

Under **THE COMMISSIONS OF INQUIRY ACT 1908**
In the matter of the **CANTERBURY EARTHQUAKES ROYAL COMMISSION
OF INQUIRY INTO THE COLLAPSE OF THE CTV
BUILDING**

**COMPOSITE STATEMENT OF EVIDENCE OF ALAN MICHAEL REAY –
HOLMES REPORT AND RETROFIT ISSUES**

BUDDLE FINDLAY
Barristers and Solicitors
Christchurch

Solicitor Acting: **Willie Palmer / Kelly Paterson**
Email: kelly.paterson@buddlefindlay.com
Tel 64-3-379 1747 Fax 64-3-379 5659 PO Box 322 DX WP20307 Christchurch 8140

Counsel Acting: **H B Rennie QC**
Harbour Chambers Tel 64-4-4992684 Fax 64-4-4992705 PO Box 10242 Wellington

COMPOSITE STATEMENT OF EVIDENCE OF ALAN MICHAEL REAY – HOLMES REPORT AND RETROFIT ISSUES

FIRST STATEMENT OF EVIDENCE

1. My full name is Alan Michael Reay. I reside in Christchurch. I am a Chartered Professional Engineer and a Company Director.

1990 Report by Holmes Consulting Group Limited ("Holmes")

60. In around January 1990 ARCL was contacted by Holmes who had been engaged to prepare a structural report on the CTV Building for a potential purchaser of the building from the receiver of Prime West. Holmes alerted ARCL to a possible issue in the detailing of the connection of several shear walls to the floor diaphragms.
61. Geoff Banks reviewed the drawing and agreed that there appeared to be an issue. As noted above, Mr Banks had joined ARCE in 1988.
62. I had little direct involvement in the events that followed but I have a general recollection of issues and I have reviewed documentation relevant to the events which was obtained from ARCL's files and from its insurance broker.
63. The receivers provided us with a copy of Holmes' report dated January 1990 [BUI.MAD249.0130.1 to BUI.MAD249.0130.10]. Holmes identified a possible issue with the tying of the walls to some of the shear walls. Holmes otherwise considered that the building "*generally complies with current design loading and materials codes*".
64. On 1 February 1990 Mr Banks notified the possible issue relating to wall ties to ARCL's insurance broker, Adam & Adam Limited [BUI.MAD249.0129.2]. ARCL's insurance was arranged through Consulting Engineers Advancement Society Incorporated ("CEAS") and was underwritten by Indemnity & General Insurance Co Limited. Mr Banks copied his letter to Mr Peter Smith at CEAS. Mr Smith was (and is) a structural engineer at Spencer Holmes Miller Partners Limited and was a CEAS claims committee member appointed by Adam & Adam to oversee the file and provide advice to the insurer.
65. When making the insurance notification, ARCL was not sure whether there was an issue or not and, if there was an issue, whether ARCL (or ARCE)

had any culpability. ARCL informed its insurers out of abundance of caution and to ensure that should extensive works be required, the necessary insurance cover would be available.

66. I contacted Mr Harding to enquire whether any site instructions were given to Williams in respect of the diaphragm connections. Mr Harding was unable to recall any site instructions and there was no reference to any such instructions on ARCL's file. I recall that Mr Banks used an electronic reinforcing bar locator at one level which indicated that some reinforcement was present but could not confirm the quantity.
67. As set out in Mr Bank's letter, ARCL proposed to have further discussions with Holmes to agree the precise scope of the issue and the level of load for which the floor to wall ties should be designed. ARCL also proposed to design the remedial works if it was concluded that the ties were not present.
68. Mr Banks and I met with the receiver of Prime West on 1 February 1990 to discuss the issues. A letter from the receiver **[BUI.MAD249.0129.27]** records the content of the meeting. As recorded in that letter we were of the view that it would be more pragmatic to assume that the steel was not in place as the cost of further investigation into the matter would probably exceed the cost of the remedial works and the investigation could cause damage to the structure.
69. Mr Banks wrote to Holmes on 2 February 1990 confirming the scope of the possible non-compliance and the proposed remedial works **[BUI.MAD249.0130.11 to BUI.MAD249.0130.13]**. ARCL's insurance broker confirmed notification of the possible claim **[BUI.MAD249.0129.23]**.
70. It appears from file records that ARCL obtained a quote from Blake Bros. Contracting Limited dated 5 February 1990 **[BUI.MAD249.0227.9]**.
71. Mr Smith wrote to ARCL on 12 February 1990 recording the position **[BUI.MAD249.0129.29]**. As requested by Adam & Adam, ARCL completed a notification and questionnaire in respect of the possible professional indemnity claim **[BUI.MAD249.0129.31 to BUI.MAD249.0129.34]**. Mr Banks completed these forms.
72. A file note records a discussion between Mr Banks and Mr Hare on 14 February 1990 **[BUI.MAD249.0130.14]**. It appears that the discussion included agreed loads at various floors of the building. Mr Banks prepared

- calculations for the remedial works **[BUI.MAD249.0130.15 to BUI.MAD249.0130.20]**.
73. On 9 April 1990 ARCL completed an annual report form for CEAS **[BUI.MAD249.0227.7]** which recorded that ARCL was still investigating whether there was a deficiency and, if so, details of the remedial work.
74. ARCL heard nothing more about the matter from the Prime West receivers, Holmes or anyone.
75. On 4 February 1991 there was an article in *The Press* **[BUI.MAD249.0438.1]** about the sale of the CTV Building by the receivers. Having read this article, Mr Banks and I decided we should notify the new owners of the correspondence from the previous year.
76. It appears that Mr Banks contacted Mr Smith at CEAS to verify the obligation that ARCL had to notify anyone regarding the status of the review conducted the previous year **[BUI.MAD249.0227.6]**. Mr Smith suggested that Mr Banks engage either Austin Forbes (now QC) or Sam Maling from Lane Neave for a legal opinion before taking any steps.
77. ARCL engaged Lane Neave to provide the advice, the cost of which was met by CEAS. ARCL submitted a further annual report on the claim to CEAS on 25 February 1991, which reported that the building had been on-sold and ARCL was seeking advice as to possible obligations to the new owners **[BUI.MAD249.0227.5]**.
78. Following receipt of the advice sought from Lane Neave, Mr Banks wrote to the new owners on 11 September 1991 although a copy of this letter is not held. CEAS also approved this course **[BUI.MAD249.0129.38]**.
79. A reply dated 30 September 1991 was received from Pedofsky, Ibbotson & Cooney **[BUI.MAD249.0129.50]**. The owners agreed that steps should be taken as proposed by ARCL to ensure the building was compliant with the required design specification standard.
80. Mr Banks prepared construction drawings for the remedial works and sent the drawings to CBD Construction Limited **[BUI.MAD249.0130.28 to BUI.MAD249.0130.31]**. He also completed further calculations **[BUI.MAD249.0130.21 to BUI.MAD249.0130.27]**.

81. CBD Construction Limited submitted a quotation of \$4,633.50 plus GST for the proposed remedial works [BUI.MAD249.0130.38]. Mr Banks wrote again to Pedofsky, Ibbotson & Cooney on 15 October 1991 [BUI.MAD249.0129.49], referring to the quote and advising the work would take approximately four days.
82. Mr Banks also notified the Ministry of Transport in respect of the remedial works in the lift shaft [BUI.MAD249.0130.32 to BUI.MAD249.0130.35].
83. The owners confirmed acceptance of the quotation [BUI.MAD249.0129.53]. Mr Banks wrote to Mr Ibbotson on 17 October 1991 recording that the work would take place the following week [BUI.MAD249.0129.54]. The remedial work proceeded as proposed.
84. I do not believe that a permit was sought for these works; however, I recall that Mr Bluck was aware that the works were being undertaken (for example see [BUI.MAD249.0130.6]). I believe that his view would have been that the works were part of the original job and that no permit was required. He probably would have asked to receive details about what was undertaken. I base this on my experience in dealing with Mr Bluck over many years. ARCL does not have its full file on these works, so I cannot say whether there was any written correspondence with the Council over the works. The builder may also have sent details to the Council.
85. ARCL completed an annual status report on the claim which was submitted to Adam & Adam on 4 March 1992 [BUI.MAD249.0129.57 and BUI.MAD249.0227.4]. As recorded in Mr Banks' letter, the remedial work had been completed, the building owner invoiced by the contractor, and the contractor paid for the work. It recorded that Mr Banks had not had any contact from the building owner since the works were completed. ARCL never received any further contact from the owner and was not asked to reimburse the cost of the remedial works.
86. I accepted at the time that there was a potential deficiency. It was not possible to say if there was actually a deficiency. For the cost of the remedial works, it seemed sensible to carry out these works rather than carry out further investigations to see if the building complied without them.

Involvement with the CTV Building following retrofit

87. ARCL has had no further involvement with modification to the CTV Building structure since the retrofit works were completed.

88. We were not contacted following the earthquakes on 4 September or Boxing Day 2010 to undertake inspections or provide structural drawings.

Dated this 30th day of July 2012

A handwritten signature in black ink, appearing to read 'A M Reay'.

A M Reay