



Determination 2010/67

The refusal to issue a code compliance certificate for a four year old house at 32 Morere Street, Titahi Bay, Porirua



1. The matters to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act¹ (“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 applicant is the owner of the house, Hot Rock Construction Ltd (“the applicant”) acting through a building surveyor, and the other party is the Porirua City Council (“the authority”), carrying out its duties and functions as a territorial authority and a building consent authority.
- 1.2 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for a four year old house, because it is not satisfied that the building work complies with certain clauses² of the Building Code (First Schedule, Building Regulations 1992). The initial reason for the refusal was that the authority believed that adequate inspections of certain elements had not been carried out during construction. The authority subsequently added further reasons for its refusal.
- 1.3 The matter to be determined³ is therefore whether the authority was correct to refuse to issue a code compliance certificate. In deciding this, I must consider:

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.

³ Under section 177(b)(i) of the Act

1.3.1 Matter 1: The external envelope

Whether the external claddings to the house (“the claddings”) comply with Clause B2 Durability and Clause E2 External Moisture of the Building Code. The claddings include the components of the systems (such as the fibre-cement wall claddings, the windows, the roof cladding and the flashings), as well as the way the components have been installed and work together. (I consider this in paragraph 7.)

1.3.2 Matter 2: Other requirements of the Building Code

Whether certain other elements identified by the authority comply with the relevant clauses of the Building Code, taking into account the inspections carried out. (I consider this in paragraph 8.)

1.4 In making my decisions, I have considered the:

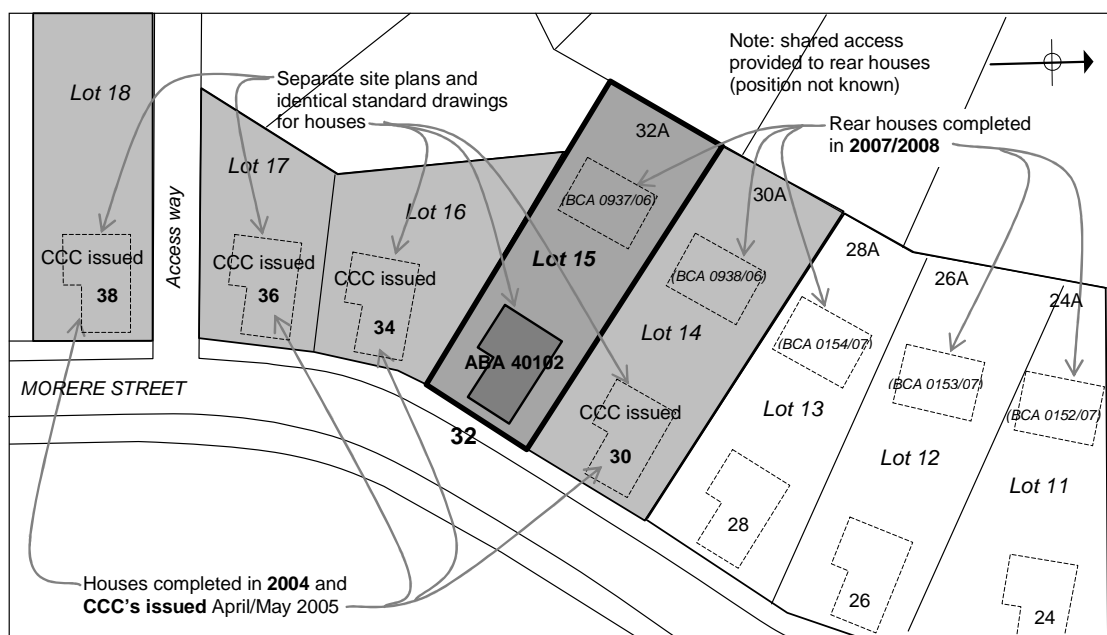
- submissions of the parties
- report of the building surveyor engaged by the applicant (“the surveyor”)
- report of the expert commissioned by the Department to advise on this dispute (“the expert”)
- the other evidence in this matter.

2. The building work

2.1 The development

2.1.1 The applicant, under a different company name, was the developer of a large number of houses in the area (“the developer”), which appear to have been constructed from 2004 to about 2008 under separate building consents issued at varying times.

2.1.2 The development area relevant to this determination includes the houses fronting onto Morere Street on Lots 14 to 18 (“the street houses”) shown in the shaded area of the following sketch:



- 2.1.3 The street houses at 30, 32, 34, 36 and 38 Morere Street were constructed at varying times, but are very similar in construction and design. Standard construction drawings and specifications cover all of these buildings. The consent documentation for the subject house on 32 Morere Street (Lot 15) included the standard drawings together with an individual site plan.
- 2.1.4 The street houses at 30, 34, 36 and 38 were completed during 2004 and correspondence between the parties indicates that code compliance certificates were issued for these in April and May 2005. The rear houses (24A, 26A, 28A, 30A and 32A Morere Street) were built in 2007 and 2008 and share a right-of-way driveway.

2.2 The house (32 Morere Street)

- 2.2.1 The building work consists of a partially two-storey house situated on a site that slopes steeply to the west and is in a very high wind zone for the purposes of NZS 3604⁴. The foundations are specifically engineered timber poles. The remaining construction is conventional light timber frame, with suspended timber framed floors, fibre-cement sheet and weatherboard wall claddings, pressed metal tile roofing and aluminium windows. The 20° pitch gable roof has no verges and eaves that vary from the gutter only to about 300mm.
- 2.2.2 The house is a fairly simple L-shaped form, with the single-storey garage at street level aligning with the living and kitchen areas in the upper floor of the house and the steep slope providing three bedrooms in a lower level. Small lean-to roofs extend above the southeast corner of the lower level and above the entry door on the upper level. The house is assessed as having a moderate weathertightness risk.
- 2.2.3 A timber framed cantilevered deck, with spaced timber decking and open timber balustrades, extends to the west from the upper level living area. A second cantilevered deck extends to the south from the lower level master bedroom. A timber framed walkway deck links the street with the main entry.

2.3 The wall claddings

- 2.3.1 The cladding to the upper walls of the house and the upper gable wall of the garage is fibre-cement weatherboards, with the remaining walls clad in 6mm fibre-cement sheet. The sheet joints are covered with 75mm x 25mm timber battens that incorporate weathergrooves, with additional decorative battens fixed between.
- 2.3.2 The claddings are fixed through 20mm timber battens and the building wrap to the framing, with the battens forming a cavity between the cladding and the building wrap. Both types of claddings were provided by the same manufacturer, which provides recommended installation details for windows and other junctions.
- 2.4 The applicant's surveyor and the expert have reported that the exposed timber framing in the garage is marked as H3.2. Based on this evidence and the date of construction in 2005, I accept that the exterior wall framing is treated to a level that will provide resistance to fungal decay.

⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

3. Background

3.1 The authority issued a building consent for the house (No. ABA 40102) to the developer on 7 December 2004 under the Building Act 1991. The consent included the requirement for the 'pile/post holes' to be inspected by an engineer (with no other required engineering inspections specified).

3.2 While the consent drawings indicate that wall claddings are fixed directly to the framing, drained cavities were incorporated. (I note that the first edition of the current E2/AS1, which provided details for drained cavities, was issued on 1 July 2004, but did not take effect until 1 February 2005.)

3.3 The inspections during construction (2005/2006)

3.3.1 Some of the authority's individual inspection records are unclear, with one record missing, the date on another recorded incorrectly as a year before construction started and another dated as two years after the first final inspection.

3.3.2 The following is therefore based primarily on the site copy of the inspection summary form, in which the required inspections are ticked, with the authority signing and dating those inspections as they were carried out.

3.3.3 The engineer provided a producer statement dated 11 May 2005 for 'pile foundation assessment'. This statement included a pile layout plan dated 16 February 2005, with the hand-written notes indicating that the front piles had been drilled at that date.

3.3.4 The authority carried out the following inspections of the house:

- Pre-clad inspection on 1 April 2005 as recorded on the inspection summary. This inspection included 'sub-floor connections, bracing, hold-down systems etc' and was passed, noting 'pre-joinery installation next'. I note that the individual record of this pre-clad inspection is missing.
- Pre-line building inspection on 27 May 2005. This inspection was passed as 'OK to line' and crossed out any engineer involvement, noting that structural timbers and fixings etc were 'checked with preclad'. I note that the individual record incorrectly records this as 27 May 2008.
- Pre-line plumbing inspection on 27 May 2005. I note that the individual record incorrectly records this as 27 May 2004.
- Pre-line plumbing recheck inspection on 8 June 2005 (which passed, including all foul and waste water pipework).
- Post-line building inspection on 8 June 2005 (which passed, including 'bracing sheets').
- First final plumbing and building inspections on 16 March 2006 (which included ticks against site drainage, gully traps, and wastes to gully traps).

3.3.5 The final inspection noted six minor outstanding items. Although the handwriting is difficult to read, the authority confirmed these in an email to the applicant dated 20 March 2006 as:

Seal meter box, clip downpipes, fix loose end drainpipe to gully by the garage, seal around toilet bowl, paint laundry ceiling.

3.4 Drainage connections

- 3.4.1 A second building consent for Lot 15 (No. BCA 0937/06) was subsequently issued for the rear house (32A Morere Street) on 18 October 2006. This was constructed during 2007, along with the four similar neighbouring rear houses as shown in paragraph 2.1.2.
- 3.4.2 It appears that, during construction of the rear houses (24A to 32A), problems with damage or connection to the main drains arose and the authority arranged filming of the interior of the drains.
- 3.4.3 In a letter to the developer it appears that the reference to the same street address as the house considered in this determination has resulted in the drainage matters associated with the rear house being brought into the dispute over the code compliance of the front house.

3.5 The final inspections (2008)

- 3.5.1 No re-inspection was carried out on the building work until the applicant sought resolution of the outstanding code compliance certificates for a number of completed houses in the development, including the house considered in this determination. In a letter to the applicant dated 1 September 2008, the authority stated:

Due to the time passed since the first Final Inspections were undertaken we would like to undertake a full Final on all the properties that do not have a CCC.

- 3.5.2 The authority carried out final re-inspections of the house on 17 November, 2 December and 18 December 2008, with the latter inspection noting: 'final recheck items complete' and listing various records and documents to be provided.
- 3.5.3 On 9 March 2009, the applicant provided copies of the Electrical Certificate of Compliance dated 4 April 2005, the engineer's Producer Statement – PS4 – Construction Review dated 11 May 2005, and an undated as-built drainage plan for the house.
- 3.5.4 In an undated letter to the applicant, attached to a letter dated 1 April 2009, the authority refused to issue a code compliance certificate, stating:

Council has not been provided with the requested information, and has no record of necessary inspections, and because of the time that has elapsed since the major part of the work was completed we are unable to issue a code compliance certificate in this instance.

Correspondence between the parties continued over the following months without resolution.

3.6 The surveyor's report

- 3.6.1 The applicant engaged a member of the New Zealand Institute of Building Surveyors to provide a report on the building. The surveyor visited the house on 27 September 2008 and provided a 'Preliminary Observation Report'. The report was intended as

supporting information for an application for a determination, and included photographs of various features and junctions.

- 3.6.2 The surveyor described the construction of the house, noting that claddings were installed over cavity battens and that the external wall framing and battens appeared to be H3.2 treated.
- 3.6.3 The surveyor carried out non-invasive moisture testing to inside faces of external walls, noting that all readings were 'in the low range'. Based on his observations, the surveyor concluded that the house 'appears to be code compliant at the time of construction'.
- 3.7 The Department received an application for a determination on 9 October 2009 and sought clarification from the authority, which was received on 2 November 2009.

4. The submissions

- 4.1 In support of the application, the surveyor supplied his 'Preliminary Observation Report' on the building work under consent ABA 40102 (refer to paragraph 3.6), and forwarded copies of:
- the site plan and the standard drawings and specifications
 - the engineer's producer statements for design and construction review
 - the authority's inspection summary
 - a statement from the builder
 - some of the correspondence from the authority.
- 4.2 The authority made a submission in a letter to the Department dated 30 October 2009, which explained that a code compliance certificate was refused due to 'a missing inspection, problems with the window flashings, and engineer's limited sign off of structural elements'. The authority expanded on these issues, including the following (in summary):
- There is no record of drainage inspections for a number of the developer's houses in the vicinity, which means that it is not possible to confirm the adequacy of the:
 - priming of welded joints
 - bedding and backfill material
 - gradients of drains.
 - A recent inspection reveals that the window flashings appear to be failing.
 - Although the engineer's producer statement for design includes the bracing, lintels and beams, the producer statement for construction review is limited to a pile assessment.
- 4.3 The authority forwarded records for consent ABA 40102, including copies of:
- the consent documentation

- the engineer's producer statements
- the inspection records
- the correspondence with the applicant
- films taken of the interior of sewer pipes
- various other statements and information.

4.4 A determination was issued to the parties for comment on 21 April 2010.

4.5 The authority's response to the draft determination

4.5.1 The authority responded to the draft determination in a letter to the Department dated 17 May 2010. I have considered the authority's comments and have amended the determination as I consider appropriate. The comments included (in summary):

- The construction review producer statement only covered the pile foundations, so it 'is not verification that all of the engineered elements have been inspected and certified by a suitably qualified engineer'. The inspection records indicate that structural inspection was required, along with a producer statement for construction review. These have not been received.
- It was 'standard industry practice' to 'receive ... sign off from a suitably qualified engineer to the effect that the work designed by them' had been completed.
- If framing timbers are found to have a moisture content exceeding 18%, then the house is leaking and does not comply with Clause E2. The draft determination has concluded that the house complies with Clause E2.
- The workmanship is 'of a very poor quality and is showing a clear failure of Clause E2 with water entering an uncontrolled cavity system'. The dwelling is considered to be 'beyond redemption'. The expert has also described 'exceptional poor workmanship and poor maintenance with this building'.
- Unauthorised connections had been made to the main sewer, the house drains were not inspected, and there is no evidence that registered drainlayers carried out the work. The expert also did not inspect the drains. The drains are considered 'beyond redemption unless they are completely excavated and inspected correctly'.
- The determination attempts to 'discredit Council records and record keeping'. It was also 'passing judgement based on the standards of today ...'.

4.6 My response to the authority's comments

4.6.1 I have considered the authority's comments and have amended the draft as I consider appropriate. I offer specific comment as follows:

- The building consent required engineering review of the 'pile/post holes' only. In my view it is not 'standard industry practice' to require engineering oversight of work that a competent building official could reasonably be expected to inspect against the requirements of the approved consent.

- The cavity has prevented moisture from entering the wall framing, however I accept that of itself this does not equate to compliance with Clause E2.
- A cavity is intended to manage unexpected moisture penetration rather than expected leaks from known cladding defects. I accept that the unsealed head flashings fit the latter category, as they can be expected to leak from the time of installation. I have therefore amended the determination accordingly.
- The defects to the house are relatively minor and easily repaired; and I do not consider the building to be 'beyond redemption'.
- The expert's report is only part of the evidence that allows me to reach a conclusion in any particular instance. (Refer paragraph 5)
- I do not accept that the errors in the authority's records are limited to 'a few minor typographical errors'. I observe the house was constructed during 2005 when standards of record keeping would not have been inconsistent with current expectations.

4.7 The applicant's response to the draft determination

4.7.1 The applicant generally accepted the draft determination in a letter to the Department dated 8 June 2010, providing copies of some additional information. The applicant also commented on the expert's report, as outlined in paragraph 6.6.

4.7.2 The applicant's comments on the draft determination included (in summary):

- The expert had identified compliance issues that were easily resolved.
- The authority initially said the house was sound and the final inspection had passed, but refused a code compliance certificate due only to outstanding documentation and a missing inspection. It was only after the applicant's surveyor identified the defects to the window flashing that this was added by the authority as a reason for the refusal.
- It is not unreasonable to assume that the drainage records were lost. The applicant submitted photographs purportedly taken during a drainage inspection that were not in the authority's records. Many of the authority's instructions were given verbally and some inspections were noted only on site drawings.
- The drainage for a number of properties was completed about the same time by the same contractors; and concurrent inspections were sometimes not recorded against each consent. The authority has not previously questioned the drain layers qualifications. The authority supplied 'saddles' for pipe connections which the applicant said was evidence this work was carried out with the authority's knowledge.
- The pipe gradients were not inadequate as 'public services are almost 5 meters deep and as the [horizontal] distance is less than 10 meters'. The builder and the contractors confirm that pipes were primed and 'a simple scratch around would expose a joint that may still show primer as well as scoria/pea metal'.
- The authority has refused to consider the suggestion of a video inspection (I have addressed this further in paragraph 8.3.6.) The videos submitted by the

authority were not of the private drains to this house, but instead appear to be 'a video of the public main that runs across the bottom of the site'.

- The building is a simple timber framed house that does not need an engineer's construction review, apart from the pole foundations. The authority carried out all bracing and engineering inspections, including the sub-floor framing and connections.

4.7.3 The applicant concluded that he believed the authority:

...should be required to review the processes that it has used to consider the other houses at Morere St which it has also failed to issue code compliances for which similar reasons of lost documentation, paperwork has also been given when the final inspections have been passed as reasons for its refusal to issue code compliance.

4.8 My response to the applicant's comments

4.8.1 The determination is limited to this particular house, and the conclusions reached cannot extend to other houses in the development. In regard to other comments made by the applicant, I have considered these and have amended the determination as I consider appropriate.

4.8.2 In a letter to the Department dated 22 June 2010, the authority strongly disagreed with the applicant's 'claims and accusations' made in his letter dated 8 June 2010. The authority was concerned that the applicant had presented information outside the context it was originally written or intended.

5. The evidence for code compliance

5.1 In order for me to form a view as to the code compliance of the building work, I established what evidence was available and what could be obtained considering that the building work is completed and some of the elements are not able to be cost-effectively inspected.

5.2 In this case the evidence supplied by the parties includes the:

- authority's inspection records
- developer's and builder's statements regarding the drainage inspections
- surveyor's assessment of the house
- drawings, photographs, other information and documentation.

5.3 In the absence of any evidence to the contrary, I take the view that I am entitled to rely on the inspection records together with the applicant's assurances. However I consider it important to look for evidence that corroborates the records and assurances and that can be used to verify that the inspections were properly conducted.

5.4 In summary, I find that the following evidence allows me to form a view as to the code compliance of the building work as a whole:

- The four almost identical neighbouring houses, which were built at similar times and were issued with code compliance certificates.

- The records of inspections carried out by the authority, which indicate satisfactory inspections of most of the inaccessible components.
- Producer statements, certificates and other statements and information, which indicate compliance of certain building elements.
- Letters that indicate the drainage problems are associated with the rear houses.
- The expert's report as outlined below.

6. The expert's report

6.1 As mentioned in paragraph 1.4, 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 visited the house on 4 March 2010 and produced a report that was completed on 24 March 2010.

6.2 The expert's report noted the following variations from the consent drawings:

- The external stairs to the south deck have not been constructed.
- The canopy over the door to the south deck has not been constructed.
- The roof over the garage has been changed to a gable.

6.3 The exterior claddings

6.3.1 In general terms, the expert was of the opinion that the workmanship was 'average', noting that little maintenance appeared to have been carried out since construction. The expert assessed the wall claddings against the manufacturer's instructions that applied at the time of installation.

6.3.2 The expert took invasive moisture content readings through the claddings into the cavity battens at areas considered at risk, and noted that moisture levels in the battens varied from 14% to 19%. Although the wall framing is protected by the drained cavity, the expert considered that the variations in moisture levels recorded in the battens indicate that moisture is entering the cavity via cladding defects.

6.3.3 Commenting specifically on the claddings, the expert noted that:

- the ends of the uPVC window head flashings are unsealed, with gaps apparent
- the lower part of a window jamb scribe is missing at the junction with a deck post to the upper deck
- the end of the apron flashing above the front door lacks a kick-out
- the internal and external corners of the apron flashing to the roof to wall junction of the lean-to above the front door are heavily reliant on sealant for weathertightness
- the ends of the deck handrails are fixed through the cladding, and one upright is pulling away from the wall.

6.3.4 Although there is insufficient clearance from the bottom of the cladding at the sides of the garage door, the expert noted that a drainage channel with a grate is provided. I also note that the garage framing is unlined and is treated to H3.2.

6.3.5 The expert also noted that a bracket connector is installed to connect a short foundation pole to a bearer and it is not clear whether this was approved by the engineer as the producer statement covered only the foundations.

6.4 The drainage

6.4.1 The expert inspected the visual elements of the drainage system and noted that the system appeared to be operating satisfactorily, with no history of problems after some years of occupation.

6.5 A copy of the expert's report was provided to the parties on 12 April 2010.

6.6 Within his submission in response to the draft determination, the applicant commented on the expert's report. I have taken these comments in account, which included the following (in summary):

- Defects noted by the expert are accepted and will be attended to.
- The suppliers of the roof cladding have stated that they will undertake repairs to the apron flashings.
- The authority should have identified the defect to the head flashings. This defect seems to be limited to few windows.
- The cladding supplier confirms that jamb and sill flashings are not required for this cladding system, and has provided a solution for the unsealed head flashings.

7. Matter 1: The external envelope

7.1 Weathertightness risk

7.1.1 This house has the following environmental and design features which influence its weathertightness risk profile:

Increasing risk

- the house is in a very high wind zone
- although only two-storeys high, the steep slope of the site results in the western end of the roof being three-storeys above the ground level
- there are limited eaves and no verge projections to shelter the walls
- there are three free-draining cantilevered timber decks attached to the house

Decreasing risk

- the house is a simple in plan and form
- the wall claddings are fixed over a drained cavity

- the external wall framing is treated to a level that provides resistance to decay if it absorbs and retains moisture.

7.1.2 When evaluated using the E2/AS1 risk matrix, these features show that all elevations of the house demonstrate a moderate weathertightness risk rating. I note that, if the details shown in the current E2/AS1 were adopted to show code compliance, the wall claddings on this building would require a drained cavity. I also note that drained cavities have been provided, although this was not a requirement of E2/AS1 at the time the building consent was issued.

7.2 Weathertightness performance

7.2.1 Generally the wall claddings appear to have been installed in accordance with reasonable trade practice and in accordance with the manufacturer's instructions. However, some areas have not been satisfactorily completed. Taking account of the expert's comments in paragraph 6.3.3, I conclude that remedial work is necessary in respect of the following:

- a missing scribe to one window jamb and the unsealed ends of window head flashings and, with significant gaps where the flashing overhang runs passed the ends of the joinery jambs
- although the remaining window jambs are protected by scribes, these should be checked in view of the defects in the head flashings
- upper corners and bottom of the apron flashing to the small canopy above the front door, with no kickout and junctions reliant on sealant
- a balustrade upright that is pulling away from the wall.

7.2.2 I note the expert's comment on the cladding clearance at the sides of the garage door. Taking account of the channel drain provided at the cladding base, the unlined H3.2 treated framing in the garage and the lack of any damage after more than four years; I consider that the clearance is adequate in these circumstances.

7.3 Weathertightness conclusion

7.3.1 The expert's report establishes that the drained cavity is preventing water penetration into the wall framing of the building at present. However, as noted in paragraph 4.6.1, moisture is penetrating the cavity as a result of known defects in the cladding, which I consider to be a failure of Clause E2.

7.3.2 In addition, the building work 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 house to remain weathertight. Because the cladding faults on the house are likely to allow the ingress of moisture in the future, the building does not comply with the durability requirements of Clause B2.

7.3.3 Because the faults identified with the claddings occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 7.2.1 will result in the house being brought into compliance with Clauses B2 and E2.

8. Matter 2: Other requirements of the Building Code

8.1 The authority's records

- 8.1.1 The authority maintains that a missing drainage inspection and the 'engineer's limited sign off of structural elements' means that it cannot be satisfied that these elements comply with the relevant clauses of the Building Code.
- 8.1.2 The applicant maintains that all required inspections were carried out, but the authority has not kept accurate records of those inspections. In regard to structural oversight of the construction, the applicant maintains that the necessary documentation has been provided to the extent required by the building consent.
- 8.1.3 As noted in paragraph 3.3, the authority's individual inspection records are inaccurate and also do not fully cover the inspections signed and dated in the inspection summary form kept by the builder on-site during construction. That 'inspection check list' is issued by the authority with a stamp noting that it must 'be retained on site', and with ticks showing the inspections required. The form also notes that the 'check list is your record of those inspections having been carried out'.
- 8.1.4 I take the view that the overlapping construction of a large number of very similar houses in the same general area by the same developer (and inspected by the same authority inspectors) leads to a general risk of inconsistencies in record-keeping for individual houses. Based on my examination of the inspection summary, I am of the opinion that the authority has not maintained full and accurate records during the inspection of this particular house; and I have taken that conclusion into account when assessing the evidence of compliance of some aspects of the building work.
- 8.1.5 I also note that the more recently constructed rear houses (refer paragraph 2.1.4) were given identical street addresses as the earlier front houses by the authority, which has resulted in confusion between the different building consents. Some correspondence about drainage problems (refer to paragraph 3.4) applies only to the rear house (No. 32A), but appears to have been incorrectly interpreted as a problem associated with the house considered in this determination (No. 32).

8.2 Clause B1 Structure

- 8.2.1 The authority maintains that the engineer's producer statement for construction review should have included bracing, lintels and beams, in line with the elements covered by the engineer's producer statement for design.
- 8.2.2 However, the building consent for this house included only the requirement that the pile/post holes be inspected (refer paragraph 3.1). This requirement is more than covered by the engineer's producer statement. No requirement was specified in the consent for engineering inspections of bracing and other structural timbers, which were covered in the authority's pre-clad inspection on 1 April 2005 (refer paragraph 3.3.4).
- 8.2.3 In regard to the expert's comment in paragraph 6.3.5 regarding a bracket connection of a short pole to a bearer, I note that the authority carried out all bracing and engineering inspections, including of the sub-floor framing and connections.

8.2.4 I also note that, apart from the pole foundations, the construction is conventional light timber frame, which is not expected to be reviewed by a structural engineer. Such construction is more appropriately included within an authority's normal inspection procedures. I am therefore able to conclude that there are reasonable grounds to come to the view that the house complies with Clause B1 Structure.

8.3 Clause G13 Foul water

8.3.1 The applicant maintains that the foul water drains were inspected by the authority during construction, in common with the other four neighbouring houses which have received code compliance certificates.

8.3.2 The authority considers that the drains to this particular house were not inspected or approved, as no record of a drainage inspection can be located. The authority has submitted three video recordings of the interior of some (unidentified) sewer pipes.

8.3.3 In regard to the drains to the house, I make the following observations:

- The authority carried out satisfactory pre-line and final plumbing inspections during construction and the expert's report notes no apparent problems with the foul water drainage after more than four years.

The neighbouring houses

- The group of five adjacent houses were constructed by the same developer at similar times, with drains expected to have been laid and connected into the main sewer in similar ways.
- Any problems with drains and connections for the subject house would be expected to be similar for the drains from the other four houses (which have been issued with code compliance certificates).

The video evidence

- The videos appear to indicate problems in some unidentified sewer pipes but include no indication of locations or descriptions of what is shown. One of the videos was filmed on 1 January 2005, which is prior to the construction of the subject house.
- The two other videos were recorded on 10 and 11 December 2007 – more than 18 months after the final plumbing inspection which passed the drainage for the house.
- From the authority's letters dated 13 May and 21 July 2008 (refer paragraph 3.4), the above videos apparently relate to the rear house (at 32A) and not to the front house considered in this determination.

8.3.4 Based on the above observations, I am unable to accept that the submitted video recordings provide any evidence relevant to the house considered in this determination. I take the view that the apparent problems with the drains relate to the construction of the group of rear houses and not to this house.

8.3.5 In its response to the draft determination, the authority maintains that compliance cannot be assured unless the drains are 'completely excavated'. However, given the dimensions of the site and the depth of the main sewer at the rear of the site, I accept

the applicant's opinion that the gradients of the drains to this house are unlikely to be inadequate and I do not consider that complete excavation of the drains is justified.

8.3.6 However, I note the applicant has suggested that a pipe joint could be exposed and a video made of the drains to this house, and I accept that this could be a reasonable compromise. I therefore suggest the parties use a mutually agreed third party to oversee and report on the following limited investigations:

- an area that exposes a sample joint in the drain connections
- a video of the drains to the house.

8.3.7 I conclude that the authority's remaining concerns about the drains are not related to the house at 32 Morere Street and should be resolved with the developer as an issue separate to the code compliance of this house.

8.3.8 Taking account of the above, I conclude that there is no evidence of any problems related to the foul water drainage of the house and I am generally satisfied that the house complies with Clause G13.

9. What is to be done now?

9.1 A notice to fix should be issued that requires the owners to bring the house into compliance with the Building Code, identifying the items listed in paragraph 7.2.1. The notice to fix should refer to any further defects that might be discovered in the course of investigation and rectification, but should not specify how those defects are to be fixed. That is a matter for the owner to propose and for the authority to accept or reject.

9.2 I also suggest that the parties use the process described in paragraph 8.3.6 to resolve their differences about the drains to the house.

9.3 Once the matters set out in paragraph 7.2.1, and 8.3.6, have been rectified or resolved to its satisfaction, the authority shall issue a code compliance certificate.

10. The decision

10.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the external envelope does not comply with Clause E2 External Moisture and Clause B2 Durability of the Building Code, insofar as it relates to Clause E2 and accordingly, I confirm the authority's decision to refuse to issue a code compliance certificate in regard to those clauses.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 26 July 2010.

John Gardiner
Manager Determinations