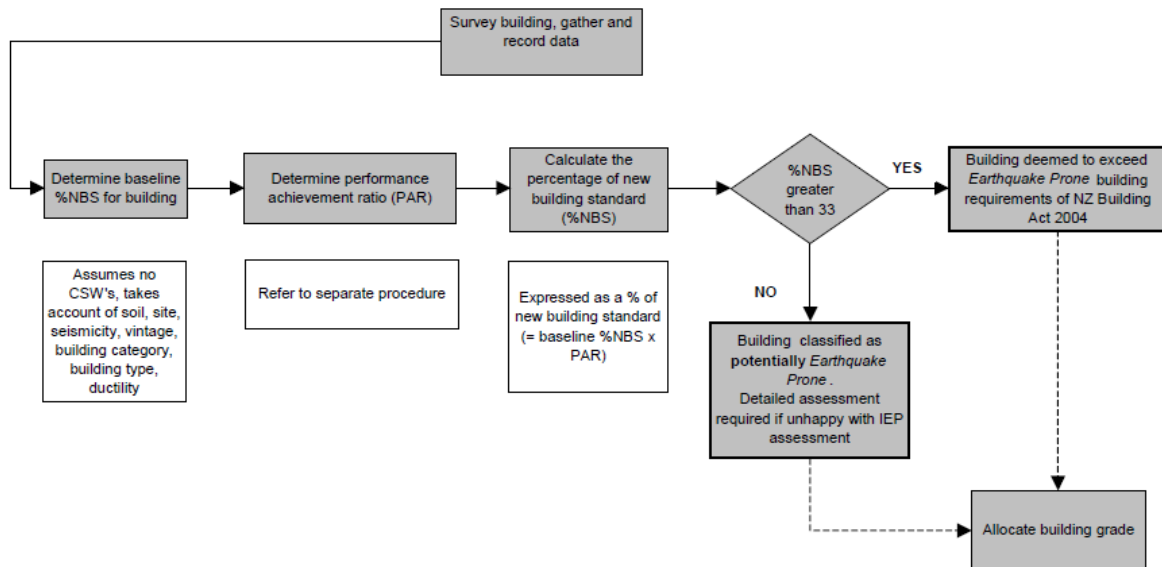


Figure 3.1 Diagrammatic representation of Initial Evaluation Procedure