

UNDER

THE COMMISSIONS OF INQUIRY ACT 1908

IN THE MATTER OF

ROYAL COMMISSION OF INQUIRY INTO
BUILDING FAILURE CAUSED BY
CANTERBURY EARTHQUAKES
KOMIHANA A TE KARAUNA HEI TIROTIRO
I NGA WHARE I HORO I NGA RUWHENUA
O WAITAHA

AND IN THE MATTER OF

THE CTV BUILDING COLLAPSE

**STATEMENT OF EVIDENCE OF DAVID LINDSAY FLEWELLEN
IN RELATION TO THE CTV BUILDING**

DATE OF HEARING: COMMENCING 25 June 2012

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STATEMENT OF DAVID LINDSAY FLEWELLEN

I DAVID LINDSAY FLEWELLEN state:

1. I am currently employed by Fletchers Construction as a Building Liaison Officer working on earthquake recovery, monitoring compliance by contractors with the Fletcher Construction strategy and the Building Code.
2. As at 7 September 2010, I was a Building Inspector employed by the Christchurch City Council ("CCC").
3. Prior to 1984, I worked as a builder. I have an Advanced Trade Certificate and New Zealand Certificate in Building. From the beginning of my working life until 1984 I had acquired extensive experience in the construction of residential and light commercial buildings.
4. In 1984, I commenced employment with the Waimairi District Council as a Building Inspector. From 1990 with the amalgamation of the councils, I became employed by CCC as a Building Inspector. My duties and responsibilities in that role included residential and commercial buildings. In particular, in respect to commercial buildings, the role of a Building Inspector was effectively to audit the processes followed by the engineer to the building project. A building consent for the construction of a commercial building invariably required certification at various stages of the construction by a registered engineer. As a Building Inspector, it was my task to audit that the engineer had complied with the engineer's requirements.
5. Prior to 4 September 2010, I had no recollection of ever receiving any specific training or instruction on completing rapid assessments of damaged buildings post a natural disaster. I had attended a Civil Defence training. This was voluntary to attend. The training did not involve assessments, but rather was more about the help that people would need following a disaster.
6. On 4 September 2010, I was awoken by the earthquake at my holiday bach in North Canterbury. Once I realised the potential for damage, I telephoned one of my superiors whom I recall was John Buchan. I asked him what was happening and he



said that I should report to the Christchurch Art Gallery where my colleagues would be meeting to be assigned tasks for the day. I then drove to town and went to the Art Gallery. I probably arrived there at about 7.00am.

7. I recall that there were a number of briefings held with guidance given as to the procedures to be followed. It is very difficult to recall specifically what was said during those briefings. As I recall, the briefings were conducted by John Buchan and I think Dave Brunnsden from the Department of Building & Housing. I recall we were given an outline of the green/yellow/red assessments, but I do not recall any of the detail of what was actually said at that time.
8. When we completed rapid assessments, we were never given any building plans or structural drawings for the building we were to assess. Our assessments were done on the basis of the damage done to the building, or lack of it. I was not qualified to assess whether any building was designed to withstand the damaging forces of earthquakes. I understood we were to assess the damage to a building as an indication of how the building had withstood the forces of the 4 September earthquake.
9. As I recall, from about 9.00am I and my colleagues went to complete rapid assessments on buildings in the Christchurch CBD. Invariably on that day, and the days following, the team to conduct such a rapid assessment comprised a Building Inspector and an Engineer. Sometimes there might have been three people in the team but certainly as a minimum there was a Building Inspector and an Engineer. I conducted numerous rapid assessments of buildings in the Christchurch CBD on 4, 5 and 6 September and all of those assessments were conducted by me in association with an engineer.
10. On the morning of 7 September 2010, I was standing with my colleagues, Graeme Calvert and Russell Simson. We were approached by Steve McCarthy who was then a Senior Manager in the Building Department at CCC. Mr McCarthy was one of our superiors in the Building Department. Mr McCarthy therefore knew all of our experience and expertise, and knew us personally. Mr McCarthy came up to us and said that there were no engineers available at that time to conduct any further rapid assessments, but that there was an urgent need to rapidly assess three particular buildings. He did not say why there was urgency. He therefore instructed us as a group to conduct those rapid assessments. It was implicit in what Mr McCarthy was saying to us that despite there not being any engineers available, he was confident



that the three of us had sufficient experience to conduct those rapid assessments ourselves, but also that there was really no choice but that we had to conduct those rapid assessments if they were to be done at all. It was out of the ordinary to be directed to conduct this assessment without an engineer.

11. The three buildings that we were instructed to assess were the Oxford Terrace Baptist Church, a small commercial building on the corner of Worcester Street and Latimer Square, and the CTV building. As I recall, we went first of all to the Baptist Church. That building was so badly damaged that it was really a case of deciding who would dash up to the building and place a red placard on it and get away as quickly as possible. I recall that Graeme Calvert fulfilled the role of scribe during our assessments, and it was Graeme who completed the rapid assessment form for the Baptist Church. Russell got the job of going up to the building and placing the placard on the front of the building.
12. We next assessed the small single level commercial building on the corner of Worcester Street and Latimer Square. As I recall, that had a dangerous parapet. I do not recall what colour placard we placed on the building but I do have a distinct recollection of spraying paint on the footpath to indicate where safety barriers should be erected to ensure that people did not come too close to the building and risk masonry falling on them.
13. The three of us then went to the CTV building. I did not notice when we approached the building that it in fact had a green placard on it but we did see people inside the building on the ground floor apparently at work. I think that these people worked for Canterbury Television but I cannot be sure. Certainly there was a receptionist in the foyer and we approached her and asked her if we could meet with the building manager. We explained the purpose of our visit namely that we were building inspectors and that we were visiting the building to complete a rapid assessment.
14. The receptionist told us that the building manager was in the building, but she was not sure exactly where he was at that time, and that she would go and find him for us.
15. The three of us walked through the ground floor of the CTV building and met the man that we understood was the building manager at the stairwell area. The manager told us that the building had been green stickered for the exterior only, and that the reason why we were there to complete a further assessment was to undertake an assessment



of the interior of the building. I got the impression that it was he who had requested that this assessment be undertaken by us. That person did seem to be knowledgeable about the building and why we were there.

16. At that stage we knew the level 2 assessment (internal) of the CTV building was outside our scope due to its complexity. My understanding was that buildings being more than three stories in height would ultimately require an engineer's assessment.
17. Despite the fact that an engineer's assessment was plainly going to be required, since we were there and had obtained access to the building, it made sense to us to look upstairs in the building where possible to see whether there was any damage evident. This was particularly so given that the ground floor of the building was already being occupied. I therefore asked the building manager if we could access any of the tenancies in the building, and the manager then left to obtain some keys for that purpose. I think that he mentioned this would take some time.
18. So, while the manager was away, I took the opportunity to access the stairwell and went upstairs, probably to the top of the building, and began working my way down the stairwell. Coming down the stairwell I saw no evidence of any thresholds having been compromised. Because the stairwell is the structural core of the building, I was looking for any evidence of damage to the structure. I saw none. There was no indication that the stairs had moved.
19. I was not able to get into each tenancy on all floors, even after the manager came to meet me, because he did not seem to have keys to all of the tenancies. However, I did enter at least one tenancy on one of the upper floors with the manager having let me in, and I recall seeing only minor cosmetic plasterboard vertical cracks as damage. I certainly did not see anything that alerted me to there being any structural abnormalities or structural damage.
20. I cannot recall which level this tenancy was that I obtained entry to for an inspection. I am not altogether sure whether I went into more than one tenancy or not. I certainly was not able to gain access to all the tenancies and therefore did not have an opportunity to visually assess the interior of all tenancies.



21. The building manager pointed to some minor vertical cracks in plaster board, but he never mentioned having observed any structural damage. He told us that none of the occupants had raised any concerns about the safety of the building.
22. When I came out of the tenancy that I had been able to gain access to, I met my colleague, Russell Simson, who I think was on his way up the stairs at that point. This would have been somewhere in the middle floors of the building but I do not recall exactly which floor we were on. I do not think that Russell Simson went to the very top of the building, and in fact he was coming to find me because he said that he had something that he wanted my opinion on. Russell wanted me to have a look at an area at a lower level. We therefore went down to what I believe was the ground level, and looked at the area where Russell had indicated on the top of the floor. Together, we viewed an untidy finish at the junction of the floor and a block wall on the north side of the building.
23. Russell and I then gained access to the underside of the floor through a cavity where the same area was observed from the underside. I observed that there was a bony type finish to the underside of the floor slab which indicated to me that this had not been vibrated sufficiently at the time of construction. It had the appearance of segregated aggregate. There was also a parallel gap of 5-10mm where the floor abutted a foundation wall. However, there was no evidence of any recent movement.
24. I then had another look at the surface above. A closer inspection revealed that there was evidence of paint on both surfaces that is on both the wall and the floor. This paint was unbroken. From what we could see in terms of the paint system and the untidy floor finish at that junction, was all consistent with there being no recent movement. This confirmed to me that what I was looking at was not any movement as a result of the 4 September earthquake but was pre-existing and likely to have been constructed in this way. I discussed this with Russell Simson and he agreed with my conclusion. I think that we did mention to one another that this would be looked at by an engineer subsequently in any event.
25. I have signed a file note dated 20 September 2011 that I understand may have been produced to the Commission. When that file note was taken, which was done at the request of the CCC solicitor, I could not reconcile how I could have been looking at the underneath of the ground floor. As a result I thought it must have been the first landing. However, I have since looked at the DBH website and have seen a plan of



the vertical section through the CTV stair shaft. This confirmed to me that there was a cavity under that area, and this was in fact where I believe my observation was carried out.

26. I did not see any other evidence of gaps or movement in the area adjacent to where we were inspecting, or within the remainder of the stair shaft. We observed no issues in regards to the integrity of the stair shaft.
27. We left the ground floor through a door at the rear of the building's stair shaft. This door led to a covered car parking area. Russell Simson and I walked under what I think was level 2 (in this building the ground floor is described as level 1) being the first floor slab, and viewed the columns and their connections to the floor slab and the connections between the stair shaft and the floor slab. I did not observe any structural abnormalities within this area. We then went out to the back of the building and entered the uncovered car park area and proceeded to inspect the exterior of the building. This visual assessment of the car park and building exterior indicated no structural abnormalities.
28. I have no clear recollection of where Graeme Calvert was during the inspection, however I do recall that Russell Simson, Graeme Calvert, and I met in the uncovered car park area and discussed the rapid assessment that we had just undertaken. We agreed that there were no structural abnormalities seen, and none had been brought to our attention by those people in the building.
29. It is my recollection that we were comfortable that only the ground floor should be occupied. No other floors were occupied at the time of our inspection. Because the building was outside our scope, due to its complexities and that we did not have an engineer with us, the building manager was to be advised to engage an engineer immediately to complete a level 2 assessment. Our expectation was that the engineer's assessment would be of the whole building.
30. Russell Simson then returned to the foyer area as I understood it to convey this message to the manager.
31. Russell reported to us that he had left the manager in no doubt of the need to obtain an engineer's report as a matter of urgency, and that the building manager assured him that this would be done. It is my recollection that as a group we were satisfied



with those assurances. Graeme either adjusted the existing green level 1 placard or wrote out another green placard. I have no recollection of observing him completing the placard.

32. It had been our practice to always advise owners or managers who were present at the building of the need to obtain a structural engineer's report to carry out an assessment regardless of the placard colour that we issued as a result of our rapid assessment.
33. When I first arrived at the building, I had assumed that there had been no level 1 assessment previously carried out and that this was the purpose of our visit. Once we were there, it became clear it was a level 2 assessment and in fact we were told by the building manager that an exterior assessment had been completed.
34. After completing the assessment of that building, we returned to the Civil Defence Headquarters at the Art Gallery to log our assessment.
35. I left the employment of CCC on 24 December 2012, having received an offer of employment with Fletchers Construction.

Dated this 25th day of May 2012



David Flewellen

