

1 Wednesday, 12 December 2018

2 (10.01 am)

3 MR BOULDING: Good morning, Chairman. Good morning,
4 Professor.

5 Before I call MTR's last witness, Prof Ma, who is
6 sitting in the witness box now, counsel to the Inquiry
7 has suggested that it might be a good idea if I update
8 the Commission on the issue of opening up.

9 CHAIRMAN: Thank you.

10 MR BOULDING: As you will have seen, it has started, but in
11 view of the tight time schedule of the Commission of
12 Inquiry, government has requested, and MTR has agreed,
13 to examine the opening-up work programme to identify
14 possible acceleration. Government wants to see whether
15 or not MTR can reduce the scheduled period of 16 weeks
16 down to 12 weeks.

17 I'm told, and I inform you, that by increasing the
18 number of concurrent working teams, it may be possible
19 to accelerate the work and compress the work duration
20 into 12 weeks.

21 However, and as you will probably realise, there are
22 major uncertainties and risks in this accelerated
23 programme, because of course the work has only just
24 started and the programme includes basic assumptions
25 which have not yet been verified, including the speed of

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1 the work and the extent of the practical difficulties
2 that might be encountered.

3 As a result, whilst the MTR cannot commit to the
4 12-week duration, I am instructed to say that MTR will
5 use its very best endeavours to accelerate the work and
6 to update the Commission with all interim results by the
7 end of January 2019.

8 With this in mind, MTR will prioritise the
9 opening-up work of the platform on the East West
10 Corridor, with the intention to complete as much of the
11 EWL platform work as is reasonably practicable by the
12 end of January 2019.

13 Obviously, after the opening-up work of the first
14 few locations has taken place, there will be a better
15 understanding of the speed of the work and the extent of
16 the practical difficulties, but of course, as always,
17 MTR will update the accelerated programme to allow
18 a better estimate of the work duration and keep you
19 informed, sir.

20 I hope that's helpful. As always, MTR are here to
21 provide all assistance it possibly can to the
22 Commission.

23 CHAIRMAN: Thank you, Mr Boulding. Thank you very much
24 indeed. That's welcome news. Thank you.

25 MR BOULDING: I thought you might say that.

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1 Against that background, Chairman and Professor, if
2 I could call MTR's last witness, Prof Ma.

3 PROF MA SI HANG, FREDERICK (sworn)

4 Examination-in-chief by MR BOULDING

5 Q. You've given your full name to the Commission, and we
6 know that you're the non-executive chairman of MTR. You
7 have produced one witness statement for the Commission's
8 assistance, and I hope we will find the first page at
9 B104.

10 Professor, do I there see the first page of your
11 witness statement?

12 A. Yes.

13 Q. If we go on to page B114, I hope we will find your
14 signature. Is that your signature under the date of
15 13 September, Professor?

16 A. Yes, Mr Boulding.

17 Q. Thank you very much.

18 I understand that you'd like to make a small
19 correction to that statement. I hope we find the
20 corrigendum at bundle B, page 114.1. Aha, good. Is
21 that the correction you would like to make, Professor?

22 A. Yes, sir.

23 Q. Subject to that correction, are the contents of that
24 statement true to the best of your knowledge and belief?

25 A. Absolutely, sir.

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1 Q. Excellent. Now, Professor, what's going to happen now
2 is that you will almost certainly be asked a few
3 questions by my learned friend Mr Pennicott for the
4 Commission of Inquiry. There are various lawyers
5 representing other interested parties in the room, and
6 they have the option of asking you questions. The
7 Chairman and the professor can ask you questions at any
8 time they consider appropriate. And it may be the case
9 that I ask you a few questions at the end of your
10 evidence. Do you understand?

11 A. I understand. Thank you.

12 MR BOULDING: Splendid. Please sit there.

13 Examination by MR PENNICOTT

14 MR PENNICOTT: Good morning, Prof Ma.

15 A. Good morning, Mr Pennicott.

16 Q. Can I first of all say thank you very much for coming
17 along to give evidence to the Commission this morning.

18 A. Thank you.

19 Q. As Mr Boulding has indicated, I get to ask you a few
20 questions first, and I don't think I'm going to be
21 terribly long, but I just have a few matters I want to
22 discuss with you.

23 Prof Ma, I understand that way back in time you
24 were -- at the start of your career, you were in the
25 banking and finance industry; is that right?

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1 A. Indeed.

2 Q. And you worked for Chase Manhattan Bank back in the
3 1970s, both in Hong Kong and in New York?

4 A. 1973, as a matter of record.

5 Q. You also worked for PCCW for a number of years, as
6 I understand it?

7 A. Only one year.

8 Q. Against all that financial background, in 2002 to 2007
9 you were the Secretary for Financial Services and the
10 Treasury in the Hong Kong government?

11 A. Correct.

12 Q. It was during that period I think you had your first
13 involvement with the MTR, when you were a non-executive
14 director whilst you were the Secretary?

15 A. Yes.

16 Q. Then, in 2007-2008, you were the Secretary for Commerce
17 and Economic Development of the government?

18 A. Indeed.

19 Q. Then a little bit of time out, which we don't need to
20 consider, but then, as I understand it, in 2013 you
21 became an independent non-executive director of MTR?

22 A. Correct.

23 Q. As we know, on 1 January 2016, you became the chairman?

24 A. Non-executive chairman.

25 Q. Since 2013, when you were the independent non-executive
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1 director, up until now, effectively, the MTR has been
2 involved in a number of substantial projects, including
3 the XRL, the South Island Line, the West Island Line,
4 the Kwun Tong Line Extension, perhaps other projects
5 worldwide, as well as what they're doing in Hong Kong,
6 and of course the SCL project, with which we are
7 primarily, indeed exclusively, concerned.

8 A. (Nodded head).

9 Q. Just taking the SCL project itself, Prof Ma, and leaving
10 aside the last six months or so, what part of your
11 working week might be devoted to the SCL project?

12 A. Maybe with the permission of the Chairman and the
13 professor, I need to explain a little bit about our
14 corporate governance.

15 Being the non-executive chairman, I'm not required,
16 unlike the chief executive officer, to go to work every
17 day. That is the beauty of being a non-executive
18 chairman. However, I have to of course chair the board,
19 which meets seven times a year. I have to attend
20 subcommittees of which I'm a member. I'm a member of
21 the remuneration committee, I'm a member of -- I'm
22 actually the chairman of the corporate responsibility
23 committee, and I sit on the nomination committee as
24 well. So I do attend meetings on a regular basis.

25 I do meet with the CEO on a regular basis. He
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1 submits reports to the board. But, other than the
2 submission of reports, I get to meet him every month, at
3 least. But we regularly, as you can see from my
4 statement, talk to each other through WhatsApp or phone,
5 you know, so that we know what is going on in the
6 company.

7 As you correctly said, we have so many projects
8 going on, so I obviously keep an eye on what is going
9 on. Until this SCL Hung Hom case really get reported in
10 the media, you know, we just get regular reports, and as
11 if it is one of the projects that has been going well.
12 All our projects, particularly the one you mention,
13 Mr Pennicott, have been completed successfully,
14 including the Express Rail, which was opened in
15 September. We have successfully completed the
16 Ho Man Tin Extension and also the South Island Line.
17 Those three projects were completed during my tenure as
18 chairman.

19 So SCL, just like any project, gets our attention,
20 but we have a committee called the CWC, capital works
21 committee, that overlooks the cost as well as the timing
22 of the project. This was created following the 2014 IBC
23 which the Chairman and Professor of aware of and
24 familiar with. Back in 2014, we created, as a result of
25 the investigation, CWC, capital works committee, chaired

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1 by Dr Allan Wong, and the formation of a risk committee
2 as well to overlook all these risks and projects. For
3 CWC, it is their duty to make sure that projects are
4 completed on time and within the budget.

5 Q. All right. So can I just summarise, then, Prof Ma, up
6 until this year, the SCL project was no more prominent
7 or less prominent than any of the other projects, so far
8 as you were concerned, from your perspective?

9 A. Absolutely. You know, we pay attention to all projects.

10 Q. Yes.

11 A. But I want the Chairman and Professor to realise, as
12 non-executive chairman, there are limitations as to what
13 I can do and I'm told.

14 Q. Yes, indeed.

15 A. I have to rely on my colleagues, to a very, very large
16 extent --

17 Q. Of course.

18 A. -- about the project itself, and I have to say that I do
19 carry out site visits with the CEO, I've done it a few
20 times, and one of them was SCL.

21 Q. We are not just concerned with SCL. We are more
22 specifically concerned with a contract called
23 contract 1112.

24 A. Right.

25 Q. I suspect that given your previous answer to me, before
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1 this year there was no sense in which any issues on
2 contract 1112 had been brought to your specific
3 attention?

4 A. No, not at all.

5 Q. However, turning to the events of this year, things
6 changed somewhat.

7 A. Mmm.

8 Q. As you mention in paragraph 16 of your witness
9 statement -- I don't think we need to look at it but you
10 can if you wish -- the MTR, once certain media interest
11 was shown in the Hung Hom Station contract 1112 project,
12 the government asked MTR to carry out a load test, and
13 I think that came to your attention, Prof Ma?

14 A. Yes. As a matter of fact, Mr Pennicott, you can see in
15 my statement that paragraph 13, Chairman and Professor,
16 that I was actually alerted to the media report at the
17 end of May.

18 Q. Yes.

19 A. I still remember our corporate affairs director called
20 me and said that there was a report in the media about
21 Hung Hom, and the project director, Dr Philco Wong, felt
22 that it was a totally false allegation, so he was going
23 to lead some of his colleagues down to the site and
24 clarify the matter. I always promote communication and
25 transparency in the company, so I said, "That's a great
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1 idea." Of course, I didn't know anything about, you
2 know, what the details are, but I thought that for
3 transparency of the company it is a very good idea to
4 clarify the matter ASAP. So hence Dr Philco Wong and
5 his colleagues went to the site and showed to the media
6 what he felt at that time was, you know, the real
7 situation, not as per the media reports said.

8 Q. You mentioned in that answer the word "perception".

9 A. Mm-hmm.

10 Q. And in paragraph 17 of your witness statement, which
11 I would like you to look at, please, in the first
12 sentence, you refer to "At the meeting" -- and I think
13 that was the special board meeting that you mention in
14 the previous paragraph. You say:

15 "At the meeting I remarked that a perception about
16 a lack of transparency in terms of both internal
17 reporting and external reporting to the government had
18 become a matter of public concern."

19 Now, just focusing on the first part of that
20 sentence, "a perception about a lack of transparency in
21 terms of both internal reporting" -- how had you reached
22 the view that there was this perception of lack of
23 transparency so far as internal reporting is concerned,
24 Prof Ma?

25 A. Well, I think at that time there was a lot of media
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1 reporting about the case, you know, so I said it was
2 a perception, it is a perception in the public arena.
3 I'm not saying that indeed our internal reporting or
4 external reporting to the government was not good.
5 I was merely saying that because the media were saying,
6 "Does the government know about this?", but I know for
7 a fact, during my 2014 IBC report, that we have a very
8 structured reporting to the government, including to the
9 RDO, you know, and they meet regularly on projects.

10 So it was purely a perception.

11 Q. Yes, because that was going to be my next question. It
12 was a perception, but in your view, as I understand your
13 last answer, you don't believe it was a true and
14 accurate perception?

15 A. Absolutely not, because the MTRC work very well with the
16 government. You know, if I remember correctly, in our
17 IBC report published in 2014, I remember we studied the
18 structure of the reporting, of which the Chairman and
19 the professor know very well, that we have very regular
20 meeting with the government, reporting to the
21 government. And I still remember very well, in the
22 report we submitted to the board and made public, we
23 actually mention the fact that there are check the
24 checkers. That really sticks into my mind very much.
25 Check the checkers. The government has appointed

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1 outside consultant to check our work.

2 Q. Yes.

3 A. So to me, our reporting system, at least at that
4 juncture, was very, very thorough and shouldn't have any
5 problem. That was my impression as the non-executive
6 chairman. I didn't attend, of course, any of these
7 meetings. I can only go by what the paper told me.

8 Q. So the perception was media-generated, but you don't
9 believe it was a correct perception?

10 A. No, absolutely.

11 Q. You say in the last sentence of paragraph 17 of your
12 witness statement:

13 "Through both a stand-up media session and a radio
14 programme, I also urged LCAL [that's Leighton] to
15 announce what it knew to the public."

16 A. Yes.

17 Q. When you say "announce what it knew to the public",
18 I assume you mean go to the media?

19 A. If you recall, Mr Pennicott, during that period, MTR was
20 under tremendous pressure from the public, but my
21 understanding is that we are the employer of Leighton.
22 In other words, Leighton is the guy who did the work,
23 not MTR. Our job was merely supervising.

24 So, that being the case, you need the party that
25 does the work to tell the public what exactly happened.

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1 That was my understanding. So, when Leighton chose not
2 to say anything to the public, the pressure was on MTR.

3 Q. Did it trouble you that Leighton didn't go to the media
4 or didn't go public?

5 A. I honestly don't think it was a responsible act,
6 particularly for a public project like this. This is
7 a major public project in Hong Kong. I felt that, as
8 a responsible contractor, Leighton should say something,
9 but I was told by my CEO -- I pressured the CEO to speak
10 to Leighton, and he assured me that he did, and in his
11 statement he also mentioned he did. I did not talk to
12 Leighton myself. It was through the CEO. And I was
13 frustrated, just like the CEO, about the fact that
14 Leighton did not say a word in the public arena.

15 Q. Did you draw any conclusions from Leighton's apparent
16 lack of willingness to go public?

17 A. I was told it's their company policy, but because
18 I don't know their company policy, I have to respect the
19 company's policy. Having said that, though, as I said
20 earlier, I didn't think it was a very responsible act of
21 a contractor on a major public work project like this,
22 to keep silent throughout this period, until the
23 Commission.

24 Q. All right. Now, in your witness statement, you make
25 reference to the report that was submitted to government

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1 on 15 June this year. You say in paragraph 21 of your
2 statement:

3 "In the morning of 15 June [this year], I met with
4 the Honourable Abraham Shek Lai Him, an independent
5 non-executive director of MTR, in preparation for the
6 press conference to be held in the afternoon [on that
7 day]. Among others, Aidan Rooney ... and Lincoln Leong
8 also participated in the meeting. Specifically, the
9 Honourable Abraham Shek Lai Him and I [that is you,
10 Prof Ma] emphasised to Aidan Rooney the report must be
11 accurate and correct, and I asked him if the projects
12 team had evidence to support the matters stated in the
13 report."

14 You go on to say:

15 "I was assured by Aidan Rooney that the matters
16 stated in the report, including as regards the number of
17 couplers referred to, were correct and supported by
18 documentary evidence. I had no reason to doubt what he
19 told me."

20 Did you specifically mention the couplers yourself,
21 or was that just part of Mr Rooney's answer to your
22 general question that you hoped the report was accurate
23 and it was supported by documents?

24 A. In the report, it mentioned the number 23,500 couplers.
25 I specifically asked Mr Rooney that number, if that

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1 number is correct, and is it supported by documentary
2 evidence. I still remember Mr Rooney said, "Yes", and
3 I said, "Show me the record." He said to me that the
4 record was kept at the site and there were lots of them,
5 tonnes of documents. So I said, "I need to see
6 something." He did produce a spreadsheet. It's a huge
7 spreadsheet. I was looking for that spreadsheet in the
8 office yesterday and couldn't find it. But it's a big
9 spreadsheet, like this size (demonstrating), with lots
10 of signatures, with the 32 bays on it. I took a look,
11 obviously, as I said, not being involved in the
12 day-to-day project management, and I have to have trust
13 in my colleague. I looked at it, I said, "Fine, but you
14 ought to produce some document at the media conference
15 that evening to show to the media that indeed this
16 number is accurate and indeed that we have documentary
17 evidence."

18 I remember vividly he mentioned about hold point.
19 In other words, if everything was checked, that concrete
20 would be poured. I obviously, as I said, have to trust
21 what my colleague told me, and that is why subsequently,
22 when I was told about the fact that the number of
23 couplers, because of the design change, is different
24 from what was given to the government, I was -- I think
25 Dr Philco Wong used the word "surprised" yesterday --

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1 I would even go as far as "shocked", Mr Chairman and
2 Professor, because I did ask the question which is
3 actually something that, you know, not even within my
4 duty, almost -- you can see that I've gone out of my way
5 to do the due diligence -- because having been
6 a minister with the government I really think that
7 accuracy of any report to the government and to the
8 public must be 100 per cent accurate.

9 Q. Can I just ask you about this spreadsheet. Was it just
10 one sheet of paper, Prof Ma?

11 A. He showed me one sheet of paper.

12 Q. Was it an A3 sheet?

13 A. It was quite big, I remember. It was quite big.

14 Q. It's not a document that immediately springs to my mind.
15 Mind you, we've looked at lots of documents over the
16 last few weeks.

17 A. There were lots of documents. I was looking for the
18 same document yesterday.

19 Q. Where were you when he showed it to you?

20 A. I was in the function room in the International Finance
21 Centre, our town office --

22 Q. This was prior to the press conference?

23 A. Prior to the press conference. The press conference was
24 held in the late afternoon, and we had this preparatory
25 meeting in the morning. I invited Abraham Shek to join,
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1 because he is an INED of the company, he is a member of,
2 I believe, the CWC, and also he has lots of experience
3 in this sort of exercise, being chairman of the PAC in
4 LegCo. So that is why, among all the INEDs, he was
5 invited.

6 Q. Right. The fact that you asked Mr Rooney specifically
7 about the couplers tells me two things: one, you must
8 have read the report?

9 A. Yes.

10 Q. Two, that you must have realised that the couplers were
11 an important issue?

12 A. First of all, to answer your second question first,
13 couplers was a very important issue because the media
14 report talked about couplers almost every day, so it
15 would be, you know, rather naive not to believe that
16 that is a very important subject.

17 But more importantly, I appreciate that for the
18 general public, they would not know a lot of the
19 technical facts in the report, but they could remember
20 23,500. That was my point, to ask Mr Rooney if that is
21 correct. I mean, among all -- the report was actually
22 submitted to the CWC on 14 June for examination prior to
23 submission to the RDO. On 14 June, although I'm not
24 a member of the CWC, I did attend the meeting, because
25 I want to know what's going on, of course, as part of my

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1 duty as chairman.

2 So I showed up at the 14 June meeting, the CWC
3 meeting held for almost three hours, if I'm not
4 mistaken, to talk about the report. But it was about
5 rather general issues but not necessarily specifically
6 on the number of couplers. But I raised it on 15 June
7 again, because I felt that the public, in my experience
8 as a former minister, the public would focus on
9 something like that, and that is why I specifically
10 asked that question, and I think Mr Rooney also, in his
11 statement, confirmed that I did ask that question.

12 Q. He did, he confirmed it in his statement and he
13 confirmed it when I asked him about it, you will be
14 pleased to hear. All right. Thank you for that,
15 Prof Ma.

16 Can I then turn to a point that you mentioned just
17 a moment ago, that is when you were told that in fact
18 the number of couplers had been inaccurately calculated.
19 You deal with that in paragraph 28 of your witness
20 statement, and you refer to having returned to Hong Kong
21 on 28 July and then immediately paying a visit to
22 Dr Wong's office, or the site office, where Dr Wong's
23 office was located, in the XRL West Kowloon Station.

24 I imagine, Prof Ma, that's the type of visit that
25 you don't make very often; would that be right?

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1 A. I meet with Dr Philco Wong from time to time. The
2 reason why -- we were originally going to meet at IFC,
3 our town office, but he said he -- well, if I may,
4 I backtrack a little bit what happened, because I think
5 it's important.

6 On the 25th, as I said in paragraph 27, Mr Lincoln
7 Leong told me there were some inaccuracies, in
8 a WhatsApp message, not in an email but in a WhatsApp
9 message, but he did not go into detail what the
10 inaccuracies were. Inaccuracy could mean very minor
11 amendment, could mean some very serious stuff, but he
12 didn't mention it. But I knew he was going on vacation
13 for a few days, and I was not in Hong Kong at that time,
14 I was in North America, so I said -- we agreed that we
15 would meet the following Monday to discuss about it.

16 Then, when I arrived Hong Kong on 28 July, in the
17 early morning, because my plane came from North America,
18 I arrived very early, I got messages from government
19 officials. As a matter of fact, three government
20 officials texted me, WhatsApp message, alerting me there
21 is a serious crisis. So, after I learned from
22 government officials -- the government officials told
23 me, "You had a design change, da, da, da", which
24 Mr Leong, to be fair, also mentioned in his WhatsApp
25 message, but he did not link the two together.

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1 Anyway, I have arrived Hong Kong, so I found out
2 this. I called Dr Wong and I said, "How could something
3 like this happen?" His explanation was that the whole
4 report was prepared in a panic, so mistakes were made.
5 I said, "Okay, let us meet." So we met up the following
6 day, in XRL site office, because he was going to have
7 a site visit, so to make sure that we get to meet, so
8 I went down to XRL.

9 Q. Right. As you said earlier and as I think you --
10 I think you used the word "shocked" earlier -- in your
11 witness statement you use the word "alarmed", and
12 indeed, as you have just said, the explanation that
13 Dr Wong gave you, as you put it in your witness
14 statement, is that the error occurred because the report
15 was prepared under serious time pressure, and you used
16 the word "panic" just a moment ago.

17 A. Yes.

18 Q. Before he had told you that on 29 July, were you aware
19 of the time scale and the pressure that the people
20 preparing the report were under before the report went
21 public on 15 June? Were you aware of that time
22 pressure?

23 A. I obviously am aware that RDO has initially asked for
24 the report within one week. We asked for an extension.
25 We asked for a one-week extension. So the report was

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1 submitted on 15 June. That is a two-week time frame.

2 Q. Yes.

3 A. Now, not being involved in the preparation of the
4 report, not -- Mr Leong chaired a committee meeting that
5 meets every day during those two weeks, in preparing
6 this report. So obviously, to MTR, we put a lot of
7 attention and we really want to make sure that the
8 report is accurate. That was my sense, as the
9 non-executive chairman.

10 So I wouldn't know whether two weeks is enough or
11 two months is more appropriate. I have no idea. But on
12 15 June, you know, we submitted the report.

13 Q. Right, and nobody ever said to you, either Aidan Rooney
14 or Philco Wong or anybody else, "Look, Chairman, it's
15 been a really tough job, we've been put under enormous
16 pressure, we're really not happy about the situation but
17 we're going ahead anyway" -- nobody ever sort of
18 mentioned that to you?

19 A. No.

20 Q. All right.

21 When Dr Wong explained the point about serious time
22 pressure and that was the reason that he was putting
23 forward for the error, what was your reaction to that
24 explanation?

25 A. My reaction was, "Do you think that the Commission or
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1 the public would accept that?" That was my response.

2 Q. That was your actual response to Dr Wong, was it?

3 A. (Nodded head).

4 Q. In your witness statement, at paragraph 30, Prof Ma, you
5 go on to deal with a meeting that you had with the Chief
6 Executive. You say:

7 "On Sunday 5 August 2018, I received a request to
8 meet with the Chief Executive Mrs Carrie Lam ... the
9 following morning."

10 Presumably that was by a telephone call or --

11 A. Yes.

12 Q. You say in paragraph 31:

13 "On 6 August 2018, I met with the Chief Executive as
14 scheduled. The Secretary for Transport and Housing,
15 Frank Chan was also present."

16 Was there anybody else present, Prof Ma, other than
17 yourself, Mr Chan and Mrs Lam?

18 A. The director of the CE's Office was present.

19 Q. The director of the Chief Executive's Office? Yes,
20 I understand.

21 A. So four of us.

22 Q. Okay. How long did the meeting last?

23 A. Mr Chan was late coming to the meeting, but I think it
24 lasted roughly maybe 30-45 minutes.

25 Q. Okay. You say in your witness statement that in the
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1 meeting the Chief Executive mentioned to you that the
2 government had lost confidence in the project management
3 team of the SCL.

4 First of all, did you gather by whom the Chief
5 Executive had been briefed?

6 A. I assume, having worked in the government for six years,
7 that she's been well briefed by her colleagues.

8 Q. You say "her colleagues" -- I mean, this is obviously
9 not something the Chief Executive is going to know about
10 without being briefed.

11 A. Of course.

12 Q. Of course. I mean, was it Frank Chan?

13 A. I have no idea because I wasn't involved in those
14 meetings, so I don't know who briefed her.

15 Q. You didn't sort of pick up during the meeting any
16 intelligence about who may have briefed her?

17 A. I think your assumption is probably correct,
18 Mr Pennicott.

19 Q. All right. When you say you were informed that the
20 government had lost confidence, did you ask why the
21 government had lost confidence? Did you ask for
22 an explanation as to why the government had lost
23 confidence?

24 A. Having worked in the government for six years, I think
25 government can tolerate people who are not capable, but
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1 cannot tolerate reports that are inaccurate. So

2 I didn't ask.

3 Q. You didn't ask?

4 A. I knew, I think.

5 Q. So your conclusion was or your deduction was that the
6 loss of confidence was related to the inaccuracies in
7 the report?

8 A. I think so.

9 Q. Okay.

10 A. Because -- maybe I could elaborate here -- when the
11 whole thing happened, the Chief Executive or for that
12 matter the secretaries have never expressed any views
13 about our management capability. It was after this
14 revelation that the government expressed that they have
15 lost confidence. So, I mean, you know, I don't have to
16 go into all sorts of questions to know that this is
17 their thinking.

18 Q. Okay. You go on in your witness statement at
19 paragraph 31 to say this:

20 "The Chief Executive told me that government took
21 the view that the senior members of the projects team
22 responsible for the SCL project, namely Dr Philco Wong,
23 TM Lee, Aidan Rooney, Jason Wong and also Lincoln Leong
24 should leave MTRCL."

25 A. Yes.

26

1 Q. As I understand it, I think the way that Mr Lincoln
2 Leong put it, although of course he wasn't at your
3 meeting with the Chief Executive -- in fact the message
4 he got was that not only should they leave, they should
5 leave with immediate effect. Is that what you were told
6 at the meeting?

7 A. After my meeting with the Chief Executive, I went to
8 Mr Frank Chan's office and called Mr Leong to come to
9 see Mr Chan and myself and relayed the message from the
10 Chief Executive.

11 But I want to emphasise that while we do hear the
12 views of the majority shareholder, ie the SAR
13 government, I as chairman must respect the corporate
14 governance. This sort of matter is not for the majority
15 shareholder to decide; okay?

16 Q. My question, Prof Ma, was whether you were told by the
17 Chief Executive that not only should they leave but they
18 should leave with immediate effect?

19 A. If I remember correctly, definitely it was not for
20 a prolonged period, particularly in the case of the four
21 projects team senior managers. For Mr Leong, there was
22 a discussion whether, you know, he should stay on just
23 for handover.

24 Q. I appreciate he was a special case.

25 A. Exactly.

26

1 Q. Yes, understood.

2 A. So my point was that although the Chief Executive
3 expressed her loss of confidence in the team, the whole
4 thing has to be put to the board of directors for
5 decision, as proper corporate governance should call
6 for. So, as a result, we relayed the message to
7 Mr Leong what the majority shareholder had said, but
8 I immediately called for a board meeting the next
9 morning, okay, for the board to deliberate on this
10 point.

11 Q. I'm coming to that, Prof Ma, don't worry. Let's just
12 get back to one more question on the meeting with the
13 Chief Executive on 6 August.

14 When you were told that the government had lost
15 confidence and that the senior members should leave MTR,
16 did you put up any resistance to that suggestion that
17 the senior team members should leave? Did you seek to
18 argue their corner? Did you seek to point out to the
19 Chief Executive that the report had been prepared under
20 enormous time pressure? I mean, did you try to, as it
21 were, defend what had been done?

22 A. No, I didn't, because I believe that this is for the
23 board to decide. I did not express my personal view.

24 Q. Did you have a personal view at the time, Prof Ma?

25 A. As I said, I was shocked, you know, by the inaccuracy of
26

1 the report, particularly after my question to Mr Rooney
2 and after Mr Rooney had repeatedly told me that he had
3 documentary evidence to support. I would be less than
4 honest if I tell you that I was not disappointed. I was
5 disappointed.

6 Q. There was -- the indication that you were given related
7 to the entirety, it seems to me, of the senior members
8 of the SCL project team. I mean, it was going to be
9 a wipeout of the senior members of that team. Was there
10 no consideration given to the individual roles that each
11 of the gentlemen concerned played in the report and its
12 preparation?

13 A. It is probably true that Mr Rooney and Mr Wong and in
14 a way Philco Wong were involved more closely with the
15 project and with the report preparation compared to
16 Mr TM Lee --

17 Q. Yes.

18 A. -- you know, because I get to see Mr Rooney and Mr Wong
19 running around in the office all the time. I seldom see
20 TM Lee.

21 But having said that, Mr TM Lee is the general
22 manager of the project; okay?

23 Q. Yes.

24 A. But as I said, it is up to -- if the CEO expressed his
25 view that certain members should not go because of

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1 particular reason, I'm sure the board would have
2 listened.

3 Q. Okay. Anyway, as you rightly say, and you were telling
4 us just a moment ago, you called -- a board meeting was
5 called, and the upshot was that the board unanimously
6 voted for essentially what the government had indicated
7 should happen; that's right?

8 A. Yes, correct.

9 Q. You describe in paragraph 34 of your witness statement
10 that the view expressed by government was a "firm view",
11 and that's right, is it, Prof Ma?

12 A. Yes, I don't detect that their view would be easily
13 changed.

14 Q. Right.

15 A. That is their view but that is not necessarily the
16 board's decision. We have to respect the board's
17 decision.

18 Q. You say at paragraph 36:

19 "I stated to the board my view that the issue had
20 given rise to a crisis of confidence and asked Frank
21 Chan for the government's view on the matter."

22 So Frank Chan, in his capacity of a non-executive
23 director of MTR, was obviously at this board meeting --

24 A. Yes.

25 Q. -- and he had already expressed his views, presumably,
26

1 at the meeting you'd had with Mrs Lam?

2 A. Yes.

3 Q. So he was basically repeating what you had already
4 heard?

5 A. Yes.

6 Q. And he told the board that the government had lost
7 confidence in the project management team of the SCL and
8 that the MTR should consider whether senior members of
9 the projects team should leave.

10 Then also the board was informed by Lincoln Leong
11 that Dr Philco Wong had already tendered his
12 resignation, and so forth, and so on.

13 Was there much discussion about what should happen
14 regarding the four people leaving?

15 A. Yes, there was discussion, I recall. It's all in the
16 minutes, you know. I should say that the MTR board is
17 not what I call a rubberstamping type of board. It's
18 a very active board. Board members consist of 14 INEDs,
19 four government officials, myself as non-executive
20 chairman, and Lincoln Leong as a board member. We
21 always have active discussion. And in this incident,
22 I remember we discussed -- particularly members were
23 concerned as to why such situation happened, ie how come
24 the report, after all this intense preparation, turns
25 out to be incorrect, you know.

26

1 But I think members were -- really understand why
2 government lost confidence, because by then, you know,
3 we appreciated that the report was inaccurate and that
4 we didn't do, you know, what we were telling the
5 government, what we were telling the public.

6 Q. Prof Ma, after the government, on 6 August, had
7 expressed their firm view, the result of the board
8 meeting was pretty much a foregone conclusion, wasn't
9 it?

10 A. Well, the board decided, just like that.

11 Q. Was it at the meeting with the Chief Executive on
12 6 August that you offered your own resignation?

13 A. I offered my resignation twice, as I mentioned in the
14 statement.

15 Q. One of them was on 6 August and I wondered whether it
16 was at that meeting.

17 A. Which meeting are you referring to?

18 Q. With the Chief Executive on 6 August.

19 A. Yes, same meeting, when she mentioned lost confidence,
20 yes. In the same meeting, I offered, shall I say, my
21 second resignation, my second attempt to resign.

22 MR PENNICOTT: Thank you very much, Prof Ma. I have no
23 further questions.

24 WITNESS: Thank you very much.

25 Cross-examination by MR TO

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1 MR TO: Chairman and Commissioner, good morning.

2 I am Christopher To, representing China Technology.

3 I just have a few questions to ask you, if I may.

4 Prof Ma, can I take you to your witness statement,
5 if I may, on B105.

6 A. Yes.

7 Q. Do you have that; yes?

8 A. Yes.

9 Q. In paragraph 4, can I take you down to line 5. You
10 mentioned about "promoting a culture of openness", and
11 can I also take you down to line 8, "good corporate
12 governance practices and procedures", and also can
13 I take you to paragraph 5 of your witness statement,
14 "corporate governance"; can you see those, Prof Ma?

15 A. Yes.

16 Q. In terms of, if you want to call, the troublemaker, the
17 client, China Technology, the first email basically was
18 6 January 2017. Did you see that email?

19 A. No.

20 Q. Did you see the email that China Technology sent to the
21 Transport and Housing Bureau on 15 September?

22 A. No.

23 Q. So you became aware of the incident on roughly 31 May
24 2018?

25 A. Yes.

26

1 Q. You also sometimes sort of attended the capital works
2 committee, you just mentioned that earlier on, and they
3 also gave you quarterly reports?

4 A. I should clarify that the capital works committee would
5 report to the board, you know, at our regular board
6 meeting, their proceedings. But I only attend capital
7 works committee meetings on 14 June and subsequently
8 later, when we appointed a consultant to look into our
9 procedures. So I don't normally -- not being a member
10 of the CWC, I don't normally attend their meetings, but
11 we do get the minutes of the CWC, and CWC chairman would
12 also, at the regular board meeting deliver it to the
13 board what happened at the CWC.

14 Q. Thank you, Prof Ma. I fully appreciate that.

15 Can I take you to your paragraph 11 of your witness
16 statement. This is not a criticism, I'm just stating
17 a fact:

18 "... the CWC comprises seven non-executive
19 directors, six of whom are independent non-executive
20 directors of MTRCL."

21 Is that correct?

22 A. Yes, I believe it's correct.

23 Q. I don't have to show you this, but in Mr Lincoln Leong's
24 statement yesterday, he did give, in paragraph 25,
25 a list of those INEDs, as well as NEDs. Just looking at
26

1 the list -- if you want to refer to it, it's B121, if
2 you have a copy of it.

3 A. I'm going to.

4 Okay.

5 Q. Paragraph 25. If you look at the list, except for one
6 person who is the Permanent Secretary for Development
7 (Works), basically he's now retired, but the rest tend
8 to be, for example, part-timers who have full-time jobs?

9 A. Yes. What is the issue?

10 Q. The issue is -- I'm coming to next. The next issue
11 relates to what Mr Lincoln Leong said yesterday about
12 the three lines of defence, if I can take you to that.
13 That's in his paragraph 23 at page 120.

14 A. Mm-hmm.

15 Q. He mentioned three lines of defence, which I asked him
16 yesterday. The first line concerns the management
17 control, the second relates to risk management and
18 compliance oversight, and the last one relates to the
19 internal audit.

20 Then on top that he mentioned in paragraph 24
21 basically you have the CWC, which you kindly referred to
22 earlier on, and also for example at the back, if you
23 look at in terms of paragraph 28 of his statement, there
24 is also a risk committee who does -- I also mentioned
25 this yesterday -- a "deep dive" into reviews of selected
26

1 risk areas, reviewing the effectiveness of ERM
2 functions, et cetera, and also, in paragraph 29, the
3 audit committee.

4 So you can see that there are roughly -- if you look
5 at it, there are basically six lines of defence in the
6 MTR; yes? So --

7 A. Depends on what do you mean by "defence".

8 Q. "Defence" means if there are issues, there are six sort
9 of organisation structures that will look into matters?

10 A. Well, different committees have different mandate.

11 Different committees have their different duties.

12 That's all I can say. I wouldn't say it's "defence", in
13 your definition.

14 Q. I understand. So my point is, Prof Ma, if you go back
15 to your statement at paragraph 11 -- this is not
16 a criticism at all, this is just to help -- you can see
17 that these seven non-executive directors are all
18 part-timers. My view is, correct me if I am wrong or
19 not, should there be some full-timers there or someone
20 who can actually oversee the whole project from day one?

21 A. The full-timers, in your word, report to the committee.

22 Q. Report to the committee and --

23 A. So whenever they convene a committee meeting, just like
24 any other committee in MTR, under the board structure,
25 the full-timers would report to the committee what they

26

1 knew, and the committee has the authority to question
2 the executives.

3 Q. So the executives are the full-time committee members?

4 A. Of course, yes.

5 Q. I understand.

6 A. They are not members of the committee, but they do
7 attend the meetings.

8 Q. Thank you very much. Can I move on, for example in
9 paragraph 13 of your witness statement.

10 In paragraph 13, you mention that you became aware
11 of the situation at the end of May.

12 In terms of a person who has basically with openness
13 and integrity, you conducted a special board meeting on
14 5 June 2018 to discuss these issues; is that correct?

15 A. I believe we convened the board meeting on 2 June.

16 Q. The 2nd, a special board meeting was held, and another
17 special board meeting was held on June --

18 A. There were two meetings, one on 2 June, one on 5 June,
19 according to this statement.

20 Q. Thank you for your correction. What I am going to take
21 you on to now is the MTRC report, if I may. If you look
22 at the MTRC report, that's in B1. Do you have a copy of
23 that, Prof Ma?

24 A. I do.

25 Q. Can I take you to B36 of that report. I also asked this
26

1 question of Mr Lincoln Leong yesterday.

2 A. Yes.

3 Q. If you look in the paragraph that says, "Interview of
4 sub-contractor (China Technology)":

5 "No information in relation to the interview with
6 China Technology is included here."

7 First of all, Prof Ma, have you read this report?

8 A. I read the report and, as a matter of fact, I did ask
9 the question why China Technology interview was not
10 included.

11 Q. And what was the answer given?

12 A. Because -- the answer given was because there were
13 allegations in China Technology's report that there were
14 corruption in the site, and this is a very serious
15 charge, so executives, not me, decided not to include it
16 in the report, which makes sense to me; okay? And, as
17 a matter of fact, I asked the executives if, you know,
18 given China Technology's charges, did we refer the case
19 to ICAC? I did ask that question.

20 Q. Okay. Your executive committee, under the leadership of
21 Gill Meller, quite rightly competently wrote to Leighton
22 and basically wrote a letter -- it's B4643; you don't
23 have to refer to it. But there was a response from
24 Leighton and I'll take you to that response. It's
25 B3090, if I may.

26

1 Can I show you to the very last paragraph of the
2 letter, and if you look at here, it says:

3 "In concluding, we make the general observation that
4 a large number of the matters raised today were not
5 substantiated by any records or contemporaneous notes.
6 No doubt MTR will draw its own conclusions about the
7 weight to be given to such bald assertions. Leighton
8 and its officers and employees reserve their rights in
9 respect of these matters."

10 So, Prof Ma, have you seen this letter?

11 A. No.

12 Q. Just by reading this statement, what do you think?

13 A. Very legalistic letter. Not being a lawyer --

14 MR BOULDING: Sir, shouldn't he be shown the whole letter as
15 opposed to just the last paragraph?

16 CHAIRMAN: Is the question, "What do you make of the last
17 paragraph?"

18 MR TO: Yes.

19 Prof Ma, what do you make of the last paragraph?

20 A. I can only go by the last paragraph saying that it is
21 not substantiated.

22 Q. So, being an open person, which you stated earlier on,
23 do you think this is fair?

24 A. Not knowing the whole situation, it's difficult for me
25 to make a judgment, to be honest.

26

1 CHAIRMAN: I appreciate the line of questioning. I don't
2 wish to cut across it. But I think that final paragraph
3 speaks for itself. Simply, it's a statement by the
4 author on behalf of those the author represents, saying
5 that in the view of Leighton, the matters raised, or
6 a large number of them, were simply not substantiated by
7 any records or contemporaneous notes. That's just
8 a statement as an assertion of fact. And the other one
9 is what I suspect any competent lawyer in today's
10 society would advise his client: in other words,
11 publishing in the public domain statements which may be
12 defamatory may make the publisher liable.

13 MR SHIEH: Mr Chairman, you will no doubt notice who is
14 seated behind Christopher To today. That could give the
15 clue as to why this line of questions is being put.

16 Secondly, Prof Ma has said that contemporaneously
17 with this letter, he had not actually seen it. So the
18 question could not have had anything to do with what
19 Prof Ma did or thought at the material time.

20 Therefore, I question what the relevance is to what
21 Prof Ma now thinks of four lines in a very long letter.

22 I need say no more about it, Mr Chairman.

23 CHAIRMAN: Thank you.

24 Yes, Mr To.

25 MR TO: Mr Chairman and Commissioner, I'll move on.

26

1 CHAIRMAN: Thank you.

2 MR TO: Thank you, Prof Ma, on that point.

3 Now can I refer you to paragraph 18 of your witness
4 statement, Prof Ma.

5 A. Yes.

6 Q. In line 5 -- can you see that? -- you said:

7 "... I was under the impression ..."

8 Who gave you that impression?

9 A. Throughout the discussion at the CWC, you obviously get
10 certain impression from my team. That's how I arrived
11 at the conclusion.

12 Q. Can I take you to B16/14036. If you look down, this
13 basically is sent on behalf by Mr Allan Wong about the
14 report, and if you go to the middle paragraph, you will
15 see, for example, it says, "there are some
16 contradictions" -- can you see that?

17 It's line 3, can you see that, line 3, the second
18 paragraph?

19 A. Yes.

20 Q. "... there are some contradictions and inconsistencies
21 between the recollections of certain individuals."

22 And after that:

23 "... without making a judgment as to the underlying
24 facts, particularly in light of the upcoming Commission
25 of Inquiry."

26

1 Can you see that?

2 A. Yes.

3 Q. So, basically, the CWC chairman says, "We should state
4 the facts", but as I showed you earlier on, in B36,
5 there was not a single thing about any facts or
6 whether -- forget about the allegations -- about China
7 Technology's interview whatsoever, on page B36 in the
8 report. Forget about the allegations, defamation, but
9 there's not a single item mentioned about China
10 Technology being interviewed or even, for example,
11 stating what certain matters were discussed.

12 A. I'm sorry, counsel, I don't quite get your point.

13 Q. But in this email, it says very clearly that you have to
14 state the facts. The facts are not stated, in B36 of
15 the report.

16 A. I'm sorry, can you repeat your point?

17 Q. Sorry about that, Prof Ma. In the email, it says, from
18 Allan Wong, Dr Allan Wong -- it mentioned that there are
19 contradictions, there are some inconsistencies between
20 what people have said, but he did say, for example,
21 "state the facts", and if you look at B36 --

22 CHAIRMAN: Sorry, where is the phrase "state the facts"?

23 MR TO: "... state the different recollections, without
24 making a judgment as to the underlying facts ..."

25 CHAIRMAN: Yes.

26

1 MR TO: So, in this report, there's not a single thing
2 mentioned about China Technology, except for "No
3 information in relation to the interview with China
4 Technology is included here".

5 It's not your fault. I'm just making a statement,
6 that's all.

7 CHAIRMAN: I think --

8 A. Chairman, I don't know how to comment.

9 CHAIRMAN: That's right. Perhaps if one puts at the end of
10 that statement "would you agree?"

11 A. It is difficult because, you know, you mention why
12 certain things were not specified, and as I said I'm not
13 a member of the CWC, to begin with, I was just
14 an observer in that particular meeting. You know, at
15 the committee meeting, all the facts were presented,
16 including China Technology was discussed, I'm sure, if
17 you look at the minutes of the meeting.

18 So counsel implies that we just ignored China
19 Technology; it's not correct. We did discuss it, I'm
20 sure, although I did not -- I cannot recollect what was
21 discussed.

22 CHAIRMAN: All right.

23 MR TO: Prof Ma, you did discuss it. I'm just making
24 a point that it's not stated here.

25 A. I'm sure it was discussed.

26

1 Q. That's not a criticism at all.

2 In terms of -- can I go back to your statement,
3 B109.

4 A. Yes.

5 Q. In paragraph 23 -- can you see that?

6 A. Yes.

7 Q. There was a press statement made; yes?

8 A. Mm-hmm.

9 Q. If you look at the very last sentence, it says:

10 "In this press release, MTRC also made clear that if
11 any violation was found, MTRC would take the matter very
12 seriously and report it to relevant law enforcement
13 agencies."

14 Can I take you to that press release. I mentioned
15 Mr Lincoln Leong yesterday. It's B9/7031.

16 Prof Ma, can you see, in this press release, was
17 there any mention of the words "law enforcement
18 agencies" anywhere in this press release?

19 A. I don't see those two words that you refer to.

20 Q. But if you look at the first paragraph, it says:

21 "The board takes these matters very seriously."

22 From your understanding, the word "seriously", that
23 means you would report it to the various relevant
24 authorities?

25 A. Hong Kong has excellent governance system, including law
26

1 enforcement agencies. So if someone did something
2 wrong, legally, of course, you know, we take this
3 seriously, so by implication we would go to, you know,
4 all the law enforcement agencies, to report any
5 irregular or unlawful act on the part of anybody.
6 That's common sense, isn't it?

7 So the fact I mentioned it -- I still remember at
8 the stand-up on 22 June, I did mention something like
9 that. As a matter of fact, I mentioned the fact that we
10 would report this sort of situation to law enforcement
11 agency not only one time but a few times, if I remember
12 correctly. Because we, you know, as MTRC, of course
13 have to report any offence to law, to any law
14 enforcement agency, just like when China Technology
15 alleged we have corruption in the site, we report the
16 case accordingly. You know, that is very, very logical
17 and normal.

18 Q. Thank you, Prof Ma, for that point.

19 Can I take you on to maybe my last point. My last
20 point relates to the inaccuracies of the report. It is
21 in paragraphs 27 to 29. My learned friend Mr Ian
22 Pennicott took you to paragraph 28.

23 So, when you looked at this report, you basically
24 said, in the middle of 28, you can see in line 8 down,
25 can you see:

26

1 "I was naturally alarmed by [the revelations] ..."

2 Okay? So you can see that. What were you alarmed
3 about? What went wrong in the report?

4 A. The fact that the report was inaccurate.

5 Q. Inaccurate. So can I take you to what Mr Lincoln Leong
6 said yesterday. It's in page 161 of the transcript. If
7 you look at line 20 -- I will just read it very quickly:

8 "... [the] whole issue of the backdating as well as
9 the retrospective nature of those papers were
10 highlighted in one of, I believe, the crisis management
11 meetings in August ..."

12 Prof Ma, are you aware or do you know there's
13 backdating and retrospective records been made in the
14 report or other information?

15 A. No.

16 MR TO: You're not? Prof Ma, I don't have any further
17 questions, and thank you for being honest.

18 WITNESS: Thank you, counsel.

19 MR KHAW: Mr Pennicott has probably stolen our thunder and
20 I believe most of the questions we had intended to
21 discuss with Mr Ma have been canvassed. We have no
22 further questions.

23 CHAIRMAN: Thank you very much.

24 MR CONNOR: No questions for Atkins. Thank you, sir.

25 MR SHIEH: No questions from Leighton.

26

1 CHAIRMAN: Thank you.

2 MR BOULDING: Sir, I have no re-examination for the
3 professor, so unless you have any questions?

4 Questioning by THE COMMISSIONERS

5 COMMISSIONER HANSFORD: I have one question for Prof Ma.

6 Prof Ma, I'm interested in the capital works
7 committee. My understanding is the CWC was established
8 in 2014, following concerns about the XRL project.

9 A. Absolutely.

10 COMMISSIONER HANSFORD: I understand its focus is primarily
11 on reviewing progress of projects from a programme and
12 cost perspective; is that correct?

13 A. Correct.

14 COMMISSIONER HANSFORD: In your witness statement, in
15 paragraph 40(d) of your witness statement, under "Going
16 forward", you tell us, helpfully:

17 "the terms of reference of the CWC is now being
18 revised to enhance its oversight of the quality of the
19 capital works projects."

20 Has it previously had a role in overseeing quality,
21 or is that a new role for the CWC?

22 A. Professor, Chairman, this is going to be a new role for
23 the CWC. If you recall, in 2014, when we established
24 the CWC, it's because XRL was facing cost overrun and
25 also project delay, and as a result CWC was established.

26

1 COMMISSIONER HANSFORD: Yes.

2 A. We have no doubt that the quality of the management team
3 in overseeing project management, because even in the
4 expert report of which, Professor, you were involved --

5 COMMISSIONER HANSFORD: Indeed.

6 A. -- you actually complimented MTR in the PIMS and all
7 that, if I recall correctly. I don't want to put words
8 into your mouth, but I recall that you actually
9 complimented MTR.

10 So given that we internally never were concerned
11 about the quality of the project as such, because we
12 believe we have a top-notch professional team to oversee
13 the quality, so quality never came into the equation
14 per se, except that this time, you know, even what
15 happened, CWC is not questioning the quality of the
16 management team, but just to be sure, it is not a bad
17 idea to also keep an eye on the quality.

18 COMMISSIONER HANSFORD: So when you refer to "quality" in
19 paragraph 40(d), are you referring to the quality of the
20 management team or the quality of the works?

21 A. If I remember correctly, we were referring to the
22 quality of the work, not the management team. The
23 management team is selected by the CEO.

24 COMMISSIONER HANSFORD: Indeed.

25 A. Okay? And as such, we believe that our CEO will pick
26

1 best team to do the job.

2 But moving forward, I think the CWC would like to
3 know, for example, certain aspects, if quality were not
4 up to standard, then they would like to know.

5 COMMISSIONER HANSFORD: Quality of the works?

6 A. Yes. You know, if there were any, for example,
7 non-compliance report, NCR, they would like to know; if
8 certain project had issued NCR, then they need to know.
9 In the past, they don't need to know about it. They
10 assume it would be taken care of by the project team.
11 But from now on, my understanding is the CWC would like
12 to know issues of that nature.

13 COMMISSIONER HANSFORD: This will therefore give the board
14 more visibility on the quality of the works being
15 carried out; is that the purpose?

16 A. Yes. I should also mention, Chairman and Professor,
17 that, you know, throughout the 39 years of history of
18 MTR, we have delivered many, many projects to Hong Kong,
19 and all these projects are top-notch in quality. Why
20 this one failed? This is something of course for the
21 Commission to find out. But I would say that overall
22 the quality of our work has been top-notch, you know,
23 recognised by the industry, recognised by the public.
24 Even the opening of the XRL recently has been well
25 received.

26

1 So this is just to be safe that we mention about
2 quality. The fact that CWC would focus on the quality
3 doesn't mean that we see there is a big issue in the
4 system; okay? But we want to make absolutely sure that
5 this sort of issue does not arise in the future.

6 CHAIRMAN: Can you tell me just -- the work of the CWC, has
7 it been effective, in your mind, and is it important?

8 A. It is a very important committee of the board, and as
9 you can see, Chairman, in the composition of the CWC, we
10 have some very experienced engineers on the committee,
11 including a permanent secretary from the government, who
12 is an engineer himself. Dr Allan Wong is a very
13 successful industrialist and engineer by background, and
14 James Kwan is also a very experienced engineer, having
15 worked for Towngas for a long time. So we have a group
16 of very experienced engineers, experienced entrepreneurs
17 and industrialists on the committee, and they take their
18 job seriously, and I believe that they are effective,
19 but given this incident there are always room for
20 improvement. I am not saying that MTR is flawless in
21 absolutely everything. Absolutely not. There are room
22 for improvement, in communication, in project management
23 and so forth.

24 So that is why we hired this consultant to help CWC
25 to look into the procedures. We learn from painful
26

1 lessons like this, to be honest. Even as non-executive
2 chairman I learn a lot more from this whole episode than
3 what I would have known if this doesn't happen.

4 But I think, you know, we need to move forward, we
5 need to learn from our painful lessons, because we are
6 here to serve Hong Kong for the next 40 years,
7 400 years, so we need to do better and better for the
8 community. I truly believe that MTR is a great
9 organisation, but there are always room for improvement,
10 sir.

11 CHAIRMAN: Thank you very much.

12 COMMISSIONER HANSFORD: Thank you.

13 MR BOULDING: Thank you very much indeed, Professor.

14 CHAIRMAN: Thank you, Professor, for coming today.

15 WITNESS: Thank you, Chairman. Thank you, Professor. Thank
16 you for having me.

17 MR BOULDING: Commissioners, that concludes MTR's factual
18 evidence.

19 CHAIRMAN: Shall we have the morning adjournment,
20 15 minutes, or do you wish to --

21 MR PENNICOTT: No, I think this is an opportune moment.

22 CHAIRMAN: Good. Thank you.

23 (11.23 am)

24 (A short adjournment)

25 (11.43 am)

26

1 MR CONNOR: Good morning, sir. Good morning, Professor.

2 We have the first witness now on behalf of Atkins
3 China Ltd, who is Mr John Blackwood, who is sitting in
4 the witness chair.

5 MR JOHN BLACKWOOD (affirmed)

6 Examination-in-chief by MR CONNOR

7 Q. Thank you very much. Good morning, Mr Blackwood.

8 A. Good morning.

9 Q. Your full name is John Blackwood?

10 A. That's correct.

11 Q. And you are, as far as this Commission of Inquiry is
12 concerned, giving evidence in terms of your three roles:
13 you're a director of Atkins China Ltd?

14 A. Yes, that's correct.

15 Q. You're the director of transport for Atkins China Ltd?

16 A. That's also correct.

17 Q. And you are project director in respect of two contracts
18 with respect to the project under consideration in this
19 Commission of Inquiry; correct?

20 A. That's correct.

21 Q. One of those is the consultancy agreement, known as
22 C1106, for detailed design with MTRC?

23 A. Yes.

24 Q. Thank you. The second is the consultancy agreement for
25 temporary works contract 1112 with Leighton?

26

1 A. That's correct.

2 Q. In those roles, you have prepared one witness statement,
3 which is in bundle J1/8, which we might have on the
4 screen in front of us, and that begins at page J56. Do
5 you see that witness statement, Mr Blackwood?

6 A. That's my witness statement.

7 Q. If you turn to, please, page J77 of that witness
8 statement, you will see a signature that appears there.
9 Is that your signature, Mr Blackwood?

10 A. That is my signature.

11 Q. Now, attached to your witness statement, as you may
12 recall, there were a number of attachments. If I can
13 just take you to a number of those. I think they were
14 JB-1 to JB-12 inclusive; do you recall that?

15 A. Yes.

16 Q. If you turn to JB-1, I think you'll see that that
17 appears at page J80, and that is your CV?

18 A. That is my CV.

19 Q. If you then turn to page J83, this is the beginning of
20 your attachment JB-2; is that correct?

21 A. Yes.

22 Q. It is here that we see described, amongst other things,
23 your roles and responsibilities as project director of
24 team A?

25 A. That's correct.

26

1 Q. And by "team A" we understand the contract with which
2 Atkins had with MTRC?

3 A. Yes.

4 Q. Thank you. If you turn to page J85, we see there,
5 again, amongst other things, a description of your roles
6 and responsibilities as project director of team B?

7 A. Correct.

8 Q. Again, by "team B", we understand the contract which
9 Atkins China has with Leighton?

10 A. Yes.

11 Q. For the sake of completeness, if you would be good
12 enough to have before you what is JB-3, which is
13 page J87. That is an organisation sheet which I think
14 explains the position of various personnel within Atkins
15 China, and in particular I think we see you to the
16 left-hand side of that organisation chart. Just below
17 Mr Samson Sin as managing director, we see you as
18 transport director?

19 A. That's correct.

20 COMMISSIONER HANSFORD: Sorry, EDPM -- what is EDPM?

21 A. Engineering design project management. It's a part of
22 the Atkins Group. I shouldn't say it's part of the
23 Atkins Group; it's where Atkins sit within the
24 SNC-Lavalin group of companies. We are under EDPM and
25 we are part of the whole global EDPM business,

26

1 basically.

2 COMMISSIONER HANSFORD: Thank you.

3 MR CONNOR: Thank you, Professor.

4 Again, turning to what is JB-4 in your statement at
5 page J88, we see then the organisation chart for the
6 transport division within Atkins; is that so?

7 A. Yes.

8 Q. And we see you as director of transport, based in
9 Hong Kong, and your three colleagues who report to you?

10 A. Correct.

11 Q. Then finally in detail on this sort of matter, you see
12 at what is JB-5 to your statement, which starts at J89,
13 the first of three figures, beginning with figure 2,
14 which is an organisation chart in respect of team A,
15 working with MTR; is that so?

16 A. Yes.

17 Q. Do we see you at very much the top of that page as
18 project director?

19 A. That's correct.

20 Q. Thank you. Just for the record, I think that is
21 an organisation chart dated as at October 2015; is that
22 so?

23 A. Yes.

24 Q. Thank you. But you are still in that role today?

25 A. Yes.

26

1 Q. Thank you.

2 Then turning to the next figure, which is at J90,
3 this is an organisation chart in respect of team B; is
4 that so?

5 A. Correct.

6 Q. This is correct as at November 2014?

7 A. Yes.

8 Q. And that shows you as project director in the top
9 right-hand corner of the organisation chart?

10 A. Correct.

11 Q. Finally, for completeness, at J91, at figure 4, this is
12 the same organisation chart for team B, as at October
13 2015?

14 A. Yes.

15 Q. Again, your position similarly noted in the top
16 right-hand corner as project director?

17 A. Yes.

18 Q. Thank you. Now, I think as you have said, the evidence
19 that you have provided in your witness statement has
20 some 12 attachments to it, which you will be pleased to
21 hear it's not my attention to take you through entirely,
22 but I might just take you to one, because it will be of
23 significance to the Commission as matters progress, and
24 that is to JB-12 which is at page J3323. I think, for
25 the record, that's probably bundle J5.

26

1 There we see a copy of a presentation, that is
2 a PowerPoint presentation, with notes sections
3 completed, which run from that page, again just for the
4 purposes of the record, to page J3343; do you see that?

5 A. I do.

6 Q. This is a presentation which was made by Atkins to the
7 Buildings Department on or about 12 July of this year?

8 A. Correct.

9 Q. This was a presentation, which I think the notes section
10 narrates, which was primarily to a Prof Nethercot?

11 A. Yes.

12 Q. Can you just inform the Commission as to what the
13 purpose was of that presentation, as you understand it,
14 and what your role was in that?

15 A. I was -- we were requested by MTRC to give
16 a presentation to Prof Nethercot, who was advising BD,
17 and to representatives of BD, on the fundamental design
18 principles and approach adopted for the design of the
19 underground element of Hung Hom Station, with a focus on
20 the EWL slab/D-wall connection, which was obviously
21 a major issue at that time, and still is.

22 MR CONNOR: Thank you. It's possible that others may ask
23 you about this in the course of the next while, but it's
24 not, sir and professor, my intention to ask anything
25 further of this, but I do know that we will come back in

26

1 more detail to this presentation when we come to the
2 second witness, Mr Wilson Sung, but it's important that
3 Mr Blackwood introduces it at this stage.

4 CHAIRMAN: Yes, certainly.

5 MR CONNOR: Thank you. I have nothing further to ask you in
6 relation to that presentation at this stage,
7 Mr Blackwood.

8 Finally, just in terms of the evidence that you have
9 presented already to the Commission -- you've told us
10 about your statement and you've told us about the
11 12 attachments to it, which run between JB-1 and JB-12,
12 which for the record are between pages J80 and J3343.

13 I think also, as you know, in the course of the last
14 few weeks, there have been some questions asked by
15 Prof McQuillan on behalf of the Commission; is that so?

16 A. There have been, yes.

17 Q. And you have been the organiser of the responses to
18 those enquiries made by Prof McQuillan?

19 A. The responses have been channelled through me back to
20 the Commission.

21 Q. Thank you. Again, for the record, but I don't intend to
22 take you there in any detail at all, those responses
23 appear in bundle J6.

24 So just a very short but important question,
25 Mr Blackwood: would you please confirm to the Commission
26

1 that the evidence that we have seen in your witness
2 statement, together with the attachments that we've
3 referred to, consist of your evidence to this
4 Commission, and that you so present it to the
5 Commission?

6 A. I do.

7 Q. Thank you. Do you confirm that, to the best of your
8 knowledge and belief, it's true?

9 A. To the best of my knowledge and belief, it's true.

10 MR CONNOR: Thank you very much. Now, you have been to
11 earlier days of the Commission so you appreciate the
12 format and procedure that we have here. Mr Pennicott,
13 who's directly in front of me, may have some questions
14 for you. Other counsel in the room may also have some
15 questions for you. Most importantly, the Chairman and
16 the professor may have questions for you at any stage in
17 matters and, if need be, I may have some closing
18 questions.

19 With that, thank you, Mr Blackwood. Please remain
20 there and I'll pass to Mr Pennicott.

21 Examination by MR PENNICOTT

22 MR PENNICOTT: Good morning, Mr Blackwood.

23 A. Good morning.

24 Q. As I think Mr Connor has indicated, I think you're
25 familiar with the way it works.

26

1 A. Yes.

2 Q. Can I first of all, however, thank you for coming along
3 to give evidence to the Commission this morning, and
4 also thank you for the assistance and cooperation that
5 you've given in dealing with the queries of the
6 Commission's expert.

7 A. Okay.

8 Q. Thank you for that.

9 Now, as we've just seen with Mr Connor, you were the
10 project director of both Atkins team A and team B?

11 A. Yes, and still am.

12 Q. Yes, and still are, yes. I know we'll be hearing from
13 him on Monday next week, but, as I understand it,
14 Mr McCrae was, at the times we are concerned with in
15 this Commission -- 2014, 2015, going into 2016 --
16 Mr McCrae was the project manager of Atkins team B and
17 the design team leader of Atkins team A?

18 A. That's correct.

19 Q. So essentially the two most senior positions in those
20 teams were you and Mr McCrae, and you were in both
21 teams?

22 A. That's correct.

23 Q. As I understand, Mr McCrae left in April -- well, left
24 Hong Kong; I think he's still with Atkins in London --

25 A. Yes.

26

1 Q. -- he left in April 2016?

2 A. That's correct.

3 Q. And there were other members of the Atkins team that
4 were in both team A and team B?

5 A. There were one or two, yes.

6 Q. There's one we've spotted, Edward Tse, T-S-E?

7 A. Yes.

8 Q. He was in both.

9 Could I ask you, please, on this topic, to be shown
10 a couple of paragraphs from the witness statement of
11 Mr Buckland of Leighton. First of all, can we look at
12 bundle C27/20804, and could we look at the footnote at
13 the bottom, please.

14 What Mr Buckland says, in footnote 3 there -- he
15 says:

16 "Typically, the same group of people at Atkins acted
17 as MTRCL's DDC and also for Leighton."

18 Then could we also look at C32/24023, at
19 paragraph 14. This is also Mr Buckland's further
20 statement. He says:

21 "While MTRC may have initially intended there to be
22 some separation between the two Atkins' teams, MTRC knew
23 that there was no real separation and accepted this
24 position. Indeed, MTR actively encouraged the same
25 people at Atkins to [complete] the work for MTR's DDC
26

1 and Leighton. It follows ..."

2 Let's pause there.

3 Do you agree with what Mr Buckland says in that
4 footnote and that paragraph that I've just shown you,
5 Mr Blackwood?

6 A. No, I don't agree with that. I think it's a bit of
7 a generalisation that it was the same people in the same
8 teams. I highlight in particular Mr David Wilson, who
9 was the structural team leader and the design
10 coordinator for team B, who was totally dedicated to
11 team B and the primary point of contact with team B.

12 Q. Right.

13 A. I think there was an understanding the teams would
14 communicate and that was encouraged, but that was where
15 basically the intent was.

16 Q. So your intent and objective was to try to keep them as
17 separate as you could, given the situation?

18 A. Given -- there were a lot of pressures came on, it did
19 get a bit blurred at certain times, but that's where the
20 process that I've highlighted in my statement was
21 important, that we stuck to the process, basically.

22 Q. Right. Did you ever, during the course of carrying out
23 the works on behalf of MTR on the one hand and Leighton
24 on the other -- did you ever receive any complaints or
25 observations about the lack of separation between the

26

1 teams?

2 A. I think certainly there were -- nothing really from
3 Leighton, to be honest, I don't think. I don't think
4 I can recall anything in that regard. I think the
5 design management team from MTRC were aware of trying to
6 make sure that the teams stay separate as far as
7 possible and they were very strict in keeping control of
8 the working drawings and particular changes to the
9 working drawings which were the main way of controlling
10 the information that was built.

11 Q. Was there any specific complaint, I think that's really
12 what I'm driving at?

13 A. I honestly can't recall anything specifically on that
14 issue.

15 Q. Okay. I think one of the reasons, one of the
16 explanations that both you and Mr McCrae have explained,
17 perhaps the necessity for close -- closer, perhaps,
18 closer cooperation than was anticipated at the outset
19 was the substantial expansion of team B's work; would
20 that be right?

21 A. Both the expansion and also the nature of the work they
22 were required to carry out changed.

23 Q. In what way was the nature of the work changed?
24 I understand the scope.

25 A. I think when we started out, primarily it was temporary
26

1 works design, but I think as the project evolved, then
2 it became a little bit more complex. There was probably
3 a greater interface on the permanent works or impact on
4 the permanent works and therefore a greater involvement
5 of team A in supporting.

6 Q. Yes. Of course, part of the original intent, as
7 I understand it, was that, in relation to certain works,
8 team B's work would be reviewed and perhaps commented
9 upon by team A; is that right?

10 A. They would, yes.

11 Q. Did that really happen? I mean, was the separation
12 significant enough to allow that to happen?

13 A. I think, yes, there were certainly occasions where
14 team A were not necessarily approving what team B may
15 have put forward.

16 Q. So you take the view, do you, that there was, as it
17 were, sufficient separation and independence between the
18 two teams to allow team A to take a sufficiently
19 independent view about what team B were doing?

20 A. They could -- there were obviously discussions in
21 principle, et cetera, between team A and team B. The
22 idea was to try to get the submissions prepared as
23 efficiently as possible and as quickly as possible. So
24 team A would be consulted on the principle, so it would
25 be hoped that the general principles would be -- so when
26

1 the submissions came in they would still have to be
2 reviewed to make sure they were satisfactory, and that
3 their guidance or whatever had been given had been
4 interpreted correctly.

5 Q. In the witness statement of Andy Leung from the MTR, he
6 said that he insisted upon separation all along, from
7 the outset of when Atkins team A and team B were, as it
8 were, engaged. We've seen what Mr Buckland says, and
9 perhaps the truth, the reality, lies somewhere in
10 between?

11 A. Clearly, the way it was set up, the project team should
12 have some visibility in who was talking to who, who was
13 communicating with who in terms of the email exchanges
14 and the like. So I think it would be a bit of a stretch
15 to say there was no -- a complete separation and no
16 discussion. I think it was actively encouraged by MTRC
17 because it gave a benefit of hindsight -- not hindsight,
18 the knowledge that team A had, to try to improve the
19 efficiency of how team B worked, and we got submissions
20 submitted on time.

21 Q. Had Atkins and you personally been involved in any sort
22 of similar situation before, Mr Blackwood?

23 A. To be honest, I can't recollect myself. It's not
24 an atypical -- it's not a normal situation. And
25 generally you would try to stay clear of that, if you
26

1 can. But in this particular case it was a request that
2 Leighton wanted to employ us because of our specific
3 knowledge, and I believe that MTRC understood why they
4 were employing team B because of that knowledge, so
5 therefore there was an element of that prior knowledge
6 being built into what Leighton were doing through
7 team B.

8 Q. Just so far as you personally are concerned, you've got
9 team A engaged by MTRC.

10 A. Yes.

11 Q. And then, when team B were taken on by Leighton in
12 2013 -- I mean, was it your mindset, your thought
13 process, that "I must try, as the project director, to
14 keep these two teams as separate as possible"? At the
15 outset, I mean -- I know things moved on -- but at the
16 outset was that the objective?

17 A. I think there was an understanding that we should keep
18 the teams as separate as we could do, yes, and we still
19 do. It's not something we started and then stopped.

20 Q. As I say, it seems, from what I've understood, that
21 because of what -- the matter we've just mentioned, the
22 expansion and the nature of the work, there seems to
23 have been, as it were, perhaps less separation than what
24 was anticipated at the outset?

25 A. I would agree with that.

26

1 COMMISSIONER HANSFORD: Mr Blackwood, I'm struggling with
2 this a little bit, because I hear your explanations and
3 I can see all the sense in what you're saying, but then
4 if you go to paragraph 16 of your witness statement and
5 the first sentence, I can't reconcile it with what
6 you've just said to us. My reading of -- well, I think
7 everybody's reading of the first sentence is -- "there
8 was a need throughout to keep both team A and team B
9 independent with no conflicts of interest". How do you
10 reconcile that with what you've just told us? I don't
11 understand.

12 A. I think, as I said, that was the intent when we started,
13 Professor, but I think as I go on to explain in the
14 following -- subsequent part of my submission, I think
15 it was paragraph 26, that the circumstances placed
16 increased pressure on trying to maintain that
17 separation. I think people tried to do it but we also
18 tried to ensure that the decisions we made were the
19 right decisions for the project, and we tried to avoid
20 conflicts where we could, and still do. If we find
21 something where we see a genuine conflict of interest
22 between what Leighton may be wanting, then we will not
23 do it.

24 COMMISSIONER HANSFORD: Thank you. So the sentence is
25 really related to avoiding conflicts of interest rather
26

1 than keeping the teams independent, because -- it's the
2 word "throughout" that I'm struggling with. If it said
3 there was a need at the outset to keep them independent,
4 I think I'd understand it, but you say there was a need
5 throughout to keep them --

6 A. It's maybe just the way I've explained it. There was
7 certainly a need or a desire to maintain the separation
8 throughout. What I'm trying to explain is that there
9 was still an intent to avoid conflicts, to make
10 decisions for the benefit of the project, so if there
11 was a decision to be made it was made based on quality,
12 safety and the like.

13 The reason that there might have been greater
14 overlap that we might have hoped for or anticipated at
15 the start of the project was really more for efficiency,
16 to try to get submissions prepared and submitted as
17 quickly as possible, but again without compromising the
18 quality or the safety of what we were producing.

19 COMMISSIONER HANSFORD: I don't really want to labour the
20 point, but then I read that Robert McCrae was design
21 team leader for team A and project manager for team B.
22 I will take your answer and probably stop at that point,
23 but it just seemed slightly odd to me.

24 A. I understand.

25 MR PENNICOTT: Looking back on it, Mr Blackwood -- I know
26

1 the work is still going on -- but do you regard it as
2 an entirely satisfactory position? Could things have
3 been set up somewhat better?

4 A. I still don't have a huge problem with myself being
5 project director on both, or even necessarily Mr McCrae
6 being project manager and design team leader, because of
7 who we -- I certainly know Rob McCrae and how he would
8 behave. He would behave in the right manner,
9 essentially. So I trust his judgment on these issues.
10 We have technical people who are producing technical
11 solutions and we try to maintain that as separate as we
12 could, so essentially the technical product was produced
13 by independent teams as far as possible.

14 COMMISSIONER HANSFORD: I'm not questioning whether there
15 was actually any conflict of interest, but in my
16 experience, it's the perception of conflict of interest
17 which is the biggest issue. I've been in the situation
18 you're talking about and I know how important it is to
19 not only have no conflict of interest but actually
20 ensure there's no perception of conflict of interest.
21 That doesn't appear to be the case here, but that's just
22 observation.

23 A. I would say that given that we're having this
24 conversation, clearly there was a perception that it
25 might cause a problem, and therefore, in retrospect, it

26

1 probably would have been better to have totally separate
2 people.

3 COMMISSIONER HANSFORD: Right. I'll leave it there. Thank
4 you.

5 MR PENNICOTT: But having said that -- slightly in your
6 defensive, if I may say so, Mr Blackwood -- you had
7 a situation where MTRC have taken you on first, Leighton
8 wished to engage you, which they did, and MTRC didn't
9 put up a fight about that. The only imposition by MTR
10 was to try to keep the teams separate.

11 A. Correct.

12 Q. All right. Could we turn to the changes, we've known
13 the first and the second change.

14 A. Yes.

15 Q. I appreciate that you say you didn't have day-to-day
16 direct involvement in the project.

17 A. That's correct.

18 Q. And so far as the second change is concerned, that is
19 the change to the detail of the top of the east
20 diaphragm wall, did you have, yourself personally,
21 contemporaneous knowledge of that change, when it
22 happened?

23 A. No.

24 Q. We know that various reports were prepared by Leighton,
25 both team A -- sorry, team B and team A, and submitted
26

1 to Leighton from time to time. What, if anything, was
2 your involvement in those reports?

3 A. At the time, I wasn't involved in those reports, or
4 producing or reviewing them.

5 Q. Okay. We know that allied to those reports are quite
6 a lot of emails by way of explanation and how the
7 reports were to be prepared, what should be put in and
8 what should be left out, and so forth. Again, did you
9 have any involvement in those email exchanges?

10 A. No, I wasn't copied in on those emails.

11 Q. Would it be right -- I'm not trying to in any sense
12 diminish your role, Mr Blackwood -- but would it be
13 right that it's really Mr McCrae that I should be
14 discussing the detail of the reports, which I will get
15 the opportunity to do next week?

16 A. Yes. Well, Rob would be more familiar with the detail
17 in the reports, because he would be signing them off for
18 issue. I have read them, obviously, read parts of them,
19 but relevant to the change, in the preparation of this
20 witness statement.

21 Q. Yes. The thing is I don't want to, as it were, waste
22 everybody's time by going through it all with you and
23 then going through it with Mr McCrae. If Mr McCrae, as
24 I understand it, looking at the emails, looking at -- as
25 you quite rightly say, his name appears on the front
26

1 sheet as the approver of the reports, although I have
2 noted what he said in a corrigendum to his statement
3 recently --

4 A. Yes.

5 Q. -- if he's the better person to look at the detail with
6 then that's what I'll do. Is that what you think the
7 position is, that he's the man who's likely to know the
8 detail?

9 A. It depends on the nature of the questions that you're
10 asking. I produced the witness statement that I had
11 that was reflecting the Atkins position, based on
12 discussions with various people and review of the
13 reports, but it's entirely your decision as
14 the Commission to whom you ask questions.

15 Q. Let me just pose an example to you. We know that there
16 was a report, 4B2 and 4B3.

17 A. Yes.

18 Q. Temporary works design reports. And we know that in the
19 second of those reports, the famous figure 1.4 and the
20 famous paragraph 1.35 --

21 A. Yes.

22 Q. -- were omitted from the second report, having appeared
23 in the first report. Would you know why they were
24 omitted or would somebody else -- would Mr McCrae know?

25 A. I'm not sure even Rob would know the details, other than
26

1 what's recorded in the email exchanges of that time, in
2 late May, when a decision was made to actually not
3 include them in 4B2 and not formally submit 4B2.

4 Q. But you don't know why there were changes?

5 A. I don't know why. And I can't add anything more than
6 what's in the email exchanges.

7 Q. Okay. Good. So that's that one out of the way.

8 There were, in those reports and in the emails, as
9 we know, we've seen, mention of how the concrete at the
10 top of the east diaphragm wall, following the change of
11 detail, should be poured, and we've got "at the same
12 time", "concurrently", "monolithically". Again, is that
13 something you were involved with at the time or is that
14 something you've only reviewed for the purposes of
15 giving evidence to the Commission?

16 A. I've only reviewed it for the purposes of giving
17 evidence.

18 Q. So again it's more likely that Mr McCrae, involved with
19 the reports at the time and the emails at the time, may
20 be able to shed some light on that for us rather than
21 yourself?

22 A. Without discussing it with him, I can't really answer
23 for him in that regard, but it's probably more likely.

24 Q. And also we know that Mr WC Lee wrote one of the key
25 emails --

26

1 A. Yes.

2 Q. -- and we'll obviously get the opportunity to discuss
3 that email with him at some point.

4 Good. All right. In the light of that, can I just
5 have one moment to see where we might get to.

6 Mr Blackwood, have you had any reason to consider in
7 detail PNAP 68?

8 A. No.

9 Q. Mr Blackwood, I think I'm right in suggesting that when
10 DAmS, as we know it, DAmS 310 was issued in August
11 2015 -- again, no contemporary knowledge of that issue
12 either?

13 A. I wasn't involved in that.

14 Q. You weren't involved in that either? All right.

15 Can I then just ask you a few questions about the
16 updating of working drawings and as-built drawings. In
17 terms of producing working drawings, that would be the
18 responsibility of Atkins team B -- team A?

19 A. Team A.

20 Q. And would Atkins team B have any involvement in the
21 production of working drawings?

22 A. They shouldn't have an involvement in the production of
23 them. They may have helped produce drawings for
24 Leighton to submit to reflect what they wanted to have
25 as a change incorporated into the permanent design, and
26

1 once that was accepted by MTRC and necessarily approved
2 by BD, it would go on the working drawings would be my
3 understanding.

4 Q. That's the general position. In terms of more specific,
5 again, with regard to the second change, which I'm not
6 looking at --

7 A. Yes.

8 Q. -- with you in detail, that was essentially
9 a contractor's generated design detail change. Who
10 would bear responsibility for producing the working
11 drawings in that situation?

12 A. For the second one, I question whether anybody generated
13 that one, to be honest. I don't think either team B or
14 team A generated that.

15 Q. Well, no. What happened was -- let's just assume, let's
16 make a couple of assumptions.

17 A. Okay.

18 Q. We've heard from the MTRC and Leighton witnesses that
19 that change was brought about by discussions by the
20 construction management team on behalf of MTR and the
21 construction management team of Leighton.

22 A. Yes.

23 Q. And so let's assume that that's how it came about.

24 A. Okay. Yes.

25 Q. What role, if any, do you believe Atkins should then
26

1 have played in producing some form of design, working
2 drawings or otherwise, given that situation?

3 A. What I would have expected in that situation, if the two
4 construction teams had agreed they were going to make
5 a change -- it would be really in Leighton's court to
6 actually initiate that process. They would have to
7 either submit a TQ, probably a TQ to team B, "We want to
8 change to this arrangement; can you give us supporting
9 information necessary to submit it to MTRC formally to
10 get agreement to that change?" That TQ, probably under
11 a CSF, would go to MTRC construction team, who in turn,
12 if they were happy with it, would submit it to the
13 design management team, who again, if they were in line
14 and happy with it, would engage team A to review and be
15 satisfied that it was okay.

16 If that change, if it was a minor thing, then maybe
17 it would just be issued as a DAmS and picked up in the
18 next issue of the working drawings that would go out.
19 If it was deemed to be a little bit more significant
20 than that, then there may be discussions with BD to
21 understand how it should be addressed, whether there
22 should be a BD amendment submission -- submission to BD
23 to get the amendment agreed. But whatever happens, if
24 it's accepted by MTRC, there should be at least a DAmS
25 issued, as I think you mentioned 310 before, would be
26

1 issued saying, "This is what you should be building
2 on site."

3 I think the key thing is when they are working
4 on site, they should have a record of what they're
5 actually building, and have drawings showing what they
6 should be building too. And we would have -- team A
7 might have a role in that DAmS issue and the
8 amendment -- any changes to the working drawings in that
9 process. But as I say, my understanding, that's
10 hypothetical just now.

11 Q. Okay. But assuming this consensus/agreement between MTR
12 and Leighton to have this change of detail at the top of
13 the east diaphragm wall, for Atkins --

14 A. Can I just understand, that's a consensus between the
15 construction teams?

16 Q. That's my understanding.

17 A. But you're not saying it's a consensus between the
18 design team --

19 Q. I'm not.

20 A. -- and everybody? Because I think you've got to be
21 quite distinct on that.

22 Q. And I thought I was.

23 A. Okay. I was just trying to clarify it.

24 Q. Absolutely. The construction teams, both MTR and
25 Leighton, which I think was the premise upon which I put
26

1 the situation, now, let's assume that that's the case.

2 A. Yes.

3 Q. As I understand it, you would say Atkins team B might be
4 involved in producing working drawings, but only in the
5 circumstances where Leighton had asked them to do so; is
6 that right?

7 A. Yes.

8 Q. Have I got this right: so far as the personnel in Atkins
9 team B are concerned, they wouldn't be based on site?

10 A. No. They would have to be advised that there was
11 a change that the contractor wanted to make. The
12 contractor has to indicate he wants to make that change,
13 because he has a responsibility to do that. Because the
14 contractor -- theoretically it might have been agreed --
15 in my understanding, it might have been agreed with the
16 construction team, but it would still be an issue that
17 would have to be started by the contractor to follow the
18 process, we said: Leighton team B, Leighton construction
19 management team; design management team, team A, and
20 then a decision made and what you do after that, whether
21 it's accepted or not.

22 Q. Right.

23 A. So that's why the process is so important. Everybody
24 gets to see what's going on, everybody gets on to the
25 same page, and there's nobody left out of the loop,

26

1 basically.

2 Q. What perhaps appears to have happened -- obviously we've
3 not quite got to the end of all the evidence yet -- but
4 what appears to have happened is nobody got that ball
5 rolling, nobody kicked it towards Atkins team B, and
6 therefore the process didn't seen start.

7 A. Again, based on the evidence I have seen and read,
8 that's my understanding of the situation, or my
9 interpretation, I should say, of the situation, that the
10 ball never got rolling and it was never picked up
11 on site, "Why is that not happening?"

12 Q. Yes.

13 A. There's a check and a balance. You need Leighton to
14 start it but you're also still building it, so you need
15 something that says, "What am I building to?"

16 Q. Yes. And even more so, I would imagine, you would
17 agree, Mr Blackwood, in circumstances where, as we know
18 now, the change is not uniform, that we've got certain
19 details in certain areas and other details in other
20 areas -- even more so that one is keeping tabs on what
21 is actually being constructed?

22 A. It certainly makes the as-built drawing production
23 easier if you've got a set of working drawings that are
24 up to date and record most of the changes you have.
25 It's a good foundation for the start.

26

1 Q. As I understand, it is really only earlier this year
2 that Atkins team B have been asked to participate in the
3 putting together of the as-built drawings?

4 A. We received an instruction basically from Leighton,
5 I think it was 12 June, to assist them with the
6 preparation of the as-built -- amendment drawings, as it
7 is at this stage.

8 Q. Finally from me, can I ask you to go to paragraph 99 of
9 your witness statement, please. We are in that part of
10 the statement, Mr Blackwood, where you are dealing with
11 the second change.

12 A. Yes.

13 Q. I just want to understand paragraph 99. You say:

14 "Typically, the process on site to address such
15 changed details would be dealt with by TQ or CSF."

16 As you've just mentioned.

17 "This could then have been reviewed and assessed and
18 a decision taken on whether it was minor and form part
19 of the final amendment submission or a separate
20 submission had to be made to BD. In either case a DAmS
21 or revised working drawing can be issued."

22 A point you've also made. Then you say this:

23 "The issue in this case is further complicated by
24 the change to the D-wall which would require
25 an amendment submission."

26

1 When you say a "change to the D-wall", are you
2 referring down to the trimming down of the concrete by
3 450 millimetres or so?

4 A. That's my understanding.

5 Q. With your experience in Hong Kong, is that something
6 that you take the view that an amendment submission
7 ought to have been made before it was instigated or
8 implemented?

9 A. Let me preface my response by saying I'm not
10 a structural engineer and I'm not particularly
11 experienced in the ways of the Buildings Department.
12 But, with my limited the knowledge, looking at it, it
13 seems a fairly minor change to the D-wall and I don't
14 think it really affected its structural ability to
15 perform its ultimate function.

16 But I believe, because of the nature of the work, as
17 I understand it from colleagues, you would need
18 an amendment submission. The question is whether you
19 need to do it before or you can do it in parallel, but
20 it was not raised or discussed at that time.

21 Q. Okay. And it's not something you feel comfortable about
22 taking a view on?

23 A. I'm not an expert in that area and it would be wrong to
24 give a view on it because it would be misleading, or
25 could be misleading.

26

1 Q. Understood. Right.

2 Thank you very much, Mr Blackwood. That's all

3 I have for you.

4 A. Thank you.

5 MR SO: No questions from China Technology.

6 Cross-examination by MR CHOW

7 MR CHOW: Mr Chairman, there are some questions from the

8 government.

9 Good afternoon, Mr Blackwood.

10 A. Good afternoon.

11 Q. My name is Anthony Chow and I represent the government.

12 Originally, I only had one or two questions for you

13 in relation to one specific issue, and that is whether

14 prior consultation with the Buildings Department is

15 required to effect the second change. Mr Pennicott has

16 covered one of my questions already, so I will just

17 concentrate on the next one. The relevant part of your

18 evidence is in paragraph 98.

19 Mr Pennicott has taken you to paragraph 99, but

20 before that, in paragraph 98, you also express a view on

21 whether the change was a substantial change.

22 The way I see how you arrange the contents into two

23 separate paragraphs, am I right to say that in

24 paragraph 98, when you talk about "not a substantial

25 change", you were only talking about the fact of

26

1 replacing the couplers with straight bars; right?

2 A. I think I was really referring to, essentially, the
3 change from the coupler arrangement to the straight
4 through-bars, and the consequences of that. It
5 performed a similar design intent, and on its own was
6 not, I believe, a significant change.

7 Q. I see. So paragraph 98 only refers to part of the
8 second change which involved replacement of couplers
9 with through-bars.

10 Now, subparagraph 98.4, when you say, "It need not
11 necessarily be submitted to BD, but this would be
12 a decision for the competent person ('CP') to make" --
13 now, this is the part I am not entirely clear as to what
14 you mean. Do you mean that for changes like replacing
15 the couplers with straight bars, because the nature is
16 not substantial, then the BD would give the final say to
17 the competent person as to whether prior consultation
18 would be required? Is that what you are trying to say?

19 A. Sorry, I'm not too clear on your question there.

20 I think what I was trying to suggest there was that,
21 in its own way, it's not a major change. It's a fairly
22 minor change; the design intent is not changed. The
23 scale might be quite significant, because of the extent
24 on the project, but it's the sort of thing, if it was
25 raised, then you would review the proposal and you would

26

1 obviously have a discussion between MTRC design
2 management and, if necessary, consult the competent
3 person to find out whether that should be made as
4 a submission to BD.

5 Does that answer your question? I'm not sure if
6 I interpreted it correctly.

7 Q. Right. So, in other words, for changes of this nature,
8 you express no view as to whether such change would
9 require prior consultation or acceptance by BD before
10 effecting the change; is that --

11 A. I think -- to follow on from the response I gave earlier
12 on the process, hypothetically, if it had come through
13 the process, I think it would have gone to design
14 management team, it would have gone to team A, and there
15 would have been some discussion, "What do we do with it?
16 Is it a significant enough change that we need to
17 consult with BD? Do we have to make a submission to
18 BD?"

19 I think you should recognise that in parallel with
20 what was actually happening on site, we had gone
21 a different way. We were making submissions to BD based
22 on a different detail, and clearly that's not a nice
23 position to be in. So I don't know -- I would have
24 thought that if we had that information at that time, we
25 would have been consulting and speaking to BD about it

26

1 and gone forward with the revised detail.

2 Q. Okay. Thank you very much, Mr Blackwood.

3 A. We seemed to depart at some point.

4 MR CHOW: I have no more questions for you.

5 Mr Chairman, I have no more questions.

6 CHAIRMAN: Thank you.

7 MR BOULDING: Nothing from MTR.

8 CHAIRMAN: Thank you.

9 MR SHIEH: Nothing from Leighton.

10 CHAIRMAN: Thank you.

11 Re-examination by MR CONNOR

12 MR CONNOR: Just very briefly then, if there are no other
13 questions for Mr Blackwood.

14 Mr Blackwood, thank you very much. Particularly
15 returning to the questions from the professor and in the
16 light of all of the review of documents that you've
17 carried out for the purposes of your statement to the
18 Commission and in preparation for today, I think you've
19 said quite fairly that the intent at the outset in
20 relation to complete separation of team A and team B did
21 become, as you put it, a little bit blurred because of
22 the circumstances which Mr Pennicott described to you.

23 A. Yes, that's correct.

24 Q. But I think from your evidence you distinguish that from
25 the idea of conflict of interest, which, I think your
26

1 evidence is, did not become blurred?

2 A. No, I don't believe that happened.

3 Q. Prior to the question being raised of you in relation to
4 the Commission of Inquiry, has it ever been suggested to
5 you that such a conflict of interest existed?

6 A. I'm not aware of any suggestion there.

7 Q. And as far as the process is concerned that you
8 described to the Commissioners, that is really
9 a safeguard for the purposes of ensuring that conflict
10 is avoided?

11 A. It's one of the safeguards or the safety nets that you
12 have, that team B reported to the design management team
13 in Leighton and team A reported to the design management
14 team in MTRC. They are both experienced and well aware
15 of what we were doing, basically, and therefore could
16 take a view if they saw anything that they thought was
17 unfair or was in conflict with their interests. As
18 I say, I don't think that was an issue.

19 Q. And having reviewed all of the papers that you have done
20 for the purposes of the Commission of Inquiry, are you
21 satisfied, largely, that the process intent has been
22 met?

23 A. I think in the main it has, and I think if you listen to
24 the evidence that's been given by other witnesses, they
25 seem to support that view as well, Mr Buckland in

26

1 particular, and also I think -- I seem to remember
2 Mr Chan did a similar thing.

3 I would also add that I don't think it was a factor
4 in the issues before the Commission just now, in terms
5 of the cutting of the rebar or the change that has been
6 made. It was not whether we were on team B and also
7 team A; I think that wasn't a factor.

8 MR CONNOR: Thank you very much. Unless the Chairman or the
9 professor has anything further.

10 Questioning by THE COMMISSIONERS

11 COMMISSIONER HANSFORD: Yes, I do. There's one area I'd
12 like to get your input on, you can help me with,
13 Mr Blackwood. This is about designers having site
14 presence or not.

15 A. Yes.

16 COMMISSIONER HANSFORD: In your paragraph 14, 14.1 and 14.2,
17 of your witness statement -- perhaps we can put it on
18 the screen, J59 -- you tell us in both of those that
19 team A was not required to supervise any of the site
20 works and only relied on information from MTR, and
21 team B did not have any on-site presence and relied only
22 upon information provided by Leighton?

23 Why was that?

24 A. It's a good question.

25 COMMISSIONER HANSFORD: Thank you!

26

1 A. It seems to be the process followed on MTRC projects.
2 It's slightly -- if I can digress a little bit -- when
3 we actually do the detailed design, we sit in the design
4 office with MTRC's design management team, with the
5 construction team, with members of their operations
6 team, to try to get an integrated design, but as soon as
7 construction starts, we have a design liaison
8 representative on site who is almost like a postbox back
9 to the design team in head office. I think it's a good
10 question, particularly for jobs as complicated as this
11 one, where you are likely to get change once you get
12 on site. I think in a simple job it probably works
13 quite well, but I think in projects where maybe there's
14 a degree of complexity or issues that may arise on site,
15 having some design support closer to site might be
16 something that could be considered in the future.

17 COMMISSIONER HANSFORD: That's helpful, because we're
18 certainly looking at what perhaps ought to be done in
19 the future.

20 A. Yes.

21 COMMISSIONER HANSFORD: But I'm still puzzled by how can the
22 designer be sure that his design intent is implemented
23 in the works if the designer has no visibility of what's
24 happening in the works?

25 A. I think you're totally reliant then on the drawings
26

1 being up to date and the construction being built
2 according to those drawings, and also that the quality
3 is there in terms of what's built. So you are dependent
4 on the supervision on site, both the contractor and also
5 the construction team on site supervising it.

6 COMMISSIONER HANSFORD: So, a little bit of a hypothetical
7 question, so forgive me --

8 CHAIRMAN: Sorry, I do apologise, I'm interrupting you --
9 I didn't quite get the answer there. Sorry, Peter.

10 COMMISSIONER HANSFORD: No, no.

11 A. In terms of ...?

12 CHAIRMAN: Well, how does the design team know that what in
13 fact is being constructed on site, especially in
14 a complex, hard-pressed construction -- how does that
15 design team know that it's being built according to the
16 design absolutely?

17 A. You don't know. You're reliant on the efforts of
18 others, basically. You are reliant on the site team
19 supervising it to ensure that it's constructed according
20 to your drawings, and obviously the contractor
21 constructing it to the quality that's specified and
22 shown on the drawings. But you don't have any visible
23 way of checking. There's not even an audit or
24 a monitoring thing where you go out and do -- I'll do
25 a quarterly or a monthly audit to see what you might do.

26

1 There's no requirement for that.

2 CHAIRMAN: No audit process at all?

3 A. No audit process, no.

4 COMMISSIONER HANSFORD: My hypothetical question to you was
5 going to be that if you were asked in future to carry
6 out this type of work and told -- and you will not have
7 a site presence, is that something you feel you could
8 comfortably do?

9 A. To be honest, I think we exercised the responsibilities
10 we had under our contract. What I'm saying -- whether
11 it's me or is it the right thing to do, could we improve
12 how we actually oversee and deliver those projects?
13 There are different ways you can actually do it, but
14 certainly that would be a good starting point, whether
15 it be people sitting on site or a design team sitting
16 on site so they can actually go and liaise more closely
17 with the construction and design management teams to
18 make sure you don't have a situation where something's
19 been built that you don't know about, it's easy for
20 people to go and say, "I want to do this, is that okay?"
21 That might be one thing, that is one option. The other
22 is you do routine audits. You go and you have
23 a specific requirement, "You must visit the site",
24 whatever you decide, it's once every week, once every
25 two weeks, once a month or whatever it is, and do

26

1 specific audits just to check on what's been built.

2 But the industry as a whole should be trying to be
3 better than that and that people work together and do
4 the job that they're supposed to be doing, basically.

5 COMMISSIONER HANSFORD: Yes. I'm interested in moving the
6 whole industry.

7 A. I think -- and to be fair, in this particular project,
8 I think MTRC were trying to move the industry forward.
9 They adopted a target cost contract, which -- they
10 recognised the risk and the complexity on the project,
11 particularly working within the operating railway
12 environment and the challenges that that might pose as
13 we moved into the construction phase. So they engaged
14 at an early stage with the contractors to try to find
15 the best way they would want to construct it so we would
16 try to minimise change once we got on site, which is
17 obviously a key challenge, or a key objective. I just
18 think that we need to be better at it. You know,
19 there's checks and balances and you put in more layers
20 of oversight but that just makes it less efficient.
21 It's just having -- doing what you're supposed to be
22 doing. And processes are important and you follow the
23 process, and I think maybe on one or two occasions here
24 we didn't follow the process.

25 COMMISSIONER HANSFORD: But nevertheless, on this project,
26

1 you were not required to have an on-site presence at
2 all; correct?

3 A. Not to supervise the works but we had design liaison
4 representatives on site who would be a vehicle for
5 liaising with the design teams back in the head office,
6 but not to supervise the works.

7 COMMISSIONER HANSFORD: Were you prevented from access to
8 the site?

9 A. No. I don't believe we were prevented. But it wasn't
10 a requirement to do it is what I'm saying.

11 COMMISSIONER HANSFORD: Okay.

12 A. And, you know, you've got to remember it's only one or
13 two people. They have a pretty heavy workload. So they
14 are not going out, swanning around, looking at what's
15 going on elsewhere. They're pretty demanding task.

16 COMMISSIONER HANSFORD: Thank you. That helps me.

17 CHAIRMAN: Good. Thank you very much indeed. You have been
18 of great assistance. Thank you. Your evidence is now
19 completed.

20 WITNESS: Thank you very much.

21 CHAIRMAN: Thank you for coming out.

22 (The witness was released)

23 MR CONNOR: Thank you very much, Mr Blackwood.

24 Subject to Mr Pennicott, the next witness is
25 Mr Wilson Sung who is not due to appear, by arrangement,

26

1 until after lunch, and I think there's also a little bit
2 of set-up that the solicitors for the Commission team
3 need to get underway for the PowerPoint presentation
4 that I mentioned earlier on.

5 So, subject to any views from Mr Pennicott or my
6 friends or yourselves, sirs, I would have thought it
7 might be a good time to rise and we might start with
8 Mr Sung as and when we are ready.

9 MR PENNICOTT: Sir, I thoroughly agree with that.

10 Sir, can I just mention so that everybody is aware:
11 Mr Sung was involved with Mr Blackwood in the
12 presentation to Prof Nethercot back in July. Whilst we
13 have not troubled Mr Blackwood with his part of the
14 PowerPoint presentation, we are going to trouble
15 Mr Sung. Indeed, whilst it might appear a bit lazy, for
16 which we apologise, we are actually going to ask Mr Sung
17 to, as it were, talk us through and give us
18 a presentation of the last five or six slides, I think
19 it's slides 13 to 18, which we understand will take
20 about 15 to 20 minutes. So that's our proposal.

21 He has no contemporary knowledge of matters in any
22 event. He wasn't engaged, I think, until sometime
23 earlier this year. However, he does have knowledge
24 about the design of the works itself and he can give
25 a good explanation by reference to the PowerPoint
26

1 slides.

2 I'm told one of the reasons we're doing this is
3 because the Commission's expert, Prof McQuillan, thinks
4 it would be good to have an explanation of those slides,
5 it would assist him and it perhaps would assist other
6 experts as well if that presentation is given.

7 So with that introduction, that's what's going to
8 happen after lunch.

9 CHAIRMAN: It's these documents here? (Indicating).

10 MR PENNICOTT: That's right, sir, yes.

11 CHAIRMAN: There's a fascinating one about three-quarters of
12 the way through:

13 "Step 2: Plaxis analysis".

14 Quite what "Plaxis" is, I don't know.

15 COMMISSIONER HANSFORD: I'm very much looking forward to
16 that part.

17 MR PENNICOTT: You're probably the only one who's going to
18 understand it.

19 CHAIRMAN: It looks very complex.

20 MR PENNICOTT: We are all going to have to be wide awake
21 this afternoon.

22 CHAIRMAN: Good. So we will break for lunch and return at
23 2.15.

24 MR PENNICOTT: Yes, sir. Thank you very much.

25 CHAIRMAN: Thank you.

26

1 (12.50 pm)

2 (The luncheon adjournment)

3 (2.19 pm)

4 MR CONNOR: Good afternoon, sir. Good afternoon, Professor.

5 The second witness for Atkins is Mr Wilson Sung. He is

6 Mr Chi Man Sung, and he will be giving -- Mr Wilson

7 Sung, good afternoon.

8 WITNESS: Good afternoon.

9 MR CONNOR: Would you please just confirm that you are

10 Mr Chi Man Sung?

11 WITNESS: Yes.

12 MR CONNOR: Also known as Wilson Sung?

13 WITNESS: Yes.

14 MR CONNOR: I think you are going to give your evidence in

15 Cantonese?

16 WITNESS: Yes.

17 MR SUNG CHI MAN, WILSON (affirmed in Puntì)

18 Examination-in-chief by MR CONNOR

19 MR CONNOR: Mr Sung, I think as we have seen from your

20 statement, you joined Atkins China in about July 2017?

21 A. Yes.

22 Q. You are the head of structures for Asia Pacific at

23 Atkins China Ltd?

24 A. Yes.

25 Q. Would you please have on the screen before you your

26 witness statement which you have prepared for the

1 purposes of this Commission, which is at J6/23. That
2 is, for the record, at page J4535.

3 You see that's the first page of your statement,
4 Mr Sung. Do you recognise that?

5 A. Yes.

6 Q. If you would be taken, please, to page J4541 of the same
7 bundle. That is page 7 of your witness statement, and
8 we see a signature there. Is that your signature?

9 A. Yes.

10 Q. Just for completeness, I think there's one attachment to
11 your witness statement, which appears at J4542. Thank
12 you. And if you move to page J4543, I think that is
13 your CV?

14 A. Yes.

15 Q. Would you please, just to complete the formality,
16 confirm that that witness statement, with its
17 attachment, represents your evidence to this Commission?

18 A. Yes, I confirm.

19 Q. Would you please confirm that what you say in your
20 statement is true to the best of your knowledge and
21 belief?

22 A. Yes, confirm.

23 Q. Just while we have your statement to hand, if we might
24 go back to it, please, at J4535. Thank you. I think
25 you confirmed -- if you would go to paragraph 3 of that
26 statement, which is on the same page at 4535, that you

1 became involved in the Hung Hom Station Extension under
2 the Shatin to Central Link Project in June 2018.

3 A. Yes.

4 Q. So your involvement is in very recent times?

5 A. Yes.

6 Q. And your role is to assist the contractor, Leighton, as
7 team B, in providing structural design support as
8 required?

9 A. Yes.

10 Q. If you move on, please, through your witness statement,
11 I think that what we find later on in your statement, at
12 page J4540, is some involvement that you had as covered
13 in paragraphs 36 to 39 in a presentation to Prof David A
14 Nethercot?

15 A. Yes.

16 Q. It is right, I think, that this is a presentation which
17 you gave obviously after June 2018?

18 A. Yes.

19 Q. And you gave that in your capacity as head of structures
20 in Atkins?

21 A. Yes.

22 Q. It was a presentation in which you co-presented with
23 Mr John Blackwood?

24 A. Yes.

25 Q. For the assistance of the Commission, if you might have
26 before you bundle J4 at page J3323, we see

1 a presentation set out there in PowerPoint form; is that
2 so?

3 A. Yes.

4 Q. Is this the PowerPoint presentation with notes which
5 form the presentation which you and Mr Blackwood gave to
6 BD?

7 A. Yes.

8 Q. Thank you. In particular, if you turn to page J3335,
9 you will see at that slide there is an opening title
10 slide headed "Modelling approach"; do you see that?

11 A. Yes.

12 Q. Is this the beginning of the section of presentation
13 that you gave?

14 A. Yes.

15 Q. Did that part of the presentation that you gave run up
16 to and include page J3340?

17 A. Yes.

18 Q. Thank you very much for that, Mr Sung. The reason for
19 taking you to that particular section is that when my
20 learned friend Mr Cheuk asks you some questions in just
21 a moment, I think he will want to ask you a bit more of
22 that, but I think you have now identified to the
23 Chairman and to Prof Hansford that part of the
24 presentation in which you were involved.

25 A. Okay.

26 Q. So thank you very much. I have no further questions for

1 you at this stage. But would you please stay where you
2 are. In a moment, my friend Mr Cheuk will ask you some
3 questions. Then he may well be followed by some other
4 of my fellow counsel in this room with some questions.
5 The Chairman and the professor may have some questions
6 for you during that section, or indeed at the end, or at
7 any time, and I'm sure you will do your best to assist.

8 A. Okay.

9 MR CONNOR: Thank you. Please stay where you are.

10 Examination by MR CHEUK

11 MR CHEUK: Good afternoon, Mr Sung. My name is Calvin
12 Cheuk, I'm one of the counsel for the Commission.
13 I will have some questions for you.

14 Is it correct that on 12 July 2018, you with
15 Mr Blackwood and Mr Wu went to the BD to do
16 a presentation to BD's then adviser, Prof Nethercot?

17 A. Yes.

18 Q. And probably Mr Connor has explained to you one of the
19 reasons why we would like you to be here today is really
20 to explain a bit more your presentation that you did on
21 that particular day.

22 A. Okay.

23 Q. We glimpsed through the slides, and one of the reasons
24 we ask you to be here is that the Commission's expert,
25 Prof McQuillan, would like you to explain a bit more in
26 detail so that it can be captured in the transcript

1 which he will be able to read in preparing his expert
2 report.

3 A. Okay.

4 Q. That's the background that the Commission will require
5 your assistance.

6 A. Okay.

7 Q. Being not any sort of engineer at all, when I went
8 through the slides, I can see a lot of things I don't
9 really understand, so please -- what I propose to do is
10 that I will let you run your own course, but I might
11 interject if I understand I have questions for you,
12 I might ask you to stop for a while and have one or two
13 questions. I don't anticipate it to be a lot.

14 A. Okay.

15 Q. Then, after your presentation, I might have some other
16 questions in relation to the preparation of as-built
17 records. That will be the overall structure of my
18 questions. Is that okay?

19 A. Okay.

20 Q. So I understand you have already given the PowerPoint
21 slides to the Commission, so there will be a lady
22 sitting over there who will be in control of the
23 PowerPoint slides. You can have your own course but you
24 might need to give the express direction to the operator
25 of the slides so that she can follow your instruction.

26 One last point I might -- if I may ask you to bear

1 in mind is that I can see a lot of technical language in
2 the slides.

3 A. Yes.

4 Q. So please, you can assume we don't understand those
5 technical language, and if you may, you might try to
6 assume that we don't know about it and try to take it
7 slowly.

8 A. Okay.

9 Q. If I may ask you to take that in mind.

10 A. Okay.

11 Q. I understand Mr Connor asked me to refer you to J3340.
12 That is the last page of your presentation.

13 A. Mm-hmm.

14 Q. I'm told it might be a good starting point for your
15 explanation. So feel free to start with that slide and
16 then you can change your course of presentation as you
17 wish to do so.

18 A. Okay, 我哋可以睇J3335, okay, 我嗰日就去到BD做presentation嘅時
19 間就會由呢張slide開始講起嘅。Okay, 其實喺我哋做工程入面, 其實...

20 Q. Wait. You can look at -- the screen in front of you,
21 that will be the screen that everybody in this room will
22 be following. So, while you have a hard copy next to
23 you, can you also bear in mind that we are looking at
24 the screen so if you can look at the screen and pause
25 there until the screen shows the right page, that would
26 be very helpful.

1 A. Okay, 好。我哋個presentation開始就係第一個到我講嘅時間就係講緊一
2 個我哋做一個structure modelling嘅approach。喺我哋做工程入面其
3 實有唔同嘅structure modelling嘅software, 喺呢個project入面,
4 我哋有利用到幾個software去做呢個structure嘅一啲simulation嘅。

5 我哋可以go to next page。首先其實喺EWL slab, 即係東西走廊
6 嗰塊樓板, 其實喺入面就有好多嘅opening。我哋睇番張圖, 我哋見到紅色
7 嘅位置其實就係嗰個樓板嘅表面嚟嘅, 呢個係一個平面圖嚟嘅。另外喺白色
8 嘅地方, 其實大家會見到其實係會有一啲叫做opening嘅, 因為喺EWL slab
9 會有唔同嘅結構會喺呢塊樓板度開窿, 包括可能有啲輦、escalator或者樓
10 梯。

11 因為喺個樓板度開咗窿之後, 就會對嗰個結構, 呢塊樓板嗰個stiffness
12 有影響嘅, 會減低咗個stiffness, 所以我哋要做一啲simulation去model
13 番呢個咁嘅effect, 所以我哋就利用咗一個叫做SAP2000嘅model, 係喺BD
14 亦都係一個approved嘅model嚟嘅。

15 喺呢個model入面, 我哋會先擺咗一啲loading落去, 擺咗一啲--上
16 面一行loading, 同埋擺咗一個--喺個bar--喺上面同下面都會放咗一個
17 support嘅。放咗之後, 我哋亦都會apply番一個我哋叫做unit moment
18 嘅reaction force落去。其實呢個reaction force其實--同埋一個
19 axial force落去, 有兩個axial--一個unit axial force, 一個unit
20 嘅moment force, 會擺番落呢個modelling入邊。

21 個用途其實就係想睇下喺under呢個咁嘅情--即係開咗窿嘅情況下之後,
22 呢塊樓板有咩嘢structural behaviour, 從而去搵番個stiffness出嚟。
23 呢個model主要就係做呢一件事嘅。

1 喺我哋area B同C入面，其實我哋斬開咗有五個model，因為根據個
2 chainage，就去睇番究竟唔同chainage嗰個時候，個樓板越開得窿多嘅
3 時間對個stiffness嘅影響就會越大嘅。

4 Q. You may carry on.

5 MR SHIEH: I'm sorry to interject but I heard what Mr Cheuk
6 said to the witness. Maybe others understand. I have
7 A Level physics but I had difficulty. As I said to
8 Leighton's own witness, perhaps I can say, "Imagine
9 explaining it to a five-year-old child", because
10 otherwise -- for example, those who have to physics
11 wouldn't know what "moment" means. I know but I don't
12 know whether others do.

13 CHAIRMAN: I would like to know.

14 COMMISSIONER HANSFORD: Sorry, while we're on this subject,
15 I have some questions on this slide. Is the intent that
16 we wait until the end of the whole presentation and go
17 back to our questions, or is the intent that we take
18 questions slide by slide? I'm asking you but maybe
19 I should be asking Mr Cheuk: which do you prefer?

20 MR CHEUK: I think it would be better if, Professor, you
21 have any questions just ask at the moment rather than
22 wait until at the end, because it might be difficult for
23 us to trace all the slides after we finish the whole
24 thing.

25 COMMISSIONER HANSFORD: Okay. That's fine. Perhaps we will
26 start with the Chairman and Mr Shieh's questions about

1 what a "moment" is.

2 MR CHEUK: Let me try to explain a little bit to this
3 witness first.

4 Mr Sung, thank you. Although I also have an A Level
5 in physics but I do also have difficulty understanding
6 everything. Can I ask you two points. First of all,
7 actually, what you say will be captured in the
8 microphone and then translated. There will be some
9 delay in translation. So if I may first ask you to slow
10 down.

11 A. Okay.

12 Q. Because I can see there's difficulty in translating
13 everything, in particular given the technical language
14 here. That's point number one, if I may ask you to bear
15 that in mind.

16 Point number two is that, again, as Mr Shieh has
17 indicated, if you can try to use even more simple
18 language to explain, and I might also interject to
19 explain my understanding to you, to see whether that can
20 help everybody.

21 A. Okay.

22 Q. I hope that might help everyone to understand what this
23 presentation really means.

24 A. Okay.

25 Q. Let's start from this first slide. As I understand it,
26 the red -- what we are looking at is a piece of EWL

1 slab?

2 A. Yes.

3 CHAIRMAN: From the top or the side?

4 MR CHEUK: From the top. From the top; is that correct?

5 A. Yes, correct.

6 COMMISSIONER HANSFORD: It's a plan view?

7 MR CHEUK: It's a plan view, yes. The red part is showing

8 the actual slab, and there's something empty, white

9 part, in the middle, which is an opening?

10 A. Yes.

11 Q. What you are telling us is that the slab contains

12 various openings at various locations, and these

13 openings will reduce the stiffness of the slab. What

14 this slide shows is using a computer software or

15 programme, SAP2000, to test or to try to simulate --

16 A. Simulate.

17 Q. -- the actual performance of the slab or its stiffness,

18 given there are some openings in the middle.

19 COMMISSIONER HANSFORD: Just on that point, when you were

20 talking about the openings, Mr Sung, you said they were

21 drilled. Were they drilled? I thought they were cast

22 in place. I thought the openings were made as part of

23 the original casting of the concrete rather than

24 drilled.

25 A. No.

26 COMMISSIONER HANSFORD: They are drilled, are they?

1 A. I think maybe a translation problem.

2 MR CHEUK: I think, Professor, your understanding is

3 correct, they were it is cast in place.

4 COMMISSIONER HANSFORD: That would make more sense to me.

5 A. Yes.

6 CHAIRMAN: And what's the blue line?

7 MR CHEUK: That I don't understand, frankly.

8 CHAIRMAN: And what's the little mauve line with a white

9 opening at the top?

10 A. 首先，個藍色個個其實係一個寫法，其實因為佢會--喺個model入面，佢哋

11 會set一啲--我哋叫做set一啲--我哋叫--我哋術語叫做呢啲“strip

12 width”嘅，其實會係定番每個strip width個個size。呢個藍色呢

13 個就係講緊個--其實都係同一塊EWL slab嚟嘅其實，就唔係話有咩

14 嘢特別，只不過嗰陣時我哋做presentation畀professor

15 Nethercot嘅時間就highlight番畀佢聽我哋會有鏢strip呢個咁嘅

16 approach，咁解。另外講到喺上面--sorry。

17 MR CHEUK: Sorry, can I stop you. What you are telling us

18 is the blue part is part of the slab?

19 A. 係。

20 Q. And you highlight that blue part was for the reference

21 of Prof Nethercot, but for what purpose?

22 COMMISSIONER HANSFORD: Yes, because the label says less

23 than 3 metres thick. It suggests to us that the red is

24 3 metres thick and the blue is less than 3 metres thick.

1 But is that correct?

2 A. 應該咁講，喺呢個樓板入面其實有部分嘅位置係唔--即係唔係全部都係3米
3 厚嘅，3 metre，3 metre deep嘅，如果呢個睇落去，喺呢度，我哋亦
4 都highlight咗...

5 COMMISSIONER HANSFORD: 3 metres thick, not wide; do you
6 mean "thick"?

7 A. Yes, the thickness.

8 COMMISSIONER HANSFORD: Sorry, it must be the translation
9 again. Okay.

10 MR CHEUK: Let me try to summarise your evidence.

11 A. Okay.

12 Q. Basically, the blue part is the location where the slab
13 thickness is less than 3 metres?

14 A. Yes.

15 Q. Otherwise, in general, the thickness should be 3 metres?

16 A. Yes.

17 Q. That's the distinction.

18 COMMISSIONER HANSFORD: And are there actually any areas
19 that are less than 3 metres? Is this just
20 representative in the model of some areas that may be
21 thinner than 3 metres? Is that the purpose of it?

22 A. 係，因為係頭先我哋有提過，其實喺成個area B同C，我哋會鏢開咗五部分，
23 亦都by chainage去鏢開，鏢開之後，就每一個都會去做一個assessment，
24 睇下究竟有opening嘅時間，同埋有啲地方係local係薄咗--塊slab係薄咗
25 嘅時間究竟對嗰個slab個structural behaviour有咩影響。

1 COMMISSIONER HANSFORD: Yes, I understand about the
2 openings, Mr Sung. I don't yet understand about the
3 sections that are less than 3 metres thick.

4 A. 因為有啲部分係佢結構上佢造唔到3米厚嘅，可能佢嗰嗰有個escalator上
5 緊嚟嘅時間，就個local會有啲chamber位，所以就會有啲位置就會唔夠
6 3米厚嘅。

7 COMMISSIONER HANSFORD: Okay. I understand. Thank you.

8 MR CHEUK: Okay, I think you can proceed with your
9 presentation. I think we've got a fairly good idea
10 about what the first slide means here.

11 COMMISSIONER HANSFORD: I think we've got a good idea about
12 the red and the blue and the white. I'm not sure people
13 in the room have a good idea about unit axial modes and
14 unit rotation yet.

15 MR CHEUK: Yes. I wonder, Mr Sung, if you could also
16 explain a little what does that mean as asked by the
17 professor.

18 A. Okay, 冇問題。我哋解釋下點解會有unit axial或者unit rotation先，
19 其實呢個--首先解釋番呢一個structural modelling其實個作用，我哋係
20 想搵番究竟呢塊slab嘅--應該咁講，我哋喺個support嘅位置個個
21 stiffness factor，我哋想知道究竟呢塊slab under呢個opening同埋
22 一啲loading嘅時間有啲咩stiffness factor會出現㗎，所以我哋其實
23 係需要apply--所以點解會apply一個unit axial，其實只不過想搵番個
24 spring，We need to find the spring, the rotational
25 spring and also the actual spring for the slab at the

1 support.

2 COMMISSIONER HANSFORD: I fear that I understand it but I
3 suspect others don't yet, what is meant by unit axial
4 and what is meant by unit rotational. That would be
5 my -- I can't speak for people in this room, but looking
6 at some nodding heads, I think that's the case.

7 MR CHEUK: Professor, frankly, I think it's difficult for
8 everybody in the room not in the engineering training to
9 understand all the details.

10 COMMISSIONER HANSFORD: So perhaps they don't need to is
11 what you're saying?

12 MR CHEUK: Yes. The original purpose of this presentation
13 is not really to do the usual cross-examination,
14 understanding all the details here.

15 COMMISSIONER HANSFORD: Okay.

16 MR CHEUK: The original purpose of this presentation is
17 really arising from Prof McQuillan's need to understand
18 these slides and what was the presentation done to
19 Prof Nethercot at that point of time.

20 That's why, originally, we didn't expect all the
21 laypersons, so to speak, to understand all the
22 intricacies, this thinking here.

23 COMMISSIONER HANSFORD: So, Mr Cheuk, shall we assume that
24 Mr Sung's audience have engineering degrees?

25 MR CHEUK: I would have thought many parties here have
26 already instructed experts. The purpose of this

1 presentation is to really give something for our
2 Commission's expert and their experts to consider. It
3 seems to me it's not the original purpose really to have
4 a lecture on civil engineering.

5 COMMISSIONER HANSFORD: No.

6 MR CHEUK: No. So what I propose -- of course I'm not going
7 to prevent any questions, if any party is interested in
8 all the engineering details. That's why we have him
9 here. If any party wishes to ask questions, they can.
10 But it's not the purpose to go through all the sort of
11 details so that it can be understood by all the
12 laypersons here. That would not be the original
13 purpose, and that would not be the purpose of this part
14 of cross-examination.

15 As I originally indicated, apart from a few
16 questions, I did not intend to have many questions on
17 Mr Sung.

18 COMMISSIONER HANSFORD: That's fine.

19 CHAIRMAN: All right. Can I ask you a question: what do you
20 mean by "stiffness"? I understand you've got a test.
21 I know what "stiffness" means. It either means a form
22 of rigidity or it means I can't move my muscles because
23 I got kicked in the leg; okay? I take it it's not the
24 latter. I take it it's the first one. Are you talking
25 about rigidity?

26 A. 其實rigidity同stiffness會係有相關嘅，其實stiffness就係其實係一

1 個數值，其實去justify嗰個--去或者quantify嗰個rigidity嘅。

2 CHAIRMAN: Ah, okay. That's interesting. Thank you.

3 MR CHEUK: Yes, Mr Sung, you may carry on.

4 A. Okay, 我哋去J3337, okay。頭先我哋step 1做咗一個modelling, 跟
5 住其實呢個就係一個step 2嘅modelling, 呢個會係一個我哋叫做Plaxis
6 嘅structural modelling software。

7 喺入面其實大家會睇到, 喺呢度就會--我哋會做一個simulation, 就
8 係東邊嘅diaphragm wall、西邊嘅diaphragm wall、EWL slab同埋NSL
9 slab都會擺咗喺入面嘅。呢一個modelling其實就喺坊間亦都會--我哋亦都
10 會愛嚟做埋個construction sequence, 去睇下究竟--因為呢個係一個--
11 紅磡站呢個project係一個我哋叫做top-down嘅construction method,
12 就先會做咗兩邊嘅diaphragm wall。

13 Q. Yes, can I pause you there. Can you explain in simple
14 terms, this Plaxis analysis, what is its purpose? Is it
15 also again to assess the rigidity or stiffness?

16 A. 呢個modelling主要就係話我哋要將--因為呢個--因為我哋呢個會係牽涉
17 一個excavation, 牽涉一個開挖, 所以喺呢個modelling入面我哋會有一
18 個--會入咗嗰個soil load, 即係個泥嘅力, 水...

19 Q. Soil load?

20 A. 係喇, soil load, 係喇, water load, 水嘅力, okay。咁under--喺
21 呢--有呢幾個嘅--有兩個嘅loading嘅時候, 喺一路做一個開挖嘅時間究竟
22 對呢個diaphragm wall究竟個behaviour做一個assessment。

23 Q. I try to summarise, if I can. Basically, this is again
24 a sort of computer modelling used to test the function

1 of diaphragm wall. So you put in the value of soil
2 load, water load, to simulate the actual soil situation,
3 and to see whether the diaphragm wall works as it was
4 designed. If it passed the software analysis, it means
5 that the design was probably good. That's the purpose
6 of this Plaxis analysis; is that a good summary?

7 A. 係，係，同埋如果okay咗，亦都會個diaphragm wall我哋都會做一個
8 reinforcement嘅checking。

9 Q. Also we see there are different colours of layers of
10 soil here. As I understand, it represents different
11 kinds of soil underground. For example, at the very
12 below, we see something pink. That might be some -- the
13 deepest layer of the ground.

14 A. The bedrock.

15 Q. Where the diaphragm wall sits on.

16 A. 係。

17 Q. You might need to speak up so your voice can be
18 captured.

19 A. Okay.

20 Q. After that you have the purple part of the soil. What
21 is that part of the soil?

22 A. 如果我有記錯，呢個位應該我哋叫做CDG，completely decomposed
23 granite。

24 Q. Decomposed?

25 A. “Decomposed”，yes，“decomposed”。

1 Q. Completely decomposed granite, yes. I don't think
2 I need to trouble you to identify each layer but my
3 understanding is that at the top those particles will be
4 most refined, and at the bottom those soil particles
5 will be most solidified. Is that a fair
6 representation --

7 A. 係。

8 Q. -- in general terms?

9 A. General terms。

10 Q. Please carry on.

11 A. 喺呢個model, 我哋做完呢個analysis之後, 我哋會--因為其實喺個
12 diaphragm wall東西牆嘅, 同埋EWL同埋NSL slab嘅個connection,
13 其實我哋係design咗一個fixed joint嘅, 所以喺呢個model考慮咗soil
14 load同埋water load之後, 我哋要將番呢一個fixed end moment, 喺個
15 connection嗰個moment就抽番出嚟, 就要for第三個step, 我哋做個slab
16 assessment嘅時候愛嚟用嘅。

17 Q. Yes. And --

18 COMMISSIONER HANSFORD: It might be helpful -- although we
19 don't need a full explanation, it might be just helpful
20 to understand what "moment" means. I know what it means
21 but I think it's probably an important term for others
22 to understand.

23 A. 或者我簡單啲講, 當我哋有一個物件會郁嘅時間, 其實佢哋就會--我哋會
24 bend嘅, 會bend咗一件物件嘅時間, 就有一個力嘅度嘅, 我哋如果喺

1 engineering term, 呢個力我哋就解釋為bending moment。

2 COMMISSIONER HANSFORD: Thank you.

3 MR CHEUK: Please -- so again, as I understand your

4 evidence, because the EWL connection with the diaphragm

5 wall was a fixed joint --

6 A. Yes.

7 Q. -- so there is a need to understand the turning/bending

8 force of that joint, whether it can resist the loading

9 or the bending force. So this is also part of the

10 purpose of this Plaxis analysis; is that correct?

11 A. Yes, yes.

12 Q. Please carry on.

13 A. Okay, 我哋可以去到J3338, 呢個就會係一個--又係一個plan嚟嘅, 一個
14 平面圖嚟嘅, 呢個就會係喺EWL slab一個平面圖, 其實同頭先你見到一樣,
15 白色嘅地方就係呢個EWL樓板上面一啲嘅opening, 頭先我哋喺Plaxis出
16 咗嚟嘅, 頭先講嗰個bending force其實都會喺--你見到喺頂同埋喺底,
17 我哋就會apply番個頭先喺Plaxis出嚟嘅bending force就會擺番上去呢
18 個safe model。

19 咁點解會做呢個safe model呢? 因為呢個先會係將所有喺呢個EWL
20 slab上面嘅loading就按usage擺番上去, 另外就要按番頭先喺Plaxis
21 出嚟嘅個bending force擺番上去, 就做呢塊EWL slab樓板嘅analysis。

22 Q. Again, I will try to summarise your evidence. First of
23 all, before I summarise, is it correct that we see the
24 gridline 26 to 33, that corresponds to gridlines --

25 A. Yes.

1 Q. -- of the project? Secondly, what we are looking at
2 here is again the EWL slab --

3 A. Yes.

4 Q. -- with some other openings, and we see some black-line
5 arrows here. These black-line arrows are the moment
6 force that you talked about; is that right?

7 A. From Plaxis.

8 Q. From Plaxis analysis. You obtained those moment force
9 values from the Plaxis analysis and then apply it to
10 another computer model called SAFE, to this particular
11 piece of slab, to see again the performance of that
12 particular slab was corresponding with the design or
13 not. Again, if it passes, it means that the design was
14 okay?

15 A. Yes.

16 COMMISSIONER HANSFORD: And can I ask, was this particular
17 location, gridlines 26 to 33 -- was this selected
18 because it's a worst-case, because it's got so many
19 large openings; is that the reason?

20 A. No. Actually, for area B and C, the whole station has
21 model.

22 COMMISSIONER HANSFORD: This is just sample?

23 A. Extract some area for presentation only.

24 COMMISSIONER HANSFORD: Right. So this process was applied
25 to the whole slab?

26 A. Yes.

1 COMMISSIONER HANSFORD: But in the presentation to David
2 Nethercot you just presented this part?

3 A. Yes. Extract some area for presentation only.

4 COMMISSIONER HANSFORD: By way of example. The reason you
5 presented this was an example of what you'd done
6 elsewhere; is that correct?

7 A. Yes. Yes.

8 COMMISSIONER HANSFORD: Thank you.

9 MR CHEUK: But not the worst-case scenario?

10 A. I'm not sure but I don't think so. Just an example.

11 Q. Please carry on.

12 A. Okay, 可以去J3339, 呢個係一個--其實係一個summary table嚟嘅,
13 呢個summary table入面其實就係解釋咗喺紅磡站呢個project入面我
14 哋所有嘅load case, 我哋行內叫“load case”, 即係究竟有啲咩嘢
15 loading會喺呢個站入面發生, 其實分別就會dead load、live load、
16 seismic load、uplift、soil load、water load, 其實好多嘅
17 loading都會喺入面出現到嘅。

18 後面見到其實就會見到一路會有啲1.4、1.6或者1.76其他factor,
19 呢啲我哋行內就叫做“load factor”。Load factor其實就要同個
20 load case做一個叫做load combination, 做完呢個load
21 combination之後, 先會做我哋一個叫做“ultimate limit stay
22 design”嘅。

23 Q. Again I try to summarise your evidence. Basically this
24 is a table which summarises the load to be applicable to

1 the slab and the diaphragm wall.

2 A. Yes.

3 Q. We probably don't need to go into the details of each
4 loading information. Please carry on.

5 COMMISSIONER HANSFORD: Actually, I'm happy for Mr Sung to
6 carry on, but I think we ought to just briefly
7 understand load factors and load cases.

8 MR CHEUK: Yes.

9 A. Okay, 好, load case其實就係我哋叫做--可以咁講, 我哋可以叫做
10 working load, 即係actual load, 究竟喺Code of Practice或者
11 喺Buildings Ordinance我哋需要用啲乜嘢嘅loading, okay。

12 Load factor其實係亦都會係under Code of Practice我哋需
13 要喺on top of load case之後去apply一個load factor for唔同
14 嘅load case, 例如我哋for dead load, 我哋就會用1.4嘅load
15 factor, live load就會用1.6。亦都喺Code of Practice亦都定義
16 咗究竟個load combination係需要點樣去做一個combination。

17 COMMISSIONER HANSFORD: So these are directly from the Code
18 of Practice?

19 A. 係, yes。

20 COMMISSIONER HANSFORD: Thank you.

21 CHAIRMAN: And when you say 1.4 or 1.6, what measurement are
22 you using?

23 A. This factor is also come from the Code of Practice.
24 Actually, in different countries have different load
25 factors.

1 CHAIRMAN: I appreciate that. I'm just thinking 1.4 ounces?

2 1.4 mega pressures sideways? I just don't know the --

3 COMMISSIONER HANSFORD: 1.4 times.

4 MR CHEUK: It's a safety factor, as I understand.

5 CHAIRMAN: 1.4 times what?

6 A. Times個load case, times個load case。

7 COMMISSIONER HANSFORD: Let me check I've got this right.

8 So the load case is stated in terms of units of load,

9 and the load factor is a multiplication?

10 MR PENNICOTT: It's a multiplier.

11 CHAIRMAN: Okay, it's a multiplier for units of load.

12 A. Yes. Load factor is the multiplier.

13 CHAIRMAN: Thank you.

14 MR CHEUK: Can we go to the left. Can we take one example

15 so that everybody can have some idea.

16 For example, "SDL" at the top left-hand corner,

17 "SDL1", what does that mean?

18 A. SDL, 我哋行內叫做superimposed dead load。

19 Q. Superimposed dead load. What "dead load" usually refers

20 to, for example, is the concrete structure --

21 A. Self weight, maybe.

22 Q. -- itself, the dead load. Self weight.

23 For example, the fourth column, "COLDL", what does

24 that stand for?

25 A. 因為呢塊EWL slab其實上面仲有一啲column喺上--support某一啲

1 column嘅，呢啲column嘅loading就係油咗呢個“COLDL”，即係column
2 嘅dead load。

3 Q. Ah, column dead load.

4 A. 或者喺後面有column live load咁樣，去反映番。

5 Q. The next column we can see, it says "COL", which means
6 column, and "LL" means live load?

7 A. Yes.

8 Q. For example, in terms of first row, "U1", what does that
9 stand for?

10 A. 呢個係一個我哋assign咗一個load combination嘅名畀佢，頭先我哋講
11 我哋會做一炸嘅load combination，其實每一個我哋喺個modelling入
12 面會assign咗一個名稱畀佢。

13 Q. Basically it's a label for some combination of loading
14 that you or Atkins adopted to test the structure?

15 A. Yes.

16 Q. And there are various combinations of such loading and
17 each one, you would give it a label?

18 A. Yes.

19 Q. For example, U1, U2, U3, U4?

20 A. Yes.

21 Q. That's all the combinations of loading?

22 COMMISSIONER HANSFORD: Sorry, when you say to test the
23 structure, you mean to model?

24 A. Yes, to model the structure.

25 MR CHEUK: To model the structure.

1 For example, we see the first top left-hand corner,

2 1.4, is that --

3 A. Load factor.

4 Q. -- the load factor you mention?

5 A. Yes.

6 Q. Thank you. Okay.

7 Shall we move on?

8 A. Okay, 我哋可以去J3340, 喺呢張slide, 其實就我哋睇到有幾個部分, 綠
9 色嘅部分就係我哋而家講緊東西邊嘅東同埋西邊嘅diaphragm wall, 喺呢
10 兩個綠色嘅diaphragm wall嘅中間, 我哋會見到有兩個, 一個EWL slab,
11 下低亦都會見到有NSL slab嘅, okay。

12 灰色嘅部分其實就係--例如我哋睇番喺3米嗰個字嘅左手邊, 其實見到
13 亦都會有啲existing嘅structure, 呢個灰色嘅就係existing structure
14 嚟嘅其實, 綠色就係新造嘅, 新建嘅。

15 呢一個亦都你見到左手邊同右手邊有啲打橫嘅箭咀, 其實亦都係講緊一
16 啲我哋會apply嘅loading嘅方向, 即係呢邊橫--lateral load就會係一
17 啲soil load同埋water load。

18 Q. So we see on the right -- I'll try to summarise it --
19 this is entitled "Critical load case".

20 A. Yes.

21 Q. Basically, in this slide, it's considering some more
22 important loading situation?

23 A. Yes.

24 Q. On the right-hand side, we have 1.4 and then "(soil plus
25 water load)". The 1.4 is a load factor that you

1 previously mentioned.

2 A. Yes.

3 Q. And soil load and water load, ie those forces exerted by
4 soil and water on the structure?

5 A. Yes.

6 Q. Then plus 1.4 DL, that's dead load?

7 A. Yes.

8 Q. Then plus 1.6 LL, that is the live load?

9 A. Yes.

10 Q. It's the critical load combination at the support. So
11 basically you say the force calculated here is use 1.4
12 times a soil load and water load, plus 1.4 times the
13 dead load, plus 1.6 times the live load?

14 A. Yes.

15 Q. Then you apply all this combination of forces to the
16 structure and to see how it performs?

17 A. 應該咁講，我哋其實--頭先load combination，其實應該係頭先嗰
18 張slide我哋有好多個load combination，只不過係from我哋做完
19 assessment之後我哋見到個critical load case就應該係有1.4
20 soil加water load加1.4 dead load加1.6 live load。

21 COMMISSIONER HANSFORD: So what I'm taking from this --
22 please tell me if I've got it right -- is you've
23 modelled various combinations and from that modelling
24 you've identified that this is the worst-case?

25 A. Yes.

1 COMMISSIONER HANSFORD: You call it critical load case, but
2 in layman's language this is the worst-case?

3 A. Yes.

4 COMMISSIONER HANSFORD: Consequently, if it works for the
5 worst-case, it must work for everything else; is that
6 the theory?

7 A. Yes.

8 MR CHEUK: Can you also explain the second bullet point on
9 the right-hand side -- it says:

10 "Soil water load and dead load dominate the bending
11 moment, which contribute more than 90 per cent in area B
12 and area C."

13 A. Okay, 呢度其實就係話例如--我舉個例, 如果我哋出咗嚟個bending
14 moment, 最大個bending moment, let' s say 1,000嘅, 其實due
15 to soil、water load同埋dead load, 就係喺呢1,000入面已經佔咗
16 900, 剩番10%先係由live load contribute嘅。

17 Q. I see. I will try to summarise again. What your
18 analysis results is that in areas B and C, over
19 90 per cent of the loading comprises soil/water load and
20 the dead load. The remaining 10 per cent is what we
21 call live load.

22 A. Yes.

23 Q. And what live load usually comprises is, for example,
24 the weight of passengers?

25 A. Yes.

1 Q. And the weight of the train; does that include the live
2 load?

3 A. Yes.

4 Q. So what this shows is that the critical loads are not
5 the live load, but the soil, water and dead load?

6 A. Yes.

7 Q. Thank you. Can you move on, if you have --

8 A. 呢度應該係最後一張slide，我當日做presentation講嘅。

9 Q. I also understand that -- there's one question I would
10 like to ask you is that you probably have knowledge that
11 the 3 metre slab consists of the top mat and the bottom
12 mat of rebars?

13 A. Yes.

14 Q. One suggestion that came out in the documents I read is
15 that the bottom mat was the compression zone, ie the
16 expected force in that part of the slab was compression
17 rather than tension?

18 A. Yes.

19 Q. Is that correct?

20 A. Yes.

21 Q. In other words, those rebars at the bottom mat in that
22 zone actually do not take any loading, because rebars
23 only take tension but not compression; is that your
24 understanding?

25 A. 如果喺compression zone--可以咁講，喺compression zone，主要嘅
26 compression都會係靠concrete去contribute，應該全部都係靠

1 concrete去contribute嘅，但係因為喺code requirement入面，其實
2 喺你--就算你唔需要配一個compression rebar，但係你都需要喺--要配
3 番50% of你嘅tension reinforcement。其實個背後嘅含意，其實呢個
4 喺個code入面，我哋喺叫做一個叫ductility section入面有講嘅，其實
5 嗰個含意其實我哋嘅understanding，就係因為due to呢個seismic嘅考
6 慮，所以其實就唔可以話個compression rebar唔需要，即係...

7 Q. I see. So, if I try to understand your evidence, it's
8 that the rebars at the bottom mat was there for the
9 purpose of taking seismic load, rather than the normal
10 tension?

11 A. 應該咁講，應該係一個我哋叫做detailing requirement。

12 Q. As required in the code?

13 A. 係，yes。

14 Q. That I understand, as required in the code. I think
15 everybody accepted that. But I was wondering the
16 rationale behind this code, as you understand it. As
17 I understand your evidence, the rationale of this code
18 is really for seismic loading, rather than the normal
19 tension and compression in ordinary cases. Is that
20 correct?

21 A. 但係如果呢一個其實就係喺code入面嘅ductility嘅section已經有提及
22 過嘅，其實我哋自己understanding，我哋就會覺得係--因為我哋自己有
23 時會做一啲國內嘅project，會有啲seismic嘅地方嘅project，其實都
24 有類似嘅requirement嘅。呢個requirement其實就係--我哋認為就係

1 一個seismic嘅時間，你會有啲reverse bending需要配一個--但係當然
2 呢個會係一個detailing requirement rather than去計數出嚟要幾多
3 鐵，係喇。

4 Q. As I understand from your answers, you are agreeing with
5 my proposition, right; the bottom mat's purpose, as you
6 understand, was really to take the seismic load? Or you
7 are not sure?

8 COMMISSIONER HANSFORD: Mr Cheuk, I think what Mr Sung is
9 telling us is the bottom reinforcement is to comply with
10 the code.

11 MR CHEUK: Yes.

12 COMMISSIONER HANSFORD: And the code may be required for
13 seismic loading but it may be required for other things
14 as well.

15 MR CHEUK: Yes.

16 COMMISSIONER HANSFORD: I'm not quite sure that's a question
17 for this witness.

18 MR CHEUK: Yes. That's why I understand he might not be
19 completely can tell us the purpose of that code
20 requirement.

21 COMMISSIONER HANSFORD: Maybe that's a question for the
22 experts when we get there.

23 MR CHEUK: Yes, certainly.

24 If I can go to -- this is the PowerPoint slide
25 number 9. I understand there's an animation originally
26 prepared at the time of presentation.

1 A. Yes.

2 Q. Can we show the PowerPoint slide number 9.

3 Look at the screen. Actually, it shows the
4 construction sequence.

5 A. Yes.

6 Q. Can we go through that so that it might help everybody
7 to understand the construction sequence in this case.

8 A. Okay.

9 Q. This is, I suppose, step 1 --

10 A. Yes.

11 Q. -- originally, before -- the grey part was the existing
12 structures.

13 A. Yes.

14 COMMISSIONER HANSFORD: And the green part?

15 MR CHEUK: There's already some green part. What are those
16 green parts?

17 A. 其實係一啲drafting嘅--因為我哋用番一張係已經有permanent
18 structure綠色嘅地方去做，所以其實就變咗好似有啲綠色嘅窿，應該喺呢
19 一個stage嘅情況係應該所有嘢都係existing嘅。

20 COMMISSIONER HANSFORD: So why is it in green? It's just
21 a colour code; it's not significant? Everything on this
22 slide is existing?

23 A. Yes.

24 COMMISSIONER HANSFORD: Okay. Thank you.

25 MR CHEUK: Can we move to the next -- yes.

- 1 A. Okay, 呢個step就係其實見到就左手邊--即係東牆--東邊嘅diaphragm
2 wall同右手--同western嘅diaphragm wall都做咗, 亦都中間--我哋亦
3 都會有一啲叫做barrette嘅foundation亦都會做咗先嘅。
- 4 Q. Pausing here, can you tell us which part is the
5 barrette?
- 6 A. 中間嗰個--Next to grid N, on the left-hand side of
7 grid N.
- 8 Q. Can you tell that colour by reference to gridline?
- 9 A. Gridline N, the left-hand side.
- 10 Q. The left-hand side of gridline N, that's the barrette?
- 11 A. Yes.
- 12 Q. And how about the three other green structures?
- 13 A. 喺左手邊最遠嗰個其實係一啲--我哋叫做一啲socket H嘅春嚟嘅。跟住然後
14 喺K1線...
- 15 Q. Socket H-pile?
- 16 A. Socket H steel pile。喺K1線嗰個就係diaphragm wall。
- 17 Q. And how about -- okay.
- 18 COMMISSIONER HANSFORD: Just so that I can understand it --
19 forgive me asking so many questions -- so what we're
20 seeing here is the two diaphragm walls, the eastern one
21 and the western one, a barrette in the middle --
- 22 A. Yes.
- 23 COMMISSIONER HANSFORD: -- and a socket H-pile, which is
24 a steel pile --
- 25 A. Yes.

1 COMMISSIONER HANSFORD: -- on the left-hand side of the
2 western diaphragm wall; is that --

3 A. Yes.

4 COMMISSIONER HANSFORD: So those are the four elements we
5 see here?

6 A. Four vertical elements.

7 COMMISSIONER HANSFORD: The four vertical elements that have
8 been constructed at this stage?

9 A. Yes.

10 MR CHEUK: Next.

11 A. Okay, 呢個因為係一個top-down嘅method, 我哋其實就會做完diaphragm
12 wall之後, 其實就會先做咗個--先挖--我哋會excavate到去EWL slab個底,
13 個soffit, 跟住就會做咗一個EWL slab。

14 Q. In documents we came across the level minus 0.5mPD.
15 That is the level that the soil should be excavated to,
16 in order to construct this EWL slab.

17 A. Yes.

18 Q. That will be slightly below the soffit of the EWL
19 slab --

20 A. Yes.

21 Q. -- in order to provide space --

22 A. Working space.

23 Q. -- for workers, for the construction?

24 A. Yes.

25 Q. Also, as I understand from the documents, the method of
26 excavation at this stage is what we call open-cut, ie,

1 basically, you are just digging out the soil from above;
2 there's no need to dig out any tunnels or anything in
3 assistance of the excavation.

4 A. 唔需要，因為其實本身個diaphragm wall已經好stiff，其實開始你先掘
5 咗去個EWL嘅soffit，即係當然挖多些少就for working space，其實都
6 係喺個modelling嘅時間，我哋analysis嘅時間都睇到係okay嘅，所以先
7 會掘到落去。

8 Q. Okay. Next, please.

9 COMMISSIONER HANSFORD: So, at this stage, everything below
10 the --

11 A. EWL slab.

12 COMMISSIONER HANSFORD: -- EWL slab is unexcavated soil?

13 A. Yes.

14 COMMISSIONER HANSFORD: Thank you, yes.

15 MR CHEUK: That's why it's called the top-down approach?

16 A. Yes.

17 Q. Okay.

18 A. 跟住個sequencing就係挖到--做完EWL slab，其實呢個EWL slab其實就
19 會--其實一個function，喺呢個top-down個operation入面就會係一個
20 propping嚟嘅，我哋叫一個propping system。跟住就會再掘落去。其實
21 呢張slid其實我哋--其實中間仲有個intermediate stage嘅，但係呢度
22 就有show，因為我哋純粹想show個sequence。就會一路會掘掘，一路會
23 excavate down to去番NSL個soffit level，跟手就會做埋NSL嘅
24 casting, concrete casting。咁--sorry，咁其實中...

1 Q. Pause there first. Can I ask this question: after you
2 finish the NSL slab, we can see the slab would join
3 together the east diaphragm wall and the west diaphragm
4 wall, so this EWL slab will form a strut?

5 A. Yes.

6 Q. This strut is a necessary component or element to
7 facilitate the further excavation down into the soil, in
8 order to construct the NSL slab?

9 A. Yes.

10 Q. So, after the completion of this EWL slab, what the
11 workers need to do is to further excavate the soil all
12 the way down to the soffit of NSL slab?

13 A. Yes.

14 Q. And again, slightly below that soffit, in order to
15 provide working space; is that correct?

16 A. 呢個case應該就可以--正常呀，正常我哋應該就可以cast against個soil
17 去做嘅，唔需要特登，就有working space。

18 Q. So the working space will be none or very limited?

19 A. Very limited.

20 Q. Then, after the excavation down to NSL soffit, workers
21 can start to construct the NSL slab?

22 A. Yes.

23 Q. Just like the situation of the EWL slab?

24 A. Yes.

25 Q. Then you can see, after this process, what we can see is
26 on the screen. We have the two diaphragm walls, and in

1 between we have -- on top we have the EWL slab and then
2 you have the NSL slab.

3 COMMISSIONER HANSFORD: Sorry, the slide keeps flicking.

4 Can we stop at that point? That's it.

5 Sorry, so again, just to make sure that I'm clear
6 and everyone's clear. At this point, after the NSL slab
7 is cast, then beneath the NSL slab is unexcavated soil?

8 A. Yes.

9 COMMISSIONER HANSFORD: And between the NSL slab and the EWL
10 slab is an open box?

11 A. Yes.

12 COMMISSIONER HANSFORD: Right. Okay.

13 MR CHEUK: Please carry on.

14 A. Next stage。Please, okay, 呢一張, 去到呢個stage, 其實就係講緊--
15 頭先講過, 灰色其實係existing的column、structure嚟嘅, 其實因為--
16 你見到其實我哋會用番EWL slab, 會做一個轉換, 做一個transfer, 就去
17 support番喺灰色呢個existing structure嘅columns。

18 Support咗之後, 我哋就會將原先喺EWL同埋NSL嘅空間入面嘅原先個
19 支--嗰個structure就會demolish佢嘅。

20 Q. Okay.

21 COMMISSIONER HANSFORD: So, at this point, the load from
22 above, the existing load from above, goes down into the
23 EWL slab and gets transferred across --

24 A. Yes.

25 COMMISSIONER HANSFORD: -- and then down into the diaphragm

1 walls?

2 A. Yes. Yes.

3 MR CHEUK: And at this point the EWL slab's function is
4 similar to a transfer plate?

5 A. Yes.

6 Q. Okay. Next.

7 A. 跟住就係會做埋其他嘅結構。

8 Q. That will be the easy part.

9 A. Yes. Yes.

10 MR CHEUK: I think that's the end of the construction
11 sequence. Thank you for your explanation.

12 COMMISSIONER HANSFORD: Sorry, can we just go back one
13 stage, one more -- right, okay. Now take us on a stage,
14 one more stage, go forward a stage -- that's it -- and
15 now one more. No, no, no, forward. The next one.
16 Right.

17 This is the OHE slab, is it?

18 MR CHEUK: OTE, over track exhaust.

19 COMMISSIONER HANSFORD: The OTE that we see being created.
20 So that's created at that stage, and then we've got this
21 discussion regarding monolithic detail, but perhaps
22 we will come to that later.

23 MR CHEUK: I should clarify, that was the original design
24 intent.

25 A. Yes.

26 MR CHEUK: But not the actual happened on the site.

1 COMMISSIONER HANSFORD: Okay.

2 MR CHEUK: I think that's all I need you to --

3 COMMISSIONER HANSFORD: Actually, sorry -- forgive me, I've
4 got all the questions -- what is the purpose of the
5 H-pile to the left? What is its purpose?

6 A. 呢邊--其實左手邊其實佢仲有其他新建嘅結構需要做嘅，所以就要做一啲新
7 嘅piling，新嘅foundation，其實同--就有同紅磡站有一個關係嘅其實，
8 即係冇同EWL--即係diaphragm wall嗰邊有任何connection，其實。
9 The left-hand side piling is only for some new structure.

10 COMMISSIONER HANSFORD: So adjacent to the Hung Hom Station
11 there's other works going on?

12 A. Yes.

13 COMMISSIONER HANSFORD: And the purpose of the H-pile is to
14 support that?

15 A. Yes.

16 COMMISSIONER HANSFORD: Okay.

17 MR CHEUK: Thank you for your presentation. I will now just
18 go very briefly to a separate topic.

19 In your witness statement, J6/4540, you deal with
20 the as-built construction details here, from
21 paragraphs 31 to 35.

22 A. Yes.

23 Q. Can I first ask you -- you mentioned about the joint
24 statement by Leighton and MTRC produced on around
25 16 November 2018.

26 A. Yes.

1 Q. Were you involved in that exercise?

2 A. 可唔可以問清楚嗰個問題?

3 Q. Yes. Were you involved in the exercise of producing the
4 joint statement by Leighton and MTRC and the drawings
5 attached to that statement?

6 A. 個drawing嘅preparation就會由我哋負責，但係個joint statement，
7 我哋就有同禮頓或者MTRC有任何溝通、參與嘅。

8 Q. And were you personally involved in those drawings, in
9 preparation of those drawings?

10 A. 有。

11 Q. Now, those drawings were prepared on the instruction of
12 Leighton; correct?

13 A. Yes.

14 Q. And given to team B?

15 A. Yes.

16 Q. If we can turn up those drawings: B19/25515.

17 A. Okay.

18 Q. Were you involved in the preparation of this drawing?

19 A. Yes.

20 Q. Again, the next page, 25516, were you also involved?

21 A. Yes.

22 Q. If we look at 25515, we see it sets out four types of
23 construction joint details.

24 A. Yes.

25 Q. For example, if we look at type 1, basically it says

1 "Existing couplers and rebars to be removed". We see
2 the annotations there; can you see that, at the very
3 top?

4 A. Yes.

5 Q. Then we see also another annotation, "Concrete to be
6 hacked off and recast with slab"?

7 A. Yes.

8 Q. Okay. This was the change that you might have
9 understood by now, what we call the second change.

10 A. Yes.

11 Q. But what I don't see here is -- it talks about the
12 process, including hacking off concrete, but what it
13 doesn't show is the result or product of this process;
14 for example, at the end, how many layers of rebar are
15 there at the top of this diaphragm wall.

16 A. 因為呢四個係一啲typical sections嚟嘅，如果要睇番究竟有幾多rebar
17 喺個top reinforcement嘅話，應該就要refer番一啲叫做slab
18 reinforcement drawing。

19 Q. I see. That will be included in the subsequent pages;
20 do I understand correctly?

21 A. Yes.

22 Q. That will show all the construction details which was
23 the product of all the changes can be located in those
24 subsequent pages?

25 A. Yes.

26 COMMISSIONER HANSFORD: Do we have them here? Are they in

1 this bundle? Can we just see one typical one?

2 MR CHEUK: Can we see -- Mr Sung, I wonder if you can help
3 us --

4 A. Okay.

5 Q. -- on this. Do you have a hard copy in front of you?

6 A. Yes.

7 Q. For example, if you want to see how many layers
8 eventually were constructed in relation to type 1, where
9 can we find it?

10 A. Please go to 25552. 首先，我哋要睇咗呢個我哋叫做coupler
11 schedule嘅drawing，呢個coupler schedule drawing就會specify
12 咗究竟每一塊panel用緊邊一隻cup嘅connection detail。

13 Q. Yes. Can you help us a little bit more? It's not
14 absolutely clear, as we can see on the screen.

15 For example, there are some drawings on the
16 right-hand side -- would that help you?

17 A. You can refer to the table, the right column, the
18 right-most column on the table.

19 COMMISSIONER HANSFORD: The left-hand side.

20 MR CHEUK: Yes.

21 A. 左手--右手邊--左手邊。我哋講第一個column--第一個table，其實你見
22 到去到最耐個column係有“type”嘅，呢個type就要refer番前面個
23 typical section嘅，係喇。

24 Q. So if we look, for example, at the first table, on the
25 left-hand side, and the last column, it is the type --

1 A. Yes.

2 Q. -- that we have seen, which includes type 1, type 2,
3 type 3, type 4?

4 A. Yes.

5 Q. And these types are referable to the two sheets that we
6 have seen?

7 A. Yes.

8 Q. Then, if we want to know, for example, type 1, how many
9 layers of rebars were there, we can check against this
10 table, and that will be shown -- for example, next to
11 the type we see "Bottom", and then next to the bottom we
12 see "Top"?

13 A. Yes.

14 Q. Those number of layers will be recorded?

15 A. 呢個table只會show到個coupler嘅數目。如果頭先好似你睇番第一行，第
16 一行你見到“Top”，其實應該係冇咗嘅，“N/A”，N/A 嘅話，即係代表佢
17 冇--即係將所有coupler都remove咗，變咗straight bar，係喇。你見到
18 “Bottom”，其實係應該冇郁過嘅就，係喇。

19 Q. We see it's empty.

20 CHAIRMAN: Sorry, the little cloud, like from a kids' book,
21 what does that stand for? That stands for "not
22 applicable"?

23 A. No, no, no. The cloud just shows the change compared to
24 the previous drawings.

25 MR CHEUK: It shows no couplers, through-bar?

1 COMMISSIONER HANSFORD: No, no.

2 A. No, I think the cloud in engineering is that we show
3 the change between this version and the previous version.

4 CHAIRMAN: That shows the change.

5 COMMISSIONER HANSFORD: So what you are telling us, Mr Sung,
6 is the cloud is a form of highlighting?

7 A. Yes. Highlight the change.

8 CHAIRMAN: And the little triangular sign which looks like
9 something you put down if your car breaks down?

10 A. This is the revision number. For every drawing, when
11 we update the drawing, we need to update the revision.

12 COMMISSIONER HANSFORD: So the cloud is highlighting the
13 change and the triangle is identifying the revision
14 number --

15 A. Yes.

16 COMMISSIONER HANSFORD: -- where that change has been made?

17 A. Yes.

18 COMMISSIONER HANSFORD: Okay.

19 MR CHEUK: So that's the way we can locate and identify the
20 final as-built construction details, as from this set of
21 drawings --

22 A. Yes.

23 Q. -- Atkins helped to prepare on the instruction of
24 Leighton recently, in recent months?

25 A. Yes.

26 Q. The last question I have for you is, according to your

1 experience, is this a normal way to prepare as-built
2 drawings?

3 A. 應該咁講，有某啲嘅activity係需要冇as-built drawing嘅，即係例如
4 我哋做foundation，foundation我哋如果做完之後，我哋都需要入番一
5 個as-built嘅record畀番屋宇署嘅。

6 Q. It's my fault. We are at cross-purposes. As
7 I understand from your witness statement, during the
8 course of preparation of these as-built drawings, you
9 relied on some site photos and some other
10 drawings/sketches provided by Leighton; correct?

11 A. Yes.

12 Q. I am wondering, is this normal practice to rely on these
13 materials instead of, you know, having contemporaneous
14 updated drawings to start with?

15 A. 應該咁講，正常係應該唔會係呢--即係咁--即係唔會係咁樣做番轉頭，應該
16 係一個continuous process去update番一啲我哋喺地盤遇到一啲可能--
17 會可能有啲改動，應該係一個continuous process嚟嘅，係喇。

18 Q. And the normal process, as I understand your evidence,
19 is that it should start contemporaneously, at the time
20 of the changes?

21 A. Yes.

22 Q. Then you continue to update those changes as time goes
23 along?

24 A. Yes.

25 Q. And at the final stage, you don't need to go

1 retrospectively to check all the photos and other
2 records in order to reconstruct everything?

3 A. Yes.

4 Q. That should be only some miscellaneous updating by the
5 time of the final stage?

6 A. Yes.

7 MR CHEUK: I have no further questions.

8 CHAIRMAN: Does anybody have any questions?

9 MR CHOW: Mr Chairman, I have a few questions for Mr Sung,
10 but I promise I won't ask anything about the SAP2000 or
11 Plaxis analysis or any of the load cases. I'm sure all
12 my learned friends in this room won't need any further
13 education on these topics.

14 Cross-examination by MR CHOW

15 Q. Good afternoon, Mr Sung. I have just one or two
16 questions. What I'm interested in is -- one of the
17 issues that interests the government is on the question
18 of whether the changes made to the top of the east
19 diaphragm wall require prior consultation of BD before
20 the execution of the works.

21 Now, I see that in paragraph 26 you apparently
22 provide some expert opinion on this matter. So can
23 I just quickly take you to that particular paragraph.

24 A. Okay.

25 Q. Bundle J, page 4539, please. We've got it.

26 Here you say, on the basis of the two sketches that

1 you have been provided by Lo & Lo -- perhaps it is
2 useful for us to quickly go to have a look on the two
3 sketches. Bundle J1, page 8.

4 The first sketch shows the original design --

5 A. Yes.

6 Q. -- where we see some couplers and some horizontal
7 reinforcement on top of the east diaphragm wall, and the
8 EWL slab and the OTE slab on each side of the wall were
9 to be connected through the couplers; right?

10 A. Yes.

11 Q. Then turn over the page, page 9. This is a different
12 arrangement which involved replacing the couplers with
13 straight bars and also trimming down part of the
14 diaphragm wall; right?

15 A. Yes.

16 Q. So this is the deviation that you are talking about in
17 this paragraph.

18 Then you go on to say:

19 "In my experience, the design principles do not
20 change as it is a substitution of couplers for straight
21 through reinforcement bars which would not change the
22 behaviour of the joint connection between diaphragm wall
23 and slab. However, I understand there was also a change
24 to the as-built diaphragm wall ..."

25 Pausing here, the change to the as-built diaphragm
26 wall that you refer to is the trimming down of part of

1 the completed diaphragm wall; is that right?

2 A. No, 呢個係我哋講--我嘅witness statement其實係想講話如果你哋打
3 低咗D-wall, 就會對個diaphragm wall有改動, 對一個as-built嘅
4 diaphragm wall有改動。

5 Q. Okay. So that is basically when I meant earlier.

6 Then you said:

7 "... and this would normally be a minor amendment
8 which for a non-instrument of exemption project should
9 normally be submitted to BD for approval and consent."

10 Now, here, when you refer to "non-instrument of
11 exemption", am I right to take it that you refer to the
12 usual private building projects governed by the
13 Buildings Ordinance?

14 A. Yes.

15 Q. So, for those projects, this sort of changes or works to
16 be carried out to a built diaphragm wall, although you
17 consider as a minor amendment, but you would still need
18 to make submission to the Buildings Department and
19 obtain consent?

20 A. Yes.

21 Q. And before the execution of the work; am I correct?

22 A. Yes.

23 Q. Okay. What I'm interested to further explore with you
24 is the next sentence. You go on to say:

25 "However, as the project had an IoE, provided that
26 the structural stability was not affected ..."

1 Now, here you mention about structural stability not
2 being affected. Is it because of what is provided for
3 in the practice note for the authorised person ADM-19?

4 A. ADM-19? No. 唔係。

5 Q. Perhaps to help you -- it's worthwhile to go to have
6 a look at the PNAP ADM-19, bundle H20, page 40065.

7 The reason why I refer you to this practice note is
8 because Leighton's witnesses referred to this practice
9 note as the basis for saying that the changes that we
10 are now talking about do not go to impact on the
11 stability of the structure, and for this reason, because
12 of a procedure implemented by the Buildings Department,
13 that sort of change does not require prior approval and
14 consent of the Buildings Department.

15 A. Foundation係冇呢個ADM-19嘅，即係foundation嘅改動係唔納入呢個
16 ADM-19。

17 Q. Right. I'm glad that you agree with me. So do you
18 agree with me that the changes now -- the changes that
19 have been made to the top of the east diaphragm wall
20 would be, as far as you are concerned, considered as
21 a change made to the foundation?

22 A. Yes.

23 Q. And because of that, any leeway allowed for by the
24 Buildings Department under this practice note would not
25 apply?

1 A. 當然。

2 Q. Thank you. Then can you explain what you were trying to
3 say at the last part of paragraph 26, where you say:

4 "... contest would not be required and it would be
5 normal to consult with BD as to the change and it would
6 be at the discretion of the CP when this amendment
7 submission would be submitted."

8 A. Okay, 我最後呢句嘅意思其實就係我understanding, 喺一個
9 consultation project, 就唔需要擺consent嘅, 只要acceptance,
10 即係BD accept咗你個drawing, 你就可以開工做嘢嘅。所以如果呢個case
11 如果in case有一個咁嘅改動, 其實亦都係一個好normal嘅channel, 就
12 會同番個BD嘅officer去討論番究竟呢一個改動需唔需要做一個formal嘅--
13 即係究竟我哋意思做amendment究竟你做一個diaphragm wall嘅minor
14 amendment㗎, 定係需要做一個A&A work嘅submission。即係因為如果
15 normal project如果under Buildings Ordinance, 如果我哋如果有
16 啲類似嘅情況, 其實呢啲case 我哋需要做番一個A&A嘅submission嘅,
17 rather than一個diaphragm wall嘅amendment。

18 Q. And for this we would expect the consultation would be
19 carried out before the execution of this amendment, is
20 that right, or the execution of the alteration work?

21 A. Before or after?

22 Q. Before.

23 A. 如果呢個case, 我會覺得呢個case係應該同番BD consult咗, okay咗之
24 後, 即係入番先做嘅。

1 CHAIRMAN: Sorry, what's "A&A"?

2 A. Addition and alteration work.

3 MR CHOW: Thank you very much, Mr Sung, I have no more
4 questions for you.

5 MR SHIEH: Consequential upon questions made by Mr Chow,
6 I may have a question or two for Mr Sung.

7 CHAIRMAN: Yes.

8 MR SHIEH: I must preface my question by this observation.
9 Mr Sung is a witness from Atkins, as a concerned party,
10 Mr Sung is not here as an independent expert. Mr Chow
11 skilfully slipped in the words "expert opinion" into his
12 characterisation of Mr Sung's evidence.

13 Now, I wish to preface my question by saying that
14 what I now question this witness on could well
15 ultimately be a matter for expert witnesses, but
16 consequential upon Mr Chow's question I must lay down
17 a marker by putting our position. The rest is a matter
18 of submissions at the end of the day.

19 CHAIRMAN: Yes. I think I should say I certainly haven't
20 accepted the evidence of this witness as being expert
21 evidence. He's obviously a knowledgeable person, but
22 a great many witnesses are knowledgeable without being
23 experts, and the way I have read it is that he's here to
24 explain these diagrams, which may be of use to the
25 experts who will perhaps later be called. I hope
26 that --

1 MR SHIEH: Yes, that is extremely helpful, but as I said,
2 consequential upon the way in which the government has
3 sought to spin the questions --

4 CHAIRMAN: Yes, of course.

5 MR SHIEH: -- I promise to be extremely short, and by way of
6 laying down a marker only.

7 CHAIRMAN: Good.

8 Cross-examination by MR SHIEH

9 MR SHIEH: Mr Sung, you talked about works being done to
10 foundation.

11 A. Yes.

12 Q. Can I ask you to look at bundle C35, page 26577. That
13 is a Code of Practice for Foundations issued by the
14 Buildings Department; do you see that?

15 A. Yes.

16 Q. Are you familiar with this document?

17 A. Yes.

18 Q. Can I ask you to look at 26585. There we see the
19 definition of "Foundation":

20 "That part of a building, building works, structure
21 or street in direct contact with and transmitting loads
22 to the ground."

23 Do you see that?

24 A. Yes.

25 Q. Can I ask you then to turn to one of the slides that we
26 have been looking at, in bundle J4, maybe 3340.

1 You see the two green vertical structures with
2 circles; do you see those?

3 A. Yes.

4 Q. Those are the diaphragm walls; correct?

5 A. Correct.

6 Q. They go all the way down to the bottom, where they touch
7 soil?

8 A. 或者bedrock。

9 Q. Or bedrock.

10 A. Yes.

11 Q. Yes. And somewhere along the way there is the NSL slab;
12 do you see that?

13 A. Yes.

14 Q. And above that we have the EWL slab; correct?

15 A. Correct.

16 Q. Where the trimming down or hacking off took place was
17 really within the circles, correct, or near the top of
18 the circles; correct?

19 A. Yes.

20 Q. I would suggest to you that that part of the diaphragm
21 wall where the hacking took place was not part of the
22 foundation; do you accept that?

23 A. 唔同意，因為其實喺你做一個approval嘅時間或者acceptance嘅時間，
24 喺BD出嗰封acceptance嘅信入面其實已經identify咗呢個係乜嘢種類嘅--
25 係foundation㗎，定係superstructure嘅。我哋睇番其實喺呢個case，

1 喺diaphragm wall嚟講，其實喺BD批--即係我哋叫批則信，或者咁簡單，
2 個批則approval letter入面其實已經寫咗呢個係一個foundation嘅
3 element嚟嘅。

4 Q. That is your answer; right?

5 A. Yes.

6 MR SHIEH: Chairman and Professor, as I said, my question
7 arose simply because of the way Mr Chow put a question.

8 CHAIRMAN: Yes.

9 MR SHIEH: I'm not yet fully prepped by way of testing the
10 evidence by way of expert testimonies so I hope I have
11 laid down an adequate marker so it can't be said that we
12 haven't actually picked up that point, but I've got the
13 answer, I've put it, the rest could well be a matter for
14 when the real experts come into the picture.

15 CHAIRMAN: Of course. Thank you.

16 MR BOULDING: Sir, we have no questions for this witness.

17 CHAIRMAN: Yes.

18 Anything further?

19 MR CONNOR: Thank you very much, sir. I have no further
20 questions by way of re-examination of Mr Sung, subject
21 to any final questions that you, Mr Chairman, or you,
22 Professor, might have.

23 COMMISSIONER HANSFORD: I've asked all my questions, thank
24 you.

25 MR CONNOR: Thank you very much.

26 CHAIRMAN: Thank you very much, Mr Sung.

1 One thing I should mention to you, and I'm sure you
2 know this, but to be an expert witness you have to meet
3 certain criteria and be there for a certain purpose.
4 It's no denigration of your very admirable
5 qualifications, all right, that you are not qualified as
6 an expert in this particular set of proceedings.

7 WITNESS: Okay. I understand.

8 CHAIRMAN: Thank you.

9 (The witness was released)

10 MR CONNOR: Thank you, Mr Sung.

11 MR PENNICOTT: Sir, that's it for today, as far as I'm
12 aware.

13 CHAIRMAN: Yes.

14 MR PENNICOTT: So far as tomorrow is concerned, there are,
15 I believe, three witnesses: Mr Lee from Atkins, WC Lee;
16 and then programmed in are the two witnesses from Pypun,
17 Mr Mak and Mr Yueng. So those are the three witnesses
18 that we have tomorrow, and I'm reasonably confident that
19 we will accomplish those three witnesses tomorrow as
20 well.

21 CHAIRMAN: Good. Thank you.

22 I would mention -- I hope that counsel has already
23 advised you -- but I will have to leave a little earlier
24 tomorrow.

25 MR PENNICOTT: Yes, I have mentioned it to some people but
26 not others, sir, sorry.

1 CHAIRMAN: I have at 5.30, tomorrow -- Mr Jat, are you --

2 MR JAT: Yes.

3 MR SHIEH: Me too.

4 CHAIRMAN: So I can join him in my excuse.

5 COMMISSIONER HANSFORD: Is this a Christmas party?

6 CHAIRMAN: There's a pre-trial review for a Securities and
7 Futures matter in Central, and that was set down some
8 time ago and we haven't been able to move it. It's at
9 5.30, but obviously one needs to be there before 5.30,
10 if possible, so working on the basis that it takes about
11 35 to 40 minutes to properly get there and then to have
12 a good look at the papers, I would look to adjourning at
13 4.30 tomorrow, if that's satisfactory.

14 MR PENNICOTT: Yes, sir. Thank you very much.

15 CHAIRMAN: My apologies again, but this was something
16 already marked in the diary a good time ago.

17 MR JAT: I'm sure Mr Chairman will find that the costs for
18 Mr Benjamin Yu to wait for us is going to be more
19 expensive than all of us here.

20 MR SHIEH: Mr Yu can't defend himself here, that's the real
21 joy of it.

22 MR JAT: That's why I said it!

23 CHAIRMAN: Thank you very much indeed. 10 o'clock tomorrow
24 morning. Thank you.

25 (3.52 pm)

26 (The hearing adjourned until 10.00 am the following day)

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