

**COMMISSION RESUMES ON THURSDAY 26 JANUARY 2012 AT 9.32 AM****JUSTICE COOPER:**

Today the Royal Commission inquires into the failure of the two buildings  
5 situated at 200–204 Manchester Street, located at the south-eastern side of  
the intersection of Manchester and Gloucester Streets. The buildings had a  
party wall that had been opened up to enable their joint use. A business  
known as Iconic Bar traded in the buildings. On the 22<sup>nd</sup> of February they  
10 were badly damaged in the earthquake and Jaime Gilbert who had been  
working in the bar died as a result of injuries he sustained from falling  
masonry as he ran from the building.

We extend our deepest sympathy to his family. I acknowledge in particular his  
15 father Robert who is here today and Jaime's sister, Amy Cooney, who was  
also working in the bar and injured as she ran from the building.

I will just take appearances now. Mr Zarifeh, Mr Elliott, Mr Laing and Ms  
20 Daines for the Christchurch City Council, Mr McLellan, Ms Morgan for Lewis  
and Barrow with Ms Benson.

**MR ZARIFEH:**

If the Commission pleases, the building as Your Honour has indicated that we  
are enquiring into today and the failure of it, was known as the Iconic Bar,  
25 situated at 200–204 Manchester St and it was a two storey unreinforced  
masonry semi-detached structure occupying the site on the south-east side of  
the intersection of Manchester and Gloucester Streets, and the building  
housed a business and bar known as the Iconic Bar. I will get some  
photographs brought up while I am speaking just to, perhaps if we can get a  
30 photo of the, oh there we go. That is the building Manchester St to the right  
and Gloucester Street to the left and the building is shown on the corner.

**JUSTICE COOPER:**

So that is looking from what direction?

**MR ZARIFEH:**

That is looking from the north-west corner of the intersection across to the south-east corner and –

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**JUSTICE COOPER:**

So Gloucester is on the left?

**MR ZARIFEH:**

10 Yes, and Manchester on the right.

**JUSTICE COOPER:**

And Manchester is on the right.

15 **MR ZARIFEH:**

And so the west side of the building is where the tree is, the north side is on Gloucester and the south is, you can't see it, but it is to the right and obviously behind where the parked car is. The east side which will become relevant because of damage on the east side, perhaps the –

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**JUSTICE COOPER:**

Is that where the low-rise is?

**MR ZARIFEH:**

25 Yes because it was two buildings, the one on the Gloucester Manchester corner being two storey and the one behind it being single storey, perhaps the best photograph of the east side is one that was taken by structural engineers Lewis and Barrow, I believe, when they were effecting repairs on the east side, and it is on page BUIMAN200.0006.7, and if that top left one could be,  
30 that's the, first of all it's highlighted the top right is Gloucester Street, and the top left is a close-up of the east gable wall of the building and that's when repairs were being conducted on it in late December and so you can see the part that's two storey.

**JUSTICE COOPER:**

Yes, and when the reports refer to the big two buildings with the party wall opened up, the low-rise was the other building that they operated as one?

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**MR ZARIFEH:**

Yes Sir, as one, they were opened up together, yes. Structural strengthening of the building appears to have been carried out in 1993 by Holmes Consulting Group and in 2004–2005 by Lewis and Barrow Limited. Following the September 2010 earthquake a rapid assessment took place on 5 September resulting in the building being green placarded. That green placard was confirmed by a rapid, what was called a rapid structural assessment carried out by Holmes Consulting Group on behalf of the owners of the building on the 8<sup>th</sup> of September. A further level 1 council rapid assessment on 10 September noted cracking in a parapet and although it noted cracking, the building was still being placarded but it appears that there was no follow up of that as recommended on the form. There was a recommendation that an engineering inspection be conducted.

20 0940

On 22 November 2010 a proposal and plans for the addition of a new structural first floor and strengthening of the roof by Lewis and Barrow was filed with the Council and it appears that this proposal was on the instructions of the then bar manager, Daryl Fraser, who at the time was considering purchasing the business. I should say that the Commission or counsel for the Commission have had contact with Mr Fraser but he is somewhere in Western Australia working in a mine and we couldn't arrange any video link up in the end but we have had a written reply from him. The Council has advised that some eight days later, this is after this proposal was filed, on the 30<sup>th</sup> of November 2010 their records show that the client requested a hold on this proposal and it appears quite some time later it had been subsequently withdrawn.

On the 26<sup>th</sup> of December 2010 a level 2 rapid assessment took place following the Boxing Day aftershock. This form noted that the east gable wall was badly damaged. That's the wall we looked at in the photo a moment ago. On the second page of that assessment form it also noted that the west wall was damaged, especially at the apex and the building was red placarded. It appears Your Honour that from recent further investigations, and these have been prompted really by the brief from Mr Gordon of Lewis and Barrow who said that, and will say in evidence, that he thought that must have been a mistake because there was only damage that he observed on the east wall and only the east wall had the apex that was described in the form and in its further investigation in speaking to the assessors that completed that form it appears that that may well be correct or is correct and that it was only damage to the east wall and it was just an error in misdescribing on the second page of the form as the west wall.

The next day, that's the 27<sup>th</sup> of December, there were two further assessments. The level 1 rapid assessment noted stress fractures on plastered brick walls, upper areas mainly where the roof trusses connect in parapets and again the building was red placarded. There was also a USAR damaged buildings inspection on that same day which noted severe damage. That day the Council wrote to the owner enclosing a Building Act Notice. That notice referred to the east gable wall damage and, as I've indicated, there was west wall damage (as it transpires incorrect) but the Building Act Notice did not include that. That appears to have been a transcribing error at the time and perhaps now in light of more recent investigation not relevant but that's what occurred at the time.

In the days that followed Lewis and Barrow, in particular Mr Chris Gordon who is a structural engineer for Lewis and Barrow, oversaw make-safe work to the building. In an email of the 30<sup>th</sup> of December he referred to the red stickering by the Council and the east gable wall parapet damage. It also recorded in

that email that further investigation had revealed damage to the gable end wall and remedial works had been undertaken.

5 The following day a CPEng certificate was signed by Simon Gifford, structural engineer from Lewis and Barrow, confirming the structural integrity of the building and accordingly this was accepted by the Council it appears on that same day and the building allowed to re-open, that day of course being New Year's Eve. The CPEng certificate had to be signed by Simon Gifford because Mr Gordon wasn't at that time a registered chartered professional  
10 engineer. The building was re-opened, the red sticker removed as a result of that and re-opened for business. I should also indicate that at that point I've already mentioned that Mr Fraser, the bar manager, was looking at buying the business so it seems that it was on the market and it was sold to a woman called Leanna Christie who was a friend of Amy Cooney who was, as Your  
15 Honour has indicted, the sister of Jaime Gilbert who was killed in the building and Leanna Christie took over the business, The Iconic Bar, on the 1<sup>st</sup> of February 2011, aware from her inspection and visits to the building that there had been works required but of course that wasn't anything to do with her but the owners of the building, the vendor, was attending to that as I've indicated  
20 through Lewis and Barrow and she was presuming, as she had been told, that everything was sorted and certificates had been filed.

Moving to the 9<sup>th</sup> of February 2011 a City Council's engineer's re-inspection of damaged buildings occurred by Mark Ryburn. He noted on that form that he  
25 recommended contacting the engineer for a confirmation of the works as the lateral load capacity may not exist. The make-safe works on that east wall that you see in the photo, obviously the scaffolding had been removed, had been completed and he saw plywood bracing that had been put in on that end wall but had some concerns of what he saw and therefore noted that he  
30 recommended the engineer be contacted for further detail. Now what Mr Ryburn didn't know it appears at that time, perhaps because the CPEng certificate that had been filed with the Council at the end of December was not on the file or not available to him, I'm not sure, what he didn't know was there

had been this process and his evidence will be that he spoke to a woman at the building, the bar, and had a conversation about an engineer and works being approved. He was just conducting, as the Commission has heard I think in some of these other buildings where there was re-inspections going  
5 on by Opus engineers who were on contract with the Council at the time, he was just conducting one of those follow-ups where buildings had been red or yellow stickered or Building Act Notices served. So he was following up on that. The re-inspection form that he completed he left with the Council for follow up, as I say oblivious to what had occurred a couple of weeks before  
10 and then there's a note on that form, a post-it sticker note, that says, "Neville please view and make a decision." Now that's on the 9<sup>th</sup> of February. Some two weeks later on the morning of the 22<sup>nd</sup> of February Neville Higgs who would appear to be the Neville who is referred to in that post-it sticker note who was an engineer on secondment or on contract with the Council at the  
15 time was sitting down on the morning of the 22<sup>nd</sup> closing files and in particular the file for this building and to do that he was checking whether there had been a CPEng certificate, essentially to sign off the building to change it from the red sticker it had been to a green one and he's viewed the CPEng certificate being filed and signed by Mr Gifford and it would appear that  
20 Mr Ryburn's form that he'd completed was either not on the file and therefore not viewed by Mr Higgs or on the file but missed or not even found its way to Mr Higgs. Mr Higgs will give evidence and he'll say essentially that he's not sure. It could have been a number of possibilities. He doesn't recall seeing it and presumably one would think that if he had then he might have taken a  
25 different course but in any event he saw the CPEng certificate and duly closed the file and what would have been a few hours later, if that, the 22<sup>nd</sup> of February earthquake struck.

0950

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**JUSTICE COOPER:**

What was the reason for Mr Ryburn's re-inspection? Was that, did Mr McCarthy cover this?

**MR ZARIFEH:**

Well I think the, he does, the council, the council's position is that it was an error. That he, there shouldn't, didn't need to be an inspection because the  
5 CPEng certificate effectively closed off the file. I'm not sure why there had to be another closure of file but there was a closure of the file once the CPEng certificate was received and again that was another Opus engineer, a Mr Mitchell, who was on secondment with council who received the CPEng certificate Mr Gifford had filed and he effectively closed the file and indicated  
10 that the building could then go to green and be opened up. But –

**JUSTICE COOPER:**

So when Mr Ryburn went to the building and looked at it he was making a mistake.  
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**MR ZARIFEH:**

Well it appears so. He was assuming, he says in his evidence that he was assuming that the building was either red or yellow stickered and that's why he was going and news of, or discussions that he says he had about an  
20 engineer was news to him. He just looked at what he saw there and had some questions about it that an engineer would, or could answer, and therefore made his comments. So he was oblivious to the CPEng certificate being filed it would seem. So it appears that that wasn't readily available or perhaps hadn't found its way to the file at that point. It's all a little unclear but  
25 that certainly seems to be the case. Mr Ryburn would not in the ordinary course have been going if he was aware that the building had in fact been opened up again.

In the 22 February earthquake the building was substantially damaged including collapse of the north and west façades onto the street. Jaime  
30 Gilbert was working as a barman at the Iconic Bar. In fact he'd only been in that job some two weeks and I think that was the second day that he was working full-time. Also working as an assistant to the manager was Jaime's sister, Amy Cooney. When the earthquake struck they both ran from the

building but were hit by falling masonry blocks. Both were covered in rubble as they lay on the footpath outside the building on the west side of the building on Manchester Street. Rescuers uncovered Amy Cooney first and then Jaime Gilbert. Jaime was severely injured and was taken to  
5 Christchurch Hospital in a van and CPR performed on him en route, however a short time after they arrived at the hospital he was pronounced dead.

The likely issues that the Commission will have to consider in this case. Firstly, an application of the council's earthquake prone policy to the building as in common with other such buildings that the Commission's enquiring into.

10 Secondly, the assessment of the building following the September earthquake and in particular the Boxing Day aftershock. I've stated that a likely issue could be whether the proposed structural strengthening in the proposal and drawings of 22 November 2010 would have had any effect on the building being able to withstand the February earthquake and Mr Lewis of  
15 Lewis and Barrow who's giving evidence addresses that issue. Fourthly, communication to the owners of the damage apparent from the rapid assessments on the 26<sup>th</sup>, that should be, and 27<sup>th</sup> of December via the Building Act notice. Fifthly, an assessment of the make safe work carried out between 27 December and 31 December. And sixthly a lack of follow-up of  
20 the problems or concerns perhaps that were highlighted by Mark Ryburn in the engineers re-inspection on 9 February and perhaps can be added to that an assessment of any potential system failures within the council for these problems that we've just been discussing in terms of transfer of information.

The witnesses who are going to be called and the approximate order. It may  
25 have to change, there are two video links that are arranged. Firstly, I'm going to call Amy Cooney, just to tell us briefly about her experiences on that day and observations of the building and she has a short video that shows some of the collapses in the aftershocks and a bit of the rescue effort of her brother, some TV footage she's obtained.

30 Secondly, the Lewis and Barrow witnesses. Mr Lewis will give evidence about the structural strengthening that he oversaw to the building and Your Honour will recall that I indicated there was strengthening in 1993 overseen by Holmes and 2005 by Lewis and Barrow. We've had some written material



back from Holmes but haven't had, been able to get the contractor to deal with any possible concerns about workmanship that are raised by Mr Peter Smith in his report but we will hear from a Mark McKenzie from Contract Construction who was the contractor who installed the, some of the structural  
5 strengthening and in particular rods that Mr Smith raises possible issues with, in the structural strengthening of 2004 that was overseen by Mr Lewis. So that's Mr Lewis.

Christopher Gordon I've mentioned, another structural engineer from Lewis and Barrow who oversaw the remedial works. He's in Nelson. He's on video  
10 link at 11.45 and Simon Gifford who's not named on the witness list but he will give brief evidence about the CPEng certificate and the main process that he signed and dealt with.

Contract Construction I've mentioned. It's not on the written summary either. That's Mark McKenzie who's the foreman or was the foreman at the time.

15 Mark Ryburn I've mentioned from Opus. We'll deal with his re-inspection and Neville Higgs who I've also mentioned will deal with the closing off of the file.

John Mitchell's not on the form but I'm going to call him to give very brief evidence. He was the Opus engineer on secondment who received the CPEng certificate that Simon Gifford sent him and I'm not sure but there may  
20 be issues arising to general issues for future, in relation to these certificates and how they're dealt with.

The Christchurch City Council witness is Mr McCarthy and then, finally, sorry, Mr Looker, Garry Looker. He's the representative of the owner and I think a director of the company that owned the building. He's –

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**JUSTICE COOPER:**

At what stage?

**MR ZARIFEH:**

30 At the –

**JUSTICE COOPER:**

Throughout?

**MR ZARIFEH:**

Throughout.

5 **JUSTICE COOPER:**

Yes.

**MR ZARIFEH:**

And as I say sold the business to Ms Christie.

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**JUSTICE COOPER:**

So she bought the business but she didn't acquire any property interest other than a lease or something.

15 **MR ZARIFEH:**

That's my understanding Sir. He's arranged for 2.15 from a video link from Auckland. Unfortunately he left most of the oversight of arranging engineers et cetera to Mr Fraser who we can't get lined up but anyway he'll give evidence of dealings he had at 2.15 and then finally Mr Smith of Spencer Homes Limited and his report on the building and the building failure.

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**JUSTICE COOPER:**

Who instructed Lewis and Barrow?

25 **MR ZARIFEH:**

Mr Fraser on behalf of the owners instructed Lewis and Barrow in terms of the remedial work and I'm not sure if he personally instructed in relation to the strengthening work, no, it wasn't. It was the previous owner I think but they'd been involved.

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**JUSTICE COOPER:**

That's for 2004 work you're talking about?

**MR ZARIFEH:**

Yes Sir.

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5 **MR ZARIFEH:**

Yes Sir. So Sir I'll move to the first witness.

**JUSTICE COOPER:**

Right thank you.

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**MR ZARIFEH:**

And that's Ms Amy Cooney.

**MR ZARIFEH CALLS****AMY SARAH COONEY (SWORN)**

Q. Ms Cooney, is your full name Amy Sarah Cooney?

5 A. It is.

Q. And you live here in Christchurch?

A. I do.

Q. Now I think you have, or a statement's been prepared for you of an outline of the evidence that you're going to give, have you got a copy or do you want me to...?

10

A. No.

Q. All right can I hand you this copy?

A. Thank you.

Q. Just have a look, is that the statement that was prepared?

15

A. Yep.

Q. I don't know if you've actually signed it yet but it's got provision for you to sign it on the back, yes?

A. It's still my statement.

Q. Now can I ask you please to read the statement, starting at the second paragraph, we've covered the first bits, and I'll, if I need to I'll stop you if I need to amplify anything or come back once you've finished, thank you?

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**WITNESS READS BRIEF OF EVIDENCE**

A. "My first involvement with the Iconic Bar that was at 200–2004 Manchester Street was when my friend Leanna Christie was looking at that business from the owner of the business, looking at buying that business from the owner of the business and building Symphony Projects Limited in November 2010. Liana had been a co-owner of another bar in Christchurch but had lost that business due to damage caused to the building it was in from the September earthquake. I went into the Iconic Bar in December/January with Liana a couple of times to look at it with her. Liana then phoned me on the 27<sup>th</sup> of December 2010 and told me the Iconic had been red stickered. She did say the real

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estate agent had told her that an engineer was on the case and it would all be sorted out. Liana told me on New Year's Day that she had been past the Iconic the night before and seen that some kind of work had been done to the building and that it was open for business. Sometime after that she told me that her lawyer had checked with the vendor and that the red sticker had been resolved. In mid-January I went with Liana and did a reasonably comprehensive look around the Iconic Bar. The bar was open for business at the time. Shortly after that visit Liana signed up to buy the business and took over operating it in the first week of February 2011. The manager, Daryl Fraser, who Liana had most of the dealings with in relation to the purchase left at the time that she took over the business as did the assistance manager Lisa Grant and also the day manager. From that point on I became the assistant manager to Liana helping her to run the business".

15 Q. Can I just ask you there just to confirm something you heard discussed a moment ago. I'm right that Liana bought the business, she didn't buy the building itself?

A. Correct.

Q. Yes.

20 A. As far as I understood Garry Looker still owned the building.

Q. Right.

A. Right.

Q. So carrying on page 2, second paragraph.

**WITNESS CONTINUES READING BRIEF**

25 A. "My brother Jaime Gilbert started working at the Iconic Bar on a casual basis Friday and Saturday nights. Then on the 21<sup>st</sup> of February 2011 Jaime started full-time at the Iconic as the day floor manager. I did not work on the 21<sup>st</sup> of February as my son was in hospital that day. The following day on the 22<sup>nd</sup> of February 2011 I picked up my brother Jaime  
30 in the morning and we both went to work at the Iconic Bar. When the earthquake occurred I was standing on the customer's side of the downstairs bar talking to Jaime who was standing opposite me on the serving side of the bar. I heard the earthquake and then saw glasses

and bottles falling down behind Jaime as the building started to shake. I said, "Let's get out". I was worried about the stability for two reasons. Because of the alterations that had been done some years before on the top floor where the building had been opened up to create a balcony for smokers. Whenever you just walked on that balcony area it shook and I had wondered about that area ever since first going in there. I was worried about the make safe repairs that had been done to the back wall. They had built into the roof space. That's where my office was built into the roof space and you could see where bricks had fallen out and plywood bracing had been put on the outside of the building covering up the holes. I could not see any bracing on the inside to which the outside plywood was attached. I thought that the top of the building in that area could well fold in once an earthquake had hit.

Jaime came around to the front of the bar and as he did so I was one or two steps in front of him as we ran out of the front door on to Manchester Street. As we ran out the masonry blocks on the façade of the building were falling. They fell on to the canopy over the door which then fell on to both of us but more so on me, more so the canopy was on me. We were both hit by the masonry blocks and trapped under the rubble. I was knocked out for several minutes. When I came round I was still holding on to Jaime's hand. I couldn't move and I started yelling out for help. A short time later Sam Siave who worked at the bar and had been upstairs but had got out another door came over and started pulling rubble off us. He got me free first and then others were helping to get Jaime free. I was walked to the middle of the intersection by two ladies to be free of the building as masonry was still falling from upstairs. A short time later Sam carried Jaime in his arms over to where I was standing. I could see Jaime was limp and I knew then that he was dead. His chest and head were crushed in. We were put into a van and taken to hospital. En route to the hospital two policemen jumped into the van and attempted to perform CPR on Jaime on the way to the hospital. Although hospital staff carried out emergency treatment for

some time I was told a short time after we'd arrived that Jaime had passed away.

I had been worried about the safety of the building from when Liana first took it over. I knew that it had been red stickered and I was worried that the plywood bracing was insufficient particularly as I've said because it did not appear to be braced against anything on the inside. I had talked about this to my partner who is a qualified builder and he saw that on a couple of occasions when he came into the bar".

Q. Thank you. Now I mentioned some footage, television footage that you have obtained and I think it's, there's some clips that are put together so that they are not necessarily in chronological order?

A. May not necessarily, roughly in chronological order.

Q. Okay. Well I'm going to get that played now and it will be on the screen and we'll be able to pause it I believe, yes, so what I want to do is you to tell us where we're, what we're looking at and what's happening and if you want it paused just say so and it can be paused?

A. Right do you want me to start from this point now?

Q. Yes.

**JUSTICE COOPER ADDRESSES MR ZARIFEH – LENGTH OF VIDEO – TO BE PLAYED THROUGH INITIALLY VIDEO PLAYED**

1010

**EXAMINATION CONTINUES: MR ZARIFEH**

Q. Ms Cooney, there is a piece there with a car, quite a few men around a car, that's further down the road?

A. That's further down the road down Manchester St so the, probably about two minutes 30 to two minutes 45 what have you is irrelevant.

Q. We can fast forward that when we go through now but if we can just go through and pause in relation to the Iconic and what was happening around that and you can talk us through that. Is that all right?

A. Okay. This is standing on the corner of Gloucester St looking on a diagonal down Manchester St so this is the north wall.

- Q. So, sorry where is the north wall?
- A. This, this –
- Q. On the left is the north wall?
- A. On the left here is the column, the very corner of the north wall into the  
5 smoking area which you can see quite clearly.
- Q. And so the doorway is –
- A. The doorway is probably approximately where this gentleman is with the  
blue hard hat on –
- Q. The blue hard hat?
- 10 A. – and the rubble we're all underneath. They're pretty much standing on  
top of us.
- Q. Diagonal on the corner is right there?
- A. Yep.
- Q. And just pause, where did you and Jaime end up? Can we see it from  
15 here or not?
- A. It's too difficult to tell you from this point.
- Q. It's round towards the left?
- A. Yep. Right, if you stop you can see it, oh, just go back a tiny little  
fraction. You can see that red t-shirt there, just around –
- 20 Q. You've got a, see the mouse?
- A. Oh I can do it.
- Q. You have to look up on the big screen or you can see it on yours but –
- A. I know I can see it here. So if you see where that red t-shirt is. There's  
actually a red car and a silver car on the footpath. You can see it from  
25 another shot further along. That red t-shirt is Sam and that's him where  
he's just starting to come over –
- Q. Just put the mouse on where you are talking?
- A. Little red t-shirt here is Sam.
- Q. Oh, okay, right.
- 30 A. And he, we're about here at the back end of the red car, in-between the  
red and the silver car. You'll see on the next shot, I'll show you.
- Q. Right. So this is the corner, that same corner?



- A. Yep, just further back on the corner, and that is another aftershock happening and they're all jumping off and at the end of this clip you'll see a better thing of the –
- 5 Q. That building, if you just pause, that's straight across the road from the Iconic?
- A. That's straight across the road and that was already unoccupied and being repaired at the time.
- Q. And we can see tarpaulin up on the top there?
- A. Yep.
- 10 Q. So that's on the south-west corner?
- A. South-west corner. This is some time after. They're still pulling Jaime, the rubble off Jaime at this stage and that's –
- Q. Is that you in the –
- A. Me screaming out for him.
- 15 Q. Right.
- A. Okay. I'm presuming I've already been, I'm not sure how but I've already been taken out. We're, sorry, we're about in there somewhere.
- Q. Okay, so these were cars that were parked outside Iconic?
- A. Yep.
- 20 Q. And you were in there on the footpath behind them somewhere?
- A. Yep. This guy here is pulling the actual blocks off exactly where Jaime is underneath this huge one and that is another policeman who was helping to pull him off so Jaime is directly there.
- Q. This is not Sam that you mentioned?
- 25 A. This is not Sam, this is Sam here.
- Q. Right.
- A. And this is Asi and this is Spencer Kingi the policeman.
- Q. And so this chap is lifting these big blocks that are obviously on Jaime?
- A. Superhuman strength, yep. Jaime's like just right there.
- 30 Q. So that is another shot in the background there is the Iconic?
- A. Yeah.
- Q. That's looking down Manchester?
- A. Yeah.

Q. And that's again another shot so just looking at that –

A. Sorry.

Q. – it's all right, just looking at that the –

5 A. The front door is here and that's the wooden structure of the canopy from up here fallen down over top of it whereas the rest of it is down where we were, roughly around here.

Q. Right, so just point to us the door that you and Jaime came out of?

A. Here.

Q. Okay, and what is in here on the corner?

10 A. Here? This is the underneath of the smoking area. This was actually a balcony that had as you can see in the prior pictures it had sort of steel open gate things that were like, you could smoke in there legally but it was really an inside/outside, it was sort of (inaudible 10:16:58)

Q. Right, so it had openings to the outside?

15 A. Yep.

Q. And is that the area that when you read your statement out, that was the area you were concerned about?

A. Yep.

20 Q. Just tell us while we're looking at that a bit more about why you were concerned about that area?

A. I don't know. I just didn't seem that it was sort of, you could just walk on it and you could have a two or three year old walk on it and it would bounce and it wouldn't just bounce a little bit like our houses do now and this was after February but it was before February obviously and it really, really bounced a lot. Just felt flimsy, just didn't...

25 Q. Right, I think Mr Lewis from Lewis and Barrow, don't know if you've read his statement but he mentions that area, the smokers' area. He says that, "Lewis and Barrow", paragraph 14, "also designed a roof opening over level 1 smokers' area and designed a wall to go round the first floor smokers' area. The roof was removed over part of the smokers' area but the purlins and other framing remained in place," and he talks about the tongue and groove flooring was removed and replaced with plywood flooring to, plywood flooring to falls and a weatherproof layer added."

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- A. They're talking about the bottom or the top? 'Cos there were two smoking areas, one underneath each other and they were both adjusted, I'm not really sure –
- 5 Q. I think he's talking, well I presume he's talking about level 1. We can find out from him but when you say that the floor moved, you're talking about on the upper level?
- A. Yes.
- Q. Yes. Well we will find out from him but if it was plywood floor that had been replaced sometimes a plywood floor can move or bounce. Is that
- 10 the kind of feeling it was or not?
- A. No, I have a plywood floor in my laundry and shower right now. That's just been put in recently and it doesn't do that.
- Q. So it was something more than concerned you?
- A. Most definitely, yep.
- 15 Q. And do you know if that concern was shared with anyone else that used or was in the building?
- A. Well only the people that I had just meant to work with, apart from that, not outside that.
- Q. So that's the north side of the building that we just looked at then.
- 20 A. Would you like me to fast forward this bit?
- Q. Yes, we can skip this bit out. Is that an aftershock? There's still more bits of the building falling off?
- A. Yeah. Everybody had jumped clear. That's me sitting in the middle, about there.
- 25 1020
- Q. So you'd just been cleared?
- A. I had just come out, out of there and then they moved me again just after that aftershock finished. I was sitting on the ground for that aftershock. The guys jumped clear and then, this is when they went
- 30 back to go back to Jaime.
- Q. To Jaime, all right and that's –
- A. And that's Jaime there.
- Q. That's Jaime and this chap removing these big blocks?

A. Yep.

5 Q. Thank you. The other thing that you said you had concerns about was the remedial works that were done in late December and we're going to hear more about those as you're aware and I think you probably read some of the briefs that have been filed. I just want you to tell us about, a bit more about that. You said that you had an office, was that upstairs?

10 A. Well it was actually in, built into the roof space, like into the space where all the trusses and stuff are and there were windows in the front wall of the office that I could see directly into. So I was looking at the inside of the east wall as I sat there on my computer the entire time.

Q. So if we get that photo that we had up before showing the east wall.

A. Yep.

Q. 0006.7.

15 A. So the office area was, oh, it doesn't work.

Q. It should work.

A. There we go, was just around, built into this section there.

Q. Right and so that's obviously had plywood put on it?

20 A. Yeah had plywood and it had steel bracing as well. You could see up on the outside.

Q. That's the vertical bars that you can see?

A. Yep.

Q. So there were no windows. Or did your office look out the other way?

25 A. My office was on the south-east corner and it looked into the middle of the main structure of the roof.

Q. Okay so it didn't have external windows?

A. No.

Q. So just tell us if you can a bit more about why you were concerned?

A. Well I'm not an engineer and I don't –

30 Q. I understand that.

A. – fully understand but from what I can guess as a lay person who knows nothing about building if you had something on the inside, on the outside bracing in it would need to be attached to the inside and to the

trusses to help that load. It just makes sense to me that you've got something there, you need something there to help it. From what I could tell that didn't seem to be evident.

5 Q. So there was nothing, no bolts or mechanism to – on the inside to hold the plywood bracing together?

A. Not that I could see, no.

Q. Okay well Mr Gordon talks about that, when I read it there were quite a few engineering terms. I don't know if you've read that?

10 A. Yeah I did read it and I managed to ask people that have enough knowledge, more than I do, to get it in, from what I understood from his briefings he explained how it would be done but it doesn't necessarily show that it was done, to me. Do you know what I mean? How it would be done, how it should have been done.

Q. Okay well perhaps we'll have to explore that with him but –

15 A. Yeah.

Q. – that was a concern that you had at the time obviously?

A. Yep well I just assumed that that corner would fall in and then it would just be a domino effect of everything and I felt like we would just be, it would implode in on ourselves.

20 Q. And in fact in February it did, didn't it?

A. That, that end corner did fall.

Q. And I think with –

25 A. My office was two-thirds high full of those bricks. You could not get back into it. The stairwell that you walked up to the office was full of bricks, up to waist high, of all those bricks, filled in. If I was sitting in my office I'd be dead as well.

Q. So the bricks which, can you tell us which bricks, where were they from on that wall that fell into your office?

A. Well all of the bricks that are behind this ply here –

30 Q. Yeah.

A. – fell inwards directly into the office and the landing behind the office and into the top of the stairwell.

Q. So what was preventing those bricks from falling in, inside?

A. Nothing as far as I could tell.

Q. Was there anything –

A. There was like a, a gib wall, you know like a plasterboard wall before it but the bricks were directly on it.

5 Q. But nothing, no bracing on the inside?

A. That I could tell.

**JUSTICE COOPER:**

But, yes, okay, I understand.

10 **EXAMINATION CONTINUES: MR ZARIFEH**

Q. But as you said you were downstairs at the time in the main bar area?

A. Yep.

Q. The only other thing I want to ask you was when did you start working at the Iconic Bar after Liana Christie took over?

15 A. The day, the day that Liana bought it I was in there with her helping to count the stock and, and take over the business.

Q. And that was 1 February?

A. Yep.

Q. So throughout February were you there?

20 A. Yes, every day. Sometimes 60 hours a week. A long time.

Q. Okay because as you've said she a friend of yours so you were helping her out in this new venture?

A. Yep.

25 Q. On the 9<sup>th</sup> of February there was an engineer who was working for the council, came to the building and you would have heard that in my opening -

A. Yeah I heard that, I read his evidence.

30 Q. Right. Now in his evidence he talks of speaking to a woman and finding out that there was a new owner. I think he says "new owner imminent" in his form, but anyway I just wanted to ask you, did you have any conversation with any man that could have been or was an engineer –

A. Not that I remember.

Q. – on or around that time?

A. There was only one person that ever came in. I thought she was checking fire escapes.

**CROSS-EXAMINATION: MR ELLIOTT**

5 Q. Ms Cooney I'm just going to show you two photographs to see if you can identify in the photographs the exit from which you and Jaime ran.

A. Sure.

Q. BUIMAN200.0005.28. It's a photograph apparently taken on the 31<sup>st</sup> of December 2010. Just indicate where the exit is.

10 A. It's in here.

Q. So you're indicating directly under the, the awning?

A. Yep.

Q. And under the word "Iconic" at the top of the building there – and then I'll just bring up a photograph of that same section after the earthquake,  
15 BUIMAN200.0004.199. That's the same area post earthquake. Is that right?

A. Yep that's the same area there.

Q. And that was the western wall?

A. Correct.

20 Q. Thank you.

**CROSS-EXAMINATION: MR LAING – NIL**

**CROSS-EXAMINATION: MR MCLELLAN**

25 Q. Just a couple of questions Ms Cooney. When, is it Liana took over the business in I think you said in your brief the first week in February you went through it with her I think to have a look at the, at what she was buying.

A. Buying, yep.

Q. And I realise that you've said that you had some personal reservations about the, the structure of the building but as far as the engineering and

council formalities were concerned was it your understanding that they had all been completed?

A. Well we were, we were dealing with the business not the building and as far as, you know we had paid rent to the owners of the building for that  
5 month so as far as I was aware they were in charge of, of organising it. I had no knowledge of what was to be done or what should have been done or anything like that.

Q. But you were aware that the building was able to be occupied. It didn't have a red or a yellow -

10 A. I presume because the prior owners had occupied it and ran it for a business from the 31<sup>st</sup> that they were the ones that had sorted that out and if they were running it like that then it should be able to be done.

Q. And Liana appeared to be of a similar understanding to you that, I suppose she wouldn't have completed the purchase if she wasn't?

15 A. That's right.

**CROSS-EXAMINATION: MS MORGAN – NIL**

**RE-EXAMINATION: MR ZARIFEH - NIL**

**QUESTIONS FROM THE COMMISSION: JUSTICE COOPER AND COMMISSIONER FENWICK – NIL**

20

**WITNESS EXCUSED**



**MR ZARIFEH:**

Sir what I propose is that Mr Lewis of Lewis and Barrow give evidence. He deals mainly with the structural strengthening of 2004 and Ms Morgan will lead his evidence and then perhaps if we dealt with Mark McKenzie. He was  
5 the foreman involved in that structural strengthening and that will give some chronology.

**JUSTICE COOPER:**

Yes.

10

1030

**MS MORGAN CALLS****WARREN LEWIS (SWORN)**

Q. Mr Lewis your full name is Warren Richard Lewis?

A. That's correct.

5 Q. You hold a Bachelor of Engineering (Civil) First Class Honours and you're a member of the Institute of Professional Engineers and a chartered engineer?

A. Correct.

10 Q. Mr Lewis, you've prepared a brief of evidence for the Commission. Do you have that in front of you?

A. (No audible answer 10:31:40)

Q. Do you have that in front of you Mr Lewis?

A. Pardon?

Q. Do you have that in front of you?

15 A. Yes.

Q. Could you please start, please read through your brief from paragraph 3?

A. Okay.

**WITNESS READS BRIEF OF EVIDENCE**

20 A. "I'm the managing director of Lewis and Barrow Limited, Lewis and Barrow, a medium sized civil and structural engineering consultancy. It was commenced as a sole practice in 1972. Lewis and Barrow's offices in Ibis House were damaged in the earthquake on the 22<sup>nd</sup> of February 2011 and we've not been able to recover our full files including that  
25 relating to the Iconic Bar building. We do have plans and some papers from the Iconic Bar building files.

2004 alterations. In 2004 I was engaged by Bob Pelham of Extreme Limited trading as Iconic to provide the structural engineering design required for proposed alterations, bar fit-out at 200–204 Manchester  
30 Street known as the Iconic Bar building. The structure was originally one building with an eastern single story area approximately 20 metres square and the western two story part shared a high brick firewall with that eastern single story part. The lower story of the west part had two

brick dividing walls that divided the ground floor into three separate tenancies. In the past those two dividing walls were removed and replaced with concrete frames to re-support the first floor. Also in the past the high brick firewall had two openings created to create one large ground floor space. The western part had a light steel roof with timber sarking and timber purlins on large timber trusses which sat into the brick side walls. The first floor comprised tongue and groove flooring on large timber joists supported on two concrete frames in the north and south walls. The external walls were double or treble plastered brick walls on concrete foundations. Internal walls apart from each side of the south stairwell, which were brick, were all light timber frame partitions. The proposed bar fit-out had been designed by RM Designs. The work involved creating a bar and an entertainment area on the first floor which had previously been used for storage and offices. I have read the report prepared by Holmes Consulting Group dated May 1993 which concerned the seismic strengthening of the building and that's got that –

### **JUSTICE COOPER**

You do not need to read the numbers in brackets thank you.

### **EXAMINATION CONTINUES: MS MORGAN**

#### **20 WITNESS CONTINUES READING BRIEF**

A. “Holmes Consulting Group had determined the building to be 67% of the building code requirements once their recommendations had been implemented. This was an acceptable level at the time. Part of Lewis and Barrow’s brief was to design the support structure to allow for two voids in the floor. One was in the south-east corner of the two story building. This was to accommodate a large television screen. The other was midway along the north wall to allow for a new stair. I identified that the floor and roof required strengthening as a result of the proposed alterations. In particular I noted that the top floor ceiling bracing was not as strong as required by my calculations. I also checked the floor diaphragm and found that that wasn't as strong as my

calculations required. I also inspected the roof space and noted that the trusses were not performing as effectively as they could. I advised the bar owner Mr Pelham that some structural strengthening was required over and above that already present. In particular I recommended  
 5 installing extra steel braces in the roof, extra ply diaphragm over the first floor and additional fixings of floor and roof members to the brick and Oamaru stone walls.

Q. I'll just stop you at that point Mr Lewis. Can we bring up those two documents, BUIMAN200.0004129 and 130. They are your plans  
 10 Mr Lewis and if you could just explain, they'll come up on the screen in front of you and there's a mouse there if you can just point to the areas you've referred to in your evidence?

**WITNESS REFERRED TO DOCUMENTS**

A. These areas here, there and around there –

15 Q. And what –

**JUSTICE COOPER:**

Q. Now I would like you to actually articulate where you are pointing with the mouse because although we can see it now we want to create a record, everything that's said today is transcribed off site and here  
 20 fortunately we have the advantage of a plan with grid references on it so it's good that you're indicating and that's helpful now but if we're reading this again later we need to know what you were doing with the mouse.

A. Sure. So there is an angle all around the ceiling of the first floor.

Q. Yes.

25 A. Underneath the trusses, immediately underneath the trusses that was securing the bracing and the trusses to the brick walls. Now in the south-east corner –

Q. Yes.

A. – there is two, a piece of brace missing from each part of the corner so  
 30 we designed that half way, well more or less half way along the south wall there is another piece of angle that I found was missing and in the south-west corner there was a piece of angle that was missing.

Q. So on that drawing those areas are actually notated 'new angle' in those were the strengthening elements that you were proposing be added?

A. Correct. There was also in the north-east corner a piece missing because there was a funny bit of corner there that made it very difficult

5 to put an angle in and I felt that that continuity of that angle was pretty important so I devised a detail to bridge across that corner. There were

other braces that were put in such as these, sorry diagonal braces put in. They were rectangular square steel sections put in diagonally across

10 the north-east corner, the first bay and then moving back into the building, longer brace in the next bay, moving back in further an even

longer brace that virtually went from middle of the north wall to the middle of the east wall. In addition I put in further diagonals to complete

the truss as it were along the north wall which were those angles that again are the trusses that were diagonal that completed the truss form.

15 I also felt that it was important because we were taking off the corrugated iron from the roof that we leave all the steel framing, the timber framing in the area over the smokers' area but that I would

strengthen the corner by putting, that's the north-west corner, by putting two struts back to the rest of the bracing from the two 45 degree corners

20 of that north-west corner. I also continued the braces from the middle of the north wall to the middle of the west wall to make that a continuous line brace and cross the north-west corner with two further braces, one

of which I instigated, one of which was already there. The small one was already there. I then continued the same diagonal bracing in the

25 south-west corner, again fixing the middle of the south wall to the middle of the west wall and moving back out to the corner with a further diagonal brace.

1040

**JUSTICE COOPER:**

30 Q. The bracing in the south-east corner of the building doesn't appear to have been as extensive as elsewhere. Why was that?

A. I'm not sure at this stage and it may have been lack of access.

Q. Were you here earlier when Ms Cooney was giving evidence?

A. Yes.

Q. I infer from what she said that that was the area where her office was. Would that be right?

5 A. No, her office was in that area immediately to the east of the south-east corner and it was not in this roof space. It was in the roof space of the building truss here that would have been about five or six metres lower.

Q. That's the single storey building?

A. It's in the roof space of the single storey building.

Q. We might have to clarify that I think.

10

**JUSTICE COOPER DIRECTS EITHER MR ZARIFEH OR MR ELLIOTT TO CLARIFY WITH MS COONEY**

15 A. I think the reason why that wasn't braced in that plane was that's where the television screen was going and we put in diagonal braces and columns and beams to strengthen that corner so I think that's why that corner is apparently missed out on the bracing as another mechanism to strengthen that corner. In addition to that we put in more longitudinal braces. It's not that clear on there but, yeah, there's two longitudinal  
20 braces that were put in there and there.

Q. Now "there and there" being?

A. Sorry, in line F and E there was longitudinal braces put in that I think were on the Holmes' plans but for some reason weren't there when I did my work.

25

**JUSTICE COOPER TO MS MORGAN:**

Can I just ask did you intend him to refer to the other plan with the suffix 130.

**EXAMINATION CONTINUES: MS MORGAN**

30 Q. Would that assist you Mr Lewis? Is there anything else you need to explain?

**JUSTICE COOPER:**

Q. This is the other plan that is referred to at that part of your evidence?

A. This is the first floor structural plan so this shows the building as if you cut it a metre above the first floor and looked down upon it and that's the stairwell that we created. This area here is the open area so we cut –

5 Q. South-east corner?

A. Yeah, and this is the corner that we took off the tongue and groove flooring and replaced that with 18 or 22mm ply and I think it was a butynol covering put over the top of that for weather proofing.

10 Q. Just to clarify do these plans that you are now discussing and the one that you just discussed show the full extent of the two-storey building?

A. That is showing the full extent of the two-storey building yes. So this is the floor strengthening that we put in in order to create that hole and that arrow there is a diagonal strut down to ground level where there's a fairly big concrete pad. These are diagonal struts down to ground level  
15 also.

Q. You're on line A at the moment?

A. That's right. And then on line 6 we have another diagonal strut going down to ground level and we tied all that steel work in with a ring beam and connected that all to the diaphragm, the floor diaphragm that we  
20 were creating with the plywood over the top which is shown on detail 3 as a line through there.

#### **EXAMINATION CONTINUES: MS MORGAN**

Q. And Mr Lewis is that the other system you referred to before when His Honour asked you about the bracing in that corner?

25 A. That's correct. We also because we were creating this hole in the north area for the stairwell, this angle that we put around the perimeter of the building couldn't go across there and be attached to the diaphragm so we continued it across there to act as a tie but it wasn't attached to anything.

30 Q. Mr Lewis can you just identify which wall you're talking about.

A. This is the north wall of the stair. We continued the floor angle across the void even though there was no flooring to attach to. At the same

time we continued that angle around the stairwell at floor level so that we had good connection to the diaphragm floor. That's about all I can, oh, the only other thing is the connection to the walls. Holmes Consulting had strengthened the building by putting plywood underneath all these floor joists and there was an angle they had connected underneath the diaphragm to the wall with bolting. We had felt that that was too remote from our diaphragm so we put our own bolting to the walls and we nailed down into the joists with copious quantities of nails. The other drawings show more detail of what I've just described.

1050

**WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM FINAL SENTENCE OF PARAGRAPH 12**

A. "The work I recommended was not intended to increase the strength of the building but rather to accommodate the alterations being made to the floor. Mr Pelham agreed to proceed in these specific areas. Lewis and Barrow also designed a roof opening over the level 1 smokers' area and designed a wall to go round the first floor smokers' area. The roofing was removed over part of the smokers' area but the purlins and other and other framing remained in place. Extra struts and bolting was provided to at least replace the roofing diaphragm strength lost to this area. I understand that sometime later that clear roofing was added. The tongue and groove flooring was removed and replaced with plywood flooring to falls and the waterproof layer added. That is, the structure of the building was not reduced with the creation of the smokers area.

Q. Mr Lewis you heard Ms Cooney's evidence. When you're talking about that flooring are you referring to the ground floor or the first floor?

A. The first floor.

Q. Thank you. Continue.

**WITNESS CONTINUES READING BRIEF OF EVIDENCE**

A. "The Lewis and Barrow designs are shown on Lewis and Barrow's drawings numbered 12646/1 to 6, dated August 2004. RM Designs



applied and obtained a building consent on behalf of the owner. Lewis and Barrow completed the structural calculations and design, prepared structural plans and specifications. We did not tender out the work and we did not select the contractor. I carried out site inspections of the preparation for steel work, concrete foundations, bolting to block walls and truss strengthening. Eight site inspection reports were issued during the course of the work to detail interpretations, modifications and to give instructions. I issued a producer statement, construction review that was dated 23<sup>rd</sup> November 2004. A final code compliance certificate was issued on the 17<sup>th</sup> of March 2005.

Lewis and Barrow involvement, September to November 2010. Lewis and Barrow Limited were not asked to inspect the building to assess damage which had occurred as a result of the earthquake on the 4<sup>th</sup> of September 2010. In September 2010 Lewis and Barrow was engaged by Daryl Fraser, the bar manager, to provide the structural design and drawings to reinstate the first floor where the television void was and to undertake minor structural work to sound proof the north stairwell. We were not instructed to undertake a review of the building following the September earthquake. However, I looked for but did not observe any earthquake damage when I inspected the building in order to provide the structural engineering design of the extensions to the first floor and the new ceiling above the north stair. During my inspections in September 2010 I noticed that the lateral support of the east wall could be improved by the addition of extra hollow sections, steel hollow sections, braces at the south-west corner...”

Q. Can I have that document please, BUIMAN200444 – sorry, 0004149? Can you just show those sections of bracing Mr Lewis?

A. Right, those sections of bracings were in the south-east corner in the first two bays going northwards from and just immediately west of the east wall.

Q. Mr Lewis can you just clarify, in your brief of evidence we've referred to it as the south-west corner. Is it south-east or south-west?

A. South-east sorry.

Q. South-east.

5 **JUSTICE COOPER:**

Q. Can I just ask Mr Lewis, when you say you noticed that the lateral support of the east wall would be improved by the addition of extra square hollow sections et cetera I wonder whether that's, you're saying all you want to say there. Did you observe a problem with that part of the structure?

10

A. No, once we're putting the floor back in –

Q. Yes.

A. – we're creating a very stiff element. We're putting back the original performance of the building.

15

Q. Right.

A. And therefore it's going to be stiffer at that particular point and therefore the roof would need to be stiffer as well and that's, you know, columns coming up from the first floor and holding the roof, or helping to hold that east wall would be too flexible. So putting diagonal struts like that makes it much stiffer and it also completes the truss action along the south wall whereas Holmes' original strengthening design only had a truss on the north wall. By one diagonal there you actually convert what was just simple bracing into a truss.

20

Q. Mmm. Well it's probably just the language you've used. It seems to me you're describing things that you thought should be done rather than things you noticed. In your, in your text you say you noticed these things but that's all I was asking about.

25

A. Well I looked at the north truss and I looked at what we'd done on the north half of the building, and I haven't got my calculations for that unfortunately, but I would say that that would probably have done the job but it was so obvious to complete the truss on the south wall that why wouldn't you do it but if I had my calculations there may have been

30

some calculation done there to find that it was essential which I wouldn't have picked up earlier or something.

**EXAMINATION CONTINUES: MS MORGAN**

5 Q. Can you continue Mr Lewis from that paragraph 21 from the sentence starting, "It was prudent."

**WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 21**

10 A. "It was prudent to install those additional braces where the void was being filled in. I may have advised Mr Fraser that the consent process would take longer if the bracing was not included in the plan. To complete the first floor area we designed for steel beams, timber joists and extra bracing from the floor down to the ground." I don't think that's quite correct. I think, "To complete the first floor area we designed for steel beams, timber joists," but I think the bracing down to the ground  
15 was already in existence.

**JUSTICE COOPER:**

Q. So if we changed that to say "the bracing from the floor down to the ground was already in existence"?

20 A. Yes please.

**EXAMINATION CONTINUES: MS MORGAN**

**WITNESS CONTINUES READING BRIEF OF EVIDENCE**

25 A. "As there was minimal architectural work involved we prepared all drawings and applied for a building consent on behalf of the owners on the 22<sup>nd</sup> of November 2010. My producer statement "Structural Design" dated 22<sup>nd</sup> of November 2010 notes that the following design assumptions were made. (1) The ground supporting foundations has an ultimate bearing capacity of at least 300 kPa which is to be verified on site. (2) The project information memorandum (PIM) for the site not  
30 revealing any adverse site conditions that could affect the structural designs. (3) All work not otherwise specified above being in

compliance with the New Zealand Building Code. (4) All proprietary products meeting the performance specification requirements. (5) This producer statement "Structural Design" will be valid for one year only from the date of issue.

5 I understand now that on the 30<sup>th</sup> of November 2010 Mr Fraser requested a hold on this proposal and that the application has subsequently been withdrawn. In my view the structural work in strengthening shown on Lewis and Barrow's drawing 22<sup>nd</sup> November '10 would have helped in a small way to prevent collapse in the south-east corner of the Iconic building but would have had minimal effect  
10 elsewhere. When the television void was designed in 2004 the diaphragm loads were transferred by structural steel work to the ground. Accordingly the void was not an area of structural concern. Putting the new floor back into the void and installing the two additional braces  
15 would have added some structural strengthening to that area of the building but would not have prevented the damage on the scale which occurred as a result of the 22<sup>nd</sup> of February earthquake.

Boxing Day Aftershock. I did not inspect the building after the Boxing  
20 Day or February 22<sup>nd</sup> earthquakes.

1100

Between Christmas and New Year 2010 I was in Nelson and phoned by Chris Gordon, the duty engineer from Lewis and Barrow. He had inspected the Iconic building and had located our previous file. The  
25 nature of Mr Gordon's call was to touch base with me and to ensure there was no information that I knew about the building which he should know. Mr Gordon discussed with me the damage on the east wall he had seen on the building. He questioned me on the strength of the roof bracing and top floor ceiling bracing and discussed the work he  
30 proposed which was to clad over the bricks with plywood and steel angles and bolt these to the east truss and to provide a platform over the bottom chord of the last three trusses to act as a diaphragm to stop any future brick failure harming those inside the two-storey building. I

agreed with the work Mr Gordon proposed. On my return to Christchurch I briefly discussed the Iconic building with Mr Gordon. Mr Gordon told me about the work that he had done to the building and which he had checked. He advised that a CPEng certificate was signed off by Simon Gifford of Lewis and Barrow. Mr Gordon had emailed the certificate to the Council and he then gave the file back to me. I put the Iconic file in my office. I anticipated that the building owner or their insurer would contact us regarding permanent repairs of the east wall. A loss adjuster for the building owner contacted Lewis and Barrow regarding the repair work and I do not have an email from the loss adjuster.

**EXAMINATION CONTINUES: MS MORGAN**

Q. I think that should be, "I do not have a copy of...", Mr Lewis.

A. Well he may have rung but we answered his queries quite specifically so I suspect there was an email that we were responding to but we haven't got, we have got bits of our file but we haven't got that.

**WITNESS CONTINUES READING BRIEF OF EVIDENCE**

A. "I advised the loss adjuster on the 4<sup>th</sup> of February that the work completed was temporary and that we had not been engaged to establish a permanent repair. On the 10<sup>th</sup> of February the loss adjuster advised us he wanted us to provide a design for permanent repairs. I advised him that it would be at least a month before we could progress the instruction..."

**EXAMINATION CONTINUES: MS MORGAN**

Q. Mr Lewis, when you say the repair or the work completed was temporary, how temporary was it?

A. We sent the loss adjuster an email responding to that query and we pointed out in our email that it was only a temporary repair. That's the email 4<sup>th</sup> of February 2011.

**MS MORGAN ADVISES SHE IS ABLE TO PROVIDE THE COMMISSION WITH COPIES OF THAT EMAIL**

**JUSTICE COOPER:**

5 We haven't had this before I take it?

**MS MORGAN:**

No, sorry Sir.

10 **JUSTICE COOPER:**

So will this be given a number in due course on our system? (will be provided to the Commission)

**EXAMINATION CONTINUES: MS MORGAN**

Q. Your response to the loss adjuster, Mr Lewis, on the 4<sup>th</sup> of February?

15 A. My response was that Chris acted for me on Iconic while I was away with the odd phone call and email. As I had been involved with Iconic's work in the past it's best that I answer your queries, ie (1) The work was only a temporary repair. (2) We've not done any work establishing a permanent fix or the cost of such a fix. (3) We've not been engaged to  
20 design a structure to restore the damaged portion of the building. (4) As far as I'm aware no buildings in Christchurch have been notified as earthquake prone pre 4<sup>th</sup> of September 2010. (5) The temporary fix will last a year unpainted and three years if painted.

Q. And when you advised the loss adjuster that it would be a month before  
25 you could start work on a permanent repair, what was his response to that?

A. He said that he would let us know if he wanted us to do any more.

**CROSS-EXAMINATION: MR ZARIFEH**

Q. Mr Lewis, just on that last point about repair the fact that it was a  
30 temporary fix that would last a year unpainted and three years if painted, on completion at that stage unpainted?

A. That's correct.

Q. And had this information been passed on to the owner by anyone from Lewis and Barrow?

A. No.

5 Q. What would the normal course be if you complete temporary repairs, would you advise the owner of details of what temporary meant?

A. We were engaged by the tenant for the building to do the temporary repairs and, as I said in my submission, at some later date we would expect to be contacted by usually the owners' insurer – sometimes it was the owner – but it's usually the insurer and then we would deal with them on the permanent repairs.

10

Q. And so clearly in this case the owner must have contacted his insurers and made a claim and the insurers or the loss adjuster was contacting you direct about that?

15 A. That's right.

Q. So you would have expected to want the insurer to liaise with the owner or the loss adjuster?

A. We would have expected to be engaged by the insurer rather than the owner but sometimes the other way round.

20 Q. Right but if any information was passed on to the owner or the owner's representative who was Mr Fraser at the time in relation to these repairs that would have been by Chris Gordon?

A. That's correct.

25 Q. And you didn't go and inspect the repairs that had been done at any stage did you?

A. No.

Q. So you were aware of them from talking to Mr Gordon and, what, did you look at site reports or see what had been specified?

A. Looked at the site reports and looked at the photos, took more notice of the photos.

30

Q. And did you have any opinion as to the efficacy of those repairs?

A. They looked satisfactory to me, yes.

Q. Right and even though you called them 'temporary' and you've explained what that meant, Christchurch was in an aftershock zone if I can put it that way at that time, wasn't it?

A. That's correct.

5 Q. And there were some significant aftershocks?

A. That's correct.

Q. And it was a bit of an unknown as to what was to come?

A. Correct.

10 Q. So what was your view of those repairs in terms of enabling the building to withstand the kind of aftershocks that might well occur?

A. At that time we were being instructed by the authorities before they would issue, withdraw a red sticker or a yellow sticker, that the building had to be restored back to the strength that it had before the earthquake. It did not have to meet any specific acceleration. No-one really knew what accelerations we were to expect. We certainly were to a certain extent led to believe that the aftershocks would die down, certainly GNS information would have led us to that belief.

15 1110

20 Q. So on the basis of that belief and that understanding you thought that the repairs were adequate and would enable the building to, enable it to have been restored to its pre-4 September strength?

A. That's right.

Q. Right.

A. But not to a specific aftershock.

25 Q. And so that was the test as you say generally being applied by engineers at the time?

A. That's correct.

Q. Can I just take you back to talk about the structural strengthening repairs that you did and those alterations in 2004?

30 A. Yeah.

Q. You said that you have read the Holmes report and in fact I presume you read it at the time?

A. That would be correct.



Q. So did you get that from the owner or the owner's representative?

A. No I think we got that from the City Council.

5 Q. Okay, and did you form any opinion once you'd read the Holmes report and what had happened in 1993 as to the structural strengthening that had been carried out?

A. I suppose the thing I was looking for was what level of strengthening had been carried out.

Q. Right.

10 A. And the important thing for me was to see that they'd strengthened it the 67% of current code.

Q. And that's what they had determined in the report?

A. That's right.

Q. So did you just accept that or did you, were you interested in trying to check that in any way?

15 A. No, I accepted that.

Q. And just from obviously your lengthy experience were you able to make any kind of assessment looking at what they'd designed as to whether or not it supported that conclusion in general terms?

20 A. I was a little bit unhappy that they'd actually strengthened underneath the floor joists when we were cutting a hole, or two holes, in the floor itself so that the tongue and groove was stabilising the top of the joists and here is the strengthening being done on the bottom.

Q. Is this at the first floor?

A. Yeah.

25 Q. Yes.

A. So that's why we put the angle round the top. We virtually duplicated that detail.

30 Q. So just before I finish with the Holmes work in 1993, from reading their report and from inspecting the building in 2004, can you say whether what was designed by them was in fact put into place?

A. Those angles that I showed you on the wall there were gaps, three gaps, three main gaps and a minor one in the corner so they were missing in my, you know, I'm not sure why they were missing.

Q. No, but they were on the plan but they weren't on the building?

A. We were coming along nine years later, or nine or 10, 11 years later, someone could have taken them out.

Q. I understand that but leaving aside why or who –

5 A. Yeah.

Q. – was that the only thing that appeared to be not as according to the design?

A. I think at the time that was the only thing, you know, that was where I was concentrating.

10 Q. And the fact that they were missing, can you say to what extent that would have compromised the overall strength of the building?

A. It meant that the south wall wasn't as well attached to the roofing and bracing as it could have been.

15 Q. And presumably their calculations of the 67% would have been based on what they'd designed, correct?

A. Yeah. Their design for the strengthening of that roof ceiling line was to put a truss along the north wall and the west wall. It wasn't to put a truss along the south wall.

20 Q. But the fact that they weren't there, that bracing, would have compromised the overall strength wouldn't it of the building?

A. Missing bits of angle were more a connection to the south wall. They wouldn't have had any effect on the global strength.

Q. Why is that?

A. Because they weren't part of the truss at that stage.

25 Q. Right but what would have only affected the strength of the south wall or its ability to resist an earthquake?

30 A. Well it's the number of fixings you've got from the brick walls to the bracing lines that is the important thing, and by having gaps you've obviously got no connections in those areas so therefore that puts extra stress on the each end of the gap, so if you can fill the gap in and put some more fixings up then you've got a uniform hold to that south wall.

Q. And that is what you did?

A. Yes.

- 5 Q. In the Holmes report or material there is a letter, I'll get it brought up, it's 0004.59 of BUIMAN200. Now that's a letter in relation to the Holmes work back in June 1993 and it's certifying, if that is the right word, that Holmes had been engaged to undertake the extensive constructive monitoring necessary to ensure those sections of the works listed above are carried out generally in accordance with the relative plans and specifications and above is referred to a seismic strengthening work outlined and detailed in our structural report. Correct?
- A. That's correct.
- 10 Q. So is that a standard thing that the council require?
- A. Yes.
- Q. And I appreciate you're not, you weren't Holmes and you weren't doing this but as an engineer I just want to ask you in general terms. Is the effect of that would be that the engineer was going to monitor that work as it was being constructed?
- 15 A. (inaudible 11:17:34) Yes.
- Q. And is that, would you have completed a similar form or letter in relation to the 2004 work?
- A. That's right, I've referred to that in my evidence.
- 20 Q. So it's a standard document and just tell us then what kind of oversight was involved? Let's talk about your work in 2004? In that sense the monitoring?
- A. Yeah.
- Q. And say the fixing of these, the additional fixings that you had installed, what kind of oversight or monitoring did you have as an engineer of that?
- 25 A. Well I checked the welds, the bolts, that the angles were there, and the work that I'd shown on the drawings had been done.
- Q. And where rods or bolts are used to go through brickwork and the epoxies used, I think you've read Peter Smith's raising an issue or possible issue about that. Do you check that kind of thing?
- 30 A. Yes.
- Q. And how does an engineer do that? How did you do that in this case?

- A. I would have usually inspected, I can't remember what I did at that particular day but I would have checked that all the bolts were there, that they were epoxied in, that you can see what sort of epoxy has been used, they've usually spilt it or there is dribbles around the place.
- 5 Q. And that's a sign that it's completely filled the void?
- A. Well not really but some, you know, you usually grab an adjustable spanner, a large one and test some of those bolts and make sure they are tight. If the bolt's not well glued in then you'll soon make it fail.
- Q. So you'd pick out a few and actually yourself –
- 10 A. Do a sample test.
- Q. So some on-site testing as such?
- A. Yes.
- 1120
- Q. And you would have done that for the work that was installed under your direction, your specifications. The work similar bolts or rods that would have been installed back in 1993, were they still in place?
- 15
- A. Yeah.
- Q. Were you able to see those?
- A. Yes.
- 20 Q. I presume you wouldn't have tested any of those?
- A. No.
- Q. No but did they all seem to be, did you give them any thought as to you know I don't know if they deteriorate or can show damage. Did you come to any conclusion about that, about the efficacy of those?
- 25 A. There was no visible damage.
- Q. So you –
- A. They looked to be in good condition.
- Q. All right, so were you able to form a view as to those fixings generally the ones you'd, you'd added but the ones that were already there as well, in terms of the building and its –
- 30
- A. I don't think I questioned them but I would anticipate with the amount of work that was going on that if there had been loose bolts or something

like that that the builders would have come across it and certainly the builders were a pretty good crowd that you could rely on.

Q. And you're talking about the builders in the 2004 contract?

A. This is Contract Construction yes.

5 Q. Yes right okay. And so as I said before Peter Smith's raised potential concerns and I take it you agree with him that care has to be taken when you're applying these epoxy fittings or fixings?

A. That's correct. Yeah you've got to be careful to get all the dust out and you know if I'm present when the holes are being drilled or if they've  
10 been drilled and have yet to be epoxied then I would measure the depth and just check that they were deep enough.

Q. All right and were they on angles these rods?

A. I think the Holmes ones were.

Q. Right. But your ones?

15 A. Were horizontal.

Q. Right. And was there any reason why they were different, your ones?

A. You know quite often it's because of the angle to get the drill in. We try and avoid angling up because unless you use a very thick epoxy it will run out again. If you've got a very thin epoxy then you have to angle  
20 down and if you've got a medium epoxy you can go horizontal.

Q. Okay so is there any advantage though in going, angling down? Is that generally what's done?

A. Only if you've got a thin epoxy.

Q. Okay so it relates to the epoxy?

25 A. Yeah.

**JUSTICE COOPER:**

Q. Why couldn't you angle down with thick epoxy?

A. You could with the thick epoxy yeah. You just can't angle up with a thin one.

30 Q. No. But if you angle down with a thick epoxy would it give you a stronger connection?

A. I doubt it.

Q. Why is that?

A. Well the thick epoxy will stay in regardless of whether it's angled up or down, and –

5 Q. Does the angle not contribute to the strength of the connection in your view?

A. Well the angle's not all that great normally so it's not as if you're trying to get it into shear as well as tension. It's usually pure tension you're designing for. You, you could argue for quite some time as to whether you're going to connect on to more bricks or more mortar and that if you angle down or up or go horizontal. The problem we have is that we're  
10 only drilling into the brick that we can see so we can ensure that we go into the middle of that brick with our holes but when it's triple brick we could be on the edge of the next brick in, we could be just going through the mortar joint and so it's an unknown once you get past the first layer.

15 **CROSS-EXAMINATION CONTINUES: MR ZARIFEH**

Q. And were these triple brick or double brick?

A. Most of it was triple brick.

Q. Right and so how many layers of brick were you getting through with those rods?

20 A. At least two.

Q. But not the third usually?

A. No. Not normally you know be quite long, it would be quite a lot longer than what is normal to get into the third one.

Q. Okay.

25 A. The triple brick was composed of bricks turned on their end it wasn't just like you see in normal brick where the bricks are laid with quite a few on at right angles.

Q. Right.

A. And those right angled bricks are visible from both sides so there's right  
30 angles there and there's right angles there with a horizontal alongside when there's a triple brick.

Q. Okay. All right well was there, there's a form in the, some of the material from the Council that shows a Council building inspection of which notes earthquake strengthening completed apart from the void area. This is on the 30<sup>th</sup> of, looks like 30<sup>th</sup> of – not clear of the date but  
5 30<sup>th</sup> of September I think '04, so would the Council have inspected the strengthening element of the work, can we take it from that form?

A. Normally they'd inspect before a concrete pour, they'd inspect before the steel work was, once the steel work was finished but before the, it was hidden from view they're wanting to inspect.

10 Q. Right. This form's 0004.88 I'll get you to have a look at it. 0004.88 BUIMAN200.

#### **WITNESS REFERRED TO FORM**

Q. You see that form Christchurch City Council Building Inspection Services?

15 A. Right.

Q. And the note in the middle "upstairs only earthquake strengthening completed apart from void area"?

A. Yes.

Q. So is that an indicator that there would have been an inspection by the  
20 Council of the earthquake strengthening?

A. It's an indication that the steel work was part, you know, that the steel work hadn't been completed yeah.

Q. Hadn't, or had?

A. Hadn't.

25 Q. Or hadn't in the void area?

A. That's right.

Q. Right but is it an indicator that, am I right that it indicates that there is an inspection of earthquake strengthening by the Council?

A. Um –

30 Q. Is that your experience on this job or generally?

A. Generally I would expect the Council to rely on our inspections for the structure. I think that's just a comment by the building inspector of –

Q. What's happening.

A. – what the progress of the work was.

Q. Okay, all right so the Council would generally rely on the engineer and the certificates that you produce?

5 A. Yep, and we would rely on – he's talking about plumbing and things like that.

Q. Yes I understand that.

A. So that's –

Q. Okay. So you said that the strengthening work that you specified and that was done did not add to the strength of the building, is that right?

10 A. There was no intention to add to the strength of the building.

Q. Right so it wouldn't have added to it? The strength was as at 1993 with the work that Holmes had done?

A. Oh it would have improved the building because we were taking out areas that were, were of lesser strength than what we were putting in.  
15 You know we were taking some of those forces directly down to the ground.

Q. Right, well why I was asking is because you say in 13, "The work I recommended was not intended to increase the strength but rather accommodate the alterations", so it might have increased the strength  
20 or are you not sure?

A. Yeah it might, if you take the stairwell on the north wall, we put a cross brace frame on the inside of that stairwell to take the diaphragm force down to ground level so, because we'd lost the ability to take it in this circuitous route of the angle.

25 Q. I understand.

A. Wasn't sufficient so...

Q. Right.

A. By taking that load directly down to the ground with steel cross bracing, that's a far better mechanism than relying on bolting into a brick shear  
30 wall.

Q. Okay but that was to make up for the fact you were putting the stairwell in wasn't it?

A. That's right.



Q. So can you say what percentage of code the building would have been when your work was completed or not?

A. It would probably be the same as what Holmes said. We wouldn't have added much to it.

5 Q. So back in 1993?

A. Yeah. The forces were taken in a better way. They were better materials but there was no intention to bring it up to 100% or anything.

Q. So the, just changing the subject you said that –

### **THE COMMISSION ADDRESSES MR ZARIFEH AND MR LEWIS**

10 **COMMISSION ADJOURNS: 11.32 PM**

**COMMISSION RESUMES: 11.47 AM**

**MS MORGAN CALLS**

**CHRISTOPHER JAMES GORDON**

**JUSTICE COOPER:**

5 Q. Mr Gordon, can you hear us?

A. Yes I can.

Q. Thank you. I am Justice Cooper, on my left is Commissioner Fenwick.

A. Hello Sir.

10 Q. I will just ask you to promise to tell the truth if you would. If you could just listen to what I am about to say and the correct answer is Yes. You solemnly and sincerely declare and affirm that the evidence that you will give to the Royal Commission will be the truth, the whole truth and nothing but the truth?

A. Yes I do.

15 Q. Thank you.

**EXAMINATION: MS MORGAN**

Q. Is your full name is Christopher James Gordon?

A. Yes it is.

20 Q. And you hold a Bachelor of Engineer degree (Civil). You're a member of the Institute of Professional Engineers and you are a chartered professional engineer?

A. Yes I am.

Q. Mr Gordon, you've prepared a brief of evidence for the Commission, do you have a copy of that in front of you?

25 A. Yes I do, yep.

Q. Could you please read through that from paragraph 3?

**WITNESS READS BRIEF OF EVIDENCE FROM PARAGRAPH 3**

30 A. "I became registered as a chartered professional engineer during 2011 along with a large number of qualifying engineers under the initiative of the Institute of Professional Engineers who sought to increase the number of engineers available to work on damaged buildings in Christchurch. I was the duty engineer for Lewis and Barrow on call over

the Christmas period of 2010–2011. I received a call from Daryl Fraser, the manager of Iconic Bar at 200–204 Manchester St on the 27<sup>th</sup> or 28<sup>th</sup> of December 2010. Mr Fraser wanted to engage Lewis and Barrow to address the red placard issued by the Christchurch City Council following the aftershock on the 26<sup>th</sup> of December 2010. On the 28<sup>th</sup> of December I collected a file relating to this building from Lewis and Barrow's offices and took it with me to my site inspection. During my site inspection on the 28<sup>th</sup> of December 2010 I visually assessed the exterior of the Iconic building. I walked around the north, west and south façades of the building and viewed the east façade from Gloucester Street. I did this before entering the building. I noted damage to the gable end wall on the eastern side of the building. Specifically I noted disrupted bricks to the apex of the gable. I also noted some minor cracks to the north and west faces of the building, however, the cracking appeared to be historic.”

Q. Mr Gordon?

A. “After I had –“

Q. Mr Gordon?

A. Yep.

Q. Can you explain why you formed the view the cracking was historic?

A. Sorry, say that again?

Q. Can you explain why you formed the view that the cracking was historic?

A. Based on the dirt in the cracks and the staining across the cracks that appeared to be from rain washing atmospheric dirt down the wall and then it runs into the crack and steps across it which gave the appearance of being quite old.

Q. Thank you, you can continue reading your brief from paragraph 8?

**WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 8**

A. “After I had inspected the exterior of the building I viewed the red placard which was located on a window to the west side of the building. The placard had been issued by the Christchurch City Council on the

27<sup>th</sup> of December 2010 and referred to disruption of the east wall gable end apex. I was not provided with any other documentation in relation to the building or the rapid assessments completed after the 26<sup>th</sup> December aftershocks. I am now aware that a rapid assessment carried out on the 26<sup>th</sup> of December 2010,” do I read the reference or?

5 Q. I will have the reference, I will have that document brought up.

**JUSTICE COOPER:**

There is no need to read the number, thank you, but just pause whilst we will display the document on our screens here.

**EXAMINATION CONTINUES: MS MORGAN**

Q. 0004153. Mr Gordon, in the file of documents you've got in front of you

–

A. Yes.

15 Q. It's the document that ends with 0004153.

A. Yes. Yeah, I've got that.

Q. And just note the highlighted portion at the top of that page?

A. “The west wall damage especially apex loose bricks could fall in or outwards.”

20 Q. And if you continue reading paragraph 9 of your brief?

**WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 9**

A. “That reference referred to a damage on the west wall and noted especially loose, apex loose bricks could fall outwards. I believe the reference to the west wall may have been in error. There was no apex on the west wall. It had a flat parapet, if you refer to paragraph mentioned in here”

Q. Photographs.

A. Photographs, sorry.

30 Q. If we could bring that one up?

A. “Also then –“

Q. It ends 0012.4. You will see that there is no, as Mr Zarifeh conceded this morning, there is no apex on that west wall.

**JUSTICE COOPER:**

Yes, we have grasped that, thank you.

**5 EXAMINATION CONTINUES: MS MORGAN**

Q. If you can continue Mr Gordon?

A. "Also there were no loose bricks on that façade when I inspected the building on the 28<sup>th</sup> of December 2010, if you refer to the photographs 28 and 36."

10 Q. I don't need to refer you to those if you keep going.

A. Keep going?

Q. Yes, thank you.

A. "I am satisfied that if there had been damage to the west wall following the 26<sup>th</sup> of December 2010 aftershocks I would have noted it during my  
15 inspection."

Q. Mr Gordon –

A. "I met Mr Fraser –"

Q. Sorry, can you just outline in a bit more detail the steps that you took in terms of your assessment and inspection of the building so that you could be satisfied you would have noted that damage if it existed?  
20

A. Yep. Yep, sure. I arrived at the site and I walked around the building, generally from the opposite side of the street looking for signs of any global movement to the building and then I approached the building, there was a barrier fence around that. I went within that and looked at  
25 the building much closer back in the opposite direction round the sides that I could access. I also looked at the building next door at I think it's 198 Manchester St, two storey brick building to make sure that there was nothing that would endanger the 200–204 Manchester St building, and I didn't find anything that did look like it was unsettled and then I  
30 went back to the main entry which is where the placard was fixed and then entered the building with Mr Fraser who showed me how to access various areas around the building.

Q. Okay if you can keep reading your brief then from paragraph 10?

**WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 10**

5 A. "I met with Mr Fraser and entered the building, Mr Fraser showed me how to access various areas of the building. I found some outwards displacement of the double brick east wall from the interior of the roof space between the truss top and bottom chords over the central portion of this wall. I prepared a site report detailing the interim repair works required as shown in the reference."

10 Q. Have you got that in front of you Mr Gordon?

A. Yes I do. Yep, that's my site report dated the 28<sup>th</sup> of December 2010.

1157

15 Q. Mr Gordon, you also prepared a sketch which we all now have. Perhaps with reference to your sketch, that's the 00A1WITGOR – WITGOR 0001A.1. By reference to your sketch Mr Gordon can you explain the system that you were proposing?

20 A. Yep, you can see where the brick wall is, the area of, or length of wall that was disrupted was above the truss bottom chord level from there up and it was bowed outwards so I devised a system to put 20 millimetre plywood on the outside. There were some existing bolt fixings through the brick wall that went into the top chord of the truss. So I asked for those fixings to be removed and the plywood fixed over, well, underneath and the fixings put back over the top and then down at the bottom chord level I asked for M16 bolts at 400 centres to fix it into the  
25 truss bottom chord. I asked for timber, vertical timber boards on the insides that were aligned with the existing bolts at the top and on the, aligned with the timber board on the outside was a steel angle, a vertical angle at each of those existing bolt fixings running down and again fixed to the bottom chord. I also asked for timber packing. Because the  
30 timber truss was spaced off the wall I asked for timber packers so that the bolts didn't clamp or try to pull the wall into the bottom chord. The truss diagonal members, the struts and ties, prevented us from putting in plywood against the inside face. So to prevent the bricks falling

inwards and landing on the, the second floor area I asked for some timber framing between the bottom chords of the first two bays of trusses, the first three bottom chords and then nine millimetre plywood on top of that to prevent the bricks going through the suspended ceiling and landing on the second floor.

5

Q. Okay if you can continue reading your brief from paragraph 13.

**WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 13**

A. "I left a site report dated 28<sup>th</sup> of December 2010 with Mr Fraser who was to arrange for a builder to complete the work. On the 29<sup>th</sup> of December 2010 I contacted Warren Lewis of Lewis and Barrow who was in Nelson between the Christmas and New Year period of 2010. The nature of my call was to touch base with Mr Lewis and to ensure that there was no information which Mr Lewis knew about the building which I should know. I discussed with Mr Lewis the damage I had observed to the east wall and my scheme for strengthening the damaged area. I questioned Mr Lewis about the strength of the roof bracing and the top floor ceiling brace. We decided to further strengthen the outside wall, the outside face of the plywood by adding vertical steel angles over the plywood along with matching vertical timber to the inside face, fixed to the existing bolt spacing. I inspected the site again on the 29<sup>th</sup> of December. The repair work that I had recommended in my report dated the 28<sup>th</sup> of December had been commenced by Nathan Cook Builders. At the time of my inspection the framing and plywood were in place between the end trusses, the bottom chords of the end trusses to the affected east wall. Scaffolding was being placed to give access to the external face of the east end gable. Some additional structural details, those agreed to with Mr Lewis, were recorded in my site report dated the 29<sup>th</sup> of December 2010, reference 165. On the 30<sup>th</sup> of December Daryl Fraser phoned to advise that the work was progressing and was almost complete. I visited the site and observed that all work was proceeding as detailed in my site reports. On the 30<sup>th</sup> of December 2010 I prepared a Christchurch City Council CPEng statement form that

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had previously been required by the council. As I had not gained CPEng status at the time I crossed out the CPEng reference and emailed the form as referenced to the council with a covering email explaining that I was, that although I was not chartered, a chartered professional engineer I did have significant experience with seismic design, and there's a reference there. In my opinion the remedial work provided adequate support to the damaged areas and I requested that the council remove the red placard from the site. I also noted that a building consent application had been made and that an amendment would be lodged in January to include the removal of the east end gable wall and reinstate a suitable structure. I anticipated that the building owner or its insurer would engage Lewis and Barrow to design a permanent repair as we had a current file for the building. An amendment to the existing consent application would have been an efficient way of dealing with the permanent repair. On the 30<sup>th</sup> of December 2010 John Mitchell of the council phoned to advise me that the council required a statement which addressed the repair work was to be given by a chartered professional engineer. As it is widespread practice for engineers who have an engineering degree but have not yet become chartered to carry out their work with the oversight of a chartered engineer who ultimately provides certification of the work I approached Simon Gifford of Lewis and Barrow. After reviewing the file and discussing the damage and repair work with me Mr Gifford provided the necessary statement dated the 31<sup>st</sup> of December 2010 as referenced ... ”

Q. Mr Gifford, sorry Mr Gordon, Mr Gordon.

A. Yes.

Q. Can you just outline for us the nature of your discussion with Mr Gifford?

A. I went to see Mr Gifford. I took the Lewis and Barrow file that I had with me and I took, each time I went to site I took a number of photos to record the damage and the repair works that were being carried out and I believe I did some sketches to explain the system to Mr Gifford. Those sketches were in our file but our building was quite severely disrupted in



the February earthquake and we no longer have those sketches. I had also taken some notes on my first visit which are also in that file and we don't have any more. So I showed him all that information and we talked at length about what had happened and what we, what I was doing to remediate it.

5

Q. Thank you. If you can continue reading from paragraph 19.

**WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 19**

A. "On the 31<sup>st</sup> of December 2010 I emailed the CPEng form to the council and delivered a copy to Mr Fraser at the site. I discussed the Iconic building briefly with Mr Lewis on his return to Christchurch. I told him about the work that had been done to the building and which I had checked. I then gave the file back to Mr Lewis. I had no other involvement with the building. I note Ms Cooney has – why I was concerned about the stability of the repairs because she could, because she could not see bracing on the inside to which the outside plywood was attached. The external plywood along with the external steel angles and the aligned internal timber boards were fixed to the truss bottom chord and the roof structures to prevent bricks falling outwards but also to replace the in-plane strength of the wall lost by the disruption to the brick wall. The plywood floor installed between the truss bottom chords to the first two truss bays was to prevent bricks from falling inwards and spilling onto the floor below. Because the diagonal truss, strut and tie members, because of the diagonal truss, strut and tie members there was no viable method to install plywood against the inside face. I don't recall there being any holes through the brick wall at the time of the repair. I had noted on site and from the existing drawings in the file that steel ceiling plane bracing had been installed at truss bottom chord level to distribute lateral loads from the outer plane forces to the in-plane walls through steel angles, bolt fixed to the walls. Additional steel work had been installed at ceiling plane level so that horizontal earthquake and wind loads were transferred from wall faces to side walls. The plywood and steel angle facing to the exterior of the

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gable ends was tied into the truss bottom chords which were fixed to this bracing system giving normal distribution for the lateral loads for this building. “

**CROSS-EXAMINATION: MR ZARIFEH**

- 5 Q. Mr Gordon your 28 December inspection of the building. Was that the first time you'd been there?
- A. It was, yes.
- Q. And you said that you got the Lewis and Barrow file for the building?
- A. Yes.
- 10 Q. So would that have included the details of the structural strengthening carried out in 2004?
- A. I can't specifically recall but I do recall that the information in the file referred to the 2010 building consent that was being applied for at the time.
- 15 1207
- Q. Okay so that was probably the current file for Lewis and Barrow that had on the building?
- A. Yeah.
- Q. That was work that Mr Lewis had done on Mr Fraser's instructions putting in I think a new first floor or part of it and a new stairwell?
- 20 A. Yes.
- Q. And did you give any thought at that time when you were considering the building to any structural strengthening that was part of that, or not?
- A. Well I could see the structural strengthening that was in place and I had the drawings that showed me the changes that were being made, but the area that I was concerned with didn't relate to those areas.
- 25 Q. You hadn't been involved though in those proposals – the November 2010 proposals?
- A. No I hadn't, no.
- 30 Q. And Mr Fraser was the one that you spoke to on the phone initially and he told you the building had been red stickered and that they wanted

someone to come and attend to work that was required to remove that.  
Is that essentially what happened?

A. Yes. I don't remember the details of the phone call but yeah that was the...

5 Q. And he didn't provide you with any documentation such as Council building assessments post Boxing Day or the Building Act Notice that had been sent to the owners?

A. No he did not. I met him at the front door which is where the red sticker was placed at the time so we both looked at that together I think.

10 Q. And you said in your statement that you saw a red placard that was dated 27 December 2010?

A. Well I believe that was the one I saw. I remember taking a photograph of it at the time but I don't have that photograph anymore.

15 Q. I was just asking about the date because there's one dated 26 December, a Council assessment, that referred to disruption of damage to the east gable and apex but not one that refers to that specifically on 27 December but it could have been 26 December, the date?

A. Ah yes it could have been, yes.

20 Q. But you recall the notice whatever the date was referring to east wall damage, correct?

A. Yes I do, yes.

Q. And you said that you walked around the building looking at the exterior of presumably each side of the building?

25 A. Yes.

Q. Was that just walking round, you didn't get any closer to the building or climb up by any means in the exterior?

30 A. Ah yes I did. I walked around the outside and there was a cordon fence in place so I walked around the outside of the cordon fence. I walked onto the other side of the road and then I went within the cordon to look closely at the building. There was a right-of-way between the 198 Manchester Street and the 200–204 building. I walked down that right-of-way, you know, as far as I could to look back and up at the east

end wall and yeah definitely got as close as I could to the building to look for any damage.

Q. All right and leaving aside the east wall, on the other walls what were you looking for in terms of damage – just cracks?

5 A. Yes well any sign of any displacement, any sign of any cracking that was new, any sign of any damage at all to the building that appeared to be related to the earthquake that had just occurred.

Q. All right and on the north, west and south walls do you say that you didn't see any damage that concerned you?

10 A. Nothing that appeared to be recent, no. There were some cracks that appeared to be quite old based on the amount of dirt –

Q. Could you tell that from ground level?

A. Um, well yep. You can see often when it rains atmospheric dirt runs down the face of the building. You can see the lines of the rain dragging the dirt down the wall and then stepping into the crack and stepping across it and I could see dirt within the cracks.

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Q. Right, but they could have been cracks caused by the September earthquake. Is that correct? When you say historic do you mean before September?

20 A. Yes, yes very old cracks. You know they definitely had a reasonable amount of dirt in them to give me the idea that they were quite old. A lot more than three months anyway.

Q. But you hadn't inspected the building before that date had you?

A. No, no.

25 Q. On the north and west walls what cracks there were, whereabouts were they? Can you remember or not?

A. Um, no. I do remember one on the mitre corner to the south west and perhaps some on the north but that's as much as I can recall at the moment.

30 Q. Your site report of 28 December talked about the repair work being temporary, right?

A. Yes.

Q. So what were you meaning by temporary when you designed it?

- 5 A. Well the bricks had been disrupted. They had lost their adhesion so I was putting in structure that obviously didn't, you know, it was there to serve a purpose. It wasn't there to look as part of the building so, you know, some further thought would need to be put in to work out how to replace the structure that had been damaged.
- Q. So it wasn't aesthetic, is that what you're saying?
- A. Yes, yep. It wasn't pretty. It was just there to put the building back to the strength that it had before the earthquake.
- 10 Q. All right so you were happy though that in the aftershock zone that we were in at that stage in Christchurch that the temporary support or repairs that you had done would enable the building to be back to its strength before September?
- A. Yes well that area that I had worked on would be able to take lateral loads to the same extent that it could before.
- 15 Q. And it was really only to make it more in keeping with the character of the building that it would have to be changed?
- A. Yes although, you know, the bricks had been disrupted. That needed to be worked through.
- 20 Q. Right because they were bowed out weren't they, the wall, the south-east wall?
- A. Yes, yes.
- Q. So did you envisage that that wall would in effect have to be rebuilt?
- A. Yes, above the bottom chord level of the trusses, yes it would need to be rebuilt.
- 25 Q. And so how long were you envisaging the temporary work would be there, all things being equal?
- A. Well I think I've mentioned in my report that if there was a building consent in then, you know, we'd make an amendment to that consent if we were instructed to do so by the building owner or insurer to work it through.
- 30 Q. So you dealt with Mr Fraser who was the manager, correct?
- A. Yes.
- Q. You didn't deal with the owner at any stage?

A. No, no.

Q. And did you tell Mr Fraser that these repairs were temporary and the nature of them being temporary?

5 A. Well I did write it in my site report. I don't specifically remember having a conversation to him about how, you know, how temporary they were but I did say they are temporary repairs.

Q. Okay and you said that you referred to the building consent that was in. I think that was in an email that you sent to the Council after the work had been completed when you were seeking certification of it?

10 A. Yes.

Q. So that was a reference to the building consent for the November 2010 proposals?

A. Yes that was the file that I had and I could see that a building consent had been applied for in the file.

15 Q. Right and so you were thinking or suggesting that it could be incorporated into that, an amendment made to those, correct?

A. Yes well that would be the ideal situation you know that there was something already in the process. We could make an amendment to it and have it changed.

20 1217

Q. Did you not need a building consent before doing the kind of works that were done in late December?

A. No I didn't believe so. No, I think they were –

Q. Why was that?

25 A. They were temporary works under a state of emergency I think I believed at the time and I don't recall to be honest.

Q. So you're envisaging that you'd only need a building consent once the permanent solution was arrived at and an amendment made to that existing consent application?

30 A. Yes, yep, and the CPEng form was the certification of the temporary works.

Q. Is the Building Act notice, and I appreciate you haven't, you said you didn't see it, but the Building Act notice talks of consents, it says, "You

must obtain a building consent to carry out any demolition, repairs or other work to remove the danger.” Were you aware of that requirement in general terms? I know you didn't see this one. It was a standard form.

5 A. I, I mean I am aware now, I wasn't, yeah, I couldn't tell you whether I was aware of that at the time or not. I hadn't, they hadn't been around that long.

Q. So you thought you didn't need a consent for these emergency works, or temporary works, but you would for the permanent?

A. Yes.

10 Q. And did you tell Mr Fraser that there would have to be that amendment to the building consent application that was in and to cover the permanent works but that you didn't need one for what you'd done so far?

A. I couldn't tell you whether I mentioned that or not, no.

15 Q. Right, is that something that you'd normally do to an owner or an owner's representative?

A. Yes, I would now, yes definitely, yep.

Q. But might not have then? You're not sure?

20 A. No, yeah, I don't recall at the time what my knowledge was but you know obviously we know now.

Q. I am just thinking that because you said that you were really in effect waiting for the owner or the owner's insurer to give you instructions to do that, to do the permanent works and then you'd make the amendment. Would you not have to tell the owner or his representative or did you have direct dealings with the insurer?

25 A. I, Daryl Fraser, I had taken as the building's, or the owner's representative. The building consent that we were working on at the time was for him, but yeah I don't remember, I'm not sure whether I had dealings with the insurer at all. I don't think I did at the time -

30 Q. Mr Lewis –

A. (inaudible 12:20:23)

- Q. – Mr Lewis was giving evidence just before you and he has produced some emails with the insurer or loss adjuster about the permanent repairs so you gave him the file back after your involvement, correct?
- A. Yes, yes, when he returned from holiday, yes.
- 5 Q. And so he may have been the one that liaised with the insurers, is that right?
- A. I would imagine, yes.
- Q. Just going back to the works then. You visit the site on 28<sup>th</sup> of December?
- 10 A. Yes.
- Q. You prepare your site report, presumably at the site?
- A. Yes, yep.
- Q. And you left it with Mr Fraser to arrange for a builder?
- A. Yes.
- 15 Q. So roughly when on the 28<sup>th</sup> would it have been that you left him to do that?
- A. Yes, yep, sorry, what time?
- Q. What time of the day would he have the site then having left that in train?
- 20 A. I don't recall. I remember I looked at a few different jobs that day.
- Q. Then the next day, the 29<sup>th</sup>, you speak to Mr Lewis?
- A. Yes.
- Q. And as a result –
- A. Yes I did.
- 25 Q. – of that you decide to add the steel on the outside of the plywood?
- A. Yes and matching timber on the inside.
- Q. Okay.
- A. Vertical.
- Q. And the same day you go back to the site?
- 30 A. Yes I did.
- Q. And you said the repair work had commenced?
- A. The internal repair work, yes, in the roof space.
- Q. But not the external?



- A. No, they were putting, I believe they were putting a scaffolding in place, at that stage. I got on the roof of the single storey area.
- Q. And you left presumably the site report for the 29<sup>th</sup> with Mr Fraser?
- A. Yes I did, yep.
- 5 Q. And the builder?
- A. Yes.
- Q. And then you had a conversation, I think you said, with Mr Fraser on the 30<sup>th</sup>, the next day?
- A. Yes, I believe he rang to say that they were progressing further.
- 10 Q. So you went down and had a look?
- A. Yes, I did.
- Q. And you said that, "I visited the site and observed that all work was proceeding as detailed in my site reports." Correct?
- A. Yes.
- 15 Q. And then that same day you say in paragraph 17 that you prepared a CPEng statement. That's the one that you signed yourself?
- A. I did. Yes I crossed out CPEng and emailed that through.
- Q. So from what you've said in paragraph 16 when you went on the 30<sup>th</sup> to the site the work was proceeding as you'd detailed?
- 20 A. Yes, yep.
- Q. So what stage was it at then?
- A. I can't specifically recall but I do remember the plywood being in place and the vertical steel angles were being placed at the time. I can't remember how many of those were up but they did seem to be a fair way through.
- 25 Q. And so where did you prepare the CPEng certificate? Did you go back to your office?
- A. Yes I did, yep.
- Q. So when you prepared that, I appreciate that it wasn't used ultimately,
- 30 Mr Gifford's one was, but when you prepared your one –
- A. Yes.
- Q. – the actual works that you'd detailed hadn't been completed at that stage, had they?

- A. I think they were you know not far away from being finished. All the angles were on site, they were just being put in place. There might have been you know one or two left to do.
- Q. So is that the norm of what happens or when you're completing a certificate like that, do you, can you do it once the works are almost complete or not?
- 5 A. Well it depends on –
- Q. (inaudible 12:24:47)
- A. – how well they're doing the work and how correct they are and you know that all the pieces are on site and how well the, or how thorough the builder is.
- 10 Q. And what was the situation in relation to this work?
- A. Well definitely all the steel work was on site, all the pieces were on site, and almost in place and the builder was doing a very good job.
- 15 Q. Okay. You didn't go back to the building site after your visit on the 30<sup>th</sup> did you?
- A. I'm not sure but some of the photos that I have taken show that the scaffolding had been removed so that must have been the next day, perhaps the 31<sup>st</sup> and I think I did say that I delivered the final CPEng certificate back to Daryl on site so –
- 20 Q. When was that?
- A. – yeah, in paragraph 19 I said, “On the 31<sup>st</sup> of December I emailed the CPEng form to the council and delivered a copy to Mr Fraser at site.”
- Q. Okay.
- 25 A. So yes I did go back on the 31<sup>st</sup>.
- Q. Right, so just tell us a bit more then about what you did on the 31<sup>st</sup>?
- A. Um –
- Q. In terms of works?
- A. Every time I went to site I took photos of the building and you know obviously later on the later site visits were more specifically of the work that was being undertaken so I would have taken photos that day as well and then delivered a copy of the form to Mr Fraser. I don't know
- 30

whether I didn't have an email for him or, I just delivered him a copy so he knew where we were at.

Q. Right and did you look at the works at all or check them on the 31<sup>st</sup>?

5 A. Well not up close but I could see that they were all in place and that's why I took photos to record that.

Q. So would it not be normal in a situation like this to get up say onto that single roof and have a closer look at works to satisfy yourself that they were secure and had been done properly?

10 A. Um, well if the, I checked the work the day before and it was almost complete and everything was satisfactory at that stage. I believed they worked from the south to the north putting the steel angles on and it was on the north few that were left to put on and they were quite visible from ground level.

1227

15 Q. What about inside, did you check inside on the 31<sup>st</sup>?

A. I don't recall but I did check inside on several occasions as they were doing the work.

Q. The visit to the site on the 31<sup>st</sup> was that after you'd emailed the CPEng form to the Council?

20 A. Yeah I believe so, yes.

Q. And your purpose was to deliver it to Mr Fraser, a copy of it?

A. To give him a copy, yes.

Q. So at that stage it had been signed off in effect by Mr Gifford?

A. Yes it had, yes.

25 Q. And so your discussions with Mr Gifford where you showed him the site reports and talked him through it that it must have occurred presumably on the 31<sup>st</sup> before you emailed him?

A. Um, I can't recall whether it was the 30<sup>th</sup> or the 31<sup>st</sup>. Yeah, it might have been the 30<sup>th</sup>.

30 Q. Okay so, what, when you came back from your site visit?

A. Yes. I think I prepared my form in the morning or some time during that day and then Mr Mitchell phoned to say that he would prefer a chartered professional to sign that form so I then prepared it and took it to Simon.

- Q. Okay and did you tell him that you believed that the structural integrity had been restored to pre 4 September state?
- A. Yes I did, yep.
- Q. Was there any rush to get the work done on the part of Mr Fraser given  
5 the time of year?
- A. Um, not that I recall but he did get a builder onto it pretty quickly.
- Q. And the work seems to have been done reasonably quickly for the amount of work that was involved?
- A. Um, no I don't think the work progressed particularly quickly. It's just,  
10 you know, getting a builder to come in between Christmas and New Year. You know, obviously he had a contact.
- Q. All right so apart from discussing the work with Mr Gifford he completed the CPEng form that he signed?
- A. Yes.
- 15 Q. And he had never inspected the building had he?
- A. No.
- Q. And is that usual for another engineer who's CPEng'd to sign off when they haven't had any involvement before in the detailing or the site inspections?
- 20 A. Yes it is. Producer statement designs and producer statement construction reviews for the buildings are normally signed by a more senior engineer and particularly so when you're not a CPEng engineer.
- Q. But someone who hasn't had any involvement is my question, not the fact that it's someone else but they don't necessarily had to have had  
25 any involvement in the building or the work?
- A. No, no, it's normal.
- Q. Did you chase up that building consent issue that we were talking about before. You know you thought that the permanent repairs could be added as an amendment or you just gave the file back to Mr Lewis and  
30 that was the end of your involvement?
- A. When I gave the file back I did discuss with Mr Lewis what I had done and showed him the photographs and the site reports but yes that was the end of my involvement.

Q. So it was then up to the owner if they wanted to do or through their insurers if they wanted to do anything about it and when?

A. Yes.

5 Q. Just finally Mr Gordon, in relation to Miss Cooney's concerns that you read I think in her statement and you addressed in paragraph 22 of your brief. I think her concerns were that she had an office up there but whatever the inside of that area on the east wall didn't appear to, that the fixings on the outside of the plywood didn't appear to be fixed to anything on the inside and as I understand it you're saying it was fixed  
10 at roof level at the top?

A. Yes.

Q. And there was a plywood or some kind of sheeting that prevented the bricks above the ceiling from dropping through. Is that right?

A. Yes that's correct, yes.

15 Q. What about the brick wall below that area?

A. Well the area that was damaged was only from the bottom chord level up. There was no sign of any damage from the bottom chord level down but then the plywood we put on the outside extended well below the bottom chord level to use up sheets.

20 Q. Would the fact that that wall had bowed out, even at the top part as you're indicating, was that not an indicator that that wall had a weakness generally?

A. No. It was only the lateral load in the weak plane direction of the wall that had failed and I could see where the steel angle that ran round the  
25 outside edge of the building was fixed into the bricks at the bottom chord level and then above that level was where it had failed where it doesn't have a lot of weight on it to hold the bricks in place under lateral loads.

Q. So you didn't think it needed anything on the inside to prevent the lower level bricks coming through?

30 A. Ah, well there was no sign of any damage to that portion of the wall. The damage had only occurred above the bottom chord level. That was the only place that I observed any damage.

**MR ELLIOTT ADDRESSES THE COMMISSION**

Your Honour I have spoken to Ms Cooney about the location of her office and I can point that out to Your Honour at this point while Mr Gordon is listening. He may wish to comment upon that if this is an appropriate time.

5

**JUSTICE COOPER:**

I am in your hands on that. Is it relevant to what Mr Gordon has to say?

**MR ELLIOTT:**

10 I am going to ask him a question about the east wall which it seems proximate to the office so if I can take care of it now Your Honour please – BUIMAN200.0004.114.

**WITNESS REFERRED TO DOCUMENT BUIMAN200.0004.114**15 **MR ELLIOTT ADDRESSES THE COMMISSION:**

Your Honour the way that's orientated is that the top is the north – Gloucester Street, the west is to the left and the eastern wall off to the right there. This is the proposed first floor plan and Ms Cooney says that her office is to the right there where it says, "Office", in the eastern section and you'll see there's a  
20 stairwell immediately below it on the bottom left.

**JUSTICE COOPER:**

So is that part of the building. Does that have two levels as well?

25 **MR ELLIOTT:**

That's a matter which Mr Smith is enquiring about Your Honour as to whether that's a mezzanine within the lower level which extends further across than the upper level.

30 **JUSTICE COOPER:**

But this isn't the second building if I may put it that way. Is that right? It's outside the area that Mr Lewis was describing in the plans that he was addressing when I asked him this question about it.

5 **MR ELLIOTT:**

That appears to be the case Your Honour. I will show you a ground floor plan now to show you where that sits and that is BUI...

**JUSTICE COOPER:**

10 Q. Mr Gordon if you're mystified about what's going on at the moment it arises out of an issue that arose earlier in the morning so Mr Elliott will be asking you some questions in a minute but he is just clearing up something that was in doubt earlier before you joined us, all right?

A Yes, thank you.

15 1237

**MR ELLIOTT:**

Your Honour, BUIMAN200.0004.112, that is the proposed ground floor plan and again the top of the page is the north and firstly Your Honour will note the left of the diagram there is the Manchester St entry area which I think is where  
20 Ms Cooney was indicating she and Mr Gilbert would have exited and then towards the, just to the right of the middle of the diagram there is a line and you can see there the stairwell so that Ms Cooney's office would be directly above that broken square section just above the stairwell, and I think this demonstrates as well that the ground floor extends out further along to the  
25 east than what the upper floor did, the upper floor being two levels which was originally a separate building on the west. Mr Peter Smith will clear up for us whether Ms Cooney's office is upper level in the mezzanine on the ground or part of the second level but it seems to be the case that the second, it sits to the right of the second level wall, ie it is a part of the lower level although  
30 raised. I hope that doesn't –

**JUSTICE COOPER:**

Does that mean it is part of the second of the two, the smaller of the two buildings or not?

**MR ELLIOTT:**

5 I think it means that it is part of the ground level, not part of the second level as it appears in photographs. I will show Your Honour a photograph BUIMAN200.0006.7. The top left-hand photograph could be highlighted please? That is the eastern side of the upper level and that is, I think Mr Gordon will say that is where the work to the eastern side was done and I  
10 think Mr Smith will confirm Your Honour but I think he will say that Ms Cooney's office was in fact below that wall to the east, ie a part of the lower section which Your Honour can see but that it would have been in the vicinity of where that wall collapsed in February which is a topic I am going to discuss briefly with Mr Gordon.

15

**JUSTICE COOPER:**

So is the office behind the wall we can see or is it out of sight and this side of that wall?

20 **MR ELLIOTT:**

The latter Your Honour as I understand it.

**CROSS-EXAMINATION CONTINUES: MR ELLIOTT**

Q. Mr Gordon, do you see that photograph that I've just referred the Commissioners to?

25 A. No I couldn't hear the reference, sorry, can you?

Q. I am sorry, can you hear me properly or am I...?

A. Yes, it is just a bit hard sometimes.

Q. You are leaning forward, it seems to be a bit difficult for you, BUIMAN200.0006.7, it's a photograph with scaffolding on it which we  
30 think you took.

A. Oh right. Yes. The picture in the top left corner?

Q. Yes, that's the work carried out after Boxing Day based –



A. Yes.

Q. – on your involvement, is that right?

A. Yes it is, yep.

5 Q. And I will just show you a photograph which I hope you have there.  
BUIMAN200.0004.182. This is a photograph taken after the February  
earthquake with the date 4 March 2011 on the bottom right-hand corner.

A. Yes.

Q. And that seems to indicate the state of that same area post-  
22 February, would that be right?

10 A. Yes, yep, yes it is.

Q. We understand that Ms Cooney and Mr Gilbert ran out the western side  
of the building, I'm just talking to you about the eastern side here now.

A. Right.

15 Q. And is it right that Ms Cooney's office would have been in the vicinity of  
the collapse area of that eastern wall?

A. Yes, yep, to the east of that wall.

Q. Just wanted to ask you one or two questions about that. You've talked  
about the work that was proposed to that area being temporary?

A. Yes.

20 Q. That's right?

A. Yes.

Q. Could you just explain for us how did you arrive at a decision about what  
the temporary work should be? For example did you consider a  
particular strength level or some criteria in reaching that decision?

25 A. Yes I did. I made sure that it was well above what was required for  
seismic design at the time. The bricks that were in place were above the  
angle that runs around the outside level at bottom chord of the trusses  
which is bolted or epoxy-grouted into the brick. I decided the bricks  
needed to stay in place to keep the mass on top of those fixings to give  
30 them stability integrity so putting the plywood on the outside prevented  
the bricks going outwards and onto the single storey roof where they  
were disrupted and then the angles gave it in-plane strength for face  
loads, sorry, out of plane strength for face load and the plywood gave it

in-plane strength in the direction, loads in the direction of the wall, and then the plywood on the inside was to prevent any bricks that did happen to fall in from going through the, into the second floor area.

5 Q. So was this particular area of work based upon the code? Did you look at the code and ask what should we do in this section of the building?

A. Well I just made sure that the work that I did was well above what was the minimum that would be required for current code requirements of the time.

10 Q. If that was the effect of the temporary work why would there even be a need for permanent work at some future point?

A. Well it doesn't, it's not in keeping with the building. I mean if the owners were happy to leave that there then that would be their decision but it wasn't, the steel angles weren't treated, they were bare steel so they would corrode. It wasn't, the plywood was H5 treated so it could last  
15 quite a while but some secondary treatment would need to be done for a permanent repair to last you know 50 years.

Q. So in terms of safety that the work would provide you didn't distinguish did you between the temporary work that you were recommending and the later work that would be permanent work, is that right?

20 A. Sorry, could you explain that again?

Q. Is your position that the temporary work and the permanent work were both provided equal levels of safety?

A. Yes they would. Yes.

25 Q. And obviously there were very significant forces at play that day. In hindsight is there anything about that work that you could comment upon or which you might do differently?

**JUSTICE COOPER:**

I am not sure that it will be clear what you mean by that day.

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30 **CROSS-EXAMINATION CONTINUES: MR ELLIOTT**

Q. I am sorry, the 22<sup>nd</sup> of February Your Honour, yes I am sorry, the 22<sup>nd</sup> of February Your Honour yes I'm sorry we look at the state of the building

in that photograph and there was, we've heard a lot of evidence about the very significant ground accelerations at 12.51 on the 22<sup>nd</sup> of February and I'm just asking you whether in hindsight there is anything differently you would have done in terms of the securing work keeping in mind that others will be in the same position as you in future of recommending securing work post earthquakes?

5

A. Yes because of the angle running round the outside level of the, the bottom chord level of the building and epoxy fixings that were into the brick, if the brick had been taken away which would obviously reduce the mass of the building and prevent those bricks from at least falling the mass of that is what was held the or gave the proxy fixings their integrity.

10

Q. Are you talking, I'm just asking at the moment about the work on the eastern side that you recommended. Are you talking about that?

15

A. Yes.

Q. Right you're not talking about other parts at this stage?

A. No.

Q. Just confine yourself to that for the moment.

A. You know it would have been good to get rid of the disrupted bricks above the bottom chord level but that had other effects you know that would need to be taken into account by any remedial system. You need to keep in mind the rest of the lateral load-resisting system of the building when you do do any repair work.

20

Q. Turning now to your attendance at the building post Boxing Day, I'm going to ask you to look at photograph BUIMAN200.0004.161. Do you see in that photograph firstly there's a cordon there in place?

25

A. Yes.

Q. Was that in place when you first went to the building?

A. Yes it was yes.

30

Q. And you see on the front of the fence there's a red placard to the left.

A. Yes on the fence yes with a phone number below.

Q. And do you see there's also a red placard posted to the right hand side of the entrance there on the building itself?

A. Yes I do yes.

Q. Did you see those two placards?

5 A. No, I, well I don't recall seeing those placards. The one I do recall seeing was in the entry below the canopy to the right which is off Manchester Street. There's a window in the recess there and I recall it being in there. I don't recall those two at all.

Q. Counsel for the council will correct me if I'm wrong but I think the council's position is that the same red placard would have been placed perhaps in a number of locations along that fence.

10 A. Yes.

Q. On that basis presumably it was the same type of placard that you were looking at.

A. Yes, yes.

15 Q. I'm going to call a document up now and I'm afraid you may not have access to it so I'll just need to talk to you about it but document ENGCCC.0001.157.

A. No I don't have that at all sorry.

20 Q. All right. I'll just tell what's in it. Your Honour the document which I've brought up is a document which counsel for the City Council informed me would have been the document on the building and on the fences. It's white here but it would have been red on the day. It's not in the bundle. It comes from the council's overall report and I've just extracted it from there in the course of the day. And Mr Gordon I'm just going to tell you what the document says and asks you whether it accords with  
25 what you read. It starts off by saying it's a notice under section 124 (1) (b) of the Building Act 2004. It refers to the Act a bit more and then says "For hoarding to restrict entry to a commercial or residential building" and in bold it says "Do not approach or enter this building. This building is a dangerous building under sections 121 and 124 of the  
30 Building Act 2004. Using or occupying this building is an offence pursuant to section 128 of the Building Act. Contact the City Council recovery office for approval of proposed action to remedy danger". It gives contact details. "Do not remove the notice", and it has been

placed by the council pursuant to the Act and issued on a particular day which I think the council will say was 27, on or about 27 December. So does that accord with your recollection of what you read?

A. No the notice that I saw referred to some damage to the east wall apex.  
5 There was a hand, it was a handwritten lines in, on the form and that's as much as I can recall.

Q. Can I refer you back to the photograph then? This is BUIMAN200.0004.161.

A. Yes.

10 Q. And do you see there's a white document on the right hand section of the fence?

A. Yes, yes.

Q. And I'll refer you now to document BUIMAN200.0004.159.

A. Yes.

15 Q. Do you see that document?

A. I do yes.

Q. The council's position is that that is or it is a copy of that document.

A. Right.

Q. Which would have been the one, the white document on the front of the  
20 fence. Just have a look at that document and tell me whether you agree with that?

A. Or agree with particulars.

**JUSTICE COOPER:**

25 Q. No you agree that that was the notice that was the white notice that was displayed on the building in the location shown in the photograph that you have just looked at? He's asking if –

A. Yes I don't recall seeing that at the time of my inspection. The notice that I recall seeing was a red placard within the entry on the west side  
30 and it had a handwritten description of where they're observed damage.

**CROSS-EXAMINATION CONTINUES: MR ELLIOTT**

Q. So you're talking there about a notice attached to the building itself as opposed to the fence?

5 A. Yes, yes there was a notice within the entry off Manchester Street below that canopy that you see in photo 161 attached to a window. That was the one that I recall seeing.

Q. Did you walk around outside the fence at all?

A. Yes when I first arrived I walked around outside the fence and yes I don't recall seeing those at all.

10 Q. Is it possible that the white document was there at the time but you just didn't notice it?

A. Well perhaps I didn't see it yes. I walked around the outside of the building on the opposite side of the road and then I went within the cordon to observe the building closely and I don't recall those fixings.

15 Q. All right. And I'll just refer you to what the notice says to see whether that accords with your memory –

A. Sorry can you say that again?

20 Q. I'm just going to refer now to what the notice itself says. You see there's a heading "Particulars" and "In accordance with section 121A or C of the Act this building is dangerous as a result of the earthquake which occurred at the property on Saturday 4 September, 2010 or as a result of aftershocks following that earthquake. Number one, the building has been damaged and there is structural defects to the building. Number two, council's records show that the east gable wall had been badly damaged". Do you recall reading any of those words anywhere?

25 A. The bit about the east gable wall being damaged I recall when it talked about the apex and that was the area that you could see was damaged from the outside. It wasn't until you got to the inside that you could see that there was further damage.

30 1257

Q. So by that do we take it that you don't recall seeing the words, "The building has been damaged and there are structural defects to the building", which appears to be a separate point?

A. No, no.

Q. And again is that something which you may have seen but you may have forgotten or...?

A. Yes, possibly, yes.

5 Q. The document also talks about what to do to reduce the risk or remove the danger and I'll just summarise it. You've got it there in front of you but comply with the notice - point (a), keep persons away - point (b), (c) – carry out work to remove danger, (d) – you must obtain a building consent to carry out any demolition, repairs or other work with contact details, (e) – if urgent building work is necessary to save or protect life  
10 or health or prevent serious damage to property then you may carry out without a building consent and then if in reliance on that section of works carried out without a consent the owner must as soon as practicable apply for a certificate of acceptance and then point (f) about  
15 Heritage buildings. So that content do you recall reading that content anywhere?

A. I have previously read that, yes.

Q. But in relation to this building do you recall reading that content?

A. No I don't. No I don't recall reading that for this building.

20 Q. You've given evidence that you were there, correct me if I'm wrong, but to address the red sticker as you describe it and from your point of view that was to address the damage to the east wall. Is that right?

A. Well no, I'd look at the building as a whole. I didn't, you know, I looked  
25 round the building before I knew where the damage that the sticker referred to was and I'd noticed that before I read the sticker but I checked the outside of the building round all faces from a distance and then much closer and then from the inside looking for signs of damage related to the recent earthquake.

Q. I appreciate that you said, "I don't know if I saw these words", but if you  
30 had seen the words, "The building has been damaged and there are structural defects to the building" would you have done anything differently to what you've described?

- A. Ah, no, no I wouldn't, no. I would still be as thorough as I was with the building as a whole.
- Q. Based on what you did see did you have an apprehension though that the red sticker meant categorisation as a dangerous building?
- 5 A. Um, no not from what I read, no.
- Q. What did you think it meant?
- A. Well just that they'd noticed damage to that particular area and, you know, I had also noticed that but that I hadn't seen anything anywhere else.
- 10 Q. By that particular area you mean the east wall?
- A. The apex of the east gable, yes.
- Q. Did it not occur to you that as there was a cordon around the whole building that might, on the face of it, demonstrate danger beyond that eastern wall?
- 15 A. Ah, yes and that's why I looked round the building as a whole.
- Q. In your examination of the building I think and in particular the west wall you've talked about looking for damage and you've said that you didn't see any damage caused by the earthquakes?
- A. Or any..., yes, yep.
- 20 Q. At some areas you may have seen some historical damage. Is that right?
- A. Ah, yes, yep.
- Q. Why was it when you were considering this question of the overall integrity I suppose of the building you just confined your question to what is the damage this building might have?
- 25 A. Yes, well the requirement was to put the building back to the strength that it had before the earthquakes. There was no requirement to strengthen beyond that.
- Q. But where did that requirement come from in terms of your retainer?
- 30 A. Ah, well the CPEng certificate that we're required to submit to the Council states that.
- Q. I see so it was the contents of the CPEng certificate that led you to simply focus on what is the damage to this building?



A. Yes.

Q. And is it right to say therefore that you didn't step back and give some consideration to what might be the overall capacity of this building to handle a particular level of aftershock?

5 A. Um, no I didn't, no.

Q. Or to consider the question of whether any particular part of the building such as a gable wall might be susceptible to failure in an aftershock?

A. No, not to any extent greater than it was before.

Q. Can you say why that was? Lots of other engineers did it.

10 A. Sorry, say that again please.

Q. You're not alone on that approach in the question that you asked but in this case you weren't acting in the capacity of a council building inspector. You were here on the instructions of the owner and I'm just asking why didn't you give consideration to asking that wider question about the capacity of this building or particular parts to handle earthquakes which may have led onto a discussion with the owner about doing a more detailed inspection?

15

A. Ah, well the file that I had showed that there was strengthening in place and I could see that on site, um, so no I didn't question the level of strength that the building had. I don't recall seeing any reports or calculations in the files which showed what strength it had but the area that was damaged, you know, I put back to at least the capacity that it had.

20

Q. So do we take it from that you didn't have any conversations with the owner or their representative about making a fuller enquiry doing a full detailed assessment of the building?

25

A. No I don't recall talking about that, no I don't.

**CROSS-EXAMINATION: MR LAING – NIL**

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**CROSS-EXAMINATION: MR MCLELLAN**

Q. You were satisfied I think that the works to the eastern gable wall restored the strength of that wall to at least what it was before the Boxing Day earthquake. Is that your position?

5 A. Yes that's correct.

Q. I'm just a bit unclear as to when those works were completed. I think you said that when you gave your original certificate on the 30<sup>th</sup> of December they hadn't been completed but you were satisfied with progress. Is that an accurate summary of your evidence?

10 A. Yes that's correct.

Q. And when Mr Gifford gave his certificate the following day had you checked that the works had been completed at that point?

A. Um, I think I emailed the report and then went to site and saw that the works had been completed and the scaffolding had been removed or was being removed.

15

Q. You'd accept that the council officer who in this case was Mr Mitchell would assume that a CPEng certificate would only be given once the works had been completed?

A. Yes, yep.

20 Q. Because that's what the certificate says, isn't it. It refers to remedial steps having been taken?

A. Yes, yep.

Q. Can I get you to have a look at a photograph which I think was handed to you a little while ago and I think you were handed an email from Professor Buchanan?

25

A. Yes.

1307

Q. And at the back of that there is a, and it has come up on the Commissioner's screens, so Professor Buchanan was, he undertook the 26<sup>th</sup> of December inspection along with someone called Declan whose initials appear on his inspection sheet as DB, and if you have a look at that photograph, BUI.MAN200.0043 and we are looking at .3 which is the photograph so I think from what I have seen that's probably the best

30

photograph of the damage immediately after Boxing Day and we can see that crease at the top of the gable wall. That's the main bit of damage that you were wishing to repair, is that right?

A. It is, yes.

5 Q. Now in, on the 9<sup>th</sup> of February Mr Ryburn from Opus who I represent, did a re-inspection I think you'll be aware of that?

A. Yes.

Q. And I'm not sure if you've seen his report and that is at BUI.MAN200.0004.168.

10 A. Yes.

Q. And you can see on the right-hand side next to the entry for columns, plasters, corbels, he's also written walls?

A. Sorry?

Q. Can you see that?

15 A. Can you repeat that?

Q. Can you see the reference under "structural hazards and damage" to columns, plasters, corbels?

A. Sorry, I'm having trouble hearing at the moment. Can you repeat that please? Sorry.

20 Q. Can you see on the left-hand side, under the heading 'Structural hazards damage'?

A. Yes.

Q. You can see the entry four lines down, columns et cetera?

A. Yes.

25 Q. And over to the right-hand side he's written "loss of bricks on rear wall, stabilised for the moment with plywood"?

A. Yes.

Q. With the plywood by this time in place of course would have he have been able to see the loss of bricks?

30 A. No, no, the plywood went to the top of the wall.

Q. And can you see further down on that form under 'general comments'?

A. Yes.

- Q. Mr Ryburn's written, "new owner imminent, engineer has apparently reviewed," I think, "the requirements for stabilising the rear wall in which about six bricks fell from the apex." Was that your understanding of how many bricks had fallen?
- 5 A. From memory, yes, about that. The photo that you just showed me is what I remember seeing.
- Q. And he recommended contacting the engineer for a confirmation of the works as "lateral load capacity may not exist". What would be your comment? His, of course, was just a visual inspection. What would be
- 10 your comment on the lateral load capacity of that wall compared to what it was before Boxing Day?
- A. Well it would be better above the bottom chord level. We would put the plywood in. He may not have realised how thick the plywood was or how well we'd fixed it back to the existing strengthening in the building.
- 15 Q. And lower down right at the bottom of that form he's "recommended protection fencing to rear corner parapet on Gloucester Street".
- A. Yep.
- Q. And if you go back up to the general comments again, he's written, "Also get comments," presumably from the engineer, "on the cracking,"
- 20 and he said, "likely just in the paint." Can I just take you back to that photograph which is .0043.3?
- A. Yes.
- Q. The cracking that he might have been referring to I suppose and the reason for recommending a cordon, I think we can see cracking in the
- 25 dark grey painted structure of the higher part of the two buildings. Can you see that?
- A. Yes, yep, I can, my photos not colour but yes I can see it.
- Q. Did you see that cracking when you inspected the building?
- A. Yes I do recall that crack and my memory that it was, it did appear to be
- 30 older based on the debris in the crack.
- Q. Did you take any steps to repair that cracking?
- A. No I didn't, it appeared to be much, much earlier than related to the 26<sup>th</sup> of December earthquake or even the 4<sup>th</sup> of September.

Q. So I take it that you wouldn't see a need for that, for the area below to be protected by cordons?

A. No, no I didn't.

Q. Thank you Mr Gordon.

5 A. Thank you.

**RE-EXAMINATION: MS MORGAN – NIL**

**COMMISSIONER FENWICK – NIL**

**JUSTICE COOPER:**

10 Q. Mr Gordon, I am just going to ask you to have a look at a document which has got the suffix 4.162 which is your email to the council?

A. Yes.

Q. This says that it is sent at 4.04 pm on the 30<sup>th</sup> of December 2010. Is that likely to be reasonably accurate as to the time you sent it?

A. I would imagine, yes.

15 Q. In the second paragraph, the one beginning, "The above property..." at that stage you are telling the council that the remedial works have been undertaken but I think on the evidence that you've already given that wasn't right and you were saying that on the basis that they well underway. Is that right?

20 A. That is, yes.

Q. So why tell the council the works have been done when they were merely underway?

A. From memory I think they were you know, there were maybe two angles to put back up, to put up.

25 Q. I see.

A. So perhaps by the time I got back to the office I would have imagined that they would be complete.

30 Q. In the fourth paragraph, the one beginning, "A building consent application..." you are referring to the existing application about which you knew, is that right?

A. That's correct, yes.

Q. And you knew that because you had seen reference to it on your file, is that right?

A. That's correct, I remember seeing the building consent application form and the drawings that were submitted with it.

5 Q. Now was that work that your firm was doing on the part of the, on behalf of the owner of the building?

A. I couldn't tell you whose behalf that was on, sorry.

Q. Well your own personal dealings were with the manager of the bar, were they not? Mr Fraser?

10 A. That's correct, yes it was.

Q. You did not regard him as the owner, did you or the owner's representative?

A. No I don't believe I was. I, no. He may have been the owner's representative I would have assumed that he would be communicating this work back to the owner.

15

1317

Q. In that paragraph of the email you say, "An amendment to the building consent will be made in January to include the removal of the damaged area of east gable end wall and reinstatement with a suitable structure.

20 A. Yes.

Q. How were you able to say that to the council?

A. I would have been passing the file back to Mr Lewis who was involved in it and I can't particular remember but I would imagine I would have mentioned it that's what I'd said.

25 Q. But how, I don't really follow that answer. It looks to me like you must have had some indication from somebody that that what was intended?

A. I guess I'm making a promise but I can't remember the circumstances sorry. I just yes, I thought that would be the best way to deal with it was to make an amendment to the building consent but I don't remember whether I discussed it previously with Mr Lewis or not or whether I just intended to tell him about it when I gave him control back.

30

Q. Well you were writing to council saying that would happen weren't you?

A. Yes.

Q. Are you saying that before saying that you mightn't have had any indication from the owner or the owner's representatives that it was going to happen?

A. I don't remember. I might have talked about it with Daryl, but yes I can't  
5 specifically recall.

**WITNESS EXCUSED**

**MR ZARIFEH RE-CALLS****WARREN LEWIS (SWORN)**

- 5 Q. Yes Mr Lewis you said in your brief of evidence that you read out that your friend wasn't instructed to assess the building post the September earthquake but you did receive instructions from Mr Fraser in relation to those proposed alterations that you drew up?
- A. Correct.
- Q. And that you went to the building to initiate that process?
- A. Correct.
- 10 Q. And was that sometime in September?
- A. Yes.
- Q. So following the September earthquake?
- A. Yes.
- Q. You said that you did have a look or that you inspected the building in order to provide a basis for the drawings that you were going to make?
- 15 A. Correct.
- Q. What kind, just tell us what kind of inspection did you make and where did you look and how detailed was it?
- A. Well I took a draughtsman with me as well and we walked round the outside. We looked at areas with Mr Fraser. We looked out on the smokers' area for some reason. We went up in the truss area. Yes we were up and down the stairs a fair bit.
- 20 Q. Right. And there wouldn't have been any cordons around the building at that stage would there?
- A. I think there might have been on the next door building.
- 25 Q. Right so around this building?
- A. No.
- Q. So you weren't hindered in terms of any access?
- A. No.
- 30 Q. And did you see any damage at all?
- A. Couldn't see any earthquake damage.
- Q. Okay. Any cracks?
- A. Yes.



Q. But nothing that concerned you?

A. No, probably more of the south wall than the other walls. The south wall wasn't plastered and the bricks were a little bit more exposed and you could see the warts that occurred over the years.

5 Q. The structural design that you completed on Mr Fraser's instructions note that or include new earthquake structural strengthening at roof line correct.

A. Correct.

Q. Now is that the bracing that you talked about earlier?

10 A. Correct.

Q. The steel bracing?

A. Correct.

Q. And you said that paragraph 21 "I may have advised Mr Fraser that the consent process could take longer if the bracing was not included in the plan".

15

A. Correct.

Q. So was there a discussion about whether that work should be done or not?

20

A. I pointed out that the north horizontal strut within the bracing system of the ceiling was what Holmes Consulting had designed to take the lateral load but I felt that it was better to take it more directly and therefore he was going to have to pay for those two RHS bits of steel.

Q. Have you seen his reply? It's in the material have you seen that?

A. Yes.

25 Q. And is that what you're in effect replying to when you say that about your conversation –

A. Yes I don't agree entirely with what he's got to say.

30

Q. Right. I was just going to ask you about that because he said after the first earthquake we discussed that for us to get the permits we needed through council faster we should put more steel into the roof space and say that it is needed for earthquake strengthening. That was not a necessity but a way for council to hopefully speed up the permit process.

A. He might not thought of it as a necessity but I did.

Q. Right okay. But that was his version of the same conversation obviously?

A. Yes.

5 Q. Right. But you considered that it was a necessity?

A. Yes.

Q. But given the work that was planned, rather than despite, even if that work hadn't been planned?

10 A. Well I would have thought any checking structural engineer at the council would have seen the cross bracing along that south wall and seen that it didn't actually hit the east wall and they would have queried that. They would have said well what is the lateral load system? Why isn't that complete along the south wall? And to have to explain that to the council that it was actually the north wall system that was meant to be taking most of the load would have just delayed things.

15 Q. What I'm getting at is that to be clear you're saying that it didn't need that extra steel unless you were doing what he wanted to do, the alterations he wanted to do?

A. That's correct.

20 Q. As it was it was alright, is that right?

A. Yes.

Q. And you said that you understand now that on the 30<sup>th</sup> of November Mr Fraser put a hold on the plans?

A. Yes.

25 Q. But back then you didn't know that?

A. No.

Q. And presumably you didn't know it even when the remedial work was done at the end of December?

A. No.

30 Q. By Mr Gordon?

A. No.

Q. And didn't know it presumably when there was some correspondence with the insurer in early February?

A. Agreed.

Q. So Mr Fraser obviously hadn't communicated that he was basically pulling out not buying the business and therefore not going ahead with the work, he hadn't communicated that to you?

5 A. Agreed.

Q. You heard some questions from His Honour to Mr Gordon about the, this consent process and Mr Gordon's evidence was that he was, his thinking was that the permanent solution to that, those remedial works could be incorporated into that consent that was generated by your design works?

10

A. Correct.

Q. Did you have anything to do with that once you got the file back?

A. Well the pathway was there for getting the consent through a bit quicker for the repair work and it would have been if it had to start from scratch for the building consent.

15

Q. I understand that but you heard reference to the email Mr Gordon had sent in on the 30<sup>th</sup> of December to the council referring to that which would happen in January. There wasn't any discussion between you and he about that happening?

20

A. No.

Q. And no discussion between you and Mr Fraser or anyone else on behalf of the owner to do that or to progress that?

A. No.

Q. So you were just waiting to hear if you did in fact whether it was going to be progressed?

25

A. I think it was a wee bit unclear to me who was owner of what.

Q. Right.

A. With Mr Fraser.

Q. Although you did I think note that it was your instructions were from Mr Fraser?

30

A. Correct, but I'm not sure that we were aware that he wasn't the owner of the land and the building. I think we were assuming that he was the owner of the land and the building as well.

- Q. All right. And you talked about the loss adjuster and some email correspondence with him. You don't recall who that was now?
- A. The loss adjuster?
- Q. Yes.
- 5 A. Yes we've got that on our email there.
- Q. Did you commence any work to do this permanent solution?
- A. No.
- Q. You discussed it I think 10 February was the date wasn't it that there was a request to carry out that work?
- 10 A. He was going to get back to us.
- Q. 10 February he advised that he wanted you to.
- A. No he said that we'll let you know if we want to move on it before that. There was no real appointment.
- Q. You say on 10 February the loss adjuster advised that he wanted us to provide a design for permanent repairs. I advised that it was to be at least a month before we could progress the instructions.
- 15 A. Yes. The wording was however we won't be able to get started for months longer if we get more damaging aftershocks.
- Q. Okay. So nothing had started anyway?
- 20 A. No.
- Q. We've heard some questioning about CPEng certification.
- A. Yes.
- Q. Can I just ask you for your comments? In this case it seems that Mr Gordon who at that time wasn't CPEng registered oversaw the work and it is detailed oversaw it then because he couldn't provide a CPEng certification got Mr Gifford who was CPEng registered to provide the certificate and did so by obviously talking him through and showing him the site report et cetera and showing him the photos and Mr Gifford signed it off he having had no involvement specifically at the site or anything like that. Is that a normal process?
- 25
- 30 A. Yes.
- Q. And it happens often?

A. Yes it's like subordinates of any profession or industry with people that are overseeing the work of others and sure the majority of the work might be done by one particular person. The person that takes responsibility for it has to be sure that they've done it right, that they've got have confidence in that person and they've got to know what their capabilities and abilities are.

5

Q. Right. My point was signed off by someone whose had no actual involvement in the work. That happens?

A. Yes.

10

Q. And it seems that this form, the standard CPEng form has to be altered because of that. Is that again a normal thing?

A. Yes, Chris was basically – up until about that time the council was accepting certificates from graduate engineers of reasonable experience and around about that time they started to ask for CPEng overview.

15

**JUSTICE COOPER:**

Mr Zarifeh, the form that Mr Gordon signed was not accepted by the council.

**MR ZARIFEH:**

20

No Sir, that's right.

**JUSTICE COOPER:**

And that is at 4.163 so while it's true that he did cross out chartered professional engineer –

25

**MR ZARIFEH:**

That's the form now.

30

**JUSTICE COOPER:**

That is the form that was altered. The form that was apparently accepted is at 4.166 I think. That's the one signed by Mr Clifford.

**MR ZARIFEH:**

Gifford.

5 **JUSTICE COOPER:**

Sorry Mr Gifford.

**MR ZARIFEH:**

Yes sir.

10

**JUSTICE COOPER:**

So that form didn't require any alterations.

**EXAMINATION CONTINUES: MR ZARIFEH:**

15 Q. Sorry I should have been clearer when I say alteration, is it a different form or is it the form produced in your office? Do you have it on word processor?

A. No we would have downloaded that from the council.

20 Q. Okay so I perhaps put you wrong there. So it's a different form then where it says under, see the words "Nathan Cook builders" about a third of the way down? It says "Personnel under my control have inspected the work and I am satisfied" that's slightly different wording to the one that Mr Gordon –

A. Yes that's right.

Q. Has said where he said "I have inspected".

25 A. Yes.

Q. So are the different versions of the same form then?

30 A. I think that's taken from the forms that we normally used for new work whereby, they're put out by the Master Builders and the Institute of Professional Engineers, the architects and Department of Building and Housing have developed their own forms for engineers to certify things whether it be a design or construction and I think Simon Gifford has

actually downloaded the forms from the council and then changed the wording to reflect what is the normal working for a producer statement.

Q. In other words the personnel under my control?

A. That's right.

5 Q. And just finally on this issue, is it normal practice to complete a CPEng certificate before the actual physical work, remedial work is completed?

A. No you'd have to be pretty confident that you know that five minutes after you left that it was complete or you would have to certainly go back and check before that certificate was acted on and if poss, if need be  
10 withdraw the certificate.

Q. Okay. And you wouldn't have any difficult signing off a certificate for an engineer under your supervision where you hadn't been to the building at all in effect signing off saying that the structural integrity of the building as a whole had been returned to 3 September when you  
15 yourself hadn't any visit to the building or any knowledge other than what you're told?

A. Not if there was someone of a calibre of Chris Gordon who certainly had no trouble getting CPEng qualification when the heat was put on a whole lot of engineers round Christchurch to do it very rapidly.

20 Q. And again that's an accepted practice.

A. Yes.

**COMMISSION ADJOURNS: 1.37 PM**

**COMMISSION RESUMES: 2.20 PM**

**MR ZARIFEH CALLS**

**GARRY REX LOOKER (VIA VIDEO LINK)**

5

**JUSTICE COOPER:**

Q. Mr Looker, can you hear me?

A. Yes, I can.

Q. I am Justice Cooper, good afternoon.

10 A. Good afternoon Sir.

Q. And on my left is Commissioner Fenwick.

A. Good afternoon.

Q. I understand you are now going to give evidence to us. Can I just ask you to make a promise to tell the truth, if you listen to what I will just say now and respond please. Do you solemnly sincerely declare and affirm that the evidence that you will give to the Royal Commission will be the truth, the whole truth and nothing but the truth?

15

A. I do.

Q. Thank you.

20 **EXAMINATION: MR ZARIFEH**

Q. Mr Looker, can you give your full name to the Commission please?

A. Garry Rex Looker.

Q. And you reside, I think, in Auckland normally?

A. Yes I do.

25 Q. And are you a director of Symphony Projects Limited?

A. Yes I am.

Q. And is Symphony Projects Limited, was it the owner of the building that was at 200 Manchester St known as the Iconic Bar?

A. I think the correct name is Symphony Projects Management Limited.

30 Q. Okay, sorry.

A. But yes it is.

Q. And are there any other directors of that company?



- A. Yes there would be, there would be another two or three.
- Q. What is your position in terms of the company then?
- A. I am a director still but the company for all intents and purposes has ceased trading.
- 5 Q. Was the company formed to purchase that building?
- A. No it had other operations, that company.
- Q. Well I just want to turn to the bldg that was at 200 Manchester Street, when did the company buy that?
- A. I don't know the exact date but I believe it was in 2007.
- 10 Q. We've heard about structural strengthening that was carried out in 1993 and then in 2004 so that was obviously before your company purchased the building. Was there any form of structural strengthening carried out that you're aware of after you purchased or your company purchased it?
- A. No, none at all.
- 15 Q. Were you aware of the council's earthquake-prone requirements for older buildings?
- A. Well, not personally, not in detail. No.
- Q. Did you ever give any thought to those matters in relation to that building?
- 20 A. Well no more than we normally would have, no.
- Q. Just tell us about the day-to-day management of the building back in September, at the time of the 4<sup>th</sup> of September earthquake in 2010. Did you have someone called Daryl Fraser who was a manager or bar manager, I don't know what his title was, who was effectively looking after the business and the building?
- 25 A. That's correct. Daryl was responsible for the operation of the bar plus the building.
- Q. And following the 4<sup>th</sup> of September earthquake did you have any contact with him about the state of the building and what was to happen to it?
- 30 A. Yes we did, I mean I think the 4<sup>th</sup> of September was a Saturday from memory.
- Q. That's right.
- A. I might be wrong.

Q. No you're right.

A. But a day or two later we contacted Daryl to find out what was happening and he told us of, what was going on in Christchurch and the engineers that were all going around looking at buildings et cetera.

5 Q. Were you aware that he got someone from Holmes Consulting Group to look at the building on the 8<sup>th</sup> of September?

A. I was aware that he, an engineer's report had been arranged, well an engineer had been arranged to inspect the building. The fact that it was Holmes Consulting, no I wasn't aware it was them but it was detail.

10 Q. And were you aware of the result of that?

A. My understanding was that the building itself was given the all clear. It was, had not incurred any damage.

Q. Were you aware of Christchurch City Council inspections on the building after September or not?

15 A. No, no, I wasn't. My understanding that Holmes' inspection was actually for the council or arranged in accordance with the council's requirement.

Q. We've had produced some plans, structural engineering plans that were prepared in November 2010 on Daryl Fraser's instructions. Was he looking at buying the building and the business from the company?

20 A. He was looking at buying the business in that period and one of subject you know following your investigations I've become aware that he was looking at changing the building if he in fact went ahead with the purchase of the business.

Q. So were you not aware at the time of him going to a structural engineer?

25 A. No, not at all.

Q. Did you have anything to do with that at all?

A. Not with the structural engineer part, no. I mean, I had spoken to Daryl about possibility of him buying the business but that was as far as it went.

30 Q. So he didn't end up buying it but you ended up selling the business to a Leanna Christie, correct?

A. That's right, yes that's correct.

Q. Were negotiations going on at the end of 2010 in relation to that?

- A. Yes that would be about right, just before Christmas from memory.
- Q. And that was to purchase the business?
- A. That's correct, just the business, yes.
- Q. So those negotiations would have been pending as at Boxing Day?
- 5 A. Yes, my recollection would be right, yeah, they would still be pending at Boxing Day.
- Q. Did you become aware of damage caused to the building after the Boxing Day aftershock?
- A. Yes I did. Obviously Daryl contacted us, the exact day I can't remember,
- 10 probably Boxing Day and told us that the building had incurred a little bit of damage that time.
- Q. And is that how he described it, a little bit of damage?
- A. Oh, his exact words obviously I can't remember but he did say that it wasn't too bad, that it was repairable.
- 15 Q. I think you have been shown an email from you to Leanna Christie of the 28<sup>th</sup> of December where you said, "Apparently there has been some minor damage to one of the walls which is currently being fixed. They are hoping to re-open again tomorrow." Do you recall sending that?
- A. Yeah, well, yes, I've got a memory of reading it there, yes.
- 20 Q. So was that information you had from Daryl Fraser?
- A. Yes, well, that would be the only source of information would have been Daryl, yes.
- Q. And did you effectively leave him to look after the business but also the building and any matters that needed attending to between September
- 25 and February earthquake?
- A. That's right, yes.
- Q. Did you understand that the repairs were completed?
- A. That was my understanding, that the repairs were completed you know within a day or two after the event.
- 30 Q. And again that's from Daryl Fraser?
- A. That was from Daryl, yes.
- Q. Did you receive anything from the engineers?
- A. Not personally, no.

Q. Did you receive their site reports or anything like that from Mr Fraser?

A. No, no, I didn't.

Q. Were you aware that the repairs to the building were temporary?

5 A. I was aware, tried to recollect, I was aware that there possibly long term it would require further work done but that the repairs that had been done in the interim were sufficient for a building to be able to be occupied.

1430

Q. Did you pass that information on to the purchaser – to Miss Christie?

10 A. Oh look personally I don't recollect but I'm sure I did. Leanna was doing a lot of her own investigation too.

Q. Right but it hadn't changed hands then had it?

A. No, no. I think from memory it was the 1<sup>st</sup> of February Leanna actually settled on the business.

15 Q. Okay so the repairs was the company's responsibility at that point wasn't it?

A. Oh yes definitely it was our responsibility, yeah.

Q. And presumably you assured her that everything was fixed up and it was open again and there were no problems?

20 A. Which I would have because that was my understanding of the situation.

Q. Okay and who told you about the fact that it was temporary and it would require a permanent solution at some stage subsequently?

A. Um, I'm trying to recollect. It would have obviously been Daryl and exact details I'm sure if the insurers were involved at that point in time. I know the insurance company had been notified and were paying the contractors that did the work directly.

25 Q. And in terms of the long-term solution did you have any involvement in getting that going or asking for that to be progressed?

A. I don't remember having put those steps in place and then given the events obviously overtook it.

30

**CROSS-EXAMINATION: MR ELLIOTT**

- Q. Just to confirm your company owned the building and operated the business trading in the Iconic Bar?
- 5 A. Yes that's correct.
- Q. And so Mr Fraser was your employee?
- A. Yes he was.
- Q. Bar Manager was his position?
- A. Technically, yes.
- 10 Q. What hours of operation did the Iconic Bar have?
- A. It didn't, it was just the bar. That was it.
- Q. It was open all the time was it?
- A. It was open normal pub trading hours yes – five, six days a weeks.
- Q. And what was its capacity?
- 15 A. You mean occupants?
- Q. How many people?
- A. I can't remember. I think it was sort of circa 400 would have been its licence.
- Q. Is that the sort of number of people you would have been expecting there on New Year's Eve?
- 20 A. Um, yes, normal trading, yes.
- Q. Following the September 4 earthquake in 2010 and then the ongoing aftershocks did you have any concerns about the safety of people within that building?
- 25 A. Um, I suppose we had the same concerns as everybody did, yes we did.
- Q. What did you do about those concerns?
- A. Well my understanding is we've had the engineer's reports and the building had been inspected and signed off. I'm not sure what else there was to do.
- 30 Q. As I understand it you thought that the engineer's report was something the Council had initiated. That's what you said. I'm just wondering

whether you thought you might have initiated some enquiries yourself from an engineer?

A. Um, from my memory we didn't initiate any ourselves. As it happened Daryl appointed or one of our staff appointed Holmes Consulting.

5 Q. You had no knowledge of Fraser commissioning an engineer in November 2010. Is that right? That's what you said?

A. That's correct. The first time I knew about it was when I was contacted by the Commissioners.

Q. Do you know who paid for the application for the building consent?

10 A. As I say the first time I knew about it was earlier this year or late last year when you made me aware.

Q. So your company didn't make any payments for the consent or any amended consent at any point?

15 A. No we never made payments, especially not to my knowledge. We had no interest in doing what Daryl was looking at doing.

Q. The sticker for the building or the notice from the Council is dated 27 December 2010 and the building was open for business by New Year's Eve. Can you give any explanation, and it's not a criticism, but can you give an explanation about how it happened so quickly?

20 A. Um, well I mean my understanding was the building had been inspected and we'd been given the all clear to re-open the business and like all the businesses were just re-opened. I don't see why you mean so quickly. It had been inspected.

25 Q. Did you have any direct dealings with the Council yourself or did someone else take care of that for you?

A. Someone else took care of that for us.

Q. You said in your evidence that you had no knowledge of a notice from the Council under section 124 of the Building Act, is that right?

A. That is correct. I've still not seen that notice.

30 Q. That notice is addressed to Symphony Projects Limited, P.O. Box 5560 Wellesley Street, Auckland 1141. Is that the company's post office box number?

A. Yes it is.

Q. That is not the Registered Office of the company for Companies Act purposes is it or don't you know?

A. No a P.O. box wouldn't be the Registered Office.

5 Q. The Registered Office is Level 1, 32 Market Place in Auckland. Is that right?

A. Yes it would be.

**CROSS-EXAMINATION: MR LAING – NIL**

**CROSS-EXAMINATION: MR MCLELLAN – NIL**

**CROSS-EXAMINATION: MS MORGAN**

10 Q. Mr Looker your evidence was that you received no advice or anything from an engineer following the Boxing Day aftershocks. Is that correct?

A. That's correct yes.

15 Q. I'm not sure what documents you have in front of you but if I could have brought up please it's BUIMAN200 0007.RED4. Do you have documents in front of you Mr Looker?

A. (no audible answer 14:38:56)

Q. Do you have a copy of the letter that you wrote to Mr Zarifeh on the 21<sup>st</sup> of September?

A. Sorry.

20 Q. Do you have any documents in front of you?

A. No I don't, sorry.

Q. You don't have a copy of the letter you wrote to Mr Zarifeh on the 21<sup>st</sup> of September, presumably last year?

A. Yes sorry I do. I thought you meant on the screen, sorry.

25 Q. On the second page of that letter at paragraph 5 you refer to inspection and reports from Lewis and Barrow, they're the engineers, and they were attached to your letter to Mr Zarifeh?

A. Yes.

1440

30

Q. Have you got a copy of the site report Mr Looker dated 28 December 2010?

A. I do now yes.

5 Q. And at the bottom of that site report it refers to the work being of temporary, the work being temporary to make the building safe and that longer, the brick wall above the truss would need to be removed.

A. That's right.

Q. So you were aware of the need or the advice for more permanent work?

10 A. As I said I didn't see this report back then. I remember Darryl and I discussing it that yes long term it needed further work.

Q. And you instructed, you made a claim under your insurance policy?

15 A. Yes. My recollection is vague mainly because I haven't been involved and I was, I was very little involved back. My memory suggests yes that the insurers and everybody were looking at it and trying to work out what to do.

Q. And you expected the insurers to follow up?

A. Yes.

**COMMISSIONER FENWICK – NIL**

20

**JUSTICE COOPER – NIL**

**WITNESS EXCUSED**



**WARREN LEWIS (UNDER FORMER OATH)****CROSS-EXAMINATION: MR ELLIOTT**

- 5 Q. Mr Lewis, photograph to be brought up BUIMAN200.0004.178. That's a photograph showing fairly graphically the western wall of the building following the February earthquake. Have you read the report prepared by Peter Smith for the Royal Commission?
- A. Yes.
- 10 Q. So you're aware of Mr Smith's statement that the north and west walls appear to have disintegrated under the severity of shaking leaving the epoxy fixings projecting from the steel work at roof level. Do you agree with that statement?
- A. Yes.
- 15 Q. Mr Gilbert's family would want to just understand a bit more about that mechanism of failure of what it means and also there may be lessons that can be drawn for those buildings around the country that are unreinforced masonry. I'm just going to ask you about this particular brick wall. Am I right in saying that it's literally bricks and mortar up to the roof with no reinforcing or anything down through them, purely bricks and mortar alone?
- 20 A. It's been plastered around the outside but apart from that it's bricks and mortar.
- Q. Would the plaster have provided any strength?
- A. For the thickness that it is you know based on the thickness of it it was stronger than the bricks.
- 25 Q. Stronger than bricks?
- A. Yes it's about 25mm wide and it probably gave more strength than 25mm of brick work but itself the brickwork would have done most of the work but if you want something stronger than the brickwork straight cement and mortar plaster would be stronger on a same width basis.
- 30 Q. Were the number of layers of bricks vertical layers less on the upper floor than the lower floor?
- A. I'd have to refer to my plans on that one to remember that one.

Q. In a brick wall like that is the resistance, the resilience provided solely by the strength of the bricks and the strength of the mortar or is there something else that provides strength?

A. No it's the bricks and mortar plus a little bit contributed by the plaster.

5 Q. And was there any particular strengthening of any other form that you can point out to that western wall as at September 2010?

A. Not intentionally. The wall around the smokers' area there has obviously held up better than the bricks and that have might have been taking some lateral load.

10 Q. So just to understand it you can see at the top of this photograph just to the right some metal beams horizontally. that's where the top of the wall would have been attached?

A. Correct.

Q. And you can see it's come away there from the points it was fixed.

15 A. I think the other thing that perhaps people are drawing not all the conclusions that they can is that when you look at those epoxied in bars it's not the epoxy you're looking at it's what they were sticking on to. What they were into was actually not bricks and mortar. They were into the cornice blocks which were made of Oamaru stone.

20 Q. So does that mean the attachment between the cornice blocks and the bricks would also be important?

A. Well that would have been mortar between bricks but when you go round the corner which is lower you'll see that angle slopes off down to the right. When you go round the corner that angle is at a lower level so  
25 it's not, doesn't have a cornice. The bricks are actually, the fixings were into the brick. You'll see that those fixings when you look at another photo are actually red so what's actually happened is the epoxy has pulled out of the brick and taken some of the brick with it. The same as the epoxy here has pulled out of the Oamaru stone and taken some of  
30 the Oamaru stone with it. It's not that the glue, the epoxy didn't adhere to the Oamaru stone or didn't adhere to the brick. It's a different mechanism to what Mr Smith says.

1450

Q. Well I think he's here so he can comment upon that. Is there anything else you want to say on that point about Mr Smith's comments while we're on the topic?

5 A. The only other one is that recent years this has been sort of the accepted way of doing that and I mean probably in the last 20 years. Prior to that people used to put bolts right through the wall and put what we called a boss on the outside which is usually a cast round piece of steel, quite heavy, quite well reinforced, and that meant that when you bolted right through the wall you put this big washer on the outside and  
10 you bolted that up that you got a much better attachment to the brick wall than you did with these. The reason these are being used is that the heritage planners didn't like having things attached to the outside of the building that took away from the beauty of their building so they, the council heritage planners stopped approving that sort of fixing, possibly  
15 20 years ago.

Q. Was the internal side of that upper level lined? The internal side of the wall?

A. Yes.

Q. If one was wanting to know something about the strength of the wall  
20 would one want to find out something about the mortar and its state?

A. (no audible answer 14:41:29)

Q. Sorry, you need to state your answer rather than nodding.

A. I think when we did the work in 2004 I don't think there was many linings on the walls, the upstairs was pretty decrepit, and the, you know, I can't  
25 remember how strong the mortar was but it was certainly exposed to view in many places.

Q. If there were linings in place around Boxing Day 2010 internally they would have needed to be removed to look at the state of the mortar internally, is that right?

30 A. Yeah.

Q. And you can't judge it from the outside either because there is plaster?

A. Correct.

Q. You've made reference to the report from Holmes Consulting Limited which I think you said that you're aware of?

A. Yes.

5 Q. When you looked at the building? Just going to refer you to one section of that BUIMAN200.0004.25, third paragraph could be highlighted please? That talks about the capacity of the primary load supporting elements, that is the perimeter walls?

A. Correct.

10 Q. And the resistance in plane forces being adequate but it says, "The exception to this is the wall forming the Manchester Street frontage at ground floor level," and mentions that is due to the large glazed shop front openings and therefore there is a significant shortfall in load carrying capacity. Am I right in saying that that was then addressed by carrying out some work as described at the ground floor level?

15 A. Yes they put in a fairly heavily reinforced concrete frame over the entrance.

Q. There were window openings on the upper level of that Manchester frontage and I am just wondering whether that might have meant there was a shortfall in load carrying capacity to that extent?

20 A. There's certainly more wall upstairs than there was downstairs, a lot more wall.

Q. Is that something that you considered when you were looking at the strengthening work at that time?

25 A. Probably was but I can't remember doing it. I think I looked at the elevation, certainly since the collapse I've looked at the elevation and it's very obvious, before all the failure, the photos before the failure and it's fairly obvious there is a lot more wall upstairs than there is downstairs which is what is being stated here.

30 Q. Mr Smith makes the point that the building was likely to have been subjected to a ground accelerations of 0.9G. Would you agree though that that western upper wall was prone to failure at ground accelerations less than 0.9G?

A. Correct.

Q. And he says the building was strengthened to a lateral load co-efficient of .42G?

A. Correct.

Q. So I appreciate these numbers are theoretical and one can't –

5 A. Yes.

Q. – there are limitations but in theory at least that accelerations of more than .42G this wall was prone to potential failure?

10 A. Yes. There is safety load factors and material factors that we use that might pull that .42 up somewhat but then those load factors are meant to account for material, workmanship, the variability of earthquakes, and everything else so you can't really say that it's above .42 but...

Q. And this wall would not have complied with the sort of strength requirements of a current code?

A. No.

15 Q. Given that and given the Boxing Day event and the damage, I'm just going to ask you about the evidence Mr Gordon gave and ask you to comment on it. He gave evidence that his focus was on damage and he explained why and he said that he didn't consider the capacity of the building or any part to sustain aftershocks which is really a separate  
20 question, and he didn't recommend a detailed report. You can probably imagine that Jaime Gilbert's family is struggling to understand why an engineer would not look at that wider question of the capacity of the building as opposed to confining the question to damage. Can you comment on that or explain to them why that was the case?

25 A. Engineers were having meetings about once a fortnight in Christchurch to discuss what their findings were, what they were learning, what they were coming across, trying to give each other hints and so on, so there was a big learning curve after September and a lot of sharing and swapping of information et cetera, some of which wasn't always correct,  
30 and there was a general confusion as to what we should be condemning buildings or closing buildings or what level you put a yellow, green or red on but by December it was pretty well narrowed down that if the building had suffered damage that you had to bring it back to at least

that level by in your repairs and that was pretty much common shared information amongst all the engineers in Christchurch that were working on earthquake recovery.

5 Q. Was that something that engineers arrived at independently or in conjunction with the council or some other governmental body?

A. Well the Council, Department of Housing, the universities, GNS, most Government departments were represented, certainly the councils were represented. It was run by the university so it was a pretty good consensus at that time.

10 Q. There were formal meetings?

A. Sorry?

Q. Were there formal meetings with agendas and minutes and so on?

A. There were, yeah, there was meetings on the websites, there was notices of meetings sent out a day or two before and there was probably up to 400 people at those meetings.

15 Q. Thank you.

#### **CROSS-EXAMINATION: MR LAING**

Q. Mr Lewis, could I ask you to turn to paragraph 6 of your evidence? Have you got that in front of you still?

20 A. Yep.

Q. Paragraph 6?

A. Right.

1500

25 Q. You say that the building was struct – was originally one building. Can I ask you to look at Mr Smith's report – BUIMAN204.0012.2. Under the description of the property, the second sentence, "The Iconic Bar occupied two buildings constructed on separate lots adjoining a common party wall." Can you help me, from your own observations of the building, as to whether it was one or two buildings originally?

30 A. I thought it was one building. The architecture looked of a fairly similar style and they shared a wall.

Q. Had you had any personal observations the building before had been renovated around 2004?

5 A. Yes I can remember that building being Haines Motors which were the Hillman and Hunter distributors in my younger days and the single-storey portion was a workshop. The two-story portion was the showroom.

Q. And looking at the brick wall, this is the east gable wall that fell down, did that look like it was a party wall or did it look like it was an internal wall?

10 A. No that looked like it was a party wall.

Q. Would that then suggest it was two buildings originally?

A. Where do you differentiate between one building and two buildings? It's one building but it's divided into two.

Q. So when you say 'party wall' do you mean an internal wall?

15 A. Yes.

Q. Just going back to some questions that Mr Elliott asked you about, the evolution of the learning following September 4 earthquake. You refer to the fact there was a group of people represented by the University, DBH, what was the assumption, perhaps I'll just ask you another question first. Were you at all involved with the development of the CPEng certification form?

20

A. No.

Q. What was your understanding when, from that form as to the base position? Was it a moderate earthquake in September 4?

25 A. I had nothing to do with the forming of that form.

Q. No, but you said that the intention was to restore the building to a state prior to 4 September?

A. That's correct.

Q. So you're not aware of what the assumption was made as to the September earthquake?

30

A. Well I presume the Council went away and developed that form after listening to the likes of the structural group meetings but also their own staff would have advised them as well.

Q. Certainly but you had no involvement with that?

A. No.

Q. But you did use that form?

A. Yes.

5 Q. And I take it you understood precisely what that form meant. There's no question about that?

A. Only by reading the form.

**CROSS-EXAMINATION: MR MCLELLAN – NIL**

**CROSS-EXAMINATION: MS MORGAN – NIL**

10

**COMMISSIONER FENWICK:**

Q. Just one quick point that Mr Elliott raised. Can we see 0004 130 please. In section 3 on the top right-hand side you show a beam coming into a wall and there's a similar illustration on section 6 as well. Section 3 you have a timber beam coming into a wall. Is that notched into the wall or what is that? You can see the packer on the outside there, timber packer, but what's the bit behind the packer. Is that a...

15

A. That's the ceiling joists and they're at 450 centres so it's not just one beam. There's a lot of them and they're just, um, normal practice was to seat them about 50–100mm onto the brickwork and build the brickwork around them.

20

Q. So you cut into the brickwork there?

A. Well looking at the way they used to make them, looking at what they look like, it looks like the bricks are brought up to a certain level, they put the floor joists on and then they put the bricks around them.

25

Q. Thank you for explaining that. So the lateral load resistance for forces out of plane of the wall, the wall is being held by that epoxy bolt into the angle so the lateral force from the wall being transmitted through that bolt into the angle by flexure through the angle and by nails which go into the packer and perhaps one nail into the –

30

A. Joist



- Q. – 300 x 50 joist and then the load is then carried back through and sideways to the side walls?
- A. That's correct.
- Q. And the packer is attached to the member by a skew nails or what?
- 5 A. Skew nails.
- Q. Are you surprised that it was the bolt which pulled out of the wall failing that? Does that come as a surprise to you that was the weak link rather than the nails or the angle?
- A. In that particular detail what I haven't show is the angle underneath
- 10 which virtually duplicates what we're seeing there.
- Q. That has a bolt on it as well does it?
- A. Yes.
- Q. So another bolt came through so there are two bolts in effect taking the load from the wall into the timber member?
- 15 A. And that's what, you know, there's twice as many holding the floor as there were the ceiling diaphragm.
- Q. But when we look at the diagrams, at the figures, you only see the top angle in place don't you. That just means the other angle has come off and disappeared into the rubble does it?
- 20 A. The photos that we saw show that the brickwork has come down to near this level but this is floor level not roof level.
- Q. Right so what happened at roof level? Did you have the similar sort of detail?
- A. Yes. That's on the other page I think on the one that shows the
- 25 horizontal trusses. [ref: suffix 129]
- Q. There's one angle shown there, not two. Is that right?
- A. That's it.

**WITNESS EXCUSED**

**MS MORGAN CALLS****SIMON GIFFORD (SWORN)**

Q. Your full name is Simon Frederick Gifford?

5 A. Yes.  
1510

Q. And you're a chartered professional engineer with a specialty in structural engineering, you're a member of the Institute of Professional Engineers, and you have worked at Lewis and Barrow since 1993?

10 A. Yes.

Q. And you have prepared a brief of evidence for the Commission?

A. Yes I have.

Q. Do you have that in front of you?

A. Yes.

15 Q. Could you please begin reading from paragraph 3?

**WITNESS READS BRIEF OF EVIDENCE**

A. "In December 2010 my colleague Chris Gordon of Lewis and Barrow was engaged by the bar manager of the Iconic building at 200 to 204 Manchester Street to address damage to the building incurred in the  
20 aftershock on the 26<sup>th</sup> of December, 2010. In particular bricks had fallen from the east gable wall parapet. The Christchurch City Council had issued the building with a red placard on the 27<sup>th</sup> of December, 2010. I am aware that Mr Gordon inspected the building on 28<sup>th</sup> of December, 2010. His investigations revealed damage to the east gable and wall.  
25 Mr Gordon provided structural details for interim repair. Mr Gordon's site report is dated 28<sup>th</sup> of December, 2010. Mr Gordon recommended repairs allowing for the temporary support of the damaged wall which would repair it to the strength it had before 4<sup>th</sup> of September, 2010. Mr Gordon noted that the brick wall above the truss bottom chord level  
30 would need to be removed and rebuilt with a suitable structure for long-term support. Mr Gordon inspected the repair work on the 29<sup>th</sup> of December, 2010. At the time of Mr Gordon's inspection the framing and plywood was in place between the end trusses to the affected east wall.

Mr Gordon's findings and some additional structural details are recorded in his site report dated the 29<sup>th</sup> of December, 2010. Mr Gordon asked the council to remove the red placard from the building on the 30<sup>th</sup> of December, 2010, yes 2010 that should be. I understand that the council  
5 required a statement addressing the repair work from a chartered professional engineer. Although an experienced civil engineer Mr Gordon was not chartered at the time so I reviewed the details he had prepared and we discussed the finished work in depth. Following my review of the file and my discussions with Mr Gordon I provided the  
10 necessary statement on the 31<sup>st</sup> of December, 2010. As the form required by the council notes, the intention of the repair work was to restore the buildings to a level of strength they had before the earthquake on the 4<sup>th</sup> of September, 2010. I was satisfied that the remedial work achieved that objective and provided adequate support to  
15 the damaged area. I discussed the repair strategy with Mr Gordon and reviewed his notes. While I became chartered in 2003 this was the first time I had signed off another engineer's work. Accordingly I took the matter seriously. It is my opinion that the structural details Mr Gordon prepared were well conceived and more than adequate to restore the  
20 strength of the east facing wall and that they would in no way have impaired the strength of the rest of the building. I also considered that Mr Gordon was the best person to inspect the completed work given that he was familiar with the configuration of the damaged wall and the nature of the damage and because as the designer he knew best what  
25 needed to be achieved by the repair work details. The statement I provided explains that I was aware of all measures that had been carried out by Nathan Cook Builders to secure or strengthen the building. I noted that personnel under my control had inspected the work on completion and that I was satisfied on reasonable grounds that  
30 interim securing methods had been, methods had been taken to restore the structural integrity and/or the structural performance of the building to at least the condition that existed prior to the earthquake on the 4<sup>th</sup> of September, 2010. The form also records that potentially dangerous

features of the building such as unreinforced masonry chimneys, parapets and walls had been removed or secured so that their integrity and level of structural performance was consistent with that generally achieved in other parts of the building and so reduces the danger to people's safety and of damage to other property. In this case that was the reference to the damaged east wall. I recorded 198 Manchester Street as having potentially dangerous features which threatened the Iconic Bar building. It is widespread practice for engineers who have an engineering degree but have not yet become chartered carry out their work with the oversight of a chartered engineer who ultimately provides certification of the work. The degree of oversight is relatively intensive in the case of the recent graduate becomes less so the graduate gains in experience and competence. Typically after five years or so graduate engineer will have amassed enough experience to apply to become chartered although a substantial number of engineers do not do so as it has little or no effect on their responsibility or work activities. Mr Gordon has had 18 years' experience having started at Lewis and Barrow shortly after I did. He became registered as a chartered professional engineer during 2011 along with a large number of qualifying engineers under the initiative of the Institute of Professional Engineers who sought to increase the number of engineers available to work on damaged buildings in Canterbury."

Q. Mr Gifford, what was your understanding of the status of the repair work when you signed the certificate on the 31<sup>st</sup> of December.

25 A. My understanding was that it had been completed.

Q. You've heard Mr Gordon's evidence this morning that there were two steel, two of the steel braces were omitted when he'd last seen it on the 30<sup>th</sup> of December. How critical would those two braces have been to the overall solution that was being implemented?

30 A. They were, because of where they were they were, probably fair to say they had half of the length of the ones closest to the apex and I would expect the amount of bending moment that they would have to take would be about an eighth so really there would be an argument for not

having the probably the last two or three or four of those. It's really the ones right at the apex that were critical.

**CROSS-EXAMINATION: MR ZARIFEH**

5 Q. Mr Gifford, when you signed the certificate that you signed you were signing on the basis that work had been completed, that was your understanding as you said?

A. Yes.

Q. And you said that you looked at the file for the building. Was that the proposals in November 2010 or was it the strengthening in 2004?

10 A. It would have been the file from 2010.

Q. Okay. But you didn't yourself go to the building from what you said?

A. No.

Q. And you relied obviously on what Mr Gordon told you. Did he tell you anything about inspecting the rest of the building apart from the wall?

15 A. Yes he did. We, we discussed his inspection of the building among other things but in quite some depth. I noted in my statement that I, that was the first time that I had ever signed off the work of another engineer and so I took it very seriously to the point of possibly annoying him really and definitely more than would be the case say if a producer statement  
20 if a construction review was being signed that level of scrutiny wouldn't usually be applied.

Q. And was it your understanding that when you're certifying, when signing that certificate you were certifying that the structural integrity of the building as a whole was, had been restored to pre 4 September  
25 level?

A. Yes.

**CROSS-EXAMINATION: MR ELLIOTT**

Q. How do you know what that 4 September level was?

A. I'm sorry I don't understand the question.

30 Q. Well the certificate required a comparison between current and what it was at 4 September.

A. Yes.

Q. I'm just wondering how you knew what the state of the building was at 4 September before that earthquake?

5 A. I knew that strengthening work had been done because Chris and I discussed that at the time and any weakening of the structure was, would have been due to damage and the only damage that was identified was that to the east gable wall.

Q. I see. So it's that focus on damage again that we've heard other witnesses talking about thank you.

10 A. Yes.

**CROSS-EXAMINATION: MR LAING**

Q. One matter. You say it was the first time that you had signed off on the work of another professional so I take it that relates to the inspection work?

15 A. Well of any work actually. I'm not a partner in Lewis and Barrow and producer statements are only signed by the partners so for that reason I've never signed a producer statement. I have signed letters in my capacity as a chartered engineer but it's been for my own work but this is the first time I have signed –

20 Q. Are you saying though that a director of your company would sign off on your work –

A. Yes.

Q. In a producer statement?

A. Yes.

25 Q. So what was happening here was that you not being a director of the company would not normally sign off any certificates that were going to an external source?

A. Not a producer statement but this wasn't a producer statement and also it was with the knowledge of Warren Lewis the fact that I don't sign producer statements. It was just by agreement with Warren Lewis that  
30 the procedure is that only partners sign producer statements but that's the only basis for that.

Q. In this case sorry you were satisfied that there had been discussion with Mr Lewis?

A. Yes.

5 Q. That work had been done and that Mr Gordon was a very senior professional?

A. He is. Our desks are about three metres apart and that's how it's been for the past 18 years. We're very familiar with each other's work and we're not afraid to offend each other and you know we've got a very good working relationship and I am very confident that I can have a clear expectation of what to expect you know with Chris's work but  
10 nevertheless as I said I, it was the first time I'd ever signed anything and I grilled him.

**RE-EXAMINATION: MS MORGAN – NIL**

15 **COMMISSIONER FENWICK – NIL**

**JUSTICE COOPER – NIL**

**WITNESS EXCUSED**

**MR ZARIFEH CALLS****MARK JOHN MCKENZIE (AFFIRMED)**

Q. Mr McKenzie, can you give your full name to the Commission please?

A. Mark John McKenzie.

5 Q. Thank you and you are employed by Contract Construction?

A. Correct.

Q. As a site foreman?

A. Yes.

10 Q. And were you in that position when work was carried out on the  
Iconic Bar in August 2004?

A. Yes.

Q. Have you got a copy of your signed statement in front of you?

A. Yes I have.

15 Q. Can I ask you to read that please from paragraph 2 "I am a  
tradesman..."

**WITNESS READS BRIEF OF EVIDENCE**

A. I am a tradesman carpenter with over 20 years' building experience. My  
role as site foreman was to organise, oversee and carry out internal fit-  
out alterations and other related work to the existing bar and restaurant  
20 areas on the ground and first floor of this building. The work included  
structural upgrading of the floor and roof trusses on level one. The work  
was detailed on plans and specifications provided by the project  
engineers Lewis and Barrow Limited, Consulting Engineers. The  
strengthening work on level one involved installing steel angle braces to  
25 the perimeter walls to provide added support to the floor and providing  
steel braces to the existing roof trusses. The steel angle floor and truss  
braces were fixed to the external masonry walls using chemically  
anchored, epoxy, steel dowel. The steel dowells are installed correctly  
in accordance with the specification and manufacturer's instruction. The  
30 above work was inspected and passed by Lewis and Barrow Consulting  
Engineers and the Christchurch City Council building inspectors  
following which a code of compliance certificate was issued for the  
public use of this building.



Q. Thank you. A couple of matters. You've seen, you've been sitting here and watching, you've seen the plans and you know the elevation, the situation of the building.

A. Yes.

5 Q. Can you tell us, were you involved in overseeing the fixing, those epoxy fixings on all of the sides or only some in particular?

A. In certain areas I put some of them in myself and supervised others putting them in, showed them how to do it so it was all done as needed to be done.

10 Q. Okay. And along the west, that's the Manchester Street façade, were you involved in that?

A. Yes but only in, a lot of those were existing from work that had already been done.

Q. That's the 1993 work?

15 A. Yes.

Q. Right. And you've heard Mr Lewis giving evidence about that, about seeing that the work that had been done previously?

A. Yes.

20 Q. Were you in a position to assess that work, those bolts and whether they were still, appeared in good condition?

A. When we were doing other work if we noticed if there was anything we would have picked up on it.

Q. And what would you have done?

A. Well would have notified the engineer if there was something.

25 Q. And how much experience had you had back in August 04 with this kind of epoxy fixing?

A. Well basically since I started building I've used them in jobs so I mean I've had over 20 years' experience now so we're talking about 12 years' experience.

30 Q. Have you read the report from Peter Smith or that section where he talks about the epoxy fixing?

A. I've seen a bit of it yes.

Q. Right. Have you got any comment about that?

A. No I mean we did it all according to the manufacturer's specifications and guidelines so all the holes were drilled at the right diameter as per plans. They were all blown out and the epoxy was mixed accordingly to what was required and inserted.

5

**COMMISSIONER FENWICK:**

Q. Yes you said you blew the holes out what with?

A. We had, at times we had a compressor there with a nozzle that could get right in. Other times we had a Hilti device which was designed specifically for blowing the holes out like an air pump.

10

Q. You had a filter on the device you blew out the holes?

A. Sorry.

Q. You had a filter did I hear you say?

A. No, no not a filter, a compressor.

15

Q. You had a compressor and that supplied compressed air?

A. Yes.

Q. And you used that direct to blow the holes out?

A. Yes.

Q. What sort of compressor?

20

A. It's an electric air compressor.

Q. How did you remove the oil from the air?

**MS MORGAN:**

I think the word you were looking for was a Hilti. It was the Hilti gun.

25

**COMMISSIONER FENWICK:**

A. Hilti like an air pump. It's an especially designed one for blowing.

Q. It had an oil filter on it did it?

A. It's a pump thing. It's one you get from Hilti. I'm not sure what the exact term for its called but it's for, designed for blowing out holes so you don't contaminate the hole with anything.

30

**WITNESS EXCUSED**

**COMMISSION ADJOURNS: 3.29 PM**

**COMMISSION RESUMES: 3.48 PM**

**MR MCLELLAN CALLS**

**JOHN WILLIAM MITCHELL (AFFIRMED)**

Q. Your name is John William Mitchell?

5 A. Yes.

Q. And you are a structural engineer of Auckland?

A. Yes.

Q. Do you have your brief of evidence in front of you?

A. I do.

10 Q. Could you read it from paragraph 1 please?

**WITNESS READ BRIEF OF EVIDENCE FROM PARAGRAPH 1**

A. "I hold a Bachelor of Engineering (Civil). I am a member of the Institute of Professional Engineers of New Zealand Civil and Structural. I am a chartered professional engineer and have six years' experience as a professional civil and structural engineer. I am employed by Opus International Consultants Limited as a civil and structural engineer. In December 2010 I was seconded to the building recovery office of the Christchurch City Council. I was tasked with reading incoming engineering reports and requests from engineers external to the council and recommending a course of action for the council. In relation to the 200 Manchester Street building I had a few telephone conversations with Chris Gordon and Simon Gifford of Lewis and Barrow in relation to their report and associated requests submitted to the council. I did not keep records of those conversations but my recollection is that they related to the requirement for sign off of reports and recommendations to be by a CPEng qualified engineer. I have seen a certificate provided by Chris Gordon, dated 30 December 2010, together with an email of the same date setting out the works that had been carried out and requesting that the red sticker be removed. As Mr Gordon noted he was not CPEng qualified. I believe that I advised him that a CPEng certificate would be required."

15

20

25

30

Q. Can I just stop you there for a moment and I will just take you to these one other document? BUI.MAN200.004.163. So that is the certificate that you received from Mr Gordon firstly?

A. Yes.

5 Q. And if we go back one page, that's the covering email that you received where Mr Gordon explained in the second to last paragraph that he's not CPEng?

A. Yes.

Q. Do you see that?

10 A. Yeah.

Q. Can I also just ask you to confirm that the document at .164 namely Mr Gordon's site report was also received by you?

A. Yes.

Q. Thank you, if you could carry on from paragraph 6?.

15 **WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 6**

A. "I believe that I then received a further certificate from a CPEng qualified structural engineer, Simon Gifford, of Lewis and Barrow, dated 31 December 2010."

20 Q. Could we just confirm that that is the document .166 please? Is that right?

A. Yes, that's correct.

Q. Carry on from paragraph 7.

25 **WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 7**

A. "On the basis of that certificate I recommended that the Building Act notice served on the owner and the red placard be removed along with the cordoning. This is recorded in the file closure form that I filled out."

Q. And which is at .167?

30 A. Yes.

Q. Thank you.

A. "My knowledge of the building and the works carried out following the September earthquake and aftershocks came from desktop study of

existing records, reports submitted to the council, and telephone conversations. I did not inspect the building. I was most likely aware of the damage assessments undertaken on the 26<sup>th</sup> and 27<sup>th</sup> of December. The reports submitted by Lewis and Barrow confirmed that the works  
 5 had been carried out addressing the damaged gable end wall mentioned in the damage assessment report. The statement from Simon Gifford was the final piece of paperwork outstanding before the red notice could be removed in accordance with council policy.”

Q. Thank you, just answer any other questions there might be.

10 **CROSS-EXAMINATION: MR ZARIFEH**

Q. Mr Mitchell, your duty in relation to this building on the day you dealt with it was essentially to authorise, if appropriate, the removal of the red sticker or basically a reduction from red to green?

A. Yes.

15 Q. And to do that you essentially, apart from checking that you had the right forms, were relying on the engineer, the CPEng engineer who was providing the certificate and certifying that the work has been completed?

A. Yes.

20 Q. So it wasn't, am I right that it wasn't the case of you applying your own view as to the works that had been done and whether structural integrity had been restored or anything like that? You were just ensuring that the i's were dotted and the t's crossed?

A. That plus making sure that the damage assessment reports line up with  
 25 what the engineer had done.

Q. You mean the site reports?

A. Well, yeah, basically, yes.

Q. Because you're provided with the CPEng certificate, correct?

A. Yes.

30 Q. And what, both site reports?

A. Yes.

Q. That would be it though, wouldn't it? Was there anything else?

A. That's all from Lewis and Barrow.

Q. Right, so you said you made sure that the works lined up? What do you mean?

5 A. Well in the damage assessment reports on the 26<sup>th</sup> and 27<sup>th</sup> and they mentioned the west, sorry, the east end gable wall and the works that were carried out were on the east gable wall.

Q. So I think you said you were most likely aware of the damage assessments undertaken on 26 and 27 December. If we look at that form that you completed, 167. Is that the form you completed?

10 A. Yes.

Q. It says 3 January 2011 at the bottom but is that the date you would have completed it?

A. That's –

Q. Presume it was –

15 A. – no, that's, no that would have been when it's entered into the City Council records.

Q. All right. So you were dealing with it on the 31<sup>st</sup> of December?

A. It's likely, I'm not 100% sure.

20 Q. And it says at the top there, "Level 1 assessment completed, yes, 26 12 2010?"

A. Yes it says that.

Q. So is that a reference to one of the council's rapid assessments of that date?

A. Yes.

25 Q. If we look at the assessment for that date it is .159, sorry .152, written over sorry. 152. That says level 2 but that's the only assessment as I understand it on the 26<sup>th</sup> of December.

A. Yes.

30 Q. And if we go to the next page of that 153, that talks about west wall damage. Do you recall that? Seeing that form or not?

A. I do not recall but I would have likely looked at that page.

1558

Q. But was it your job, I know you had the site reports, but was it your job though to look through them and check that the damage that had been notified by the Council inspections was addressed?

5 A. Yes it was.

Q. Well if you saw that was there any addressing of –

A. It's likely that there were photos in there as well and I am likely to have come to the same conclusion that it was an error.

Q. Okay, you can't remember though?

10 A. No I can't remember specifically.

Q. You said that you had discussions with Mr Gifford and Mr Gordon?

A. That's my recollection.

Q. I think we've heard from Mr Gordon in his brief that he talked to you but do you recall talking to Mr Gifford as well?

15 A. I remember a similar scenario where I did talk to the other person as well. I thought it was this building. It may have been another building.

Q. Okay but in relation to this building one of the issues was that Mr Gordon wasn't CPEng registered which you required?

A. Yes.

20 Q. Was there any urgency do you recall to have the matter dealt with given that this was a bar and it was New Year's Eve when you were dealing with it?

A. Um, well there may have been urgency. There was no sort of rush of the process.

25 Q. No, no I'm not suggesting that you weren't doing your job properly because of that but do you recall anyone being anxious to get it through?

A. Um, I don't recall anything in particular but there may have been.

30 Q. And I presume you didn't have any problem with Mr Gifford's certificate that he filed referring to personnel under his control having inspected it rather than himself and assuring him of the matters required?

A. I don't have a problem with that process, no.



**CROSS-EXAMINATION: MR ELLIOTT**

Q. Mr Mitchell how long were you seconded to the Council for?

A. I was seconded to the Council in September to the Building Valuations team for I think it was five weeks and then again for two weeks or two  
5 and a half weeks after the Boxing Day earthquake.

Q. So that was the BETT team in the first instance and then the BRO team –

A. – in the second instance.

Q. Was that different people in each team?

10 A. Um, the manager had changed.

Q. But apart from that it was the same personnel?

A. Virtually.

Q. But with a different name to the group?

A. I think their functions were slightly different but my role wasn't really  
15 different.

Q. Who were the managers of each team?

A. Um, Ester Griffiths was the manager of the BETT team and Vincie Billante was the manager of the BRO team.

Q. In either of the capacities were you given any instructions by the  
20 Council about the terms of section 124 of the Building Act?

A. Which terms?

Q. What it said.

A. Could you repeat the question then sorry.

Q. Well I'll put it differently. Were you given any information about the  
25 definition of a dangerous building in the Building Act?

A. Um, yes I was aware of what a definition of a dangerous building was.

Q. Was that a formal process that was followed with you or informal?

A. Um, I think it was informal, yeah I can't recall. It would have been in  
September.

30 Q. You said you had telephone conversations with Chris Gordon and Simon Gifford but you kept no records of those conversations?

A. That's correct.

- Q. Was that the usual expectation within that team that there would be no records of telephone conversations?
- A. Um, yeah I guess that's similar to what I did in other cases similar to this.
- 5 Q. Did anyone say to you we expect that you keep records of your conversations?
- A. Not in particular.
- Q. Did you ever go out and check on any particular building or were you always working off the documents?
- 10 A. I looked at some buildings in the city.
- Q. In this particular case do you recall whether you looked at the actual Building Act Notice that was served?
- A. Um –
- Q. Sorry, that was on the file?
- 15 A. Not in December, no.
- Q. So you didn't consult the Building Act Notice before making the decision about whether to accept the engineer's certificate?
- A. There's a copy of the notice in the file so I would have seen the terms of that 124 notice.
- 20 Q. Were you instructed to consider the terms of the notice and to compare them to the terms of the certificate to see whether they matched up before deciding to accept the certificate?
- A. The engineering certificate?
- Q. Yes.
- 25 A. Yes.
- Q. And did you do that in this case?
- A. Yes.
- Q. So were you satisfied in this case that where the notice said the building has been damaged and there are structural defects to the building that that was no longer the case as at the date of the certificate?
- 30 A. The certificate said that the building was satisfied, well had no reduction in strength from September and that was acceptable.

Q. I see so the satisfaction of that test in your view meant that there were in effect no structural defects to the building?

A. Um, there were no structural defects that, um, that had occurred from the September earthquake onward or as a result of the earthquake and aftershocks.

5

Q. And that interpretation of structural defects attaching to the earthquake or earthquakes again was that something that resulted from the training or directions you were given within the team?

A. Yes.

10 Q. By?

A. Sorry?

Q. Who was that given to you by?

A. Well Neville Higgs was the technical engineer to the Council and that's who I did the work with.

15 Q. Would you agree that in the final days of 2010 priorities within the Council, based upon your observation, were placed on opening restaurants and bars as quickly as possible?

A. Um, yes but within the due process.

Q. In your is it BRO or B-R-O, how do we pronounce that?

20 A. Well B-R-O.

Q. Well in your BRO capacity were you aware whether or not the BETT procedures were still operating?

A. Um, I assumed it was similar transition of policies.

25 Q. Were you aware of any instances where protocols established during the BETT team project were not followed?

A. Ah, no.

Q. Did anyone within the Council say anything to you at any point about where safety concerns fit within the priorities Council attached to decisions that were being made?

30 A. The safety concerns are consistent across all buildings.

Q. I'm just asking if anyone said anything to you within the Council about safety?

A. Um, well that's our prime concern. That's what our function was – the safety of the public was our prime concern.

Q. Someone said that to you?

A. Yes.

5 Q. When?

A. That was, well that was just always the case all the way through. That's what we were always saying is that our concern was for the public (inaudible 16:06:47) public spaces.

**CROSS-EXAMINATION: MR LAING – NIL**

10 **CROSS-EXAMINATION: MS MORGAN - NIL**

**RE-EXAMINATION: MR MCLELLAN**

Q. You were asked by Mr Elliott about effectively matching up the works that were done and that were referred to in the CPEng certificate against the Building Act Notice?

15 A. Yes.

Q. Can I just have the Building Act Notice please which is 0004.159 and can we have highlighted please just above half way the section that is under the words, "Particulars in Accordance with s 121". The top line reads, "In accordance with section 121 of the Building Act this building is dangerous as a result of an earthquake." Is that your understanding of what you were approving when allowing the building to be changed from red to green that the CPEng certificate must address the defects resulting from the earthquake?

20

A. Yes.

25 **QUESTIONS FROM THE COMMISSION – NIL**

**WITNESS EXCUSED**

1608

**MR MCLELLAN CALLS****MARK JOHN RYBURN (SWORN)**

5 Q. Your name is Mark John Ryburn?

A. Yes.

Q. And you are a structural engineer of Wellington?

A. Yes.

**WITNESS READS BRIEF OF EVIDENCE COMMENCING FROM  
10 PARAGRAPH 1**

A. "I hold a Bachelor of Engineering (Civil) (Hons.) I am a Member of the  
Institution of Professional Engineers (New Zealand). I have 11 years'  
experience as a civil engineer and construction project manager.  
Between the 22<sup>nd</sup> of April 2010 and the present day I have been  
15 employed by Opus International Consultants Limited as a structural  
engineer. My brief of evidence relating to another building which I read  
into evidence at the hearing into 593 Colombo Street held on 13  
December 2011 contained evidence of a general nature relating to the  
building re-inspection process after the September 2010 earthquake  
20 and aftershocks. I do not intend to repeat that evidence but it remains  
relevant to the other buildings that I have been asked by counsel  
assisting the Commission to comment on.

My Role:

In January 2011 I was seconded to the Christchurch City Council to  
25 carry out inspections under the direction of its building recovery office. I  
carried out about 10 inspections each day. Each inspection would take  
about half an hour – sometimes more, sometimes less.

200 Manchester Street:

I have been asked by the Commission to provide information about my  
30 inspection of 200 Manchester Street on 9<sup>th</sup> of February 2011. The  
inspection was requested by the Council BRO team. I am now aware  
that the building had been the subject of remedial works following the  
Council serving a Building Act Notice on the building owner. I was not

5 aware of this at the time of my inspection and when I inspected the  
building I do not recall seeing any placard although I am now aware that  
the building had been given green status following an engineer's  
certificate in late December or early January. Given that my re-  
inspections were typically of buildings with red or yellow status I had  
assumed that this building must have red or yellow status and that my  
inspection was for the usual purpose of up-dating the Council file and  
checking the placard. The file provided to me by the Council did not  
include information about the remedial works carried out after Boxing  
10 Day. When I visited the property I spoke to the owner of the Iconic Bar.  
I think she was the new owner. She told me that an engineer's report  
had been obtained as part of the sale and purchase agreement. I told  
her that this assessment did not appear to be on the Council file I had  
been given and that a formal sign-off process with the Council was  
15 needed before buildings could be re-occupied. I told her to submit the  
report to the Council within seven days for it to be reviewed and  
processed. I do not recall the basis for the seven day requirement other  
than providing her with a reasonable time-frame and a cut-off point. It  
also appeared that the bar was not yet open fully to the public. I noted  
20 on my re-inspection form that there had been a loss of bricks on the rear  
east wall which had been stabilised for the moment with plywood. My  
general comments noted that –

Q. If we just have those in front of us and in fact can you please focus on  
the lower highlighted passage under "General Comments". You can  
25 carry on reading.

A. "My general comments noted that 'new owner imminent, engineer has  
apparently reviewed the requirements for stabilising the rear wall in  
which about six bricks fell from the apex. Recommend contacting the  
engineer for a confirmation of the works as the lateral load capacity may  
30 not exist. Also get comments on the cracking, likely just in the paint'."

Q. Can I just stop you there and we'll just have a look at a photograph  
which is BUIMAN200.0043.3. We've already heard that the brick wall  
that you've referred to in your general comments is visible there. Can

you just talk about the last sentence in your general comments about cracking and where you observed that?

A. I can't recall in detail where the cracking was but I think it was along that wall on the Gloucester Street elevation.

5 Q. Can you see the cracking in that photograph, or what appears to be cracking anyway, that I referred I think Mr Gordon to?

A. Yes I can see that. That may have been it. I can't recall in particular the details of the cracking.

10 **JUSTICE COOPER:**

Q. Can you see a crack there now?

A. Yes I can.

Q. And do you say, looking at that, that you would conclude it was likely in the paint?

15 A. Ah, it's hard to tell from that. That looks a bit more. That probably looks a bit more than just in the paint.

Q. You're saying that that is a bit more than was likely more than just in the paint and are you referring to that one that's roughly in the middle of the column there?

20 A. Yeah.

Q. What about the ones above?

A. The ones that are second from the top looks like it's more than just in the paint. You can see the sort of shadow in it.

**EXAMINATION CONTINUES: MR MCLELLAN**

25 Q. Do you think they are the cracks that you referred to in your general comments or you can't remember?

A. I just can't say to be honest.

30 **WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 11**

A. "The information about an engineer's review came from the owner. Although I used the word "stabilised" I was not able to determine

whether the plywood wall had been installed as weatherproofing or to re-instate some degree of lateral continuity to the gable wall. I would have expected this to be covered by the building owner's engineer's report."

5 Q. Can I just stop you there and ask you another question. In your general comments you referred to six bricks having fallen from the apex and you might recall me asking Mr Gordon about that and he said you wouldn't have been able to see that because of the plywood. Do you know where the information came from?

10 A. I can't say for certain. It probably was from just talking with the owner. It's sort of in my general comments there so it was probably from that discussion.

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**WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM  
15 PARAGRAPH 12**

A. "The cracking on the walls appeared to be minor and older. I recall it following a more random pattern consistent with cracking in the paint rather than in a defined step-wise manner that might be related to cracking in the bricks themselves. Again I would have expected this to  
20 have been covered in the engineer's report. My re-inspection report recorded that protection fencing was required to the rear corner parapet on Gloucester Street. This was due to my concern about the potential risk from the east wall pending confirmation from the engineer on remedial works. I was not involved in any follow-up work to check that  
25 the cordons were in place. I have no recollection of any further contact with the Council about this building. I note that the Commission's copy of my re-inspection report has what appears to be a post-it note on it saying "Neville, please view and make a decision" indicating that the council staff proposed a further inspection of the building. The  
30 handwriting on the note is not mine and I was not involved in the decision to reinspect nor in the re-inspection. When inspecting this building along with the other buildings that I re-inspected I attempted to take into account the likely performance of the building with regard to its



pre September condition. I was not aware that the building had been subject to previous structural strengthening prior to September 2010 and my assessment was based on a visual external inspection only. Inspections were limited in scope. They did not involve calculations and I was not provided with building plans. In this case I considered that the correct action was for the building to be subject to a detailed engineering assessment which would be provided to council for its decision on future occupancy or requirements for further works and appropriate placarding as a result. Unknown to me an engineer's report had already been submitted to the council and the council had approved the building's red status being changed to green.

**CROSS-EXAMINATION: MR ZARIFEH**

- Q. Mr Ryburn, you had had no contact with the building prior to the 9<sup>th</sup> of February?
- 15 A. No.
- Q. And the information that you had was only from the council file?
- A. Yes.
- Q. And from what you say on the file there was not the CPEng certificate or the site reports that had been filed on to the presume the council file on the 31<sup>st</sup> of December?
- 20 A. No from memory there wasn't a lot of information about this particular building and hence when I sort of got there as I said I was expecting sort of one to be a red or yellow and obviously...
- Q. And so just talking in general terms back to your time with the council then did you get the council file for a property when you were doing a re-inspection like this or did you just get bits of it?
- 25 A. Well we got given a file on the property. I sort, I guess I just assumed that was the file. That was the information they had on it. I wasn't sort of aware that there may have been more. I guess –
- 30 Q. So can you remember what was on the file that you got for this property?
- A. Not in detail but I can remember that there wasn't a lot.

Q. And what can you remember what was on it?

A. Probably the re-inspection form, might have been a photo.

Q. Of the building?

A. Of the building. That was, that's all.

5 Q. So they were pretty fairly skimpy files?

A. They were. They varied. Some of them had the rapid assessment forms in them, some didn't.

Q. So would it depend on who had made the file up for you?

10 A. It was the same personal group putting them together but they just sort of put them together on the information they had.

Q. Alright so you went to the building without knowing anything about the remedial works and the CPEng certificate and you were going as part of a process back then in late January early February as a follow up to Building Act notices that had been served on red sticker properties?

15 A. Yes, red or yellow.

Q. So you went in there assuming that this building was red or yellow stickered, correct?

A. Yes.

20 Q. And you said that you spoke to the new owner so the bar was open for business obviously? You didn't have to get the new owner to come and open the building?

A. No there were people there or thereabouts.

Q. So did it not surprise you if you thought it would be red or yellow stickered that there were people in there?

25 A. Yes.

Q. And did you say anything about that?

A. Yes that's why I went in and spoke to the owner.

Q. Right. Can you remember anything else about that person you spoke to?

30 A. She was a lady.

Q. Can you see her sitting in the public gallery here?

A. I can. I probably couldn't have described her beforehand.

Q. And which one is she that you spoke to?

A. I think it's the lady on the end there.

**JUSTICE COOPER:**

Q. Can you be more precise than that? What does she look like?

5 A. Sorry the lady on the end on the second row back.

**CROSS-EXAMINATION CONTINUES: MR ZARIFEH**

Q. On your right?

A. I think.

10 Q. And you might have read, she's provided an email to the Commission obviously she's seen your brief and you've probably seen it. She doesn't recall speaking to you at all on that day but you, now that you've seen her you recall that it was her that you spoke to. You've said that she told you there'd been an engineer's inspection for work that had been done.

15 A. I don't know if she specifically said an engineer's inspection but I understood that there had been a, an engineer had been involved.

20 Q. Right okay. And you didn't have that on your file or parts of the file that you had so you said that you required her to have it produced within seven days. There doesn't seem to be any record of that in your re-inspection form.

A. No, no.

Q. Why's that?

A. I just didn't write it down.

Q. How was the council or anyone else going to follow that up then?

25 A. I recommended to contact the engineer.

Q. Right. So –

30 A. It's possible I may have, we often had a debrief at the end of the day when we came back to the office and we debriefed with the sort of administrator of the team. I may have mentioned it to her but I can't say.

Q. You can't recall?

A. No.

- Q. You said you gave her seven days, she doesn't recall that but you gave her seven days to get that information but you were obviously expecting there to be council follow up of this form?
- A. Yes
- 5 Q. Your re-inspection form. And although you were told by this new owner that something had happened with an engineer, that wasn't sufficient for your purposes was it to be told the little information that you were told by her? That wasn't sufficient for you to be satisfied about the building was it?
- 10 A. Not on its own no. Not just taking somebody's word for it no.
- Q. Because you had a look at the work that had been done and in particular the plywood?
- A. Yes.
- Q. And just looking at it without knowing anymore you had some concerns, didn't you?
- 15 A. Yes.
- Q. And concerns about lateral load as you recorded?
- A. Yes.
- Q. And concerns also about the cracking?
- 20 A. Yes.
- Q. That you wanted that looked into further?
- A. Yes.
- Q. Or the engineer if there'd been one involved that you'd spoken to. You said you weren't sure about that cracking. Do you remember seeing that particular cracking that was referred to in that photo?
- 25 A. I don't.
- Q. So you don't remember where the cracking was that you noted?
- A. No, no. No I don't.
- Q. Because you also put comments on the cracking but no definition.
- 30 A. No.
- Q. There's actually a better photo of that sir at 0006.7. So you made no record of where it was? Was that normally what you'd do on a re-inspection form, bottom right? That's the same area. That's when the

scaffolding was up in December. That's around 30 December. You don't recall that?

A. No, no.

Q. But that could have been the cracking or some of the cracking?

5 A. It could have been, but no I don't recall sorry.

Q. And so when you went back to the council then you had a building that was red stickered or was the sticker there when you went?

A. No, no as I mentioned I don't recall seeing any placard on it at the time.

10 Q. Presumably it had gone because there was authority to remove it sometime before that and it was open for business?

A. Possibly sometimes people left up the green placard if they'd been given it to sort of show that it had been.

1628

15 Q. But you talked to this new owner. There's mention made of an engineer. You want confirmation of that because of what you'd seen and concerns that you had and you wanted more information. You give her seven days. You don't record it. You go back and leave the file. What do you do with it? Put it in someone's in tray or?

20 A. No, no we talked it through and some of them were put in an in tray to be, what's the word, be sort of processed by the case manager and often if there were ones that were perhaps different or had something particular on it we would discuss it and put it sort of somewhere separate for it to be actioned kind of out of the normal process. So if it was sort of a unique situation or something we tried to separate them.

25 Q. And would you not have gone back and said, "I've just been out to what I presume is a red stickered building and there's people in it. We'd better get on to that"?

A. Yeah and I probably would have separated that from the usual process so it didn't just sit in the queue.

30 Q. And so the post-it sticker wasn't put on by you but then someone obviously has handled your re-inspection file after you?

A. Yes.

Q. And directed it to Neville, who is Neville Higgs isn't it?

A. Yes.

Q. Right, and was he the senior engineer to you?

A. (no audible answer 16:29:03)

Q. So it would have been his job to look at your form or what?

5 A. Ah,

Q. Possibly reviewing it?

A. Um, I don't know. Possibly they just weren't too sure quite what to do with it so it was given to Neville to perhaps make a decision.

Q. What were you expecting to happen?

10 A. I guess I was expecting perhaps someone, possibly the case manager or something, just to see if there was actually a report or to follow that up.

Q. And you don't recall when you went back looking for an engineer's report or anything else any other information?

15 A. No.

**CROSS-EXAMINATION: MR ELLIOTT**

Q. Mr Ryburn am I right in saying that when you went to this building you believed it was yellow or red placarded?

A. I expected it to be, yes.

20 Q. And when you left the building having spoken to the people who were there did you have that same belief?

A. Ah, no.

Q. What did you think?

A. Um, it looked like it had been some damage and there had been some  
25 work done to remedy that damage. There had been a process gone through whereby an engineer, a sort of independent engineer, had been engaged by the owner to look at it and that engineer had been involved in design or involvement in those works.

Q. Nevertheless is it right that you considered that the correct action from  
30 the Council's point of view was for the building to have a detailed engineering assessment to determine whether or not there should be occupancy?

A. My understanding was that in terms of being able to sign off a building to remove from the red placard to it being green it needed more than just somebody saying it's green. It needed to be sort of something, an independent engineer, someone looked at it and went through a process and that was given to the Council for them to be aware of it before it actually became a green so there was sort of a formal process whereby someone separate was engaged and the Council was able to sort of assess that.

5

Q. So is it right that from your point of view you considered there must be this detailed assessment before it would be green placarded?

10

A. There should be a formal process, yeah, where it went through that was on the records, yeah. It couldn't just be left with somebody saying it was fine and that was it. It needed to be something a bit more detailed than that.

15

Q. All right and then you came back to the office and sent your document on its way through the BRO system and did Neville or anyone ever come and talk to you about the document?

A. No, no.

**CROSS-EXAMINATION: MR LAING**

Q. Mr Ryburn when you refer to the formal process did that include the CPEng certification – from an independent engineer?

20

A. Yes, yeah I think it involved a CPEng engineer being involved in that yes.

**CROSS-EXAMINATION: MS MORGAN – NIL**

**RE-EXAMINATION: MR MCLELLAN**

25

Q. Based on what you were told by the owner if the Council was able to confirm the accuracy of what you were told then what did you understand that would mean in terms of the status of the building?

A. That it would stay as it was.

30

Q. What do you mean?

A. It would be open, allowed to be opened, yeah.

**QUESTIONS FROM THE COMMISSION – NIL**

**WITNESS EXCUSED**



**MR ZARIFEH CALLS****NEVILLE HIGGS (SWORN)**

Q. Mr Higgs do you have a statement, I don't think it's signed, but a statement that you prepared in front of you?

5 A. That's correct.

**WITNESS READS STATEMENT**

A. "My name is Neville Owen Higgs. I hold a Bachelor of Engineering Degree from the University of Canterbury. I am a Fellow of the Institute of Professional Engineers (New Zealand) and a chartered professional engineer. I have been practising civil and structural engineering for in excess of 40 years. After initially volunteering my services to the Civil Defence Emergency in Christchurch in September 2010 I was engaged by the Christchurch City Council as the Engineering Support Co-ordinator for its building evaluation transition team. The Council records show that I wrote an instruction on a sign-off and closure form to close off the building evaluation transition team's file on the building at 200 Manchester Street known as the Iconic Bar on the 22<sup>nd</sup> of February 2011. At this time I was processing and closing numerous similar files a week and have no particular recollection of this file. The Council's records also show that there was an Engineer's Re-inspection of Damaged Buildings form completed on the 9<sup>th</sup> of February 2011 by Mr Mark Ryburn that in the general comments section had a comment by Mr Ryburn that in part said, "Engineer has apparently reviewed the requirements for stabilising the rear wall in which approximately six bricks fell from the apex. Recommend contacting the engineer for a confirmation of the works as lateral load capacity may not exist." There was also an asterisk in the right-hand margin beside this comment and the words, "Contact engineer". The Council's records also show that there was a post-it note attached to the Engineer's Re-inspection of Damaged Buildings form with, "Neville please view and make a decision." The writer of this note confirmed to me in person yesterday (and this is the reason for my change in brief) that she had written this note at a time when she was reviewing a number of files but no case

manager had been allocated and they passed the file to me to review as a result of Mr Ryburn's comment. I have no reason to doubt that this happened some time prior to the 22<sup>nd</sup> of February 2011. The primary documentation for justifying the closing of a file was a satisfactory statement by chartered professional engineer stating that the building had at least the structural integrity and performance as it had before the September 2010 earthquake and that there was no potentially dangerous features on the building. The engineer was also required to identify any threat from adjacent buildings. The statement for this building was provided by Mr Simon Gifford in a statement dated the 31<sup>st</sup> of December, 2010.

- A. The process I used was firstly to check the engineer providing the certification was on the chartered professional engineers' register by checking the register on the Institute of Professional Engineers New Zealand (IPENZ) webpage. I would then check that the certification given was in the prescribed format without any addition to pass engineer's responsibilities on to any other body. I would then do a general scan of the file to see if anything else was on the file that still required action. If no requirement for further action was found I would write a note instructing that the building owner be advised the council accepted the building as being acceptable for occupancy. I would also make a note that the file be closed. I have no specific recollection from February last year of any of the documentation that I have referred to nor do I have any specific recollection of what was on the files that related to this building at the time. In particular I do not recall whether the form completed by Mr Ryburn was in front of me or not on the 22<sup>nd</sup> of February, 2011 when I processed the re-occupation certificate. It is possible that when I carried out the processing of the re-occupation certificate that I simply overlooked the engineering re-inspection form with the post it note on it. The form is most likely to have been in the file or on my desk. It is also possible that even though there was five to six weeks time difference given Mr Gifford's personnel inspect of the building and Mr Ryburn inspected I concluded that Mr Gifford's

certification was the deciding documents. Such a conclusion would have been founded on Mr Gifford's personnel having had the opportunity to carry out whatever inspections they deemed necessary to determine the accuracy of Mr Gifford's certification while I would have expected Mr Ryburn's inspection to be only a rapid external inspection from street level. The general assistance followed in the building evaluation transition team were standard type council emergency processes. However no-one involved in the total operation had been involved before in an operation like the one that was being carried out and the full requirements of an operation were not initially known. Engineers employed by council and those employed by the building owners were not immune to some of this lack of knowledge. Procedures that would work in normal times were not always applicable as the desirable times for consideration, consultation and implementation was not always available. There is no doubt that some mistakes were made under the pressures of the earthquake events was putting on the people involved and that the systems can and will be improved. There is also no doubt in my mind that the systems that were in place and the efforts of all the people that were involved played a big part in the reducing the number of deaths that occurred on the 22<sup>nd</sup> of February, 2011.

Q. Just a couple of matters Mr Higgs. So from your enquiries yesterday we know now that someone from the office had put the post it sticker on it and tasked it to you, so either put it on your desk or in your in tray?

25 A. Yes.

Q. For you to deal with?

A. Yes.

Q. But not necessarily spoken to you about it?

A. Not necessarily but could have as well. I couldn't –

30 Q. All right so that cuts down the possibility of what happened to you either overlooked it or you did consider it but as you've said you considered that the CPEng certificate from Mr Gifford overrode that even though Mr Ryburn's re-inspection was later?

A. That's correct.

Q. But you can't remember it so you can't say which one?

A. I can't say which one.

5 Q. You said that they, in closing the file you would be checking the CPEng certification?

A. That's correct.

Q. So when you say closing the file where a building's gone from red to green or red and yellow to green?

10 A. Building, well the building, once the building was safe for occupancy the BETT file was actually then able to be closed. It was really the fact that the building was considered acceptable for occupancy that it made it that the file was closed. There would be no further action. The assumption was there'd be no further action by the BETT team.

Q. But Mr Mitchell got the certificate in 31 December?

15 A. Yes.

Q. And his actions resulted in the building being opened on that day?

A. That's correct.

Q. So some six or so weeks later you come to close the file. Are you again checking the CPEng certification?

20 A. Yes I looked at that certificate of Mr Gifford's yes and I would expect that I probably looked at Mr Mitchell's— closure form as well.

Q. You said you would expect that you looked at Mr Mitchell's?

A. I expect that I looked at Mr Mitchell's form as well.

25 Q. You said that you accept that the certification given was in the prescribed format without any additions that passed the engineer's responsibilities on to any other body. What do you mean by that?

A. What we would, the intent of that form as I understood it was to make it very clear that it was the CPEng engineer certifying that the building was equivalent and structural performance to what it was before the 30 22<sup>nd</sup> of September [*sic*]. That form was very clearly the responsibility of that chartered professional engineer and the chartered professional engineer was the one that was saying the building was safe for occupancy.

**JUSTICE COOPER:**

Q. You said the 22<sup>nd</sup> of September did you mean the 4<sup>th</sup> of September?

A. Sorry yes.

**5 EXAMINATION CONTINUES: MR ZARIFEH**

Q. And you heard the evidence, some evidence today I presume and you'll know that in this case Mr Gifford signed it but Mr Gordon had done the work and inspected. From your work at the council that wasn't a problem?

10 A. I would generally expect probably nothing else.

Q. And just going back to Mr Ryburn's form and not knowing what happened to that, that would appear just to be an oversight perhaps not necessarily saying on your part but could be on your part or someone else's and you not getting it and considering it or as you say who knows you may be considering it and dealing with it?

15

A. I believe it's one of those two options and I don't believe that it would have necessarily have made any difference to the decision I made.

Q. And do you think then that you talk about the systems that were in place and were there other mistakes or things not followed up on?

20

A. I've, well I've never seen a system yet that doesn't have the odd hiccup with it, but no I wouldn't say that they, you know the place was rife with errors occurring.

Q. Why I ask you that because in this case on the 10<sup>th</sup> of September, 2010 there was a level one rapid assessment green placarded but barricades stated to be needed and a level two assessment recommended and this doesn't appear to have been followed up. What do you think might have happened to that form?

25

A. Sorry what date was that?

Q. That's back on the 10<sup>th</sup> of September.

30

A. 10<sup>th</sup> of September.

Q. Just from your, I know you didn't deal with it personally but –

A. There was a certain amount of data lag in getting those files electronically processed into the council's system and I, well essentially just by the sheer volume but I would have thought that that would have got into the system albeit it may have taken five or so days to get there, working days to get there.

5

Q. And the fact that you were closing a file six weeks after the building had been opened, was that a reflection of the workload?

A. Yes I wasn't sitting there with nothing to do.

10 1648

**CROSS-EXAMINATION: MR ELLIOTT**

Q. Mr Higgs, you were in the BRO team were you?

A. I was in both. I've been basically with Council doing a similar role – well, started with the Council in September and started with BETT then the BRO and now effectively I'm actually with CERA doing a very similar role.

15

Q. What was your particular role in the BRO team?

A. The description of my position was, as I've put there in my written evidence, I was there as the building evaluation transition team leader. I was the team co-ordinator.

20

Q. Was that a team leader of a team of engineers such as Mr Ryburn or others?

A. The engineering resource was, well the initial engineering resource of course was volunteers under the Civil Defence emergency. Then it went to the building evaluation team and they then were commonly varied as demand required and were all contracted engineers. Commonly a lot of them were actually from Opus International Consultants but there were others.

25

Q. You made a comment in your evidence about no doubt some mistakes being made. Do you consider that there were any mistakes made in relation to this building we're talking about today?

30

5 A. Um, I wouldn't necessarily say so much mistakes, but there is – different people would have made different judgements. You know, there is no correct answer to assessing whether a building is safe or unsafe. There is no – you can't get a black and white answer on it and there will be differences of opinion.

Q. Jamie Gilbert's family considers there are really three things which could have been done better and I just want to ask you to comment on them. The first area of concern is that there is this form produced by Mr Ryburn?

10 A. Yes.

Q. Dated the 9<sup>th</sup> of February and on the face of it the form expresses the need for an engineer to confirm works as lateral load capacity may not exist. I take it you would agree that that is something which would, or perhaps you wouldn't, that would suggest further enquiry is warranted?

15 A. Not necessarily in the context. Bearing in mind the context was that I was, the expectation that Mr Ryburn's inspection was a very, for want of a better term, low level inspection, ah, very quick and essentially an observation and you've heard him say in fact that he was not aware that there had been the inspection done by Mr Lewis' firm, Mr Gifford's firm.  
20 That, as I said in my evidence, I would be conscious of the fact that Mr Gifford in the personnel he was signing off for, had the opportunity to do whatever inspections, investigations that were required so they had the opportunity to do an in-depth inspection, albeit that Mr Ryburn came along later and said, "Oh, I just don't like the look of that" is almost what  
25 he was saying. Mr Ryburn had not had the opportunity to look inside the building, get up, and did not know what the actual, well, he'd even said the strengthening on it. I didn't necessarily know the strengthening had gone on but I knew that Mr Gifford's team had had the opportunity to do a far more detailed look at the building than Mr Ryburn.

30 Q. Right, so just to be clear around that point. I think your evidence has been that you may not have even seen Mr Ryburn's form before actually making a decision on 22 February?

A. Mmm.

Q. But are you saying that had you seen the form it wouldn't have necessarily changed the opinion you formed and the decision you made?

A. That's correct.

5 Q. And the proposition I want to put to you about that is, is it really compatible with a philosophy of safety being a priority for one to ignore this suggestion from an engineer that there should be a check of the lateral load capacity. Isn't it better to err on the side of caution?

10 A. Um, in an ideal world that would have been nice but this was not necessarily an unusual situation. We were expecting engineers out there to make a comment if they saw something, and in this case actually Mr Ryburn was doing an inspection, but even if they weren't doing an inspection of a particular building and they saw something, to comment on it. Now, we were commonly getting comments and the  
15 check would be, have we got a detailed engineer's report on it? If we did and it was relevant and within a reasonable time scale, we would say, "No, we won't take that any further."

Q. Are you suggesting it was common practice to effectively ignore concerns like that expressed by engineers who'd inspected buildings?

20 A. I didn't say ignore. I said we would act on it to the extent of looking to see if we had other information that was better founded if you like or better researched and if there was other information there that was better researched we would run with that.

25 Q. The one piece of information you didn't have for this building was a detailed engineering evaluation was it?

A. No, but to be quite honest that term, "detailed engineering evaluation" was not in common usage at that time but if you mean a more in-depth investigation, I believe that Mr Gifford's team had done that.

30 Q. What I mean is a report that looks into the capacity of a building, or parts of the building, to withstand aftershocks as opposed to reports solely based on a damage inspection. That is something you did not have, is it?

A. Can you ask that question again?



Q. Well, by a detailed evaluation, what I'm referring to is an evaluation which would yield information about the capacity of the building to sustain earthquakes or the risk of parts of the building failing and I'm suggesting that's a different thing to a report focused solely upon whether there is damage and whether that damage puts the building in no worse position than 4 September?

A. In this context that was not my decision. The process was – the established process at that time – was whether the building was assessed to have at least the same or better structural strength and performance capabilities as before the 2<sup>nd</sup> [sic] of September .

Q. I see. So the decision that you didn't need that type of more detailed analysis was based upon the instructions that had been given to you about the process which was that the process didn't require it?

A. Yeah. I was effectively carrying out a process at that stage.

Q. And the process was conveyed to you by whom?

A. It was basically developed by a team that was initially developed by Dr David Hopkins was involved in it who was a renowned earthquake engineer. Mr Mike Stannard of DBH also had some input into it. Mr John Haire of Holmes Consulting also had a fair amount of input into evaluation documents etc of earthquake prone buildings and I also had some input into it and the thinking definitely was that that was the guideline and in fact Dr David Hopkins wrote that certification form and the guidelines that go with it.

1658

Q. In hindsight would you agree that those guidelines were wrong and what really should have been asked was what is the capacity of these buildings?

A. I don't think, the only answer to that could be yes, well, yeah, I think the only answer to that can be yes, but you know, I think you've got to take it at the times, the time we were doing it. You know, I think it's been said before today the general expectation was that we'd had the major earthquake and things would taper off, now, okay, yeah, from that point of view we got it wrong.

Q. Can I show you a document WITCRU0001.21. This is a document which emerged during the course of Tuesday's hearing. I'll just explain what it is and ask you to comment upon it. It's a document which is entitled, 'Christchurch City Council building assessment certification requirements' and there's some handwritten notes on top saying 'BETT advisory 12 October 2010' and what it does it sets out apparently, I'm going to ask you what you have to say about it, but apparently it sets out what the council requires before the council will accept a building is satisfactory for occupancy, it will be necessary for you to obtain certification from your engineer, practising in structural engineering that the building is not dangerous in terms of the Building Act and the relevant section is highlighted and the section which I think we're dealing with is C, the building is dangerous if there is a risk the building could collapse or otherwise cause injury or death to any person in the building as a result of an earthquake that generates shaking that is less than a moderate earthquake.

#### **JUSTICE COOPER ADDRESSES MR ELLIOTT**

#### **CROSS-EXAMINATION CONTINUES: MR ELLIOTT**

Q. Would you like the original or the hard copy Mr Higgs so you can see it as well or can you read it there?

A. I actually can't recall seeing this form back in 2010 but I was shown a copy of it by council's lawyers this morning.

Q. Well don't tell us about that.

A. Right but –

Q. Just –

A. I, that's the first I've, and I'm, I say that's why, why I'm saying that I'm aware of that form now as being you know presented, and I am aware of what that says in there as far as s 124.

Q. Or s 121?

A. 121, sorry, yes.

Q. I've just read sections of the form which summarise its purport and my question just is does this so far as you understand it reflect a policy that

the council adopted at any point during either the BETT or the BRO period?

- A. I think my answer to that comes from, and I unfortunately haven't got the document reference to it but there was a, it was on the public section of the Royal Commission's web page, the draft report put together by one Esther Griffin and Dean McNulty.

5

**JUSTICE COOPER:**

Q. Esther Griffith?

A. Sorry?

10

Q. Esther Griffith?

A. Griffith, sorry.

**CROSS-EXAMINATION CONTINUES: MR ELLIOTT**

- A. And somewhere around the middle of that is the, a copy of the blank statement by chartered professional engineer in respect of the Building Act form and three pages of notes at the front of it. Near the end of those notes is a note that says, "in framing these conditions the council has interpreted s 121(c) and (d) of the Building Act 2004 to mean that when the conditions for the removal of the red and yellow safety notices are met the risks that the building could collapse or otherwise cause injury or death to any person in the building as a result of an earthquake that generates shaking that is less than a moderate earthquake or that other property could collapse or otherwise cause injury or death to any person in the building are tolerable in the context of other risks." So I believe that, well, you know, I believe that really addresses this one of the level of risk, level of safety that we were, that at least the intent of the level of safety. Now you know I maybe but I was aware of that and I was aware that we'd addressed this one at the time and you know that's why I could flick fairly quickly to that. There was, we were aware of what s 121 of the Building Act said at the time this was put together.

15

20

25

30

Q. The reason I ask is that it appears, you can disagree with this –

A. Yeah.

Q. – you can disagree with anything I say. It appears on the face of it that the CPEng form which you accepted and which relates to restoration of integrity to September state appears to be a different test than that which is set out in s 121(c). Do you agree?

5 A. It could be interpreted as that, yes.

Q. And that the test set out in s 121(c) is a more cautious test and a test more directed more likely to be resulting in a safer decision?

A. Yeah, of, well, yes there is, if this this form did not guarantee that you had the 33% NBS value which is essentially the, well in the Building Act definition of an earthquake prone building and under the order in council 10 2010 actually then fronted it up to being the definition of a dangerous building.

**JUSTICE COOPER:**

I think Mr Elliott you have taken this about as far as you can with Mr Higgs, 15 haven't you? We know the policy that was being applied. The question whether it was right under the legislation is a matter for legal submission perhaps but certainly decision by the Commission.

**MR ELLIOTT:**

20 Yes, Your Honour, there was a question which I thought had still been at large from the other day which is whether this ever became a policy, what was its status, did the BETT process ever kick in?

**JUSTICE COOPER:**

25 In relation to the BETT advisory?

**MR ELLIOTT:**

Yes, and I just –

30 **JUSTICE COOPER:**

Well you can pursue that. My intervention was in relation to the meaning and import of s 121 of the Building Act.

**MR ELLIOTT:**

Yes Sir, I certainly accept that and I am conscious I do not want to stray into matters not relevant to this building.

**5 CROSS-EXAMINATION CONTINUES: MR ELLIOTT**

Q. My question Mr Higgs is, on the basis that they appear to be two separate issues, whether you're aware at any point whether the BETT process, as outlined there, was adopted or not?

10 A. I, as I say, I can't recall that form that's referenced as .21. I can't recall having seen that form to be quite honest.

Q. And it's evident that it wasn't the test that you were applying –

A. That would be correct.

Q. – in accepting the form –

A. Yeah.

15 Q. – and again that was based upon the instructions given to you. Your answers are certainly appreciated and you are giving very full and frank answers. I do just need to put to you the other concern which Mr Gilbert's family has which is just that it appears that this particular form, which I know you say may not have –

20 A. Yes.

Q. – led to a different decision but that it wasn't actioned at all between 9 February and the morning of 22 February. I think you have given an explanation of that –

A. Sorry.

25 1708

Q. This form –

A. Well there was, there was a backlog of processing of those forms in the office at that stage. Sorry am I interpreting your question correctly or not. I was interpreting you're saying why was the delay.

30 Q. I think they would just like to know why was there a delay in looking at that form and considering it?

A. Essentially the delay was that the office was reasonably well loaded with work and okay while we were trying to keep that to a minimum at times it did extend out a little.

Q. Was there sufficient resources?

5 A. There was possibly insignificant resources of the right skills but again the work was peaky so did you bring in resources for the catch up with the backload that was a fortnight out or did you and then have to put the whole crew off if you like when things fell off a bit or did you try and smooth out your resources. I, you know we were trying to keep our  
10 resources reasonably constant and still deal reasonably sensibly with the workload.

Q. Did you perceive any pressures to keep buildings open?

A. Sorry.

15 Q. Did you perceive any pressures from anywhere to keep buildings open if possible?

A. Not directly no.

Q. Indirectly?

20 A. No, well you know I think we all have some desire to make things efficient and economic as we, we don't believe in wasting resources if we can help it.

Q. All right thank you again and finally given what you've commented upon around the issue of resources and before that are there any lessons that you can draw from this that might help us to provide a better system next time around?

25 A. I think that's probably, I believe the Commission's going to have, looking into systems in a few months' time or a month's time. That's probably a comment for them. I don't just want to answer that off the cuff if I 'm...

Q. You'd like to come back.

A. Yes.

30 **CROSS-EXAMINATION: MR LAING**

Q. ENGCCC0002F.141 up please? Is that the passage that you were reading from previously?

A. Correct.

Q. Could I now have the next note to structural engineers enlarged please? You'll see there the first sentence there "Judging by the impact on buildings in Christchurch City the earthquake of 4 September 2010 is  
5 believed to be equivalent to no more than a moderate earthquake". Is that the basis on which you formulated the engineering certification?

A. That was one of the bases I guess. It was a factor, definitely a factor in the putting together of that policy yes.

Q. So on that basis the assumption was that if a building survived the  
10 September 4 earthquake then it had survived a moderate earthquake. Is that correct?

A. That was the assumption there yes.

Q. And so if there was damage to that building, that damage had to be remedied to bring it up to a building again that would survive a moderate  
15 earthquake. Is that the fundamental assumption?

A. That was the assumption at that stage yes.

**JUSTICE COOPER:**

Mr Laing, is it the council's case that that remained a legitimate approach after  
20 the Boxing Day earthquake.

**MR LAING:**

Well I can't provide evidence directly today about that.

25

**JUSTICE COOPER:**

Well it is a matter of law though isn't it as to whether –

**MR LAING:**

30 There was no change in that, there was no change in this formulation. That certification was still being used after Boxing Day as Your Honour would have noted –

**JUSTICE COOPER:**

But the Act had been changed.

**MR LAING:**

5 No the Act was changed earlier on.

**JUSTICE COOPER:**

Well it wasn't changed before the 4 September earthquake.

10 **MR LAING:**

Not before the 4 September earthquake. It changes afterwards but that change was by order in council not long after the, I think, I can't remember the exact. I think we've got the 16<sup>th</sup> of December so that change was in force when that document was –

15

**JUSTICE COOPER:**

When this document was prepared.

**MR LAING:**

20 Prepared. So that document was prepared with that change already in place and that document refers to that change.

**JUSTICE COOPER:**

25 But by Boxing Day the law was talking about a building being dangerous if the shaking was at a lower level than had hitherto applied.

**MR LAING:**

30 There was no, the change in the legislation to introduce that particular section was in September Your Honour. There was no change after Boxing Day. That order in council was still in force. It still had the reference to moderate earthquake and that was something that was brought in in September from memory. I can't remember that exact date.



**JUSTICE COOPER:**

Well this is all going to be covered in submissions.

**MR LAING:**

5 Yes it will be sir and I intend to –

**JUSTICE COOPER:**

Provide it to us in due course.

**10 MR LAING:**

I intend to address this in legal submissions and probably further evidence in due course so I just want to make sure this witness understood.

**CROSS-EXAMINATION: MR MCLELLAN**

15 Q. Mr Higgs, if I can just come back to this particular building. Can I have that document back again please which is ENGCCC000 just on the top left hand of that page. Do you see the paragraph 1 relating to green safety notices? Do you have that in front of you?

A. I have that document in front of me.

20 Q. Can you see paragraph 1 relating to green safety notices on the screen? Buildings of green safety notices. No action required. Notice may be removed or stay at discretion of owner but buildings would still be subject to council's earthquake prone building policies.

A. Yes.

25 Q. The building that we're talking about here on Manchester Street had of course been changed, the status had been changed to green following the acceptance by the council of the CPEng certificate in late December 2010 hadn't it?

30 A. Yes though there was, I have not seen to date any documentation that essentially went to the building owner and that is possible because of the time of the year it happened, well that, Mr Mitchell filled out that form basically turning it green.

Q. Yes. And in the normal course that would have been communicated to the building owner who would then have been able to reopen for business as we know they did?

A. Sorry I'm having a little difficulty hearing you actually.

5 Q. And in the normal course that information would have been communicated to the building owner who would then have been able to reopen as we know they did?

A. Yes.

10 Q. So if the person who directed re-inspection such as that conducted by Mr Ryburn had been aware of that change to green status and the CPEng certificate that had been received by the council, this re-inspection wouldn't have been called for would it?

A. That would be correct.

15 Q. And if you had seen that re-inspection report of Mr Ryburn's with the post it note saying "Neville to follow up" or whatever it said and you had checked the file and seen the CPEng certificate, wouldn't your response have been that effectively that process, the CPEng and the change to green effectively trumped what was in the re-inspection report?

A. That would be correct.

20

**COMMISSIONER FENWICK – NIL**

**JUSTICE COOPER – NIL**

**WITNESS EXCUSED**

25

**COMMISSION ADJOURNS: 5.19 PM**

**COMMISSION RESUMES: 5.30 PM****MR LAING CALLS****STEVEN JAMES MCCARTHY (SWORN)**

- 5 Q. Is your full name Steven James McCarthy?  
A. Yes it is.  
Q. You have produced a brief of evidence?  
A. Yes I have.  
Q. You have it before you?  
10 A. Yes I do.  
Q. Can I ask you firstly to turn to paragraph 16 of your evidence?  
A. Yes.  
Q. In the last sentence in paragraph 16 you refer to the section 124 notice  
and the fact that it did not expressly refer to the damage to the west wall  
15 and you go on to say this is likely to be a transcribing error. Do you  
wish to add anything to your evidence there?  
A. It's either a transcribing error or alternatively, it's simply an error when  
the officer was filling out the form and I suggest from the evidence today  
that that's the more likely scenario.  
20 Q. Could I then ask you to turn to paragraph 20 of your evidence?  
A. Yes.  
Q. And I'd like you to look at the sentence beginning, "The email stated,  
'Hi John. As discussed the attached'" etc?  
A. Yes.  
25 Q. Do you wish to delete the word "Hi"?  
A. Yes I do.  
Q. Now, we come to the next sentence. Do you wish to delete all the  
words from "The CPEng form" down to the next line where it says  
"Note"?  
30 A. Yes I do.  
Q. So delete all the words down to the word "note" in the next line from  
"The CPEng form." Do you wish to substitute the following words and I'll

read them to you, “An earlier email dated 3 30 December 2010 from Chris Gordon of Lewis and Barrow referred to the east gable wall parapet.”

A. Yes.

5 Q. “But also noted” and then it goes on. The next words will be “other damage.”

A. Correct.

Q. Could I have BUI MAN 200.004162 brought up please. Is that the email that you’re referring to from Mr Gordon?

10 A. Yes it is.

Q. Finally if I could ask you to go to paragraph 25 of your evidence?

A. Yes.

Q. And you refer there to an email that Mr Higgs had sent to the Royal Commission?

15 A. Yes.

Q. You’ve heard Mr Higgs’ evidence today. Do you wish to add any further comment in light of that evidence?

A. I think the evidence that Mr Higgs gave was that he may well have seen the form when reviewing the file or alternatively, he did not see the form as one of two options.

20

**CROSS-EXAMINATION: MR ZARIFEH**

Q. Mr McCarthy, on the 10<sup>th</sup> of September 2010 there was a level 1 rapid assessment of this building, correct?

A. Yes there was.

25 Q. And that’s document 0004.137. That was an inspection on behalf of the Council?

A. Yes it was.

Q. And it noted moderate overhead falling hazard and referred to cracking, I’m not sure what that word is, but it says parapet cracks?

30 A. Yes.

Q. Can you read the first word?

A. I’ve tried to decipher that. I don’t know what it says sorry.

Q. But cracking in the parapet anyway?

A. Yep.

Q. It was placarded green?

A. Yes.

5 Q. But the assessor has ticked the need for barricades and in fact put how long the barricades have to be?

A. Yes.

Q. And has also recommended a level 2 or detailed engineering evaluation, a structural evaluation, correct?

10 A. Yes.

Q. Have you looked into what happened to that form on the Council records?

A. There doesn't appear to have been a level 2 form formally entered into the records but I do note the note alongside of that which says,  
15 "Detailed assessment, LJF, interior says okay."

Q. What does that mean?

A. Well, I can only assume that that may have been done in concert with this form and that that notation has been added and perhaps dealt to that issue.

20 Q. So who's LJF?

A. I don't know.

Q. And who's SJL, who did the first one?

A. I don't know.

Q. And is there no way of the Council knowing who did these forms? Is it  
25 someone who wasn't employed by the Council?

A. Those are not initials that I recognise. We had an influx of help and it made it quite difficult for us. We were managing many hundreds of people at that time.

Q. So what would have happened though in the normal course to a level  
30 1 assessment that called for or recommended a level 2? How would it be dealt with in the system?

A. Normally that would be allocated to the engineers and a level 2 would be done.

Q. But apart from you surmising that that notation may indicate that the level 2 was in fact done, there's no level 2 form on the Council record is there relating to that period?

A. That's correct.

5 1740

Q. And if a level 2 assessment had been done what would the normal procedure be – to fill out a form?

A. Yes.

10 Q. Were there in fact level 2 assessments done where no form was filled out on behalf of the Council I'm talking about?

A. Not to the best of my knowledge.

Q. Right so I accept we don't know what that means but it seems to follow that no level 2 assessment, no formal level 2 assessment, was ever carried out as recommended on level 1?

15 A. Other than the notation on the form.

Q. And, to be fair, you can't explain why a formal level 2 wasn't done?

A. No I can't.

Q. But it's slipped through the cracks somehow?

A. Yes.

20 Q. And is that indicative of the time period, the period we're talking about, the 10<sup>th</sup> of September in the aftermath of the earthquake and the number of buildings that were having to be assessed?

A. There was a huge amount of disruption.

Q. Is it indicative of the resources that the Council had at that time?

25 A. I don't think it was so much a lack of resources. It was organisation. When you're dealing with many hundreds of engineers, many hundreds of volunteers coming in to assist it just was overwhelming quite frankly.

30 Q. I think you're aware that there's a form and I'll get it brought up – WITAKE 0001.1. This is from the Council file. Have you seen that form before?

A. Yes I have.

Q. That appears to be a certificate or an affidavit doesn't it, some form from someone called O'Keefe?

A. Yes it is.

Q. Who was he?

A. He's one of our enforcement officers.

5 Q. And he seems to be saying that on the 28<sup>th</sup> of October 2010 he affixed a Building Act Notice to the building at 204 Manchester Street?

A. Yes so I would say he's clearly filled that out in December and the reference there should, or the date should be December as opposed to October.

10 Q. So someone's typed in October instead of December. Is that what you're saying?

A. I think it was a standard template that's been used and they just haven't adjusted the date.

Q. Right, so have you made any enquiries to ascertain if that was the case?

15 A. I'm assuming that's the case. There was a Building Act Notice issued about that time to this building.

Q. Yes there was a Building Act Notice in December. We've heard about that. What I'm asking is have you checked to confirm there wasn't also one issued in October? There's no copy of one on the file.

20 A. There's nothing on the file to indicate that.

Q. So that's why you're assuming it's a mistake?

A. Yes.

Q. And it's not a case of that 10<sup>th</sup> of September assessment that we've looked at being followed up?

25 A. No.

Q. In other documentation missing from the Council file?

A. No.

Q. How can you be sure of that?

30 A. I'm confident that there was no Building Act Notice in October in respect of that building from the records that we have available.

Q. Because there's no Building Act Notice on the file relating to that time?

A. That's correct.

**JUSTICE COOPER:**

What's the source of the document we're looking at?

**MR ZARIFEH:**

5 Council file Sir.

**JUSTICE COOPER:**

So this is on the file but there's no notice. So that's the point that's being made?

10

**MR ZARIFEH:**

Yes Sir I think so. That document is there and the explanation, Mr McCarthy's explanation or assumption is that it's a mistake and it should be 28 December.

**15 CROSS-EXAMINATION CONTINUES: MR ZARIFEH**

Q. That's what you're saying isn't it?

A. Yes it is.

Q. And you're saying in effect is that it relates to the Building Act Notice that we've got in the file that's dated 27 December 2010?

20 A. Yes.

Q. All right well let's move to December and the assessments that were made post Boxing Day. As you are aware there were a number, weren't there?

A. Yes there were.

25 Q. So the first one was on 26 December and the one we've heard something about, the level 2, with the two pages and east gable wall damage on the first page and the west wall damage on the second page, correct?

A. Yes.

30 Q. That form 0004.152. That's that form?

A. Yes.



- Q. So that's 26 December. There appear to be two further assessments the next day and they are on pages 155 and then 156. The 155 is the USAR damaged buildings reports that's been referred to, correct?
- A. Yes.
- 5 Q. So USAR would have been independent of the Council or not?
- A. I believe so.
- Q. And that's in more general terms but noting severe collapse or partial collapse, moderate and severe, and that the building or a storey was leaning and a moderate overhead falling hazard?
- 10 A. Yes.
- Q. And temporary hazard tape applied?
- A. Yes.
- Q. And then the next page there's the assessment by someone called G Mackle. Was that on behalf of the Council?
- 15 A. Yes it was.
- Q. Why was there one the next day on behalf of the Council after the 26<sup>th</sup>. Was that because of aftershocks? There's the 26<sup>th</sup> of December and then there's one on the 27<sup>th</sup>.
- A. I'm a little unsure as to the reason for that. It may be that they were wanting to check that the barricades were in place. I notice that's been highlighted and generally I think at that stage they were doing general "reccies" through the City so this may have been a result of that.
- 20 Q. In the comments it's got, "Stress fractures in plastered brick walls, upper areas mainly where roof trusses connect – parapets."
- A. Yes.
- 25 Q. So it seems to be speaking of stress fractures in walls – plural?
- A. Yes.
- Q. And the barricade's in place now. We saw some photos of barricades that appeared to go along Gloucester Street and Manchester Street –
- 30 A. Yes
- Q. – around the building?
- A. Yes and past 198 Gloucester Street as well.

Q. Right so do you know anything about the determination of the extent of those cordons?

A. No I don't.

5 Q. One would presume that there was concern about the whole of the building rather than just the east wall?

A. Yeah I imagine a precautionary approach.

Q. Now what then followed is this Building Act Notice that was prepared by someone in the Council office?

A. Yes.

10 Q. You referred to it being a transcribing error and I think you amended that to say, "Or an error when the officer was filling out the form."

A. Yes.

1750

Q. What's the difference?

15 A. Well I suppose they are both, there's either a transcribing error when you fill out the first page of the form, then you go to the second page of the form and you actually put in, instead of east you write west by mistake, the alternative is that he goes back to the office, he hands it to an administration officer, that person prepares the 124 notice and takes  
20 incomplete information on to the 124 notice.

Q. But that person would have had those three assessments that we just went through? They would have been on the council file?

A. It's likely.

25 Q. They were the information that the person would use, wouldn't that be the normal course?

A. (inaudible 17:50:44)

Q. Prepare the Building Act notice?

A. Yes.

Q. And which office was doing that? Or which section?

30 A. I think they didn't declare an emergency but it was happening out of the emergency office and so there was what offices were available at that time in holiday period so they were, they mobilised quite quickly.

- Q. Right, so again is that, we know we've heard evidence about the east wall and west wall –
- A. Yes we had.
- Q. – but in terms of preparation of the Building Act notice is that just a  
5 mistake or is that perhaps a reflection of resources and systems then?
- A. It could be.
- Q. It could be a reflection of what systems –
- A. Just, yeah, systems, pressure, timing, there's a whole range of possibilities.
- 10 Q. So it's not in your view an isolated error, human error by someone? It's something that you consider was happening, or the kind of thing that was happening because of the systems in place?
- A. Yeah, when you're doing so much and you're impacted so much as an organisation by the magnitude of this event, then you're likely to make  
15 errors and we made a few so you know I wouldn't say our systems were 100%. We certainly did the best we could.
- Q. Well that was Boxing, post-Boxing Day. Was that any different in terms of the systems and the pressure?
- A. Yeah, less resources, had to focus on, focus their attention. There are a  
20 lot of people already on holiday as you'd appreciate so mobilising resources was more difficult.
- Q. The CPEng certificate's the next step in this process?
- A. Yep.
- Q. And you've heard the evidence about that. You've said in your brief that  
25 the council would expect, I think you've put it in paragraph 17, "Council would expect the owner's engineer to carry out a full assessment of the building before signing the CPEng certification form."
- A. Yes.
- Q. So what do you mean by a full assessment of the building?
- 30 A. A full assessment: assess the whole building interior and exterior, walk around the building. I think the expectation is up to a level 2 and even more in depth around the damaged areas.
- Q. Right.

A. And assess the building, look at the building and say is that building up to the same standard post-repairs as it was pre-September 4.

5 Q. The form, the CPEng form doesn't talk about the kind of detail that's required of any inspection of the building or in fact inspection of the whole building, does it? It just talks about the repairs bringing the structural integrity of the building back to pre-4 September condition, doesn't it?

A. Yes it does.

10 Q. So do you think that was clear to engineers at the time that they had to inspect the whole of the building?

A. Yes, absolutely. There was regular updates. The engineers today have talked, all talked I think about the regular two weekly meetings that were being held with the Institute. I attended a lot of those. I'm aware that all of the changes that were occurring and the legislation and the forms were all being communicated by that process.

15 Q. Right, and so the kind of inspection that was done in this case, we heard from Mr Gordon that he had a walk round the whole of the building and looked inside as well.

A. Yes.

20 Q. Is that the kind of inspection you're talking about?

A. Yes.

Q. So you don't see that as any issue with the form or the communication between council and engineers as to what was required?

A. No.

25 Q. And you think that generally that's what was happening?

A. Yes.

Q. A full assessment of the whole of the building?

A. Yes.

30 Q. Although we did have an example the other day didn't we where we were part of the interior of the building wasn't accessible and a CPEng certificate was signed off so it wasn't happening in every case, was it? Cashel Street?

A. I recollect that one. There may be exceptions but I would expect those to be very much exceptions. I think the engineers were clear what their role was.

5 **JUSTICE COOPER:**

7 Riccarton Road is an obvious example where it did not happen, is it not?

**CROSS-EXAMINATION CONTINUES: MR ZARIFEH**

10 Q. That was an example, I think, where the, that's another one His Honour is mentioning, you recall last year where the CPEng certificate was in fact altered? You remember the wording was altered? There had been no structural repairs?

A. That's right. I remember that. An engineer had done a level 2 interior and exterior assessment –

Q. No, he'd done a level 1.

15 A. He did a level 2 I think you'll find.

Q. He'd done a level 1 after the building was yellow though? That was the problem wasn't it?

A. Yes.

Q. So that's another example of an engineer not understanding?

20 A. I don't think that one, I think the eventual outcome wasn't altered by that exception but yes I would expect those to be exceptions rather than the rule.

Q. Well there –

25 A. A full expectation is that engineers will do a full assessment of the building, not a detailed engineering evaluation because we, that mechanism wasn't really in place at that time.

30 Q. What I'm saying though is that is there a problem with the engineers or enough of them understanding that that was what was required, a full assessment of the whole of the building and not simply a signing off of the remedial works. They've been done, if they've been done then the building's back to how it was.

A. Look I can only say that our expectation and my understanding from talking to a lot of engineers is that a full assessment of the building is done before they sign those engineering certificates but if that is not the case there may be exceptions.

5 Q. Because the council is relying on that CPEng certificate almost solely, isn't it?

A. Yes we are.

10 Q. And it seems that it is the exception rather than the rule that the council and council engineer will actually go out and inspect a building where there has been a CPEng certificate provided?

A. Yes and of course there would be a difficulty in that because we don't exactly know all of the considerations so we wouldn't be able to exactly check that so and so, it is the exception for the council to go out and check.

15 Q. And I presume that from the council's point of view there is no problem with the practice that we've heard about with the engineer, one engineer signing off another engineer's inspection assuming that the work was complete I presume?

A. There's no problem with that.

20 Q. Assuming it was complete?

A. Yes.

Q. Did that work require a building consent as it appears from that Building Act notice?

25 A. I think the process was that was securing works under s 41 of the Building Act.

Q. So an emergency?

30 A. So emergency, it needs to be done to protect property, to protect people so that it could be done without a building consent. The expectation then is that the building consent is applied for for the permanent works, permanent, and some of those temporary works might be incorporated into that building consent. The alternative is that the emergency repairs are the final solution in which case a certificate of acceptance would

need to be applied to the Council for that, so that would regularise the situation with either of those alternatives.

**THE COMMISSIONER:**

5 Q. Just on that point, I haven't been referred to a certificate of acceptance being applied for in this case. Do you know if that happened?

A. It didn't occur, no it didn't.

**CROSS-EXAMINATION CONTINUES: MR ZARIFEH**

10 Q. So you would say in this case would you that the, from the evidence we've heard, that it hadn't started but there was discussion about a permanent solution?

A. Yes.

Q. And if that happened there would have been an amendment to, or a consent incorporated then?

A. Yes.

15 Q. So it would rely on the owner doing something permanent?

A. Yes, or the certificate – well, yes, it needed to be permanent because I don't think the solution was weatherproof and obviously a timeframe of only three years for its effective life so something would need to be done.

20 Q. The fact it was changing hands, that wouldn't have been a difficulty from the Council's point of view?

A. No.

25 Q. Mr Ryburn in his inspection form we've heard about from Mr Higgs why that may or may not have been followed up. In the normal course would something like that, a re-inspection form where it calls for further attention and an engineering evaluation, how long would you expect that to take to be actioned?

30 A. I would have expected that that matter would have reconciled quite quickly within a week. I'm surprised it wasn't reconciled at the time quite frankly. Mr Ryburn went to Mr Higgs. There was discussion in the team

because there was obviously some knowledge within the team of the fact that there was certification to –

Q. But that didn't happen?

A. It didn't happen, no it didn't.

5 Q. And do you see that as an isolated error if you like, or omission, or part of the systems that you spoke of or systems failure that Mr Higgs referred to?

10 A. I think it was an overload situation. Clearly the Boxing Day event overloaded the system. We were also facing a whole lot of 124 notices were coming due at the end of January so we had a combination of two, we had two waves basically. So there was an overload situation at that time.

15 Q. And it perhaps wouldn't have been a problem if the CPEng certification had been on the file that Mr Ryburn got but it seemed he only got parts of the Council file. Is that fair?

A. That's fair.

Q. And was that deliberate or was that just up to someone who was preparing it?

A. The someone preparing it I think.

20 Q. Was there a policy on what should go to the engineers that were on secondment?

A. They should have got the formal information.

Q. And it seems from Mr Ryburn today, and I think we've heard from other engineers that that wasn't happening?

25 A. In some cases, yes.

Q. So again a part of the system?

A. Yep.

30 Q. The cordons briefly, you said in your brief that the 10<sup>th</sup> of September assessment we've talked about recommended cordons but nothing happened?

A. Yes.

Q. Third of January there was a notation from Mr Mitchell that the cordons could be removed?



A. Third of January?

Q. Third of January 2011.

A. Okay, yes.

Q. And you said in your brief that the cordons weren't removed or not fully?

5 Quoting from paragraph 28 in your brief. "Closure file date of 3 January that the cordons could be removed. It appears a limited cordon did remain. Council does not have any record as to why this limited cordon stayed in place."

A. Yes.

10 Q. And 9<sup>th</sup> of February we've just discussed Mr Ryburn. He indicates on his form that there needs to be a cordon, correct?

A. Yes.

Q. And nothing happens about that?

A. Yes.

15 Q. So again, is that another systems failure with all these cordon issues or communications?

A. Yes it does appear to be like that, yes.

Q. When you look at all those things that happened in this one file?

A. Yes.

20 Q. And I accept that with some of the evidence that's come out that some of them may not have made any difference, but does that raise concerns in your mind as to the systems that were in place to communicate these various things and ensure that there was follow up and things were completed?

25 A. Yes, yes, I am concerned about that.

Q. Is that something that perhaps the Council will address in the assessment hearing as the lessons to take from –

A. Yeah -

Q. not only this tragedy but others?

30 A. Yeah.

## **JUSTICE COOPER ADDRESSES COUNSEL**

1810

**CROSS-EXAMINATION: MR ELLIOTT**

- 5 Q. Mr McCarthy, I have Jaime Gilbert in mind as I ask these questions and they are questions really that his family would like the council to answer and you have already answered them to some extent. The first point: you may not have read all of Professor Ingham's report to the Commission but he does make a comment about a phenomenon of parapets falling outwards from buildings in the September earthquake, that being something which was observed following the September
- 10 earthquake and also of gable walls falling almost exclusively outwards. We've had the cases of Mr McEachen who died when running out of Southern Ink, Mr Tobin when running out of Joe's Garage and Jaime Gilbert running out of Iconic and Amy Cooney injured and the question really is whether the council had given consideration after 4 September
- 15 to putting out some sort of information to the public about the particular risks posed by unreinforced masonry buildings and in particular the risks posed outside of as opposed to inside of those buildings?
- A. The council had been pursuing an earthquake prone policy following the 2004 Building Act and in 2006 we didn't understand I don't think the full,
- 20 fully the impact of that and there were considerations around the numbers and the economics of it.
- Q. Can I just interrupt you? You're answering a harder question than I asked. I'm really just talking about that period after September.
- A. After September sorry
- 25 Q. After September when it had been observed –
- A. I thought you meant before September, post September.
- Q. After September there had been damage of reinforced masonry falling outwards. That was evident, ongoing aftershocks. Did the council put out some information for people about those particular risks on the basis
- 30 that places, streets, buildings were being kept open in these cases?
- A. I'm not certain we did specifically with respect to parapets and the failure of buildings but what we did do was to isolate those buildings

where there was apparent dangers so we isolated those with cordons and did our best to monitor the remaining buildings where there were apparent defects we did our best to contain those risks. I think it was pretty obvious to people where we thought there were real apparent dangers because of those cordons and our primary focus was on ensuring public safety.

5

Q. Given that in hindsight at least do you agree the council really should have put out some information to the public about those particular risks outside unreinforced masonry buildings after 4 September?

10

A. I'm not certain we anticipated February 22<sup>nd</sup>. I think what we believed was that the buildings that remained undamaged had survived this fairly substantial earthquake and we were looking to resolve the issues with the ones that had been damaged. There would have been perhaps in an ideal world we might have taken up that suggestion. Can I comment though and I'd just like to comment that this particular building had been strengthened to and you've heard today to a very high level of strengthening and I don't think we would have anticipated a failure of that particular building.

15

Q. The building in a sense didn't fail. The wall came off in the same way as we saw on Lichfield Street the other day. It was a failure of particular section or sections of the building wasn't it in this case? Is it true that in those final days of 2010 priorities within the council were being placed on opening restaurants and bars as quickly as possible?

20

A. I think returning the city to normality was important and I'm unsure that bars or cafés were treated any different to any other business.

25

Q. Can you assure Mr Gilbert's family that that priority didn't outweigh safety considerations in relation to this building?

A. Yes.

Q. How do you know that?

30

A. Because we went through a process of receiving from the engineers certification to say that building was safe. We made sure that it was a CPEng engineer signed it before we did anything so there was a

protocol, a process, a system being followed and it was followed in respect of that building.

Q. The perception that Mr Gilbert's family may have though is that we have the post Boxing Day inspection with the red sticker.

5 A. Yes.

Q. Followed by a USAR report on the 27<sup>th</sup> recommending an engineering assessment.

A. Yes.

10 Q. And Mr Ryburn's comment and when one weighs those all up against the ultimate decision to reopen the building it just doesn't seem to fit. What do you say to that?

A. You started off I think saying that at the end of 2010 it was our rush to open a building. The events I think between Boxing Day and the time it was opened I think there was a process followed that was reasonably  
15 robust. Certainly the certification concluded the building wasn't a risk, had been brought back to a standard and so I think it was reasonable at that time to open the building. Subsequently Mr Ryburn made an inspection on the 9<sup>th</sup> of February. That was, that was a different scenario. The building had already been opened so I just wanted to  
20 clarify that.

Q. I think the point though would be was it the correct decision to accept a CPEng form and allow the red sticker to be removed given that we had an engineer on after Boxing Day red stickering it, another engineer on the 27<sup>th</sup> saying an engineering assessment is required and of course I  
25 accept the later view by Mr Ryburn of further assessment required does that not send out at least in hindsight that the decision to reopen was a wrong one given those views of those engineers?

A. I've listened to all the evidence today and I know the process that was followed by our people. I believe the decision was valid at the time to  
30 reopen at the end of 2010.

Q. And I won't get you to go through it but I think you would say that is based upon the test the council adopted which is reflected in the CPEng form that the council accepted?

A. Yes.

Q. Would you agree with what Mr Higgs said that in hindsight that test was wrong?

5 I think he said that if we had the mechanism of a detail engineering assessment in respect of every building that would be, that would be beneficial and that situation was in place now but at that time it wasn't and the direction we got from the Department of Building and Housing, the engineers and in agreement was to accept that certification and that is what we did.

10 1820

Q. Or to put it another way I suppose adopting Mr Peter Smith's suggestion, does the Council agree in hindsight, applying to this building, a red sticker should have remained in place until there had been a detailed inspection and assessment of the building's capacity against some sort of strength criteria?

15

A. I think that would be desirable and that's the case now that we're going through but what I want to say to you is this, that if someone had looked at the file in respect of this building they would have seen very rapidly this building had been strengthened to 67% and they knew from our file this was not an earthquake prone building and so they would have, a detailed engineering evaluation would have very quickly concluded that this building could open.

20

**JUSTICE COOPER:**

Q. At 67% though was to a standard under quite an old code wasn't it? It was 67% going back to –

25

A. 1993 was when that was assessed. Mr Smith, and I've had a conversation about that and he advises me that that standard continued right through. There was a slight alteration where a co-efficient was changed but that building would have been 70% of the code at the time of September. Mr Smith can elaborate on that. We had a building with a very high level of strength.

30

**CROSS-EXAMINATION: MR ELLIOTT**

Q. Really the final concern I just want to put to you is around the issue of mistakes or errors on the Council's part and what that might mean and what it might mean in terms of learning points, which I accept you've  
5 already covered to some extent.

A. Yes.

Q. The Building Act notice, you were nominating different types of possible errors but I think you would agree that the Building Act notice did not properly record what was in the form, although we should note that the  
10 form now appears to have been wrong itself.

A. Yeah.

Q. That was an error?

A. Yeah.

Q. It appears that Mr Zarifeh pointed out an error where the date October  
15 appeared but it should have been December?

A. Yeah.

Q. It appears that the Building Act notice was not served on the registered office of the company but rather to a post office box?

**OBJECTION: MR LAING (18:24:00)****20 CROSS-EXAMINATION CONTINUES: MR ELLIOTT**

Q. I suppose my point – you may not be able to answer this directly Mr McCarthy, it's just that it appears that the notice was sent to the post office box and I'm just suggesting that it would have been better to have sent it to the registered office of the company if one was looking to  
25 ensure that it arrived safely?

A. It was put on the building and it was, you know, I mean everyone seemed to know about the Building Act notice that was intimately involved with this building.

Q. Except the owner.

30 A. It appears on the building, the owner's representative on site. So your question would it have been good to send it to the registered office, um,

yes it would but that would have taken time to be received. The people immediately dealing with this building at the time had that notice.

Q. And were you here earlier on when I was questioning Mr Gordon about the notices on the fencing and so on around the –

5 A. Yes I was.

Q. Can you just confirm that it is the Council's position that the documents which I showed him were the ones which were posted in the locations I referred to?

10 A. I think there's notices put on the building. I wasn't certain about the fence. I looked at that and I'm – it didn't seem to me, well I couldn't see the definition on that particular notice but it may well have been a notice served both on the fence and on the building. I don't know. I couldn't see from your photo anything other than that. Clearly it was important that key people could see the form.

15 Q. All right, well just in relation to this issue of mistakes, during Tuesday's hearing there was a situation where an engineer has produced a form pointing out some possible study about how a building works structurally and I think your comment was that was overlooked, that was right wasn't it?

20 A. At the time.

Q. And on Monday we had a file where a Council officer received an email pointing out high level bricks and stone blocks and suggesting the area be secured or fall areas cordoned off and the case manager simply added that to the file without further action. That was right wasn't it?

25 A. I'm sorry I'm not certain about the point of your –

Q. Well my point is that when one considers those, what appears to be mistakes, and what appears to be further mistakes of the transposition error on the Building Act notice here, those types of mistakes which seem to recur are not compatible with safety being the over-riding concern of the Council?

30 A. We don't like making mistakes. When you're a big organisation doing an awful lot in an emergency situation there will be mistakes made. As

much as possible we try to make sure that what we do doesn't compromise public safety, in fact we're trying to enhance it.

Q. The Council doesn't say those types of mistakes are acceptable I take it?

5 A. No we don't.

Q. And as part of its submission to the Royal Commission on the post earthquake period will the Council be producing information about what lessons it might have drawn specifically from all of these cases that we're dealing with?

10 A. Yes, yes we will.

**CROSS-EXAMINATION: MR MCLELLAN – NIL**

**CROSS-EXAMINATION: MS MORGAN – NIL**

**RE-EXAMINATION: MR LAING**

15 Q. Mr McCarthy, in answer to a question you refer to powers that are now available to require engineers' reports?

A. Yes.

Q. At the risk of asking you a question of law, where does that power derive from if you can answer that question.

20 A. The Canterbury Earthquake Recovery Act, section 51 empowers CERA to ask for detailed engineering evaluations before they allow the re-occupation of some buildings. CERA has enacted that provision and that mechanism has been rolled out to buildings that are currently unoccupied but also to buildings that are occupied and they're using another section, section 29 in that regard. Those mechanisms are  
25 available to CERA. Those mechanisms weren't available to us post September.

**QUESTIONS FROM THE COMMISSION - NIL**



**WITNESS EXCUSED**

**COMMISSION ADJOURNS: 6.30 PM**

**(ADJOURNED UNTIL 4.00 PM THURSDAY 2 FEBRUARY 2012)**

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