

## **CANTERBURY EARTHQUAKE ROYAL COMMISSION**

### **Statement of Marton David Sinclair in relation to Building at 601 – 601A Colombo Street, Christchurch**

#### **Introduction**

1. My full name is Marton David Sinclair. I am a director of Eliot Sinclair & Partners Ltd, Engineers, Surveyors and Planners of Christchurch and am a Chartered Professional Engineer in the disciplines of Civil and Geotechnical Engineering. I am a member of the Institution of Professional Engineers NZ (IPENZ) and a Fellow of the NZ Institute of Surveyors. I am also a member of the NZ Geotechnical Society a technical group of IPENZ.
2. I have practiced predominantly in the Christchurch region for the past thirty five years in the fields of Civil and Geotechnical Engineering including structural engineering for low rise buildings and complex residential structures on the Port Hills.

#### **Building Description**

3. The building at 601 – 601A Colombo Street was a two story unreinforced masonry building on the south west corner of Mollett Street and Colombo Streets. It appeared to be in two units with an unreinforced masonry transverse wall separating units 601 and 601A Colombo Streets. The building had a timber first floor and timber roof trusses supporting a pitched corrugated steel roof.
4. A double brick wall on the north side of the building had collapsed onto Mollett Street during the 4<sup>th</sup> September 2010 earthquake leaving the roof partially supported.
5. The interior of the southern building at 601 Colombo Street was not inspected but is likely to have been of similar construction.
6. Our firm was instructed to inspect the building at 601/601A Colombo Street on the 6<sup>th</sup> September 2010 by Mr John Dallison of Dallison Stone Lawyers on behalf of his client S, L, D, E and N Yee. There was some uncertainty over the building numbering in the various public records and our report was prepared only for what now appears to be 601A Colombo Street although the report is headed 601 Colombo Street.

#### **Observations**

7. Our photographs, taken on the 15<sup>th</sup> September 2010, record that there was a stepped vertical crack in the transverse dividing wall at the south east corner of unit 601A. This crack was related to the predominantly north/south shaking of the September earthquake which had affected the north and south walls rather than the eastern façade fronting onto Colombo Street.

8. There was also a small crack in the east façade at the north east corner of the building.
9. The facade onto Colombo Street appeared largely undamaged apart from the cracking at this corner. However, we considered the building still needed to be cordoned off.
10. The cracking of the eastern façade and in the transverse dividing wall did not indicate any outward movement of the façade.

### **Report**

11. I prepared a brief post earthquake report for our client dated 16 September 2010 after an inspection on the 15<sup>th</sup> September 2010 by one of the engineers employed by our firm. This report, on 601A Colombo Street concluded that the building was unsafe to occupy as a part of the upper level of the north wall had collapsed onto Mollett Street. The west wall was also severely cracked towards the rear of the building.
12. As noted in the report it was apparent from our inspection that the building needed to be demolished however this was not seen as urgent as Civil Defence had erected barriers along the Colombo Street frontage of 601 & 601A and in Mollett Street and the building was cordoned off.

### **Heritage Status**

13. The building was not a listed building and was probably not an archaeological site as it appeared to have been built after 1900.

### **Further Observations**

14. We did not further inspect the building after the Boxing Day earthquake as it was obviously due for demolition and had been cordoned off. It was also dangerous to enter.
15. The barriers were still in place in Mollett Street and in Colombo Street in front of 601 and 601A and the building was not seen as being at greater risk of collapse than the many other unreinforced masonry buildings in the Christchurch area.
16. We do not have a record of the condition of the building immediately prior to the 22<sup>nd</sup> February 2011 earthquake and I am unable to determine whether the façade had deteriorated due to the aftershocks or whether the 22<sup>nd</sup> February earthquake, with shaking predominantly in an east/west direction caused the failure regardless of any prior deterioration.
17. I attach photographs of the building and the interior along with my report.

Marton Sinclair  
22 November 2011

## 601/601A Colombo Street



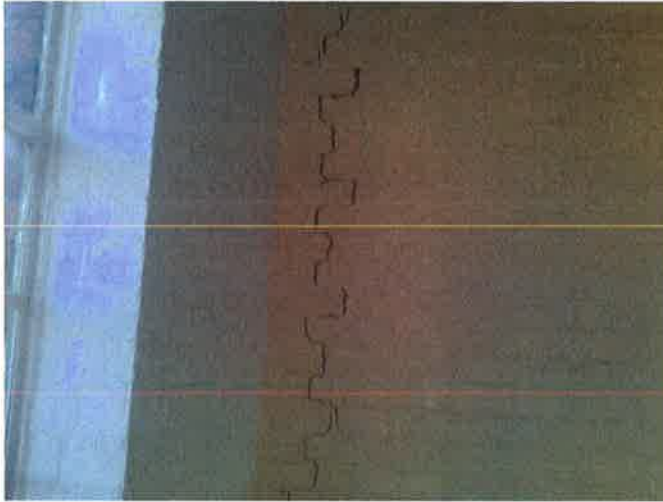
Figure 1 - 601/601A Colombo Street, Mollett Street to right, 16th September 2010



Figure 2 - 601A Colombo Street north east interior corner and north wall, 15th September 2010



Figure 3 - Crack west wall, 15th September 2010



**Figure 4 - Cracking in transverse wall southeast corner, 15<sup>th</sup> September 2010**