



## Determination 2012/067

### Regarding the issue of a notice to fix for additions and alterations to a house at 35 Tautari Street, Orakei, Auckland



#### 1. The matters to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004<sup>1</sup> (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations, Ministry of Business, Innovation and Employment (“the Ministry”)<sup>2</sup>, for and on behalf of the Chief Executive of the Ministry.

1.2 The parties to this determination are

- the current owners and vendors, A Park and JC Park and Peters Trustee Services Limited (“the applicants”)
- the purchasers, acting through a real estate firm<sup>3</sup>
- Auckland Council, including in its previous capacity as Auckland City Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.

1.3 This determination arises from the decision of the authority to issue a notice to fix for building work carried out under two building consents. The authority considers the building work does not comply with the consents and does not comply with the Building Code (First Schedule, Building Regulations 1992) that was in force at the time of the issue of the consents. The owner subsequently proposed some remedial

<sup>1</sup> The Building Act, Building Code, Compliance documents, past determinations and guidance documents issued by the Ministry are all available at [www.dbh.govt.nz](http://www.dbh.govt.nz) or by contacting the Ministry on 0800 242 243.

<sup>2</sup> After the application was made, and before the determination was completed, the Department of Building and Housing was transitioned into the Ministry of Business, Innovation and Employment. The term “the Ministry” is used for both.

<sup>3</sup> The property is subject to a sale and purchase agreement and the purchasers are therefore considered as parties under section 176 of the Act

work be carried out (“the scope of works”), which the authority did not approve but responded seeking further detail.

- 1.4 The matters to be determined<sup>4</sup> are therefore whether the authority correctly exercised its powers in issuing the notice to fix, and in requiring further detail in the proposed scope of works. In making this decision I must consider
- whether the building work carried out under the two consents complies with the relevant clauses of the Building Code<sup>5</sup> (First Schedule, Building Regulations 1992) that was in force at the time of issue of the consents
  - whether the scope of works provided to the authority is sufficient to establish on reasonable grounds that the proposed remedial work will bring the building into compliance.
- 1.5 The notice to fix states that the applicant may apply to the authority for a modification of the durability requirements to allow durability periods to commence from the date of substantial completion. I leave agreement about when the durability periods started for the parties to resolve in due course.
- 1.6 In making my decision, I have considered the submissions of the parties, the report of the expert commissioned by the Ministry to advise on this dispute (“the expert”) and the other evidence in this matter.
- 1.7 Relevant clauses of the Building Code and sections of the Act discussed in this determination are set out in Appendix A.

## **2. The building work**

- 2.1 The building work consists of additions and alterations to an existing single storey timber framed house built circa 1962. The additions and alterations were undertaken under two separate consents and include a deck and sun room to the north, and an ensuite added externally to the west of the master bedroom.
- 2.2 The deck on the north elevation is timber-framed on pile foundations. It is open on all sides and forms a carport underneath. The consent plans show the deck constructed of 17.5mm plywood substrate with joists at 400mm centres supported on timber posts. The membrane is not identified, but it is shown with tiles fixed to the membrane, and the fall is shown as 50mm over approximately 4.0 metres (0.7° fall). The plans also show a glass balustrade with top fixed tubular steel balustrades on a plaster upstand; however, the deck was constructed with a solid plaster balustrade on timber framing.
- 2.3 The consent plans indicate the existing windows in the master bedroom and living room leading onto the deck were to be replaced with bi-fold doors to match existing timber joinery.
- 2.4 The ensuite is timber-framed on concrete masonry foundation walls. The cladding to both the deck and ensuite is cement/sand plaster on rigid fibre-cement sheet backing fixed direct to the framing. The consent plans included a small section of membrane clad roof with a slope of 1.5° under the existing eaves in addition to a 35° proprietary aluminium glazed mono-pitch roof; the plans also show the west wall being curved.

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<sup>4</sup> Under sections 177(1)(b), 177(2)(a) and 177 (2)(f) of the Act

<sup>5</sup> 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.

- 2.5 The eight-sided aluminium-framed semi-circular sun room is constructed over part of the deck, with the glazing fixed in proprietary aluminium glazing bar system.
- 2.6 The expert was able to observe markings on some of the timber below the deck as being treated with preservative to level H3, but did not ascertain the treatment level of timber in the balustrades or the ensuite.

### 3. Background

- 3.1 On 29 March 1994 the authority issued building consent no. B/1994/3801774 under the Building Act 1991 for the deck. The consent plans did not include the sunroom addition.
- 3.2 On 12 December 2000 the authority issued building consent no. B/2000/3607979 under the Building Act 1991 for the ensuite addition. The consent plans show the sunroom addition as existing.
- 3.3 I have seen no record of inspections having been carried out by the authority during construction for either consent.
- 3.4 On 2 May 2012 the authority carried out an inspection of the building work and subsequently issued a notice to fix dated 4 May 2012. The notice to fix cited contravention of Clauses B1 Structure, B2 Durability, E2 External moisture, and E3 Internal moisture, and noted the following 'areas of concern':

#### Deck

- Deck not built as per consented plan
- Flashing detail – deck to balustrade and building envelope
- Internal gutter detail – overflow and outlets, are insufficient
- Floor heights to deck
- Top of balustrade flat
- Deck membrane and fall
- Construction connection of sunroom to Building envelope cannot be confirmed as compliant with E2

#### Ensuite

- Not built as per consented plan, internal lay out changed
- Vanity and tiled area not sealed
- Tiled area to bottom wall area of shower not sealed
- Possible moisture ingress internal barge board
- No spouting on to glass roof

- 3.5 I note that no items listed in the 'areas of concern' relate directly to Clause B1 Structure. I have taken the inclusion of this clause to mean that moisture ingress may have adversely affected the timber framing and hence the structure. The notice to fix makes no mention of the sunroom addition as building work undertaken without consent.
- 3.6 In the covering letter the authority recommended the applicant 'engage the services of a suitably qualified person to review the attached [notice to fix] and to develop a proposed scope of work ...'. The authority would then advise whether consent was required for the remedial work.

3.7 On 11 May 2012 the applicant submitted a one page response to the notice to fix, as follows:

'Area of concern' in the notice to fix	Agreement or comment	Proposal
<b>Deck over carport</b>		
Deck not as per consented plan	Agreed	Advice requested of authority
Flashing detail	Waterproofing used was silicone to corners with overlay of a band of tape and [proprietary waterproofing membrane] applied 100 to 150 up wall and covering complete deck	
Internal gutter detail – insufficient overflow and outlets		<ol style="list-style-type: none"> <li>1. Install required diameter pipe to existing location of overflow</li> <li>2. Sought acceptance of current construction given water able to escape at gate entrances/stairs</li> </ol>
Floor heights to deck	Agreed	Advice requested of authority  Applicant considers height may have been acceptable in 1994
Top of balustrade	Agreed	Render with a 10° fall then cover and apply an approved waterproofing membrane as per E2/AS1 figure 117 – with proposed render in lieu of prescribed polystyrene packer
Deck membrane and fall	Fall is 1/100, which applicant was advised was acceptable in 1994	
Connection of sunroom to building envelope	As per flashing detail above	
<b>Ensuite</b>		
Not built as per consented plan.	Agreed	Advice requested of authority
Vanity and tiled area not sealed.	Agreed	Will be rectified
Tiled area to bottom wall area of shower not sealed.		Total area of shower wall, floor and step plus outside floor of shower treated as per flashing detail above
Possible moisture ingress internal barge board.	Agreed	Will have it investigated and repaired where necessary
No spouting on to glass roof.	Agreed	Will have necessary replacement done

- 3.8 No further information was provided by the applicant.
- 3.9 In an email on 4 June 2012 the authority responded to the applicant noting that although the applicant agreed in some instances with the items listed in the notice to fix, 'further detailing will be required to demonstrate how these solutions will achieve compliance', and that other items had not been addressed. The authority reiterated that the applicant was required to obtain the services of a suitably qualified person to assist in preparing a complete response to the notice to fix.
- 3.10 On 8 June 2012 the Ministry received an application for determination.

## **4. The submissions**

- 4.1 The applicant made no submission but forwarded copies of
- the approved plans for the deck and sunroom
  - the notice to fix dated 4 May 2012 and the covering letter
  - email correspondence between the parties (as described above).
- 4.2 The authority acknowledged the application in a letter dated 18 June 2012 but made no submission in response. The authority provided some of the relevant building consent documentation by way of CD ROM including:
- drawings and documentation for the two building consents
  - records of the final inspection on 2 May 2012.
- 4.3 A draft determination was issued to the parties for comment on 1 August 2012.
- 4.4 The authority accepted the draft determination without further comment in a response received on 2 August 2012.
- 4.5 Neither the applicants nor the purchasers made any response to the draft determination.

## **5. The expert's report**

- 5.1 As mentioned in paragraph 1.6, I engaged an independent expert to assist me. The expert is a Registered Architect and a member of the New Zealand Institute of Architects. The expert inspected the building work on 4 July 2012 and provided a report dated 12 July 2012.

### **5.2 General**

- 5.2.1 The expert found the cladding was generally reasonably straight and fair and the standard of workmanship in the finishes of the ensuite and deck was good; however, several details did not comply with good practice at the time of construction. The expert also commented that several of the flashings were complex and non-standard, with the exposed parts of the flashings variable in terms of laps and the use of cover flashings where back flashings would have been good practice.
- 5.2.2 The expert noted the following variations from the consent drawings:
- The ensuite shower room was constructed to a rectangular plan without the curved west wall shown, and the internal layout was altered.

- The ensuite was built on concrete masonry foundations rather than timber piles as shown in the drawings.
- The ensuite roof was constructed as a single mono-pitch without the 1.5° top section indicated on drawings.
- A solid plaster balustrade was constructed to the deck in lieu of the glass balustrade indicated on the drawings.
- The sun room was constructed over part of the deck.

5.2.3 The expert commented that as the deck and sun room were completed approximately 18 years ago, and the ensuite 11 years ago, many of the elements are beyond the service life required by Clause B2 of the Building Code, and that his report assumed a modification of Clause B2.3.1 to the effect that the durability periods begin from the dates of substantial completion (refer also paragraph 1.5).

### **5.3 Moisture levels**

5.3.1 The expert inspected the interior of the house, noting no evidence of moisture damage and non-invasive moisture content readings were low.

5.3.2 The expert carried out invasive moisture testing to 15 sample areas at various locations considered to be at high risk of moisture penetration from the deck, sunroom, and ensuite additions, recording elevated readings as follows:

#### **The deck**

- four readings ranging from 20% to 26% in the top plate of the deck balustrade
- 18% in the bottom plate at the junction between the deck and the master bedroom
- 21% in a stud adjacent the deck at the south west corner
- 33% in a joist to the southwest of the sunroom with visible decay evident in the plywood which was soft and had fungal mycelium present

#### **The ensuite**

- 22% to wall capping to the south end of the ensuite, with watery slurry leaking from drill holes.

### **5.4 The external envelope**

5.4.1 Commenting specifically on the external envelope the expert largely restricted his observations to those issues raised by the authority in the notice to fix, noting the following:

#### **The deck**

- The plaster cladding to both the deck balustrade and the house finished at or below the level of the deck tiles.
- There was no height difference between the floor of the deck and floor of the house (the consent plans show this being in the order of 100mm).
- Obvious signs of leaks below the deck internal gutter at a change in slope, and at the gutter outlet.

- Evidence of leaks over a long period of time leading to damage to the plywood decking.
- Rusted joist hangers.
- The wooden sill of the door from the master bedroom to the deck is buried in the deck tiles and there is no sill flashing below. There was evidence of past and current leaks.
- Cracks at the junction between the balustrade and:
  - the plastered masonry stair handrail wall
  - the house wall, and likely no saddle flashing fitted
  - the staircase at the east end
  - the house at the west end.
- The balustrade top is nearly flat.
- Further investigation is required to establish the performance of the tiled kerb to the floor junction of the sunroom with the deck.

#### **The ensuite**

- Cover boards of the window at the north side not all closely fitted or adequately sealed.
- Moisture evident and watery grout under the wall capping to south end.
- Damaged paint finish below a junction between the butyl rubber roof and sloping glazing.

5.4.2 The expert also observed that the balustrade to the deck is only 850mm high (the consent plans show the balustrade being 1000mm high).

5.4.3 In regard to the flashings to the sunroom, the expert considered that, taking into account no elevated moisture readings were recorded, the flashings at the junction between the sun room and the house, and the roof flashings and clearance from the cladding edge to roofing are performing adequately.

### **5.5 Internal moisture**

5.5.1 The expert noted that the wood lining overlaid with glass tiles on the north window in the shower room creates a risk of leaking behind the linings to the framing. A moisture reading of 17% was elevated in comparison to readings under the window on the south and indicated moisture was reaching the framing.

### **5.6 The notice to fix**

5.6.1 The expert commented on the items listed in the notice to fix, and the following table summarises his comments with relevant code clauses in brackets:

<b>Notice to fix items</b>	<b>Expert's summarised comments</b>
<b>Deck &amp; Sunroom</b>	
Deck not as per consented plan	Agree; and further amendments will be necessary for remedial work.

Internal gutter detail – insufficient overflow and outlets	Gutter allowing moisture ingress and ply has been damaged. (E2/B2) Outlets and overflow are sufficient.
Floor heights to deck.	Agree; has contributed to leaks at master bedroom sill. (E2/B2)
Top of balustrade.	Agree; has contributed to high moisture reading in balustrade framing. (E2/B2)
Deck membrane and fall.	Agree; gutter has failed. (E2/B2)
Connection of sunroom to building envelope.	No evidence of leaks through the wall or roof junctions.
<b>Ensuite</b>	
Ensuite not built as per consented plan.	Agree; revised drawings required.
Vanity and tiled area not sealed.	Has been remedied since the issue of the notice to fix.
Tiled area to bottom wall area of shower not sealed.	Has been remedied since the issue of the notice to fix and low moisture content readings to framing.
Possible moisture ingress internal barge board.	Agree. Requires monitoring over time to establish whether detail is performing adequately. (E2/B2)
No spouting on to glass roof.	Agree. Run off may discharge onto concrete driveway and over the property boundary. (E1)

## 6. Discussion

### 6.1 The notice to fix

- 6.1.1 Taking into account the findings of the expert, it is clear that some areas of the external envelope to the additions are unsatisfactory in terms of their weathertightness performance, which has resulted in moisture penetration and possible decay in some areas. Consequently I am of the view that the additions and alterations do not comply with Clause E2 of the Building Code that was in force at the time of the issue of the building consents.
- 6.1.2 Given the expert's findings, the current and ongoing compliance of the building work with Clause B1 must also be considered in any further investigation. The rectification of the building work should include investigation of the condition of the timber framing to determine the effect and significance of any moisture ingress and possible decay.
- 6.1.3 In addition, the external envelope is also required to comply with the durability requirements of Clause B2. Clause B2 requires that a building continues to satisfy all the objectives of the Building Code throughout its effective life, and that includes the requirement for the building work to remain weathertight. As there are some faults that are likely to allow moisture ingress in the future I am therefore satisfied that the dwelling does not comply with the durability requirements of Clause B2 of the Building Code with respect to Clause E2.



- 6.1.4 Because the faults occur in discrete areas, I am able to conclude that satisfactory investigation and rectification of the items outlined in paragraphs 5.4.1 and 6.1.2 will result in the external envelope being brought into compliance with Clauses E2 and B2.
- 6.1.5 Effective maintenance of claddings is important to ensure ongoing compliance with Clauses B2 and E2 of the Building Code and is the responsibility of the building owner. The Ministry has previously described these maintenance requirements, including examples where the external wall framing of the building may not be treated to a level that will resist the onset of decay if it gets wet (for example, Determination 2007/60).
- 6.1.6 The expert has noted remedial work that has been undertaken to seal the vanity and tiled areas of the ensuite, and I accept that these now comply with Clause E3.
- 6.1.7 In addition I accept the expert's findings as to the items that are performing adequately, namely the overflow and outlets to the deck, and the connection of the sunroom to the building envelope.
- 6.1.8 The expert has identified two other items of building work that were not included in the notice to fix, and I consider that the following items do not comply with the Building Code that was in force at the time of the consent:
- the shower room timber window sill detail (Clause E3)
  - the height of the deck balustrade (Clause F4).

## **6.2 The sunroom**

- 6.2.1 The 1994 consent for the deck did not include the addition of the sunroom, however it is indicated on the consent for the ensuite in 2000 as an existing structure, as such I consider the sunroom addition was constructed after the Building Act 1991 came into force and is building work that required a building consent. It appears that no consent was applied for or obtained for the sunroom addition. A certificate of acceptance is the appropriate regulatory mechanism for regularising this work.
- 6.2.2 The transitional provisions section 437(1)(a) of the Act provide for the issue of a certificate of acceptance where an owner has carried out building work for which a building consent was required under the 1991 but where a consent was not obtained.
- 6.2.3 With respect to an application for a certificate of acceptance, the owner is required to provide (if available) plans and specifications and any other information that the authority reasonably requires. It is the owner who must provide sufficient information to the authority to establish the level of compliance achieved. The authority may inspect the building work, which, along with information supplied by the owner, would assist the authority in forming a view as to compliance with the Building Code.

## **6.3 Conclusion**

- 6.3.1 I am satisfied that the alterations and additions did not comply with the Building Code that was in force at the time the consents were issued and accordingly that the authority correctly exercised its powers in issuing the notice. However, I am satisfied that some items included in the notice are compliant, and additional items identified by the expert should be included: the notice to fix should be modified accordingly.

6.3.2 The notice to fix should also be modified to include building work for which consent was required but not obtained, and require that the applicant seek a certificate of acceptance for that work.

#### **6.4 The authority's requirement for further information**

6.4.1 The notice to fix required the applicant to lodge with the authority 'a proposed scope of works ... outlining how each area of non-compliance is to be rectified', noting that this may then form the basis for an application for building consent.

6.4.2 An authority is entitled to set minimum requirements to ensure that the proposed building work is appropriately documented and clearly demonstrates how code compliance is to be achieved.

6.4.3 I note that in this case the applicant's response to the notice to fix (refer paragraph 3.7) did not provide sufficient detail as to proposed remediation of each of the items, and as such I consider the authority was correct to require further information.

6.4.4 Full details should be provided that show the extent of building work to be carried out and demonstrate how compliance with the Building Code is to be achieved. Plans and specifications submitted in support of a consent, or in this case in support of alterations to a consent, must:

- provide a compliant solution, and
- must also be sufficiently clear to describe how that solution is to be achieved through the construction process, and
- detail critical features.

6.4.5 I note that the applicant sought advice as to the steps required to remedy the issue of the as-built work not conforming to the consents. Amended drawings will need to be provided to the authority that accurately reflects the as-built construction.

### **7. What happens next**

7.1 The notice to fix should be modified to take account the findings of this determination, identifying the items identified in paragraphs 5.4.1, and 6.1.2 as non-compliant, and referring to any further defects that might be discovered in the course of investigation and rectification, but not specifying how the defects are to be fixed. It is not for the notice to fix to specify how the defects are to be remedied and the building brought to compliance with the Building Code. That is a matter for the owner to propose and for the authority to reject or accept.

7.2 The notice to fix should also reference the sunroom addition as building work undertaken that required consent for which consent was not obtained and require the owner seek a certificate of acceptance for that work.

7.3 The applicant should then produce a response to this in the form of a detailed proposal, produced in conjunction with a competent and suitably qualified person, as to the rectification or otherwise of the specified matters. Any outstanding items of disagreement can be referred to the Chief Executive for a further determination. The applicant has undertaken remedial work in respect of two items on the notice, and accordingly the notice to fix may take the remedial work into account.

## **8. The decision**

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

- the building work carried out does not comply with Building Code that was in force at the time the consents were issued and the authority correctly exercised its powers in issuing a notice to fix, and
- there was insufficient information provided to the authority in respect of the proposed remedial work to establish compliance with the Building Code

8.2 I also determine that the notice to fix is to be modified to take account of the findings of this determination.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 29 October 2012.

John Gardiner  
**Manager Determinations**

## Appendix A

A.1 The relevant sections of the Building Act 1991 are:

### **32 Buildings not to be constructed, altered, demolished, or removed without consent**

- (1) It shall not be lawful to carry out building work except in accordance with a consent to carry out building work (in this Act called a "building consent"), issued by the territorial authority, in accordance with this Act.

A.2 The relevant sections of the Building Act 2004 are:

### **437 Transitional provision for issue of certificate of acceptance**

- (1) This section applies if—
- (a) an owner, or the owner's predecessor in title (whether an immediate predecessor in title or otherwise), carried out building work before the commencement of this section for which—
    - (i) a building consent was required under the former Act; and
    - (ii) the building consent was not obtained; or
  - (b) ...
- (2) A territorial authority may, on application, issue a certificate of acceptance.
- (3) For the purposes of subsection (2), sections 96(2) and (3) and 97 to 99 apply with all necessary modifications.

### **96 Territorial authority may issue certificate of acceptance in certain circumstances**

- (1) A territorial authority may, on application, issue a certificate of acceptance for building work already done—
- (a) if—
    - (ii) a building consent was required for the work but not obtained...
- (2) A territorial authority may issue a certificate of acceptance only if it is satisfied, to the best of its knowledge and belief and on reasonable grounds, that, insofar as it could ascertain, the building work complies with the building code.
- (3) ...

A.3 Acceptable Solution F4/AS1 current at the time the consent was issued:

#### **1.0 Barriers in buildings**

##### **1.1 Barrier heights**

- 1.1.1 Minimum barrier heights shall be 1000 mm on floors and landings, and 900 mm on stairs or ramps, measured from the pitch line or nosings.