Department of Building and Housing
Te Tari Kaupapa Whare

Determination 2009/87

Determination regarding the code compliance of basement alterations to a house at 19 Fontenoy Street, Mt Albert, Auckland

1. The matters to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004[1] ("the Act") made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing ("the Department"), for and on behalf of the Chief Executive of that Department. The applicants are the owners, D Shapcott and H Warren ("the applicants") acting through the designer of the proposed alterations ("the designer"). The other party is the Auckland City Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.

1.2 This determination arises from the decision of the authority to stop work being carried out to the basement area of a 97-year-old house because it was not satisfied that the basement, when completed, would comply with certain clauses of the Building Code (Schedule 1, Building Regulations 1992).

1.3 The site instruction to the property owner issued on 11 May 2009 requiring a certificate of acceptance prior to work being continued was in effect a stop work notice. The appropriate procedure would have been to issue a Notice to Fix. Under section 177 (b) of the Act, the correctness of the issue of a stop work notice is not a matter I can determine. However, based on the information available to me, I consider that the matters for determination in terms of section 177(a) of the Act[2] are:

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

[2] In this determination, unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

1.3.1 Matter 1: The structural elements of the basement

Whether the proposed alterations will comply with Clause B1 Structure of the Building Code, taking into account the condition of the existing basement area.

1.3.2 Matter 2: Weathertightness of the basement

Whether the proposed alterations will comply with Clause B2 Durability and Clause E2 External Moisture of the Building Code, taking into account the condition of the existing basement area.

1.3.3 Matter 3: The existing subfloor

Whether the existing sub-floor framing to the lower level of the house may be classified as "dangerous" in terms of section 121(1) of the Act.

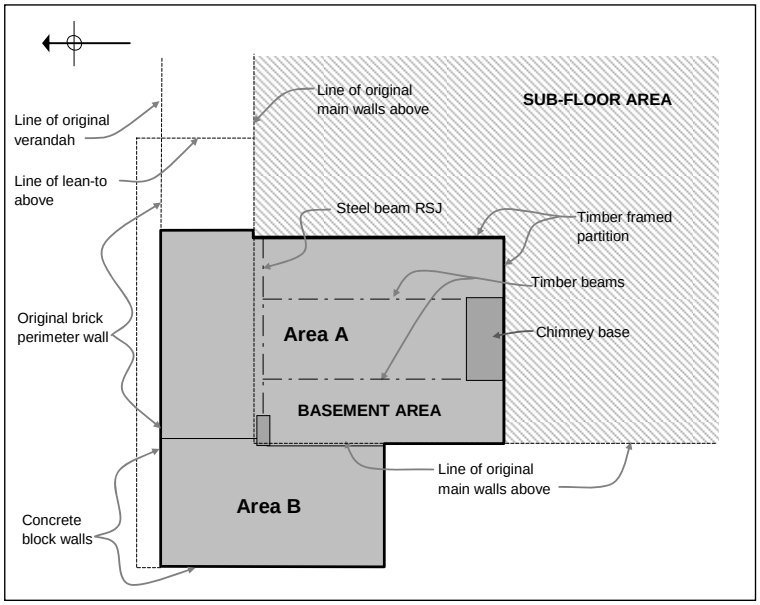
1.4 I note that the work to the basement is part of a building consent that covers other alterations to the upper floor of the house. The authority has limited its concerns to the basement and sub-floor areas; and other building work within the building consent is therefore not considered within this determination.

1.5 In making my decision, I have considered the applicant's submission, the reports of the expert ("the expert") and the engineer ("the engineer") commissioned by the Department to advise on this dispute, and the other evidence in this matter. I have evaluated this information using a framework that I describe in paragraph 7.1.

2. The building work

2.1 The building work covered by the building consent consists of alterations and additions to an existing detached house situated on a sloping site, which is in a low wind zone for the purposes of NZS 3604[3]. The northwest slope of the site results in the house being two storeys high for part of the north and west elevations.

2.2 The following sketch shows the basement and sub-floor areas considered within this determination:



[3] New Zealand Standard NZS 3604:1999 Timber Framed Buildings

2.3 The existing house

2.3.1 The original house was built prior to 1914 as a simple rectangular single-storey "villa" constructed in a manner traditional for houses of that period, with light timber framing, a suspended timber-framed floor supported by jack studs and bearers, brick perimeter foundation walls, weatherboard claddings, double-hung timber windows, a corrugated steel hipped roof and a lean-to veranda to the north elevation. The authority has no records of the original house.

2.4 Past alterations to the lower level

2.4.1 At some stage(s) the northwest corner of the sub-floor was developed to provide "Area A", with sub-floor supports replaced by beams, a concrete floor slab laid and timber partitions installed to separate the area from the sub-floor. Based on the style of timber windows installed to the original brick foundation wall, it seems likely that this initial development of the basement was carried out during the 1940's or 1950's.

2.4.2 At some stage(s) the remaining sub-floor area was opened up by removing some of the original piles and placing new bearers alongside the existing. The engineer has described this work as 'clearly undertaken a long time ago'.

2.4.3 Subsequent alteration(s) included a small extension to the west ("Area B"), with a step down from Area A. That building work may have included the steel beam(s) to Area A. Area B has a concrete slab and foundations, concrete block exterior walls, timber windows and doors, and stairs providing internal access to the upper floor. The resulting basement is L-shaped, and about 35m^2 in area.

2.4.4 The earliest record of the house appears to be a drainage plan that shows the outline of the extended northwest corner, with a gully trap shown adjacent to the extended north wall and a note stating '9.10.62 pass'. Based on this date and the use of concrete blocks to the exterior walls of Area B, I consider the basement extension is likely to have been at least partly constructed during the early 1960's.

2.5 The current basement alterations

2.5.1 The current building work includes interior alterations to the enclosed basement area to provide a bathroom in the southeast corner of Area A. The completed basement will provide a bedroom and ensuite bathroom in Area A and a small sitting area within Area B. No changes to the partition walls or exterior walls of the basement, or to the adjacent sub-floor, are shown in the consent drawings.

2.5.2 At the time construction work to the basement was halted, the bathroom timber framing had been installed, some wiring was installed and trenches had been cut through the floor slab in Area A to accommodate the plumbing pipework.

3. Background

3.1 When the applicants purchased the house in 1981 the basement had apparently already been developed as shown in the consent drawings as the 'existing lower floor plan'. In 1982, a building permit was approved for minor alterations, with the site plan showing an approximate outline of the Area B extension.

3.2 In 2006, in contemplation of alterations to the house, the applicants obtained a copy of the Land Information Memorandum ("LIM") from the authority, which raised no issues about the building's history.

3.3 In 2008, the applicants engaged the designer to prepare a concept design for the alterations. During the course of the planning, the designer discovered the authority's records were limited to a drainage plan and a site plan, both of which showed the house plan in outline only.

3.4 The designer submitted the documents for the alterations to the authority at the end of 2008, and a building consent (No. B/2008/28885) was issued early in 2009. I have not seen a copy of the building consent.

3.5 Following a plumbing inspection of the basement on 11 March 2009, the authority issued a site instruction (No. 27573) that required basement work to stop, noting:

> Downstairs area is not on council records as an existing area. A certificate of acceptance is required prior to any work being continued. (Floor slab is approx. 40mm thick, no flashings on windows, ground clearances, cladding etc.)

3.6 The designer discussed the history of the house with the authority, explaining that a certificate of acceptance for the existing basement was not possible due to the age of the past alterations. It appears that the authority agreed, but needed a structural report to confirm that the slab to the bathroom area would accommodate the loads.

3.7 The designer arranged for a structural assessment of the slab and, in a letter to the designer dated 19 March 2009, the engineer noted:

- the unknown thickness of hardfill
- the lack of damp proof membrane or reinforcing
- the crack adjacent to the proposed shower.

While considering that the slab would support the bath, the engineer noted that if 'local soft spots' in the hardfill coincided with the feet of the bath, then the slab would crack.

3.8 The authority considered the engineer's assessment inadequate and, in a facsimile to the architect on 1 April 2009, required a registered engineer 'acceptable to Council' to provide specific design and calculations to verify the structure and to undertake construction observation. The authority required that engineer's report to include:

1. Ground conditions.
2. Foundations including point loads.
3. Concrete slab including moisture control.
4. Concrete block work.
5. Support posts.
6. Beams including floor joists.
7. Connections.
8. Internal stair case.

3.9 Correspondence and discussions continued without resolution, with the designer noting the following (in summary) in a series of emails to the authority:

- The lack of a code compliance certificate for the existing construction is irrelevant, and there is no requirement to upgrade the basement.
- While the house as a whole does not comply with the code due to its age, the alterations will not make compliance worse than it was prior to the current alteration work.
- It is not 'reasonable and practicable' to upgrade the entire basement area, as the cost of that upgrade would outweigh the cost of the intended alteration.
- It is not the owner's fault that the authority's records are inadequate, and there is no proof that any alterations prior to 1982 did not have building permits as no records at all exist – even for the original house.
- The authority should have identified any issues about the original construction at the time of approving the building consent, as that would have allowed the owner to reassess the viability of the intended alterations.

3.10 The Department received an application for a determination on 20 April 2009.

4. The submissions

4.1 The designer provided a submission that detailed the background to the situation and included a statement titled 'Owner's position', which included the following points:

- In common with many other old houses in the area, there were no records available to the applicants at the time of purchase in 1982.
- It cannot be proven that work undertaken prior to 1982 had a building permit, but on the other hand the authority cannot prove that there was no permit.
- It has been extremely difficult to get clarification and explanation from the authority as to what process should be followed in this situation.
- The authority issued a consent, so should have been satisfied that the building would comply to the same extent when the alterations were completed.
- Any outstanding matters in regard to the lack of records or condition of the existing building should have been raised at consent stage in order to allow the applicants to make an informed decision on the likely costs of proceeding.

4.2 The designer forwarded copies of:

- the drawings
- the authority's site instruction dated 11 March 2009
- the engineer's letter dated 19 March 2009
- the correspondence with the authority.

4.3 The authority made a submission in the form of a letter to the Department dated 30 April 2009, which responded to some of the issues raised in the applicants' submission as follows (in summary):

- Although aware of the lack of records while processing the building consent, the existing plan showed the basement used as a bedroom/sitting area that could be reasonably expected to have had a compliant floor slab.
- The plumbing inspection revealed that the floor slab was not code compliant and also raised doubts about compliance of the existing slab with Clauses E2 and B2.
- Given the degree of concern, the authority is considering its responsibilities in regard to whether the area is dangerous and insanitary.
- The authority, in approving the consent acted reasonably given the lack of records, but 'on site conditions' have since provided further information that changes the basis of the initial decision.
- There have also been significant alterations to the sub-floor area that affect the structural performance, such a lack of bracing, removed piles and new beams.
- Weathertightness is also a concern at the junction between the concrete block walls and the older brick foundation wall, with movement apparent.

4.4 A draft determination was issued to the parties for comment on 25 August 2009. The authority accepted the draft without comment.

4.5 The applicant accepted the draft but the designer, in a letter to the Department, dated 3 September 2009, submitted in summary that:

- The authority had no records of the original house.
- A statement regarding building permits in the discussion in paragraph 7 of the draft should be removed due to insufficient records being available on that matter.
- The designer also sought guidance on the completion of the work that was likely to arise from the notice to fix outlined in paragraph 11.1, the lifting of the stop work notice, and the continuation of the consented work.

I have amended the determination accordingly. In response to the last bullet point above, I note that there are a variety of ways in which the work may be completed that are equally valid: the authority may require the work arising from the notice to fix to be done as an amendment to the building consent. I leave that to the applicant and the authority to resolve.

5. The first expert's report

5.1 As mentioned in paragraph 1.5, I engaged an independent expert to provide an assessment of the condition of those building elements subject to the determination. The expert is a member of the New Zealand Institute of Building Surveyors. The expert inspected the basement area on 9 May and 3 June 2009 and provided a report on 15 June 2009.

5.2 The expert noted that the early work to the basement appeared to be at least 30 years old and considered that it 'would not have complied with building standards and good trade practices at the time of construction'.

5.3 The floor slab to Area A

5.3.1 The expert inspected the openings in the floor slab, and noted the following:

- The floor slab is about 45mm thick with no reinforcing damp proof membrane ("DPM") or hardfill beneath the slab.
- There is a crack in the floor slab near the chimney base.
- The slab finishes beside the old sub-floor partition, with the partition constructed over a brick base (indicating that the floor slab was poured at a later date to the partition).

5.3.2 The expert drilled through the slab in three locations to the north of the steel beam position; and confirmed the thickness as 45mm in two of the locations. The western location was approximately below the steel beam, and the drilling revealed 150mm deep timber.

5.4 The foundations

5.4.1 The expert dug holes next to the exterior brick and concrete block walls to probe the depth of the footings and noted the following:

- The footing under the brick wall to Area A was about 200mm deep
- The footings under the north and west concrete block walls to Area B were also about 200mm deep.
- The earth beneath the footings at each location appeared soft.

5.4.2 The expert also noted that the base of the original brick chimney had been excavated in the past, with concrete poured against the foundation. The concrete appeared to be less than 30 years old, and the expert considered that the concrete may have been applied under the chimney base to stabilise it.

5.4.3 The expert investigated the footing below the support to the east end of the steel beam over Area A, and noted that the depth was about 200mm. At the west end of the steel beam, the expert pulled the carpet back from the timber-framed boxed column, and noted that concrete had been poured over timber.

5.5 Other structural matters

5.5.1 The expert noted that the timber beams in Area A spanned more than 5m between the chimney base and the steel beam; and appeared under-sized at 220mm x 50mm.

5.5.2 The expert also noted that many piles and jack studs in the sub-floor area had been removed in the past, and also considered that bracing may be required.

5.6 The basement exterior walls

5.6.1 Commenting specifically on the exterior of the basement, the expert noted that:

- the concrete block walls to Area B butt against the original brick foundation walls of Area A, and movement cracks are apparent although there is no sign 'serious differential settlement'
- the existing timber doors to the west wall of Area B are allowing moisture penetration, with carpet damage apparent
- the existing timber window in the west brick wall of Area A lacks a sill flashing and moisture is penetrating, with carpet damage apparent beneath the window (I note that the windows to the north are protected by the 450mm overhang of the upper level).

5.7 A copy of the expert's report was provided to the parties on 16 June 2009.

6. The engineer's report

6.1 Taking into account the serious structural concerns raised by the authority and noted by the expert, I engaged the engineer as a second independent expert to provide an assessment of the condition of the structural elements associated with the alterations to the basement and within the existing sub-floor area. The engineer is a member of the Institution of Professional Engineers New Zealand; and inspected the basement area on 14 and 27 July 2009, providing a report dated 30 July 2009.

6.2 The basement area

6.2.1 The engineer inspected the openings to the floor slab in Area A, and confirmed the findings of the first expert in regard to the lack of hardfill, DPM and reinforcing.

6.2.2 The engineer noted that the original floor joists to the upper level are about 100mm x 50mm at 500mm centres. The floor joists above Area A are supported by two 220mm x 50mm timber beams that span about 4 metres.

6.2.3 The steel beam ("the RSJ") is 230mm x 105mm and is supported on a boxed column (of unknown size) at one end and a timber post and concrete foundation pad at the other. The RSJ supports the timber beams, the main upper wall of the original house and the joists to the original veranda.

6.2.4 Commenting specifically on the basement area, the engineer noted that:

- there are signs of corrosion in the bottom flange of the RSJ
- calculations confirm that the 220mm x 50mm timber beams are insufficient for the span and the loads
- there is a large crack to the slab of Area A near the chimney base
- the vertical junction between the original brick foundation wall to Area A and the concrete block walls to Area B is 'extremely poor'
- there is a displaced concrete block at the corner of Area B.

6.2.5 The engineer made the following additional comments:

- There is no significant deflection in any of the beams to the basement area
- Despite the 'questionable' foundation depths and apparent poor workmanship, there is no evidence of settlement of the external walls to the basement area.
- Apart from the crack noted above, the floor slab to Area A appears to be performing adequately as a wearing surface.

6.3 The existing sub-floor area

6.3.1 The expert observed that the sub-floor space had been opened up in the past by the removal of many of the original jack studs and the installation of new bearers alongside the original, with the work 'clearly undertaken a long time ago'. The engineer noted that the perimeter foundation walls were a mix of original brick, concrete and rubble, in-situ concrete and concrete block.

6.3.2 Commenting specifically on the sub-floor area, the engineer noted that:

- some areas of the concrete block sections in the perimeter foundation walls were severely cracked and 'sagging'
- there is significant deflection of floor framing where jack stud supports have been removed
- there is no evidence that the remaining jack studs or concrete piles have been upgraded to take the resulting increased loading
- there are jack studs that are cracked, misaligned, supported on timber or are in two pieces with timber nailed over the joint
- there is no sub-floor bracing, although this is typical for houses of that era
- apart from some skew-nailing, there are no connections between bearers and jack studs, and jack studs and concrete pile foundations.

6.3.3 The engineer concluded that a 'full and detailed assessment' of the existing sub-floor is needed, together with recommendations for remedial works, noting:

> Despite the age of the original structure the workmanship observed would not meet any kind of acceptable standard or good trade practice.
>
> In our opinion the existing sub-floor is bordering on unsafe.

6.4 A copy of the engineer's report was provided to the parties on 4 August 2009.

6.5 The designer responded to the engineer's report in an email to the Department dated 17 August 2009, which noted that the main issue is whether the alterations continue to comply to at least the same extent as before, rather than to current requirements. Very few older houses comply as the standards are constantly updated, and it is important to consider the accepted practices at the time the house was built. I have considered the designer's comments in the preparation of this determination.

7. Evaluation for code compliance

7.1 The relevant legislation

7.1.1 The relevant section of the Act in regard to alteration work is:

> **112 Alterations to existing buildings**
>
> (1) A building consent authority must not grant a building consent for the alteration of an existing building, or part of an existing building, unless the building consent authority is satisfied that, after the alteration, the building will—
>
> (b) continue to comply with the other provisions of the building code to at least the same extent as before the alteration.

7.1.2 If building work was completed before the Building Act 1991 or the Building Act 2004 came into effect, then an authority has no power to take any action unless:

- the owner decides to alter the building, or change its use, or change its intended life, or subdivide the allotment in a way that affects the building, or
- the building is dangerous, or is earthquake-prone, or is insanitary.

7.1.3 In regard to the first provision, the current basement alterations provide a bedroom, ensuite bathroom and sitting area to replace what appears to have been used as a 'rumpus room'. Before and after the alterations, the basement will remain a 'habitable' space and no significant change of use is therefore proposed.

7.1.4 I accept that prior to the 1960s (or thereabouts) alterations taking place, the subfloor space was most likely modified by the removal of various elements, eg jack studs, bearers, etc, in order to create this space. However, this is not a matter I can address in this determination, apart from the matters referred to in paragraphs 8, 9, and 10.

7.1.5 In regard to the second provision, this building is a single household unit that is no more than two storeys high; and can therefore not be classified as "earthquake-prone" under the Act. This leaves the question of whether the lower level of this house is "dangerous" or "insanitary", for which the relevant sections of the Act are:

> **121 Meaning of dangerous building**
>
> (1) A building is **dangerous** for the purposes of this Act if,—
>
> (a) in the ordinary course of events (excluding the occurrence of an earthquake), the building is likely to cause—
>
> (i) injury or death (whether by collapse or otherwise) to any persons in it...
>
> **123 Meaning of insanitary building**
>
> (1) A building is insanitary for the purposes of this Act if the building—
>
> (a) is offensive or likely to be injurious to health because—
>
> (i) of how it is situated or constructed; or
>
> (ii) it is in a state of disrepair; or
>
> (b) has insufficient or defective provisions against moisture penetration so as to cause dampness in the building...

7.1.6 If the authority is satisfied that a building is dangerous or insanitary under the Act, it may give written notice requiring work to be carried out to reduce or remove the danger, or to prevent the building work from becoming insanitary (section 124).

7.2 The compliance of the lower level

7.2.1 It is apparent from the expert's and engineer's observations, together with the other evidence, that the past alterations to the basement and sub-floor areas of this house were undertaken well before the 1991 Building Act came into effect.

7.2.2 Taking into account the nature of the past alterations, I consider these did not meet the requirements of the applicable building bylaws in force at the times the alterations were undertaken.

7.2.3 In order to form a view as to the code compliance of the building work I must consider whether the building work complies with the relevant clauses of the Building Code to the extent required by the Act, taking into account the condition and age of the existing basement and sub-floor areas, and whether those areas (either before or after the proposed alteration work) are likely to be considered dangerous in terms of section 121 of the Act.

7.2.4 In doing so, I have taken into account the following:

- for the existing lower level of the house, the compliance of the past alterations with the practices and standards considered acceptable at the time that the various alterations were likely to have been carried out
- it is the responsibility of the building owner for the level of repairs and maintenance expected to be carried out to prevent defects that affect the ongoing performance of the existing areas
- for the existing lower level of the house, any defects affecting safety and sanitary conditions
- the effect of the physical condition and characteristics of building elements within the basement area on the future function of that part of the dwelling once the currently proposed alterations are completed.

Matter 1: The structural elements of the basement

8. Discussion

8.1 The designer maintains that the proposed alterations will result in the structure of the basement area being no worse than it was prior to the work. However, taking account of the expert's and engineer's reports, I consider that the following items require attention to achieve a minimum level of safety and/or compliance:

- the corrosion to the steel beam
- the inadequate timber beams above Area A
- the crack to the slab of Area A
- the vertical junction between the brick and concrete block walls
- the displaced concrete block to the exterior corner.

8.2 I note the engineer's comments as outlined in paragraph 6.2.5, and I accept that these other areas are adequate in the circumstances of the existing basement area and comply with the Building Code to the extent required by the Act, which is less than would be required for a new building.

8.3 Notwithstanding that lower level of compliance, I consider that the limited remedial and maintenance work outlined above is sufficient to provide a minimum level of structural safety that is reasonable in the circumstances, taking into account the history of the basement development.

8.4 As a general comment, I consider that it would be reasonable for an authority, in terms of sections 121 and 124, to ask for a report that verifies the safety and sanitary condition of the dwelling, and also sets out any work required to rectify any faults in relation to those matters. Such rectification work would also have to conform to the requirements of the Building Code.

Matter 2: Weathertightness of the basement

9. Discussion

9.1 The building work to the basement of this house involves interior alterations to provide a bedroom, ensuite bathroom and sitting area, to replace what appears to have been used as a 'rumpus room'. The designer maintains that the alterations will result in the basement area being no worse than it was prior to the work.

9.2 While I accept that the basement alterations are unlikely to decrease the existing weathertightness of the basement, I consider that some limited repairs and maintenance of the existing exterior walls are necessary to ensure that the proposed basement area will not suffer from moisture penetration that could cause 'undue dampness', taking into account its proposed use as a bedroom.

9.3 Taking account of the expert's report, I conclude that remedial work is necessary in respect of:

- the cracks to the junctions between the brick and concrete block walls
- the lack of adequate weatherproofing to the exterior doors, with associated moisture penetration apparent
- the lack of adequate weatherproofing to the west timber window, with moisture penetration apparent.

9.4 I note that the repair of the above faults will not result in the area complying with the provisions of the Building Code to the same extent as new building work. However, the extent of code compliance for alterations to an existing building may be less than would be required for a new building, but that work must not contribute to a situation that is potentially insanitary.

9.5 Notwithstanding that lower level of compliance, I consider that the limited repair and maintenance work outlined above is sufficient to provide a minimum level of weathertightness that is reasonable in the circumstances, taking into account the

likely history of the basement development in the past, the intended use of the basement in the future and the nature of this alteration work.

9.6 Because the faults identified with the existing basement walls occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 9.3 will result in the basement complying with Clause E2 and Clause B2 to the extent required by the Act that I consider to be reasonable in the circumstances of these alterations.

Matter 3: The existing sub-floor

10. Discussion

10.1 During his assessment of the basement alterations, the expert noted various significant defects that were apparent in the existing sub-floor area of the house. I leave it to the authority to decide on whether a notice to fix should be issued with regard to that area, and in doing so suggest it has due regard to the following:

(a) The 'injury or harm' test applied within Section 121 of the Act relates to people in and around the dwelling who are likely to be affected.

(b) Whilst subfloor spaces would not normally be habitable, if failure occurred within the substructure, that failure could well have consequential effects on the basement areas A, B which are habitable.

10.2 As I considered that the significance of these defects could be such as to result in the sub-floor being "dangerous" in terms of section 121 of the Act, the engineer was asked to include the area in his assessment of the basement to this house.

10.3 Taking into account the engineer's report, I therefore conclude that detailed structural investigation, with remedial work as necessary, is required to ensure the structural safety of the sub-floor in respect of:

- the concrete block sections in the perimeter foundation walls
- the deflection of floor framing where jack stud supports have been removed
- the capacity of the remaining jack studs and/or concrete piles for the loading
- the jack studs that are cracked, misaligned or supported on timber
- the lack of sub-floor bracing, taking into account the age of the house
- the inadequate connections between bearers, jack studs, and concrete piles.

10.4 While the current basement alterations are not associated with the existing subfloor area, the concerns raised by the expert, and subsequently confirmed, clarified and expanded by the engineer, have identified significant structural defects that may endanger the structural integrity of the house. I note the engineer's conclusion that the sub-floor area is clearly substandard and is 'bordering on unsafe'.

10.5 Based on the engineer's report, I am satisfied that the existing subfloor area is likely to be dangerous in terms of section 121 of the Act.

11. What is to be done now?

11.1 A notice to fix should be issued that requires the owners to bring the building work into compliance with the Building Code, identifying the items listed in paragraph 8.1 paragraph 9.3, and paragraph 10.3 and referring to any further defects that might be discovered in the course of investigation and rectification, but not specifying how those defects are to be fixed. It is not for the notice to fix to stipulate directly how the defects are to be remedied and the house brought to compliance with the Building Code. That is a matter for the owner to propose and for the authority to accept or reject.

11.2 I leave it to the authority's discretion whether it wishes to give written notice under section 124(1) in respect of the condition of the existing subfloor structure. I note that these structural concerns will otherwise be addressed through the notice to fix as described above.

11.3 I would suggest that the parties adopt the following process to meet the requirements of paragraph 11.1. Initially, the authority should issue the notice to fix. The applicants should then produce a response to this in the form of a detailed proposal, based on further investigation as necessary (including structural investigation of the existing subfloor), and produced in conjunction with competent and suitably qualified persons, as to the rectification or otherwise of the specified issues. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

12. The decision

12.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:

- the proposed alterations, taking into account the condition of the existing basement, do not comply with Clause B1 of the Building Code
- the proposed alterations, taking into account the condition of the existing basement, do not comply with Clauses E2 and B2 of the Building Code
- the existing sub-floor does not comply with Clause B1 of the Building Code and may be classified as dangerous under section 121(1) of the Act.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 13 October 2009.

John Gardiner
Manager Determinations