HEARING RESUMES ON WEDNESDAY 8 AUGUST 2012 AT 9.30 AM

MR ZARIFEH ADDRESSES THE COMMISSION

Sir, we are moving onto the construction phase and there are four witnesses – Messrs Brooks, Scott, Jones and Shirtcliff. Mr Shirtcliff lives in Australia and a videolink has been arranged for quarter to 12. We may or may not get the other three witnesses before then but that is what is hoped and we will start, Sir, with the person who was the Managing Director of Williams Construction, Michael Brooks.

MR ZARIFEH CALLS

MICHAEL BROOKS (SWORN)

Q. Mr Brooks, is your full name Michael John Brooks?

A. It is yes.

Q. You reside here in Christchurch?

A. Yes.

Q. And you are retired?

A. Yes.

Q. Have you got a signed brief of your evidence in front of you?

A. I have.

Q. Can I ask you please to read from that, beginning at paragraph 2 and as we go through if we need to refer to documents I will stop and do that and if I've got some additional questions I will do that as you go through.

WITNESS READS BRIEF OF EVIDENCE AT PARAGRAPH 2

A. "I was the Managing Director of Williams Construction (Canterbury) Limited when the construction of the CTV building at 249 Madras Street commenced in 1986.

I joined Williams Construction Limited in 1985 initially as General Manager and became Managing Director in mid '85.

Prior to that appointment I had worked at Industrial Holdings Ltd, a property developer and builder of commercial buildings as Development Manager.

Before that I was employed by the Christchurch City Council as a Senior Town Planner where I assisted with the review of the District Scheme. I hold a town Planning qualification from the Nottingham College of Art.

In 1985 Williams Construction consisted of about 25 employees. Most were trade qualified and included three foremen. Bill Jones was one of those foremen, having been with the company for many years. At the time I joined the company, Bill had recently completed a housing development for Christ's College and was due to commence a multi-storey office block for the Aged Persons Council."

Q. I will just interrupt you, that multi-storey office block was that a building designed by Alan Reay Consultants?

A. It was, yes.

WITNESS CONTINUES READING BRIEF OF EVIDENCE AT PARAGRAPH 7

A. "The Construction Supervisor was Geoff Taylor. He was responsible for overall co-ordination of construction progress.

Tony Scott joined the company in mid 1985 as quantity surveyor with the title of Development Manager. His responsibilities were financial, such as estimating construction costs, monitoring of labour and material costs and preparation of progress claims. He was not responsible for technical construction issues.

My main responsibilities at Williams were personnel management and obtaining further construction contracts. I had no real involvement in the detailed management of the sites, although my general practice was to visit the sites two or three times a week to check how things were going and whether the foreman need anything.

For the following year or so the management structure remained unchanged. However, during 1985 to 1986 the company expanded significantly to about 100 employees. Contracts underway at that time included the Copthorne Hotel on Durham Street, the RNZAF Museum, the Aged Persons' Council building and some smaller contracts. Other potential contracts were under negotiation. At this point it had become

evident that the management structure of the company needed to be strengthened. This was not simply due to increased workload but the complexity of the buildings being constructed by Williams had also increased.

Q. And when you make that general point are you also including the CTV building that we're coming on to?

A. Yes.

Q. 11.

A. "I recall a meeting with the then Williams Group Chief Executive Officer, Mr Williams, to discuss various projects and the future growth of the company. Mr Williams impressed upon me the need to strengthen the management structure by employing a structural engineer. I recall well his comment that far too much responsibility was being placed upon the foremen.

I then took steps to employ someone with construction experience but particularly with a structural engineering background. This led to the appointment of Gerald Shirtcliff as Construction Manager. The creation of this position effectively replaced the Construction Supervisor role. Gerald Shirtcliff's responsibilities were to ensure satisfactory progress of all Williams' contracts. That would have included co-ordination of su-contractors, liaison with Consultants and the supply of materials and labour to the various sites, including the CTV building site. Mr Shirtcliff was left to his own initiative as to how this was achieved.

Q. Can I just ask you there, when you appointed Mr Shirtcliff, what was your understanding of his background?

A. My understanding was that he was an engineer, a qualified engineer.

Q. Civil engineer?

A. Sorry.

Q. Civil?

A. Yes, yes and he'd been working in South Africa mainly where he detailed out, you know, his experience with various, you know, building companies and building sites there.

Q. Paragraph 13.

A. "Gerald Shirtcliff was the Construction Manager of Williams until I left in March or April 1987 and so far as I am aware continued in that role thereafter. I should make it clear that whilst he was later dismissed from the company after the CTV building was completed, it was not for reasons of technical incompetence. I never had cause or was given cause to doubt his technical knowledge.

The CTV Building:

I recall a meeting with Mr Neil Blair of the Prime West Corporation in the middle of 1986 regarding the development of the site at the corner of Cashel and Madras Streets which Prime West owned.

I first formed an association with Mr Blair when I was employed by Industrial Holdings. In 1984 and 1985 I had arranged the development of a site he owned in Hereford Street into a six-storey office block.

Mr Blair was an experienced and successful property developer and investor with a clear understanding of market conditions. I am quite sure that he would have had definite knowledge of the site's potential prior to purchase, if only to determine its price.

The meeting resulted in Williams being invited to submit a design-build proposal to Prime West. I put a proposal to Prime West which was accepted, subject to the final details being worked out.

I had a clear view on how the building should look. It was my idea to have the lift shaft at the back of the building. This allowed for maximum rentable space. As I recall it, I set this out on a piece of paper, just a square box really with a lift shaft drawn at the back. I ran it by Tony Scott to get an idea of how much it would cost.

I then gave my drawing to Alun Wilkie to draw up final plans. He had worked for developers before and understood that the building needed to be as efficient as possible and provide maximum lettable space. Tony Scott and I then prepared a contract.

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Q. Just pause there. I know you are going to come onto it in a moment but at that stage you said you approached Alun Wilkie the architect. Had you decided on a structural engineer at that stage?

A. I don't think so. I couldn't honestly confirm.

Q. Had you worked with, had Williams worked with Alun Wilkie before?

A. No but I had.

Q. You had?

A. Oh, yes.

Q. The Aged Persons building, was that an Alun Wilkie design? You said Alan Reay Consultants was involved, was Alun Wilkie?

A. I don't know who the architect was.

Q. Thank you, 20?

WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 20

A. A contract price of about 2.45 million was agreed with the client. It was a fixed price and did not include any bonus or penalty clause. I recall that a profit of about $200,000 was budgeted for which was maintained throughout if not improved upon. The considerations –

Q. Can I just, sorry, is that profit, is that from what you recall?

A. Yeah.

Q. You can't give us any figures within the time that's elapsed? I'm talking about the end result more than the (inaudible 09:40:31)

A. Oh, the end result. The end result it was definitely better than that. I think it was, I think it was into the 300,000 mark.

Q. Despite financial problems with Williams later in the time?

A. Well the contract of course was transferred to Union.

Q. Right well we'll come to that and bring that up.

A. That's who at that stage.

Q. So paragraph 21?

A. Yeah, the considerations that led to the design of the building and its location are as follows.

Firstly, the district planning scheme. The site is located in commercial 4 zone. Uses permitted as of right include retail and office use.

The maximum height of the building was determined by an angle of 68 degrees from the road centre. That would give a height of about 24 metres.

The total permitted net floor space was determined by the plot ratio of 3.5 multiplied by the site area, so that would give approximately 3490 square metres of net office space.

The number of onsite carparks and layout dimensions were determined by conditions of the zone.

The district scheme imposed strict limitations on access. In this case the site access was limited to the western extremity of the site off Cashel Street by an existing building.

Both the height and floor space of the building were less than was allowed for under the district scheme. The final design complied with the district scheme in all respects.

Market conditions.

The amount of floor space and floor size was ultimately determined by the client based on his own perception of the market. Although I cannot speak for him, it is fair to say that our views were similar.

As best I can recall, demand for office space at that time was mainly in the range of 250 to 500 square metres. Large floor areas were very difficult to lease. Retail activity in this area had declined dramatically over the previous 10 years to the extent that it was not profitable to provide ground floor retail space in this building. This partially explains why the building was not located on the corner.

The site itself was very much regarded as secondary. It is at the opposite end of town to the central business district's medical, banking and legal services. However it did benefit from good access and off-street parking. Demand was expected to come from tenants with little concern for public profile but with a need for low cost basic office space.

The actual location of the building on the site was largely determined by the requirements for access and carparks. There was no compelling need to locate the building on or near the corner.

The architect, Alun Wilkie, was expected to produce a building with an efficient use of floor space, keeping non-lettable space to a minimum. The floor space may also need to be sub-dividable in the future.

The client required a building that was for as low a cost as possible consistent with achieving its function and having a reasonable experience and reasonable appearance.

Economy of cost starts with an efficient and simple architectural design supported by a structure of a similar nature. These factors coupled with skill and experience of the builder led to a profitable project that met the client's criteria in all respects.

The final appearance of a building and how it's perceived is usually determined by its location as a building for example by the river looks more attractive than one in Tuam Street.

The structural frames of reinforced concrete buildings, whilst there being many different methods, are fundamentally alike. I have attached four photographs to illustrate my point.

Q. We will bring those up now, quickly refer to them.

WITNESS REFERRED TO PHOTOGRAPHS

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Q. Those are the first, three of those four photographs?

A. The photograph A is the Aged Persons Council building which I have referred to in the text.

Q. That was the Alan Reay building?

A. Yes. I may be, I may not be correct but I have got a feeling that the building underneath which is the Mair Astley building, I have got a feeling that Mr Reay actually was the structural engineer on that as well.

Q. Right.

A. But I may need to be corrected on that.

Q. But B is the Mair Astley building?

A. Yep.

Q. And C?

A. Oh, I don't know what that building is called but I mean it does of course look quite different, curtain, glass curtain wall building –

Q. Is that Westpark Tower?

A. I don't know.

Q. You don't know, okay, and the next photo please?

A. That's – of course that is a fairly modern building, it has now been demolished because of the earthquake of course but I, you know, it is quite close to the other three and I think it illustrates my point that we probably have got four structural frames there that are all fairly similar but four very different looking buildings.

Q. And I think you covered that, if you read from the bottom of page 4, "Although it is not..."

WITNESS CONTINUES READING STATEMENT FROM PAGE 4

A. "Although it is not clearly shown, each building is similar in floor space and each one with the lift shaft and services on the side. It is what is attached to the frame and what is included in the interior, such as carpets, marble floors, air conditioning which makes the point of difference. These items can add substantially to a building's cost and therefore rental potential.

The CTV building had none of these items when first completed. It is only in those optional extras that economies were made.

It was a standard kind of speculative deal but it had a little bit of sharpness to it. By contrast, my previous employer, Industrial Holdings did a couple of buildings down the road which were of the same design (columns and reinforced concrete floor) but they lacked that little of sparkle that the CTV building had.

Williams did not work on this building on the basis of a price it had committed itself to, based on sketchy plans from Alun Wilkie and Alan Reay. As multi-storey buildings go it was very straightforward. If you have done a few buildings like this you get to know the 20,000 square feet is about one million dollars, 40,000 square feet therefore is about the same ratio or 5% less and so on. "

JUSTICE COOPER:

Q. I just find that paragraph a little hard to follow. You say, "Williams did not work on this building on the basis of a price he had committed itself to based on sketchy plans from Alun Wilkie and Alan Reay." But you had earlier told us there was a fixed contract price of about $2.45 million dollars. That is right isn't it?

A. That is correct Sir, yes.

Q. So what is the point you are making here?

A. I think what I have gone and confused things is that there is really two stages to this Sir. There was an initial stage of negotiation where I'd done some sketches and because I knew how much floor space there was going to go on the site I could therefore establish what the price was going to be based on the rate per square metre. Now the contract itself wasn't drawn up on that basis. That was a statement of intend if I can use that term. The contract came later with more detailed plans.

EXAMINATION CONTINUES: MR ZARIFEH

Q. Just to follow up on that, so you said the contract came later. Was it for the same price as the original quote from Williams?

A. Yeah it might have been a little bit less actually but it was pretty close.

Q. All right thank you, 40?

WITNESS CONTINUES READING STATEMENT FROM PARAGRAPH 40

A. We made a decent profit margin on the job, more than most. I used the fact that Williams was very good at concrete to make money. If, for example, the concrete component on a job was $250,000 I used to load as much of that as I could into early payments to assist with cash flow. I did this on the CTV job.

Q. And can I just ask you what do you mean by, "Williams was very good at concrete."?

A. Well in terms of you know standard of finish of concrete because most certainly over the years he had established you know, quite a good reputation for the – if you like for the appearance of it but for some reason I was never really quite sure of the blokes that worked for

Williams were particularly efficient at doing it and so we used to do rather well out of concrete jobs, probably better than many builders.

Q. Right, because you are using it in the sense of efficient cost wise, aren't you, when you say they were very good at it, they were good at doing it for a low price?

A. Yeah the two go together.

Q. But it wasn't a matter of a change in the quality of the concrete that was provided, in terms of the lower cost?

A. No, no, no.

Q. All right, 41?

WITNESS CONTINUES READING STATEMENT FROM PARAGRAPH 41

A. There was no financial pressure on this job and Prime West made progress payments on time which kept Williams ahead in terms of cash flow. I do recall by the time the CTV building was finished Prime West was in trouble and there was some uncertainty about whether we would be paid right up until the cheque was received.

Q. So do you say that that uncertainty and financial problem for Prime West didn't happen until CTV was finished or –

A. Oh, it was - CTV building was definitely fully completed by the time you know that pressure came on as it was only the final payment, final progress payment if you like that we were sweating on.

Q. Because we heard from a witness earlier on in the hearing, I think he quoted something like 26% was the going interest rate back then in the mid 80s?

A. Yes it was.

Q. Does that fit with your recall?

A. Yeah, oh, yeah.

Q. So no doubt that was one of the reasons for Prime West's problems?

A. Oh, I am sure it was yeah.

Q. You say that didn't affect the CTV construction?

A. No we – yeah we, they paid us in full. I think, I think the way it worked was that we just happened to be high up on the list of order of payment

of creditors fortunately and so we, you know, the contract was paid in full.

Q. Because you are going to say a bit later about the slowing down of the construction, March '87?

A. Yeah.

Q. And following, and that you believe that was due to non-payment of suppliers and sub-contractors?

A. I believe so yes, yes.

Q. So that is payment by Williams?

A. Yeah.

Q. So isn't that an indicator that Williams was being affected by the financial market at that stage?

A. Well at that stage Williams was then part of the Richmond Smart Group.

Q. Right.

A. And the Richmond Smart Group were definitely experiencing some problems but they also handle their cash, handled their financial matters rather differently than Williams used to in that before Richmond Smart, Williams Construction Canterbury was like fully self-contained financially. Weren't allowed to borrow money or anything, it existed on its own cash flow. When the Richmond Smart Group came into the picture, they if you like started helping themselves to you know money out of the Williams account you see which of course they were perfectly entitled to do.

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Q. And didn't that cause problems –

A. And it did.

Q. – with Williams and the payment as you -

A. It did cause problems with subcontractors and so on, yes.

Q. So the CTV at that point hadn't been completed?

A. Not at that point no.

Q. So financial problems did occur which had an effect on the progress of construction of the CTV?

A. I'm sure it did, yes.

Q. Do you think that that in turn may have had an effect in terms of having to cost cut?

A. On –

Q. On the job, on the CTV job?

A. Cost cut?

Q. Yeah, to cut costs or cut corners?

A. I see what you mean, well the short answer is no I don't think it did, because building, the building was nearly complete.

Q. But it wasn't in March 1987 was it?

A. Well I left Williams in say April, and it was – it was that period, April to sort of September that the building slowed down, you know, and I think because subcontractors not turning up to do the work.

Q. And what I'm saying is could that in turn have had an effect in terms of the workmanship on the building?

A. Well it can affect the workmanship.

Q. Yes.

A. There's no question about that but I really don't think it did.

Q. Right, but you can't be sure because –

A. No.

Q. – it happened and could have an effect?

A. Yeah.

Q. Thank you. To 42.

A. I was familiar with Alun Wilkie's work from working with him at Industrial Holdings and Alan Reay was the structural engineer on the Aged Person's Council building which Williams had built.

I cannot single out any particular reason why Alun Wilkie and Alan Reay were selected. However both were experienced in dealing with builders and developers and had a particular understanding of developer's requirements to maximise floor space and the use of a building and to employ economical construction techniques.

Q. Could I just get you to pause there. So you can't recall now why you say Alan Reay was chosen but you had worked with Alun Wilkie before?

A. Yeah.

Q. And sorry you might have said this, had you worked with Alan Reay before?

A. No.

Q. Yourself had or Williams?

A. No.

Q. So what was the basis of you saying that both were experienced in working with developers? Is that what you ascertained?

A. Yes, I mean that was the prime – you know easy to answer in the case of Alun Wilkie because I knew Alun so well in having worked with him. But I knew Alan Reay more by reputation of course, you know from other builders and developers and it's largely that that you know attracted me you know to offer him a commission. I think the other factor here is that in selecting a consultant I was always of the view that I'd much prefer to have you know several – contacts with several consultants rather than just have one favourite, you know, which some builders do. You know I think it helps to spread the business about. You know it's the old principle, you know you do business with people who do business with you.

Q. All right, but the reason for you going with Alan Reay as with Alun Wilkie was in Alan Reay's case the reputation for maximising floor space and the use of a building and employing economical construction techniques?

A. Yes it is, fundamentally.

Q. And does that apply to the structural designs in the case of the engineer?

A. Well it's one and the same thing.

Q. Can I just ask you and I don't know if you can help us with this, but at that point where you got Alun Wilkie doing some preliminary work and then you decided on Alan Reay Consultants, at that point you had a general picture of the layout of the building, the box with the shear core at the back –

A. Yeah.

Q. – or the side, what about the other features of the building, say the columns, CTV mainly had circular columns, there were precast beams used throughout, there was a Hibond floor used, the floor slab, things like that, did you have any part in discussion of those or deciding those?

A. Not especially, you know, it's something that I suppose you could say performed a watching brief, you know.

Q. So you performed –

A. You know a watching brief, you know, just seeing what was going on, but it's largely an exercise of you're between the quantity surveyor and the structural engineer, you know, with some building knowledge input as well of course.

Q. So perhaps Mr Scott can deal with that?

A. Yes I think he probably could better than I can.

Q. Thank you, 44.

A. I do not recall speaking to Alan Reay about the CTV building. In my mind David Harding as an employee of Alan Reay Consultants was the principal engineer for the building. I remember speaking to him when the CTV building was first given to Alan Reay Consultants. I also remember speaking to him two or three times throughout the project. I doubt whether this was about a specific engineering matter but rather more social contact, checking on the progress of the building.

At all times both consultants undertook their duties to Williams satisfaction.

Q. Who are you referring to when you say both consultants, is that –

A. Alun Wilkie and Alan Reay.

Q. I have no doubt –

A. I have no doubt that had we continued in business both consultants would have been employed on other jobs.

I had no dealings with the Council over the building permit for the CTV building. I have been advised during the course of preparing my evidence that prior to the permit being issued Mr Graeme Tapper who was at that time a Council engineer, recorded in a letter to Alan Reay a number of concerns he had about the building. I had not been aware of

this. I do not recall David Harding or Alan Reay saying anything to me about it at the time. The fact that there was a letter does not of itself ring alarm bells for me as it would often happen that the Council would question aspects of drawings that they were not sure of and on such matters the Council would go directly to the design engineer.

Q. Just on the issue of the permit, and the granting of it, if there'd been a delay in the granting of the permit would that become a concern to Williams in terms of this design-build contract?

A. Oh, very much so, yeah.

Q. All right, Union Construction.

A. In late 1986 Williams became the subject of a takeover by the Smart Group. This had little impact at first but a hostile situation developed in early 1987. I learnt that attempts were being made to sell Williams and that the tower crane was up for sale. This did most certainly have an unsettling effect on everyone.

When situations like this occur it may manifest itself in the following areas:

i) absenteeism, supposed sickness

ii) accidents

iii) lower productivity and work to rule

iv) poor quality workmanship.

During this period three serious accidents occurred including one at the CTV building. Whether or not these were caused by distraction as a result of the Smart Group takeover I could not say but nevertheless recognise this as a distinct possibility.

Q. And just on that we talked about that a moment ago, but the poor quality workmanship as you said, is a potential factor and you don't think it was a result of it, but you can't be sure. Is that fair comment?

A. Well no I don't suppose I could be sure, really.

Q. All right, 50.

A. Sorry I got lost.

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Q. Paragraph 50.

A. Yeah, "I wish to comment on this issue in the context of whether or not it would have impacted detrimentally on work standards at the CTV building.

At first the takeover had if anything a positive effect insofar as the Smart Group gave an assurance that Williams would be retained. In addition a shares to the staff was promised.

Regarding the issue of standards of workmanship falling. I reject this assertion entirely for the following reasons. Prior to me joining Williams the company had undergone two management changes which to the best of my knowledge had no effect on the work standards. The site staff of Williams were entirely skilled and conscientious tradesmen, well led by experienced foremen, themselves very capable tradesmen in their own right. Work standards and good tradesmanship are second nature to these people and I cannot envisage a situation where they would compromise their principles.

There is some indication that the progress of the CTV building slowed down after March '87. However, based on my experience some months later I believe this was due to non-payment of supplies and subcontractors."

Q. If I can just pause there. Just so that we can be clear on this issue of the workmanship you say in paragraph 52 that you reject that but as you said earlier you can't be sure if it did have an effect and you told us about the Smart Group once it took over taking money from –

A. Yeah.

Q. – the Williams' pot if you like and the effect that had on Williams, so ultimately then it could have had an effect, you can't be sure?

A. Well I mean you can't, I don't think one can rule out the possibility 100% to be realistic.

Q. You're aware, and we're going to come to it in a moment, of some construction issues that the Hyland Smith report –

A. Yes, yes.

Q. – identify?

A. Yeah.

Q. So clearly there were some issues with workmanship on the site? Potential issues?

A. Well according to the Hyland report, yes.

Q. Okay, all right, 54?

A. "I was dismissed from Williams in March 1987 and Mr Scott left Williams shortly afterwards whilst Mr Shirtcliff remained employed by Williams. Tony Scott and I established our own construction company, Union Construction Limited in March 1987. It consisted of myself as managing director, Mr Shirtcliff as construction manager and Mr Scott as development manager. We each held 10% of the shares which were unpaid. The balance of 70% being held by nominees of Angus Construction Limited. Board membership consisted of myself and two directors of Angus.

JUSTICE COOPER:

Q. So if I read those two paragraphs together, 54 and 55, Mr Shirtcliff is the construction manager for Union from March 1987 when the company was formed but he remained employed by Williams?

A. That's correct.

EXAMINATION CONTINUES: MR ZARIFEH

Q. And where was he working?

A. Mainly at Williams.

Q. Sorry, he remained at Williams?

A. Yeah.

Q. And as construction manager, the construction manager of the CTV including other projects?

A. Oh yeah, yeah.

Q. Did you continue to have contact with him after you'd left?

A. Yes.

Q. Right, but he didn't report to you in terms of your previous position at Williams did he?

A. No.

Q. Who did he report to?

A. Well after I left Williams I well this is an assumption, I assumed that he would have reported direct to the Wellington director, a Mr Paterson.

Q. Of Smart Group?

A. Of the Smart Group, yeah.

Q. All right. So 56?

A. "Mr Scott joined Union shortly after it was formed but Mr Shirtcliff stayed at Williams and come over to Union later in the year. Some months later all of the employees of Union were former employees of Williams. At some point Bill Jones joined Union in the same capacity. I am unable to recall approximate dates.

From April 1987 I had no further contact with Williams until September or October of 1987. I received a call from Steven Smart, chief executive officer of the Smart Group, asking me to go back to Williams as he was unhappy with the state of the company, and I agreed to do so."

Q. Can you just tell us there firstly Bill Jones was the foreman of the CTV site?

A. Yes.

Q. And you said that he at some point came over to Union but had he remained after you left Williams remained as foreman of the CTV site for Williams?

A. I'm unclear about that sir.

Q. Right.

A. You know it's a bit of a, that period's a bit of a blank. I've been doing my best to sort of try and remember just where everybody was at that point.

Q. All right, but you physically left your role in March/April 1987?

A. Yes, yes.

Q. Went over to Union?

A. Yeah.

Q. And had nothing further to do with CTV?

A. Nothing at all.

Q. At that point?

A. That is correct.

Q. Right, the second thing was you said that Mr Smart asked you to come back as he was unhappy with the state of the company. Why was he unhappy? What was it about the company?

A. I think he was unhappy about there was a manager who was a, well two sort of management people that had been appointed in my place and he was obviously un- well he was I know for a fact unhappy with their performance and I think, I think in the Smart Group generally was having problems not just in Christchurch but in you know Wellington and Auckland and I think the one thing that he was obviously concerned about the fact that we were you know a growing company –

Q. Right.

A. – and you know and staff were leaving Williams and you know coming to Union.

Q. Okay, and following on from what you said before these managerial problems could have had a flow on effect in terms of workmanship at the CTV site?

A. I really, I really don't know.

Q. No.

A. Don't you know, it...

Q. Gerald Shirtcliff, from what you said, would have remained as construction manager as far as you're aware?

A. Yes, yes.

Q. So would Bill Jones have reported to him rather than you then once you'd gone?

A. Yes he would have done, yeah.

Q. So was Shirtcliff in-between you and Bill Jones effectively in terms of the chain?

A. Well that was certainly the, you know, the intention once Mr Shirtcliff had come on board, yeah.

Q. Right, is that how it worked out or not?

A. No, well, you know, things really didn't work out very well at all between me and Mr Shirtcliff so –

Q. Right, well you talked about dismissing him?

A. Yeah.

Q. When was that?

A. Oh that was right at the end of Union.

Q. Page 8, paragraph 58?

A. "At this point the CTV building was nearing completion. Although I cannot recall its exact state at the time I am fairly certain that the structural frame columns, floors, beams and shear walls had been completed.

On returning to Williams it was apparent that the company was in a parlous state, almost out of work, behind in payments to creditors and had been issued with a Council stop work notice on one job."

Q. Which job was that?

A. At Riccarton.

Q. At Riccarton?

A. AMP.

Q. AMP? And do you know when that was issued?

A. The stop work notice would have, it would have been issued around about May, April I think.

Q. Okay, thank you. "I also discovered..."

A. "I also discovered that the two persons appointed to manage the company were clearly out of their depth. It was agreed with the Smart Group that Williams would be closed down and that existing contracts, including the CTV building contract, would be assigned to Union." But I'd just make that clear that the CTV building contract was the only contract signed to Union....

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Q. And why was that? Why was it the only one?

A. Well the other contract that – I really didn't want the others. They were, one of them is of course the hotel, you know which would have been you know far too big to, you know for us to chew.

Q. Too big for Union?

A. Yeah.

Q. Right, so CTV was a smaller project?

A. I don't know that Mr Smart actually gave me the option. I think he just wanted to you know. He would have been quite nervous about the fact that we got Prime West as a potential creditor you see and I think he was more than happy to just get rid of it.

Q. You said that staff were coming over from Williams to Union?

A. Mmm.

Q. Why was that?

A. Because we offered them a job.

Q. And nothing to do with the way Williams was being run?

A. Well I guess that would have had some influence on them.

Q. All right, and did, some of those staff might have come from the CTV site?

A. Well the staff that were on the CTV site were there all the time, you know, I don't think that – the only doubt I've got here is regarding Bill Jones.

Q. Right, well let's keep going and I think you come to him in the next paragraph. So you're at paragraph 60, I think you stopped in the middle of it, so.

A. I'll start it again. It was agreed with Smart Group that Williams would be closed down and that the existing contracts, including CTV building contract would be assigned to Union. Union would purchase the plant and equipment of Williams. Many of the Williams employees also joined Union at this point.

A. The CTV building was completed by Bill Jones and Union carpenters.

Q. So had he remained at Williams until then, or is that what you're not sure about?

A. I'm – honestly I'm just not sure.

Q. So this was a fairly disruptive time?

A. Yes.

Q. And that could have clearly had a flow on effect in terms of the CTV construction, progress, potentially workmanship?

A. Well it certainly – it certainly affected you know, the progress I mean, that was pretty obvious that it had slowed down, but I don't know the

type of people that worked for Williams, I, you know, don't – you don't suddenly, you don't – people like that don't suddenly start doing bad workmanship because the boss is having a fight with somebody.

Q. Right, but it sounded like most of them were leaving and going to Union?

A. Yeah.

Q. So you're only relying on staff that had stayed to finish jobs that were there, stayed at Williams?

A. Yeah, but we by that time we'd got the –

Q. Taken it over?

A. Yeah, well September/October we took it over.

Q. Right, what you're saying the problems that Williams was obviously facing, it sounds like they were occurring between when you left to – when you were asked to come back and when it was actually transferred?

A. Yeah, yes.

Q. So that's when that could have had the effect and –

A. Yes, it would be in that period, yeah.

Q. Slowing down as you said there's a 26 percent interest rate. All right, 62 please.

A. During this period Union also built a multi-storey office building in Victoria Street, a multi-storey carpark in Lichfield Street, and the foundations for a 12 storey building in Oxford Terrace and completed internal alterations to the former Winter Gardens in Madras Street.

Q. And when you say during this period what are you talking about please?

A. I'm only talking about the, well the period that Union was in operation which runs from –

Q. Well what's the commencement of the period?

A. Well the company was formed in March so I was operating as the managing director of that company in say April.

Q. So from April onwards you're talking about?

A. Yeah, yeah.

Q. So when you took over the CTV you had other projects on the go as well?

A. Yes, the office building in Victoria Street was on the go and I think –

Q. Did those other projects affect the ability to complete the CTV site, CTV building?

A. No.

Q. Right, 63.

A. A management dispute arose at Union Construction in late ‘87 or early 1988. However this was sometime after the completion of the CTV building.

In early 1988 Union became insolvent and closed down in late 1988.

Q. Right, the Holmes Consulting Group report.

A. After Union closed I took a position in real estate with H G Livingstone Limited. By this time the CTV building was owned by the Bank of New Zealand as mortgagees in possession, because Prime West had gone into receivership. The building was offered for lease or sale and H G Livingstone was the agent. I would like to just sort of clarify that, we were really, we weren't trhe sole agent. I think you know, practically every agent in town had got it.

JUSTICE COOPER:

Q. Sorry I didn't hear that last comment.

A. I said practically every real estate agent in town had got it on the books Sir.

EXAMINATION CONTINUES: MR ZARIFEH

Q. Sixty-six.

A. As a result of my employment I learnt that the former Canterbury Regional Council had considered purchasing the CTV building but had declined to do so. Malcolm Douglas the former chief executive of the Canterbury Regional Council was a former colleague of mine so I phoned him. He told me that Holmes Consulting

Group had identified a design fault with the building. I remember reference to the connections between the floors and shear wall.

I remember being shocked when he told me about the report. I knew Malcolm as a pedantic person who would have taken the report very seriously. I never saw the report or any other related documents.

I had no further involvement of any kind with the building. To the best of my knowledge I was the only employee of H G Livingstone to have dealt with the property. The policy of H G Livingstone at the time would have precluded the company from dealing with the property unless full disclosure of all relevant facts could be made to potential tenants and investors.

Q. Can I just ask you, when you got that information did you speak to anyone that had been involved in the CTV project with you?

A. No.

Q. You didn't pass that onto anyone or do anything about it?

A. Oh, there – it rapidly got around the sort of real estate community of course.

Q. Did it?

A. Yeah.

Q. But further than that, you didn't speak to –

A. I don’t know.

Q. The engineers or anyone who had been involved in it?

A. No I didn't, no.

1025

Q. Right, 69 please.

A. I have read the report prepared by Dr Clark Hyland and the Ashley Smith for the Department of Building and Housing on the collapse of the CTV building and wish to make some comments on matters discussed in that report. However I would first like to make some comments on the roles and responsibilities of foremen on the project like the CTV building.

Most foremen of that era, indeed Mr Jones would be a classic example are fundamentally carpenters by trade, formally or informally trained to

the level light timber framed structures up to three storeys in height. Over years of experience many pick up other skills and a wealth of knowledge of construction. They are characterised by a 'can do' attitude and daunted by very little.

In my experience few, if any, foremen of that era would have had the benefit of a written employment contract with appropriate conditions and terms of reference. Indeed this was the case at Williams.

A typical scenario of Williams being a successful tenderer would be a call to the appropriate foreman "to pick up the drawings and let me know what you need." That would just about be the sum total of management instructions.

The type of contract that the job is, has I believe a great deal of influence on the responsibilities that may be imposed on the foreman. I use the term "imposed" deliberately. With the benefit of hindsight I realise that so often management expected more from the foremen than they were initially trained for, or for that matter paid for.

An example is the RNZAF museum at Wigram. In all ways this was a traditional type of contract with an architect and engineer appointed by and reporting to the client. This contract was won by tender and I well recall the drawings and specifications which were of a high standard. In that case the client also employed a clerk of works.

The clerk of works carried out frequent inspections (almost daily) to a level of detail greater than that normally carried out by an architect and engineer. In addition there would have been a formal meeting and recording regime. This was a very typical construction management system of the Ministry of Works division.

By way of contrast the CTV building was a design-build contract, a package deal. The most obvious difference being between a design-build contract and a tendered job in terms of management is that the architect and engineer were employed by and reported to the builder. In this case the client did not employ anyone, such as a clerk of works in a contract supervisory position.

Despite the added bureaucracy of a clerk of work, I feel sure that it not only gave a level of added comfort to the client but also to those directly involved on the construction, especially the foreman.

To the best of my knowledge, much of Mr Jones' experience was previously on work of the likes of Ministry of Works contracts. The CTV building may have been his first experience with a design-build contract.

Q. Just pause there, I took from your evidence before that Mr Williams talked to you about the issue of supervision or management and that's why, one of the reasons you employed Mr Shirtcliff?

A. Yeah.

Q. So that there was someone if you like between yourself as the manager, or managing director and the foreman? You appointed Shirtcliff as the construction manager?

A. Yeah, I don't think it's so much an issue of having somebody between me and the foreman. It's more of an issue of having a construction manager with engineering, you know, background.

Q. But I thought that's why you employed Mr Shirtcliff who had that?

A. Yes.

Q. Right, so what I'm getting at is I understand what you're saying about a clerk of works but effectively is that the type of role that you were envisaging for Mr Shirtcliff? Albeit that he wasn't going to be at the site all the time?

A. Well I never thought of it that way, but you probably, you know, you probably make, you know, quite a, quite a good point really.

Q. So is that how it worked out or not? As a clerk of works?

A. No the clerk of works and the construction manager are two, they really are two different things.

Q. So are you saying that the appointment of Mr Shirtcliff didn't meet the concerns that you're now expressing in hindsight?

A. No. I'm sorry to take so long for that.

Q. That's all right, why was that, why didn't it?

A. Well he just wasn't up to the job, you know, it's as simple as that.

Q. Mr Shirtcliff?

A. Yeah.

Q. And would that have affected supervision of the job that should've been there if a construction manager was doing the right, doing a proper job?

A. Well this is where we start to sort of get misunderstandings in the business where we start using terms like "supervising" and so on. We had a team, you know, of foremen, and essentially they didn't need supervising but what they did need from time to time was guidance and mentoring, you know, and I think that's rather different from saying supervisor.

1030

Q. So there wasn't the guidance and mentoring that you would have hoped for?

A. Correct.

Q. And that could also be another factor in terms of construction issues and I understand you won't be able to say it definitely is but it is another potential factor?

A. It is a potential, you know, factor.

Q. 79 please.

A. "With regard to the specific responsibilities of the foreman, I make the following comments:

He is mainly responsible for carrying out the work that falls with his trade. For example, had we elected to make our own columns and beams with timber framework, then clearly it would have been his responsibility to ensure the work was to the appropriate trade standard.

A large percentage of work undertaken on a construction site is by subcontractors or sub-trades. These people or organisations are appointed by management and are expected to perform to their own standards of trade. This would include the electrician, plumber, steel placer, floor placer, and lift installer.

The foreman's role where these activities are concerned is that of facilitator. This means to ensure that the 'job' is ready or prepared for a particular trade and where reasonably necessary provide assistance by way of labour and materials.

The fact that the foreman has an in-depth knowledge of those trades does not under any circumstances make him responsible for their activities. His responsibility is limited to the extent of reporting to management on their performance or otherwise.

I would like to clarify the issue of concrete testing at this point. The Hyland Report has identified this matter as being of some concern. The specification does, of course, make it clear as to responsibility."

Q. And when you say that are you referring to the concrete suppliers' responsibility?

A. Yeah.

However, even if the specification were silent on this subject my clear view is that the concrete testing is outside the foreman's terms of reference.

Q. Carrying on – "Construction Deficiencies..."

A. "Asymmetrical design:

Designs of this nature are quite commonplace and I am at a loss to understand how this could be seen as a fault.

Locating the service core on the side not only produces the maximum amount of net leasable space, but also offers more flexibility for office layout. Locating the service core centrally was not an option. The north and west walls were fire rated walls, four hour fire rated walls, and had to be of solid construction without windows. A central service core would therefore result in office space without any natural light which was not acceptable."

Q. Mr Brooks, you understand I presume that I think what the Hyland Smith Report is referring to is the problems that result structurally not architecturally?

A. I now realise that Sir and I was looking at the thing more in architectural terms.

Q. 81 (ii)

A. "Building out of 'plumb'

The report refers to a survey carried out that established that the North Core was 90–100mm out of 'plumb'. Whilst that is not surprising under

the circumstances, the conclusion that it was built like that most certainly is. If that was the case, the lift installer would have experienced great difficulty in installing the lift.

Cobbling of concrete:

It is a general trade standard to ensure that the surface of existing hard concrete be suitably roughened or cobbled where it is to join new concrete. This is to aid adhesion and is normally carried out manually with a hammer and chisel.

However, in the case of shell beams, this is not necessary for the following reasons:

i) The inside of the beam is already roughened by the manufacturer during the moulding process;

ii) The bottom edge of the face has reinforcing protruding, thus avoiding the need for cobbling

iii) The side edges are not done because of the fragile nature of the beam. Chipping with a hammer would almost likely cause cracking and break off the edges;

iv) The top edges do not require 'cobbling' because the metal Hi-Bond floor is laid over it.

I refer to a copy of a typical manufacturer's specification for shell beams which I have provided with my statement."

Q. When you say, and I won't get that brought up, but that's not necessarily one that was –

A. – I don't know which one was used I just took this at random.

Q. All right, now you know I think that one of the issues with the concrete not being roughened or your term is it 'cobbled'?

A. Yes.

Q. One of the issues that the Hyland Report raises is the end of the pre-cast beams where semi-circular end where it met the columns. You understand that?

A. Yeah.

Q. And are you saying the end of the beam couldn't be chipped with a chisel because it might damage it?

A. No, I'm only talking about the shell beam.

Q. Okay, not the –

A. – they're the ones around the edge.

Q. Do you want to talk about the pre-cast beams?

A. I haven't made any comment about this.

Q. No, but you understand that that's an issue?

A. I do, yes.

Q. And particularly the ends of them?

A. Yes.

Q. And presumably you would say the same about the chipping of those or not?

A. Well there is a risk obviously when you've got, you know, a circular piece of concrete that you start hacking away at the thin bit you're gonna break bits off you know.

Q. Right, but you can spray a retardant can't you on the concrete?

A. I believe so.

Q. And clearly that wasn't done?

A. I've no idea.

Q. You don't know anything about this?

A. I don't know.

Q. All right just going back quickly to the design, the asymmetrical design. You talked about it not being an option to not have the core in the centre. Would it be potentially a problem for the owner in this design-build if there had to be another shear core across the south so the Cashel Street side of the building if there had to be a wall there as opposed to lots of windows?

A. Well it would have caused, you know, some problems for the owner because clearly you know you'd be blocking out the opportunity for more windows, you know, so you really are limiting.

Q. And if that was a potential that could happen would that be something you would imagine would be discussed with Williams and with the owner and architect?

A. Yes I mean it is the sort of thing, you know, that would be part of discussion. I'm just looking at a typical floor plan of the building at the moment and you would be able, it would have been possible to have made that shear wall, you know, a lot longer without, and still retain a fair degree of glass, you know, and light to the offices. I don't rule it out completely.

Q. All right, do you recall being party to any discussion about the south shear wall?

A. No I don't.

Q. And is that something that the architect would be involved with?

A. Oh, very much so, yes.

Q. All right. Now you're at 86 – Bending of steel.

A. "Reference is made to the bending of H24 steel bars back into the concrete on the site.

Steel of this size can only be bent manually with great strength and mechanical assistance. An H24mm bar is 6 metres in length. Approximately 4 metres of that would first need to be firmly fixed. A pipe of suitable length would then need to be applied to the free end and upward force applied. The resulting "bend" would be a "kink" rather than a smooth even curve. The suggestion that such an action was undertaken on scaffolding three metres off the ground in wet concrete, it is in my view utter nonsense.

1040

Q. Whose is that suggestion that you are referring to?

A. Sorry?

Q. Whose is that suggestion that you are referring to?

A. It is in here.

Q. What are you referring to though is my question?

A. Oh...

Q. You say the suggestion, whose suggestion is that?

A. Well the suggestion is in here.

Q. So we will get that brought up, I think you are referring to the Hyland report –

A. Yeah.

Q. 249.0189.109?

A. Yeah it is page 79 anyway.

Q. So you are referring to this page?

A. Yes that is correct.

Q. And –

A. You see it states, hang on –

Q. Yes?

A. The bottom H24 bars from shell beam have been turned back into the concrete infill rather than embedded in the shear wall.

Q. And we can see that in the photos can't we?

A. Yeah, but you see that is a shell beam and therefore the concrete was wet when they were trying to do it allegedly.

Q. Depending on when it was done? Depending on when it was bent?

A. Well you are not going to poke steel into dry concrete are you?

Q. No, I understand that but depending on when the ends were bent is what I am saying? You don't agree?

A. No.

Q. But I understand what you are saying about that but you can't explain what is shown in those photographs can you?

A. No I can't.

Q. No.

A. I am trying to –

Q. Yeah. And you accept that it is a problem that has been identified?

A. I think – quite frankly I think it is a problem that is much more serious than the Hyland report actually states.

Q. Do you?

A. Yeah because that shell beam which is on the north side, sorry on the west side isn't it, coming up to the shear wall, that beam basically isn't connected at all to the wall. Why I don't know.

Q. Right.

A. Now, you know and I – if a beam is not connected to the shear wall it is extremely serious.

Q. Yes obviously.

A. And I can't explain why it is like that.

Q. So you weren't aware of any issue, any problem with the reinforcement in the shell beams?

A. Not at all.

Q. When the shell beam was connected to the north wall (inaudible 10:43:44) would that be something that would be supervised by anyone?

A. Well yes because before the concrete is poured those joints have to be inspected. There is no compromise about that, there must be.

Q. Inspected by whom?

A. Either the building inspector or the engineer.

Q. Right. And are you aware of that happening from your position as the manager, managing director?

A. I'm – no I am not but you know that is not to say it didn't. I am just not you know, I wouldn't go to the site personally and meet the building inspector or whatever.

Q. Were you aware of site reports being completed by the engineer, by Mr Harding?

A. I am aware that there were reports –

Q. Did you see those or not as a matter of course?

A. Not as a matter of course no.

Q. So you can't shed any light on, other than you saying it would be difficult to physically do, you can't shed any light on how that has happened?

A. No.

Q. No?

A. Well the only light I can throw on it is what I have tried to illustrate with the rather amateurish drawing that I have attached, is that those, both of those bars, those H24 bars are semi-circular. That is what has led me to the view that because they are semi-circular they actually have been made like that in a factory because it is extr – you can't manually bend H24 steel into a pure semi-circle. Now, if that is the case, well it is, my explanation is that they are semi-circular and they should have gone

into the wall and there should have been a horizontal bar going through –

Q. And this –

A. – lock it in.

Q. And this is what you cover in the rest of your brief?

A. Yeah.

Q. And if we get that diagram so that we can complete your evidence then, its 0001.21. Is this the diagram you have done to explain what you are talking about? Is that the diagram?

A. Yes that is right.

Q. So you – top right you are indicating what a semi-circular bar looks like one piece the bar?

A. Well this is the side view.

Q. Yes?

A. I mean they will be parallel, you know two in parallel.

Q. And at the bottom you are indicating that it should have had a horizontal bar –

A. Yeah.

Q. To lock it in so it couldn't come out?

A. Yeah.

Q. Is that what you are saying?

A. Yeah.

Q. So –

A. But that – and then that horizontal bar itself of course because remember there is vertical bars in the shear wall so that horizontal bar is tied to the vertical bars.

Q. I will get you to go back to your brief and just finish reading it please. So you were up to 89 I think?

WITNESS CONTINUES READING STATEMENT FROM PARAGRAPH 89

A. "Those H24 bars were formed in a semi-circular pattern to a pre-determined radius, on a machine under factory conditions and subsequently delivered to the site. Every beam that connects to a shear wall contains, or should contain one pair.

Consideration of the above has led me to a certain conclusion that I believe to be fundamental to the cause of the collapse. It is a fundamental precept to reinforced concrete construction that the steel reinforcing forms a continuous flow without gaps, breaks or other form of interruption. In simple terms the foundation steel must connect to the column steel and in turn to the beam steel and shear wall and so on. Any interruption to that flow must inevitably undermine the integrity of the structure.

This is precisely what has occurred in the CTV building and it has occurred at the point where the beam connects to the shear wall.

The pair of H24 rods are located in the beam such that each semi-circular end protrudes into the shear wall just beyond the line of vertical reinforcing rods. A horizontal H24 rod should then have been inserted through the semi-circular ends and tied in place prior to the concrete pour. The insertion of this item would have provided continuity to the steel connections and would have gone someway towards frustrating any forceful attempt to collapse of the structure if not prevent it."

Q. And 94?

A. "This in my opinion is a major contributory reason for the collapse of the building."

Q. Now just finally I wanted you to just comment on – we are going to hear evidence from Mr Shirtcliff who you have mentioned. His brief that he has provided, I think you have had a chance to read it?

A. Yes I have thank you.

1050

Q. And don't want to go into the detail but you will recall that he says that he was engaged with I think four projects that he lists and therefore had limited time to be involved in the CTV building, and says he would've gone there maybe once a month to check on progress. That Bill Jones was the foreman and that he would occasionally update Shirtcliff on the status of the CTV building. He described his role in relation to the CTV building as receiving updates on progress of the construction on site from Mr Jones which he subsequently forwarded, he says, to

Mr Pattinson of the Smart Group. He's talking obviously about after the period April/May?

A. Yeah.

Q. Now do you agree with that evidence?

A. Well I don't, I obviously can't comment on what he was doing when I, you know, I wasn't there.

Q. But before that?

A. Well personally, you know, his role was construction manager and he was responsible for all contracts, there were no exclusions. That applies all the way through. Union as well.

Q. And the visiting the site once a month. Is that what had been envisaged by you in terms of his role?

A. No, you know as a construction manager, you know your, if you're doing your job properly you really should be visiting the sites every day.

Q. So you don't, if that's what was happening were you aware of that at the time?

A. Um, he was visiting the site. You know, when he first came he was, you know, visiting all the sites. I'm sure of that.

Q. So you don't agree with, factually with his evidence?

A. I'm sorry what did you say?

Q. You don't agree factually with his evidence about once a month, or limited involvement with CTV?

A. Well I don't know where that comes from. I, you know, he, his involvement is limited to the extent that he didn't, he didn't have any involvement in the design of it because you know he didn't join the company until it was started.

Q. Just talking about his role as mentoring or guidance that you talked about?

A. (no audible answer 10:52:34)

Q. Construction manager?

A. Yeah, well you know that was his role and that's what he was supposed to do.

JUSTICE COOPER:

Q. Yes but you were the, his superior and you're being asked to tell us what you know about what he in fact did? Now did he visit the site every day or thereabouts so far as you know?

A. Well the answer to that is I don't really know.

EXAMINATION CONTINUES: MR ZARIFEH

Q. But if he was visiting it once a month and had a limited involvement because he was involved with other jobs, you know the jobs that he refers to?

A. Yes.

Q. Is that, was that your understanding of what he was doing at the time or not?

A. My understanding at the time was that he would've been visiting the sites more often than once a month.

Q. And should have been?

A. And certainly should've been.

Q. Should've been, right.

CROSS-EXAMINATION: MR MARSH – NIL

CROSS-EXAMINATION: MR LAING – NIL

CROSS-EXAMINATION: MR RENNIE

Q. Just a couple of matters. You mentioned that in relation to the time you were at Livingstones –

A. Yes sir.

Q. – Mr Douglas formerly the chief executive of the Regional Council mentioned to you that a design fault had been found in the building?

A. Yes he did.

Q. And your statement of evidence was, "It rapidly got around the real estate community of course." You recall that statement?

A. Yes I do.

Q. What was the "it"? What was "it" that got around the real estate community? That there was a problem with the building or –

A. Yeah.

Q. – that there was a design fault or how much detail?

A. Oh, I don't think, you know, it's real estate gossip so, you know, and that's, and that's just about it, but it's of course very harmful gossip.

Q. A matter though where a real estate agent would then be cautious in selling the building to ensure that there was no non-disclosure of such a matter?

A. Well there's two ways of looking at that Mr Rennie. The, obviously, you know, one expects the real estate agent to exercise due caution but it's also when you know that a building has got something wrong with it, it can also be a great opportunity for the property speculator to get it cheap especially if he has the belief that he can fix it for next to nothing.

1055

Q. Now the second matter relates to the point you were making in respect of figure 44 in the Hyland Smith report in the beam ends. In the narration to figure 44 and I don't think we need to have it up but you'll recall, I think, that "the statement is the bottom H24 bars from the shell beam have been turned back into the concrete infill rather than embedded in shear wall as detailed", and then there's a design reference?

A. Yes.

Q. Yes, now I understand firstly that your point is that that bending would not have occurred on site because in your experience it would be a physical impossibility?

A. That's my view sir yes.

Q. Does it follow from that that then the reinforcing steel must have been delivered on to site bent in that manner?

A. That's my view.

Q. Yes. If we can have please BUI.MAD249.284.20, and when this comes up you will find that this is sheet 19 of the design drawings which is the reference given in the Hyland Smith report?

A. Oh yeah.

Q. And the reference that they give is BENG detail 5 drawing S19. Can you pick that up on the plan in the screen in front of you?

A. Is that one at the top?

Q. I'm relying on your skill rather than my amateur interpretation. Detail 5, drawing S19.

A. I can't read the numbers, sorry.

JUSTICE COOPER:

Q. Let's get it expanded. This is the top right-hand diagram?

A. Top right-hand? Oh yeah.

Q. All right?

A. That's better, thank you.

CROSS-EXAMINATION CONTINUES: MR RENNIE

Q. Now do you agree that Hyland Smith are correct to say that the detail required the reinforcing bars H24 to be carried through into the shear wall?

A. That's what the Hyland report says, yes.

Q. But do you agree with the detail that they referred to shows that?

A. Yes I do.

Q. Given that at least in relation to this finding in this photograph that did not occur does it follow that the materials delivered to site must have not conformed to the detail in sheet S19?

A. Well either that or they, or the wrong steel has been put in the shell beam.

Q. By that you mean steel which has been prefabricated for a position other than this position?

A. Correct, yes.

Q. Yes, and I take it at this distance it would be difficult to determine which of those two possibilities actually occurred?

A. I wouldn't be able to.

Q. In terms of the work on site in relation to this reinforcing steel. If it became necessary to bend the bars could you achieve that by gas heating the reinforcing bars?

A. It can be done that way but I don't think you're supposed to.

Q. And indeed would there be any logical reason why the bars would have been bent by the construction staff on site by that method?

A. I can't think of any logical reason to do that. I mean if surely you'd just keep using the torch and cut them off completely if they were in the way.

Q. So are you pointing here essentially to an apparent construction defect which you feel the Hyland Smith report understates or underemphasises?

A. I believe the Hyland report actually understates it.

Q. Yes, as a construction defect?

A. Yeah.

Q. Yes.

A. Yes.

Q. Thank you.

CROSS-EXAMINATION: MR ELLIOTT – NIL

RE-EXAMINATION: MR ZARIFEH – NIL

QUESTIONS FROM COMMISSIONER FENWICK:

Q. The issue you've briefly touched on, the lack of cobbling or roughening up of the –

A. Yes Sir.

Q. – surface of the log beams above the columns?

A. Yes.

Q. Now the specifications said something about that the all concrete cast this other concrete had to be roughened by a broom or effectively while it was still plastic?

A. Indeed.

Q. It clearly could not have been done. The drawings mention the possibility of using retarder on the surface. Now I don't think the drawings specifically identified that particular surface but can you comment further on that? It does look as though this was quite a critical issue.

A. I don't think I can be very helpful to you actually on that Sir. I you know I don't know, you know I can't comment on the you know the chemical compound whether it was used or not and I really don't know whether the log beams you know were you know were roughened or whatever. I'm surprised that they're not because the log beams were of course made by the company itself. We had our own pre-cast yard.

Q. The evidence we've got are pictures from the land site is very clear that all the ones that we can find were not roughened, they were very very smooth on that surface.

A. Yeah.

Q. But there would have been no problem, wouldn't there, of taking a kango hammer or something and roughening up the surface would there? You know it's a fairly solid thing that you've got the wings that the curve bits you pointed out that you got too close to that you might chip them but it's a fairly solid beam 400 millimetres wide?

A. Yeah.

Q. And 500 millimetres-odd deep?

A. Indeed.

Q. That wouldn't have been a danger in chipping that, of failing that would you of a kango hammer?

A. No, I –

Q. Would that be right?

A. – I accept that Sir, yeah, you know roughening up concrete, those concrete beams is certainly it would be the kind of job that nobody would want to do, you know, particularly unpleasant and bearing in mind that there's quite a few of them. I you know I would have to say that I'm disappointed that obviously that it wasn't done but I can't, I can't understand why none of them were done. You know, one can

understand the odd one or two things sort of you know getting, getting missed but not all of them which leads me to the view that the foreman was probably under the impression from one reason or another that he didn't have to do it and I would have to say that we're essentially talking about the column beam joint and those joints get inspected by an engineer or the building inspector. I know it sounds as if I'm passing the problem off on somebody else but you know why didn't the engineer say something?

Q. That was going to be my next question to you. These beams would have been delivered and presumably stacked ready for erection?

A. Yeah, yeah.

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Q. So they would have been on the site for some time presumably before they were put in erection?

A. For some time, yeah, but probably only a day or two.

Q. So any engineer walking round should have been able to spot, shouldn't they?

A. Yes.

Q. All right, so it's a bit of a mystery because we don't know. There maybe some of them may have been roughened up, but just all the ones we can find, that we can find out on the site, were in fact very, very smooth, slightly powdery surface on the edge?

A. Yeah.

Q. Which made me wonder wherever it's possible they'd used a retarder and never actually followed it up and cleaned it, but you wouldn't know anything about that?

A. I really just have no idea whether a retarder was used or not sir.

QUESTIONS FROM COMMISSIONER CARTER:

Q. You were previously the development manager at Industrial Holdings –

A. Yes Sir.

Q. - and then became the managing director of Williams?

A. Yeah.

Q. And you were familiar with the desire to perform economic buildings and efficient buildings. I believe the buildings that you showed were to a large extent built with pre-cast concrete elements?

A. Yes on those photographs, yes.

Q. Would you consider yourself an expert in pre-cast concrete building assembly or in your role that you had, was that a function that you would expect others to look after?

A. I wouldn't consider myself you know an expert in concrete buildings at all sir.

QUESTIONS FROM JUSTICE COOPER:

Q. Mr Brooks, Williams Construction Limited employed the architect Mr Wilkie, is that right?

A. Yes Sir.

Q. And you employed Mr Reay's firm, Alan Reay Consulting Engineer as it then was?

A. Yes Sir.

Q. Was there a written contract with the engineers?

A. There would have been an exchange of letter. I don't think it would have gone any further than that Your Honour.

Q. Can you remember what the basis of their remuneration was?

A. I can't recall the figure but it would have been a fixed sum, of that I'm sure.

Q. Why are you sure about that?

A. Well it was because of the way that I do business.

Q. Right, well that's a good answer. Now –

A. Used to I should say Your Honour.

Q. We've had some evidence which suggests that the building permit application was made at a time when the structural drawings were not available. Are you aware of that evidence, the building permit applications made on the 17th of July. Structural drawings were not given to the Council until the 26th of August. Are you aware of that?

A. Well I heard the evidence yesterday Your Honour and I, you know I'm just you know, it's just a mystery to me, I just can't offer any answer really.

Q. Can you remember being aware of that at the time?

A. No I don't, the only thing I can really remember is that we weren't aware of any problems, it just –

Q. Well Mr Harding's expressed the view on the basis of what was raised by Mr Tapper, the Council structural checking engineer who wrote back the following day after the structural drawings were produced. Mr Harding says well the drawings must have been incomplete for some reason. Can you shed any light on that?

A. I can't Your Honour I'm sorry.

Q. And there's a possible inference from all the circumstances that the building permit application and the plans may be made, provided to the Council under conditions of some urgency. Can you recall whether Prime West who were your client, were putting pressure on you to produce the building permit so that work could get underway?

A. I can say quite categorically that Prime West didn't put us under any pressure whatsoever.

Q. Now why can you be so categorical about that?

A. I was very good friends with the chief executive officer at Prime West at the time.

Q. What was his name?

A. Neil Blair.

Q. Neil Blair.

A. And he's absolutely not the sort of person that would pressure anybody, you know, he's just a sort of quiet sort of chap who just let's people get on with their job and you know, and I think he just had confidence that we were getting on with the job and it's as simple as that and I certainly, you know, never felt any pressure whatsoever from Prime West.

QUESTIONS ARISING – MR RENNIE, MR MARSH AND MR LAING – NIL

QUESTIONS ARISING: MR ZARIFEH

Q. Just on that last issue that His Honour was asking you about, I thought your evidence was that if there was, if there were delays that would be a problem. You mean a problem to Williams Construction rather than to Prime West?

A. Well if there is delay in the permit you mean?

Q. Well delays generally is what you're talking about, but a permit, if there was a permit delay that would be a delay wouldn't it?

A. Yes, I'm not conscious that you know the permit was being delayed any longer than –

Q. No, I'm asking if there was, it would have been a problem?

A. If, yeah, yes if there was because obviously you know when you're employing a lot of people you know you've got to keep them employed so time is of the essence.

FURTHER QUESTIONS FROM JUSTICE COOPER:

Q. So arising from that, you can't recall though or do you recall putting pressure on the structural engineers to produce the drawing?

A. I probably did, you know, because I'm that sort of by nature, by nature I'm that sort of person.

Q. What sort of person's that?

A. Well you know I pressure people. I want things done. I want them done yesterday you know and ...

Q. So when you contracted with Alan Reay Consulting Engineer to produce these structural drawings, would you have imposed a deadline?

A. No, I didn't impose any deadline, I'm sure of that Sir.

Q. But you would have what, made regular enquiry as to progress with the production of the structural drawings?

A. I would, not necessarily direct, I may have, yeah my colleague Tony Scott, you know, may have been more a question of me asking Tony how things were going.

Q. And he would be well aware presumably of your desire to see things happen expeditiously?

A. Yes.

Q. Correct?

A. Yes Sir, yeah.

WITNESS EXCUSED

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MR MARSH CALLS

ANTHONY JOSEPH SCOTT (SWORN)

JUSTICE COOPER:

Before you get underway Mr Marsh, I understand, and you may not have been here at the time but counsel assisting the Commission have told us that Mr Shirtcliff is booked to speak to us by a video link from Australia at quarter to 12.

MR MARSH:

Yes I'm aware of that Sir.

JUSTICE COOPER:

You are aware, all right, so Mr Scott will be interrupted for us to hear from Mr Shirtcliff, all right?

MR MARSH:

That's fine Sir.

EXAMINATION: MR MARSH

Q. You are Anthony Joseph Scott?

A. Mhm.

Q. A retired quantity surveyor, currently –

A. Yes.

Q. – a commercial apiarist in Hanmer Springs?

A. That's correct.

Q. Mr Scott you prepared three witness statements in relation to this Commission hearing?

A. Yes.

Q. Do you have copies of the three signed witness statements before you?

A. Yes I do.

Q. Could I ask you please to read those witness statements commencing with the first at paragraph 1 for the Commission?

A. Yes. Paragraph 1?

Q. Yes.

A. "My full name is Anthony Joseph Scott (Tony Scott). I am a retired quantity surveyor (QS). I was qualified in 1977 ANZIQS and I practised from 1971 to 1996. I am now a commercial apiarist in Hanmer Springs. From 1985 to '88 I was the senior QS for Williams Construction Canterbury Limited.

I was the QS on the CTV building. My role at Williams Construction on the project was not simply that of a QS. I was also the project development manager. In my role as project development manager I was responsible for setting up the professional team and making sure the project was viable. It did not include management of construction.

The development company for the building was Prime West Corporation Limited.

When I was first employed by Williams Construction this was primarily for the construction of the Copthorne Hotel. This was originally intended to be an apartment building. It is on the corner of Kilmore and Durham and is being demolished.

The managing director for Williams Construction at the time work on the building commenced was Michael Brooks. He was subsequently dismissed and replaced by Charles Wright after the Smart Group took over Williams Construction.

Williams Property Holdings Limited was the holding company for Williams Construction. It was a public company listed on the stock exchange. Sir Arthur Williams of Wellington was the majority shareholder. Sir Arthur Williams was a very successful property developer in both Wellington and Christchurch.

The CTV building.

The building was a speculative design-build development. Neil Blair of Prime West engaged Williams Construction to submit a design-build proposal for an office building in early 1986.

Mr Geoff Taylor was the contracts manager for Williams Construction on the CTV building. Bill Jones was the site foreman. He had also been the site foreman on the Aged Persons building. Both were senior and experienced, with experience in multi-storey reinforced concrete and pre-cast concrete buildings. Gerald Shirtcliff joined Williams Construction in 1986 as the construction manager and replaced Geoff Taylor in late '86 as the person with the responsibility for the onsite work on the CTV building. Bill Jones reported to him.

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The building was funded by Prime West with high levels of debt. However, no shortcuts were taken in its construction and there was no shortage of money. There was a $50,000 builder's contingency in the budget and a 15% overheads and profit margin. There was no pressure to leave anything out and the parties ran a smooth design and build project. The building was a straightforward job.

The building contract did not include fit out. What was built was an empty shell.

Williams Construction engaged Alun Wilkie of Alun Wilkie Architects as the architect and Alan Reay Consultants as the structural engineer. They were to prepare and design preliminary structural drawings for pricing. Michael Brooks was responsible for liaising between Prime West and Alun Wilkie Architects. I was responsible for liaising with David Harding of Alan Reay Consultants to obtain preliminary structural details for pricing.

$100,000 was allowed in the budget for the architectural and engineering design work but this was only available after the feasibility of the project was established. The preliminary work done by Reay and Wilkie was on a 'no job no fee' basis. They were retained to help put together a proposal for the building in order to see whether a feasible and fundable design could be developed. The aim was to spend as little

as possible until feasibility was confirmed. All of this was prior to a building permit being issued.

I put together prices for the building at an early stage, based on structural sketches from Alan Reay and preliminary layout plans and elevations from Alun Wilkie. My original cost plan was for what was referred to as option 3. Option 3 was a Hi-bond structural system which consisted of a metal tray floor with poured concrete over and pre-cast structural beams. It was the best financial option and could be done without using a tower crane. We used pumped concrete. The only real difference between the various options was in relation to the floor types.

On the 3rd of April 1986 my cost plan was submitted to Prime West as a preliminary estimate of $2.45 million plus gst based on A2 architectural drawings and A4 structural sketches and subject to building consent approval.

The Williams Construction practice was that these prices would later have to be verified internally. At this point Williams was not yet committed unconditionally as the cost plan was described as a preliminary estimate only. This is how we initiated most of our design-build negotiations.

The $2.45 million estimate for the building included design fees of $100,000, a provisional sum for foundation piling of $100,000, a builder's contingency of $50,000 and $369,000 profit and overheads margin.

In June 1986 we received approval to proceed to instruct the consultants to prepare drawings for permit and construction.

In July and August 1986 I re-measured the architectural and structural drawings to check quantities, prices and subcontractors against the 3rd April preliminary estimate and also to quantify any extra foundation depths and support work due to the deletion of the bulb piles that had initially been proposed.

I had some say in the design of the building based on costings of structural alternatives but not on the detailed design. The final plan involved a six level open plan office building of 3174 square metres.

In October 1986 Williams signed a formal building contract with Prime West for the same amount as the preliminary estimate."

Q. Mr Scott, if I could just stop you there? That contract price being the same as the preliminary estimate price –

A. Mhm.

Q. – was that unusual in your experience?

A. It could have been unusual. It was, usually there was some adjustment between the preliminary estimate and a final contract price because obviously we had to let the consultants have an opportunity to verify their design from preliminary to permit approval and construction. Yes it was unusual that it remained the same but there again there was a very healthy margin and a very healthy builder's contingency.

Q. And in your role as quantity surveyor would you try and achieve as close to as possible the preliminary estimate price in your final contract price?

A. Yes because the client Prime West was geared up to funding that amount of money. They had, they had I believe they had prior finance approval for that first amount and it possibly would have been embarrassing to go back and get more from the banks.

Q. So if this comes out at the same price or a similar price –

A. Mhm.

Q. – you've done a good job in your role as the quantity surveyor in preparing the preliminary estimate?

A. Yes, yes.

Q. If you can just carry on please? Paragraph 21.

A. "In the same month Bill Jones was appointed as foreman and work started on the Madras Street site.

The Shangri-La Hote, on which I also worked, was a similar design and used the same materials. This was Prime West's next project after the CTV building. There are also other buildings in the Christchurch CBD that have been constructed in the same way as the CTV building. This would not have been the first one. However, other than the one on the corner of Cashel/Cambridge, the Aged Welfare building. I cannot recall any others by name.

The building was built in accordance with permit plans. I submitted the permit plans personally to the Council. The Williams Construction staff were under strict instructions to follow the design engineer's instructions. Although there are no as-built plans this was not a Council requirement at the time and no variation orders were issued during the construction. The building when finished complied precisely with the permit drawings that were issued on 30th September 1986.

I saw the *Sunday* programme on TV One on 21 August 2011 and listened to the discussion about whether there were inadequate connections between the walls and the floor of the building. This was the first time I had heard this. It was also the first time I had heard of a letter between Graeme Tapper at the Council and Alan Reay Consultants in relation to the building permit referred to in that programme. I was not told of the letter at the time. I first learned of it watching the *Sunday* programme. As I was one in the line of communication into Williams Construction and I was the project development manager of the building I am confident that if I did not receive this information there was no one else at Williams who did. It is possible that David Harding might have mentioned verbally to me that there was a bit of an issue over the building permit. I do not recall any delay in the permit being issued and I had the impression that it was straightforward. Mr Tapper was in charge of checking the structural drawings for the Council plans. In my experience of dealing with him he liked to deal directly with the consultants."

JUSTICE COOPER:

Q. Just pause there. We'll take the morning adjournment now and Mr Scott you appreciate when we come back we'll be hearing from Mr Shirtcliff so you'll just have to resume later?

A. Yep.

Q. Thank you.

HEARING ADJOURNS: 11.29 AM

HEARING RESUMES: 11.48 AM

MR ZARIFEH ADDRESSES JUSTICE COOPER

MR ZARIFEH CALLS
GERALD SHIRTCLIFF

JUSTICE COOPER:

Q. Mr Shirtcliff can you hear me?

A. Yes Sir.

Q. I'm Justice Cooper and on my left is Commissioner Fenwick and on my right Commissioner Carter, all right. Now you're accompanied by somebody are you, is that your counsel?

MR TUCKER:

A. Yes Justice Cooper, my name's Tucker, initials D R W, solicitor of the firm Tucker and Cowan solicitors in Brisbane.

JUSTICE COOPER:

Q. Mr Shirtcliff I'm going to ask you to promise to tell the truth in accordance with an affirmation and I just ask you to listen to me and then give me the answer at the end. Do you solemnly and sincerely truly 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. I do.

GERALD SHIRTCLIFF (AFFIRMED)

EXAMINATION: MR ZARIFEH

Q. Mr Shirtcliff can you see and hear me?

A. Yes.

Q. Do you have a brief of evidence that you have signed and produced to the Royal Commission dated 28 June of this year. The date is on the last page?

A. Yes.

Q. Do you have that in front of you?

A. Yes I do.

Q. Can I ask you please to read that out loud to us?

A. "My name is Gerald Shirtcliff.

I worked for Williams Construction Canterbury, (Williams) the building company that constructed 246 Madras Street. The building was later known as the CTV building.

I was employed by Williams to the best of my recollection in late September or October 1986. I was 40 years old at the time.

My previous experience prior to Williams was as follows.

I had previously worked in the building industry in various countries including Australia and New Zealand. The work that I undertook was of a general supervisory role relating to on site construction and to ensure that construction works were in accordance with plans and specifications provided to the builder by the professional design engineer or architect.

I was a graduate civil engineer. The type of work I undertook while requiring a thorough knowledge of the building industry did not require me to undertake any design works of a structural nature and I did not do so. I was not and did not apply to the Institute of Engineers New Zealand for registration because my work did not require me to do so.

I was employed with the title construction manager, however the work that I was directed to undertake would probably have fitted better into the title of Project Manager. My duties included focusing on specific projects as directed by Mr Brooks, to make sure all work was completed in accordance with design engineer's plans and specifications and in other instances the plans and specifications of the architect.

My position was akin to that of a project manager and while it was construed that I had an overarching brief of all projects of Williams, that

was not altogether correct as certain projects required a lot of attention and others virtually no involvement. When I started working at Williams, Williams was struggling to complete some of the existing projects such as the Canterbury Manufacturer's building Mancan House and the Airforce Museum at Wigram and the hotel on the corner of Kilmore and Durham Streets within the required timeframes that had been set by the various building contracts. Most of the staff employed at Williams started out as tradesmen and did not have proper (inaudible 11:53:26).

Q. Mr Shirtcliff, can you hear me?

A. Yes I can. Sorry I was reading from a draft that was sent to me yesterday and apparently it's the wrong draft so I'll use the one that I signed.

Q. Who sent that to you?

A. It came from Tucker and Cowan.

Q. So was that a draft of your original – the statement you're reading now had an original draft did it?

A. Yes, this was the original draft and now what I've done is I'm now reading a signed statement.

Q. Can you find the part you were up to?

JUSTICE COOPER:

Q. I think if you could start again at paragraph 6 that would be the best. "My position –"

EXAMINATION CONTINUES: MR ZARIFEH

At paragraph 6 I said my position was akin to that of a project manager when I started working at Williams. Williams was struggling to complete some of its existing projects such as the Canterbury Manufacturers building Mancan House and the Airforce Museum at Wigram and the hotel on the corner of Kilmore and Durham Streets within the required timeframes that had been set by the various building contracts.

Most of the staff employed at Williams started out as tradesmen. The staff employed by Williams tended to religiously follow the plans. Christchurch City Council were also keen to make sure that the plans which had been approved and stamped, approved by Council were strictly complied with.

I reported to Mr Michael Brooks, managing director of Williams Construction Canterbury. Mr Brooks provided me with instructions when I first joined the company regarding the projects he wanted me to concentrate on and which projects to be involved with. I followed the instructions that Mr Brooks gave me. Mr Brooks did not direct me as what tasks I should undertake on a day to day basis but he did expect me to report to him regularly as to the progress of the works he had instructed me to be involved with on a day to day basis. Mr Brooks spent a considerable period of time in the field and he and I would meet on site from time to time on the sites he had instructed me to be at. Because of the number of projects that Williams was undertaking, it was neither feasible or necessary for me to have a detailed involvement in all of the projects that Williams were undertaking at the time.

I was instructed by Mr Brooks to become involved in specific buildings under construction for specific reasons which are as follows.

Quality Inn chain

Williams had just been taken over by the Smart Group, they had negotiated a lease of the partially constructed hotel on the corner of Durham and Kilmore Streets for the Quality Inn chain. The Quality Inn chain required that the project be changed completely, in that sections of the internal works had to be demolished and replaced with a new design from an architect Graham Smith, who took instructions from the Quality Inn chain. The person responsible for those instructions who I dealt with was to the best of my knowledge Mr Corbett. I had to deal with both these people. When Mr Corbett and Mr Smith were in Christchurch I would attend meetings with Mr Brooks on site where alterations and new plans were given to Williams from Mr Smith. These

plans were then given to the site foreman and the Williams office for action. I dealt with the Smart Group people from Wellington specifically as I recall Mr Cowan and Mr Patterson who was the director for the Smart Group in Wellington. Mr Cohen was the company buyer. The project became a turn key project and Williams supplied not only the building but everything that went into an operating hotel. External quantity surveyors from Wellington were also part of the new team that were engaged and I had a liaison role with this firm but I cannot remember their name. This was the principal job that I was employed for and it consumed a substantial part of my time.

The Quality Inn chain hotel was a complicated job and I was on site almost every day. It was very labour intensive and that was because of the changes to the design and the internal fit out. The outer shell of the building remained the same except for the ground floor but the internal layout was changed significantly. That was why such a substantial amount of my time was devoted to this project.

RNZAF Air Force Museum.

Williams was constructing the RNZAF Air Force Museum at Wigram. This was a Ministry of Works contract with a demanding Clerk of Works on site and Air Force Personnel. The Foreman in Charge required expertise from me to assist in the completion of the structure and fit out of this building. the architect was Mr Donnithorne and he provided me with a reference which I have attached to my statement and I spent considerable periods of time on this project particularly towards the end of the job as there was a high level of scrutiny of the work that was being undertaken.

Canterbury Manufacturers Building Mancan House

The third building that I was heavily involved with was the Canterbury Manufacturers Building Mancan House. Williams was constructing this building. This building although a low rise structure was an important building that was seriously behind time and the Canterbury

Manufacturers Association had a fixed completion date when the then Deputy Prime Minister was to officially open the building and Williams had to pick up their game to ensure the building was completed for the official handover. It fell to me to replace sub-contractors who had fallen behind in their tasks and to replace them with suitably qualified and suitably resourced contractors and to ensure there was sufficient manpower from Williams available to complete the building tasks to finish the building for the opening.

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The work was demanding and also took a substantial amount of my time and involved working late with tradesmen who in some cases were working 15 hours a day as we approached the opening ceremony. The building was opened on time and substantially complete. There were some minor tasks left to complete after the opening but these did not impinge on the opening ceremony.

I worked directly with the Director of the Canterbury Manufacturers Association Director, Ian Howell, and he subsequently provided me with a reference which I also attached to my statement.

AMP Society Office Block:

The fourth building that I was involved with simultaneously was the office block for the AMP Society on Riccarton Road. Williams was constructing this building. The reason I was involved was a promotion of a sub foreman to foreman and Mr Brooks wanted an extra pair of eyes, as I remember it, to look over the job to make sure all was going to plan.

Mr Brooks said to me words to the effect that the four projects referred to in the preceding paragraphs were to be my highest priority.

The CTV Building:

When I started at Williams, I recall that Mr Brooks ran through all the buildings that were under construction by Williams. I recall that

Mr Brooks told me the following about this high-rise concrete structure in Madras Street –

The Design Structural Engineers were Alan Reay and Associates;

Alun Wilkie was the architect;

The Christchurch City Council had approved the plans and they would be providing building inspectors to check the works as they proceeded;

David Harding, a registered structural engineer from Alan Reay and Associates, was tasked as part of the contractual agreement between Williams and Alan Reay to inspect and approve all concrete pours, all reinforcing steel in position prior to pouring; to inspect the concrete in the columns after the formwork had been stripped, and to verify and approve the concrete dockets from the previous pours for strength as per his design requirements.

Mr Brooks did not instruct me to and I did not visit the CTV site regularly. From the best of my recollection I was on the site about once a month at most. When I was on the site, the purpose of my visits was generally to discuss any concerns that the foreman Mr Jones had and see if there was anything that he needed.

The reason why I only rarely visited the CTV building was that it was a relatively simple straightforward job. Every floor was the same with repetitive concrete floors, walls and columns and no internal fit-out. When I started at Williams, the foundations and ground floor had already been poured. The total time for the construction programme was about eight or nine months and I was only there for the last six or seven. The Williams staff on site were in the rhythm of doing the same thing on each floor. Mr Brooks kept a watching brief over all projects. He visited the CTV building about three times per week to the best of my recollection. Mr Brooks did not instruct me to and there was no need for me to visit the site regularly because it was essentially a straightforward job and because Mr Brooks was visiting the CTV building about three times a week, there would have not been a lot for me to accomplish."

Q. Excuse me, Mr Shirtcliff, you seem to be reading a different line there than what we've got. Can you read that line again please. "Mr Brooks did not instruct me..."

A. "... did not instruct me to, and there was no need for me to visit the site regularly because it was essentially a simple job and because Mr Brooks was visiting the CTV building about three times per week and there would have been nothing for me to do there. Due to the long-standing personal relationship that Mr Brooks had with Mr Jones, Mr Brooks knew before anybody else what was going on with the job and what actions needed to be taken.

The foreman, Mr Jones, would meet with me at the offices of Williams occasionally to up-date me on the status of the CTV building. Williams office was in Hereford Street, Christchurch, which was around the corner from Madras Street. It was about two blocks away. He would tell me that the project was progressing to plan. I never recall him raising any significant problems or issues with the project with the exception when he came to the office to report an accident which I recall involved his son who was working on the job as a carpenter.

I would describe my role in the CTV building as receiving up-dates on progress of the construction on site from Mr Jones and after Mr Brooks departed I subsequently on-forwarded these to Mr Patterson of the Wellington office of the Smart Group. I have no recollection of any issues with the construction or any reports from the Christchurch City Council who were undertaking inspections as to the construction of this building nor any reports directed to me from the design engineers or Mr Harding.

I understand that originally the footing design for the CTV building was going to involve piles. However, I understand that the design was changed to a shallow padded concrete footing system. I had no involvement in the design of the footings or in the change to the design of the footing system. It was not my role to design or have input into the structural design of the CTV building. I was not asked to and did not have any input into the design of the CTV building. To the best of my

recollection the work in the foundations was complete when I first started at Williams and this particular project had already been in construction for two or three months to the best of my knowledge.

It is my understanding that the building was constructed in accordance with the approved plans and was certified as such by the design engineers, Alan Reay and Associates and the Christchurch City Council. I have no knowledge of any departure from the approved plans nor any knowledge of any defects I the construction of the building while the building was under construction.

My employment with Williams:

In about March 1987 to the best of my recollection the Smart Group took over Williams and subsequently Mr Patterson dismissed Mr Brooks, the Managing Director of Williams, Canterbury. Mr Brooks started a new company, Union Construction, in about July or August 1987, or earlier, I'm not sure. By that time, to the best of my recollection the structural frame of the CTV building was all but complete. The only works of a structural nature that had not yet been completed were the awning fronting Madras Street and the removal of the hoarding. The lift installation, completion of the fitment of the windows and external doors as well as all the services within the building that were not of a structural nature had not been completed to the best of my recollection. My workload did not change as far as the Madras Street building was concerned as I was still fully occupied with the Quality Inn and the Wigram Air Force Museum.

I continued to work for Williams until about September. I then worked for Union Construction. Mr Brooks negotiated a deal with Mr Steven Smart and the remaining work that was outstanding from Williams was transferred to Union. There was still outstanding work at Wigram and I continued my liaison with Mr Donnithorne into early 1988 when the project paperwork was finalised.

I have had no contact with any of the Williams personnel since the closure of the company with the exception of Tony Scott and some

carpenters who joined Shirtcliff Scott which was formed after the demise of Union Construction. Shirtcliff Scott was subsequently closed due to non payment of variations on a major warehouse structure in Sockburn and the failure to sell the high-rise apartment property that was constructed at 108 Park Terrace."

COMMENTS REGARDING WITNESS STATEMENTS OF BROOKS, HARDING AND SCOTT:

Mr Brooks Statement

At para 12 – I deny that I was responsible for ensuring the satisfactory progress of all Williams' contracts. I deny that I was responsible for, or had any involvement or close contact with sub-contractors, consultants or the supply of materials or labour for the CTV building.

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Mr Harding's statement

At para 31, Mr Harding said he met Bill Jones the site foreman, the quantity surveyor Tony Scott and the construction manager Gerald Shirtcliff at the start of construction. I think that statement is incorrect, in so far as to say that I took part in a meeting regarding the CTV building at the start of the construction. I had not been employed by Williams Construction when construction of the CTV building started but it is possible I met with Mr Harding, Mr Scott and Mr Jones at some stage on the project.

Mr Scott's statement

Para 8, I deny that I was the person responsible for the onsite work at the CTV building.

At para 30 I deny that after the dismissal of Mr Brooks and the establishment of Union Construction that I agreed to stay on to complete the CTV building. Mr Jones continued in his role as the site foreman. Mr Harding the design engineer continued in his role certifying all structural works on site as well as the supervision from the Christchurch City Council building inspectors and my role was confined to reporting

the progress if the works directly to the Wellington office to the Smart Group. Mr Brook's position and the responsibility to supervise the completion of the CTV building and indeed the Williams branch in Christchurch known as Williams Construction Canterbury was taken over by the director Mr Charles Wright who had previously been a senior member of the Williams Team in Wellington and he had an overarching view of the Christchurch operations.

At para 31 my job title at Williams was construction manager but I only had limited involvement with the CTV building and other buildings such as the Canterbury Building Centre.

At para 40(h) I do not have any personal knowledge of whether or not the concrete strength was audited.

Mr Scott's supplementary statement

para 12. I deny that I was responsible for supervising the structure of the CTV building, Mr Jones or the sub-contractors.

At para 14, I was not required to and I did not visit the CTV building on a daily basis. I was not required to and I did not assist Mr Jones with formwork and propping design, the construction programme, quality control or any general problems. I was not on the tools. Mr Harding would have approved the formwork and propping design prior to the first floor being constructed before I was employed by Williams. I was not required to and I did not liaise with the City Council inspectors or Alan Reay Consultants. Mr Jones was responsible for dealing with the Council inspectors and the engineers from Alan Reay and Associates. Description of work however is correct in so far as my workload and daily activities at Shirtcliff Scott. I suggest Mr Scott may have muddled these memories after 25 years.

Hyland Smith report

I have read sections of this report since receiving the link to the documents from the Royal Commission. There appears to be significant evidence relating to the building columns, variable concrete strengths in the columns, design issues relating to the shear walls, the intensity of the ground shaking and vertical ground accelerations.

I note that the concrete supply for the building was organised by Mr Scott. Mr Jones said he set out the columns and organised the steel fixers to place the reinforcing steel prior to the inspection which was organised by Mr Jones by the Canterbury City Council Building Inspectors and Mr Harding's inspections. The basis of my knowledge of the facts contained in this paragraph are the various statements of Mr Jones and Mr Harding.

On page 50 the reports states that the minimum shear force reinforcing steel for the columns was not provided in accordance with the code and that goes to the structural design of the columns.

The conclusions on page 52 refers to the earthquakes in September 2010 and December 2010 and the significant weakening of the structure with respect to the collapse in 2011.

On the following page there are two references, one from Canterbury Manufacturers Association. Do you want me to read those?

Q. No. No thank you. That is the completion of your statement Mr Shirtcliff?

A. Yes it is.

Q. I have just got some questions for you now. Firstly, turn to paragraph 5A please. Does that set out your job description as you understood it, your duties as you put it?

A. Yes as I understood it, it was.

Q. So you were to make sure that work was completed in accordance with the design engineers plans and specifications and in other instances the plans and specifications of the architect, correct?

A. Correct, correct.

Q. And that applied to the CTV building as well as any other projects that were on when you were the construction manager, correct?

A. Correct.

Q. Mr Brooks told us that you were employed as the construction manager because there was a perceived need for more management or oversight of the projects, were you aware of that?

A. Well that became apparent when I started, when I joined the company.

Q. Okay and Mr Brooks' evidence was that you were the construction manager on all projects with no exceptions. You don't accept that or you do?

A. Well I think there is a time issue involved in that statement, in that those projects which required the most attention got the most attention and those projects which were proceeding satisfactorily would not have received as much attention because it wasn't necessary. I think we need to understand that Mr Jones was a highly competent capable foreman and he had a relatively straightforward job which was being carefully monitored by the design engineer and the Christchurch City Council, so the need for me to actually be there constantly was not really – when in fact there were major issues on other jobs simply I just had to proportion my time.

Q. So how did you know –

A. It was not a matter of me not doing the job, it was simply a matter of what job I needed to be at.

Q. Right. How did you know it was being monitored by the engineer and the Council?

A. Because I was told that that was the case and I was told that by Mr Brooks and by Mr Jones and I saw these notes that had been issued as the approvals that were issued by Mr Harding because each time he came he would issue an approval to proceed and the Council also gave instructions to Mr Jones to proceed.

Q. So did you check those site inspection reports for Mr Harding?

A. I wouldn't check them I would just see that – I would just note that they had been sent to the office because if Mr Harding left an instruction on site he would go back to his office and they would send a note back through to the Williams office.

Q. Right, so in performing your duty and ensuring that the building was completed in accordance with the design, how did you do that?

A. Simply by, when I went to the site I would look at what was being done, I would look to see that we working on IFC drawings that were approved

and I would look to see what work was being done on the site by, that was supervised by Mr Jones.

Q. And how often did you go to the CTV site during the construction period that you were involved with it?

A. Well not – not regularly, probably, there was – initially, initially probably only on a monthly basis. I may have been there a little more often when, after Mr Brooks left but only to make sure that everything was, what I would do was, I would actually look at the construction programme which has been developed by Mr Jones and I would look at the critical path analysis which we had prepared to make sure that we were going to complete the work within the specified time for the building contract and I would look at the progress that had been made in relation to progress claims that were to be resubmitted to the client for payment.

Q. Do you accept that you were responsible for all of the construction activity as construction manager? Are you getting advice Mr Shirtcliff before you answer a question?

A. No I am not getting advice.

MR TUCKER:

No he is not getting any advice at all. I will state that plainly clear, none whatsoever at all. But the question is rather a broad question that perhaps you need to break down because it is a very general question and judging by the puzzlement on his face he's a bit confused by it, so perhaps you could re-phrase it.

1218

EXAMINATION CONTINUES: MR ZARIFEH

Q. I've forgotten it now so I'll leave it. Mr Shirtcliff it's one I asked you a moment ago. As the construction manager, do you accept that you were responsible for all construction activity at the CTV site?

A. Only as far as my work allowed me to do, where what I would do is to ensure that the builder was, the foreman was working in accordance with the drawings. The work was being supervised by the Council and by Mr Harding and being certified as each structural element was being completed.

Q. Right so you didn't actually visit the site when a structural element was being completed, or there was about to be a pour of concrete and check for yourself –

A. No, not neces – no. No.

Q. So you relied, you relied on others?

A. Correct.

Q. Did you actually do any physical site inspections of various stages of work or not?

A. Obviously when I went there to check the progress I would look at the work that was being done, but the work was, the work was repetitive so that each floor was the same as the floor below and each floor, so I could look at what was happening at the level or two levels below and then look at what was being done further up and if they, if they appeared to be the same then I assumed that the, that the work was being done in accordance with the plans.

Q. But for example –

A. There were never any issues, there were never any issues with the Council writing to the company and saying that we hadn't complied with the plans, or we hadn't, we weren't constructing something in accordance with the rules. The only time I ever saw anything was when the awning was built at the Madras Street entrance where the columns were out of position, and that was picked up immediately by the Council and they had to be demolished and replaced.

Q. So are you saying then that as construction manager you were simply relying on the Council highlighting any issues or Mr Harding the engineer?

A. I think both of them in conjunction with all the other work that was going on, with Mr Brooks being there regularly, I relied on the whole, the whole of that activity.

Q. And you're aware of the construction issues that the Hyland Smith report has highlighted?

A. I read parts of the Hyland Smith report.

Q. And what do you say about those various construction issues? Were you aware of any of those issues?

A. I was not aware of any issue that was, that the company was involved with. As far as I was concerned the concrete, the contract for supply of concrete was let by Mr Scott. The ordering of concrete was undertaken by Mr Jones, and the concrete company would leave a docket with the onsite with the strength of the concrete written on it, and that would be checked by Mr Harding when he came to review the building the following, when he came to see the next lot of work that was going on on the, on the construction. So I was not aware of anything that was untoward in relation to concrete strength because nobody ever said there was a docket that showed that the concrete was a third or a half the strength that in fact the engineer had specified.

Q. And the other issues, for example the fact that the inside faces of precast beams and elements were not roughened. You, from what you've said you wouldn't have had any idea of that?

A. No I wouldn't have, I wouldn't have been looking at those particular specific beams simply because the beams had to be reinforced with con – with steel and all those steel bars that had to go in there had to be put into an exact position, and that would've been checked in detail by the engineer Mr Harding and the Council.

Q. And what, a similar posit –

A. Prior to the pour.

Q. – a similar position then with connections of beams to for example a shell beam to the north core. There's an issue there with bars being bent around and not going into the shear core?

A. Yes I've heard all the discussion of it. I watched some of the discussion about that today but my understanding was that everything was done in accordance with the Council approved plans and in accordance with the engineer's directions.

Q. Well you say that but it's clear that that wasn't the case isn't it? We now know that wasn't the case?

A. Well if that, if that wasn't the case then I would've expected at the time, 25 years ago, that there would've been an instruction to stop work from the Council, or from the engineer because he designed it and he knew exactly what he was looking at, to say this is the wrong size or it's in the wrong place or it's the wrong, in the wrong position, and therefore it needed to be rectified before the concrete could be poured around it.

Q. So you're saying you don't know anything about those issues and it wouldn't have been your responsibility to ensure that things like that didn't happen?

A. No I wouldn't have thought that would've been my responsibility. I would've thought there were others that were responsible to ensure that all those details were complied with.

Q. Mr Shirtcliff, did you complete a curriculum vitae for your, the company that you and Mr Scott formed? Shirtcliff Scott, do you recall that?

A. I may have.

1225

Q. Well I've got this document that Mr Scott has provided to the Royal Commission and he'll refer to it when he gives, finishes his evidence later, but it's a curriculum vitae in your name and it sets out your work experience prior to Shirtcliff Scott and it says, I'll read you a portion of it, under, "Williams Construction Canterbury Limited, employed as construction manager, responsible for all construction activity." And then it says, "Work completed in this period included Quality Inn, Durham Towers, 10 storey hotel turnkey project, seven

storey office block 209 Madras Street for Prime West." Now you've got the address wrong as you have in your brief but that would be the CT – what's called the CTV building now?

A. Yes.

Q. So in your CV you were stating that you were employed as the construction manager responsible for all construction activity at the CTV building site, correct?

A. The point that I would make sir is that what we're doing is differentiating between the detail and what was actually being done. Responsibility can be, is in fact the detail by various aspects by various people in vari – at various levels. And while you might say somebody has done overall, and overriding responsibility, I think that's what I was trying to refer to.

Q. All right.

A. I mean it would be just as easy for me to say that Mr Brooks had the responsibility or Mr Patterson or Mr Wright had the responsibility because they were above me as in the chain of command within the company.

Q. Do you accept that then that you may well have given the impression to Messrs Brooks and Scott that you were doing a lot more than you're saying now?

A. I don't think that I ever did that. I think that I was dealing with Mr Brooks regularly. I talked with Mr Brooks on a daily basis and he knew what I was doing, or he perhaps the memory might be somewhat faded after 25 years but he knew that I was working, that I had a heavy workload with the hotel at Durham Towers and the air force museum at Wigram.

Q. Did you –

A. So the –

Q. Did you and Mr Brooks and Mr Scott share an open plan office at the Williams Construction office back then?

A. No.

Q. Did you not?

A. I had an office, Mr Brooks had an office and I think Mr Scott had an office. I can't remember.

Q. Well you were all at the, the three of you were in daily contact?

A. I would expect so, yes.

Q. And you said that you don't agree with their descriptions in their statements of your job and what you were doing?

A. Well I just think it's a matter, it's a matter of nuance that's been put on the, on the statement.

Q. Well what about Mr Brooks' comment this morning that he didn't agree with your statement. He said that you were the construction manager for all projects and that you were supposed to be going to the site more regularly, but that clearly you were "not up to the job" were his words?

A. I don't think that was the case. I think that it was clearly understood the workload that I had was extensive in relation to the completion of the hotel in Durham Towers and the work that was required at the Wigram Air Force Museum.

Q. Mr Brooks also said that there was insufficient mentoring or guidance in the role that you carried out, clearly. You don't agree with that?

A. Well I was not under the impression that I was meant to be mentoring or guiding people. I certainly guided people when I was onsite if there were work, if there were things that had to be done I'd say, "This is how this needs to be undertaken," and I did that on a regular basis.

Q. What did you do on the CTV site in that regard?

A. Well in that regard I did very little because, if nothing because Mr Jones had the thing completely under control.

Q. So you basically left it to him?

1230

A. Well it wasn't only that, it was Mr Brooks was visiting regularly, Mr Jones was there all the time, Mr Harding was there on a regular basis and the council were there on a regular basis.

Q. Mr Shirtcliff, we had a witness in the first week of the, or the second week of the hearings into the CTV building collapse who said that he was a council inspector, local council building inspector said that you had a reputation for being "a bull at a gate" was his description. Would you agree with that description of how you carried out your work duties?

A. No, not at all. I think that what was happening was that there were requirements which were put on, placed on me to complete works within the certain period of time and at the direction of the manager Mr Brooks, and I simply had to ensure that we completed that work.

Q. All right, now you said a moment ago that Mr Brooks might be having trouble with his memory because it was 25, 26 years ago but you can remember what you did and didn't do in relation to CTV building at that time?

A. Well to the best of my, I have said to the best of my recollection that's what was happening.

Q. Right, so what I'm saying is what you can remember you can remember, there are bits you can't remember but what you've told us is things that you're sure of?

A. To the best of my recollections, yes.

Q. You see Mr Shirtcliff, I put it to you that you are trying to distance yourself from any involvement or any considerable involvement in the CTV building construction? Do you accept that?

A. No I do not.

Q. Well when the Royal Commission located you and asked you about your involvement in the CTV building did you not forward an email outlining various projects but saying that, and saying that they were the complete spectrum of work, as you put it, when you were employed for, employed by Williams Construction but you omitted to mention the CTV building? Is that correct?

A. I'd have to have a look at the email trail that you're referring to but I think email trail to and from the Commission is important and I think that statements that have been made that I didn't co-operate with them are false.

Q. I'm not asking about that yet, I'm just asking you when you sent an email, I'll get it brought up. It's BUI.MAD249.0450RED.1. Have you got the emails there in front of you? Now it says at the top there from Kate Fisher but it's from you, you accept that?

A. Yes, that's correct.

Q. And that email 23 April is in reply to Ms Jamieson of the Commission's email to you of 16 April, correct? Where she is enquiring about your time at Williams Construction in relation to the CTV building. Do you agree with that?

A. (inaudible 12:34:27) I wrote this letter on the, this request was for, I wrote on the 23rd of April and this, the next one I have is the, is the letter from the 27th of –

Q. Well just look at the 23rd of April?

A. – April.

Q. Look at the 23rd of April email please? You list the various projects you're involved with when you were at Williamsons. Do you see that? The bullet points towards the bottom of the page?

A. Yes, that's right.

Q. And you say in the second to last bullet point, "This is the complete spectrum of work that I was employed for at Williams Construction."

A. Yes. I understand that but I, I accept the fact that those were the works, those were the jobs where I was focusing all my attention –

Q. Right.

A. – and I subsequently amended that to advise you in relation to the CTV building.

Q. Well just get you to turn to another email then that's on .5 and that's of 3 May 2012, have you got that one?

A. No I haven't got that.

Q. Well I'll read you out some of it. You said, "After 27 years it is obvious that people you have interviewed have greater clarity of the day-to-day activities at the building project 246 Madras Street as it was then known, which is now referred to as the CTV building, than I do. Perhaps you should direct your questions to them." And then you said, "I do not agree with the statements made by Mr Scott that my recollection –

A. Yeah.

Q. – was totally different." And the next paragraph you said, "As I have reiterated to the best of my recollection while I knew the project 246 Madras Street was proceeding as a building project for

Williams Construction I was fully involved on the Durham Towers Hotel," and you go through to the other buildings that you've mentioned today. Then at the bottom of the email in the last paragraph, "I am sorry I cannot help you any further with the technical matters on the project 246 Madras Street CTV building as I have no further recollection of work on this job. My recollection was that I knew it was a building project under construction when I started at Williams but other than that I was not involved." They were –

A. Yep.

Q. – your words?

A. Yeah well, what I was meaning is that I was not involved on a regular, what you were arguing is that my understanding is I was replying to a note with saying I was there on a day-to-day basis which I wasn't.

Q. You were saying you were not involved at all?

A. No, well, it, that was not my intent to say that. My intention was to say that I was not there working there all the time, that was not the job I was involved heavily with at the time. I've already said the jobs that I had the most involvement with were the hotel at Durham Towers –

Q. Right, you've said that.

A. – Wigram airforce museum and the Manufacturers Association and the job on Riccarton Road.

Q. Mr Shirtcliff, the reason you said that you were not involved at all was because you did not want to assist and become involved in having to answer questions about the CTV construction? That's correct isn't it?

A. No, that is not correct.

Q. And what you said in those emails was not true was it?

A. It is again it is a matter of, it is a matter of saying of taking those points absolutely literally when in fact I provided a proper statement subsequently to that.

Q. Mr Shirtcliff, Mr Brooks told us that when he employed you, you told him that you'd worked in South Africa? Is that correct?

A. I don't have any recollection of that but go on.

Q. Is it correct firstly that you did work in South Africa?

A. Yes I did.

Q. And what kind of work did you do there?

A. I worked on a construction site.

Q. In what position?

A. As a supervisor in a supervisory role.

Q. Right, and is that what you would have told Mr Brooks in terms of your previous employment that made you suitable for this job?

A. I don't think that that would have had much to do with it, it was as very, a very, very long time ago, it's over 40 years ago.

1240

Q. What name were you living in South Africa under?

A. (no audible answer 12:40:08)

Q. Who are you looking at Mr Shirtcliff?

MR TUCKER:

Answer the question, okay. You cannot get any advice from me, you need to answer the question.

EXAMINATION CONTINUES: MR ZARIFEH

A. The name was Shirtcliff.

Q. Were you not under the name of Fisher?

A. No.

Q. Are you sure about that?

A. Yes.

Q. What about in Australia?

A. I have always, I always worked in New Zealand as Shirtcliff.

Q. My question was about South Africa?

A. No your question is about Australia and that I, I changed my name and I have always worked in Australia as Fisher for the whole of my working life.

Q. And what about South Africa?

A. Oh, look I can't remember, I can't tell you. I can't remember.

Q. You can't remember what name you lived in South Africa under?

A. No I, well I think it was Shirtcliff.

Q. But you're not sure?

A. (no audible answer 12:41:41)

Q. How long did you live in South Africa for?

A. Oh, less than a year.

Q. And why did you live under the name Fisher in Australia. Are you still under that name or not?

A. Yes that is my name. I changed my name and I use the name of Fisher.

Q. Why did you do that?

A. It was a personal matter and I made a decision to do that and it was a personal matter when I returned to New Zealand at the request of my mother to try and effect a family reconciliation that I go back to New Zealand and bring my children up in my birth name, and I agreed to utilise my birth name and live in New Zealand and that's what I did.

Q. Mr Shirtcliff you referred to reports in the media about you not being co-operative with the Royal Commission. You referred to that a moment ago, you recall that?

A. Yes.

Q. Those reports said that you had been in fact extradited from Australia back to New Zealand at one point. Do you recall that?

A. Yes.

Q. Was that to face a fraud trial? A GST fraud trial?

A. Yes.

Q. And was that, were they charges that you were convicted on?

A. Yes.

Q. And I think you were living under the name Fisher when that happened, when you were extradited back to New Zealand?

A. I was living in Australia, so I lived as Fisher.

Q. Sorry I didn't hear the last bit, you were living in Australia?

A. And I lived as Fisher but Fisher and Shirtcliff are one in the same.

Q. And Mr Shirtcliff, or Mr Fisher, your co-operation with the Royal Commission, contrary to what you say, only came about when

you were actually, when the media publicity occurred over your position. That's correct isn't it?

A. I don't think that's the case sir. I think that I have been communicating regularly with the Commission by email, and in fact that was, that information was not, I had communicated with the Commission and I had written to the Commission and I never said that I would not co-operate with them, ever.

Q. But you did say that you had no involvement in CTV initially and you only really changed your account once the evidence started mounting up in the form of Messrs Brooks, Scott and Jones, correct? Is that correct Mr Shirtcliff?

A. No I don't think that's correct either. What I said was that I always said that I would provide whatever I could to assist the Commission and I did.

Q. And I suggest that even now your evidence is at odds with those people and you're trying to distance yourself still from involvement with the CTV building. Do you accept that?

A. No.

1245

MR TUCKER ADDRESSES THE COMMISSION

No, I'll clarify that because you've asked questions there and the answer tended to be misleading, but you've actually asked a positive and negative and he's answered no, so I don't want his answer taken incorrectly on that.

JUSTICE COOPER:

Are you objecting to a question that Mr Zarifeh has put?

MR TUCKER:

Justice Cooper, there didn't seem to be a lot of point to that and we seem to spend more time haranguing the witness about his level of co-operation rather than asking him meaningful questions. He's here today for as long as need be. He's happy to answer any questions that may be put to him or look at any documents that may be shown to him rather than have his credit impeached, so as I say (inaudible 12:46:39) but there's one thing that did concern me

about some of the questions in the sense that it was contended by counsel assisting that there was some construction issue that Mr Shirtcliff should have known about but that wasn't put to him in a fair manner. He didn't seem to be afforded a fair question about that so if that's to be a contention could we have that put fairly and he may well answer that. I appreciate that there are many witnesses, counsel assisting may get overly familiar with the facts and what may have been established by others but it seemed to be put as if it was assumed to be a fact in evidence but it just wasn't insofar as Mr Shirtcliff was concerned.

JUSTICE COOPER:

Well can I just deal with some of the points that you've made one by one. The questions that Mr Zarifeh was asking going to the credit of the witness, it seems to me perfectly legitimate, having regard to the fact that his testimony is challenged by other witnesses who are also giving evidence on the same subject matter as to the extent of his involvement in the CTV building and it seems to me tolerably obvious in those circumstances, issues affecting his credibility are highly relevant.

Now on the question of construction defects in the building, I take it that what you're saying is that if there were particular construction defects for which it is suggested that Mr Shirtcliff is responsible, that should be put to him in a particular way. Is that the burden of your submission?

MR TUCKER:

Yes, yes. Absolutely.

JUSTICE COOPER:

Well I'm happy to ask Mr Zarifeh to do that but the reason I haven't other than in responding to your submission raise that as an issue has been that Mr Shirtcliff's account of events is that he had very little to do with the supervision of the project other than checking what others were doing to supervise, but I'm happy for Mr Zarifeh if he wishes to, and it's his responsibility to decide to ask those questions in a more particular way.

JUSTICE COOPER ADDRESSES MR ZARIFEH

Do you Mr Zarifeh?

MR ZARIFEH:

I'm happy to Sir.

EXAMINATION CONTINUES: MR ZARIFEH

Q. Mr Shirtcliff as His Honour has just said I understand from your evidence that you had little contact with what was going on, physically at the site to see for example when concrete was poured if the reinforcing appeared to be correct and so despite you saying that you were – one of your roles was to ensure that the building was constructed in conformity with the plans, you relied on others to ensure that that was done, the engineer and the Council in the main, and the foreman I take it. That's what you're saying isn't it?

A. That is correct.

Q. So in terms of the construction issues that the Hyland report has highlighted, you say, well because I was relying on others and not having direct physical supervision at the site of various stages, I can't answer how they occurred or why. That's what you're saying isn't it?

A. Well there is, as the building proceeds you can see various elements of the structure as it's being put up. So for example I would be able to see the steel that was coming out of the top of the columns that was on the drawing. So when I went to the site I could see that – the reinforcing steel was coming out of a column so I could agree that that was the correct steel in the right position as per the drawing.

Q. So did you check that it was the right steel. Did you go and look at the drawings?

A. I would look at the drawing and if I had to look at the drawing that Mr Jones would have with him, where he was working, then I'd look at that and say, ace, that looks to be right, but that would also have been checked by the engineer.

Q. Right, but you just said that you would see the steel and you knew that it was correct, so did you check that it was correct?

A. Well as much as simply looking at it, and saying yes it looks – it's in line with what was on the drawing that Mr Jones had with him at the time, that was what I would assume to be correct.

Q. And what were you looking at in particular in relation to the reinforcing in the columns?

A. When you look at the bars that were coming out of the top of the columns and you'd look at the spiral steel that was coming out of the column.

Q. And did that conform to the plans?

A. In each case yes, to the best of my recollection.

Q. What about in the beam column joints, did the spiralling (overtalking 12:52:44)?

A. The beam column joints.

Q. Do you know what I'm talking about?

A. Well I don't recall actually going to the site to physically check everything as such because that was not – I didn't do that.

Q. And isn't that the point Mr Shirtcliff that you didn't do that so you relied on others. That's what you're saying isn't it?

A. Yes I did rely on others.

Q. And really if there's a criticism put to you, it's that I suggest that as Mr Brooks says you didn't do enough in that supervisory or mentoring role. If you had maybe some of those issues would have been picked up. I'm not saying they would have, we'll never know but if there's going to be a criticism that's what I direct to you. What do you say to that. Do you think you could have done more in that role?

A. It's always in hindsight you could say you could do more but from my perspective of what I did was what I was required to do at the time.

Q. By Mr Brooks?

A. Well Mr Brooks, his interest was as where was the building proceeding in relation to the construction plan and were we actually on target to actually complete the works within the timeframe.

Q. Right, you said required to do, I just wanted to know required by who or what?

A. Well the requirement was to actually meet the programme to get the building completed on time.

Q. So was there pressure to do that?

A. In accordance with the plans.

Q. Was there pressure to do that on time?

A. There's always pressure on a construction site to get work completed within the prescribed time.

Q. So the requirement was of the manager Mr Brooks. Is that what you're saying?

A. Mr Brooks was always making sure that we were actually making – that things were made up to – we met our milestones as required...

1255

CROSS-EXAMINATION: MR MARSH

Q. Mr Shirtcliff, my name is Marsh. I'm appearing for Mr Scott today. Just one quick question for you. Mr Zarifeh has referred in brief to the evidence of Mr Brooks and particularly of Mr Scott still to be given and Mr Scott's evidence to be given will be to the effect that you certainly gave the impression to him that you were spending a lot more time working on the CTV building than what you've said in your evidence before the Commission today. What do you have to say to that?

A. Well I think that my work and Mr Scott's although entwined as an integral part of a team was in an organisation that there weren't time constraints that were put on by Mr Scott on my work nor me on his work so what I did with my time was in fact to ensure that work was completed within the time-frames that we were directed to complete by Mr Brooks.

Q. I'm not sure that you've answered the question there Mr Shirtcliff. My question was: Mr Scott's evidence will be that you gave the impression to him that you were spending much more time on the CTV building

than what you've indicated in your evidence to the Commission today. What do you have to say to that?

A. I don't think that I ever gave that impression sir I think everybody knew what work that I was doing and they knew that I was very busy with the work that was being undertaken at Durham Towers and on the other buildings that I have already said.

CROSS-EXAMINATION: MR LAING

Q. Mr Shirtcliff, my name's Duncan Laing. I'm appearing for Christchurch City Council and I just want to ask you about paragraph 17 of your evidence. Could you turn to that please.

You say there that it was your understanding the building was constructed in accordance with approved plans and was certified as such by the design engineers, Alan Reay and Associates and the Council. Are you referring to some form of certification when the building was complete?

A. No sir. I was referring to the drawings that were on site which had been signed as approved by Mr Harding with his initials DH and at the bottom right-hand corner of those drawings it had a certificate of Christchurch City Council permit approved, stamped and dated and signed.

Q. So you're referring to the building consent as issued rather than anything that happened subsequently when the building was complete. Is that correct?

A. Yes that's correct.

MR RENNIE:

As Your Honour knows, my name is Rennie and I appear for Mr Reay and Alan Reay Consultants but I have no questions for the witness.

CROSS-EXAMINATION: MR ELLIOTT – NIL

QUESTIONS FROM COMMISSIONERS FENWICK AND CARTER – NIL

QUESTIONS FROM JUSTICE COOPER - NIL

JUSTICE COOPER ADDRESSES WITNESS

Mr Shirtcliff thank you for your evidence and Mr Tucker thank you for your assistance.

MR TUCKER ADDRESSES JUSTICE COOPER

Justice Cooper, may I just ask a couple of re-examination questions?

JUSTICE COOPER:

Does anybody oppose that course being followed? (Leave granted).

JUSTICE COOPER ADDRESSES MR TUCKER

Go ahead. I was just wondering whether you are appearing in New Zealand or Australia Mr Tucker and I was wondering about Law Society Rules but we'll bend them.

MR TUCKER:

My feet are firmly planted in Australia today but I'm always happy to travel to New Zealand.

RE-EXAMINATION: MR TUCKER

Q. Mr Shirtcliff in paragraph 17 of your statement you say it's your understanding the building was constructed in accordance with the approved plans and were certified as such and you were just asked that question and your answer was to the effect that you were referencing the plans that were stamped as approved but I think the question that was asked of you which I don't think you really answered was what was the basis of your understanding that the building was constructed in accordance with those plans?

A. The basis of my understanding was that we had a set of plans that we worked to and we stuck to those plans religiously in constructing that building. So that we had issued a set of drawings on the site which were signed off by the engineer as approved and they were stamped by the Council as certified, as approved and that's what we worked on.

Q. And it was suggested by Counsel Assisting when you they asked you questions about the name Will Fisher and the inference seemed to be that you were changing your name to perhaps avoid people or avoid enquiry. Could you tell me, and I appreciate it's a personal matter, but can you tell the Commission the circumstances by which you changed your name and whether you did so lawfully in any way?

A. Yes I did. I changed my name following issues with my family. They are personal. It happened a very long time ago and that I have worked for nearly 40 years everywhere else in the world except New Zealand as William Fisher.

Q. Did you change your name by Deed Poll?

A. Yes.

Q. So where did you do that?

A. In Australia.

Q. And do you recall when you did that?

A. Ah, I think it was probably about 40 years ago that I did that.

HEARING ADJOURNS: 1.02 PM

HEARING RESUMES: 2.17 PM

MR MARSH RE-CALLS

ANTHONY JOSEPH SCOTT (ON FORMER OATH)

Q. Mr Scott, I think when we broke you had just finished reading paragraph 24 of your first witness statement?

A. Mhm.

Q. If I could ask you to carry on from paragraph 25 please?

A. Yes.

WITNESS CONTINUES READING STATEMENT FROM PARAGRAPH 25

A. "Smart Group acquisition of Williams.

Williams Construction was sold to the Smart Group, Auckland-based property company, in 1986. This sale was part of the sale of Williams Property Holdings Limited, the parent company.

There was a change of culture within Williams Construction when Smart Group took over. Steven Smart made it obvious that he did not want to run, to own a construction company. Soon after this acquisition Smart Group merged with Richmond Corporation to become Richmond Smart Group and an attempt was then made to sell Williams Construction as a going concern. I learned about this when I was talking to other construction companies.

After Smart Group purchased Williams Construction, Mike Brooks was dismissed as managing director. This upset a number of the staff, including me. Several of us were very opposed to his dismissal as we thought that he was doing a very good job. Mike came from a planning background at the council and had hired me at Williams Construction.

Following his dismissal Mike Brooks approached the Angus Group in Wellington and asked if they were interested in moving to Christchurch. At the time I was involved in pricing the Cathedral Properties development. I did know this was owned by Angus Properties. This connection ultimately led to an offer to bring across three key people from Williams Construction to Angus Properties. This included me.

Union Construction takes over CTV building construction.

These events led to Court proceedings being issued by Smart Group alleging a breach of fiduciary duty by Michael Brooks, Gerald Shirtcliff and me. An injunction was sought. In the meantime a new company, Union Construction Limited, had been formed with Angus Group holding 70% and Michael Brooks, Gerald Shirtcliff and myself holding 30%. The intention was to bring other staff across from Williams Construction to Union. Union then signed up for a building on Bealey Avenue known as Amuri Park.

The CTV building was under construction at the time all this occurred and was about half completed. The upshot of the dispute was that Gerald Shirtcliff agreed to stay on with Williams Construction to complete the CTV building and the Durham Towers Hotel. A meeting was called by Steven Smart in which he said to the effect that he would call off the dogs and give Williams Construction a decent burial, any outstanding contracts of Williams would be assigned to Union and the injunction proceedings would be discontinued. All parties could then get on with their respective businesses.

This offer was accepted and it included the assignment to Union of the CTV work which Union completed. Bill Jones and Gerald Shirtcliff continued throughout as foreman and construction manager respectively.

Union was given continuous access by the Smart Group to the Williams Construction documentation for the building.

In 1987 the share market collapsed. The Richmond Smart Group went into statutory management in 1989 and the Angus Group went into receivership in the same year. The CTV building was completed in 1988 by Union after which it too closed down after paying off all its creditors.

The building foundations.

Initially the building was priced to have bulb piles but these were found unnecessary and deleted. A provisional sum of $100,000 was initially

allowed in the costings for piling but I was later advised by David Harding that this was no longer required and a credit for the difference between $100,000 and the cost of the foundation supports used was given. As built the building has no piling. It is based on a shallow foundation.

I am confident there would have been a foundation investigation and a soils report before this decision was made but I have no record of this. My belief that there would have been a proper foundation investigation is based on my confidence that David Harding and Alan Reay were very thorough and there was a soils investigation for the Shangri-La development in which both Harding and Reay were involved. $7000 was spent on a soils report for that building for which I have records.

I was also involved in the Durham Towers development. There were 53 x 10 metre piles used for an 11 storey building. The engineers on that project were Halliday, O'Loughlin and Taylor.

David Harding was also involved in the building at 108 Park Terrace where friction piles were used. This building is five storeys plus a basement.

Construction supervision.

David Harding was closely involved in supervision of the CTV site. He checked the foundations and steel on every floor before the concrete was poured. At the time the Council permitted the owner's engineer to do this instead of using its own inspectors. The costs of site supervision was included in the Alan Reay contract, although the contract was just a letter it was a standard form letter and was the same one as the one used on the Shangri-La development.

If I had any concerns about the CTV building I would have raised these directly with David Harding and beyond this with Alan Reay. In addition Arthur Williams had always told me I should raise with him any concerns I had about the company.

On another project I was involved in, for Williams Construction, I did just this. Here Williams Construction was the client of Williams Property

Holdings on an arm's length basis. Shephard and Rout were the architects and Halliday, O'Loughlin and Taylor were the engineers. I was the QS and project development manager and responsible for coordinating the design team at the early stage. Originally Durham Towers was to have been apartments, however, Quality Inn signed a long-term lease as tenants and managers and the decision to convert the apartments into a hotel required a redesign and the levels 1, 2, 3, partitioning framing had to be ripped out.

I had concerns about the structural form of Durham Towers or Copthorne Hotel as it is subsequently became. I expressed these concerns to Mr Harman Halliday of Halliday, O'Loughlin and Taylor. My specific concern was that the elevator walls were not being taken all the way down to the basement. Instead they stood on a suspended slab at ground level. I could not understand why all this weight was sitting on the suspended slab including the elevator machinery and the reserve water tanks which were on the roof of the hotel. However, I was told that this was cutting-edge technology and I was not an engineer.

I then took up the issue with Arthur Williams. I phoned him. He was not there when I phoned, but I passed on my concerns about the construction of Durham Towers. I did not hear anything further although it is possible there may have been some discussions following my call that I did not know about.

I visited Durham Towers in September 2010 to see how it had responded to the September earthquake. All the people in the building had been evacuated and I was told by security guards I spoke to, who refused me access to the basement to look for myself, because they said it was too dangerous, that the beams under the elevator shaft had cracked. At the time I could see the red tape that had been put around the elevator shaft to prevent anyone going near it.

I was not surprised by this as it was exactly the concern I had raised with the engineers at the design stage before construction began.

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The point I wish to make here is not to criticise the designers of Durham Towers but to emphasise that I had no such worries about the CTV building.

When people were evacuated from other buildings after the 4th of September 2010 earthquake, many of them then were taken to the Millennium building. This was built in the early 70s and is one of my favourite buildings. I was that QS on the building for Fletcher Construction. I regard it as a model of a strong structural design, it has stood up extremely well. It consisted of a waffle slab construction with fibreglass moulds being put into the form work. There was no pre-cast concrete used except on the outside marble panel. It was all solid concrete. It is my belief that there is now too much pre-cast being used.

Concluding points.

I have thought a lot about the collapse of the CTV building and what may have caused it. My thoughts on this are as follows:

Did the CTV building really survive the September 4th quake? Was it inspected properly after it? The weak point in the building could be the column beam connections.

The columns were poured in situ, with the column poured first and the beam then fitted over it. I am not sure how they fitted together, but Bill Jones would know as he was the foreman. This method of construction has also been used in other buildings I have worked on although I cannot now recall which ones.

Were the ceiling tiles removed to inspect the columns after September the 4th? The only way to properly inspect the building was to remove the ceiling tiles.

Was the flooring carpet removed after 4th of September?

Why was the building not red stickered and evacuated similar to the Copthorne Durham Hotel?

Why was the tenancy increased after September the 4th, as this increased the live load of the building? What effect did this have in February?

Until I saw the *Sunday* programme I had no idea that welded mesh was identified in the USA as a problem in early 1990, but nothing was done to strengthen any New Zealand buildings even after it was written into the 2004 building code amendment.

Was there an issue with the quality of the concrete? Water is sometimes added to assist the pumping and this can weaken it. However I do not believe David Harding would have allowed this. Bill Jones, Geoff Taylor and Gerald Shirtcliff would know whether the concrete strength was audited.

Tenants reported hearing noises from building movement during numerous aftershocks and heavy traffic passing on Madras Street. A multi-storey reinforced concrete structure does not produce noises in my experience. These reports should have rung warning bells to the building owners, managers and inspection structural engineers.

Q. Mr Scott, can you now go to your supplementary brief of evidence.

A. Mhm.

Q. If you could read that to the Commission from paragraph 1 onwards please.

A. My full name is Anthony Joseph Scott. I provided an early brief of evidence dated 30th of March 2012. This brief of evidence is supplementary to that and addresses some further issues I was asked about by counsel assisting the Royal Commission, after completing my previous brief.

Relationship with David Harding.

My first contact with David Harding was in the course of the CTV building project. Michael Brooks and I had decided to invite Alan Reay to participate in the design team with what was to be Prime West's first development project in Christchurch. Williams Construction had had previous dealings with Alan Reay Consultants where Williams was the

successful tenderer. One of these was the Aged People's Welfare building on Cashel Street.

We liked the presentation that Alan Reay made for the CTV project in terms of presentation, content, the standard of his drawings and his willingness to provide preliminary structural sketches for preliminary estimates without charge.

David Harding was the engineer we principally dealt with during the course of the CTV project. He attended all the design meetings at Williams' office and signed all letters, document transfer forms and sketch plans on behalf of Alan Reay Consultants. I considered David Harding to be the principal structural designer of the CTV building. The early A4 structural sketches were done in his handwriting and he signed off all of the correspondence as David Harding, registered engineer.

As David Harding was the only engineer from Alan Reay Consultants I had direct dealings with, I do not know what Alan Reay personally, what role Alan Reay personally played in the project. Because Alan Reay was the principal engineer of the practice, I assumed that he had an oversight role in the calculations and structural drawings that David Harding presented but I have no direct knowledge of this.

I understand that it has been suggested that David Harding brought the CTV contract to Alan Reay's office. This is not correct. Michael Brooks and I took the project to Alan Reay Consultants and invited Alan Reay to be the structural engineers on the project.

I have been asked by counsel assisting to give evidence about the construction timeline. I can only recall this now by reference to milestones that I do remember. I am advised that the Council records show a first inspection in October '86 and this is for the foundations. I recall that the foundations, ground floor slab, the north core wall form work, prefabrication and footpath entry were completed by the end of January 1987. The first floor slab was completed by the end of February 1987. The second floor slab was completed by the end of March 1987, the third floor slab was completed by the end of April '87. I

recall starting a new position with Union Construction at Amuri Park on the 1st of May 1987.

I have been shown copies of the Christchurch City Council inspection records which show an almost five month gap in the inspection record between the 1st of April '87 and the 19th of August '87. I have no explanation for this and I cannot recall a gap of this duration. As Alan Reay Consultants were engaged to supervise the building of the structure by Williams it is possible that the Council inspectors were satisfied with the standard of workmanship and the engineer's supervision up to level 2, and as a result Council inspections were reduced.

Q. Can I just stop you there Mr Scott. Just discussing that five month gap, you said that you started with Union Construction on 1 May 1987?

A. Mmm.

Q. Would you have had anything more to do with the CTV building after that date?

A. No I personally didn't.

Q. So for that four months or so would there have been any reason why you would have known whether there was a delay or the reasons for that?

A. Only through my continuing communication with Mr Shirtcliff, after all he was a shareholder of Union Construction during that time.

Q. If you can just carry on with the rest of your statement.

A. My recollection is that in late September '87 all Williams' outstanding contracts were assigned to Union including CTV as part of the settlement reached with Richmond Smart Group.

To the best of my recollection the CTV building was completed by January 1988.

Key personnel

I have also had my attention drawn to a reference on the Council inspection records to a new foreman. I'm not aware of any new foreman replacing Bill Jones on the CTV contract. Bill assisted management in

the new Union Construction offices at Amuri Park when the CTV building was completed, and he assisted me with measuring quantities for pricing tenders from November 1987 onwards. However this did not affect his role as foreman on the CTV site and my recollection is that he was a foreman throughout the project. I do not understand what the Council inspection record is referring to.

Geoff Taylor was the contracts manager for Williams and started the construction of the CTV building foundations in a supervisory capacity, reporting to Michael Brooks as general manager. Geoff was then transferred to the new building centre transferred to the new building centre in Mandeville Street in Riccarton as site foreman. Gerald Shirtcliff replaced Geoff Taylor as the construction manager on the CTV job and was responsible for supervising Bill Jones and the subcontractors.

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As site foreman Bill Jones was responsible for staff on site, day-to-day activities, including setting out each level, co-ordinating sub-contractors, ordering materials and mobile cranes. Bill Jones reported to Gerald Shirtcliff who in turn reported to Michael Brooks and then to Charles Wright of the Smart Group.

I understand that Gerald Shirtcliff was a graduate Civil Engineer. He visited the CTV site on a daily basis, assisting Bill Jones with formwork and propping design, construction programming, quality control and any general problems. It was Gerald Shirtcliff's responsibility to liaise with the City Council inspectors and with Alan Reay Consultants."

Q. Just to go on from that last paragraph you've obviously now heard Mr Shirtcliff's evidence this morning and you've had a chance to consider that evidence. When you say that Mr Shirtcliff visited the CTV site on a daily basis can you say, hand on your heart, that he did visit the site every day?

A. I wasn't on the site myself to witness Gerald's presence. However, I worked with him in the office in a fairly close-knit team – myself, Gerald, Mike Brooks and staff that reported to us. It was a fairly open-plan

office with individual offices and we got to discuss these matters as a team on a daily or two daily basis. Also Geoff Taylor, the previous contracts manager, did visit all contracts on a daily basis. Other companies I've worked for, including Fletchers and including Industrial Holdings, contracts managers visited all contracts on a daily basis and it was my impression through conversing with Gerald as a close team during that period that Gerald was attending to the matters on the CTV building at that time. After all, it was our biggest structure. The other jobs that Gerald refers to were only single level and Riccarton Road was two level. The Durham Towers Hotel had already been closed in by the time Gerald took charge over Geoff Taylor so it wasn't as if it wasn't an insignificant job. We treated it as a fairly major job in the company.

Q. So what would you say to Mr Shirtcliff's evidence that he maybe attended on site at the CTV building once a month?

A. I don't see how he could have possibly have done his job as a construction manager by attending the site once a month. It would have been impossible to do his job properly.

Q. Did you ever have any indication during this time that he wasn't doing his job properly?

A. No I don't believe I have.

Q. Now one of the documents that Counsel Assisting the Commission put to Mr Shirtcliff today was a copy of Mr Shirtcliff's curriculum vitae. Do you have a copy of that or do you have the document in front of you now?

A. Yes I do.

Q. Can you explain please how you came by that document?

A. Yes. Gerald Shirtcliff and myself started a new company in mid '88 after the closure of Union Construction and as part of that process it was a 50:50 partnership we formed – Shirtcliff Scott Limited – part of that process Gerald gave me this CV after I requested it.

Q. And is that the original CV or is that a copy of it?

A. This is the original.

Q. Are you happy to hand that to the Commission for evidential purposes?

A. Certainly, yes.

Q. I will just ask you a further question. The last sentence of the witness statement you just read it was Mr Shirtcliff's responsibility to liaise with the Christchurch City Council inspectors and with Alan Reay Consultants. His evidence today was that it wasn't necessarily his role. Was there ever anything that you were aware of which would have indicated that Mr Shirtcliff was not liaising with the City Council inspectors or Alan Reay Consultants at that time?

A. Ah, no, but possibly during the five month period that I was away from Williams during early '87 I was not in a position to witness that issue. I was probably better able to witness that in the initial period of construction up until the time I left Williams at the end of April '87.

Q. If you could just now go on to the further supplementary brief of evidence that you prepared in this matter and if you could read that from paragraph 2 onwards please.

A. "I have provided two earlier briefs of evidence, the first dated 30th of March 2012 and the second dated the 17th of May 2012.

I am preparing this brief of evidence as a result of a number of matters reported as having been raised in the Opening Statement of Stephen Mills QC to the Royal Commission of Enquiry.

The various matters attributed to Mr Mills QC which I wish to provide further evidence on are as follows:

JUSTICE COOPER:

That italicised extract from Mr Mills' opening may be taken as read.

EXAMINATION CONTINUES: MR MARSH

Q. Mr Scott just one quick question there. In paragraph (a) refers to Mr Shirtcliff, Michael Brooks and one other man. I presume the other man was you?

A. That's correct.

Q. Carry on from paragraph 5.

A. "I provide further evidence on each of these statements as follows:

Following the Smart Group acquisition of Williams Construction, I refer to clauses 25–28 of my first witness statement dated 28th of March 2012, Mr Brooks, Mr Shirtcliff and I decided to form a new company. It appeared obvious to us that Williams Construction was either going to be sold or closed down.

The time line for the formation and commencement of Union Construction was as follows:

17th of March 1987 Union Construction Limited formed by Mr Brooks, Shirtcliff and me;

18th March '87 letter from us to Williams Construction advising the new company would be commencing on 1st May '87 and giving notice of our resignations from Williams Construction;

9th of April '87 Mr Brooks dismissed from Williams Construction.

During this time Mr Brooks approached a number of potential business partners for Union Construction. As a result, Angus Properties became a 70% shareholder in Union Construction;

1st of May 1987 Union Construction commences business.

I resigned with effect from 30th of April 1987 and commenced with Union Construction on 1st of May '87. Between then and September 1987 Union Construction itself had nothing to do with the CTV building notwithstanding the fact that Mr Shirtcliff was a shareholder in Union Construction. He remained working for Williams Construction as Construction Manager to complete the CTV building and the Durham Towers Hotel.

I also provided ongoing consultancy services to Williams Construction in relation to the final account for the Durham Towers Hotel project as had been set out in our letter to Williams Construction on 18th of March '87.

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Smart Group Injunction Proceedings.

The injunction proceedings by Smart Group primarily related to the awarding of a building contract to Union Construction in relation to Cathedral properties.

The injunction proceedings and resulting affidavits had nothing whatsoever to do with the Prime West Madras Street contract, CTV building. I refer to my draft affidavit prepared by Phillips Shayle-George in September '87 in this regard. I confirm that that affidavit would have been true and correct with the handwritten additions that I made to it at the time.

Q. If we could just bring that document up please, that is BUI.MAD249.0404.25. And the next page. Mr Scott the handwritten additions that you see on that document as we go through it, were they done by you?

A. Yes that's my writing.

Q. And you've said it would have been true and correct with those handwritten additions that you made to it at the time. Do you recall if you ever actually swore that affidavit?

A. I can't recall attending a solicitor's office to do it but I believe I must have done it because otherwise we wouldn't have ended up with the meeting with Stephen Smart.

Q. Thank you if you could just carry on reading from paragraph 12 onwards.

WITNESS CONTINUES READING BRIEF OF EVIDENCE FROM PARAGRAPH 12

A. Following the affidavits on behalf of Mr Brooks and myself being presented to Smart Group's lawyers we met with Stephen Smart in or about late September 1987 to discuss potential solution to the dispute.

As set out above Mr Shirtcliff had remained working for Williams Construction as from the 1st of May '87 and remained as the construction manager on the CTV building from May to late September '87.

As set out in my first brief of evidence (see in particular paragraphs 29 to 32), the upshot of the meeting with Stephen Smart was that the CTV building work was assigned to Union Construction for completion. As such both Bill Jones and Mr Shirtcliff continued throughout that time as foreman and construction manager respectively.

To the best of my knowledge, best of my recollection the CTV building was contractually completed by the end of October '87. Substantial completion was achieved under the head conditions of contract with Prime West. This meant that both liens and maintenance retentions held by the client could be released.

From then on, I did not have a great deal to do with the CTV building personally. I was aware in general terms of what was happening on the project however.

I would estimate that the CTV building was structurally complete, close in and weatherproof by the end of September '87, the approximate date of assignment from Williams Construction to Union Construction. This would have been the first formal date of association between Union Construction and the CTV building.

As such, I do not believe that the termination of Mr Brooks' employment and the subsequent formation of Union Construction and the later assignment of the CTV building contract to Union Construction had any effect on the construction of the CTV building.

CROSS-EXAMINATION: MR REID – NIL

CROSS-EXAMINATION: MR PALMER - NIL

CROSS-EXAMINATION: MR ZARIFEH

Q. Mr Scott just on that last, the last few paragraphs that you just read. The date of completion of CTV, you say that contractually completed. We have got evidence from Council inspection records that show things like handrails being done early '88 and I think the canopy done then?

A. Mmm.

Q. Were you aware of that?

A. Yes.

Q. So you are not referring to the whole job being completed then?

A. No.

Q. You heard Mr Brooks' evidence this morning?

A. Mmm.

Q. You have been here?

A. Yes.

Q. Do you agree with what he said in general terms about the building. Was there anything that you disagreed with?

A. No I agree completely with Mr Brooks.

Q. I just want to ask you firstly about the initial contact you had in setting up the, this design-build project, right?

A. Mmm.

Q. And you said that you dealt with Alun Wilkie from Alun Wilkie Associates?

A. Mmm.

Q. And that you had had dealings with him before, Williams?

A. Um, not at Williams. I had dealings with Mr Wilkie at Industrial Holdings.

Q. Okay, sorry and you said that Williams had had dealings with Alan Reay before?

A. Yes.

Q. You said that one of those dealings was the Aged Peoples Welfare building?

A. Mmm, yes.

Q. What were the others?

A. I think there was one other. There was one other that we did with Alan and his team and it was a single level or it was a pre-cast concrete tilt slab construction and I am not sure there was a design-build because we were doing a lot of those projects at the time but there was definitely another project in the back of my mind that we did with Alan Reay as structural engineer.

Q. And had you deal with Alan Reay personally on those two projects?

A. Yes I had yes.

Q. And so am I correct that you are saying that it was because of that previous dealing, those previous dealings with Alan Reay that you decided to invite him to be the structural engineer, or his firm?

A. Yes, in one of my statements here, it is possibly a little bit misconstrued but I was trying to say that we liked the presentation generically of Alan Reay's drawings and yeah designs, drawings and economies he incorporated into his designs. I think it came through as that it was a presentation on the CTV building that that didn't actually occur. He didn't actually do a presentation.

Q. Right I was going to ask you about that to clarify that because you say that in paragraph 3 of the second statement. "We like the presentation that Alan Reay made to Williams for the CTV project."?

A. Mmm.

Q. So was there a presentation for the CTV project?

A. No.

Q. No so it was the previous experience with him and what presentation on other projects –

A. Yes.

Q. – on the other two projects?

A. Alan was particularly innovative engineer to do with mainly pre-cast concrete tilt slabs and economies therewith.

Q. Had you dealt with though, pre-cast concrete column and beam buildings. The Aged Persons was that wasn't it?

A. Yes the Aged Peoples.

Q. So is that included in your reference to economies?

A. Yes.

Q. Of this design?

A. Yes.

Q. So just tell us then how or what happened in terms of this initial phase of the CTV project. Was there any presentation at all?

A. We started with a meeting I can recall with Neil Blair of Prime West, Alun Wilkie, Mike Brooks and myself. I cannot recall which engineer was there or if there was one because we generally started off with the architect, and the shape of the building I recall was decided at that early meeting with input from Neil Blair and Alun Wilkie.

Q. And you don't recall if an engineer was there you said. Do you recall if there was any engineering input at that stage into the issue of the shape of the building?

A. No.

Q. What is the next stage that you recall?

A. The next stage is Alun Wilkie came up with his A2 preliminary drawings outlining the shape of the building, the elevations and there may have been a cross section and at that stage that drawing was given to David Harding. David Harding came into the scene then. I can't quite remember how it happened at Alan Reay's office or our office and Dave was asked to produce the structural drawings off the architectural A2 sketches.

Q. So had you met David Harding sorry, before?

A. I don't think I did, I don't think I did, no, no.

Q. So your contact was with Alan Reay?

A. Yes.

Q. How was it then that you were introduced to David Harding?

A. I am not sure, David just sort of turned up as the man that is going to be doing the CTV, sorry the Prime West Madras Street contract.

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Q. Can you recall if Alan Reay introduced you?

A. I think he did, I think it was a meeting at his offices where Alan actually introduced David, to say that he was the man that – assigned to this project.

Q. And can you remember who was at that meeting apart from yourself?

A. I think Mike Brooks was there too.

Q. And this presumably is early on?

A. Fairly early on, yeah.

Q. After the architectural A2 drawings had been done?

A. Yes.

Q. And at that meeting can you recall any discussion about the building and any of the features?

A. I think we generally went through a fairly comprehensive discussion on the type of construction techniques we were used to, for example you know secondary beams in the hotel stahlton, the flat slabs on another project and we requested that Alan Reay with David come up with three structural alternatives, mainly for evaluation, pricing and for us to confirm which option we wanted to go with.

Q. Okay, is that the three options you refer to in your first statement?

A. Yes.

Q. You refer to option three I think -

A. That's right.

Q. – as being the final one, so when you say that you, presume you mean we, by we you mean you and Michael Brooks?

A. Yes.

Q. So when you say that we requested Alan Reay and David Harding to come up with various options, did you have any input into what those options should be?

A. Yes, I recall one of them was going to be stahlton because we had had experience with stahlton on the hotel.

Q. And what's stahlton?

A. Stahlton are pre-stressed secondary beams spending primary beams.

JUSTICE COOPER:

Q. Spell it please?

A. Stahlton, S-T-A-H-L-T-O-N.

CROSS-EXAMINATION CONTINUES: MR ZARIFEH

Q. And so you said you've had previous experience with that?

A. Mhm.

Q. On which building?

A. Durham Towers hotel.

Q. So not necessarily with Alan Reay, you just had it from that job?

A. Yeah, I think that's the – that was the main, possibly the only one Williams I can't speak for what Williams did previously to my

employment but that was the only one we had knowledge of, stahlton beams on the hotel.

Q. Any other input or was that it?

A. The other option was a pre-stressed flat slab like uni-span or one of those pre-stressed slabs basically placed across the primary beams.

Q. Right, and who came up with that as a possibility?

A. Me and Mike Brooks asked David Harding and Alan Reay that they were our three, and of course the third one being Hibond permanent metal formwork.

Q. Right, and where did that option come from or who from?

A. I think that probably came off the Aged People's building because we had found the men on site were quite labour efficient in erecting that system.

Q. So is that your recollection in terms of that building, the Aged People's building that it had Hibond?

A. Yes, yes.

Q. And can you recall Alan Reay's view if any, was expressed about that third option, the Hibond and the pre-cast beams?

A. I can't recall his reaction to that, no.

Q. So you said a moment ago that you asked him to come up with various options.

A. Mhm.

Q. What did they come back to you with in terms of options?

A. They came up with the A4 structural sketches, done the three different ways, for example the layout, foundation layout structural frame and with three variations in the upper floor slabs.

Q. And roughly how long was it between that meeting and then getting those plans for those three options?

A. I believe it was very short. It was possibly about two weeks, just a guess, it was in the April of '86.

Q. How did you receive those?

A. David visited our offices with them.

Q. And do you know who had drawn them up?

A. Yes I was under the impression they were David's drawings.

Q. Did you have anything further to do with Alan Reay personally in relation to the CTV project after that, after that initial meeting?

A. I don't think so. Alan was always in the background, Alan was fairly approachable. If we wanted to talk to him about anything, but I actually personally found David Harding to be very competent and confident that he was happy with these preliminary structural drawings.

Q. And you said you found Alan Reay approachable. Did you have to approach him at all during the CTV project?

A. No I didn't, no.

Q. And you also said in your evidence that your understanding was that David Harding was the engineer who – the only engineer that you had direct dealings with?

A. Mhm.

Q. You're talking about apart from that initial meeting with Alan Reay and David Harding both present?

A. Yes I believe it was David was the rest of the time.

Q. You said at paragraph 5 of your second brief that you assume that Alan Reay as he was the principal engineer of the practice, had an oversight role in the calculations and structural drawings, right?

A. Mhm.

Q. What made you assume that. On what basis did you assume that?

A. Well you know Alan was the principal engineer of a small to medium sized practice and I thought he was in there in an advisory role or a checking role, somehow. Alan was very much, you know it was Alan Reay Consultants, it wasn't David Harding Consultants.

Q. And yet you dealt, it sounds like with David Harding directly following that first meeting?

A. Yes, yes.

Q. So were you aware of Alan Reay checking or providing oversight from any of your conversations with David Harding or anything that happened?

A. No the only thing that David used to refer to was that, “Now I have to go back and check with the computer program,” so he referred to the computer program that he had to check it when we progressed from the A4 structural sketches to the next stage which were basically working drawings, although we didn't instruct them to proceed with working drawings until the June of that year.

Q. But clearly there would have been a bit of work going on, on David Harding’s part from after the initial meeting?

A. Not necessarily. He produced his structural sketches and that was basically to enable us to get our preliminary estimates to Prime West and they didn't, apart from computer analysis there wasn't an instruction to proceed further with working drawings.

Q. But your understanding was that there was this computer analysis going on before the confirmation to go on with the working drawings?

A. Yes.

Q. The initial concept Mr Brooks said was basically a square box with the shear core on the north, outside the perimeter of the building?

A. Yes.

Q. And no shear wall on the south?

A. Mhm.

Q. Do you recall that shear wall on the south becoming part of the structural plan?

A. I recall the shear wall on the south at a very early stage.

Q. Can you say when?

A. At the time, at the time the structural – the three structural alternatives were produced, I can recall that double wall so it was opposite the north core and that was usual for a design of that, sort of a balanced shear wall system.

Q. Are you sure about that in terms of the timing I mean, I'm not questioning –

A. Yeah.

Q. – that the (inaudible 15:06:36) shear wall in there, we know that, but in terms of when it came in?

A. There was an issue with the height of the southern shear wall.

Q. See why I ask is because my understanding is that the calculations that David Harding did, appear to show that there was no south wall initially but was put in because of the torsion that the computer modelling program showed.

A. Okay.

Q. Were you aware of that or not?

A. No I wasn't aware of that, no.

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Q. All right, but you became aware of the south shear wall at some stage?

A. Yes.

Q. And you think earlier on, early on?

A. Yes it was only up to the fourth floor level though.

Q. Right, but the concept of the south shear wall you became aware of?

A. Yes, yes. David, David was quite good at explaining his design. It wasn't just a matter of dumping the A4 sketches and running. He took a lot of trouble to explain it to me and I found that very helpful.

Q. Do you know from anything said or done at that time whether or not Alan Reay was aware of it? The south shear wall I'm talking about?

A. No, no. I don't think we discussed Alan's involvement at any of the meetings.

Q. And we're talking about the same thing aren't we when you say, when I mentioned the south shear wall?

A. Mhm.

Q. We're not talking about the western wall that was masonry up to fourth floor?

A. No, no.

Q. You're talking about the wall opposite the northern shear core?

A. Yes.

Q. Yeah.

A. Yeah.

Q. You said this option 3 was the one that you went with?

A. Mhm.

Q. Who decided on option 3 then? Was it you and Michael Brooks or?

A. Possibly we involved Gerald Shirtcliff as well because of his engineering background.

Q. Would he have been employed by Williams at that stage though?

A. No. No he wasn't, no.

Q. So he can't have been involved?

A. No.

Q. No, okay.

A. I'm wrong.

Q. So important to try and remember what you can.

A. Mmm.

Q. All right, so option 3 you said was obviously what went ahead with the building?

A. Mhm.

Q. And you said that the Hi-bond flooring you'd come across in the Aged People's building?

A. That's what I recall, yes.

Q. But you'd definitely come across it before?

A. Yes.

Q. And in conjunction with Alan Reay as the structural engineer when you come across it?

A. Not always. I've got a system on my own residence done by another engineer.

Q. All right, but did you associate Alan Reay with it for any reason?

A. No.

Q. In terms of the CTV proposal I'm talking about?

A. No I didn't really associate Alan with it. What I'm more interested in is construction economies suitable for the plant and equipment of the company owned and the familiarity with the system with our men.

Q. So was it recommended to you or anything like that?

A. No.

Q. So just so we can finish this topic, you were at that initial meeting, you asked them to give you three options but there is discussion between you all about what those various options could be?

A. Yes.

Q. And the option 3 is the Hi-bond flooring?

A. Yes.

Q. Which is discussed at that meeting and that comes back in the A4 plans as option 3?

A. Yes.

Q. In terms of other features of the building, so you said option 3 included the pre-cast, use of pre-cast beams?

A. Mhm.

Q. Was that something that you had been or had any input into at that meeting?

A. Well the pre-cast, the primary beams are almost essential for all three options. The only other option if you go away from primary beams is a reinforced flat slab, a thick flat slab which requires a lot of propping.

Q. Right, and when, so when option 3 came back were you expecting it to be pre-cast beams as well or not?

A. I think the beams were common to all three options.

Q. Okay, were you aware if that was something that Alan Reay had used before?

A. No, I wasn't aware of that, but aware that the company had exactly the primary beam system on the hotel.

Q. The circular columns?

A. Mhm.

Q. Where did that concept come from?

A. Circular columns were sort of a feature of Alun Wilkie's work and we did a number of those sort of buildings with Industrial Holdings with possibly rectangular external columns and circular internal columns.

Q. So it wasn't surprising that that was replicated in the CTV. Is that what you're saying?

A. Wasn't surprising, no, in fact I think that, I think that Neil Blair was aware of Alan Reay's [*sic*] particular architectural style and I think he specifically wanted the circular columns –

THE COURT:

Q. Alan Reay's architectural style or Alun Wilkie?

A. Alun Wilkie's.

CROSS-EXAMINATION CONTINUES: MR ZARIFEH

Q. And you said paragraph 19 of your first statement that you had some say in the design of the building based on costings of structural alternatives but not on their detailed design?

A. Mhm.

Q. So you had some say in terms of whether it was a cheaper option to do something but the detailed design came from David Harding or Alan Reay from that first meeting and subsequently from David Harding?

A. That's right, I'm strictly a quantity surveyor with no engineering qualifications.

Q. Were you aware of the Contours building? Do you know the building I'm referring to?

A. No I'm not.

Q. On the corner of, it was on the corner of Armagh and Durham?

A. Oh yes, I know the one, yes.

Q. Was there, do you recall any discussion about that building and it had circular columns. That was an Alun Wilkie building?

A. Mhm.

Q. Do you recall any discussion about that building when –

A. No I don't.

Q. – CTV was being built?

A. I don't, no.

Q. You mentioned the Shangri-La, who designed that?

A. David Harding.

Q. That was after CTV?

A. Yes it was, yes.

Q. He talked about after CTV and later in the period he was at Alan Reay's office having direct contact with you over a couple of projects? Perhaps that was one of them?

A. Mhm.

Q. Is that correct?

A. That's right. The other one was Chester Street, for Amuri Corporation. In fact I think we nearly got to working drawings stage on that one until Amuri Corporation decided not to proceed with it.

Q. Now you said that in the first statement that you actually submitted the permit plans?

A. Mhm.

Q. Is that delivering them to the Council?

A. Yes.

Q. And where did you get those plans from?

A. From David Harding. I either collected from their office or they dropped them into our office.

Q. Right.

A. It was part of my responsibility as project development manager to expedite the, expedite the building permit process and in fact be involved with any problems that arose from the City Council.

Q. Were you aware that the building permit application had been put in by Alun Wilkie?

A. I can't really recall that situation occurring.

Q. Were you aware that when the building permit application was put in, 17 July 1986, that the plans were not with it? The structural plans?

A. I'd become aware of that later on. That's why I delivered the rest of the drawings.

Q. And how did you become aware of that?

A. Just through David Harding.

Q. And that's when you say you went, you presume you went there and picked them up and dropped them into the Council?

A. Yes. The reason for that is that I wanted to get to know the people that were processing it because my role on the hotel was exactly that. We actually got a two-stage permit to do the foundations first before the structural frame had been approved.

Q. Right, but that wasn't the case at CTV was it?

A. No it wasn't.

Q. So you dropped the plans into the Council on you can't remember the day presumably?

A. No.

Q. You said that in paragraph 24, "It is possible that David Harding might have mentioned verbally to me that there was a bit of an issue over the building permit"?

A. Mhm.

Q. Can you be any clearer about that or not?

A. No, that was as a result of my interview with the Royal Commission in August of last year, only became aware of the letter from Mr Tapper through the television programme and so I'm trying to piece the whole thing together. I couldn't recall seeing the letter at all because Mr Tapper had sent it directly to Alan Reay's office but by way of explanation I merely said that well David might have mentioned it to me but I couldn't recall it....

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Q. And that's all you can recall?

A. That's all I can remember.

Q. You said that the agreement between Williams and Alan Reay Consultants would have been in a letter?

A. Yes.

Q. You haven't got that still I presume?

A. All the records have gone.

Q. And can you recall who would have signed it on behalf of Alan Reay Consultants?

A. I can only go by the Shangri-La letter which I've already presented to the Commission.

Q. No, I'm talking about the CTV?

A. Yes, but the letter was the same as that. The Shangri-La letter was signed by David Harding and included a fairly detailed proposal for fees and including supervision and that was signed by David and it would have been exactly the same type of letter for the CTV building and the contract was really cemented through merely an exchange of letters. We didn't draw up anything more formal than that.

Q. So have you still got the Shangri-La letter or not?

A. No, I've forwarded it to you people.

Q. So you say it's the same?

A. Same, yes.

Q. But you can't recall who signed the CTV one?

A. I'm pretty sure it was David.

Q. And in terms of the fees and how they were calculated. Mr Brooks said it would have been a fixed fee?

A. Yeah.

Q. Is that your recall?

A. Yes.

JUSTICE COOPER:

Q. What was the fee?

A. The fee was just under $50,000 and it included supervision and I recall that the supervision component was round about 20% of the total fee.

CROSS-EXAMINATION CONTINUES: MR ZARIFEH

Q. You mean supervision of the construction?

A. Yes, yes.

Q. And you mentioned that that occurred by David Harding?

A. Mhm, mhm.

Q. How do you know that it occurred. What makes you say that he did that?

A. I'm pretty sure I heard that David was attending first of all the foundations and that was a fairly important aspect of digging out the

foundations and ascertaining the true depth of the shallow foundations right through to approving the pours at the foundation stage.

Q. Did you see any site inspection reports that he completed?

A. Yes he was very good with his paper work, David. Yes I did see them. They come through the office.

Q. And what regularly?

A. Yes they did, yes.

Q. David Harding said that he had never been to the Williams office?

A. Okay, that's interesting.

Q. That's not your recall?

A. I can recall him in my office at Williams, yes.

Q. So you can remember that?

A. Yes, yes.

Q. And, what, presumably during the project?

A. Yes, yes, no, more towards the beginning of the project. I saw more of him putting the design together really than during the project so probably one or twice in my office at Williams.

Q. Mr Brooks said that when he went across to Union when he left Williams in March/April 1987 that things slowed down with the project, CTV?

A. Mhm, mhm.

Q. Is that your recall?

A. No I can't recall that at all.

Q. So it could have happened, you can't recall it?

A. I don't think it happened because it was a very straightforward construction project with a very competent foreman, Bill Jones. I mean it doesn't get much simpler than that, you know, elevated core, shear wall columns. It was a very straightforward job compared to the hotel. The hotel was far more involved, far more complex. So I can't see any reason for the building slowing down during that period.

Q. And were you aware of that, have you heard the reference to the five month gap –

A. Yes.

Q. – in the inspections?

A. Yes.

Q. You can't understand that. I think you've put forward a possibility that the Council weren't inspecting?

A. Mmm.

Q. Just relying on David Harding?

A. I think there was more of a problem with the Council than a problem with the building.

Q. How do you mean. Do you mean in terms of not inspecting?

A. Yeah. If you have a look at the Council notes they're pretty amateurish. The inspection notes are very hard to read and they're not in any regular intervals. I think there was a problem at the Council during that time.

Q. What, a problem with documentation?

A. Problem with staff. It's just my observation. Could be wrong.

Q. But is it based on anything other than an opinion?

A. It's only based on me reading the Council reports that I only had in the last 12 months, have come with my evidence.

Q. In relation to this building?

A. Yes.

Q. Now you said that you were essentially driving the early phase of the project to get it going –

A. Mhm, mhm.

Q. – and that you didn't supervise or have anything to do with the construction?

A. That's right, yes.

Q. So you've already talked about Mr Shirtcliff and his role and Mr Jones. Were you visiting the site at all during construction and seeing for yourself what was going on or not?

A. Yes in the initial period I did the progress claims for the column so it required a visit to the site, a good excuse to get out of the office anyway. I handed the quantity surveying project over to Mr Sandy Robertson who was a staff quantity surveyor who reported to me and I think I forwarded some costing notes and other matters to the Commission in

his handwriting and he was a very experienced quantity surveyor who handled the project after I left.

Q. Now you weren't aware of any issues during construction –

A. No.

Q. – with workmanship or...

A. No.

Q. And you've heard and I think you've probably read some of the Hyland Report?

A. Yes.

Q. You know about the issues that have been highlighted?

A. Yes.

Q. Can you make any comment or give us any assistance in trying to understand how they could have occurred?

A. Well I can't understand the concrete matter, concrete in the columns being under strength. I find that very difficult to understand from the point of view that knowing the site foreman and how organised he was, knowing that really ordering concrete at the right strengths was a fairly straightforward procedure, knowing that David Harding was down there inspecting the pours. I find that a really difficult one to get my head around how you could get 35MPA concrete in your columns so wrong and I just wonder whether it was the core samples weren't taken from the beam column junction where the floor slab interacted with the column beam infill. I'm just wondering whether the core was taken out of that area.

Q. Thank you for that. So what about the other construction issues, for example the lack of roughening on the pre-cast faces?

A. Well that's an issue I believe that those external shell beams were sub-let to a company. I think it may have been, no I'm not sure, but it may have been Precision Pre-cast who did our beams for the Durham Towers Hotel.

Q. So it was the same firm?

A. I think it was the same firm and that's an issue of letting them know, letting them have the correct drawings and the correct specification and

usually when Geoff Taylor was on the staff Geoff was very good at making sure that sub-contractors got the right drawings, the right specification. He always went to see them and supervised things like pre-cast beam pours.

Q. And can the same be said in your view with Mr Shirtcliff then when he took over?

A. No I can't say the same really because I didn't understand how Gerald really worked in relation to how Geoff Taylor worked. I didn't really, I wasn't with him in the course of his supervision so I didn't know how he worked. I do know that Geoff Taylor used to visit all the sites in the morning every day.

Q. And another issue is the bars that were bent around. You heard about that this morning?

A. Yes, yes I have.

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Q. We heard reference to that. Again you didn't see that, have you, can you offer anything of assistance or not?

A. Well those bars would have been supplied by the reinforcing steel supplier which could have been someone like Fletcher Steel. The steel would have arrived on site, would have been placed by professional placers under Bill Jones' supervision and then those same beams, shell beams, should have been inspected by David Harding before the concrete was poured. In fact I'd go to the extent of saying Bill Jones probably wouldn't have poured it until the engineer had been around to inspect it and approve it.

Q. Are you aware of – have you read Bill Jones' evidence?

A. Most of it yes, yes.

Q. Are you aware of him saying that at least on one occasion David Harding may not have got there for the actual pour?

A. Yes.

Q. You've heard that, you've read that?

A. Yes.

Q. And just quickly cover off, the – any other issues that you can offer on, anything on or not?

A. Yes, one other. I think one of the questions in my first statement I was asked, did we build any other buildings similar to the CTV structure. The next building we did most akin to that structure was the Cathedral properties and that was designed by Buchanan and Fletcher with Ian Krause Associate as architects and had circular columns and it had a Hi-bond upper floor slab. It had an offset elevator shaft and it had structural steel support beams under the Hibond connected by what's known as Nelson anchors. That building I believe survived all the quakes but I understand it's now demolished.

Q. And you're drawing a distinction between the CTV and that building and that that one had steel bracing essentially under the floor?

A. Under the upper floors, yes.

Q. Right.

A. It also had piles.

Q. You made a comment at the end of your evidence of your first brief that you thought there was too much pre-cast concrete used nowadays?

A. Mhm.

Q. And do you think that was a problem looking back now with the CTV, that the mixing of pre-cast and in situ concrete?

A. I think my comment was based on the fact that the severe earthquake that came in February the 22nd, in relation to how various buildings stood up in town, and also comparing it to the Millennium Hotel that I spoke about.

Q. Right.

A. It was just a comparison between an older building that was much slower, the hotel, the Millennium Hotel originally State Advances Corporation, much slower than modern day buildings who you can quicken your programme up by using pre-cast. In fact you know we could get a floor by floor turn around in under four weeks if we're using precast, but using in situ flat slabs it was 50 percent more than that.

HEARING ADJOURNS: 3.31 PM

HEARING RESUMES: 3.47 PM

CROSS-EXAMINATION: MR ELLIOTT – NIL

RE-EXAMINATION: MR MARSH – NIL

QUESTIONS FROM COMISSIONER FENWICK – NIL

QUESTIONS FROM COMMISSIONER CARTER:

Q. Yes just a little bit about the beginning of this project when the design was starting to come together. Now the owner of the building that you were offering to build was to be Prime West?

A. Mhm.

Q. So what contact were you having with them as you were going through the development of these plans and presumably someone who is spending a lot of money on a building wants to know what they are going to buy?

A. Mmm.

Q. So was the owner of Prime West party to these discussions that were going on about forming the building?

A. He mainly had involvement with Alun Wilkie the architect. He didn't have – he was a dream client really, Neil Blair. He was brilliant to work with. Incidentally their company was a very new company. It was spawned out of a company called Sovereign Gold and became Primewest and attracted a lot of investment money on the share market at that time and they had the banks chasing him to lend money. He had his brother called Alastair Blair in the company too and about four or five other staff but Mike Brooks had the most dealings with Neil Blair. He took an interest in what we were doing but mainly just architectural side of it.

Q. So the floor plate, the position of the core, the question of adding another shear wall in, all of that was being conveyed to Mr Blair by Mr Brooks is that what –

A. Yeah.

Q. – you are saying?

A. Yes, yes.

QUESTIONS FROM JUSTICE COOPER:

Q. Mr Scott, just looking at your first brief at page 3. You've have given us various figures there, estimates, what was the provisional sum allowed for piling, what was the sum allowed for design fees, builders contingency and a profit and overheads margin of $369,000?

A. Mmm.

Q. I know quantity surveyors by profession must be precise but how have you been able to bring all of that detail to mind. Is it right that you have no records left in relation to this building?

A. There were only two records that I had left.

Q. Yes?

A. And both of them I have given to the Commission.

Q. Yes.

A. One was a summary, a cost plan summary of option 3.

Q. Right and that's where these figures are from?

A. Yes, and you people have got that.

Q. Yes?

A. And the other one was a letter from myself to Neil Blair of Prime West.

Q. I see.

A. Telling him that the structural drawings were becoming available.

Q. Can you remember there being any pressure to, coming on to extract the building permit from the Council. I have noted that it was lodged on the 17th of July?

A. Mmm.

Q. Without structural drawing?

A. Mmm.

Q. The structural drawings, according to Mr Harding, were submitted then on the 26th of August in an incomplete state?

A. Mmm.

Q. Now, can you shed any light on what was happening at that stage?

A. I think as I said before it was part of my responsibility to expedite the building permit side of things. It certainly was my job on the hotel and I don't think there were pressure from Neil Blair the client to get the job started. I mean none of the floors were let until well after the building was finished so there was no pressure from tenants. I think it was just part of our normal operation that we wanted to get things moving. The permit was a condition of my price going unconditional so I was keen to get permit drawings, expedited so that I could establish the authenticity of my original price and also get towards finalising the contract and drawing up a formal contract with Prime West so maybe if any pressure came on the permit it could have come from me.

Q. Can you explain why incomplete drawings would have been provided with the permit application and then subsequently?

A. It sort of was quite normal and I think Alan Reay alluded to that yesterday in his evidence that with the design-build contract you have got the flexibility of having staged drawings and maybe at that time we didn't need the upper floor levels, the upper floor structure details complete when in fact maybe Mr Tapper at the Council could have been quite happy with the foundations.

Q. I don't think the – I see. Well the upper floors you mean from ground –

A. From first floor to sixth.

Q. To sixth?

A. Yeah, yep.

Q. Just in relation to paragraph 3 of your supplementary statement. I think of the second one you read where, "We like the presentation that Alan Reay made to Williams for the CTV project. In terms of presentation, content, the standard of his drawings and the willingness to provide preliminary structural sketches for preliminary estimates

without charge." I think you have said, well, there never was a presentation for the CTV project?

A. No there wasn't no.

Q. So how – explain to me how you could get that so wrong?

A. I was in the process of cooperating with whoever wrote this that the presentation I meant, it was a generic term for all Alan Reay's drawings, we liked presentation of his drawings from a quantity surveyor and a contractor's point of view and I think it may have got misinterpreted in drafting of this particular statement but it wasn't referring to the presentation because there wasn't one.

Q. So why did you sign this statement?

A. I probably made a mistake by doing so Sir.

Q. Are you saying you received drafting assistance from your lawyer or somebody else?

A. No, no. I had actually – I had two working days to sign this particular one.

Q. Yes but you said, "Whoever wrote this." So tell me now who wrote it?

A. Sarah Jamieson.

Q. All I see.

A. And I probably should have had it corrected at the time but I didn't and that is my mistake.

Q. So when did you discover the mistake?

A. Um, really only through, probably a month ago.

Q. And what were the circumstances when you discovered the mistake?

A. I just thought well, um, it is not a big mistake. It is possibly something that could be explained today.

Q. So you discovered it by simply reading it through to yourself did you?

A. Yes I did yes.

QUESTIONS ARISING: ALL COUNSEL – NIL

WITNESS EXCUSED

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MR ZARIFEH:

Sir if the Commission is happy, I've spoken to Mr Jones and he's happy, if I read the brief it might make it a bit quicker and he listens to it and I can ask him questions.

JUSTICE COOPER:

Well I'll just have a word to him about that.

MR ZARIFEH CALLS

WILLIAM JAMES JONES (SWORN)

Q. Mr Jones is your full name William James Jones?

A. That's correct.

Q. And you're referred to by the Christian name Bill?

A. Bill.

Q. You live in Ashburton and are you retired?

A. I'm retired.

Q. Now have you got a statement of evidence dated 1 June signed by you in front of you?

A. That's correct.

Q. It's some 16 pages long.

JUSTICE COOPER:

Q. Mr Jones I've been wondering whether it might be easier all round really if this statement of yours was read by Mr Zarifeh rather than forcing you to read it yourself?

A. That would be okay as long it was read exactly as I've –

Q. Well I was thinking that you would watch that with your eagle eye, because then I'd be asking you to confirm that that's the evidence that you want to give?

A. Thank you.

Q. Is that all right?

A. Yes that's fine thanks.

BRIEF OF EVIDENCE OF WILLIAM JAMES JONES READ BY CONSENT

I am giving evidence to the Canterbury earthquakes Royal Commission because I was the foreman for the building that was constructed at 249 Madras Street. This building later became known as the CTV building.

I started working in the construction industry straight from school at age 15. My first job was with Williamsons. I worked as an apprentice unofficially for about 18 months and was then offered an apprenticeship through work experience but as I would be paid a lot less I decided to stay on as a hammer hand. I became a carpenter and worked my way up to a position of leading hand with Williamsons.

After about two years I left Williamsons and got a job with Luneys, where I stayed for about five years. I worked on the memorial wing of the Canterbury Museum as a carpenter and a hammer hand. I also worked on St Mary's Church in Manchester Street, St Stephen's Church in Papanui and the Government Life building in The Square among others.

My first job as a foreman was for Barry Rea Construction in about 1958. We worked on a new building at the airport.

In approximately 1960 I joined a Paynter and Hamilton as a foreman. We built a bus depot in Hereford Street and the bottling store for New Zealand Breweries near Christchurch Hospital.

Prior to 1986 I had worked on a number of multi-level shear core buildings. I was the foreman for Williams Construction on the Radio Avon building in Kilmore Street. This was either four or five levels and had a shear core on one side of the building. I also was the foreman for a six level office and retail building in Cashel Street built for the Pyne Gould Corporation and the Aged Persons Welfare building, a four level building with the lift core at the back on the corner of Cashel Street and Cambridge Terrace.

After I was made redundant from Union Construction which I joined after Williams, I worked for a number of years at St George's Hospital. I retired in 2007 after 49 years in the construction business.

I cannot recall when I started working for Williams, but my first job for them was the Radio Avon building. I do remember before the 249 Madras Street job I worked on the Aged Persons Welfare building in Cashel Street and the Christ's College housing project.

At the time I worked on the Aged Persons building Geoff Taylor was my boss. During construction of 249 Madras Street Geoff Taylor left Williams and Gerald Shirtcliff was appointed as his replacement.

I enjoyed working for Williams. It was a good construction company and was well managed. The foremen were kept in the picture by the management. Every time Williams got a new contract the foreman would be invited into the office to meet each subcontractor over a few drinks. The engineer and architect might be invited by management as well.

The Aged Persons project started in 1985 and took about six months to complete. Alan Reay was the structural engineer on that project. I remember contacting Alan Reay about lifting the concrete panels.

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After the Aged Persons building I did a couple of jobs in-between and then went to the 249 Madras Street job.

I was the foreman for this project. I have been shown a Council inspection record for the building which is dated 20 August 1987 and records that there was a new foreman on site. I recall that the topping of slab to the lift was placed on 10 July 1987. I remember this date as it was the day I attended my Mother's service of remembrance at the Harewood Crematorium. After that I can remember going doing the roof steel and closing in the building but that is all. I do not recall doing the linings to the outside wall on line A from level 4 to the underside of the roof. I do not recall doing the fit out to the inside or the ceilings, door jambs, trim skirtings or the pre-cast planters and the pre-cast panel detailed on sheet 26.

It would take approximately six weeks from the topping of the lift slab to the closing in of the building. That would mean that by 20 August 1987 I was no longer on site and the new person must have taken over as foreman as the Council inspection record, dated 20 August 1987, suggests.

I do recall being on the site at the end of the project fixing the signs to the doors, for the toilets and exits and meeting the Council and architect or engineer and handing over the keys.

Responsibilities of the foreman on a job like this are to manage the tradesmen, build the building to the plans and specifications and to keep the construction on schedule. I set out below a list I have compiled which summarises the foreman's responsibilities:

(a) set out site;

(b) safety of all workers on site;

(c) staff allocate jobs according to their skills;

(d) contract subcontractors with drawings of all relevant details;

(e) office duties order materials as required;

(f) critical path programme prepared, bar chart updated as required each week;

(g) phone engineer for inspections of foundations, columns, beams, slabs, walls, roof steel and all items on the engineer's drawings before placing form work, concrete and linings;

(h) pass on engineer's instructions to subcontractors and send copy to Williams' office;

(i) draw up form work and set out works, do levels, check plumb and walls and columns with theodolite level;

(j) as the job progressed check all schedule items for quantity and order materials to meet site requirement and programme date on site delivery;

(k) check on workers several times a day;

(l) work with tower crane operator as dog man on the ground checking and securing loads before being lifted then radio instruction to operator;

(m) plant maintenance, plant in general;

(n) security on crane and site sheds;

(o) time sheets for staff members with hours worked and contractor analysis for materials and labour, all orders to supply with quantities of item along with full description of job and code number;

(p) site report book – two copies completed each day includes list of staff, list of subcontractors, visitors to site, work in progress and weather.

There were around approximately eight to 14 staff who reported to me that were working on the building at any one time. Some of the staff would be working on the shear walls, others on the wall on the south, others on the columns. Some of the staff were hired on a daily or weekly basis. If they were good we tried to keep them otherwise we would get rid of them. Some of them stayed for up to three months. It was hard to get good staff. There was a lot of building going on around Christchurch at that time. There were others on site at different times for example the subcontractors who placed and tied the reinforcing steel.

When I first started on this project I went to the Williams' yard in Vagues Road in Papanui. At that stage the staff had cast about 75% of the beams that later went into lines 2 and 3 and A for levels 2 to 6. I was involved in placing another casting bed at Vagues Road to speed up the casting process. Then I designed and manufactured the form work for the north core with the staff that were working at Vagues Road while the rest of the beams were completed.

I have no recollection of the shell beams being made at Vagues Road but they could have been done before I got there.

I remember that the foundations for the building were quite simple. They were not very deep and there were just pads in some areas. When I was shown the drawings for the building by Dr Clark Hyland in September 2011 I could confirm that there were four pads on line 2, three of those were not tied into the perimeter of the building. There were also four pads on line 3 which were tied into the core.

I am fairly certain that it was on the site where I smelt gas in the soil for quite some time during the excavation process.

The beams and spandrel panels were pre-cast and brought on to the site while the columns and floor slabs were poured insitu, meaning on site. I do not recall which company made the pre-cast beams.

The building was built one level at a time. My recollection is that we would have had started on the western face of the building and worked out. Columns were poured and the beams would be lifted up and the slab poured. The north core and the south wall were built level by level as well. My memory is that the

block work on the western wall, western side was built in later and may have been saved as a job to be done over the winter.

I have been shown three photographs that have been provided to the Royal Commission which show the building at three different stages of construction.

The first photograph which I will get brought up on the screen has been taken from the opposite side of Madras Street looking northwest. On the left side of the photograph you can see the building which was on the corner section of Madras and Cashel Streets during the construction of the building and which must have been demolished some time later. My office was in the white portacom with the Williams signage. When this photograph was taken the ground floor columns were in place with starter reinforcing rods coming out of the top of each column.

As the floors progressed we used a tower crane which was attached to the building on the Madras Street side at the southern end. This can be seen in photograph. By this stage my office is up to above the footpath. In this photograph construction is up to level 4 if ground level is 1 and the north core is at the same height.

The third photograph shows all six levels and the roof on the building. The tower crane is still there. The scaffolding is still in place around the north core. The canopy over the entrance to the north core off Madras Street is not visible in the photograph so it must not have been completed at this point.

The reinforcing steel starter bars and the spiral reinforcing for the columns were supplied by Christchurch Steel. Spiral reinforcing was 6 millimetres in diameter. When the tradesman brought it on to the site for the columns they just pulled it from each end until it was 250 millimetre pitch. That was then placed around the starter bars and then the form work was placed around that.

We used steel form work for the round columns. The ground floor was higher than the rest so the form work was made to the height of the other five floors and then we put an extender on top when we were pouring the columns for the ground floor.

Three or four columns would be poured at a time. The next day we would strip the form work off and spray the columns with a sealant which kept the moisture in. The engineer allowed us to do this rather than keeping the columns wrapped in hessian for seven days. That sped up the process by saving us that curing time.

I do remember thinking that the reinforcing in the columns and the size of the columns made this building light having regard to its height. I had built other buildings where there was so much steel in the columns you could not fit a recessed light switch into the column. The spiral reinforcing was quite light too because as I have already stated it was able to be stretched out on site.

I was responsible for ordering steel and ensuring it was delivered. I would supply the drawings and detail sheets to the subcontractor. The steel placer would then come on site and put the steel in place. I would check that the steel was clean and tidy and then phone the engineer for inspection when the steel placer informed me that he had completed his work. Inspection of reinforcing steel was not my responsibility but I would take responsibility for any steel placed by my staff, for example, the extra steel for the bracing of the tower crane to the slab. The engineer would also be contacted for an inspection of this work.

The pre-cast beams sat on a small seating at the top of each column. This may have been as little as 20 to 30 millimetres so the beams were all propped. They had reinforcing already in them which was joined into the columns.

The beams on the perimeter of the building were shell beams which meant that they were hollow on the inside. These were all put in place before the slab was poured.

I have been told that the Hyland Smith report states that there was no roughening on the inside faces of the shell beams. These were made by a pre-cast supplier arranged by Tony Scott. They arrived on site ready to go. I never thought about roughening them. If I had noticed that they were not roughened and were meant to be I would have contacted the supplier.

The supplier should have painted the form work with Rugasol MH retardant before placing concrete and cleaned it off when the formwork was removed

from the mould. This gave a roughened joint with no latent surface. I have provided a document about Rugasol MH to counsel assisting the Royal Commission.

There was also another product called Rugasol C. This was used on the site and painted on to the wall joints as soon as the concrete was set and washed off the next day.

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We also cleaned the concrete from the reinforcing steel at the same time with Rugasol C.

The shear walls were built at the same time as the columns up to the underneath side of the slab.

The outside walls of the north core may have been built up higher than the floor level but the area inside the walls was poured at the same time as the rest of the floor slab on that level. Before the floor was poured the reinforcing bars and the 664 mesh would then be put in place in the shear core then out over the metal decking and then the floor would be poured over the reinforcing.

For the south wall we had formwork made up to the height of the next floor. I would set out where the weld plates were going to go and then the steel placer would come and tie the diagonal reinforcing steel into the wall. We then completed the formwork and poured the concrete for the wall.

The pre-cast beams had a recessed part of seating built into them where the metal decking could be placed and supported by the beams. The floor slab would be poured once all steel work was in place on a floor. After the slab was poured we sprayed it with water for a day and then used the same spray as we had used on the columns to prevent the concrete drying out.

This was one of Williams first jobs where the floor was free screeded. This meant that we pre-cambered the floor to the level set out on sheet S15 by placing pads and hand-screeding with three metre aluminium screed between pads.

We propped the floors at pre-camber points and left the props in place as we went up the building. We kept a minimum of two fully propped floors throughout the building. Williams had plenty of props.

It did worry me that we would be lifting our equipment up onto the floor the day after it was poured.The first thing we would be lifting up would be the steel for the columns. It would take me about a day to set out the grid-lines on the new floor slab to work out where the columns would go but after that we would be straight onto the next lot of columns.

Prior to construction commencing Tony Scott would organise a concrete supplier for the whole project but if that supplier could not supply concrete when it was needed I had the approval of the company to go to another supplier. We had always had only one supplier for each floor. I do not remember who the concrete supplier was for this job.

When the concrete truck arrived the driver would give me a docket which recorded the strength of the concrete. I kept one docket and another went back with the truck. I always received the docket which confirmed the concrete delivered met the strength that I had ordered.

I would ring the engineer for every pour except the columns because the steel there was there sticking out of the columns for them to see at their initial inspection. Quite often in relation to the columns the engineer did not arrive at the site, they would say “If you don't see us, go ahead”. This did not concern me.

About the time of construction of the building at 249 Madras Street the concrete supplier was using crushed sand in the mix. This was to give the concrete more strength. It also made it harder to pump. The finish on the floor slabs was not as good with this kind of mix as the crushed sand would tip when the floor slab was being finished off with a hand float. It is my understanding that this could be – that they could use less cement to obtain the required strength when crushed sand was added.

I also recall that the columns were then placed four or five at a time which required about 2.5 cubic metres of concrete. Sometimes the concrete truck would be carrying a split load of up to five cubic metres but we would not always get our 2.5 cubic metres delivered first.

The western side of the building was block work masonry up against an existing building. The columns on that wall were square rather than circular and there were pre-cast beams between each column. The beams had

dowels in them to put the block work in at a later date. Those beams had to go in before the slab was poured on top because they had starters going into the slab.

I do not recall if the block work was put in first and then the beam put on top or if the beam was propped and the block work put in later. The block work may have been left as an inside job for the winter. I have been shown the Council inspection records which records that as at 9 October 1987 the block work on the first and second floor was to be filled in on the west end.

I do not have any recollection of the engineers coming to inspect the block work before it was grouted. As there was a building hard up against the masonry wall mortar could not have been placed on the outside wall at the time 249 Madras Street was built.

I recall there were rods threaded into inserts in the square columns and beams and built into the block work. These rods were greased to allow for movement. I do remember there being a gap down the side between the square columns and the block work.

The spandrel panels were pre-cast and came to the site with the textured finish already on them. I remember that they were just lifted with the tower crane and sat in place between the columns on brackets which had been fixed into the beam. Once it was in alignment we bolted them on with tru-bolts. There was timber infill between the spandrel and column and on the corners as well.

When I was interviewed by Dr Hyland last year I said to him that I did not remember any problems with fitting the spandrels. After that interview I did have a recollection of having to chip the edge off one of the panels to ensure there was a gap between the panel and the column but I cannot be any more specific than that.

I note from the Hyland Smith report that the north core was found to be out of plumb. I can say that the building was plumb when I left the job and the lift was working well.

I do recall inspectors from the Christchurch City Council coming onto the site and I have seen the summary of their inspection cards.

My impression is that the Council inspectors relied on the design engineer to do supervision and maintenance.

I would observe that by the time the building was constructed there was less supervision of construction than I had been used to in the past. I had been used to having a clerk of works on the site who was there to look after the client's interest. They had their own office on site. A clerk of works was invaluable to the foreman to help with technical matters. For example I remember building the St Mary's Church and being told to stop building at on the back of the building and start on the front because the clerk of works on the job, that job, had taken a level and found that it had gone down 30 millimetres.

At some point during the construction of the building, the Richmond Smart Corporation took over Williams. Sometime after that Michael Brooks left Williams and Tony Scott left soon after. Together they formed a new company, Union Construction Limited. With the backing of Angus Construction, sorry with the backing of Angus Construction. I do not remember exactly what stage the building was at when this happened, but I think it was fairly well on.

I left Williams and went to work for Union, I was working for Union by December 1987 because on 21 December 1987 I applied for a building permit on behalf of Union to erect a canopy covering the entranceway from Madras Street into the north core. A permit was issued by the Council on 25 January 1988 and I have signed the permit.

There was an issue with the placing of the columns for the canopy on Madras Street which is reflected in the Council inspection records. The columns were 200 millimetres outside the boundary and had to be moved back. Council records state that by 11 January 1988 they had been moved.

I remember after leaving 249 Madras Street I joined Union, together with two other foremen that went over to the Union with me, we were offered one share in the company between us as a bonus. That came to nothing though because the only jobs that Union did were the foundations for two buildings.

I remember that someone from Angus Brook Construction came down from Wellington and said that Angus was going under and that Union would too

unless it had some big projects in the pipeline. I stayed on until the end of Union and sold off the company's materials and equipment. I received a reference from Michael Brooks dated 23 September 1988 which records that I was made redundant by Union following the local downturn in the industry.

Some years after the building was constructed I received a phone call from someone who was making enquiries about the building as he was interested in buying it. He wanted to know about the alterations that had been done on the top floor to the core. I said I did not know anything about that.

I always thought that the building was intended to be for light office work. I have wondered since whether the building could have handled the weight of the cameras and other equipment that Canterbury Television would have had in there.

I also think that removing the tower crane at the end of the construction could have damaged the building. It had a concrete base and a large hole had been dug out for it.

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EXAMINATION: MR ZARIFEH

Q. Now Mr Jones, that's your statement, I just want to ask you some questions to clarify a few matters that are raised in there. As you're aware, and you've referred to, there's construction issues that were highlighted by the Hyland Smith report. I just want to ask you about some of those, that firstly and you mentioned it in your statement, the lack of roughening on the faces of the pre-cast beams?

A. Yes.

Q. Firstly, do you ever recall noticing that or not during construction?

A. No. The pre-cast beams that we done were only the beams on lines 2 and 3 and line A. They were the only ones that Union, ah, that Williams cast. The other beams were done by a sub-contractor. Those beams were about 50–75% incomplete by the time I went to Vagues Road where they were being made and I looked at what the boys were doing, I ascertained that we needed another casting bed because of the curing time we couldn't get enough beams done in a week. We did a test on

the beams to find out what strength we were getting out of them and we knew what strength we could lift the beams and move them so by putting an extra casting bed in it allowed us to do this but I never reckoned on or never took into consideration any alteration to what the boys were doing.

Q. I take it you understood the principle of roughening or cobbling –

A. We would have never roughened or chipped or cobbled the shape bends for a start off because we had metal panels although someone prior to my taking charge someone had made the round shape of the column in metal at the end of each beam. Now normally we would have painted that with Rugasol, poured the concrete against it, stripped off and cleaned the Rugasol off the concrete. Those beams were only 20mm thick at the sides when they come to the end and if you tried to chip them at all you would have just knocked them off 'cos there's no reinforcing in that part of the beam. Reinforcing stops right back at the start of the column so there's nothing on that curl that you could (inaudible 16:24:34)

Q. So those beams with the circular ends, were they made in the Vagues Road?

A. They were made in Vagues Road.

Q. And did you give any thought to the ends of them being smooth?

A. No, I'm sorry I didn't. The same thing applies to that. They were too, as I say, they were 75% complete when I went there and I never took any more notice of them.

Q. Right, do you recall them being smooth or not?

A. When I look at the picture –

Q. You've seen the pictures?

A. Yeah I've seen the picture.

Q. But at the time?

A. No I didn't.

Q. Do you recall the specifications talking about roughening?

A. I see it in the specifications the roughening in there and, as I say, and the drawings also specified on sheet 23 I think it was that we could use a retardant which I always use Rugasol.

Q. I think to be fair to you and this issue has come up in the hearing, the specifications talk about the roughening but the drawings are slightly inconsistent and I don't think there's any indication on the ends of those beams, the circular end, that that was to be roughened?

A. Well I don't know about the ends of the beams at all. As I say, they were so far on when I got there that we were probably only looking what was there in total of beams, a hundred odd beams, I don't know, but I would say there was only 25 to do and we were doing. Well they were doing only one change a week so they were only doing seven a week, seven beams a week.

Q. And I take it you didn't give any thought to any other inside surfaces of the beams or shell beams being roughened?

A. The shell beams, no, but I would imagine they would have been done with Rugasol and cleaned out with Rugasol. I can't visualise a construction company that was capable of doing those beams not providing what was necessary.

Q. But you don't recall it now?

A. No I don't recall. I recall I looked in the inside of them and seen the steel coming out of the bottom across the top and connecting on the other side and I did think about those beams. The only thing I thought about them was how they casted them, whether they did them upside down with the flat bottom to the top or whether they did them the other way around which would make a difference to how the beam turned out.

Q. The next issue is the ends of some of the beams and the bars that were turned over. Do you know what I'm talking about?

A. Yeah, yeah.

Q. I will get the photo brought up for you, the Hyland Report for you.

A. Well I've heard two or three (inaudible 16:27:41) seen drawings. At first I couldn't make out head or tail until I got the drawings back from, got the drawings from you people that I could have a look to see where they

went and what happened there. I don't know why or how that could occur, whether they were, every shell beam on that job apart from, no, every shell beam on that job had rods turning, the two rods that went through the bottom turned up at the ends. There was no straight pieces going into the beam.

Q. Right I'll get a picture brought up – 249.0189.109. What the Hyland Report says is that the bottom reinforcing steel in the shell beams had not been developed fully into grid C of the core wall on line 4 as specified except at level 2.

A. Yeah, well looking at that picture there now the one on my left-hand side, those two bars sticking up there, would be the top bars threaded through the stirrup line. They wouldn't be the bottom bars.

Q. No, I think the purpose of that photo on the left is to show the imprint of the turned over bars isn't it, that's what the caption says.

A. The one on the left shows the top bars, the main, what they call saddle bars that travel through over the top of all columns and all joints. They would be the top saddle bars turned up there and the only way that they could be turned up, they're turned up above the slab that you can see there. The only way they could be turned up would be bend (inaudible 16:29:34).

Q. Can you recall any bars being bent, reinforcement bars?

A. Ah, there wasn't many. Some bars, when you have two bars entering a column like that, well you've actually got four and they slot into a column like that and they have a return 250 or 200mm high. You have very little room and if you've got a return up in the air that's slightly out of plumb, right, the other bar won't go past it because it's controlled by the vertical column rods. So the only thing we used to do there we'd put a dog bar on the bottom of it.

Q. What's a dog bar?

A. Well a dog bar it's a special bar made by the Sealy's really. Their own type of bar. It's a piece of slotted metal with a slot in it and a handle on it and you can hold one bar and stop it moving, stop it turning. We put that on the straight piece that come out of the beam and we'd put what

we called a putlog which was a two inch length of water pipe over the top and give them a quick pull like that and just twink them until they were plumb but we did our best to try it well. We did our best to try to keep them plumb in the mould but sometimes if you've got a bar that goes right through from one end to the other and it goes through the bending machine it will be, you've got no control over it because it's deformed steel, has its own memory if you like or its own, like you can bend that one, it could be dead flat here but as it goes through the roller on this end it'll tilt so there's not much you can do about it unless both were bent at the same time.

Q. But what the Hyland Report is highlighting is that those bars should have been going into the north core?

A. Yeah well the only thing I could say there is that they were made short, just turned up. I can't see, there was no other, all the bars, all those bars in the shell beam above every column just returned vertically into the infill of the shell beam. Every bar on the job excepting, it looks like those two there that should have been turned up into the core wall and how that come about I have no idea whatsoever.

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Q. Right, so you don't recall any –

A. No I am certain, certain – well I would like to think that men working on the site but the thing that puzzles me a little bit they said it was right on one floor.

Q. Level 2, yes?

A. And normally if it had been level 1 that was wrong I would say it probably be wrong on every floor because once you sort of set a norm and the boys go through and do a floor they have a memory for doing the next floor the same.

Q. Well level 2 though is the first – level 1 is the ground level, level 2 is the first floor I think?

A. Yeah well one was right you say?

Q. Well that is what –

A. The rest should have followed it.

Q. That is what it appears to say in the Hyland report, yes. So you –

A. Unless the steel is made, he has made the steel shorter or unless the core wall had been filled and there was no recess or, left there for those bars to fit into.

Q. But you can't recall that?

A. I can't recall that.

Q. And you were there for the subsequent levels, 3, 4 –

A. Well it is very, very difficult to remember the full picture of that job. The more I have been involved in this Commission listening to people and what is going on and what, I always thought I was there from start to finish but apparently Mr Taylor started the foundations while I was still up at Vagues Road and when I think about it now I don't think I did the foundation part on the core itself. I think I only did the foundation on the inside beams and the back beam on line A and down the side.

Q. Right.

A. And then as I say I don't remember anything after, well, after my mother's crematorium, remembrance day because I think I had a couple of weeks off and the more I think about this job I don't think I went back again until I was asked to take the drawings back. I never did the front entranceway, or shifted those columns.

Q. Okay, yeah. In August of '87 that you are talking about?

A. Yeah.

Q. What height would the building have been up to then?

A. Well if the core – that date I had there, the build, that was the topping off slab of the top of the lift works, so everything would have been in place, the columns would have been in place to hold the roof steel and I believe even some of the roof steel was in place at that stage but not the roofing. I don't even remember the roofing iron going on.

Q. Okay, but this issue that we are talking about with the bars being bent back?

A. Yeah.

Q. That would have all, those levels would all have been completed by the August of '87?

A. Oh, they'd all have been completed by then yeah.

Q. So what I am saying –

A. It's in my field that I was there.

Q. Yes, yes but you can't –

A. No.

Q. – help us out, okay. There is also the connection, you might recall from reading it, the connection of the top of the column C18 to line DE, to wall DE. It's shown as having four bars going in and there is only three, were found?

A. Well only three holes were found I believe.

Q. Right but you can't shed any light on that?

A. No, but I mean if those three bars had all the levels, from level 6 to level 2, gone, that is what it would take to pull them out and it probably pulled that other one out as well and it mightn't have been inside the confinement of the steel up the top because there are some chips off the side of that piece that were left there. It could have gone with that. I don't know. Did they check the column itself?

Q. Well I think they did that is how they included that but you can't shed any light on it?

A. No, I can't shed any light on that further.

Q. You talked about the columns and the vertical reinforcing and the spiral reinforcing going around that?

A. Yeah.

Q. Can you remember what you did at the beam column joints where the column met the beam in terms of that spiralling?

A. Well for a start off those steel rods, you have got two on either end, had to slide down with nothing in their road, so if there was a spiral coming above the height of the column that it was sitting on, it would be untied, it would be sat down and left on top of the –

Q. Column?

A. – and of course there is no way of getting that back up again so there would have been, they were 350 deep, there would probably be only

one wrapping of new steel went in there before the top saddle bars went through.

Q. So in the beam column joint one wrapping of spiral -

A. You'd have one, one would be the max, if the steel in there was too close to the shell beam and didn't leave enough room but the steel had 50 mm cover on the main column but in the shell beam inside that piece at the top you must remember that the shell beam reduced that column size down from 400 to 350 in that area so you had less cover on your main bars inside that area.

Q. Right, and is that an issue that you recall –

A. Well it was an issue I worried about a wee bit because those bars that went in there were like, the bottom bars of each beam were like, they didn't do anything, they just sat in there with a return up and when I seen the, (inaudible 16:38:25) of TV of the building moving like that I often thought that perhaps they disturbed the outer casing on the shell beams.

Q. Right, you are talking about since February and seeing it on TV?

A. Yeah, yeah.

Q. I will just show you a photo of one of the columns, that's 249.050.5. This is – you are going to see a column taken from the Burwood site where it's a transection of the column?

A. Yeah.

Q. 249.050.5 it is a Heywood photo.

THE COURT ADDRESSES MR ZARIFEH

CROSS-EXAMINATION CONTINUES: MR ZARIFEH

Q. 0520.5 sorry. You see in particular the bottom photo it will be on the screen in front of you?

A. Oh, yep.

Q. See the bottom photo. You can see the reinforcing, the vertical reinforcing bars?

A. Yep.

Q. Do you see how close the ones on the left in particular are to the edge and the ones on the right are close to the middle?

A. Yeah I can see that.

Q. Can you comment on that?

A. Where was that cut in the column? It must have been above the floor starters and it must have been anywhere between there and the underneath side of the beam. But I can't, I can't explain that, how far, what have we got –

Q. It doesn't say exactly where it is cut but what I wanted is particularly a comment on the placing of the steel being so far over to the edge?

A. Yep.

Q. Did that happen very often from your recollection?

A. No well it shouldn't have done. They weren't very long. If that was taken on, probably on the ground floor where the columns were longer perhaps.

Q. 'Cos it would be hard to get the reinforcing, the vertical reinforcing back into line for the next level, wouldn't it? Can you remember having to move the vertical reinforcing across?

A. Well your vertical reinforcing in a column like that, standing up three metres high and in some case they went up two floors I think some of rods, the ground floor went up two floors. The reinforcing would be in the right place at the bottom because it would be tied on to the starters and where it come out at the top it would normally be pulled and pulled into a position where if that, where the tape is, is the main line of the building the other two were at the side. Because if they weren't pulled into the right place where they come out at the top of the column you wouldn't be able to get your other bars through.

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Q. So you can't explain that?

A. No I can't explain that at all.

Q. And you don't recall that happening?

A. I don't recall seeing it.

Q. The other issue was the western wall that you talked about in your statement and you said you recall a gap between the column and the block work?

A. Mhm.

Q. Mr Heywood who took that photograph said that they found some sealant or remnants of sealant from between the columns and the blockwork. Do you recall flexible sealant being put in that gap?

A. No it would. That would probably have been done at the fit out time because those walls, I don't know whether they were lined on the ground floor but the next two floors up would've been lined as they were offices.

Q. Now is there anything you want to comment about the construction issues because you've read it. I've covered the main ones but is there anything else you want to say about that?

A. No I, I excepting I thought it was a good job, you know, it went well. I would've liked to have been there at the start of it but I, in saying that I thought I was, so…

Q. But you accept it?

A. I accept that I didn't actually start it, and now I accept that fact that I didn't finish it but I got to the stage where I would look at the job and say what I'd done and then I started asking myself what I hadn't done. And it was only when I started asking myself what I hadn't done, I started thinking of doors, jambs, architraves, skirtings and I hadn't done any of that so.

Q. Now you talked about supervision by the engineer. Who was the engineer who did this inspection?

A. Inspection?

Q. Yes.

A. Well it was Dave Harding and quite often he came out, two of them come out quite often. It was him and another young fella and they would spend a couple of hours there. Sometimes a couple of hours, sometimes a lot less.

Q. You know who the other person was?

A. No I don't know. I would say it would probably be someone from Alan Reay's office unless Dave had a helping hand.

Q. And do you know if it was an engineer or not, or you didn't know the other person?

A. I don't know. I asked them for, they had a nice wee set of plans and I said, "Oh, a set like that would be handy for me," So the next time they come on site they brought me a set.

Q. Did you not have a set before that?

A. I only had me full size sheets in the office and to take those out around site was a bit of a nuisance.

Q. The other question I wanted to ask you about was Mr Shirtcliff. Now you've, I think you've been here all day and you've –

A. Yeah, yeah.

Q. – heard the evidence and his evidence and the others. Have you got any comment about his evidence as to his involvement and the time he spent at CTV site?

A. No, Gerald didn't spend much time on that site at all. He, he, if we'd poured a floor a month he might've come once a month but it wouldn't have been for the floor pour or anything special. He never gave me any advice on, or any instruction on anything to do with construction issues on that job.

Q. He said that, in his evidence that he read out he said that you were, he was relying on reports from you, presumably regular reports from you as to the progress and what was happening?

A. The only reports he got from me would be my foreman's reports. Foreman's reports were, were supposed to be filled out every day but if there was not much happening on a day you left that blank, but there was a copy kept in my book and the other copies were sent to the office for the time sheets each week, along with all the order forms that I'd priced, that I'd written out for purchase of concrete or purchase of gear.

Q. So you didn't have much contact with him at all you say?

A. No, no. Very little contact with Gerald at all.

Q. When Michael Brooks left Williams March/April 1987 –

A. Yeah.

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Q. – do you recall who was left, so who you reported to?

A. Um, it's a bit of a muddle up because they've mentioned certain jobs and I can remember being on all of them. I can remember being on the Winter Gardens when we poured, cut the back of that building off and that was going at that time and taking out all the floor springs from under the dance floor there. I can remember that job. I can remember going out to almost to Lincoln, we had a dairy shed out there, a rotary dairy shed and I'm sort of – was of the impression that I was being used to replace Shirtcliff and Taylor as sort of unofficially but not paid to do the supervising of those jobs as well. We also had a job and we supplied labour and materials for it for an octagon building in – opposite the Bridge of Remembrance and we put a foundation in for that, but when I say we didn't, we had supplied some labour but we hired a chap by the name of Gordon Barnes I think it was, an ex Fletchers foreman, retired, to look after it.

Q. Just finally you said that you remember thinking the reinforcing in the columns was light and they were very slender. Did you say anything at the time?

A. Not to anyone in particular, no, you've got six rods, 20 mm in diameter holding up six floors, that's basically one rod per column per floor and I didn't think that was enough, it was all right on the top two floors probably but down, by the time you got lower, to the lower floors, I didn't think it was enough anyway. I mean on past experience I've got no engineering degrees, no degrees whatsoever actually.

Q. You didn't discuss it with Mr Harding when he came?

A. No, I don't – I've never – unless they ask me anything I've learnt to sort of be quiet.

CROSS-EXAMINATION: MR MARSH AND MR REID - NIL

CROSS-EXAMINATION: MR PALMER

Q. Do you have a copy of your brief in front of you?

A. Yes.

Q. Mr Jones, do you have it there? If you just have a look at paragraphs 33 –

A. Wait a minute, my brief sorry. Thirty-three?

Q. Yes, 33. I'm going to refer you to four paragraphs, where at paragraphs 33 is the first. You notice there you say, “I was responsible for ordering steel and ensuring it was delivered, I would supply the drawings,” you go further and say, “I would check that the steel was clean and tidy,” third to last line you say, “You would take responsibility,” last line, last sentence you say, “The engineer would also be contacted for inspection of this work.” Do you see that?

A. I was looking at the wrong area there, but I listened to what you said and it's basically –

Q. What I'm focusing on here is that you –

A. What page number are we on?

Q. We're on page 9, paragraph 33.

A. Yeah.

Q. If you just look at that, you’ll see that you used the word, ‘would,’ at the beginning of four of the sentences in paragraph 33.

A. I do remember thinking that the reinforcing, that the one you're looking at?

JUSTICE COOPER:

No the next one, paragraph 33.

CROSS-EXAMINATION CONTINUES: MR PALMER

Q. I was responsible for ordering it, it's in the middle of the page, paragraph 33.

A. Three-three you're talking about?

Q. Three-three, that's it.

A. Yeah, well my three-three starts off, “I do remember thinking that the reinforcing columns and the size of the columns made this building light.”

Q. Right, you must have a different version to the one that I have I'm sorry. I've got the one, it's WIT.JONES.0001.16 and it's up on the screen now. It's probably your paragraph 34.

A. I was, yes my paragraph 34.

Q. And what I'm focusing on here is that you used the word, ‘would.’ If you look at this paragraph your evidence is that, “You would supply things, you would check steel, you would take responsibility and the engineer would be contacted”. You see that?

A. Yeah.

Q. And just if you could go please to paragraph 46, it’ll be your 47, page 11.

A. Forty-six – I was one of Williams –

Q. It begins, “It did worry me.”

A. It did worry me that we would be lifting equipment, that one?

Q. Yes that one there, it says, “It did worry me we would be lifting up equipment up onto a floor the day after it was poured. The first thing we would be lifting up would be the steel for the columns. It would take me about a day to set out the grid lines on the new floor slab to work out where the columns would go,” and if you could just keep reading the following paragraphs to yourself, the next paragraph it's 47 in the version that I've got, you talk about, “Tony Scott would organise a concrete supplier,” 48, “The concrete, when the concrete truck arrived the driver would give me a docket,” again would, and in 49 you say, “I would ring the engineer for every pour and they,” at the end of that paragraph, “They would say if you don't see us go ahead, this does not concern me.” Do you see –

A. Is it the word would?

Q. Yes, you use the word would a lot and we've noted that but later in your evidence you start using words in paragraph 55, you say, “I do

remember," and in paragraph 59, "I do recall," so you're noting that you say those things.

A. Well I really know what reason I did for changing this. This brief was not my own handwriting but it was a brief that I had taken off my statements to the Royal Commission and I don't know why I would go I did or I would. They're both the same really, I did something or I would do something.

Q. What I'm suggesting to you is when you use the word, 'would,' are you assuming that you would have done it as opposed to actually remembering doing it?

A. Well it's as I said to Clark Hyland when I did this job, did his original interview, that I can't remember precisely everything on that job but after another 25 years' experience in the building industry these are probably the way I would have done it and I have no reason to doubt it that that would be the way I would have done it.

Q. Well it's just, if you go to paragraph 49 I suppose it will be your paragraph 50 which begins, "I would ring the engineer for every pour, except the columns because the steel was there sticking out of the columns and so on," at the end you say, they would say, "If you don't see us go ahead, that did not concern me."

A. No well that didn't concern me because for a start off we put up 20 columns on every floor. For all the structural steel would have been put up and placed and we would be pouring those steel columns just clamped together and were probably properly half an hour to an hour a column maximum and if we had those steel frames, columns made up first we'd prop them over by the crane over the top of the reinforcing,

JUSTICE COOPER:

Q. Mr Jones, just listen to me for a moment. When you say in that paragraph, "I would ring the engineer for every pour," do you remember ringing the engineer for every pour?

A. Every slab pour?

Q. Yes.

A. And every pour well no I don't remember ringing him every pour because we poured nearly every day and he would have seen all the columns, steel in place on his first inspection of that floor slab.

Q. Yes.

A. But he would be there looking at other work during the week as well, likes of the core steel and before we covered that up, like there is the three operations going at the same time.

Q. Yes.

A. So the actual time that he looked at the columns well could have been the same day as I got in there to look at the shear wall.

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CROSS-EXAMINATION CONTINUES: MR PALMER

Q. So the situation is that you don't specifically recall this occurring on every occasion but you assume that it would've done?

A. Well that's –

Q. You would've done?

A. – just a pity that Williams folded because and all their gear got lost because every record of every engineer's visit to the site was recorded in my, and I was onsite, was recorded into my foreman's daily report.

Q. Yes but you don't have those records anymore?

A. No we don't.

Q. I was going to ask you too about this section of your evidence in relation to concrete. You did – what arrangements did you make for the testing of fresh concrete?

A. For testing?

Q. Yes?

A. I only took tests when we were asked to. The tests were done by the concrete supplier in those days unless an engineer wanted to test. Like if I wanted to test, to lift those beams out of Vagues Road I would take tests on site and we used to take them down to the Ministry of Works yard by the breweries and have them broken.

Q. And who would make that request of you?

A. No, well I'd do that off my own bat, because I wanted to shift those beams as quickly as I could.

Q. And what about onsite?

A. Pardon?

Q. Would you test the concrete onsite?

A. No, no, well I didn't have to do anything more to it to replace it.

Q. I think you said that you would get dockets from the concrete suppliers?

A. We got dockets from the concrete supplier with every load which had the order number that I'd given him on an order docket, and the strength and the quantities and the dates.

Q. And do you recall any specific problems with concrete strength?

A. No, but I would know, I would know if it was real weak concrete. You can, I don't know, after 25 years in the trade you know if it's real weak but you wouldn't, you couldn't tell the difference between 35 MPa and 30 MPa but you could tell the difference between 35 MPa and 20.

Q. And to the best of your recollection did you notice any of those differences or difficulties with understrength concrete that could be observed by you?

A. No, I only started looking at the concrete when we started doing these slabs really, because the sharp sand in it was annoying me a little wee bit and I wanted to know why, because we had one fall from Ready Mix I think it was, one slab, and it was beautiful.

JUSTICE COOPER:

Mr Palmer, this witness says in paragraph 48, "I always received a docket which confirmed that the concrete delivered met the strength that I had ordered."

MR PALMER:

Yes.

JUSTICE COOPER:

Why are you cross-examining him on that?

MR PALMER:

Well I'm just asking him about that Sir. He's gone further than that though by now observing that he recalls that there were no issues as far as he was concerned.

CROSS-EXAMINATION CONTINUES: MR PALMER

A. There were no issues with the concrete as far as I was concerned.

Q. And you met Dr Hyland at least on one occasion. Did you discuss this with him?

A. No I don't think it come up in his report. I don't think any of Clark Hyland's, things that he put in, and his concerns were mentioned. Whether he'd done those inspections at that time or not I wouldn't know.

Q. I've got one final question and that relates to your paragraph 65. I'm not sure what version it is on yours but it simply says that after leaving 249 Madras Street you worked on, or that Union worked on two further buildings but they came to nothing. All they did was the foundations for two buildings. Just out of interest can you remember those two buildings?

A. Yeah, one of them was to be an octagon shaped building. An eight sided building there opposite the Bridge of Remembrance. It wound up in the finish getting some motels put on top of it. I don't know whether it's still there today, I don't think it is, but they were real deep foundations because they were going to take an eight –

Q. And the other one?

A. – an eight storey building. And the other one we drove a test pile. I think it's Chester East, behind the Justice Department on the corner. There was a radio building there as well. It was on the Blackwell's old site. Blackwell Motors old site there and we drove a test bore for that. We put an office on the site, we put the phone on for it, we had it already to go and then it got stopped by Angus.

1702

Q. All right, thank you very much.

A. That's all right.

CROSS-EXAMINATION: MR ELLIOTT

Q. I'm just going to show you a page from what appears to be the structural specification for this building, BUI.MAD249.0199.4. It'll come up on the screen in front of you Mr Jones.

A. Yeah, I've got a copy here I think as well.

Q. And if clause 2.3 could be enlarged please? If you just work off the screen there and the section will be enlarged for you?

A. 2.3 you say?

Q. That'll be blown up for you so you can see it.

A. You'll have to forgive me a wee bit because I do have hearing aids and unfortunately I...

Q. So the section has been enlarged and I'm just going to read it to you then ask you two questions so it says, "Materials and workmanship. The contractor shall comply with all requirements of NZS3109:1980 except where specified otherwise herein or instructed otherwise by the engineer. A copy of this standard shall be kept on the site and relevant parts read with the following clauses of specification." So my first question is was a copy of that standard kept on site?

A. Been in the trade for 45 years and I've never had one on site yet. If I wanted to know anything like that or anything that was in the specification I would have to go to the office and find it.

Q. My second question was how did you ensure that you complied with the requirements of NZS3109:1980?

A. I can't, I can't comment on that at all. We, I done what was required on the drawings. I done what was required by the company and I can't say anymore than that.

Q. So your answer is you would follow what's on the drawings rather than carrying out any checking yourself of what –

A. No I checked the specifications. I read the specifications. Also see in the specification here where it says, "No hacking of concrete once it's

hardened," but the other part of the specification says that the beam shall be chipped.

Q. Thank you.

RE-EXAMINATION: MR ZARIFEH – NIL

QUESTIONS FROM COMMISSIONER FENWICK:

Q. Thank you for your descriptions. I've just got two or three quick points. First of all the column you said it was formed, the pre-cast beams, the round part was formed by a steel or a metal tube?

A. Yeah, it's just a pity they hadn't used an embossed metal or something or rather that would have given it a bit –

Q. Yes.

A. – of grip but –

Q. It was something which wouldn't have taken the retarder if it had been applied I take it?

A. You paint the retarder on to the steel –

Q. It would have –

A. – pour your concrete against it.

Q. It would have stayed there, it didn't have to be a timber to stay there to remain? Okay.

A. Well there was no timber there at all on the ends.

Q. It wasn't done at any rate as far as you're aware? They didn't put retarder on?

A. No, well I don't know, someone's, no, it wasn't because it wasn't done on the last few that I did up there as well so.

Q. You have the column. It was cast to the right level –

A. Yes.

Q. – and then the concrete would have been smoothed off as best you could with a trowel or something –

A. Yeah.

Q. – at the top of the member and then the pre-cast beams were put on to it. Was that a cold joint or was there some mortar or epoxy?

A. No the pre-cast beams would have been put into and sat on beams, timber beams with props underneath them that were dumpied to a set level. The, we'd put a landing in, a yoke around the column, two sets of columns for a start off, and then sit the beams down on to a timber railing and there could be 5 mm gap off the column or it might find we had to chip a wee bit off the top of the column if it was a fraction high but normally they were pretty right.

Q. So it was a cold joint? There was no –

A. It's a cold –

Q. – epoxy or put mortar in?

A. It's a cold joint no mortar.

Q. So would have been some irregularity at that joint?

A. Pardon?

Q. There would have been some irregularity in the contact at that point?

A. Yes.

Q. Wouldn't have been –

A. Yes, could be a wee bit of difference there at that point but no when you poured the concrete that was why we kept the floor wet the next day is because we used to clean up underneath the floor that we'd poured above –

Q. Right, some spillage?

A. – we used to clean it up because we had a, you'd have a wee bit of leakage but not much.

Q. Yes, right, now the spiral was then, you put the pre-cast beams in and you had the steel?

A. Yeah.

Q. Anchoring between it, the spiral, where did that start?

A. Well it would normally start above the saddle bars.

Q. So there was no, okay, so –

A. (inaudible 17:07:32) they would put, if they could the steelies would have put a ring of 6 mm wire around inside the 400 deep bit of concrete -

Q. Right.

A. – infill.

Q. Was that wire anchored in? Was it bent into the core of the concrete? In to the core of the column?

A. The one that put around? I'm not quite sure whether it's tied up as a ring, I mean it could have gone round twice. They just slid it over down in –

Q. So it wasn't anchored into the centre of the column?

A. Not to my knowledge.

Q. What about the spiral above that level? Was that anchored into the above the saddle bars? (inaudible 17:08:15) Was that anchored into the core?

A. Well the rods, the columns, it depended, sometimes they were tied up on the ground loose and fed over the starter bars.

Q. Yes.

A. And sometimes they would if they didn't get there on time they'd bring the bars up, tie them on to the starter bars and then slide the spiral down over the top.

Q. Yes.

A. So there were two ways of doing it.

Q. The end of the spiral going round was the end of the bar actually bent in?

A. I'm not sure.

Q. (Inaudible 17:08:53)

A. I'm not sure, I would have personally bent it in because it would –

Q. Yes.

A. – have helped to hold it as you tied it and pulled it around.

Q. Right, yes, yes.

A. As you took it up you'd want something to hold it otherwise it just moved.

Q. But you can't remember that detail?

A. No I can't remember.

Q. Thank you very much, very helpful.

A. Thank you.

QUESTIONS FROM COMMISSIONER CARTER:

Q. I've just got one question that I'd like your opinion on. You talked about the free screeding of these floors which was a new technique you were using on this job as I understand your description?

A. Well something they did in Wellington and they brought it down and wanted to try it out on that job.

Q. Now when you, most of the concrete in this job went into the floors, in fact they, I mean they were the volume the concrete –

A. They were the bulk amount.

Q. When you ordered concrete did you order a, over order to your calculation, in other words would you have, would your floors tend to be thicker or (inaudible 17:09:55)

A. No, they should follow, they should follow the pre-camber that you put in the bottom and when, if you've look on sheet 15 or whatever it was where the lines of the cambers are it would say how much camber it was in each, at each of those points –

Q. So in –

A. – so when you pour them in strips across, across and down.

Q. Yes, I'm familiar with how you would arrange the geometry of it but I'm just interested to know floor slab that was specified to be 200 millimetres thick if you had to make a judgment about whether that, how accurate that 200 millimetres would be –

A. Yeah.

Q. – what would you say? Would it be more, slightly more than 200 or slightly less or exactly 200?

A. The height of the concrete in each slab was governed by the shell beams around the perimeter of the building, when you put your shell beam in place the depth of the shell beam on to the timber framing, the top of the shell beam would set your height for the floor because they both finished, the floor level finished at the edges level all the way around and towards coming in from towards say Madras Street you'd come in a short distance and then you would start your pre-camber for your floor.

Q. You're –

A. The pre-camber didn't carry itself right out to the outer edge. Over the thickness part of the beam it tapered off.

Q. So your answer to my question was how thick would you judge the slab would have been exactly the 200 millimetres?

A. Well it wouldn't be any less because everything would be set out by the two portions of the shell beam, the outside, the finished level and the inside the level that you sit the metal on which should have been 200 mm below the or 245 I'm not sure whether the indentation in the metal work was included in the thickness or not.

Q. Okay, no, that's adequate as a response, thank you.

QUESTIONS FROM JUSTICE COOPER - NIL

QUESTIONS ARISING - NIL

WITNESS EXCUSED

HEARING ADJOURNS: 5.12 PM

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