

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 TERRY HORN
IN RELATION TO THE CTV BUILDING**

DATE OF HEARING: COMMENCING 25 JUNE 2012

STATEMENT OF EVIDENCE OF TERRY HORN IN RESPECT OF THE CTV BUILDING

Personal Background

1. My full name is Terence John Horn. I live in Raglan. I am currently employed by Kingston Building as an estimator. My current work load is for Stream Group inspecting and estimating Tower Insurance claimants' residential properties in Christchurch.

Purpose of Evidence

2. From 1985 to 1995 I was employed by Alan Reay Consultants Ltd (**ARCL**) as a structural draughtsman. During this time I may have done some of the structural draughting for the CTV building. I have been asked to give evidence about this.

Working at ARCL: 1985 - 1995

3. I went to ARCL in 1985 from Holmes Wood Poole & Johnstone (**Holmes Wood**) where I had worked as a structural draughtsman for 7 years. During my time at Holmes Wood I worked with a number of engineers, including John Henry, and I was involved in draughting a number of multi-level shear core buildings.
4. John Henry had left Holmes Wood and gone to ARCL. After he had gone he told me that there was an opportunity for me at ARCL as well. While the majority of the projects at ARCL at that time were tilt-slab buildings, there were also some multi-level shear core buildings in the pipeline.
5. When I arrived at ARCL I found that the two draughtspeople that were there, Wayne Strachan and Shane Fairmaid, were very experienced in draughting tilt-slab buildings, but the firm as a whole did not have experience in multi-level shear core buildings. It was John Henry who had this expertise and I worked closely with him on the design of Landsborough House. I also did the draughting work for the Mair Astley Building and parts of the Aged Persons Welfare Building.

Landsborough House and Mair Astley Building

6. John Henry was the design engineer for Landsborough House. John & I worked together well, in a room separated from the rest of the staff in the open plan office. I have been asked by Counsel Assisting what Alan Reay's role was in the design of this building. My recollection is that Alan Reay was very involved with the client side of things. He would be the point of contact for the client, architect, Council and

Williamsons, the construction contractor. Alan must have gone to the initial site meetings of Landsborough House but I clearly remember doing a lot of the reinforcing checks before concrete pours as the project was under way. However, in terms of the design itself I do not recall Alan Reay being closely involved in the design at all.

7. I draughted Mair Astley, which was a direct copy of Landsborough House's structure. The main difference between the two buildings was that Mair Astley had a larger precast concrete façade. I am sure that John Henry designed this façade but otherwise there was no new design required. On Mair Astley I clearly remember doing many of the site inspections with the Fletcher Construction foreman John Morrison right from the foundation formation up.

The CTV Building

8. I have no memory of the CTV Building project. I have looked at the drawings that were submitted to the Council and I do not recognise them. However I have been advised by Counsel Assisting that Wayne Strachan who was a senior draughtsman at ARCL at this time has said that he recognises that he did the majority of the draughting, but thinks that I did or supervised some parts of the drawings, for example the foundation reinforcing. It is possible that I could have drawn the foundation reinforcing after the engineer had marked up the carcass drawings. This could be an isolated element done late in the project after the building mass was known. It was also not unusual to split up the draughting between a number of draughtspeople, particularly if the project was on a tight timeframe to go into the Council for a building permit.
9. I do not recall working with David Harding as closely as I had with John Henry on many buildings projects while he was at ARCL.
10. I have been informed that David Harding has stated in correspondence with the Royal Commission that the ARCL draughtsmen were all under continuous supervision by Alan Reay and that he would *"visit each draughtsman at least once each day to look over the work they were preparing, to comment on their work and to ask them what information had been provided to them by the Engineer"* [BUI.MAD249.0286A.RED.3].
11. After John Henry left ARCL I worked primarily on my own with some direction from Alan Reay. However I am not in a position to say what the practice was in terms of supervision of the junior draughtspeople.

12. In terms of the projects where I worked closely with Alan Reay, my experience was that he did not regularly oversee my work other than to check on my progress and the timeframe. He would be involved at the start of a project when decisions about building use, layout and maximum leasable areas were made. After initial training in the ARCL concrete tilt up design systems, using ARCL office standard practices – panel lifting, panel connection, posthole footings and roof steelwork systems – I was left to complete projects with minimal supervision from Alan Reay until he reviewed the permit application.

Signed: _____

Terry Horn

Dated: _____

28/5/12