



To: Royal Commission on Canterbury Earthquakes
Attention: Sara Jamieson
Email: Sara.Jamieson@royalcommission.govt.nz
From: Peter Higgins
No. of pages: 30

File Ref: C971

Date: 14 June 2012

Concerning: CTV Building

Dear Sara,

We refer to your telephone call of 12 June 2012 and your subsequent email of same date requesting any documentation we might hold relating to our visits to this building and providing a list of questions for our comment.

Responding to your bullet points in turn:

Visits to CTV Building.

1. We made two visits to the building – both by Peter Higgins.
2. These visits were based on a request from the building manager to provide an estimate of costs to repair cracking in various elements. The purpose of the visits was to attempt to quantify the amount of cracking in various elements and prepare an estimate of costs for the epoxy injection of the cracks. The visits were not conducted for the purpose of forming any view of why any damage had occurred or the severity of any such damage – these considerations were dealt with by other parties.
3. The first meeting was on 8 February 2011. After being contacted by CTV Building Manager John Drew we arranged a meeting for 1PM on 8 February 2011 at his office on the 4th Floor of the CTV Building. There was no information in our possession prior to the conducting the first visit. After waiting in the reception area for approximately half an hour while another meeting took place Mr Drew emerged and then proceeded to show me the typical crack damage in the stairwell, Level 4 bathroom end wall (north shear wall), then to Level 5 to point out the cracked column and beam outside the lift doors facing Madras Street, before we returned to his office. During this walkover I was aware a structural engineer's report had been written and when back at his office, he located the CPG report dated 6 October 2010. While still in his office, he forwarded the CPG report to my email address. A copy of this email is included in the attachments.
4. Without prior reference to the 6 October 2010 CPG report, this initial visit was very much preliminary and involved Mr Drew quickly pointing out examples of crack damage to be followed by a further visit after having an opportunity to digest the engineer's report.
5. A second visit took place on 14 February 2011 - this time with the CPG report. The report did not quantify the scope of work that may have been required and the purpose of this visit was to determine the approximate quantity of the reported crack and spall repair in order to provide an initial budget estimate for the remedial works.



6. Given the limited access, occupation of the building, and the fact that no architectural linings had been removed - and that any external assessment could only be carried out from ground level - the quantification could only be indicative based on the areas accessible at that time.
7. The budget estimate was submitted on the basis of attributable labour/material/plant rates applied to a preliminary scope of work with those rates adjustable on the actual scope of works which would usually vary once architectural linings were removed and structural engineers confirmed the remedial requirements.
8. The process of receiving a request to quantify a scope of work and prepare a preliminary cost estimate for a building owner, contractor or insurance representative was very common in the aftermath of the September 2010 earthquake.
9. We would note that until architectural layers (wall/floor linings, paint and plaster render) are removed and the surface laitance along the line of any crack is ground back it is difficult to accurately quantify the scope of the repair. It is for this reason that the cost estimate is only presented as a budget estimate and a number of clarifications are included to identify the scope of work included in the estimate.

CPG Report

10. A copy of the CPG report dated 6 October 2010 was received by email following my visit of 8 February 2011 and this was to hand at the time of my later visit of 14 February 2011. The only information conveyed other than the CPG report was Mr Drew indicating the typical repair areas mentioned above. Any other areas were occupied at the time of the visits or were inaccessible e.g. lift shaft, external walls, columns or beams above ground level except in public spaces. Not all columns were sighted or accessible and similarly access to the north wall was limited.
11. The nature of the remedial works sighted generally from the visual walkover inspection guided by the CPG report considered the south shear wall crack outside the fire escape, 1st floor beam cracks on the north face, stairwell walls and construction joint cracks, the cracked column on the 5th floor outside the lift shaft and the adjoining lintel beam spall/crack. We did not form any view of the nature of the damage because the purpose of our visit was to quantify the scope and prepare a budget estimate for repairs.

Lift Shaft

12. After submitting a budget estimate to Mr Drew on 15 February 2011 I received a telephone call from him on 18 February 2011 noting that we had omitted any quantification of lift shaft cracks. This area was omitted due to the extensive arrangements that would have been required to gain access for quantification. This would have involved disruption to tenants by locking off the lift and installation of scaffold as would be necessary to provide safe access into the lift shaft. Mr Drew requested our budget estimate be amended to provide a contingency for approximately 80 linear metres of cracks in the lift shaft walls that were not accessible at that time and to resubmit on this basis. We were not clear on the basis of 80LM but as noted above, this was for the purposes of an initial budget estimate and would be refined moving forward. We did not have the opportunity to resubmit this estimate with the quantity amendment prior to 22nd February 2011.

Stairwell Cracks

13. Cracks noted in the stairwell walls were generally horizontal and as indicated by CPG would be expected at construction joints as illustrated in CPG Photo 3. My recollection is that there was a thin plaster render over the concrete in the stairwells which had cracked with the joint movement and this render would need to be removed along the crack line for setting up and injection of the construction joints. Cracks were noted on both sides of the stairwell as well as the north shear wall.

5th Floor Column/Beam

14. The column on the 5th Floor immediately outside the lift facing Madras Street appears to be the same as CPG's Photo 4 as per your email. My record indicates 6 No. horizontal circumferential cracks in this column with concrete spall or crack in the overhead lintel beam adjoining this column approximately 1200mm-1500mm out from the face of the column above the window. I have attached a hard copy photograph of this beam and column.

1st Floor Beam on North Elevation over Entry

15. You have requested whether I hold any other documentation relating to this building and observations were made at the above location. My notes recall 5 No. near vertical or diagonal cracks in this beam above the glass entry area of approximate length 1 metre which is referred to in CPG report Photo 5.

Cracks in South Shear Wall

16. Whilst not critical to the overall budget estimate, my submission dated 15 February 2011 inadvertently omitted this small area of remedial work but my notes recall 1 No. fine, near vertical or diagonal crack in the wall adjacent to the fire escape landing of approximate length 2 metres and as referred to in CPG report Photo 2.

Drag Bars

17. We were unaware of and did not sight the referenced drag bars during either of our visits.

We trust the above addresses the points raised in your email. Please do not hesitate in contacting the undersigned if you require any further information.

Yours faithfully

Construction Techniques Ltd

Peter Higgins

Southern Regional Manager

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Attachments:

- *John Drew email to BBR Contech dated 8 February 2011 forwarding CPG Report – 21 pages*
- *BBR Contech email to John Drew with budget estimate dated 15 February 2011 – 5 pages*
- *Scanned photos from Level 5 Column/Beam outside lift taken during visit of 8 February 2011 – 1 page*