OPUS 2 INTERNATIONAL

Grenfell Tower Inquiry

Day 50

October 8, 2020

Opus 2 International - Official Court Reporters

Phone: +44 (0)20 3008 5900

Email: transcripts@opus2.com

Website: https://www.opus2.com

| 1 | Thursday, 8 October 2020 | 1 | | excess of what the budget was, so something needed to be |
|--|---|--|----|--|
| 2 | (10.00 am) | 2 | | changed. |
| 3 | SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to | 3 | Q. | Yes. |
| 4 | today's hearing. Today we're going to begin by hearing | 4 | | Now, can we go, then, to the status report for the |
| 5 | further evidence from Mr Booth of Artelia . | 5 | | TMO that Artelia produced in April 2013. This is |
| 6 | So could you ask Mr Booth to come in, please. | 6 | | {ART00009101}. |
| 7 | MR PHILIP BOOTH (continued) | 7 | | Now, bearing in mind the date of 23 April 2013, is |
| 8 | Questions from COUNSEL TO THE INQUIRY (continued) | 8 | | it right that this was produced pretty much at the |
| 9 | SIR MARTIN MOORE-BICK: Good morning, Mr Booth. | 9 | | moment you were joining the project? |
| 10 | THE WITNESS: Good morning. | 10 | A. | Yes, it was. |
| 11 | SIR MARTIN MOORE-BICK: Ready to carry on? | 11 | Q. | But are you familiar with this status report? |
| 12 | THE WITNESS: Yes. | 12 | A. | I am. |
| 13 | SIR MARTIN MOORE-BICK: Good, thank you very much. | 13 | Q. | Can you help us, who drafted it? |
| 14 | Yes, Ms Grange. | 14 | A. | Robert Powell. |
| 15 | MS GRANGE: Good morning, Mr Booth. | 15 | Q. | Right. And can you recall when you first read it? |
| 16 | A. Good morning. | 16 | A. | It was when you know, around the time it was issued. |
| 17 | Q. I want to start this morning by asking you some | 17 | | It was part of the it was a good document, actually, |
| 18 | questions about the decision to re-procure the project | 18 | | for bringing me up to speed as to where the project was, |
| 19 | that happened in 2013. | 19 | | because it articulated, you know, the position of |
| 20 | We know when you started on the project, you started | 20 | | where you know, it was a status report as of the |
| 21 | in April 2013. Were you aware that Artelia's cost | 21 | | status of the project as of April 2013, so |
| 22 | estimates at that stage were in excess of the TMO | 22 | Q. | Yes. |
| 23 | budget? | 23 | | If we turn on to page 5 {ART00009101/5}, in the |
| 24 | A. Yes, I was. | 24 | | second paragraph, we can see why the report's been |
| 25 | Q. And were you aware that Leadbitter's cost estimates were | 25 | | created. It says there: |
| | 1 | | | 2 |
| | 1 | | | 3 |
| 1 | even further in excess of the TMO budget? | 1 | | "It has been generated, because progression of the |
| 2 | A. Yes, I was. | 2 | | scheme has been extremely slow since before the |
| 3 | Q. If we just look at paragraph 45 of your first witness | 3 | | beginning of 2013 and there are obvious indications that |
| 4 | statement, if we can go to $\{ART00008527/10\}$, you say | 4 | | the scheme as it stands remains outside the parameters |
| 5 | this: | | | |
| 6 | | 5 | | set for the project relating to time and cost, which |
| | "Although I had limited direct interaction with | 5 6 | | set for the project relating to time and cost, which continues to hamper progress." |
| 7 | | | | |
| 7 8 | "Although I had limited direct interaction with | 6 | | continues to hamper progress." |
| | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was | 6 7 | | continues to hamper progress." So we get that there. |
| 8 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they | 6 7 8 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet |
| 8 9 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for | 6 7 8 9 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that |
| 8 9 10 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." | 6 7 8 9 10 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: |
| 8 9 10 11 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you | 6 7 8 9 10 11 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: •" Client brief has been allowed to develop in a |
| 8 9 10 11 12 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity | 6 7 8 9 10 11 12 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: "Client brief has been allowed to develop in a piecemeal fashion over time; |
| 8 9 10 11 12 13 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with | 6 7 8 9 10 11 12 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: ·" Client brief has been allowed to develop in a piecemeal fashion over time; ·" Absence of a controlled and managed scope for the |
| 8 9 10 11 12 13 14 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? | 6 7 8 9 10 11 12 13 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: '" Client brief has been allowed to develop in a piecemeal fashion over time; '" Absence of a controlled and managed scope for the project; |
| 8 9 10 11 12 13 14 15 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. | 6 7 8 9 10 11 12 13 14 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: ·" Client brief has been allowed to develop in a piecemeal fashion over time; ·" Absence of a controlled and managed scope for the project; ·" Late commitment to a defined construction |
| 8 9 10 11 12 13 14 15 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap | 6 7 8 9 10 11 12 13 14 15 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: "Client brief has been allowed to develop in a piecemeal fashion over time; "Absence of a controlled and managed scope for the project; "Late commitment to a defined construction budget." |
| 8 9 10 11 12 13 14 15 16 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap between Artelia's cost analysis and Leadbitter's costs | 6 7 8 9 10 11 12 13 14 15 16 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: "Client brief has been allowed to develop in a piecemeal fashion over time; "Absence of a controlled and managed scope for the project; "Late commitment to a defined construction budget." Et cetera, and there are a number of factors there |
| 8 9 10 11 12 13 14 15 16 17 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap between Artelia's cost analysis and Leadbitter's costs was narrowing? | 6 7 8 9 10 11 12 13 14 15 16 17 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: '" Client brief has been allowed to develop in a piecemeal fashion over time; '" Absence of a controlled and managed scope for the project; '" Late commitment to a defined construction budget." Et cetera, and there are a number of factors there that are mentioned. |
| 8 9 10 11 12 13 14 15 16 17 18 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap between Artelia's cost analysis and Leadbitter's costs was narrowing? A. It was, yes. | 6 7 8 9 10 11 12 13 14 15 16 17 18 | | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: '" Client brief has been allowed to develop in a piecemeal fashion over time; '" Absence of a controlled and managed scope for the project; '" Late commitment to a defined construction budget." Et cetera, and there are a number of factors there that are mentioned. Did you have any view at this time that you read |
| 8 9 10 11 12 13 14 15 16 17 18 19 20 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap between Artelia's cost analysis and Leadbitter's costs was narrowing? A. It was, yes. Q. When you joined the project you've said you were | 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 | A. | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: '" Client brief has been allowed to develop in a piecemeal fashion over time; '" Absence of a controlled and managed scope for the project; '" Late commitment to a defined construction budget." Et cetera, and there are a number of factors there that are mentioned. Did you have any view at this time that you read this about those contributory factors? Did you agree with them? |
| 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap between Artelia's cost analysis and Leadbitter's costs was narrowing? A. It was, yes. Q. When you joined the project you've said you were aware of these discrepancies between the budget and | 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | Α. | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: '" Client brief has been allowed to develop in a piecemeal fashion over time; '" Absence of a controlled and managed scope for the project; '" Late commitment to a defined construction budget." Et cetera, and there are a number of factors there that are mentioned. Did you have any view at this time that you read this about those contributory factors? Did you agree with them? |
| 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap between Artelia's cost analysis and Leadbitter's costs was narrowing? A. It was, yes. Q. When you joined the project you've said you were aware of these discrepancies between the budget and Leadbitter's and Artelia's cost estimates did you | 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 | A. | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: '" Client brief has been allowed to develop in a piecemeal fashion over time; '" Absence of a controlled and managed scope for the project; '" Late commitment to a defined construction budget." Et cetera, and there are a number of factors there that are mentioned. Did you have any view at this time that you read this about those contributory factors? Did you agree with them? Well, obviously I was just coming on to the project, and |
| 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap between Artelia's cost analysis and Leadbitter's costs was narrowing? A. It was, yes. Q. When you joined the project you've said you were aware of these discrepancies between the budget and Leadbitter's and Artelia's cost estimates did you think the TMO could afford the project as things stood | 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 | Α. | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: '" Client brief has been allowed to develop in a piecemeal fashion over time; '" Absence of a controlled and managed scope for the project; '" Late commitment to a defined construction budget." Et cetera, and there are a number of factors there that are mentioned. Did you have any view at this time that you read this about those contributory factors? Did you agree with them? Well, obviously I was just coming on to the project, and so I had no reason not to believe them, because I had no |
| 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 | "Although I had limited direct interaction with Leadbitter my impression of them as a contractor was that they were not open or transparent about how they had built up their figures in their costs estimate for the Project." So you say that there. But is it right, and did you understand at the time, that Ms Lim, the quantity surveyor for Artelia, was working closely with Leadbitter at this time? A. Yes. Q. Is it right that, as a result of her work, the gap between Artelia's cost analysis and Leadbitter's costs was narrowing? A. It was, yes. Q. When you joined the project you've said you were aware of these discrepancies between the budget and Leadbitter's and Artelia's cost estimates did you think the TMO could afford the project as things stood at that time? | 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 | Α. | continues to hamper progress." So we get that there. Then in the middle of this page we see in bullet point form a summary of the contributory factors to that situation, and we can see there: "Client brief has been allowed to develop in a piecemeal fashion over time; "Absence of a controlled and managed scope for the project; "Late commitment to a defined construction budget." Et cetera, and there are a number of factors there that are mentioned. Did you have any view at this time that you read this about those contributory factors? Did you agree with them? Well, obviously I was just coming on to the project, and so I had no reason not to believe them, because I had no experience of anything other than what was being |

2

3

4

5

6

7

Q. I understand.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

23

24

25

Then if we go on to page 18 {ART00009101/18} of this report, at the bottom of the page, immediately above the numbered list, we can see that it says:

"Whilst it is expected that prices to be received from either Higgins or Lakehouse may improve upon those submitted to date by Leadbitter, there would need to be some significant work to align all the figures and to determine if this course might give better value."

Then it says:

"Whilst this exercise is still underway, Appleyards would suggest this is not a viable option, for the following reasons ..."

Then if you can see, a number of reasons are given as to why in this report it was said it was not a viable option to effectively get others to pitch in for the project or tender for the project.

We can see at 1:

"[Project QS] project costs maintain that the overall cost of the scheme is in excess of the budget, which would indicate more fundamental action is required rather than to just change the contractor."

Then there are other factors, including throwing up legal questions, and then at 3:

"Replacing the Principal contractor at this stage

5

will incur additional time and expense without the guarantee that the TMO would be any better served by the replacement."

So we can see that's very clear advice from Artelia at this stage. $\label{eq:constraint}$

Then if we can go to page 25 {ART00009101/25} and look at the conclusions and recommendations of this report, I want to start looking at the second paragraph down. It says there:

"The project is currently over budget with little expectation that if left to iterative reviews with the contractor giving diminishing returns, that costs will be aligned or reduced sufficiently to make the scheme affordable."

Then in the third paragraph it says:

"The TMO has advised it has desires to change the overall scheme to accommodate a change in brief and the proposed VE options to afford these proposed changes may be consumed simply to bring the existing scheme within the realms of affordability."

Do you see that there?

22 A. Yes, I do.

Q. Then if we look within these conclusions at the third paragraph from the bottom of this page, we can see it says there, two up from the numbered paragraphs: "Accordingly, it is Appleyards opinion that unless the project, in its current guise, is stopped and a fundamental review embarked upon to re-define the scope, programme and cost, it will fail."

So we can see that that was the advice being given by your colleagues in this report at that stage; is that correct?

8 A. That's right.

9 Q. Then there are some numbered recommendations at the 10 bottom of this paragraph, in the conclusions, and we can 11 see those recommendations there.

Is it fair to say, therefore, that Artelia's primary recommendation was to stop the project and fundamentally review the project scope, programme and cost?

A. Yes. I think the purpose of this was to say, "Well, look, something needs to change", and this was sort of drawing a line in the sand and saying, "This is where we've got to, what do we want to do to make this project a success? And there are going to have to be some decisions made."

So this was produced, and then Appleyards produced a near-term action plan that was off the back of this to bring the project back into a proceedable project.

Q. It's right, isn't it, that at this stage Artelia wasadvising against re-procuring the main contractor

7

because it was thought that changing contractor would
 not address the fundamental problems that had been
 identified here?

A. We wanted to make it clear, I think -- Robert wrote this report, but I think the answer to it wasn't just getting another contractor. My experience at the time -- I did have limited dealings with Leadbitter -- is that whilst we were narrowing the gap, they were very much busy on the Kensington and Chelsea Academy project at the back.

10 Q. Yes.

11

12

13

14

15

16

17

18

19

20

22

23

24

25

A. And I think the procurement decision at the beginning was: the sites are very close to each other, there will be economies of scale that can be gained by having the same contractor do both, and there won't be any sort of difficulties with logistical arrangements, contractually, already relationships set up. But as -- that had almost run its course. There had been a number of iterations between Chweechen and Leadbitter, and it was obvious that it wasn't getting any further down that course.

21 Q. I see, yes.

If we move forward with the chronology, if we can now go to {ART00006252}, this is an email from Robert Powell to you, you're the main recipient of this email, Simon Cash is then copied in, and it's on

(

1 21 May 2013, and we can see it says: 2 "Philip 3 "Interesting meeting this am! 4 "Basically - Peter Maddison has been over-ruled by 5 Laura Johnson 6 "She wants to keep the works for the boxing club and 7 nursery and doesn't want to progress the kitchens & 8 bathrooms at this stage necessarily 9 "Also PM ..." 10 Is that Peter Maddison? 11 A. That's what I understood it to be, yes. 12 "... not keen on progressing with Leadbitter 13 "Our report kicking this all off was based upon the 14 objective of preserving programme - This now not so 15 important. Value for money is 16 "Accordingly we are likely to reprocure scheme via 17 OJEU! 18 "We are planning a status update meeting ... on 19 6th June ..." 20 And we will look in due course at what happened in 21 22 So you are getting this email on 21 May. 23 Just taking this in stages, what did you understand 24 Robert Powell to be saying to you when he uses the 25 phrase "Peter Maddison has been overruled by

9

1 Laura Johnson"?2 A. So Peter Maddis.

A. So Peter Maddison, I believe, reported in to

Laura Johnson at Royal Borough of Kensington and

 $\begin{array}{ll} 4 & \quad \text{Chelsea, and we had been reporting in \ to \ Peter \ Maddison} \\ - & \quad \end{array}$

 $\,\,$ as Artelia , and the project driver when we started was

a desire to ensure that Grenfell Tower was included as

7 a project at similar times to the Kensington and Chelsea

Leisure Centre and Academy behind. And I believe the

9 driver from the TMO on that was there was a lot of

 $10 \hspace{1cm} \hbox{political} \hspace{0.2cm} \hbox{pressure to demonstrate that Grenfell} \hspace{0.2cm} \hbox{Tower}$

wasn't being forgotten.

12 Q. Yes.

3

6

8

11

13 A. That they were -- there was still going to be money spent on the tower and not just a shiny new academy and

leisure centre behind, but also the tower would be

built, and I know that there was concern because a lot

of residents were complaining, like, "What's

happening?", you know, "You're not going to improve our

19 tower, we're going to get forgotten". So I think the

20 TMO were very aware that they wanted this project to

21 proceed, and so programme was really important to them,

 $22\,$ as in doing it -- not quickly, but that was their

primary driver.

That informed, obviously, that status report we

10

originally wrote, and if programme is the primary

1 driver, then negotiating with an existing contractor

2 saves programme. But it may -- in general project

 $3 \qquad \quad \text{management terms, it may well cost \ you \ more \ because \ you}$

4 negotiate with one contractor.

Q. I understand that, and I understand here you're being
 told now programme is not so important --

7 A. Yes.

 $8\,$ $\,$ Q. $\,$ -- and that value for money is, but we've seen that

9 Artelia's written advice was that the biggest problem,

the most fundamental problem, was that the budget wastoo low.

12 A. Well, I think -- yes. Also, you can see that we'd been

13 talking to them about what is going to change to the

actual scope of the project. So it's not just about

changing the contractor. So you see there she wants the

works to the boxing club and nursery -- we were talking

at that time, "Okay, maybe, if we've got to bring it

back into budget, here are some of your choices."

19 Q. I see.

20 A. "You can exclude doing the boxing club or you can

21 exclude doing works to the garages or you can exclude

doing -- you know, some works, that's how you were going

 $23\,$ to bring it into budget", and at the same time they were

 $24\,$ saying, "Actually , we would like to improve the kitchens

and bathrooms in the residents ..."

11

 $1\,$ $\,$ So there was -- our status reports did enact the TMO $\,$

2 into considering alternatives; not just changing the

contractor, but also looking at what could also change

4 in the project to bring it into budget.

 $5\,$ $\,$ Q. $\,$ I see. So what you're saying, I think, to us is that

you still thought that fundamentally revisiting the

 $7 \hspace{1cm} \text{scope of the project was also a necessary next step?} \\$

8 A. Yes.

3

6

9 Q. In terms of value for money and the difference between

 $10 \hspace{1cm} \text{going from programme to value for money, was that} \\$

a polite way of saying that RBKC and TMO were now

12 interested in doing the works as cheaply as possible,

even if that took longer?

14 A. So value for money is often something that clients ask

 $15\,$ for , and there's three primary drivers in projects:

 $16 \hspace{1cm} \text{price, quality and time.} \hspace{0.2cm} \text{Which one's the most important} \\$

to you will make your decision -- you know, help you

 $18 \hspace{1cm} \text{make decisions.} \hspace{0.2cm} \text{It doesn't mean you throw the others} \\$

19 out, but, yes, if you want to bring the price down, then

20 it might take a bit longer, and that's what's being

requested here: we're not so precious about the time, we

want to make sure we're getting the best value for the

23 money we're spending.

24 Q. I see.

25 A. And that's quite -- particularly public sector funding,

| 1 | | value for money is exceptionally important, and being | 1 | | We can see that there. So you have set out the |
|----|----|---|----|----|--|
| 2 | | able to demonstrate and audit that. | 2 | | stages with this changed advice. |
| 3 | Q. | | 3 | Α. | Yes, and we're continuing to say it's not just about |
| 4 | | produced in May 2013 by Artelia, {ART00006232}. We can | 4 | | changing the contractor, there is still needing to be |
| 5 | | see this is dated May 2013, and if we go on to page 3 | 5 | | reconfiguration of the scope. |
| 6 | | {ART00006232/3} of it, we can see that it was authored | 6 | 0. | So, just to be clear, you felt that this was the correct |
| 7 | | by Robert Powell and checked and approved by | 7 | ` | advice to be giving at the time, did you? |
| 8 | | Robert Powell as well, and then it's issued on | 8 | A. | I supported it, yes, what Robert was proposing. |
| 9 | | 24 May 2013. Do you see that there? | 9 | Q. | |
| 10 | A. | Yes. | 10 | | Robert Powell to you and Simon Cash on 22 May 2013 where |
| 11 | Q. | Did you read this report when it was produced? | 11 | | he's attaching this addendum report that we just looked |
| 12 | A. | Yes, I did. | 12 | | at. He says in the first line: |
| 13 | Q. | | 13 | | "Attached my draft addendum to our April report to |
| 14 | Ì | in it had changed? | 14 | | the TMO." |
| 15 | A. | · · | 15 | | Then he says this: |
| 16 | Q. | It's right, isn't it, that Artelia had completely | 16 | | "Fundamentally this is a bit of political |
| 17 | | changed its position, given the change in the client's | 17 | | lubrication to give the TMO justification to go against |
| 18 | | requirements, in terms of re-procurement of the project? | 18 | | the recommendation in our original report which |
| 19 | A. | That's correct. | 19 | | suggested they keep Leadbitter involved with the |
| 20 | Q. | You say in your first witness statement at paragraph 50 | 20 | | project." |
| 21 | | {ART00008527/11}, and the first part of paragraph 50, | 21 | | Then he talks about when he would like to be issuing |
| 22 | | you agreed with the conclusion reached in the original | 22 | | the report. |
| 23 | | report to stick with Leadbitter and avoid delay going | 23 | | Now, this email was sent to you but you don't |
| 24 | | down a longer procurement route. | 24 | | mention it anywhere in your witness statement. Can you |
| 25 | | Did you agree with the change of advice given in | 25 | | help us as to why that might be? |
| | | 13 | | | 15 |
| 1 | | this addendum report? | 1 | A. | I didn't think it was particularly pertinent. |
| 2 | A. | Yes, I still did, because, you know, there had been | 2 | | I received many, many emails on this project. |
| 3 | | a change of primary focus of what the client wanted, and | 3 | Q. | Yes, I think you exhibit over 450 documents, but this |
| 4 | | depending you know, the client 's primary driver does | 4 | | one wasn't one of them. |
| 5 | | affect their procurement decision. It's often one of | 5 | A. | Yeah. |
| 6 | | the things we do talk about on projects, you know, | 6 | Q. | What did you understand the phrase " political |
| 7 | | what's most important to you, and different projects | 7 | | lubrication" to mean there in that second paragraph? |
| 8 | | will have different levels of importance. | 8 | A. | I didn't really give it a great deal of thought. I'm |
| 9 | Q. | Let's just look at the bottom of page 6 {ART00006232/6} | 9 | | not sure what Robert meant by that. I mean, I can he |
| 10 | | and on to page 7, just so we can see that change of | 10 | | was quite flamboyant with his language sometimes, |
| 11 | | advice. | 11 | | Robert, as an individual. My impression was simply this |
| 12 | | If we look at the bottom, it is said there, above | 12 | | was the client had a report by their professional |
| 13 | | the bullet points: | 13 | | team telling them to do one thing, they changed their |
| 14 | | "In light of the changed emphasis of the project | 14 | | project driver, so they needed, before they went to the |
| 15 | | brief , $% \left({{\mathbf{w}}_{1}}\right) =\left({{\mathbf{w}}_{2}}\right) =\left({{\mathbf{w}}_{1}}\right) =\left$ | 15 | | board, you know, the new advice that was appropriate to |
| 16 | | follows" | 16 | | the new driver. That's, you know, the TMO following |
| 17 | | Then what we can see is basically you're saying: | 17 | | their professional advice. |
| 18 | | "Cease design activity on anything other than | 18 | Q. | I see. And you were entirely comfortable with that, |

19

20

21

22

23

24

25

were you, in the circumstances?

Q. If we can now go to {ART00009020/2}, we can see an email

of $24\,\mathrm{May}\,2013\,\mathrm{at}\,16.27$. This is from Robert Powell to

"Please find attached the addendum to our report we

Peter Maddison and Paul Dunkerton, and you and

Simon Cash are both copied in . We can see it says:

A. It didn't cause me any concern.

re-configuring the scope of the project

"Conduct options appraisal ...

"Re-programme the project ...

option to be considered."

"Revise planning submission \dots

"Review options to replace the contractor with the

target of improving value for money - Framework/OJEU

19

20

21

22

23

24

25

5

6

O. Then:

1 discussed. This should now give you the comfort you are 2 looking for to proceed with looking to re-procure the 3 construction against our earlier recommendation (which 4 was based on now obsolete information)." 5 So we can see that there. 6 Then if we go up to the top of page 1 7 {ART00009020/1}, we can see David Gibson's response --8 you're still copied in to this -- to Robert Powell, and 9 he thanks him for it, and then in the second line he 10 savs: 11 The recommendations within the addendum are in line 12 with our discussions of last week, and allows us to 13 progress towards re-procuring the construction." 14 Now, those discussions, where he says "in line with 15 our discussions last week", do you know what he was 16 referring to there? Who were those discussions between? 17 A. I don't know. 18 Q. You don't know? 19 A. I mean --20 Were you present during any discussions in which this 21 change of advice and this addendum was discussed? 22 A. No. 23 Q. Okay. 24 A. But I assume it was because, like the emails all say 25 before, that you said, which -- the change of driver 1 means the change of strategy. 2 Q. Yes. 3 Now, moving forward again, we saw in an earlier 4 email that there was a proposal to discuss this --5 actually, we can see it here in this email -- proposal 6 to meet again on Thursday the 6th, that's Thursday, 7 6 June. 8 If we can go to the minutes of that meeting, 9 {ART00009106}, we can see this is called a TMO meeting, 10 and you authored the minutes for this meeting and took 11 the minutes. Is that correct? 12 A. Yes, it is. 13 Q. Then if we look at the bottom of the first page, at 14 point 2.1, under "Contractor procurement", the minute 15 reads: 16 "PM ..." 17 Is that Peter Maddison? 18 A. I think so, yes. 19 So it's --20 A. It will be in the brackets a little bit --21 O. Yes, I think this is Peter Maddison.

1 greater value for money, the main project driver." 2 Do you see that there? 3 A. I do.

"Programme implications of OJEU vs. [London Housing Consortium] framework to be issued to PM by 11/6."

7 So by that, do we understand that the TMO requested 8 a further revision of Artelia's addendum report?

9 A. My memory on that was that what they were interested in 10 was what were the timing issues. So we'd advised that 11 it would take them longer to re-procure than the 12 previous strategy of negotiating with Leadbitter, and 13 there was a decision to be made between going with 14 an OJEU procurement process or the other framework, and 15 they wanted us to do a bit more work, to be more 16 detailed in what are the two programme implications of

17 those two options, to see if one was a bit quicker or

18 one was a bit slower, which I did.

19 Just going back to the "PM requested Appleyards to 20 review the previous addendum report", was Peter Maddison 21 telling Artelia that the report had to demonstrate that 22 tendering the project would deliver greater value for 23

24 A. No. I think it was mainly he wanted more detail on the 25 programme to -- of one of these procurement routes.

19

1 Q. Well, the minute does record that he wanted greater 2 detail, but then it says "to demonstrate that tendering 3 the contract will deliver greater value for money, the 4 main project driver". Was that your view, that 5 tendering would deliver greater value for money? 6 You don't know until you tender it, but you can -- it's

7 evidently demonstrable, if you have gone to the market 8 and tendered the work, that's how much it costs. So 9 that is what it costs.

Prior to that, an estimate by a professionally qualified quantity surveyor like Chweechen, or even an estimate by Leadbitter, is just that: an estimate. So open procurement, whichever way we went on here, would demonstrate that is what it cost to do this.

15 So value for money would be demonstrated. I think 16 what you're saying is: can it be demonstrated that it 17 would be cheaper than what we had on the table for 18 Leadbitter at that time.

19 Yes, would tendering it deliver greater value for money? 20 Was that Artelia's opinion, that tendering it would?

21 It would demonstrate that that is the greatest value for 22 money that you can achieve, because market rates will 23 determine what the actual cost is.

24 Q. Right.

10

11

12

13

14

25 A. You can't demonstrate value for --

18

"PM requested Appleyards to review the previous addendum

report to include greater detail on programme and costs

to demonstrate that tendering the contract will deliver

A. Yes.

22

23

24

- Q. They won't necessarily demonstrate that it was greater 2 value for money, will they, depending on how the tender
- 3 results come in?
- 4 A. It might not, depending on market conditions, et cetera.
- 5 But generally, my experience of every project, if you're
- 6 negotiating with a single contractor versus
- 7 a competitive process, the competitive process will
- 8 leverage the greatest value for money compared to a --
- 9 you pay a premium for negotiating with a single
- 10 contractor.

5

6

7

8

9

- 11 Q. Was the quality of the works and the safety of the works
- 12 ever discussed at this meeting?
- 13 A. Not that I recall, no.
- Q. Can we then go to {ART00006473}. This is an email from 14
- 15 you to Peter Maddison on 11 June 2013, and I want to
- 16 look at the fourth paragraph down beginning
- 17 "I understand". You say:
- 18 "I understand you have spoken to Simon Cash today
- 19 about Appleyards report produced in April and the
- 20 addendum. We had agreed at our meeting last week to
- issue a revised addendum to the report by Thursday 22 recommending the best value for money procurement route.
- 23
- However following your conversation to Simon it appears 24
- that more adjustments may be required delaying our 25 delivery to you. Simon is looking at arranging a time

- 1 with you to enable a full review of the report to ensure 2 it meets your requirements. I wanted to raise this here 3 so you were aware we are unlikely to meet our Thursday
- 4 deadline now."
 - I want to ask you about the second sentence from the end of that, where you say:
 - "Simon is looking at arranging a time with you to enable a full review of the report to ensure it meets your requirements."
- 10 What did you mean by Peter Maddison's requirements 11 in that sentence?
- 12 So I wasn't altering the report, Simon and Robert were,
- 13 and I think at this time of writing this email I'd taken
- 14 away the action of doing the comparison of programme
- 15 between the two procurement options, but we'd made
- 16 a promise to deliver an addended(sic) report, clearly,
- 17 and it looked like we were going to miss that deadline,
- 18 and it was -- I wasn't doing it, but Simon was doing it.
- 19 Q. I see.
- 20 A. And I think he asked me, "Look, I want to make sure we
- 21 get this really right", because, you know, these aren't
- 22 short reports, they're detailed, and I think Simon just
- 23 wanted some more time to talk to Peter, make sure we got
- 2.4 it right this time.
- 25 Q. I see.

- A. That's what I -- I think that's what I was saying.
- 2 Q. So is it your evidence that those that really were
- 3 involved in amending this report were Simon Cash and
- 4 Robert; is that right?
- 5 A. Yes.
- 6 Q. Remind me who that is, Robert ...?
- 7 A. Robert Powell.
- 8 Q. Who had written the original --
- 9 A. My previous -- I took over from him as employer's agent.
- 10 Yes. So Robert Powell is still involved?
- 11 A.
- 12 0. Did you get involved in the detailed discussions about
- 13 the changes to the addendum report, or was it Simon Cash
- 14 and Robert Powell who were doing that?
- 15 A. I think they were mainly leading on it. I was aware of
- 16 what was going on.
- 17 Q. Were you aware that Artelia changed the wording of that
- 18 report so that it read more favourably for the TMO?
- 19 A. I wasn't particularly aware of that. I think -- I don't
- 20 know the specifics of what changes were made. I think
- 21 the overall recommendations were the same, as I recall.
- 22 Q. I see. I think Mr Cash agreed that Artelia had been
- 23 strong-armed into amending the report to read more
- 24 favourably, taking out certain parts that were slightly
- 25 negative for the TMO and putting in other passages.

23

- 1 Were you involved in that?
- 2 A. I wasn't present at those things. He would be best to
- 3 advise on that.
- 4 Q. Yes.

5

6

- Let's turn to another topic now, so the OJEU process itself for the selection of the main contractor.
- 7 What was your role in the OJEU process? What role 8 did you play?
- 9 A. So I remained as the employer's agent, I was
- 10 administering the overall process of tendering via the
- 11 OJEU. So it's a very -- it's a European process, it's
- 12 very regimented and precise, and so I was doing the
- 13 administration of making sure that we got all the
- 14 documents together from the professional team, the
- 15 notice was published on the website, and
- 16 co-ordinating --
- 17 Q. I see, okay.
- 18 A. -- the administration.
- 19 Can you help us, how did your role sit with that of
- 20 Jenny Jackson, who I think was the TMO's lead on
- 21 procurement? Did you work closely with her during this
- 22 procurement process?
- 23 A. I did. I'd describe it as -- she was a procurement
- 24 expert, that's how she was introduced to us, so she was
- 25 very familiar with doing these sort of exercises, and

- I wanted to respect her position. So, you know, if
 I drafted something, I'd share it with her, but I was
- 3 very much led by her as the client procurement expert.
- 4 Q. Yes.
- Now, we know that that OJEU notice was published on
- 6 20 August 2013, and that there were a number of
- 7 expressions of interest, but only five bidders returned
- 8 what are known as pre-qualification questionnaires,
- 9 known as PQQs. Is that your recollection?
- 10 A. That is.
- 11 Q. Is that a low number of returns for this sort of
- 12 contract, five returns?
- 13 A. It's not high, but it's not low. I mean, the point is
- you only want people that really can do the job and are
- 15 interested in it to return it. There is a fair bit of
- work in returning a pre-qualification questionnaire, so
- that drop is not uncommon, because it's quite easy to
- request information about a project, and sometimes
- people go, "Well, I won't qualify because I don't have
- 20 the experience to put a pre-qualification together", and
- that's definitely the point. We only want people that
- are likely to be proceedable as contractors.
- 23 Q. I see.
- $24\,$ $\,$ Now, all five of the bidders at this stage were
- invited to tender for the contract; is that right?

- 1 A. That is correct.
- Q. Of the five bidders, is it right that Rydon scored
- 3 substantially below the others in the PQQs, the
- 4 pre- qualification questionnaires?
- 5 A. Yes, they didn't score so well in the pre-qualification
- 6 hurdle to get in to tender.
- 7 Q. Yes. I think we can see on the overall scores, Rydon
- $8\,$ was down at 51 and some of the other contractors were in
- 9 the 60s; Mulalley was 69.5, Durkan 66.75.
- $10 \hspace{1.5cm} \text{So would you agree that was substantially below the} \\$
- 11 others at the PQQ stage?
- $12\,$ A. They scored lower, yes. Just to explain, though, a PQQ
- $13\,$ is like to get in to -- sift out those contractors that
- $14\,$ are not appropriate, they're not the right size of
- contractor or they don't have the appropriate
- $16 \qquad \quad \text{experience.} \quad \text{So scoring highly in a PQQ doesn't mean} \, \,$
- well, they may well have done -- they've clearly done $\frac{1}{2}$
- $18\,$ a better submission at the PQQ stage, but scoring low
- doesn't mean that they're not appropriate to proceed,
- $20\,$ just they didn't answer perhaps the questions as well as
- 21 their competitors. But they're still deemed -- all of
- those that were taken through were of sufficient,
- $23 \hspace{1cm} \text{you know, experience, size, all those sort of general} \\$

26

- qualities that were needed to be invited to tender.
- 25 Q. Yes, I see.

1 Now, we can see in the OJEU notice -- I just want to

- $2 \hspace{1cm} \text{ask you if you remember this, and if not we can turn it} \\$
 - up -- the notice of 20 August 2013, that it envisaged
- a minimum number of tenders of five. Can you remember
- 5 that? 6 A. Er --

3

12

- 7 O. Let's look at it, {ART00008871/8}. This is the OJEU
- 8 notice of 20 August 2013, and if we go within it to
- page 8 and we look under section IV, "Procedure", in themiddle of that page, there is a heading:
- 11 "Limitations on the number of operators who will be
- Then just a few lines down it says:
- "Envisaged minimum number: 5 and (if applicable)

invited to tender or to participate."

- 15 maximum number 8."
- Do you see that there?
- 17 A. Yes.
- $18\,$ $\,$ Q. So five was the envisaged minimum; that's correct, $\,$ isn't
- 19 it?
- 20 A. Yes. This is put forward because you're advertising to
- 21 the world if you want to bid, and one of the decision
- 22 criteria that bidding contractors will be interested in
- is: how many people am I going to be up against at
- 24 tender stage?
- 25 O. Yes.

27

- $1\,$ $\,$ A. So if you put a big number in there, it may turn off
- 2 contractors because they might think, "Even if I get
- $3\,$ $\,$ through the PQQ stage, I $\,$ still $\,$ only have maybe a one in
- $4\,$ $\,$ ten chance of winning". But we did -- that's the range
- 5 that we agreed to go for on this.
- 6 Q. Was the reason that Rydon was invited to tender because
- 7 the TMO preferred to have five bidders? Did you ever
- 8 have that discussion with them?
- 9 A. No. Both TMO and Artelia independently scored the PQQ
- process. It was diligent, we went through it all, and
 - both came to a similar conclusion that all five were
- quality enough to be invited to tender. They passed the
- 13 PQQ stage.

11

- $14\,$ $\,$ Q. Were you aware at the time that $\,$ TMO guidance was to have
- 15 at least six bidders?
- 16 A. I was not aware of that.
- 17 Q. Now, of the five bidders that were invited to tender, we
- know that one -- that's Wates -- pulled out in
- December 2013. Another one, Keepmoat, pulled out on
- 20 15 January 2014, so that left three bidders; is that
- 21 right?
- 22 A. That's correct.
- Q. Were you ever concerned that there would not be
- sufficient competition with only three bidders?
- $25\,$ $\,$ A. $\,$ It was a concern, yes, at one point. We wanted to make

- 1 sure that we could demonstrate competition, so we took 2 steps, when we heard that some were pulling out, because 3 when they got into the detail they made their decisions
- 4 to pull out, that we wanted to be reassured that the
- 5 others were still going to be submitting.
- 6 Q. Yes.
- 7 A. Three would be my minimum, really, that you would want 8 to compare as a fully detailed tender exercise.
- 9 Q. Was there ever any consideration given to recommending 10 the recommencement of the process?
- 11 A. That would have been an option, potentially, but because
- 12 we still had bidders that were going through the process
- 13 and were, you know, saying that they were going to
- 14 submit their returns, and we did get three returns, it
- 15 wasn't something that we considered in great detail.
- 16 Q. Okay.
- 17 A. I think if we'd got down to maybe two or one, there
- 18 would have definitely been a, like, "What are we going
- 19 to do now? Let's think again."
- 20 Q. Let's look at an email now. This is {ART00008976}.
- 21 This is an email from Peter Blythe on 17 February 2014,
- 22 and I think you're copied in to this.
- 23 A. Yes.
- 24 Q. Yes, you're copied in to this.
- 25 We can see that Peter Blythe is providing a list

- 1 here of the three remaining bidders and their prices.
- 2 Do you see that there?
- 3
- 4 And then in the second paragraph, so underneath the
- 5 bullet points, he says this:
- 6 "We are now busy checking the quality returns as 7 well as checking that the contractors have priced for
- 8 everything correctly."
- 9 Do you see that there?
- 10
- Q. So we can see that Peter Blythe here is circulating the 11
- 12 prices before the quality has been assessed; is that
- 13 right?
- 14 A. Yes.
- 15 Is that standard practice in your experience, to share
- 16 the price of the bids with the team before the quality
- 17 has been evaluated?
- 18 A. Yes, it is. We usually have a tender opening form that
- 19 records what -- when the tenders are opened, to make
- 20 sure it's an open and transparent process, it's usually
- 21 opened by a couple of independent people to make sure
- 22 that it's fair and reasonable, and then there's a form
- 23 that's signed and it just records literally what are the
- 24 tender returned prices. That's what we're sharing here.
- 25 Now, those prices may well change as we dig into the

- detail and check that everything has been added up
- 2 correctly, everything has been included, but we do
- 3 record diligently: when we opened the tenders, these are
- 4 what the prices are.
- 5 Q. I see.
- 6 A. And then we go into the assessment of the quality and 7 checking all the prices.
- 8 Q. Is it possible that, by doing that, the scores given for
- 9 price might have influenced the scores for quality? 10 A. I don't think so. This process was a very diligent
- 11 process that we went through, particularly all the
- 12 quality questions were spelled out, what scores were
- 13 going to be given was all agreed before we even got the
- 14 tenders back, both the TMO team and Artelia team marked
- 15 it independently and scored the quality criteria. So
- 16 I think it was a thorough process, and the quality
- 17 scores I do not believe were influenced by the knowledge 18 of the price.
- 19 Q. Okay.
- 20 Can we just look at your first statement at
- 21 paragraph 113, {ART00008527/32}. So you say:
- 22 "Following receipt of Chweechen's email, both 23 Studio E and Max Fordham provided comments on Rydon's
- 24 tender submission from a technical perspective on 19 and
- 25 20 February 2014. Bruce Sounes of Studio E commented in
 - 31

1 his email that he was 'concentrating on Rydon as the

- 2 others are so far behind'. I understood this to mean
- 3 that Bruce Sounes had concentrated his efforts on
- 4 assessing the Rydon tender submission because it was the 5 lowest price and believed it was significantly stronger
- 6
- than Durkan and Mullaley's tender submissions." 7
 - So we can see what you say there.
- 8 Just for the transcript, that email where Sounes 9 says he's concentrating on Rydon is at {ART00008832}.
- 10 Now, is it normal in your experience to concentrate
- 11 most attention on the cheapest bid?
- 12 So Bruce Sounes' role in this -- he didn't score any of
- 13 the quality criteria, he wasn't part of the scoring
- 15 propose -- he was looking at the proposals, should have

team, but he was the lead designer and architect, so the

- 16 looked at all of them, and I think he was saying here
- 17 that he was concentrating on Rydon first, because he had
- 18 made the assumption that they were most likely to win,
- 19 I think he was just prioritising his workload, but he --
- 20 Q. I see, okay.
- 21 A. And we were seeking his comments on, you know, "Is there
- 22 anything in their tender submission from you as the
- 23 architect that you should be raising to us as causing
- 24 a concern, does it look appropriate", and that's what

32

25 I took from that.

4

5 6

7

8

9

10

11

12

13

14

15

Q. Would it be fair to say that those assessing the bids 2 were most concerned about price?

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

2

3

4

5

6

8

9

10

11

12

13

14

A. So before we'd started the tender process, we'd agreed how we were going to score it and how it was going to be orchestrated and managed, and so price was deemed as 40% of the overall mark, and quality was deemed as 60%, and that was broken down into various different quality criteria. So 40% of the score to determine who would win was based on price.

That's not an unusual ratio, and we discussed that with the client at the beginning of any tender exercise, depending on how price sensitive they are and how quality sensitive they are. I mean, that's actually quite quality, like, focused, 60% of the score towards --

Q. I'm interested that you say the architect -- and we know they were the lead consultant -- didn't contribute into the quality assessment. Again, is that normal on a project like this, to not have your lead architect or lead consultant contributing into the quality scores?

So he was involved, but he didn't actually mark the quality response questions. Most of the questions were around -- I forget all of them, but they were around procedure and process, which is best placed between the

25 client and us as employer's agent and the quantity

33

1 surveyor to do scoring.

> Bruce was, you know, representing his role as the architect and so commenting on architectural aspects.

Q. In your view, did all the bids get an equal amount of attention and, specifically, did the more expensive contractors have the quality of their submissions

7 assessed with the same amount of care?

A. Absolutely. This is actually one have the most diligent procurement exercises I have ever been involved in. We scored all of them very diligently. We had -- we scored them independently. We got together with the TMO, we compared our scores, we reviewed our comments. It was a very thorough procurement exercise from my point of view.

15 Q. Can we now go to {ART00002197}. This is Artelia's final tender report dated 12 March 2014, and if we look at 16 17 page 4 {ART00002197/4} of this, we can see that you

18 checked and approved this report.

19

20 Q. Do you see that there?

21

22 Q. The author is Chweechen Lim and you have checked and 23 approved it.

24 Then if we go on to page 12 {ART00002197/12} within 25 this, we see the prices that were bid. So we've got

1 a table, a simplified table of the prices in the major 2 categories.

> Perhaps if we can start by just looking at the bottom of the page, there we can see the respective

Now, the first sum we see -- it 's not easy because we can't see the tops of the columns, but I will explain -- the first sum of £10 million there the Artelia estimate, and then the next price is Rydon at 9.2 million, then we have Durkan at 9.94 and then we have Mulalley at, I think, 9.89. Is that correct? Perhaps we can just scroll back to the top. I'm just checking my notes are correct. No, sorry, there is a typo in my notes. If we go back to the bottom, Mulalley are 10.4.

16 So we can see from that that the 9.2 there for Rydon 17 is substantially lower in price than the other bidders; 18 do vou agree?

19 There's a range and they are the lowest, yes.

20 Substantially lower.

21 Α.

22 Q. I mean, the next tender is 9.9, and the others are all 23

24 A. So there is 700,000 between 1 and 2, and then, yeah, 500

25 from 2 to 3.

35

1 Q. Did the Rydon tendered sum strike you as abnormally low?

2 A. I did not get that impression, but the QS is really 3 the -- so Chweechen would have been the one that really

Δ dived into the detail of assessing whether or not this

5 was abnormally low or not, and I think she makes comment 6 in this report on that. From her professional capacity

7 as a QS, she would be best placed to highlight if things 8

were being undervalued or missed.

9 O. I see.

10 A. I think she says -- I think she does comment somewhere 11 in here.

12 Q. I think we ought to note here as well, in fairness to 13 Rydon, that if we look at "External Façade", the B8 line 14 there, the Artelia estimate is at 2.6 million and Rydon

15 are coming out at 3.8, and then the other contractors

16 3.6, 4.1. Do you see that there?

17 A. Yes, I do.

18 If we go over the page to page 13 {ART00002197/13}, in 19 the sixth paragraph down, just before the table in the 20 bottom half of that page, we can see that Artelia have

21

22

23

"Overall, the table on page 7 reveals broadly consistent pricing at a sustainable level."

24 So would you agree that that was the advice that 25 Artelia was giving at this point?

8

9

10

11

12

1 A. Yes.

4

5

6

7

8

9

10

11

12

13

14

15

16

17

1

2

3

Δ

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Now, I want to ask you a little bit now about resident
 involvement in the OJEU process.

Can we just look at paragraph 89 of your first witness statement, this is {ART00008527/23}. So there you say:

"On 9 October 2013 Jenny Jackson of the TMO sent me the results of the evaluation undertaken by the TMO of the subjective PQQ questions. Question 10.3 of the PQQ, which related to communication and coordination with residents during the works, was evaluated in a meeting attended by two residents of Grenfell Tower, and David Gibson, Jenny Jackson and Claire Williams of the TMO. The remaining questions were evaluated by Jenny Jackson and Claire Williams. Peter Blythe and I marked the subjective questions on behalf of [Artelia]. The scores were added together and an average computed."

Do you see that there?

19 A. Yes.

Q. Now, did you or anyone else at Artelia advise the TMO on who should be scoring which questions, or was that

 $22 \hspace{1cm} \text{something the TMO decided for itself?} \\$

A. The TMO wanted to have some resident input to the
 selection of the contractor, and it was their assessment
 as to, you know, what was fair and reasonable to ask

37

a resident to engage in, and I think they made the assessment to ask some residents to represent and score the parts of the PPQ that were around resident liaison.

I think that's what happened.

Q. Let's have a look at the scoring matrix for the PPQ, {ART00008909/3}. We can see question 10.3 there, which we know is the question that the two residents had some input into marking. It said:

"Grenfell Tower will be occupied during the construction works and working effectively with Residents is essential to the success of the project. Using an example from one of the projects listed in question 10.1 above, please confirm how your organisation managed communication and coordination with Residents during the works ..."

So we can see that question there.

Underneath it, you see at question 10.4 there is a question about potential disruption to residents if the contractor doesn't keep to programme. So it says:

"The timetable for the completion of this project is challenging and, to minimise disruption to Residents is it is important that the project is delivered to the agreed timescales. Using examples ... how your organisation adhered ..."

38

Would you accept that that would also be relevant to

the residents, wouldn't it, disruption to the residents due to programme overrun?

A. I think it was -- well, it was referenced in -- this was
 more around timetable, yes, could disrupt residents. It
 was the TMO's decision which questions they engaged the
 residents in.

I think they were also -- what's, you know -- what's ... you know what's the right thing to engage them in, you know, that question may well have got sort of detailed, you know, project Gantt chart information. I don't know, I didn't make the decision as to which

13 Q. No, okay.

I just want to show you one more question over the page at page 5 {ART00008909/5}, question 10.10. It's about long-term benefits to the community:

17 "Using examples from the projects listed in 18 question 10.1 above, please give examples of three 19 initiatives ..."

Again, would you agree that that would be something relevant to residents that residents could have scored on?

A. Yeah. I mean, again, I'm not -- I didn't choose whichones residents were engaged with.

Q. Now, it's right, isn't it, that residents weren't

39

involved with scoring the bidders on programme or quality; is that right?

A. So any resident engagement during the assessment process
 was within TMO's gift. They decided how much to engage
 them or not in the assessment process. We didn't advise
 them or suggest what was right or not. We agreed the
 criteria that we were going to score the tenderers

8 against, the weighting, the scoring, and the resident

9 level of interaction was a TMO decision.

10 Q. Okay.

11 A. I was open to whatever they wanted, really .

12 Q. I see.

Now, we know that the bidder interviews took place on 7 March 2014, and that's addressed in your first witness statement. We know also that the interviews formed 5% of the overall score; is that right?

17 A. That's correct.

Q. Can you help us, why so low? Why would those interviewsonly have contributed 5% to the overall score?

A. That was what we assessed. That's not a low percentage.
Sometimes interviews are purely a clarification exercise
that don't score anything. In other tenders that I do,

23 that's appropriate. That --

Q. Isn't that the opportunity to test, for example, whatthe contractor said about the quality, about the

- competence of the team, the expertise of the team?
 Given that, again, why so low in this instance?
- A. I think you can assess all of those things you just
 mentioned in written submissions. The interview was put
 forward and it was very much -- the actual format of
 what that interview was going to be was 100% driven by
 Jenny Jackson. She was adamant that we wanted to use
 some examples of sort of a role-play at that session,

and she dictated what the questions were going to be.

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

2.4

25

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

There was also a real desire through this entire procurement process to make sure that it was done thoroughly, fairly, equitably, and that every contractor was given the same opportunity to answer every question, and that is much easier done in the written format of question and answer. And in the interview -- when we got to the interview, actually Jenny was particularly concerned to make sure that every contractor was given the same question, so there was no opportunity for discussions going off down a particular tangent that one contractor talked about that another didn't.

Q. Yes. But to give you an example that we are now aware of, for example some of the Rydon CVs that were put forward, we now know that there were some inaccuracies in those CVs in terms of people's experience. Isn't the interview a potential chance to test some of that and

41

get a better feel for who is going to be on this project in fact, and what their experience had been in fact?

A. So, yes, interviews are a great opportunity to get to meet the individuals and the team that are going to deliver the project, and my memory of the interviews that we had, the scenario that we played was particularly resident-focused, like: how are you going to deal with something that had gone wrong on the construction and you needed to, you know, liaise with residents and things like that. So it was a deliberate role-play to see those team members, how they would react perhaps in the real life.

So I think the interview was doing exactly that: checking and seeing the team that would be on the job, you know, how they would react to, you know, the possible events that would happen on Grenfell real. So I think it happened.

- Q. Was that a question that you ever thought to ask: here
 are the people that have been proposed in your CVs, can
 you assure us that in fact those people will be on the
 project?
- $22\,$ $\,$ A. So we asked them to put forward their proposed team.
- That proposed team was asked to come to the interview.
- They did. I remember seeing the people that then
- 25 ultimately did deliver the project from Rydon, resident

liaison lady and the, you know, contracts

- $2\,$ $\,$ $\,$ representative . So, yes, we did ask the people that
 - were going to do the job to come to the interview.
- Q. I see. So you assumed that, therefore, those people would in fact be doing the project?
- 6 A. Yes. It was asked that -- I believe we -- that's
- 7 a normal thing on a lot of tenders, "Don't send the
- 8 sales team; we want to meet the people that are actually
- $9\,$ going to do the job", and I believe that's what happened
- 10 here.
- 11 Q. I see.

Now, just some short questions about the scoring for the interviews.

Is it right that the residents' scores would be averaged with the TMO's scores?

16 A. They were doing it together, yeah, the residents and the 17 TMO.

Q. And is it right that, in turn, those scores would thenbe averaged with Artelia's scores?

20 A. We based -- so TMO and the residents did their

21 assessment.

22 Q. Yes.

 $23\,$ $\,$ A. We did ours. We came together and we compared notes and

24 compared scores, and then we collectively agreed, if we,

you know, scored a 3 and they scored a 4, do we go 3.5,

43

and we debated it, and, you know --

Q. Yes, but in broad terms, is what I just described the process you followed?

4 A. I think so, yes.

5 Q. Yes.

Would you agree that that would mean potentially that the residents' scores were being watered down in

8 the scoring process?

9 A. I don't agree that they're being watered down. I think

they're being -- the TMO decided what the residentswould be involved in and they scored the elements that

would be involved in and they scored the elements in were involved with them. Again, I didn't really get

involved in the -- how much the residents would or

wouldn't be involved in the tender scoring.

15 Q. Okay.

16 Can we look at the agenda for the meeting on the
17 date of the contractor interviews, {ART00008870}. This
18 is the agenda for the Grenfell contractor session,
19 Friday, 7 March, 9.15 to 10 am.

Is it right that this is an agenda for a pre-meeting before the first contractor was to be interviewed?

22 A. I think that's right, yes.

 $23\,$ $\,$ Q. $\,$ And was the purpose of this $\,$ meeting to $\,$ make sure that

24 everyone understood what was happening at these

meetings, like a briefing before you conduct the

42

1 interviews? 2 A. Yes, and making sure everybody knew where we had got to 3 so far on the tender scoring process. So it was just 4 amongst TMO people. I think that this was headed on TMO 5 headed paper, is it? 6 Q. We can see at item 4 that you are doing a briefing there 7 on the tender quality questions. Do you see that there? 8 A. Yes. 9 Q. Can you briefly remember what that involved? 10 A. I think it was just to update the attendees to the 11 meeting where we'd got to on scoring the other tender 12 quality questions. 13 Q. Yes. A. Progress update. 15 Q. If we can go now to an email, {ART00008969}, this is 16 an email from Claire Williams of 6 March 2014 to you, 17 and the subject is, "going through Grenfell quality 18 evaluation", and it says: 19 "Philip 20 "Peter M has asked that you present this in a way 21 that you get residents to 'buy into' the various topics, 22 and understand what we are looking for. 23 "I think this means that you need to be very clear 24 on why some answers were better than others." 25 Do you see that there?

45

1 A. I do.

2

3

15

16

Q. Was that email in relation to the briefing that you were going to be giving in this pre-meet that we just looked

Δ at a moment ago?

5 A. I'm not sure. I don't recall this email. Was it 6 before, timewise? I think it was the day before.

- 7 Q. Yes. It's the day before the interviews. They're on 8 7 March, this is on 6 March.
- 9 A. So --
- 10 Q. I wonder whether you can help us as to what you 11 understood this to mean:

12 "Peter [Maddison] has asked that you present this in 13 a way that you get residents to 'buy into' the various 14 topics, and understand what we are looking for.

> "I think this means that you need to be very clear on why some answers were better than others."

17 What did you take that to mean?

18 A. I think it was around explaining to perhaps the 19 residents that were there why we might have scored one 20 quality return answer a 4, say, and why we scored 21 another a 2, and just being clear on the process, and 22 that we had an agreed scoring criteria beforehand, and 23 what you needed -- what we were expecting in terms of 2.4 answers to score a higher score than the other. 25 We were about to score -- if I think about this now,

1 we were about to score the actual interview, so it would

2 be appropriate for us to sort of take the residents

3 through sort of: this is how we are scoring it, so we

4 all take a similar approach, and realising that

5 residents, you know, wouldn't necessarily have been 6

involved in an exercise like this before, so we just 7 needed to explain how it was going to work and what was

8 expected of them.

Q. I see. 9

10 A. I think that was what I took from that.

11 There is reference in that first line to you getting 12 residents to "buy into" the various topics.

13 So far as you were aware, had there been any problem with resident buy-in for the tender process more

14 15 generally? 16 A. I don't know if there had been an issue with buy-in to

the tender generally. I know the TMO were trying to engage with the residents and reassure them that these works were going to happen and were wanting to listen to

them and involve them in -- as best they could.

21 O. I see.

17

18

19

20

22 I now want to discuss some events which took place 23 at the time when Rydon was appointed, and just to recap 24 on some relevant dates: on 18 May 2014, Rydon was 25 notified it was the preferred contractor, and then there

47

1 was a standstill period while other bidders were 2 notified; then on 25 March 2014, Rydon and the TMO

entered into a pre-contract agreement before the

4 building contract was then finalised in July 2014. Do

5 you recall that broad chronology?

6 A.

3

12

13

14

15

16

17

18

19

20

21

22

23

24

25

7 Q. Now, can we go to {ART00006433}. This is an email chain 8 between Simon Cash and Jenny Jackson of the TMO, and 9 I want to look at the bottom of the page, where we see 10 Simon Cash's email to her. You are not copied in here.

11 It's on 3 March 2014, and Simon Cash says:

> "I agree with you in terms of placing the contract at the submitted tender value and an offline discussion with the preferred contractor. Particularly to set out the intent once a contract has been entered into . There is absolutely nothing to say that once in contract the KCTMO cannot look for ways of making savings and as part of the informal discussion, the intention can be made clear and although not binding, the contractor's agreement sought to work with KCTMO to achieve the required savings. Some savings have already been identified and the contractor may well put forward others for consideration during the discussions that can be investigated prior to entering into contract."

Now, you see that there, and you do mention this

- 1 exchange in your first witness statement. For the 2 transcript, that's at paragraph 119 (ART00008527/34).
- 3 I said you weren't copied in, but if we look at the 4
- cc list, we can see that there is reference to a number,
- 5 "11833 Grenfell Tower". Do you see that there?
- 6 A. I do.
- 7 Q. Was that Artelia's general mailbox address for the
- 8 Grenfell project?
- 9 A. I think it was, yes.
- 10 Q. Does that mean that you are likely to have received
- a copy of this email during your time on the project? 11
- 12 A.

- 13 Q. Is it common in your experience to discuss savings to
 - the tender price of a bidder before they are selected?
- 15 A. So in the tender itself we did ask for sort of
- 16 alteration -- alternative prices, so all of the
- 17 tenderers were asked that. Is it ...
- 18 Q. Is it common to discuss savings to the tender price of
- 19 a bidder before they're selected? Here I'm really
- 20 talking about doing it with one bidder and not with the
- 21 others.
- 22 A. No.
- 23 Q. Do you have any recollection of seeing this email at the
- 24 time? It would have been through the 11833 email
- 25 address. Do you recall seeing it at the time?

49

- 1 A. Yes.
- 2. Q. And did you have any reservations about the advice
- 3 Simon Cash was giving in that email, including the
- Δ reference to an offline discussion? Did that concern
- 5 you at all?
- 6 A. What I interpreted from this was -- this was at a time
- 7 where we had nearly completed the entire tender process,
- 8 and we recognised that even the lowest priced tender was
- 9 in excess of the TMO's budget. I believe Jenny Jackson
- 10 in particular was wanting to diligently understand what
- 11 the next stages would be in the procurement process,
- 12 because normally you would just say, "You are the -- we
- 13
- 14 selected bidder, here is a contract, please build what 15 we want to build", but she recognised that you couldn't
- 16 just say, "Here is a contract for 9-point-whatever
- 17 million, 10 million", because they didn't have that
- 18 money, so they couldn't commit to a contract in that
- 19 way.
- 20 So this was a precursor: well, how are we going to
- 21 manage that? Make sure that we delivered an OJEU
- 22 compliant tender, but that we also recognised that we

50

- 23 needed to do some sort of change to whoever we selected
- 24 to make sure it was brought back into budget.
- 25 O. I see.

- A. And I think that was what was being talked about here.
- 2 So it wasn't to do it -- that would impact on who won
- 3 the tender; I think it was: we'd know who won the
- 4 tender, we would need to enter into perhaps some other
- 5 agreement with the selected contractor to then work how
- 6 to get it back into the budget.
- 7 Q. Sorry, just pausing there, you said it wasn't going to
- 8 impact on who won the tender. I think you then say,
- 9 "I think ... we'd know who won the tender". But this is
- 10 3 March 2014 and you haven't had the contractor
- 11 interviews vet.
- 12 Yes, so this is pre-judge -- this is us sort of
- 13 interpreting -- we knew all three tenders were above the
 - contract price -- the budget that the TMO had, so
- 15 regardless --

14

- Q. Yes, but I think -- sorry, I'm going to interrupt. 16
- 17 I think you just said, "We knew who had won the tender".
- 18 Do you mean that?
- 19 A. No. If I said that, I apologise. We didn't know. We
- 20 had scored -- that's incorrect. We had gone through
- 21 most of the scoring process, I believe, by that time.
- 22 Q. Okay.
- 23 A. We hadn't decided who had won, we hadn't completed it
- 24 and we hadn't notified anyone. This was Jenny knowing
- 25 that whichever contractor won, it was going to be more

- 1 than their budget, so how are we going to take the next
- 2 steps forward once we've concluded the tendering
- 3 process.
- 4 Q. My original question -- it's a short question -- was:
- 5 did you have any concerns when you read this email, yes
- 6
- 7 A. No.
- 8 Q. Now can we go to {RYD00003310}, and I want to look at
- 9 the bottom of page 1 and over on to page 2. This is
- 10 an email right at the very bottom, is what I want to
- 11 start with, from David Gibson to Steve Blake, this is
- 12 13 March 2014, and if we go over the page
- 13
- $\{RYD00003310/2\}$ we can see that Claire Williams and 14 Peter Maddison are cc'd in, but nobody from Artelia is
- 15 copied in here.
- 16 If we just quickly scan down the email, this is 17 David Gibson to Steve Blake, saying:
- 18 "Peter Maddison of the TMO has given me your contact
- 19 details. I understand you are currently in a meeting. 20 "I have attached a simple spreadsheet indicating the 21 areas we would like you to look at in relation to
- 22 possible savings. 23 "Our target is circa £800k, which included the
- 24 cladding savings already priced ... 25
 - Could you come back to us early Monday ..."

1 So that's that email.

2 Were you aware of these email exchanges going on in

- 3 March 2014?
- 4 A. No, I've not seen that email before.
- 5 Were you aware at the time that the TMO had asked Rydon
- 6 to find savings of around £800,000?
- 7 A. No.
- 8 Q. Now, a meeting is set up for the following Tuesday,
- 9 in fact, because although it says Monday in this email,
- 10 if we scroll up to page 1 {RYD00003310/1}, we can see
- 11 that those on the email chain then say:
- 12 "Your spreadsheet says a Tuesday pm meet rather than
- 13 Monday pm ..."
- 14 And then in the very top email it's then confirmed
- 15 that the meet will be on Tuesday pm. That's Tuesday,
- 16 18 March by our calculation.
- 17 Were you aware at the time of a meeting being set up
- 18 between Rydon and the TMO on 18 March 2014?
- 19 A. If I wasn't there, then no, I don't know about that.
- 20 Q. Were you actually at that meeting on 18 March 2014?
- 21 A. I remember a meeting where we introduced them both
- 22 post-tender selection, I don't think -- I think that was
- 23 much later.
- 24 Q. Yes.
- 25 A. So, no, I don't think I was there. I'm surprised about

53

- 1 this, because, you know, we were very thorough in how we
- 2 organised the tendering process.
- 3 Q. Is it within the procurement rules to seek a reduction
- Δ in price from one contractor during the tender
- 5 evaluation process?
- 6 A. No, not that I'm aware of.
- 7 Q. I then want to look at the letter that's sent to Rydon
- 8 in mid-March 2014. If we go to {TMO10005474}, we can
- 9 see at the top that it's dated 17 March 2014, and it's 10 telling Rydon that they're the preferred bidder.
- 11 If we look on page 2 {TMO10005474/2}, we can see
- 12 that you have signed this letter. Do you see that
- 13 there?
- 14 A. That's right.
- 15 Q. But it looks from what we can see on the documents that
- 16 there came a time when Jenny Jackson made some comments
- 17 and amendments to this document. Do you have
- 18 a recollection of that?
- 19 A. Not specifically, but I did often send formal, you know,
- 20 letters and things to her for her review, and she often
- 21 made comments. Particularly on this letter, there's
- 22 lots of feedback.
- 23 Q. Yes.
- 24 A. So that was, you know, collectively -- collective
- 25 feedback between both TMO and Artelia.

- Q. When you sent a letter to Jenny Jackson like that, with
- 2 a draft effectively for her to look at, would your
- 3 signature have been in that letter at that stage, or
- 4 would that be added only in the final version?
- 5 I don't know.
- 6 Q. You don't know, okay.
- 7 A. I can't remember.
- 8 If we can go to {ART00002210}, this shows some comments
- 9 on the document. If we go to page $8\ --\ sorry$, let's go
- 10 back to the document, I think that's just showing that
- 11 there has been some changes made.
- 12 What we can see is this is the version of the letter
- 13 dated 17 March, and then we can see -- and we believe
- 14 it's Jenny Jackson, based on the author of the changes
- 15 that you see later in the document -- has made some
- 16 comments on it and some suggested additions to the
- 17 letter. Do you see that?
- 18 A.
- 19 And can you remember that?
- 20 Okay, yes, I can see that.
- 21 We see, for example, that she has inserted some capital
- 22 letters below the first bold text there.
- 23 If we look at the version sent out to Rydon, this is
- 24 at $\{ART00008632\}$, we can see that this version to
- 25 Peter Arnold at Rydon is dated 18 March 2014, and again,

55

- 1 if we look on -- we can see, sorry, before we look at
- 2 page 2 and your signature, some of Jenny Jackson's
- 3 changes have gone into this final version. That's
- 4 correct, isn't it?
- 5 A.
- 6 Q. Then if we look on page 2 {ART00008632/2}, we can see
- 7 there is your signature. So that appears to be the
- 8 final version that's sent out.
- 9 Can we then go to {ART00008755}. This is an email
- 10 from Peter Blythe to Rydon attaching the letter of
- 11 18 March, and we can see from that that it's sent at
- 12 5.55 pm. Do you see that there?
- 13 A. Yes.
- 14 O. Do you know how Peter Blythe would have received the
- 15 instruction to send these out? Would someone at the TMO
- 16 tell him, "Right, now you can send these out", and then
- 17 he would do that job?

meeting?

- 18 A. Maybe, or it might be probably me telling him that,
 - "Yes, the letter's been agreed, please send".
- 20 Q. So we now know that the TMO had a meeting with Rydon in
- 21 the afternoon of 18 March, that was on Tuesday,
- 22 18 March, this day. Did you know anything about that
- 24 A.

19

23

25 Were you ever made aware that Rydon got the job because

| 1 | it was prepared to reduce its tendered price? | 1 | | Zinc to Aluminium composite (ACM). Put forward our cas |
|----|---|----|----|--|
| 2 | A. No. As I said, I thought we we absolutely did a very | 2 | | that ACM is not an inferior product to Zinc." |
| 3 | thorough process. | 3 | | Do you see that there? |
| 4 | Q. Yes. | 4 | Α. | I do. |
| 5 | A. This is news to me. I think Rydons went through we | 5 | Q. | |
| 6 | orchestrated the whole tender and they scored and we | 6 | Q. | If we can go to that, {ART00008527/38}, paragraph 133 |
| 7 | followed the rules, as far as I was aware. I didn't | 7 | | If I pick it up right at the bottom of that page, you |
| 8 | know anything about that. | 8 | | |
| | | 9 | | Say: |
| 9 | MS GRANGE: Mr Chairman, I think that might be a good time | | | "I recall that at this time the entire discussion |
| 10 | for a break. | 10 | | between Studio E, IBI Taylor Young and the LPA |
| 11 | I'm doing well with this witness. I have another | 11 | | surrounding the cladding related to its appearance and |
| 12 | couple of topics to do, but I would hope we will get to | 12 | | whether ACM looked of a cheaper or lesser quality than |
| 13 | the other witness before lunchtime. | 13 | | zinc." |
| 14 | SIR MARTIN MOORE-BICK: That would be good, thank you. | 14 | | So that's what you have said in your witness |
| 15 | Well, Mr Booth, we will have a break now, and come | 15 | | statement. |
| 16 | back at 11.35, please. | 16 | | When you say there "lesser quality ", what do you |
| 17 | THE WITNESS: Okay. | 17 | | mean by that? Do you mean whether it looked like |
| 18 | SIR MARTIN MOORE-BICK: Please remember not to talk to | 18 | | a lesser quality product, or that it was in substance |
| 19 | anyone about your evidence while you're out of the room. | 19 | | lesser quality? Can you help us? |
| 20 | Thank you. | 20 | A. | So all of the discussions were around aesthetic |
| 21 | (Pause) | 21 | | appearance and what it would look like . Changing the |
| 22 | Yes, 11.35, please. | 22 | | façade of Grenfell Tower was obviously a significant |
| 23 | MS GRANGE: Thank you. | 23 | | visual change, and the planners were particularly |
| 24 | (11.20 am) | 24 | | wanting reassurances that what we were proposing would |
| 25 | (A short break) | 25 | | you know, look appropriate and good quality and would |
| | 57 | | | 59 |
| 1 | (11.35 am) | 1 | | last . So all of the discussion was around what colour |
| 2 | SIR MARTIN MOORE-BICK: Right, Mr Booth, are you ready to | 2 | | it might be, how it was going to be fixed to the |
| 3 | | 3 | | building, whether or not the fixings would be visible or |
| 4 | carry on? THE WITNESS: Yes, of course. | 4 | | hidden fixings, cassette fixings, it was that. |
| | | | 0 | |
| 5 | SIR MARTIN MOORE-BICK: Thank you very much. | 5 | Q. | |
| 6 | Yes, Ms Grange. | 6 | | fire performance, the fire safety performance of the |
| 7 | MS GRANGE: Yes, thank you. | 7 | | cladding was discussed? |
| 8 | Mr Booth, just a few short questions now about the | 8 | A. | It was never discussed with me. Fire, you know, |
| 9 | value engineering exercise that was undertaken after the | 9 | | compliance was you know, it's not a debatable thing |
| 10 | contract was entered into with Rydon. | 10 | | to have, it's implicit, it absolutely must. So, no, at |
| 11 | Can we go to {RYD00004154}. This is an email from | 11 | | no point in any of the discussions and reviews of what |
| 12 | Simon Lawrence to Claire Williams, Marc Watterson and | 12 | | the cladding was going to be was there any, "Is this |
| 13 | you and Peter Blythe on 6 May 2014. It's about | 13 | | going to be fireproof?" or anything like that. That |
| 14 | a meeting with the planners which was to be held on | 14 | | never happened. |
| 15 | 8 May 2014, and it appears that this discussion is | 15 | Q. | That segues nicely into a query that was raised by |
| 16 | against the backdrop of whether the planners would | 16 | | Claire Williams in November 2014 that I now want to ask |
| 17 | accept ACM as the exterior material for the rainscreen | 17 | | you about. Can we go to {ART00008794}. |
| 18 | cladding system. Do you agree with that? | 18 | | This is an email chain between you and |
| 19 | A. Yes, this was a meeting with the planning officers to | 19 | | Claire Williams, and I want to pick it up on the second |
| 20 | talk about how we were going to discharge the some of | 20 | | page {ART00008794/2}. We can see an email dated |
| 21 | the conditions, and one of them was the façade. | 21 | | 12 November at 10.36 there. So this is from |
| 22 | Q. Yes. | 22 | | Claire Williams to you and Nick Valente, |
| 23 | Under Simon Lawrence's agenda points there, the | 23 | | 12 November 2014, and it's under the heading "Grenfell |
| 24 | first bullet, it says this: | 24 | | Windows", and she says this: |
| 25 | "Proposal of material change to the facade. From | 25 | | "Chaps |
| | | | | |

1 "Windows 2 "When I delivered the building contract to site 3 yesterday I met up with Rydon and Matt Smith yesterday, 4 and had a window discussion - I am looking to take this 5 report to Peter Maddison and David Gibson, but am 6 waiting for Rydon to verify that the proposed windows 7 will meet Building Regulations."

Then under the heading "Cladding" she says:

"I have just been looking at the cladding as our database is asking for costs (I have put something together). However, I do not know if there is any issue of flame retardance requirement? I know at Lacknall(sic) House one issue was that the replacement panelling for the asbestos cladding was not flame retardant! I don't know if this is in the specification, but want to make sure it is raised.

17 Please advise.

18 "Thanks."

19 So can you see there she is seeking your advice on 20 these two issues?

21 A. Yes.

8

9

10

11

12

13

14

15

16

22 Q. Before this email, were you aware of the fire at

23 Lakanal House in 2009?

24 A. I wasn't, no.

25 So does it follow that you didn't know what she was

1 referring to in that "Cladding" paragraph?

2. A. Well, I could work out what it was probably referring to

3 from reading it, that there was something happen --

Δ a fire happened at Lakanal House, and since then I've

5 looked into it.

6 Q. At the time did you go and look it up and put that into

7 Google and see what you could find out about that

8

9 A. No, at the time of receiving this, this was one of the

10 many sort of design queries that I'd received from

11 Claire, and I think you see in my reply above that

12 I didn't know the answer to, you know, what was -- all

13 the specification and everything. So what I did, to try

14 and be helpful, is pointed her to some of the references

15 in the tender -- NBS spec.

16 Q. Yes, I'll take you to that in just a moment.

17 A. Oh, okay.

19

18 Q. Thinking back to your knowledge at the time, were you

aware of other cladding fires having occurred at the

20 time you worked on the Grenfell project, whether in the

21 UK or internationally?

22 A. I mean, I have a light understanding that that obviously

23 happens, but not an in-depth knowledge of all of them.

24 Q. Did you have that understanding at the time? Did you

25 know that that was a potential risk with cladding, that 1 you could get rapid external flame spread --

2 A. Yes.

3 Q. -- up a cladding system? You knew that?

4 A. Yeah.

8

9

5 As you say, you then respond to this email. If we go up 6 to your response on page 1 $\{ART00008794/1\}$ of this

7 document, we can see you say:

> "I am delighted to hear that you have delivered the contract. Big milestone achieved."

10 In the second paragraph you are dealing with 11 windows. You say:

12 "I would be very surprised if there is any issue 13 with building regulations with the windows. So I hope 14 that you are not holding up getting approval from Peter 15 and David while you wait for Rydon to confirm."

16 Now, just pausing there and just looking at what you 17 wrote, when you wrote that, how familiar were you with

18 the Building Regulations?

19 A. Well, I'm not an expert in them. I know they need to be 20 achieved, and, as I said there, you know, there were new 21

windows being supplied, and I would anticipate all new

22 windows to comply with Building Regulations.

23 Q. I see.

24 A. As a -- you know, that's a standard that all new windows

25 have to achieve. So I just wanted to make sure she

1 wasn't holding anything up for that confirmation, and

2 that was my advice.

3 Q. Was it any part of your role as employer's agent to

4 advise on the Building Regulations?

5 A.

10

11

12

13

14

15

16

17

6 Q. I think you have explained why you said what you've said 7 about the Building Regulations.

8 Returning then to this response and looking at what 9 you say in the third paragraph, you say:

"I had a quick review of the NBS spec in the tender does for cladding and it does specify the cladding must comply with the following standards, one of which I would anticipate requires flame retardance. However as client I suggest you seek clarification from Rydon."

Then we can see what you have done is set out various compliance standards from the NBS specification; is that correct?

18 That's correct. Α.

19 Did you actually check those standards yourself to see 20 whether in fact any of them did have a flame retardance

21 requirement?

22 A. No. I didn't write the NBS spec, I don't know all those 23 standards, I was just trying to be helpful because she

64

24 asked me, is it or is it not, and I, as I said there,

25 anticipated that, you know, one of those standards,

- because they're quality standards, would cover fire
- 2 arrangements, and I guided her towards talking to Rydon,
- 3 who were responsible for the design, to get further
- 4 clarification . So I wasn't trying to tell her anything
- 5 more than: that's what we put in the tender, and here
- 6 are some standards, please check with Rydon.
- 7 Q. Did you know that the cladding would have to meet
- 8 certain requirements, including that the external wall
- 9 needed to adequately resist the spread of fire? Were
- 10 you aware of that at the time?
- 11 A. Yes, that would be one of many safety standards it would
- have to -- the building would have to comply with, yes.
- 13 Q. Did you specifically know that that was a key part of
- 14 the Building Regulations, or was that just an assumption
- you made that that must be the case?
- 16 A. Well, in my role as employer's agent, you know, I don't
- know the intricate details of -- I'm not a designer, so
- I don't know the intricate details of all the
- building regs and all the other safety requirements for
- all the component parts that go into a building, but
- I know that we need to get Building Control sign-off at
- 22 the end of the project, and I know that we have
- designers that have to design to all the necessary
- 24 standards.
- 25 O. Did this email from Claire Williams at this time raise

- any concerns in your mind as to whether proper checks
- 2 had been carried out on the fire performance of the
- 3 cladding materials?
- 4 A. It didn't, but, I mean, you know, coming back to it now
- 5 in hindsight, you can sort of see why this is, you know,
- 6 of high importance, and rightly so, but this was one of,
- you know, lots of queries I'd got from Claire, and
- 8 I replied and directed her towards Rydon.
- 9 So I didn't, at the time, sit there with a concern
- that there would be a flame or a fire issue with the
- cladding because we'd asked for the standards to be met.
 - clauding because we'd asked for the standards to be met
- 12 Q. Yes.
- $13\,$ $\,$ A. We had an experienced contractor on board who had done
- 14 this before. We talked to supply chain that --
- you know, they were designing it.
- 16 Q. Okay. But you knew that there had been a change as part
- of the value engineering exercise to the --
- 18 A. Yes.
- 19 Q. -- external cladding; you knew that, didn't you?
- $20\,$ $\,$ A. We'd been talking about options on the cladding, yes,
- 21 for some time.
- 22 Q. Did you also know that the insulation product had
- changed in the external wall?
- 24 A. I didn't know that, no.
- $25\,$ $\,$ Q. $\,$ Did you know that the cavity $\,$ barrier $\,$ placement had

- changed from Studio E's designs to what Harley ended up
- 2 installing?
- 3 A. No. All my involvement in the sort of change of
- $4 \qquad \quad \text{cladding was purely around aesthetics, purely around how} \\$
- 5 it was being fixed to the building, and around,
- you know, planning approval and how much it was going tocost.
- 8 Q. Now, we can see that you recommend -- and you have just
- $9\,$ been talking about it $\mbox{ -- }$ to her that she should approach
- 10 Rydon.
- Can you just help us, why didn't you approach Rydon
- at this time, as employer's agent? Why leave that for
- 13 her to do?
- 14 A. Because it was -- that was her role. I was
- facilitating , she was -- it was a design query and
- I wasn't part of the design team at that time. I said
- to her, "Go talk to Rydon, they're the designers, you've
- got a client query", so that was the appropriate
- response, I thought.
- $20\,$ Q. I appreciate you're not part of the design team, that's
- entirely understood, but as you just said, you were
 - facilitating, you were the employer's agent, and your
- employer has raised a direct query about the
- fire resistance requirement of the cladding; why didn't
- you think it was part of your role to go and bottom out

67

- $1 \hspace{1cm} \hbox{that query and check and get back to her with a } \hspace{1cm} \hbox{full} \\$
- 2 answer?

22

- $3\,$ $\,$ A. Because it was a design query and it was for -- there
- 4 were lots of design queries going on. My role was
- 5 administering the contract, as employer's agent. Once
- 6 contractors' proposals have been -- you know, a change
- 7 happens, then I will instruct it and alter the contract.
- 8 Q. Okay.
- 9 A. If I'd have got involved in all the design queries,
- I would have muddled the waters, and as I showed
- 11 yesterday, the clear process chart I put in place as to
- how changes were going to be reviewed, it was for the
- 13 TMO as client to liaise with the designer, Rydon, as to
- 14 changes.
- 15 Q. Did you think to yourself at the time, "This is
- an important query that's been raised by my client,
- I had better keep an eye on this and make sure Rydon do get back to her"?
- 19 A. So I saw that I think later that day she forwarded on my
- bits that are here to Rydon, so I'd seen that she had
- 21 approached Rydon, and I anticipated that something must
- have happened and it got sorted, because that's what generally happens as a custom and practice on the job:
- I would get a query around what was maybe in the tender,
- I'd direct her, she would go and talk to the designers,

- 1 they would resolve it, and if it needed me to instruct
- 2 it or change the contract, then I would.
- 3 Q. I see.
- 4 A. And after this, it was never brought back to my
- 5 attention. Nobody said, "Oh, there is a problem, I'm
- 6 concerned". If somebody had said to me there is a risk,
- 7 a problem, then obviously I would have taken that really
- 8 seriously.
- 9 Q. Let's look at what you were just describing. If we go
- 10 to {ART00008974}, we can then see the email that
- 11 Claire Williams sends to Simon Lawrence on
- 12 12 November 2014, and you are copied in to that, you are
- 13 the only person copied in to that, subject: "Grenfell
- 14 cladding", and she says:
- 15 "I am just writing to get clarification on the fire
- 16 retardance of the new cladding - I just had a 'Lacknall'
- 17 moment.
- 18 You can see she has cut and paste from your email,
- 19 it would appear, the standards that you had sent her.
- 20 Is that correct?
- 21 A. That's what I saw, yes.
- 22 Q. I think you have just explained you weren't aware of any
- 23 response from Rydon on this, is that right, whether
- 24 written or otherwise?
- 25 A. Correct. I don't know. I assume they spoke, sorted it

- 1 out.
- 2 Q. Did you ever consider chasing Rydon for a response to
- 3
- 4 A. At the time, no, I didn't.
- 5 Q. Can you help us as to why not?
- 6 A. Because I had assumed that it had been resolved because
- 7 of -- I got lots of these type of things, and that was
- 8 how things usually happened. So Claire would ask me as
- 9 employer's agent what was maybe included in the tender,
- 10 and then the design discussion, agreement, would happen
- 11 between her -- well, and other TMO representatives, and
- 12 Rydon, the designer, whoever it might be, and then it
- 13 would come back to me as: right, now we need to instruct
- 14 and confirm what it is that we've decided.
- 15 Q. But wasn't that a very important email referring to
- 16 fire safety, potentially relevant to life safety on the
- 17 project? Wasn't that an important email which was
- 18 important for you to check had been responded to?
- 19 A. I mean, yes, it's important. I mean -- but I didn't see 20 it really as my job to check that Claire was, you know,
- 21 getting replies to every email.
- 22 Q. Yes.
- 23 A. Looking at it now, you question in your mind: well,
- 24 maybe I could have done something. But I think at that
- 25 time it was just another email query, I directed her to

- 1 where to get the answer, and nobody ever -- it never
- 2 became a -- nobody raised it to me as an issue going
- 3 forward, so I didn't at that time have any concerns that
- 4 there was any fire issues with the cladding being 5
 - proposed.
- 6 Were you concerned that Claire Williams isn't actually
- 7 posing a specific question to Rydon in the email? Were
- 8 you concerned that the email's slightly kind of
- 9 shortform in terms of what she has put here? Did that
- 10 concern you?
- Not at the time, no. 11
- 12 What about liaison with your CDM co-ordinator? Did it
- 13 occur to you that maybe the CDM co-ordinator on the
- 14 project ought to be made aware of this set of email
- 15 exchanges?
- 16 A. No, because, again, at the time, it was all part of the
- 17 design review process, and they were looking at
- 18 different options of the cladding. It wasn't something
- 19 I shared with the CDMC.
- 20 O. I see.
- 21 Now, in his oral evidence, Mr Lawrence has said that
- 22 he thought the email he received, this email, was
- 23 continuing discussions that TMO and Rydon were having
- 24 about the cladding on the lower floors, and in
- 25 particular the glass fibre reinforced concrete products.

71

- 1 Can you help us on that: is it right, were you aware
- 2 of discussions going on between the TMO and Rydon about 3 the robustness of the cladding on the lower floors and
- 4 specifically about its fire performance?
- 5 A. I wasn't aware of any distinction between lower and
- 6 upper floors, other than the lower floors needed --
- 7 because they didn't currently have a -- they weren't
- 8 being overclad.
- 9 Q. When you received this email, you were copied in to it,
- 10 did you understand this email's concerns about the
- 11 Lakanal House issue to relate only to concerns about the
- 12 cladding of the lower floors, or did you take it as
- 13 a concern more generally about the cladding?
- 14 A. I just took it as the cladding for the whole building.
- 15 Q. Yes.
- 16 I now want to ask you about some of Mr Gibson's
- 17 evidence. David Gibson of the TMO has made two witness
- 18 statements to the Inquiry, and I want to start by 19
- looking at his first statement. This is {TMO00000887}.
- 20 It's his statement which was dated 23 January 2019, and
- 21 I want to go to pages 18 to 19. Start on page 18 22
- {TMO00000887/18}.
- 23 So from paragraphs 94 onwards, he explains in these 24 paragraphs that he didn't have a clear understanding of 25 what the cladding would involve, and he then goes on and

70

| 1 | | describes raising a query with Rydon about this, and he | 1 | of the minute recording it . My recollection is that it |
|--|----|--|--|---|
| 2 | | says specifically he raised it with Simon Lawrence. | 2 | was raised at a Design Development Meeting and the |
| 3 | | Can I just check: have you read these passages of | 3 | minute was produced in time for the next Monthly |
| 4 | | Mr Gibson's first statement before? | 4 | Meeting. It was produced in hard form at that time and |
| 5 | A. | I've read Claire Williams'. I don't know if I've read | 5 | may not have been scanned onto TMO system or received |
| 6 | | David Gibson's. | 6 | electronically . I know I did not receive the minute |
| 7 | Q. | Let me take you through them, then. | 7 | electronically before the meeting because it was handed |
| 8 | A. | Please. | 8 | to me in hard form at the meeting. Until the occurrence |
| 9 | Q. | So at 94 he says he did not have a clear understanding | 9 | of the fire at Grenfell Tower I had always believed the |
| 10 | | of what the cladding would involve, and he envisaged it | 10 | cladding installed was inert as had been assured by |
| 11 | | would be as composite panels of rainscreen. | 11 | Simon Lawrence and I had no reason to consider |
| 12 | | Then he says: | 12 | otherwise. I cannot recall the date of the meeting but |
| 13 | | "I recall however at one of our monthly Design | 13 | I have given some details in my statement as to when it |
| 14 | | Development Meetings, Simon Lawrence of Rydon indicating | 14 | was. I think it may have been about March - April 2015 |
| 15 | | that there was disparity between the delivery times for | 15 | or possibly earlier." |
| 16 | | insulation and rainscreen and to avoid delaying the | 16 | So I've read that all out to you so that you can see |
| 17 | | project he indicated their intention to install the | 17 | clearly what he's saying. |
| 18 | | insulation first and fit the rainscreen later." | 18 | Before I ask you some questions about it, I also |
| 19 | | Then he says in 96: | 19 | want to show you what he says in his second witness |
| 20 | | "This was the first I was aware that the two items | 20 | statement. This is dated 5 February 2019, this is |
| 21 | | [ie the insulation and the rainscreen] were separate and | 21 | {TM000842310/8}, paragraph 23. So this is where he |
| 22 | | it raised some concerns in my mind having then recently | 22 | gives a little bit more evidence on this point, and he |
| 23 | | read recommendations following the Lakanal House Fire | 23 | says: |
| 24 | | Inquest" | 24 | "I have been asked what precisely I meant when, in |
| 25 | | At 97 he tells us at this time: | 25 | the earlier meeting I asked for assurance that we would |
| | | | | 0 |
| | | | | |
| | | 73 | | 75 |
| 1 | | 73 " Rydon were erecting the mast climbers to the | 1 | 75 not have a Lakanal-type problem with the separation of |
| 1 2 | | | 1 2 | |
| | | " Rydon were erecting the mast climbers to the | | not have a Lakanal-type problem with the separation of |
| 2 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than | 2 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation . Prior to that |
| 2 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display ." | 2 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation . Prior to that meeting, I had believed that the cladding and the |
| 2 3 4 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. | 2 3 4 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" |
| 2 3 4 5 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: | 2 3 4 5 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. |
| 2 3 4 5 6 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of | 2 3 4 5 6 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: |
| 2 3 4 5 6 7 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some | 2 3 4 5 6 7 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from |
| 2 3 4 5 6 7 8 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem | 2 3 4 5 6 7 8 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed |
| 2 3 4 5 6 7 8 9 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." | 2 3 4 5 6 7 8 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note |
| 2 3 4 5 6 7 8 9 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 | 2 3 4 5 6 7 8 9 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at |
| 2 3 4 5 6 7 8 9 10 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TMO00000887/19}, he says this: | 2 3 4 5 6 7 8 9 10 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as |
| 2 3 4 5 6 7 8 9 10 11 12 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TM000000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia | 2 3 4 5 6 7 8 9 10 11 12 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TMO00000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no | 2 3 4 5 6 7 8 9 10 11 12 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TMO00000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert | 2 3 4 5 6 7 8 9 10 11 12 13 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TMO00000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert and would not bum at all. The meeting accepted his | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were 'completely inert' and 'would not burn at all '. I believe those were the exact words used." |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TM000000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert and would not bum at all. The meeting accepted his assurances in this regard and nothing came to my notice | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were 'completely inert' and 'would not burn at all '. |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TM000000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert and would not bum at all. The meeting accepted his assurances in this regard and nothing came to my notice subsequently prior to the fire to question that these | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were 'completely inert' and 'would not burn at all'. I believe those were the exact words used." So I've shown you all of that in detail. |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TM000000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert and would not bum at all. The meeting accepted his assurances in this regard and nothing came to my notice subsequently prior to the fire to question that these assurances were not accurate. "The minutes of this meeting were produced by | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were 'completely inert' and 'would not burn at all'. I believe those were the exact words used." So I've shown you all of that in detail. Now, in your first witness statement at |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TM000000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert and would not bum at all. The meeting accepted his assurances in this regard and nothing came to my notice subsequently prior to the fire to question that these assurances were not accurate. | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were 'completely inert' and 'would not burn at all'. I believe those were the exact words used." So I've shown you all of that in detail. Now, in your first witness statement at paragraph 173 {ART00008527/52} you say that you don't |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TM000000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert and would not bum at all. The meeting accepted his assurances in this regard and nothing came to my notice subsequently prior to the fire to question that these assurances were not accurate. "The minutes of this meeting were produced by Artelia and they definitely existed because I recall reading them. I recall that 'Lakanal' had been spelled | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were 'completely inert' and 'would not burn at all'. I believe those were the exact words used." So I've shown you all of that in detail. Now, in your first witness statement at paragraph 173 {ART00008527/52} you say that you don't recall any other occasions, other than the Lakanal emails we discussed between you and Claire Williams, |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TMO00000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert and would not bum at all. The meeting accepted his assurances in this regard and nothing came to my notice subsequently prior to the fire to question that these assurances were not accurate. "The minutes of this meeting were produced by Artelia and they definitely existed because I recall | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were 'completely inert' and 'would not burn at all'. I believe those were the exact words used." So I've shown you all of that in detail. Now, in your first witness statement at paragraph 173 {ART00008527/52} you say that you don't recall any other occasions, other than the Lakanal emails we discussed between you and Claire Williams, where any party raised the fire at Lakanal House or |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | | " Rydon were erecting the mast climbers to the Tower and had not then fitted any cladding other than the sample that was on display." Then I think we can pick it up in more detail at 98. He says this: "I raised this with Simon Lawrence as a matter of serious concern and asked him if he could give some assurance that we would not have a Lakanal-type problem with the separation of rainscreen and insulation." Then if we can go over to look at 99 {TM000000887/19}, he says this: "The meeting was chaired by Philip Booth of Artelia and Simon Lawrence assured us that this would create no problem because the materials used were completely inert and would not bum at all. The meeting accepted his assurances in this regard and nothing came to my notice subsequently prior to the fire to question that these assurances were not accurate. "The minutes of this meeting were produced by Artelia and they definitely existed because I recall reading them. I recall that 'Lakanal' had been spelled incorrectly in the minutes. I understand these minutes | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | not have a Lakanal-type problem with the separation of the rainscreen and the insulation. Prior to that meeting, I had believed that the cladding and the insulation were manufactured off-site" Et cetera. Then he says: "It was only during that meeting, when I learnt from the contractors that they were to be installed separately, that I recalled a learning or advice note circulated by the HSE following the fire at Lakanal House that noted that the cladding had acted as a flue or a chimney. I raised these concerns in the meeting and Simon Lawrence of Rydon responded by assuring me that the rainscreen and the insulation were 'completely inert' and 'would not burn at all'. I believe those were the exact words used." So I've shown you all of that in detail. Now, in your first witness statement at paragraph 173 {ART00008527/52} you say that you don't recall any other occasions, other than the Lakanal emails we discussed between you and Claire Williams, |

"I have a clear recollection of the discussion and

74

25

I want to check: does that remain your evidence?

1 Does showing you this provoke any recollection on your 1 {ART00008891}. This is an email from you to 2 2 part of David Gibson raising with Simon Lawrence, at Paul Dunkerton on 10 May 2013. So this is shortly after 3 3 you joined the project in March 2013. In the third a meeting you minuted, these issues? 4 4 paragraph you say this: I was definitely not at a meeting that that was 5 discussed. All the meetings I was at were minuted, we 5 "Yesterday we did discuss the future consultant and 6 6 produced them. It may -- I didn't go to design contractor appointment strategy and arrangements. 7 7 development meetings because I wasn't part of the design I feel this needs further consideration and we propose 8 8 at that time. So I'm not saying it didn't happen, it to prepare a procurement paper for your consideration 9 9 may well have happened, but it wasn't a meeting that and approval on this. I want to ensure that it is very 10 10 I was at, so I don't have any recollection of that clear what everyone's role is going forward, how the 11 discussion point at all. 11 contracts and appointments work and what TMO are 12 12 committing to going forward. I have put some words 13 13 A. And all of our other meetings have got clear minutes about this into your attachment which I hope is 14 14 appropriate and clear." 15 15 Q. Yes. Now, there's an attachment to this document, if we 16 16 A. So maybe it was a Rydon meeting that he remembers, but can go to that, {ART00008711/2}, if we look at the 17 I wasn't there. 17 bottom, we see this, it says: 18 Q. Do you ever recall anyone using the word "inert" or 18 "Appleyards proposal for new appointments 19 19 "completely inert" in the context of the cladding "Following the approval of the Grenfell Tower 20 materials? 20 project rebrief Appleyards have proposed to prepare 21 A. No, I had no -- other than that one email, I didn't have 21 a procurement paper setting out how the contractor and 22 22 any -- nothing was raised to me about fire retardance or consultants should be appointed going forward." 23 23 anything around the cladding. All of my cladding If we go back up to the first page {ART00008711/1} 24 24 discussions were around what it was going to look like of this document, at the bottom of the page we see 25 25 and how it was fixed to the building. a header "Other appointments", in the second half of 77 79 1 1 Q. I see. that page. We can see the third and fourth lines down 2 2 In her statement, Claire Williams says that Artelia refer to Exova, and we have: 3 gave her a hard copy of the minutes recording 3 "Exova, to [assess] existing fire strategy for 4 4 David Gibson's question. building 5 Now, can you help us as to whether Artelia ever did 5 "Exova, advise on fire strategy during 6 6 just produce hard copies of the minutes as opposed to construction ..." 7 7 any electronic form of minutes as well? Can you see that? 8 8 A. No, I'm not familiar with that. Every other minutes we A. I can. 9 did were issued electronically rather than hard. 9 Q. We can see that it says: 10 I don't know why we would print one and just hand it to 10 "Exova, advise on fire strategy during construction 11 11 them. stage D - F and to provide strategy for building on 12 Were there ever any meetings that weren't minuted? 12 completion of work for TMO records." 13 13 A. Erm ... I think most of them were. There were lots of Do you see that there? 14 them, but I have ... I was not at a meeting where this 14 A. Yes. 15 15 was discussed. Q. So is it right that, from the very beginning of your 16 16 Q. Okay. So you can't help us as to whether someone from work on the project, you expected that Exova would 17 Artelia may have recorded a conversation about the 17 produce fire strategy advice through the construction 18 cladding and produced it only in a hard copy form? 18 phase to completion of the work? 19 A. No. It doesn't sound right. I don't -- I definitely 19 A. This was a document which we were trying to record all 20 didn't do that or write some minutes and only hand it in 20 of the fees that had been sort of -- and appointment to

78 80

21

22

23

24

25

hard copy. It's not in accordance with our checking and

Q. Exova now, I want to ask you a bit more about the

fire strategy and Exova's work on the project.

Can we pick it up with an email, this is

all the other minutes we did.

21

22

23

24

25

date and for them to assess what was likely to be going

forward, and these were provided to me when I took over,

already, and there was some work still to be done there.

and so yes, I -- obviously Exova had done some work

Q. Yes, so you anticipated further work from Exova through

- 1 to completion of the work for TMO records; do you see
- 2 that there?
- 3 A. At that time, yes.
- 4 Q. Did Artelia in fact prepare a procurement paper
- 5 following your offer to do that in the email to
- 6 Paul Dunkerton?
- 7 A. I think what actually happened is the procurement paper
- 8 got sort of subsumed into the status reports that we
- 9 did, so it didn't sort of warrant its own just on
- 10 procurement. Because we were looking at everything in
- 11 a whole, the procurement aspect got rolled into the
- 12 status report papers.
- 13 Q. So we know, in the event, that on the refurbishment
- 14 works Exova prepared three draft outline fire safety
- 15 strategies; the first one was in October 2012, the
- 16 second one was in October 2013, and the final one was
- 17 7 November 2013. So the first one was before your
- 18 appointment, but the second two of those were after your
- 19 appointment. That's right, isn't it?
- 20 A. Can you say that again, sorry?
- 21 Q. So there was a draft 1 of the fire strategy in
- 22 October 2012, that was before your appointment.
- 23 A. Yes.
- 24 Q. But then there were two revisions to that in
- 25 October 2013 and November 2013. That was during your

- 1 time on the project.
- 2 A. Yes. The last version was included in the tender that
- 3 we went out to the contractors for.
- 4 Q. Did you read any of the outline fire safety strategies
- 5 when they were produced?
- 6 A. Yes.
- 7 Q. For what purpose were you reading them?
- 8 A. It was part of the tender that I was collating. I mean,
- 9 I didn't -- I just wanted to be familiar with what it
- 10 said, and so I received it along with all the other
- 11 papers that came from the design team to form the tender
- 12 that we went out to the contractors on.
- 13 Q. Did you regard it as part of your role to check that
- 14 Exova had completed the work that it had promised in its
- 15 fee proposal?
- 16 A. I don't think that is part of my role, no.
- 17 Q. I'm asking you: at the time, did you think it was part
- 18 of your role to check that Exova had completed the work
- 19 it had promised in its fee proposal?
- 20 A. No.
- 21 Q. And why not?
- 22 A. I didn't have engagement with Exova. They weren't part
- 23 of the core professional team that I was working with
- 24 for preparing the tender documents. They were
- 25 appointed, I think, either direct by TMO or under

- 1 Studio E as a sort of specialist contractor, so --
- 2 Q. So they weren't appointed by Studio E.
- 3 A. Okay.
- 4 They were appointed by the TMO, but Artelia gave the
- 5 instruction to accept their fee proposal. We do know
- 6 that.

7

- A. Okav.
- 8 Q. Are you saying that you yourself had no involvement in
- 9 terms of monitoring Exova's work, looking at the
- 10 fee proposal, looking at what they delivered, and
- 11 advising your client on the discharge of that?
- 12
- No, I didn't see my role as employer's agent to monitor 13 their work. You know, they provided a fire strategy,
- 14 I had received one, it went into the tender. That's --
- 15 I think I've got a duty to raise concerns if anybody is
- 16 underperforming, as an employer's agent. I didn't have
- 17 any concerns.
- 18 I think you agreed at the beginning of your evidence 0.
- 19 that you did accept it was part of your role to check
- 20 for gaps in any work not completed. Are you saying that
- 21 you didn't ever perform those checks in terms of Exova's
- 22 engagement on the project?
- 23 Yeah, so I didn't. Yes, that is a role of mine.
- 24 I didn't perceive there was a gap. We had
- 25 a fire strategy.

83

- 1 I think in the employer's agent duties there, it's
- 2 about advising on, you know, clear and obvious gaps.
- 3 I'd expect my design leaders to tell me if there were,
- 4 like, real specialist sort of gaps. Not every project
- 5 always has a fire engineer on, so it wouldn't always be
- 6 an actual gap that, as an employer's agent, I would
- 7 necessarily highlight. But we had the fire strategy,
- 8 they did ...
- 9 Q. That was my next question: if you didn't have that role,
- 10 who did you think did have that role to check the work
- 11 that Exova had done under its fee proposal and ensure
- 12 that it had completed its work? And indeed we saw here
- 13 that the intention was to have something completed at
- 14 the end of the project for TMO records. If it wasn't
- 15 your role, whose role was it?
- 16 A. So as an employer's agent, I can't check people's, like,
- 17 design outputs. I could check -- you know, if
- 18 an architect does a drawing, I could check that, but I'm
- 19 not qualified to check the quality of them. I would
- 20 rely on the designers to highlight any gaps or to do 21 whatever checks there might be in place. Is that ... so
- 22 does that answer your question?
- 23 Q. It's answered my question.
- 24 A.
- 25 Q. Can we now go to {EXO00001106}. This is the third and

2

6

8

9

10

11

1 final issue of the outline fire safety strategy dated 2 7 November 2013. If we can go within it to page 9 3 {EXO00001106/9} and look at the top of the page, we can 4 see here under "Compliance with B4 (external fire 5 spread)", it is said:

> "It is considered that the proposed changes will have no adverse effect on the building in relation to external fire spread but this will be confirmed by an analysis in a future issue of this report."

10 Do you see that there?

11

6

7

8

9

- 12 Now, did you read that, do you think, at any stage when 13 working on the project?
- 14
- 15 Q. Would you agree with me, you don't need to be a designer 16 to see that the work that Exova's doing in relation to 17 that aspect is not complete, and that an analysis in
- 18 a future issue of the report is being promised? Do you
- 19 agree with that?
- 20 A. So when I read this -- and I have gone back to this 21 subsequently -- I read it at a time where I'm collating 22 a lot of tender documents ready to go out to tender, and
- 23 design in many aspects is not complete. It's only up to 24 a certain stage to go to tender. When I read that
- 25 sentence, it says to me there are no adverse effects on

85

- 1 the building in relation to the external fire spread, so 2 from my perspective, it didn't raise any alarm bells.
- 3 At that time of the design development, it felt there's
- 4 no alarm here. But I recognised that there was further
- 5 design that would need to be done, as with the rest of
- 6 the project, and that that would need to be done in the
- 7 next stage by the design and build contractor.
- 8 Q. I see. So you saw it as something for Rydon to pick up 9 if they saw fit to do so; is that right?
- 10 A. Yes, and we drew to Rydon's attention that this was the
- 11 strategy at that time of the design development, and
- 12 that they needed to, you know, take the design forward
- 13 as the design and build contractor and satisfy that
- 14 compliance is met.
- 15 Q. As employer's agent, agent to the TMO, wasn't this gap 16 in Exova's work something that you should have spotted
- 17 and at the very least pointed out to your TMO client?
- 18 A. Reading it at the time, I didn't see it as a gap. It
- 19 was a -- there is no adverse effect at this time, but 20
- that, you know, more design work is required. At this
- 21 time, we haven't -- you know, I also knew that we needed 22
- to appoint a design and build contractor that would 23
- bring with them a supply chain of specialist cladding 2.4 suppliers -- you know, designers and suppliers. They do
- 25
- it day in, day out, they install these things, so they

86

was bringing in the expertise to make sure that we got the best design and it complied.

3 So at the time of reading this, I didn't see this as 4 a gap or an issue or a problem. I saw it as a status of 5 design. We went to tender, passed it over to the design

and build contractor for them to then carry on the

7 design process through to completion.

Q. Now, we know -- and you have just referred to it -- that a version of this outline fire safety strategy was included in the tender documentation. Can we now go to {ART00008667}. This is an email dated 11 November 2013.

12 It's from Andrew Snelling of ADS.

13 Is it right that ADS was subcontracted by Artelia to 14 assist Chweechen Lim in costing the M&E elements; is 15 that right?

16 A. That's correct.

17 Q. So it 's to you and Chweechen Lim, and it's just before 18 the OJEU notice was published. We can see from the 19 email that Andrew Snelling has concerns about going out 20 to tender, and in the middle of the page, he says at

21

22 "Fire Strategy has not been signed off by 23 Building Control/Fire Officer."

24 Do you see that there?

25 A. I do.

87

1 Q. You say in your witness statement -- this is 2 paragraph 93 on page 25 {ART00008527/25} -- that

Andrew Snelling was highlighting outstanding M&E items.

3 4 Did you understand that he was referring to the 5 Exova fire strategy that we've just looked at, or was he 6 referring to some other fire strategy?

7 A. No, I think he was referring to the Exova fire strategy.

8 Q. When you received this email, did it prompt you to 9 consider what position had been reached with the Exova 10 strategy which had been included in the tender

11 documents?

12 A.

13 What checks did you then carry out? 0.

14 A. So Artelia were pulling together the tender, and Andrew 15 was giving us his advice on where he saw we were at that 16 time.

> Andrew wasn't involved in the project as much as Chweechen and I, and what we have -- and I got this email, met with Chweechen, we went through all the bits that he raised, some of them we resolved and some of them we considered. The fire strategy not being signed off by Building Control -- we knew we had the fire strategy, it was there, it was complete, it was completed by a fire engineer, and so it was appropriate -- a decision was made, I felt we could go

> > 88

25

17

18

19

20

21

22

23

5

out to tender on this basis. We didn't need to have it checked by Building Control or fire officer because we had a professional prepare it, it was there, we were advising the tendering contractors of what the fire strategy was.

So we went through all of these, and there was a slight delay before we went out to tender as we had to resolve some of these things, but that wasn't something that was a concern to me.

- Q. You say the fire strategy was complete; was that your understanding having read the report or had somebody told you that the fire strategy was complete?
- 13 A. So I was assured, I had a fire strategy piece of paper 14 by a qualified fire engineer telling me what the 15 strategy was. The point -- we were at a point of design 16 where we wanted to go out to the market, and the point 17 of tendering for a design and build contractor is to 18 tell them how far you have got on the design, give them 19 a clear understanding of where it's got to, and I felt 20 that we were at an appropriate time to go out to tender, 21 because we had a fire strategy, it was clear where we 22 got to, what was decided and what wasn't.
- 23 Q. Okay.

24

25

1

2

3

4

5

6

7

8

9

1

2

3

4

5

6

7

8

9

10

11

12

Can we now going to {ART00002256}. These are minutes of the contractor introduction meeting that was

89

held with Rydon on 1 April 2014. We can see that you're at this meeting from the list, and we can also see that you checked the minutes of this meeting.

If we go to page 4 {ART00002256/4} and look at point 5.3 in the middle of the page, we can see it says:

"Exova completed the fire strategy at tender stage. They have not been novated, but SL [Simon Lawrence] will contact them with the view of using them going forward."

Do you see that there?

- 10 A. I do.
- Q. Did you understand by that stage that three draftoutline fire safety strategies had been delivered, but
- Exova had not yet delivered any detailed fire strategy?
- 14 Did you realise that at this time?
- 15 A. Erm ... well, the fire strategy that I had at tender,
- that was the same one, so did it say "draft" on it?
- I ... that was my understanding. That was the report we
- got, and we tendered it and gave it over to
- 19 Simon Lawrence.
- $20\,$ $\,$ Q. $\,$ Do you agree that by this stage the cladding materials
- 21 had not been finally selected?
- A. Yeah, we'd put some alternatives in the tender, but you're right, it had not been finally selected.
- $24\,$ $\,$ Q. $\,$ And there had been no confirmation from RBKC planners
- 25 that ACM would be acceptable, had there, in April 2014?

- 1 That didn't come until much later in the year.
- 2 A. Okay. Agreed.
- $3\,$ $\,$ Q. Now, we can see from the minutes that $\,$ it $\,$ said that $\,$ Exova
 - have not been novated but Simon Lawrence will contact

them with a view to using them going forward, that's in

6 that second sentence.

7 Can you remember what was actually discussed at this

8 meeting about Rydon appointing Exova?

9 A. So my memory is mainly around: we were clarifying -- as 10 it says under there, novation of designers -- which

designers, we -- well, as the TMO -- and we were passing over to the contractor. It was always understood that

the structural engineers, Curtins, and the architects,

Studio E, would be novated so that the knowledge they'd

gained thus far in the project would stay and they would

16 complete the design process, and that's what we

17 confirmed higher up.

But Exova, who had completed the fire strategy, were
not going to be novated, but we wanted to draw to the
attention of the design and build contractor -- not
telling them who they had to use, that's their
prerogative -- draw to their attention that, you know,
this was done, this is where the design was, suggesting
that they got in contact to consider using them going

25 forward.

91

- Q. I see. So you recall that actually being said to Rydon,do you?
- 3 A. That's my--
- 4 Q. "This is where we have got to", and suggest that they get in contact to consider using them going forward?
- 6 A. Yes, and that's what I think the minutes record.
- 7 Q. Yes.

Now, if we go forward in the minutes to June 2014, this is at {TM000832490}. So what we were just looking

 $10 \hspace{1cm} \text{at was 1 April 2014.} \hspace{0.2cm} I \hspace{0.2cm} \text{now want to look at} \\$

11 13 June 2014. This is called the pre-start meeting. We can see you're present, and again you have checked the

13 minutes.

Then if we go to item 3.5 on page 3 {TM000832490/3}, we can see there's an action there:

"[Simon Lawrence] to appoint other consultants (to
include fire, DDA, acoustic, etc) after the main
sub-contractors are on board."

So did that mean Simon Lawrence to appoint other consultants, and when it talks about fire, was that envisaging either Exova or someone like Exova?

22 A. Yes

19

20

21

- Q. And DDA, can you help us with what that was referring to?
- 25 A. Disabled access.

ii. Disasica access.

9(

6

9

10

- Q. Yes. Some form of disability consultant?
- $2\,$ A. Yes. Sometimes they -- because there were some ramps
- 3 and things at the lower level and they wanted to make
- 4 sure that the building was going to be accessible to
- 5 all.
- ${\sf 6} \quad {\sf Q}. \quad {\sf Had} \ {\sf there} \ {\sf been} \ {\sf a} \ {\sf recommendation} \ {\sf by} \ {\sf Artelia} \ {\sf or} \ {\sf the} \ {\sf TMO}$
- 7 that disability consultants should be involved?
- 8 A. I don't think we recommended it. I mean, it needed to
- 9 make sure -- the design needed to make sure it complied
- 10 with, again, those standards of accessibility, public
- building and the residents may well need that, but it
- 12 wasn't dictating that they needed to have a specialist
- designer for that.
- 14 Q. Yes.
- 15 A. But the design, as overall by Rydon, needed to comply.
- 16~ Q. Now, if we go on in time to look at {ART00002797}, these
- are minutes of the progress meeting number 3 on
- 18 16 September, so about a month later, 2014. Again, we
- can see you're there and you have checked the minutes,
- and if we go to page 2 {ART00002797/2} at item 1.4, we
- see the same action again in that first line:
- $22 \hspace{1.5cm} \hbox{{\tt "[Simon Lawrence] other consultants (to include)}}\\$
- 23 fire, DDA ...)"
- Do you see that there?
- 25 A. I do, yes.

93

- 1 Q. You can take it from me that in the October progress
- 2 meeting number 4, held on 21 October 2014, exactly the
- 3 same item appears again at point 1.2 at the top of
- 4 page 2 of those meeting minutes.
- $\,\,$ $\,\,$ So we're seeing the same action through from June,
- 6 September, October; that's correct, isn't it?
- 7 A. Yes.
- 8 Q. Did anyone query at these meetings whether
- 9 Simon Lawrence had or in fact was intending to appoint
- 10 a fire consultant?
- 11 A. My memory from these meetings is we were at the early
- $12 \hspace{1cm} stage \hspace{1mm} of \hspace{1mm} the \hspace{1mm} ... \hspace{1mm} Rydon \hspace{1mm} coming \hspace{1mm} on. \hspace{1mm} They \hspace{1mm} were \hspace{1mm} initially$
- $13 \qquad \quad appointed \ on \ a \ limited \ scope \ of \ work \ under$
- 14 a pre-construction services agreement, so they'd only
- been appointing the sort of key designers and
- subcontractors that they needed to progress the
- 17 pre-construction services work.
- $18\,$ Q. So it didn't strike you as odd that this minute was
- coming up again and again with no change on --
- $20\,$ A. We did keep pressing it as an action, that's why it
- 21 stayed on there a number of times, and Simon Lawrence's
- $22\,$ response was, "Well, we're going through the procurement
- 23 process of bringing on our subcontractors and
- designers", and he had started with bringing on,
- 25 you know, the M&E and the façade people, because that's

- $1 \hspace{1cm} \text{some of the area that we were really focusing on, so he} \\$
- 2 wanted to bring them on board, but he hadn't yet got
- $3\,$ $\,$ $\,$ round to appointing the follow-ons. That's why we -- it
- 4 kept on there.
 - Q. Can we go to $\{ART00003150\}$. These are minutes of
 - progress meeting number 5 held on 18 November 2014.
- Again, we can see you're present and you've checked the minutes.
 - If we go at the bottom of the page to point 1.2, we can see it says:
- "[Simon Lawrence] has now received the signed
- $12 \hspace{1cm} \text{contract.} \hspace{0.2cm} \text{[Simon Lawrence] to arrange preparing the} \\$
- 13 bond/warranties etc."
- $14 \hspace{1.5cm} \hbox{That's all that's said about appointments in these} \\$
- meeting minutes. There is no mention at all of
- appointing consultants, whether that be fire consultants
- or Disability Discrimination Act, DDA, consultants.
- $18 \hspace{1.5cm} \hbox{Can you help us, how did the action about Rydon} \\$
- appointing a fire consultant drop out of the minutes?
- 20 A. I don't know. Usual custom and practice is that only
- 21 once a minute has been completed, then it wouldn't
- 22 manifest itself, we wouldn't write it again in the
- following month, and so the few meetings beforehand it was there -- $\,$
- 25 Q. Does that mean you thought at the time that Rydon had

·

95

- 1 appointed a fire consultant?
- 2 A. I don't have a vivid memory of it, so I don't know, so
- 3 I can't answer that, but that would be usually what
- 4 would happen. That's why actions usually dropped off
- 5 the minutes. But I don't have a memory of him, Simon,
- 6 saying, "I have appointed a fire consultant", I am
- 7 afraid.
- 8 Q. Do you recall anybody noticing at the time that the
- 9 action about Rydon appointing a fire safety consultant
- 10 had not been closed off?
- 11 A. No. We did -- you know, also, whenever we write
- $12\,$ $\,$ $\,$ minutes, we do send them for draft $\,$ and then ask at the
- beginning of the next one: is there any inaccuracies?
- And ... but I just -- I don't remember what happened
- there, I'm afraid.
- 16 Q. Simon Lawrence's oral evidence was that Rydon decided
- internally not to appoint one. Was that ever discussed
- or communicated to you?
- $19\,$ A. It may have been. I mean, I knew that -- I don't have
- a memory of that. I mean, I knew that the overall
- design responsibility sat very clearly with Rydon, and
- we weren't dictating who they needed to appoint to
- discharge that design responsibility.
- $24\,$ Q. No, but I'm asking you a specific question: was it ever

96

25 communicated to you that Rydon had decided not to

- 1 appoint fire consultants?
- 2 A. I don't have a strong memory of that, no.
- 3 Q. Can you recall any discussion at this time about
- 4 disability consultants, again why that was allowed to
- 5 drop off? Was there any discussion around that at this
- 6 meeting?
- 7 A. No, I don't remember. I remember that -- I do remember
- 8 that we had a point we're focusing -- or Rydon were
- 9 saying they were focusing on their main subdesigners and
- 10 subcontractors to start with, and there was a reticence
- 11 to appoint too many additional people whilst they didn't
- 12 have the contract, signed contract in place, because
- 13 they were only under a limited instruction to start with
- 14
- 15 Q. But they had the signed contract in place from
- 16 July 2014, so this postdates that, doesn't it?
- 17 A. Well, that's what this minute is, 1.2, "SL has now
- 18 received the signed contract".
- 19 Q. Oh, I see.
- 20 A. That's what I remember it. They had a pre-construction
- 21 agreement before that, but it was only focusing on
- 22 certain activities that were some value engineering
- 23 activities, cladding design -- that's why they appointed
- 24 those people first.
- 25 Q. Okay.

- 1 We know that Exova was not novated to Rydon
- 2 following appointment as main contractor, and Exova was
- 3 not otherwise retained by Rydon as fire safety
- 4 consultant.
- 5 Were you ever concerned that a fire consultant had 6 not been appointed directly by Rydon on the project?
- 7 A. At the time, no.
- 8 Q. Did you ever have any discussions with your client about
- 9 that, the TMO, about whether it might be a good idea to
- 10 discuss with Rydon why a fire consultant hadn't been
- 11 appointed?
- 12 No. I mean, there were plenty of fire elements being
- 13 discussed on the project that you will see elsewhere in
- 14 the minutes, and they were -- so there was -- it wasn't
- 15 like it was a subject that wasn't ever discussed, but they were largely -- they were around the smoke extract
- 17 system, that design, making sure that -- the
- 18 Fire Brigade was involved, TMO's fire officers were
- 19 involved.
- 20 Q. I understand all that. I wanted to know whether it was
- 21 ever discussed between you and your client --
- 22

16

- 23 Q. -- whether or not that should be raised with Rydon.
- 24 Were you aware of the basis on which Exova was used

98

25 by Rydon and others after Rydon's appointment?

- A. I don't know, no.
- 2 Q. Did you know at the time that the design team
- 3 occasionally asked for Exova's input on an ad hoc basis?
- 4 Were you aware of that?
- 5 A. No, but I'm not surprised by that, because we had
- 6 introduced them.
- 7 O. I see. So had you been aware of that, that wouldn't
- 8 have concerned you, that Exova were being used on
- 9 an ad hoc basis?
- 10 A. No. So, you know, Rydon were in control of the design.
- 11 We(?) decided who was going to be novated over, and they
- 12 were clear that they had to discharge their design
- 13 responsibilities, and it was for them to decide which
- 14 designers they needed in place.
- 15 Q. Did you ever enquire whether a final version of the
- 16 outline fire safety strategy had been produced?
- 17 A. No, I didn't ask that question.
- 18 Wasn't that an important document for your client, the
- 19 TMO? We know, for example, that the cladding changed
- 20 really quite radically between what the tender suggested
- 21 and then what was put on the building. Why didn't you
- 22 ever have a discussion with your TMO client about
- 23 whether Exova's work needed finishing and a final
- 24 detailed fire strategy for this building prepared?
- 25 So I would expect that sort of thing to happen, but when

99

- 1 I left the project it was still mid-construction. At
- 2 the end of projects, usually you start engaging with the
- 3 client at handover about, you know, what's their new
- Δ fire risk assessment that they're going to have in
- 5 place, which would include what's the final
- 6 fire strategy based on the overall building. But when
- 7 I left it was still mid-construction, so I didn't bring
- 8
- 9 Q. Would you accept that it would part of Artelia's role as
- 10 employer's agent or as CDM co-ordinator to have those
- 11 discussions with the TMO about a final fire strategy for
- 12 the building?
- 13 A. I think in handover duties you need to make sure that
- 14 there are -- the fire operations and strategy, so the
- 15 client -- is in place, so the fire risk assessment the
- 16 client has to write to look after the building going
- 17 forward is in place. So I think that's part of the
- 18 handover at the end.
- 19 Just finally in my questions, some very brief questions 20 about the health and safety file on the project.
- 21 Were you ever made aware of any steps which Artelia, 22 as CDM co-ordinator, was taking to create the health and
- 23 safety file during the time you worked on the project? 24 So I was aware Keith Bushell was the CDMC, and I was
- 25 aware that he did -- he provided information that went

100

A.

| 1 | into the tender documents, and also | 1 | but I just wanted to make that clear. |
|----|---|----|---|
| 2 | Q. But were you ever aware that he was collating | 2 | THE WITNESS: Thank you. |
| 3 | information for use on a health and safety file? Were | 3 | SIR MARTIN MOORE-BICK: Right. |
| 4 | you ever made aware of that? | 4 | Well, Mr Booth, it only remains, then, for me to |
| 5 | A. So I was aware that he'd put together the as is | 5 | thank you very much for coming here to give your |
| 6 | normal custom and practice, the structure of what the | 6 | evidence. I'm sorry that we had to do it over two days, |
| 7 | health and safety file would look like and what would | 7 | not one, but these things happen sometimes. |
| 8 | need to be provided by the designers and also the main | 8 | Anyway, it's been very helpful to hear from you, and |
| 9 | contractor, so that that could be collated at the end as | 9 | we are grateful to you for coming, and now you are free |
| 10 | a record of the as-built. | 10 | to go. |
| 11 | But when I was on the project, we were still | 11 | THE WITNESS: Thank you very much. I hope my small part |
| 12 | mid-construction, so I think we'd only got to the point | 12 | helps with making sure something like this never happens |
| 13 | of: this is what we're going to expect the structure to | 13 | again. |
| 14 | be. I don't believe it had been put together. | 14 | SIR MARTIN MOORE-BICK: Thank you. |
| 15 | MS GRANGE: Okay. | 15 | THE WITNESS: Thank you. |
| 16 | Mr Chairman, I've reached the end of my questions. | 16 | MS GRANGE: Thank you. |
| 17 | SIR MARTIN MOORE-BICK: All right. Thank you very much. | 17 | (The witness withdrew) |
| 18 | MS GRANGE: If we could just have a short break, I would | 18 | SIR MARTIN MOORE-BICK: Now, Ms Grange, we would normally |
| 19 | have thought ten minutes, to sweep up. | 19 | have to have a short break for housekeeping purposes at |
| 20 | SIR MARTIN MOORE-BICK: Yes, we will do that. | 20 | this stage anyway. |
| 21 | Well, Mr Booth, counsel thinks she has finished her | 21 | MS GRANGE: Yes. |
| 22 | questions, but we need to have an opportunity to sweep | 22 | SIR MARTIN MOORE-BICK: I will suggest we break now for |
| 23 | up and make sure there is nothing that ought to have | 23 | lunch. |
| 24 | been asked that hasn't been asked, or that there are | 24 | MS GRANGE: Yes. |
| 25 | questions from others that we need to put to you. | 25 | SIR MARTIN MOORE-BICK: We will take the hour for lunch, but |
| | | | |
| | 101 | | 103 |
| 1 | So we will break now until 12.45, and then we will | 1 | we will resume at 1.45. Would that be all right? |
| 2 | come back and see if there is anything else we need to | 2 | MS GRANGE: That would be fantastic. Yes, thank you. |
| 3 | ask you. All right? | 3 | SIR MARTIN MOORE-BICK: Good. |
| 4 | THE WITNESS: Okay, thank you. | 4 | 1.45 then, please. Thank you. |
| 5 | SIR MARTIN MOORE-BICK: Thank you very much. | 5 | (12.48 pm) |
| 6 | (Pause) | 6 | (The short adjournment) |
| 7 | Right, 12.45, please. Thank you. | 7 | (1.45 pm) |
| 8 | (12.37 pm) | 8 | SIR MARTIN MOORE-BICK: Yes, Ms Grange. Now, who do we have |
| 9 | (A short break) | 9 | next? |
| 10 | (12.45 pm) | 10 | MS GRANGE: Yes, Mr Chairman, we have another Artelia |
| 11 | SIR MARTIN MOORE-BICK: All right, Mr Booth, we will just | 11 | witness. Could we have Mr Neil Reed, please. |
| 12 | see if there are any more questions for you. | 12 | SIR MARTIN MOORE-BICK: Good, thank you very much. |
| 13 | THE WITNESS: Okay. | 13 | MR NEIL REED (affirmed) |
| 14 | SIR MARTIN MOORE-BICK: Yes, Ms Grange, have you found some? | 14 | SIR MARTIN MOORE-BICK: Thank you very much, Mr Reed. Good |
| 15 | MS GRANGE: No more questions, but just a clarification on | 15 | afternoon. Sit down, make yourself comfortable. |
| 16 | my part. I think I may have said, perhaps up to two | 16 | I know you have been waiting quite a while to give |
| 17 | times, that the Exova outline fire safety strategies | 17 | your evidence. I'm sorry we have kept you waiting, but |
| 18 | were drafts. In fairness to you, they're not marked as | 18 | that sometimes happens. Anyway, we're ready to go now. |
| 19 | draft. It was Exova's existing fire safety strategy | 19 | THE WITNESS: Thank you. |
| 20 | that was marked as a draft. They were always just | 20 | SIR MARTIN MOORE-BICK: All right. |
| 21 | outline fire safety strategies. So I feel I ought to | 21 | Yes, Ms Grange. |
| 22 | correct that, in fairness to you. | 22 | Questions from COUNSEL TO THE INQUIRY |
| 23 | THE WITNESS: Okay, thank you. | 23 | MS GRANGE: Thank you, Mr Reed, for coming today and |
| 24 | MS GRANGE: I don't know if there was anything more you | 24 | assisting the Inquiry with its investigations, it's very |
| 25 | wanted to say on that as a result of that correction, | 25 | much appreciated. |
| | | | · · · -FF |

1 My questions are intended to be short and simple, 2 but if you have any difficulty understanding anything 3 I'm asking you, please ask me to repeat the question or 4 put the point in a different way. 5 If you need a break at any time, please let us know. 6 Please keep your voice up so that the lady sitting 7 to your right can take a nice clear note of your 8 evidence. 9 Now, you have made two statements to the Inquiry. 10 If we go to the first, this is {ART00006663}, there we 11 have it. If we turn to page 39, we can see it's dated 12 18 October 2018. Is that your signature there? 13 A. It is. 14 Q. Have you read it recently? 15 A. I have. 16 Q. Are the contents true? 17 A. Correct. 18 Q. Thank you. 19 If we go to your second statement, this is 20 {ART00009419}. This is a shorter statement, and if we 21 go on to page 6 at the end, we can see it's dated 22 11 March 2020. Again, is that your signature there on 23 that page? 24 A. It is, yes. 25 Q. Have you read that statement recently?

105

1 A. I have.

- 2 O. Are the contents true?
- 3
- 4 Have you discussed your statements or your evidence with
- 5 anybody before coming here today?
- 6 A. No.
- 7 Q. If we go back to your first witness statement where you
- 8 set out your qualifications, I want to first ask you 9 about your background and your work history. So if we
- 10 can go to that on page 2, this is {ART00006663/2}, and
- 11 look at paragraph 4, you tell us there you graduated
- 12 with a first class degree in construction management
- 13 from Southbank University in 1993, and since 1997 you've
- 14 been a member of the Chartered Institute of Building,
- 15 and then since 2004 you have been a member of the
- 16 Association for Project Management.
- 17 Do you still hold those memberships now?
- 18 A. I do.
- 19 Q. Yes.
- 20 In paragraph 5 you tell us that you began working 21
- for Artelia in 2001, and between 2008 and 2014 you were
- 22 a director of project management at Artelia. Is that
- 23 correct?
- 24
- 25 Q. Then in 2014 you were appointed as one of two heads of

- 1 project delivery at Artelia. Is that correct?
- 2 A. That's correct.
- 3 Were those senior roles within Artelia?
- 4 Α.
- 5 Very senior roles within Artelia?
- 6 Well, I was the director of a team.
- 7 Q.
- 8 A. And a member of the management board for a period.
- 9 Q. Yes.
- 10 Can you explain to us what your role as joint head 11 of project delivery involved?
- 12 At that time from 2014 I was looking after a team, from
- memory, of around four or five project managers, looking 13 14
 - after a range of projects and accounts, as we would call

responsible for delivering our services to those clients

- 15 them in the business, client accounts, where I was
- 17 and being a project manager on some of the projects
- 18 myself.
- 19 Q. Yes.

16

- 20 Can you help us, where were you in comparison to
- 21 Mr Cash in terms of levels of seniority within Artelia?
- 22 Sorry, as the head of project delivery? A.
- 23 Q.
- 24 A. I think it probably would have been a notch below Simon.
- 25 I think Simon remained a board member -- a management

107

- 1 board member, if that's the right term.
- 2 Q. Is it right that your role on the Grenfell Tower
- 3 refurbishment was to come in as employer's agent?
- 4 That's correct.
- 5 You took over that role from Philip Booth in March 2015;
- 6 is that correct?
- 7 A. Yes.
- 8 Q. You tell us in paragraph 6 of your statement that you
- 9 left Artelia in July 2015 and you formed your own
- 10 company called Re Sol Group Limited; is that right?
- 11 That's correct. Α.
- 12 Just to confirm, is it right that, despite leaving
- 13 Artelia, you continued to work on the Grenfell project?
- 14 A. I did.
- 15 Q. Did you continue to work on the Grenfell project in the
- 16 same capacity, that is as employer's agent?
- 17 A.
- 18 Q. Is it right that your company was appointed by Artelia
- 19 pursuant to a consultancy service agreement in
- 20 July 2015?
- 21 Α. Yes.
- 22 Q. Did you continue in that role as employer's agent,
- 23 albeit on a consultancy to Artelia, through to practical
- 24 completion in July 2016?
- 25 That's correct.

108

- $1\,$ Q. Is it right that, pursuant to that consultancy service
- $2 \hspace{1cm} \text{agreement, when the certificate } \hspace{0.1cm} \text{of practical completion} \\$
- 3 was signed, your appointment on the project ended; is
- 4 that right?
- 5 A. That's right.
- 6 Q. Yes.
- 7 Is it right that you have worked in construction
- 8 management roles for the entire length of your career,
- 9 since the mid-1990s?
- 10 A. Yes. We need to be careful with the term "construction
- 11 management", but I was involved in managerial roles in
- both contracting and consulting environments.
- 13 Q. Yes, thank you.
- 14 A. Yes.
- 15 Q. That's helpful.
- Would it be right to say that you are very
- 27 experienced in the management of construction projects?
- 18 A. I think that's a fair comment, yes.
- 19 Q. Now, before the Grenfell Tower refurbishment project,
- $2\,0\,$ had you personally ever worked on any high-rise
- 21 residential projects before?
- 22 A. I'd worked on a project very early on with AUK in the
- early 00s, around 2002 or 2003, on three ten-storey
- tower blocks that involved window replacements, communal
- works and façade repairs, not cladding, so to speak --

- 1 Q. Yes.
- 2 A. -- with residents staying in place.
- 3 Q. Yes, that's helpful. Yes.
- 4 What about any high-rise projects involving the
- 5 overcladding of the building? Had you been involved in
 - any such projects before this one?
- 7 A. No.

6

- 8 Q. Had you ever worked on any projects which had involved
- 9 ACM cladding, whether low-rise or high-rise?
- 10 A. No, not to the best of my knowledge anyway.
- 11 Q. Yes.
- 12 Now, we know that you took over from Philip Booth as
- employer's agent in March 2015, and is it right that, at
- 14 the time you took over, it was anticipated that there
- were just a few months left until practical completion,
- some six or seven months left at that point?
- 17 A. I think that's correct, yes.
- $18\,$ Q. Is it difficult to take over a project as employer's
- agent at such an advanced stage? Is that a difficult
- 20 thing to do?
- $21\,$ $\,$ A. It can be challenging, but many projects involve the
- 22 same skills.
- 23 Q. Yes.
- 24 A. So whilst you might -- there's obviously historical
- context that gets lost in that process, it's inevitable. $110 \label{eq:context}$

- 1 Q. Is it right that you were assisted in the employer's
- 2 agent role by Nick Valente and later Andrew Malcolm,
- 3 both of whom were deputy employer's agents; is that
- 4 right?
- 5 A. That's correct.
- 6 Q. Were you told why Mr Philip Booth was leaving? What
- 7 were you told about his departure and why you were being
- 8 brought on?
 - A. I don't really recall, other than I thought that Philip
- was leaving the business, is what I recall.
- 11 Q. Yes, I see.

9

- Now, Philip Booth has explained to us that, between
- March 2015 and June 2015, when he was appointed to
- another full-time project, you essentially had
- $15\,$ a handover period for the employer's agent role; is that
- 16 right?
- 17 A. That's not what I recall.
- 18 Q. Okay. What do you recall?
- 19 A. I may be mistaken, but I don't believe there was
- a handover from Philip in the way you describe.
- 21 O. Yes.
- 22 A. The handover, if that's the right term, came from Simon,
- so I don't remember sitting down with Philip, per se,
- and going through detail. I mean, that's my
- 25 recollection.

111

1 Q. Okay. Yes.

3

4

6

7

8

- Let's look at an email. This is {ART00006678}.
 - It 's an email from Simon Cash to David Gibson at the
 - TMO, copying in a number of individuals,
- ${\small 5} \qquad \qquad {\small Claire \ Williams, \ Philip \ Booth \ and \ also \ yourself \ there,} \\$
 - you're copied in, headed "Grenfell Tower".
 - We can that he says:
 - "Further to our conversation this morning,
- 9 I appreciate that things are progressing with Grenfell
- Tower and the Artelia team have developed a good working
- $11 \hspace{1cm} \text{relationship \ with the \ KCTMO, in particular \ Claire} \ ,$
- 12 However, a number of projects that Philip Booth is
- $13 \hspace{1cm} \text{working on have bunched up for various \ reasons and his} \\$
- 14 availability to give this project the input that it
- $15 \hspace{1cm} \text{really needs to make it a success has come under a lot} \\$
- 16 of pressure. Therefore, to maintain the level of
- service that is necessary, I would like to introduce a new senior project manager to the project. Neil Reed is
- Head of Project Delivery for the PM team ..."
- Is that project management team?
 - o is that project management tea
- A. That's correct.

 22 O. "... and has a
- 22 Q. "... and has a wealth of experience of working on this
- $23\,$ type of project. I have had a briefing session with
- well up to speed on the current issues that need to be

112

both Neil and Nick Valente and Neil is already getting

1 dealt with on the project. Neil will be attending the 2 project meeting tomorrow and hopefully you will have an 3 opportunity of meeting him then."

> So we can see that that's how you are introduced to the project.

Now, just a few questions about that.

7 It refers there to a briefing session from 8 Simon Cash that he had with you and Nick Valente. Does 9 that coincide with what you were just telling us 10 a moment ago, that it was Simon Cash who introduced you 11 to the project and gave you a handover, but not

12 Philip Booth?

A. That's correct.

4

5

6

13

- Q. There's reference there to "Neil is already getting well 14
- 15 up to speed on the current issues", that's in the final
- 16 lines there.

17 Can you recall, what were the current issues which 18 you were being told about at that stage?

- 19 A. I recall the project was in some delay, I would call
- 20 distressed, and I think that was the main theme of that
- 21 conversation: it was in distress.
- 22 Q. Yes.
- 23 A. The TMO, as client, had a hands-on role, so the
- 24 arrangement around us as Artelia having no design
- 25 responsibility was made clear to me, and I think it was

113

- 1 fairly soon after this conversation there was a meeting.
- 2 That's really all I recall. Those are the themes from
- 3 that first meeting.
- 4 Q. Yes.
- 5 So we know from your terms of appointment to the 6 Grenfell project and your consultancy services that, 7 essentially, that refers back to the scope of services 8
- 9 Can I check: did you yourself read the contract 10 between Artelia and the TMO when you were appointed to

in Artelia's contract from July 2014.

- 11 the contract?
- 12
- 13 Q. When you took over, did you understand that you were not 14 the designated project manager for the refurbishment?
- 15
- 16 O. We see here in this email, kind of in the middle of that 17 paragraph, that Simon Cash there says:
- 18 "Therefore, to maintain the level of service that is 19 necessary, I would like to introduce a new senior 20 project manager to the project."
- 21 Do you know why Simon Cash was referring to you as 22 project manager there, or in what way was he using those
- 23 words?
- 24 A. Well, it's synonymous with my role rather than the 25
 - service. So I am a project manager, I'm referred to as

- 1 a project manager.
- 2 Q. Yes.
- 3 A. What I do is project management, so -- elements of what
- 4 I do is project management, so that's quite normal, to
- 5
- 6 Q. But were you clear that your role was as employer's
- 7 agent and not project manager?
- 8 A. Very clear.
- 9 Q. Yes.
- 10 Can you help us in your own words about the
- 11 difference between a project manager and an employer's
- 12
- 13 A. Okay. An employer's agent is a unique term used by the
- 14 JCT design and build contract to administer the terms
- 15 and obligations under the build contract. Project
- 16 management -- project manager is a role, is a function,
- 17 and in my experience would often go much broader than 18 the services that are provided by an EA.
- 19 Q. Yes.
- 20 A. It's that simple. A project manager, by definition,
- 21 would do everything and anything required of a project
- 22 that perhaps the EA is not doing.
- 23 Is it right that a project manager would usually have
- 24 some form of delegated authority to be able to make
- 25 decisions on behalf of the client?

115

- 1 A. Yeah, that's quite normal.
- 2 Q. Yes.
- 3 Α.
- 4 In your experience, do refurbishment projects like the 0.
- 5 Grenfell Tower project need a properly trained
- 6 designated project manager in the way we've just been
- 7 discussing, with oversight of the whole project? Do
- 8 they need that kind of skill?
- 9 A. I would say so, yes.
- 10 Q. Could you do a refurbishment project like the
- 11 Grenfell Tower project without a designated project
- 12 manager?
- 13 A. We talk about project manager as a person rather than as
- 14 a team, so project management can be done by virtue of
- 15 a person, an individual, or a person being supported by
- 16 a variety of other people with the skills to support
- 17 that person.
- 18 Q. Yes.
- 19 On the Grenfell Tower project, did you understand
- 20 that there had been a designated project manager
- 21 appointed?
- 22 Sorry, could you repeat that?
- 23 On the Grenfell Tower project, did you understand that
- 24 there had been a designated project manager appointed?
- 25 Designated project manager appointed?

- 1 Q. I'll put it more simply: who did you think was the project manager --
- 3 A. Right.
- 4 Q. -- on the Grenfell Tower project?
- A. I understood that Claire Williams of the TMO was the
 employer's representative, was providing all the other
- 7 functions that would be required in a project management
- 8 sense --
- 9 Q. Yes.
- 10 A. -- and extended into quite a significant design function
 11 in terms of architectural compliance. That was my
 12 understanding from the outset.
- 13 Q. Yes.
- Just help us with that last part of your answer.

 You said that "extended into quite a significant design function in terms of architectural compliance". Can you just help us as to exactly what you mean in practice you understood Claire Williams to be doing?
- 19 A. Yeah, of course.

Okay, so I when I came on board, with a design and build project, it's very often the case that a design team is either retained to provide what used to be called -- may still be called performance duties, ie retained by the client to provide an oversight function in terms of the contractor's design and build delivery,

117

where that team would be compliance checking and auditing the contractor's proposals and what the contractor wanted to do against the contract documents.

When I came on board, it became very apparent very quickly that Max Fordham were being retained in the capacity of M&E engineer, which was normal to see, but I'd come to recognise that I think it's Studio E were either novated or switched, I think is the term in the industry, they went on to work for the builder, which for me meant: okay, so who is going to be providing the oversight function in terms of architectural compliance? That led to me— my understanding around the offer in relation to the, I think, client design adviser role that Artelia offered the TMO—

15 Q. Yes.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

- A. -- where I learnt that they'd declined that role, and it
 was very clear to me that the TMO and that
 Claire Williams had made the decision that they would
 provide that function themselves. And that was very,
 very important, because I needed to know, in coming on
 board, you know, who are my team, in essence, that are
 going to be monitoring this project with me.
- I hope that answers your question.
- 24 Q. Yes.

In practice, did you ever become aware that the TMO \$118\$

- were carrying out that compliance checking against the
- 2 contract document function that you have just described?
- 3 A. Sorry, could you repeat the question?
- $4\,$ $\,$ Q. Yes. In practice, were you aware that the TMO were
- $\,\,\,$ $\,\,$ in fact carrying out that compliance checking function
- 6 that you have just described?
- 7 A. Well, I saw Claire actively involved in discussions
- 8 around design matters and making decisions and offering
- 9 direction, which is what I would expect to see.
- 10 Q. Yes.
- 11 A. But when I'd come on board, I also understand that the
- TMO had taken the decision to appoint a clerk of works
- or site inspectorate role to support them, in my view,
- $14\,$ $\,$ in $\,$ fulfilling $\,$ that duty, which again would be quite
- 15 normal.
- 16 Q. So you have spoken about a need on the client side for
- somebody doing a compliance checking role; did you
- understand -- let's take them in turn -- that
- 19 Claire Williams was checking for compliance, say, with
- 20 the Building Regulations?
- 21 A. Not so much the Building Regulations. I think that's
- a separate -- in a way, that's a separate matter,
- because the Building Regulations are governed by the
- 24 Building Control process and the Building Control
- officer. So that's a separate workstream. They sit

119

- 1 side by side.
- 2 In terms of the rest of the requirements, in terms
- $3\,$ of compliance checking, I understood the TMO and
- ${\small 4} \qquad \qquad \text{Claire Williams were monitoring the contractor's} \\$
- 5 proposals, be they statements, drawings or otherwise,
- 6 setting out what they were proposing to do in response
- 7 to their obligations under the contract.
- 8 Q. Yes.
- 9 A. So I saw that, I saw that happening, in dialogue, in email communication mainly, et cetera.
- 11 Q. And that would include checking that what was being
- proposed by the contractor, as you say, either in
- drawings, specifications, et cetera, was consistent with
- what was in the employer's requirements?
- 15 A. Yes, correct.
- 16 Q. Take the clerk of works, then. We will talk about them
- 17 in due course.
- 18 A. Sure.
- 19 Q. John Rowan and Partners. Did you understand at the time
- 20 that it was part of their role to be checking the works
- 21 for compliance with the employer's requirements?
- 22 A. That was my understanding, yes.
- $23\,$ $\,$ Q. $\,$ Did you also $\,$ understand that they were checking the

- works for compliance with statutory requirements,
- 25 including the Building Regulations?

- 1 A. I wouldn't necessarily be expecting them to do that 2 explicitly, but to explain, if the design had obtained
- 3 its Building Regulations approval -- the
- 4 Building Regulations process involves a full plans
- 5 approval, the plans are submitted when they're
- 6 available, submitted to Building Control, they would
- 7 approve the plans first and then their inspections would
- 8 follow later. So if the contractor had submitted
- 9 proposals that had achieved their full plans approval,
- 10 by virtue of the builder building out those plans and
- people checking against those plans, they would be
- 12 checking what in theory would be complying with the
- 13 Building Regulations.
- 14 Q. Yes.
- 15 A. But it's not, per se, looking at the drawings, checking
- against codes of practice themselves.
- 17 Q. I understand.
- 18 A. If that helps.
- 19 Q. But that assumes, doesn't it, that there has been some
- 20 form of checking of some form of crystallised design as
- 21 part of the full plans application?
- 22 A. Yes.
- 23 Q. Yes.
- 24 A. Absolutely.
- 25 Q. Now, did you ever feel that, in practice on the project,

- 1 you were pulled into performing the role of project
- 2 manager, as opposed to the role of employer's agent?
- 3 A. We had a scope of duties to deliver. Some of those
- duties might be construed as project management type
- 5 duties.
- 6 Q. Yes.
- 7 A. For example, monitoring performance.
- 8 O. Yes.
- 9 A. It's a project management duty.
- 10 Q. Yes.
- 11 A. What's key here is: what were the duties required of
- what was described in that contract as an EA?
- 13 Q. Yes.
- 14 A. So that's what mattered.
- 15 Q. Yes.
- 16 A. We were either appointed to do something or we weren't.
- 17 Q. Yes.
- 18 A. It was always that simple to me.
- $19\,$ $\,$ Q. $\,$ Did you perceive that the TMO had a clear understanding
- $20\,$ of the distinction between the employer's agent role and
- 21 the project management role?
- $22\,$ $\,$ A. $\,$ I think so, yes, because they were undertaking project
- 23 management.
- 24 Q. Yes
- 25 A. For example, they were managing stakeholders. That's

122

- 1 a fairly significant role. They were managing the
- 2 appointment of the design team. They were managing the
- 3 design process. These are very key functions of what
- would otherwise be known as project management in the
- 5 industry.
- 6 Q. Yes.

7

- Now, you come into the project in the spring of
- 8 2015, so that's during the construction phase --
- 9 A. That's right.
- 10 Q. -- of the project.
- Can you tell us, what were your first impressions,
- 12 at the point you came in, of Rydon?
- 13 A. My first impressions of Rydon were pretty good. I was
- 14 impressed with Mr Lawrence, Simon Lawrence, he was
- someone that was very easy to talk to. I mean, the
- project was in some significant delay, and I very
- 17 $\,$ $\,$ quickly gained an insight into what I saw as the key
- issues for the project.
- $19\,$ Q. Just help us -- I mean, I'm going to take you through it
- and take you to some key documents in a moment --
- 21 A. Sure.
- $22\,$ Q. -- but what were the key issues as you saw them on the
- 23 project, once you had got familiar with where it was at?
- $24\,$ A. There were two key issues for me. The delay itself ,
- which I think was one issue. There appeared to be

123

- 1 significant change, ongoing change, which would be quite
- 2 unusual in month 9 of a construction project. That's
- 3 going to cause some challenges and some issues for the
- 4 team to manage. But my immediate concern in terms of
- 5 looking at the sort of broader, high-level issues were
- 6 the lack of access to flats, that it became very
- 7 apparent to me very quickly were going to cause
- 8 a significant problem for TMO, and indeed Rydons, but
- 9 it 's TMO's problem if the TMO cannot provide access for
- 10 its contractor.
- 11 O. Right.
- 12 A. I mean, that was very, very key.
- 13 Q. Yes.
- What about your first impressions of the TMO when
- 15 you began working with them?
- 16 A. Working with them ... I mean, I met Claire, forged
- a quick, effective relationship with Claire.
- I understood that we were working with a large
- organisation involved in much capital work of this
- 20 nature.
- 21 Q. Right.
- 22 A. That was the impression I got.
- 23 Q. Can we look at what you say in your first witness
- statement, now, at paragraph 13. This is
- 25 {ART00006663/3}. So you say there:

1 "The Project was in delay and I was keen to 2 introduce some improved process around Rydon's 3 engagement. The need to improve process is reflected in 4 an email I sent to the TMO and Max Fordham on 19 March 5 2015 in which I noted that I had already asked Rydon for 6 an Information Required Schedule ... and I said I would 7 be 'introducing some improved discipline (by Rydon) to 8 the resolution of queries, decisions, etc.' The need to 9 improve process was also recognised by Claire Williams 10 of the TMO in an email to Tony Batty of Silcock Dawson 11 ... dated 20 March 2015." 12 Now, just going back to what you said in the first 13 lines of that paragraph, you said you were keen to 14 introduce some improved process around Rydon's 15 engagement. Can you help us as to exactly what you mean 16 by that? 17 A. Yes, I think, as I say, when I arrived, it became -- on 18 the run-up to the meeting and soon after the meeting, 19 I thought there was too much -- there was far too much

125

contract. It's quite normal to see a contractor

email traffic around matters that constituted change,

and doubt about whether something was in or out of the

adopting a request for information schedule in order to

track the nature of their questions and ensure they're

closed out. So I think that was missing. You wouldn't

expect to see it at month 9. So hence the suggestion to improve the situation by suggesting we introduce that, to bring some improved discipline to the change management process.

5 Q. Yes, I understand.

> Can we go to one of the emails you are referring to there, {ART00006641}. This is the email on 19 March between you and Max Fordham. This is Matt Smith and Claire Williams. I think it's concerning flats which required disabled access and whether certain flats were compliant with the Lifetime Homes standards. Do you

13 A. That's the subject heading, isn't it?

14 Q. Yes.

20

21

22

23

24

25

1

2

3

Δ

6

7

8

9

10

11

12

18

19

20

21

22

23

24

25

15 A. Yes.

16 Q. Then in the second paragraph, so just to pick it up 17 there, you say:

"Matt, I appreciate we have not spoken yet but look forward to working with you and introducing some improved discipline (by Rydon) to the resolution of queries, decisions, etc. You'd be very welcome to attend the meeting so by copy to Nick I will ask him to invite you so we can meet and discuss project status quo." So that's consistent with what you were just

126

1 describing to us, is that right, about introducing some

2 discipline over the resolution of queries, decisions, 3

et cetera?

4 A.

5 Q. Did you perceive that that problem you have described 6 about a lot of email traffic and Rydon raising queries

7 formally through the request for information, the RFI

8 process, rather than anything else, was that

9 a substantive problem or was it just a communication

10 issue, did you think?

11 (Pause)

12 I'd say a bit of both actually.

13 O. Yes.

A. Yeah, both. 14

15 Q. Yes.

16 In terms of it being a substantive issue, what would 17 your concern be fundamentally about this email traffic 18 and all these requests for information coming out? 19 I mean, did you have a concern about quality,

20 for example, at this point?

21 Α.

22 Q. No.

23 A. Not quality, no. No. I think change on a design and

24 build contract can lead to significant cost increase,

25 so, you know, you need to get a grip on the change.

127

1 Q. Yes.

2 A. Which I think we did. So I was just concerned to

3 identify, you know: okay, what's going on here,

4 what's --

5 Q. Yes.

6 A. We're on site, we're nine months in, we've got

7 a programme, we've got a scope of work to finish, there

8 has been a lot of discussion around, "Is this in? Is

9 this out? What are we doing with this? This has

10 changed", it was very unusual.

11 O. Yes.

12 So you need to close that down as quickly and

13 effectively as possible so that, you know, the

14 out-turn -- certainty can be created around the

15 programme and the cost of these things.

16 O. Yes, I understand.

17 Let's look at another email now, and this time in 18 relation to the work on the lifts, {ART00006659}. This 19 is an email from you to Mr Campbell at Max Fordham. We 20 can see it's dated 8 April 2015. You say:

21 "Duncan.

22 "I am still, slowly getting up to speed with the

23 status of this project."

24 Sorry, I should have noted the subject is

25 "Grenfell - Fee claim and Lifts ".

1 A. Yes. 2

 $Q. \quad Then \, I \, \mbox{ want to pick up on that bigger paragraph at the }$ 3 bottom of the page, it's the sixth paragraph down, you 4

5 "My understanding is that there are no ERs or 6 CPs ...'

Is that employer's requirements or contractor's

8 proposals?

9 A. Yes.

7

23

24

25

- 10 Q. "... for the lift works? Rydon has allowed for the work 11 they describe by loose reference to drawings? I find 12 this incredible but it appears to be a reality. Hence 13 the concern now being aired by TMO over who needs to do
- 14 what even though works are starting on site. In a
- 15 nutshell I would recommend yous cope out the work that 16 needs to be done (cognisant of what Rydon is doing) in
- 17 performance terms with deliverables and requirements
- 18 around matters of interface - interface with lift
- 19 maintenance team, warranty providers, etc. We can then
- 20 issue this to Rydon as a variation and agree the
- 21 implications of anything considered beyond the current

22 scope of contract."

> Now, just in terms of the effect of there being no employer's requirements or contractor's proposals, does that mean that there was in effect no clarity on what

> > 129

- 1 the contractor had to do for this part of the works?
- 2. A. I think that's correct. Other than what would have been
- 3 indicated on the drawings, which I think was very
- 4 little
- 5 Q. And therefore no way to hold Rydon to account for what 6 they actually did do in practice.
- 7 A. On the lifts?
- 8 Q. Yes.
- 9 A. At this moment?
- 10 Q. Yes.
- 11 A. Yes.
- 12 And there was a risk that Rydon's price for the lift
- 13 work would be wrong, wasn't there, if that's the case? 14 A. It might be wrong, but the price had to be predicated on
- 15
- 16 Q. Would there be a risk that, in practice, Rydon might cut
- 17 corners on the work without it being picked up if you
- 18 have got no baseline before you start?
- 19 A. There possibly is that risk, that's true.
- 20 O. Yes.
- 21 A. Yes.
- 2.2 Q. Can you help us with this: one this a one-off problem
- 23 with the lift package, or did you feel at the time that
- 2.4 this was symptomatic of a wider problem on the project?
- 25 A. No, I think this one was unique.

1 Q. Okay.

- 2 A. Yeah.
- 3 Was your experience of Rydon any different from other
- 4 design and build contractors that you had worked with
- 5
- 6 A. It came to be, yes.
- 7 Can you explain why it came to be, in short?
- 8 Α. There was significant personnel change --
- 9 Q. Yes.
- 10 A. -- on the project, and I began to grow frustrated with
- 11 performance-related issues with the team that we were
- 12 working with, that culminated in some complaints --
- 13 O. Yes.
- 14 Α. -- about performance.
- 15 Q. Yes, I'm going to take you to those later in your
- 16
- 17 A. Right, okay. So -- but certainly at the front end I had
- 18 no misconceptions. I was very happy with the way the
- 19 team were working.
- 20 O. Yes.
- 21 A. And the attitude that they were taking to the
- 22 discussions that we were having about the project and --
- 23 Q. Okay, yes.
- 24 Let's go to another email from early on in your
- 25 involvement. This is {ART00006629}. This is an email

131

- 1 from you to Claire Williams on 9 April 2015.
- 2 A. Yeah.

4

5

6

7

- 3 Its subject is "Grenfell", and you say:
 - "Claire,
 - "Thanks for your email of yesterday suggesting a meeting to discuss Artelia's fee account. I agree we should meet. I would like to propose a broader meeting

8 objective and agenda for the following reasons. 9 "With my limited involvement to date I hold

- 10 a perception that:
- 11 "1. The scope of work that Rydon is doing is not as 12 well understood as it could be - there is significant 13 email traffic of what is considered to be in the 14 contract.
- 15 "2. The roles and responsibilities of ail parties 16 do not appear as clear to me as they could be -17 processes for resident liaison, CoW scope, Architectural
- 18 compliance monitoring for example.
- 19 "3. New risks and issues are arising that need 20 managing, mitigating and for which financial provision 21 Is required in terms of build cost and consultant fee 22 implications."

23 Then you go on to propose a meeting to discuss those 2.4 issues at a later stage. That's right, isn't it?

25 That's correct.

- Q. Now, I think you have already helped us with point 1,
 "The scope of the works that Rydon is doing is not as
- 3 well understood as it could be". You have touched on 4 that already.
- Just to be clear, who did you think didn't
 understand the scope well? Was it Rydon themselves or
 the TMO?
 - (Pause)
- 9 A. Rydon or the -- of the change. Changes that were 10 apparent.
- 11~ Q. I see. So was it your perception that Rydon hadn't
- $12 \hspace{1cm} properly \hspace{0.1cm} understood \hspace{0.1cm} their \hspace{0.1cm} original \hspace{0.1cm} scope \hspace{0.1cm} of \hspace{0.1cm} works \hspace{0.1cm} and \hspace{0.1cm}$
- therefore were raising queries about changes, when
- actually they ought to have known what the original
- scope of works was? Is that the point?
- 16 A. No. No.

- 17 Q. Do you want to help me, then --
- 18 A. I'm trying.
- $19\,$ Q. -- on exactly what Rydon wasn't understanding as well as
- 20 it could?
- 21 A. I think the outcome of this particular meeting scheduled
- out the key headings where there were change -- you
- know, Rydon -- I got a good impression that Rydon knew
- $24\,$ what they needed to do, but they were encumbered from
- doing some of the things they needed to do by virtue of

133

- what they were faced with on site. So the HIUs,
- 2 for example, were a very good example.
- 3 Q. That's the heat interface units?
- 4 A. Yes. And the assumptions on which the strategy for that
- 5 work was based I think turned out to be flawed, and
- 6 there was opportunity -- sorry, not opportunity; there
- 7 was a requirement to revisit how they were going to
- 8 achieve, you know, the outcome of that piece of work.
- 9 Q. I see. Yes. That's helpful.
- Looking at point 2, you are saying it's your

 perception that, "The roles and responsibilities of all
 parties do not appear as clear to me as they could be".
- 13 If we just break this down, you have got processes 14 for resident liaison. Why were you concerned about
- $15 \hspace{1cm} \hbox{roles and responsibilities} \hspace{0.2cm} \hbox{in relation to that?}$
- 16 A. Okay, so coming into the project when I did, one of theareas that hadn't had much discussion, if you like, was
- about resident liaison, which was going to be a very key
- 19 theme on this project.
- 20 O. Yes.
- A. So that was probably more to do with my understanding at this time, hence perception, that I understood the TMO
- 23 were very -- well, I say "very"; they were engaged with
- 24 the residents, and Rydon had, I think, two or three
- 25 resident liaison officers on the ground, so there was

134

- a process in place, and I understood that Claire was in
- 2 essence managing that process.
- 3 Q. But why at this point did you think that the processes
- 4 weren't as clear as they could be?
- 5 A. Because it wasn't apparent to me that resident liaison
- 6 was happening in the way it was.
- 7 O. I see.
- 8 A. Because, I mean, I wasn't privy to some of the
- 9 information. I think eventually, around this time,
- 10 I think some minutes of a meeting were shared to me, so
- 11 it started to become clear that there was a process in
- 12 place.
- 13 Q. I understand.
- 14 Then clerk of works scope.
- 15 A. Yes.
- 16 Q. Help us as to what you didn't think was as clear as it
- 17 could be on clerk of works scope.
- 18 A. The TMO had appointed JRP to come on board and provide
- an inspection service, but at this moment in time
- I wasn't clear what their full scope was, because I came
- 21 to learn very quickly that they had not been attending
- 22 progress meetings.
- 23 Q. Yes.
- 24 A. Which puzzled me.
- 25 O. Yes.

135

- $1\,$ $\,$ A. So this was really just about understanding the context
- 2 for their on-boarding, because I don't think they were
- 3 there from the outset, I don't know when they started,
- 4 and it wasn't entirely clear to me what they were doing.
- $5\,$ $\,$ Q. $\,$ Did you subsequently gain a clear understanding of what
 - they were doing?
- $7\,$ A. I gained a clearer understanding, yes, because I think
- 8 I held a meeting with them in June with Claire and with
- 9 Rydon. I don't think it's a meeting that was formally
- 10 minuted, which is unfortunate and unusual, but the
- 11 meeting took place nonetheless, and there are notes of
- that meeting from my notebook.
- 13 Q. Yes.

6

- 14 Did you think it was part of your obligations as
- an employer's agent to ensure that there was more
- clarity, for example, around the clerk of works and what
- 17 they were doing?
- 18 A. Yes, in this instance I think that was correct.
- 19 Q. Yes.

24

- 20 You also specifically mention here architectural
- compliance monitoring, that wasn't clear. Can you help
- us as to precisely what you meant by that?
- $23\,$ $\,$ A. So this is the area we were discussing earlier $\,$ where --

as a result of not taking up the client design adviser

role and understanding that the TMO were doing that,

- $1 \qquad \quad \text{this was me wanting to prompt, you know, how that was} \\$
- 2 going to be happening on the understanding that the TMO
- 3 were going to be fulfilling that service.
- 4 O. Yes, yes.
- A. So these were the three areas that I was immediatelyinterested in.
- 7 Q. Were you ever concerned that a lack of architectural
- 8 compliance monitoring on the project might be putting
- 9 health and safety at risk?
- 10 A. No.
- 11 Q. Okay.
- 12 Now, you have said there in that email that you felt
- 13 that roles and responsibilities of all parties weren't
- as clear as they could be. Wasn't it part of Artelia's
- job, as employer's agent, to clarify those roles and
- responsibilities, and did you feel that that was
- something that perhaps should have happened already on
- 18 the project?
- 19 A. So that's two questions.
- 20 Q. Fair enough.
- 21 A. So the first question: yes, I think I had a duty to
- 22 understand the roles and responsibilities . It's a duty
- 23 I believe I discharged.
- $24\,$ $\,$ $\,$ And in answering that, $\,$ I've forgotten your second
- 25 question.

- 1 Q. Did you think that Artelia should have got on top of
- 2 that earlier in the project? Were you surprised that
- 3 the roles and responsibilities weren't clear?
- 4 A. Well, my perception of the situation wasn't suggesting
- 5 that something hadn't been done; this was just my
- 6 perception at that moment in time that these things
- 7 weren't clear to me. I think what bore out soon after
- 8 was that the process for resident liaison was actually
- 9 quite thorough. The architectural compliance clearly
- 10 was a function of the TMO. The only area that I think
- warranted a further dialogue and discussion was really
- the clerk of works scope.
- 13 Q. Yes, okay.
- 14 A. So in my view, you know, this was really about me.
- 15 Q. Yes.
- 16 A. The roles and responsibilities of everyone else were
- 17 pretty clear.
- 18 Q. I see, okay.
- Now, we can see from the documents that there was
- $20\,$ then a meeting, as you suggested, and it was held on
- $21\,$ $\,$ $\,$ 17 April 2015, to address some of the issues that you
- 22 had raised . If we can go to {ART00006657}, this is
- $23\,$ an email chain from April 2015, and we can see there in
- the main body of that page there is an email from
- Nick Valente to Claire Williams and Simon Lawrence,

138

- 1 copying you -- sorry, it's to you as well.
- 2 A. Yeah.
- 3 Q. It's "Grenfell Contract Scope Review Meeting -
- 4 17th April 2015 Actions Arising".

5 What we see clearly is that a number of issues were

6 discussed at this meeting, and we've got the headings

7 there: lift, AOV, windows, I think then we've got the

8 heating interface units, cyclical decorations and

9 external work. So a number of specific packages of work

were discussed at this point.Did anyone discuss at this meeting the issues about

roles and responsibility that you had raised in your

email? Because we can't see anything about

architectural compliance monitoring or clerk of works

scope in the notes that we see here of that meeting.

16 A. Yeah. I don't honestly remember. I thought we would

have, but of course what's going on between the meetings

is I'm forging a relationship with Claire and there are

conversations and there are emails in the background.

20 These notes demonstrate that we were talking

fundamentally about the scope, the scope issues.

- 22 Q. Yes.
- $23\,$ $\,$ A. $\,$ I don't recall at this meeting whether we talked about
- 24 those other things specifically .
- 25 Q. Okay.

139

- 1 In your view at this time, did the project need
- 2 stronger project management as opposed to just contract
- 3 administration?
- 4 A. Stronger project management? I don't know what that
- 5 means.
- 6 Q. Okay.
- 7 A. I think what the project needed was clarity on what was
- $\ensuremath{8}$ required with regard to these particular themes of work,
- 9 and decisions made, which in turn relied on the cost 10 implications of the changes.
- 11 O. Yes.
- 12 A. So there's a bit of a circle there that required
- 13 management and decision-making.
- 14 Q. Yes, I understand.
- Now, I just want to ask you some questions now about
- $16 \hspace{1.5cm} \text{the fire strategy and the appointment that the TMO had} \\$
- made with Exova, the fire safety engineers.
- 18 Is it right that, during your time on the project,
- $19 \hspace{1cm} \text{various issues arose which required some input from} \\$
- 20 Exova?
- $21\,$ A. I would -- I don't recall being aware of that
- 22 specifically.
- 23 Q. Okay. Let's look at one example. If we go to
- 24 {EXO00001342}, this is an email from Claire Williams to
- Terry Ashton, it's 19 October 2015, so some time after

3 Can you see that there? 4 A. Yes. 5 Q. The subject is "Grenfell tower - changes to floor 6 layout". What we can see in this email is 7 Claire Williams is asking for some advice from 8 Terry Ashton about changes to the fire alarm system 9 following changes that had been made to the layout. 10 Now, do you recall sometimes being copied in to 11 emails between, say, the TMO and Exova like this one? 12 A. No. 13 Q. Did you ever review the subcontractor appointments to 14 Rydon at any time while working on the project? So did 15 you ever look at who Rydon had appointed on the project? 16 Well, you asked me two questions. The first was: did 17 I review their contracts? No. 18 Q. Their subcontractor appointments. 19 A. Their subcontractors -- no, that wouldn't be normal. 20 21 A. And the second question in terms of who they were 22 employing, part of their progress report arrangement 23 would be to essentially schedule out which 24 subcontractors they're engaging with for the elements 25 that constituted the work. 141 1 Q. Yes. 2 A. That's as far as I would be interested. 3 Q. Okay. 4 When you got an email like this, who did you think 5 Exova were contracted to in providing this advice? Did 6 you have an awareness at the time of who they were in 7 contract with? 8 A. No. 9 Q. So you wouldn't have known whether they had been engaged 10 by Rydon as part of their consultant team? You wouldn't 11 have known whether they were or not engaged by Rydon? 12 A. I think I came to believe that Exova were an adviser to 13 Rydon. That's -- I recall that was my understanding. 14 Q. I see. How do you think you came to believe that? What 15 was it that gave you that impression? 16 A. I think that in a progress meeting, 1 or 2, this came up 17 in conversation, and there may be a minute. I may be 18 mistaken but that's my recollection. 19 Q. Did you appreciate at the time that Exova was giving

ad hoc advice to TMO and the design team as and when

surprised you, that that was the basis on which Exova

was providing advice, on an as and when needed, ad hoc

Q. If you had known that at the time, would that have

142

you've become involved in the project, and you are

copied in, together with your assistant Andrew Malcolm.

1 basis, would that have been surprising? 2 A. Not necessarily, no. 3 Q. Did you ever consider whether that was a satisfactory 4 way of involving a fire consultant on the project? 5 That wouldn't be something I'd be thinking about. 6 Q. Did you ever see Exova's appointment to the TMO in terms 7 of what Exova had promised the TMO they would do back in 8 2012? 9 A. No. 10 Q. Were you ever asked to check whether a final version of 11 the fire strategy had been prepared by Exova? 12 Sorry, could you repeat the question? 13 Were you ever asked to check whether a final version of 14 the fire strategy for the building had been prepared by 15 Exova? 16 A. No. 17 Q. Were you ever made aware that there was no final 18 fire strategy prepared by Exova that addressed the 19 building as it had been built, as opposed to perhaps 20 what was proposed at design stage? 21 A. No. 22 Q. So I now want to ask you a few questions about how the 23 design decisions were made on the project. 24 Can we start with your first witness statement, if 25 we can go to {ART00006663/3}, and I want to look at what 143 1 you say at paragraph 10. So this is where you're 2 describing the scope of the employer's agent role, and 3 you say: 4 "The specifics of the [employer's agent] role do, 5 however, vary from contract to contract, depending on 6 exactly what services are ticked in the RICS Employer's 7 Agent Services schedule that form part of the EA's 8 contract. I recall that, when I was introduced to the 9 Project, the scope of AUK's EA role was very explicit in 10 terms of what it was required to do; and it was clear 11 that AUK's role did not include contributing to any 12 matter concerning design or choice of materials. My 13 understanding was that AUK was performing purely in a 14 contract administrator capacity. Sometimes, an EA will 15 be contracted to monitor design progress. However, on

Now, we've already touched on some of these issues, I appreciate.

this Project, I was informed by Simon Cash that AUK did

not have that role. AUK had offered to be the TMO's

client design advisor, but the TMO had declined this

Can we just look at the Artelia contract against the background of this now. If we go to {ART00005742/47}. Just so know what we're looking at, these are the services for employer's agent. I think it actually

144

16

17

18

19

20

21

22

23

24

25

offer ."

needed?

A. No.

20

21

22

23

24

25

1

| | begins on page 40. Let me snow you that so you can see |
|----------|---|
| | how this fits together. So this is the part of |
| | Artelia's RICS standard form contract that's dealing |
| | with the employer's agent services. |
| | If we go back to page 47, at tick-box 1.1.4 on the |
| | left -hand column there, we can see it says: |
| | "Monitor the performance of the Professional Team |
| | and the Contractor. Report to the Client." |
| | Do you see that there? |
| Α. | Yes. |
| | Now, can you help us with whether in practice that would |
| ζ. | mean that there was any monitoring of the progress of |
| | designers to make sure they complete tasks as part of |
| | this EA role? |
| Δ | Designers forming part of the professional team? |
| | |
| • | Yes. |
| | |
| • | |
| | |
| Ų. | expected to be aware of progress in the design work |
| ٨ | |
| | |
| • | • |
| | |
| | |
| Q. | Once Rydon come on board, and you have got the design |
| Ų. | 145 |
| Ų. | |
| Ų. | 145 |
| Ų. | \$145\$ and build contract in place, they then have Studio E |
| Ų. | and build contract in place, they then have Studio E novated over to them. What in practice would that role |
| Ų. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the |
| Ų. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, |
| Q. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor |
| | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? |
| | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there |
| | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the |
| | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by |
| | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in |
| A. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. |
| | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. |
| A. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. So when you say in your statement that Artelia was |
| A. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. So when you say in your statement that Artelia was not obliged to monitor the design progress, can you help |
| A. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. So when you say in your statement that Artelia was not obliged to monitor the design progress, can you help us with what you meant by that and why Artelia wouldn't |
| A. Q. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. So when you say in your statement that Artelia was not obliged to monitor the design progress, can you help us with what you meant by that and why Artelia wouldn't monitor the design progress? |
| A. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. So when you say in your statement that Artelia was not obliged to monitor the design progress, can you help us with what you meant by that and why Artelia wouldn't monitor the design progress? Well, let's think of it as inputs and outputs. The |
| A. Q. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. So when you say in your statement that Artelia was not obliged to monitor the design progress, can you help us with what you meant by that and why Artelia wouldn't monitor the design progress? Well, let's think of it as inputs and outputs. The contractor is providing a design input through his team, |
| A. Q. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. So when you say in your statement that Artelia was not obliged to monitor the design progress, can you help us with what you meant by that and why Artelia wouldn't monitor the design progress? Well, let's think of it as inputs and outputs. The contractor is providing a design input through his team, they are designing, and from that task you are presented |
| A. Q. | and build contract in place, they then have Studio E novated over to them. What in practice would that role involve at that stage? If you're monitoring the performance of the professional team and the contractor, are you still monitoring the design and build contractor in terms of progress of its design? No. I think there would be a bearing in mind this is not the function I performed at that stage, but there would be a I would expect to see a programme from the contractor setting out what he intends to provide and by when, in essence, so that it can be reviewed by those in the compliance review function. I see. So when you say in your statement that Artelia was not obliged to monitor the design progress, can you help us with what you meant by that and why Artelia wouldn't monitor the design progress? Well, let's think of it as inputs and outputs. The contractor is providing a design input through his team, |
| | A. Q. A. Q. A. Q. A. Q. A. |

A. So I wouldn't expect us to be close to the contractor's

management of the detailed design process.

begins on page 45. Let me show you that so you can see

1 Q. Yes.

A. I'd be interested in understanding: when are you going
 to present the team something to review for our comment
 and support?

5 Q. I understand.

6 A. So -- yeah.

Q. Now, you go on in your statement -- if we can go back to that, your first statement, {ART00006663/3}, this time paragraph 11 -- to say:

"I was therefore mindful during the Project of the limits on AUK's EA role and that AUK was not to be involved in design issues. There were occasions when the TMO tried to involve AUK in design issues when it was necessary for AUK to push back and remind the TMO that this was not our role. I refer to some examples of this in paragraphs 64 to 76 below."

Then you give us a number of examples, and I'm not going to ask you about all of them, but just a few key points, if I may.

Design team meetings. If we stay with this first statement and now look at page 19 {ART00006663/19}, paragraph 65, you say there:

"On 20 March 2015, shortly after I had become involved in the Project, I quickly started to encounter the TMO looking to involve AUK in design issues that

were outside AUK's appointment. This is reflected in an email I sent to Chweechen Lim on 20 March 2015, when I queried the appropriateness of AUK attending a meeting that appeared to be relevant to design and in the email of the same date which I refer to in paragraph 16 of my statement."

Now, let's go to that email that you're referring to there. It's at {ART00006670}. This is an email from you to Chweechen Lim, 20 March 2015, subject "URGENT: Grenfell residents meeting of 17 March", and in that second paragraph down, you say to her:

"[Claire] has called me and I have said that it is highly unlikely any of us can make a meeting on Monday noting that even if we could I am not sure we should be attending (scope creep?).

"She has asked me to comment on the below.... which I am reading now but I thought I would ask about the 2nd bullet."

Now, is it right that you were saying you didn't think it was appropriate for Artelia to be attending meetings with the design team? Is that what you were getting at here?

A. I can't remember the context. Can we look at the secondbullet? That might help me.

25 Q. Yes, let's go down the page.

Q. Yes.

1 (Pause) 1 In terms of monitoring the performance of the 2 2 I don't know, is there a second page to this email professional team, is what you are saying that you can 3 string {ART00006670/2}? Yes, there we can see the 3 monitor the performance of the design without having to 4 4 second bullet. attend design team meetings? 5 So this is about the HIU, the heat interface unit 5 A. I think we're mixing two or three things up there. We 6 6 location, and she's asked you and Matt Smith of have to remember at this stage of the project the design 7 7 Max Fordham: was being led by the contractor. 8 8 Q. Yes. "... do you have any queries over the text? 9 9 "I have asked Artelia to understand any cost A. So it wouldn't be typical for an EA to attend 10 implications of relocating the HIU from the kitchen, 10 a contractor's design team meeting, in my view. It's 11 boxing in etc." 11 coming back down to the outputs from the contractor's 12 So that was her second bullet point. 12 design process that the professional team are either 13 13 Can you help us, therefore, on why you were appointed or not appointed to review. 14 14 concerned about Artelia attending the meeting that was I see. Yes, I understand. 15 15 being suggested, and why you referred to "scope creep"? Let's look at another example that you refer to in 16 16 A. Well, the scope creep reference would have been in your statement. This is to do with lifts again. 17 relation to: are we being asked to get involved in 17 Now, we can see from the documents that in 18 a conversation that is about design? But looking at 18 September 2015 a difficulty arose with the lifts, and in 19 19 that second email, that's fundamentally talking about particular the TMO was concerned about the effect of 20 20 cost implications of relocating. So this probably isn't fire alarms apparently sending lifts to the ground 21 21 the best example of --22 22 Q. I see, fair enough. If we can go to $\{ART00006656/2\}$ at the top, this is 23 23 A. -- where I, shall we say, perhaps kicked back on an email from Claire Williams to you and Andrew Malcolm, 24 a dialogue around design. 24 subject: "Grenfell lift ", and she says: 25 25 Q. Yes. "Chaps 149 151 1 1 A. I do know the HIU change was a significant one in which "Can you please give me 3 ring with your views on 2 2 I was party to the discussions and conclusions and where this, and where we go with it? 3 3 that led "There seems to be a couple of anomalies." 4 4 Q. Yes. If we look below that, she's forwarded an email from 5 Perhaps I can ask you more generally: did you ever 5 Simon Lawrence, and we can see in that first paragraph 6 6 attend any design team meetings on the project? that she's obviously raised a concern about systems 7 7 within Grenfell that might send the lifts to ground in A. No. 8 8 Q. And would you have thought it was part of your role to case of fire, and then he's talking about "there 9 9 attend design team meetings? certainly aren't any audible alarms apart from smoke 10 10 detectors". So that's some of the context for this. 11 11 Q. And why not? Just help us with why those design team Then what happens is, after she's asked for your 12 meetings wouldn't be relevant to you as employer's 12 views on this, if we scroll up to the top of page 1 13 $\{ART00006656/1\}$, you then forward this to Simon Cash on 13 14 A. Well, they wouldn't be relevant to me as the employer's 14 the same day, that's her email. 15 15 agent on this project because we were specifically A. 16 excluded -- not excluded; it was not part of our brief 16 Q. You say to Simon Cash -- this is 11 September: 17 to be involved in design. 17 "I'll call you after lunch to discuss: 18 Q. I understand that, but didn't you need an awareness of 18 "1. the challenges go on Re lack of design 19 19 the progress of design on the job in terms of performing coordination and foresight 20 20 "2. Claire is emailing us and seeking to draw us in your employer's agent functions? 21 21 A. Well, you would have, during the design stage, but here on conversations about 1.! 22 22 we were not at the design stage, we were at the "I remain concerned about time we are spending along 23 23 construction stage, and the design discussions that were with the very fact these things [are] coming up at this 2.4 arising were associated with the changes. 24 stage in the project." 25 Q. Yes. 25 Do you see that there?

150

1 A. Yes. 2 Q. Then we can see that on the same day you also send 3 an email to Matt Smith, if we can go to that, 4 {ART00006637}, and you say to Matt Smith: 5 "Matt, 6 "Does the below matter fall within the scope of your 7 services please? If not, do you know with whom it 8 does?" 9 So you are trying to find out if it's something 10 Max Fordham can help with. 11 Then you say in the last paragraph there: 12 "I'd be grateful for your earliest response as 13 Artelia is not best placed to provide [advice] to TMO in 14 this regard: design coordination, scoping and resolution 15 do not form part of our brief." 16 Then I just want to follow this all through and then 17 I'm going to ask you some questions. 18 Mr Smith of Max Fordham replies. We can see that if 19 we go to {ART00004709}. His reply to you is dated 20 14 September 2015. He says: 21 "As mentioned previously, the lift package does not 22 form part of our scope. Exova may be best placed to 23 advise on any fire requirements." 24 Then I want to look at what you say about this in

153

your first witness statement. So if we go back to that,

it's at page 22 {ART00006663/22} of your first statement, paragraph 71. We can see you say this:

"Again, I was emphasising that issues of this nature were not AUK's responsibility but at the same time trying to assist the TMO by directing the point to the correct parties. I also re-emphasised the fact that AUK's scope did not involve design to Claire Williams

(who appeared to understand this) on a telephone call , which I reported (among other things) to Simon Cash in

9 which I reported (among other things) to Sin 10 an email on 14 September 2015."

> Now, bearing in mind all of that, we know this was September 2015, so some way into the project; would you say that there was still a substantial problem of the TMO not understanding the scope of Artelia's role?

(Pause)

16 A. A substantial misunderstanding of Artelia's role, was17 that your question?

18 Q. Yes.

25

1

2

3

4

5

6

7

8

11

12

13

14

15

A. No, I don't think there was a substantial
misunderstanding of our role. I think that there was
a lot of dialogue around changes, and gaps appeared that
perhaps surprised Claire as much as me. So I'm just

23 seeking here to point her in the right direction to get

24 the outcome that she needed.

25 Q. I see.

A. Without being drawn into something I felt was outside of
 our scope.

3 Q. I see.

When you say there in that paragraph of your witness statement that Claire Williams appeared to understand this --

7 A. That's right.

Q. -- did you think in reality that the TMO was trying it
on from time to time to get you involved in these design
issues, even though they knew that wasn't part of your
scope? Is that what was going on?

perhaps just sometimes a knee-jerk reaction, albeit it was consistent, to ask us for help. But I think

16 Claire -- you know, Claire demonstrated eventually with

some of the other replies that she understands that we can't help. It wasn't a kickback to me. So ...

Q. There are a number of examples you give of this in yourstatement, and you spend quite a lot of time in your

witness statement explaining that there were a number of issues where you felt. Artelia was being inappropriately

asked about design issues --

24 A. Yes.

1

2

3

4

5

 $25\,$ Q. $\,$ -- and you had to keep pushing back.

155

Are you merely telling us about that in your statement because you are seeking to demonstrate that Artelia was always very clear about the scope of its role, or are you telling us about it because you felt that it was a significant problem on this project?

6 A. I'm setting out the facts of the matter. We were 7 regularly asked about design matters. I never thought 8 about it in any other way, other than I was clear where 9 the responsibility for the design function sat. I think 10 Claire knew that too. That was evident. It just 11 surprised me that it kept happening. On occasion 12 I think I probably got quite frustrated with it. 13 I didn't read into that in any other way than our client keeps asking us to get involved in design, and at some

keeps asking us to get involved in design, and at some to stage I think I'd suggested to Simon that he may wish to remind and escalate the issue and remind them this is

just not part of our scope, it shouldn't be happening.

18 Q. Yes.

Can we look at another email chain on this,

ART00006577}. This is another exhibit to your

statement at paragraph 71, and it's a log that you sent
to Simon Cash --

23 A. Yes.

Q. -- referring to telephone conversations you've had withClaire Williams.

154

1 If we just look at the entry you've got there on 2 11 September 2015, at the very bottom of that table, it 3

> "Emails Re lift queries, [programme] meeting, CDM2015 ..."

You list various things out there.

Then in the second line you say:

"... catch up call from Claire Re Lift / Fire issue mentioned our scope [not] being design and apologised if I appeared terse in some emails - she understood and [said] this was fine - thanked me for addressing Lift query, emails to Matt at Max Fordham Re Lift queries."

So you say there that you apologised if you appeared terse. Does that reflect the frustration that you have just told us about, that perhaps you did get a bit frustrated at the number of times you were being asked to help out on design issues?

18 A. Yes.

4

5

6

7

8

9

10

11

12

13

14

15

16

17

23

24

25

3

Δ

5

6

7

8

9

10

11

12

13

14

15

16

17

19 Q. Now, if we look at something from 2016, so later in the 20 contract, if we go to {ART00006672}, this is an email 21 you wrote to Simon Cash on 9 May 2016. In the first 22 sentence there you say:

> "O&Ms are unacceptable to the [clerk of works]." We will come back to look at the whole question of the health and safety file and the O&M manual later.

> > 157

1 A. Okay.

2 Q. Then you say this:

> "This is just to flag that this is becoming a farce; despite all our efforts to ensure a smooth landing I have to say I do not think I have ever worked with a Contractor operating with this level of nonchalance. We are all getting sucked into ... doing far more than we ought to at this stage of the project. I am wondering If you need to write to TMO to express our concern and what we are endeavouring to do about it additional site visits, additional meetings, endless emails on design related issued that dont concern us as Claire is the design lead, etc, challenging the Contractor, etc."

> Now, at this stage -- I'm going to come back to ask you about Rydon and the comment you made about nonchalance, so can we just park that bit for a moment.

18

19 The comment you have made there about, "We are all 20 getting sucked into doing far more than we ought to on 21 the project ... wondering if you need to write to TMO", 22 does that indicate to us that you still had some 23 concerns about this even much later in the project, in

2.4

25 A. Yes, I think the -- I mean, you fast-forwarded quite

158

1 some time there, and the issues at this stage were more

2 about the performance of the contractor, you know,

3 mostly in that sense. But, yes, in answer to your

4 question.

5 Did you ever get the impression that Ms Williams was 6 foundering in terms of design issues and was therefore

7 reaching out to you for additional support?

8 Did you say foundering? What was the word you used?

9 Yes, foundering. Struggling. Did you ever get the 10 impression she was struggling to deal with the design

11 issues that were cropping up on the project and needed

12 to seek to reach out to you for help on it?

13 Α. Yes, I can see that. Yes. Possibly.

14 O.

15

16

17

18

19

20

21

22

23

24

25

Now, in your first witness statement, as I say, you have discussed a number of other similar incidents where the TMO looked to Artelia to provide design advice despite the fact it was outside your scope of works, and you have dealt with those in some detail. We've got examples of crown access, tiling in the boxing club, letterboxes at lower levels, sleeving through risers, the building management system and its connection with the gas supply. I'm not going to take you to any of the detail of those, but I want to just ask you in general,

159

was the volume of design queries you were seeing usual

1 for a project of this size and at this stage in the

2 construction process?

3 A. I didn't think so, no.

4 Q. Was the range of design queries usual for a project of 5 this size and at this stage?

6 A. No, I didn't think so.

7 Q. Was it unusual to have the sorts of queries that you saw

8 at this stage on the project?

9 A. No. Sorry, just to clarify, we're talking about at this

10 stage, in relation to September 16?

11 Q. Yes. I mean, those other examples span from August 2015

12 through to January/February 2016.

13 A. Yes.

14 O. So you have given examples across that time period. Was

15 it unusual to have those sorts of queries at this stage

16 of the project?

17 A. Yes, it was for a design and build project, yes.

18 Q. Now, you have touched on the offer of the client design

adviser role and you were obviously aware -- were you

20 aware at the time of your involvement in Grenfell that

21 that offer had been rejected by Artelia?

22 A. Yes, Simon had made --

23 Sorry, rejected by the TMO.

24 A. Yes, Simon Cash had made that very clear at the

25 beginning, because in coming on board, as we said,

160

2 2 this information and was surprised to see that that SIR MARTIN MOORE-BICK: Well, that probably is a good point, 3 3 function didn't at that moment appear to be -- hadn't 4 4 been taken up, and then learnt that the TMO were Mr Reed, we have a break during the course of the 5 providing it. 5 afternoon, and it's convenient to take it now. So we're 6 6 Q. Yes, I think you say there you looked at that and you going to stop until 3.20, please. I'm going to ask you 7 7 were surprised to see that the function hadn't at that to go with the usher in a moment, but first I must ask 8 8 moment been taken up. Was that surprise something you you, please, to make sure you don't talk to anyone about 9 9 carried forward through the project, that you were your evidence or anything relating to it while you're 10 10 surprised that they hadn't thought about having a client out of the room. All right? 11 design adviser? Sorry, not thought about it, but they 11 THE WITNESS: Okay, understood. 12 had not accepted that offer. 12 SIR MARTIN MOORE-BICK: Thank you very much. Would you like to go with the usher, please. Thank you. 13 13 A. No, I mean -- sorry, I thought -- I mean, we've covered 14 14 this earlier, so just for clarity, you know, in coming (Pause) 15 15 on board I had learnt that the offer had been made. It Right, 3.20. 16 made sense to make the offer. It had been made clear to 16 MS GRANGE: Thank you. 17 me that the TMO hadn't taken up the offer, and it had 17 SIR MARTIN MOORE-BICK: Thank you. 18 been made very clear to me the TMO would be providing 18 (3.05 pm) 19 19 the function of that service themselves. So, from my (A short break) 20 20 perspective, that was okay, that was understood. (3.20 pm) 21 21 SIR MARTIN MOORE-BICK: Right, Mr Reed, ready to carry on? 22 22 You have given us all these examples of the types of THE WITNESS: Sure. 23 23 queries, design queries, that the TMO were raising with SIR MARTIN MOORE-BICK: Thank you. 24 24 you, Artelia. Were those queries things that a client Yes, Ms Grange. 25 25 design adviser might have been able to assist them with? MS GRANGE: Thank you. 161 163 1 1 A. In so -- yes. Yes. 2 2. Q. Did the TMO's refusal to appoint a client design adviser 3 3 make your role as employer's agent more difficult? Δ Δ (Pause)

5 A. I don't believe so.

6 Q. Did you ever have a conversation with the TMO that they

I think, at the beginning of this session, I'd looked at

7 might appoint a client design adviser to assist them

8 even at a later stage in the project?

9 A. Did -- sorry, could you repeat the question?

10 Q. Did you ever have a conversation with the TMO --

11 A. No.

1

12 -- about appointing a client design adviser later in the

13 project?

14 A. No.

15 Q. Did you ever have concerns that certain safety issues

16 had not been considered properly by the TMO when

17 considering the designs?

18 A. No.

19 Q. You didn't ever have a concern that they weren't

20 scrutinising the designs carefully from a safety

21 perspective?

22 A. No, I wasn't aware of what their scrutiny constituted.

23 MS GRANGE: Mr Chairman, I think that would be a very good

162

24 moment for our break.

25 SIR MARTIN MOORE-BICK: Would it?

Just before we move on to the topic of the CDM Regulations, I just want to go back and ask you a couple more questions about something we looked at earlier about the lifts . If I can bring up again 5 {ART00004709}.

MS GRANGE: Yes, I'm moving on to talk about CDM next.

So, if you recall, I was asking you some questions about an issue that had been raised by the TMO about the effect of fire alarms apparently sending lifts to the ground floor. We saw that one of the things you did was check with Max Fordham whether it was part of their scope of works.

12 Here we've got Matt Smith saying to you on 13 14 September:

14 "As mentioned previously, the lift package does not 15 form part of our scope. Exova may be best placed to 16 advise on any fire requirements."

17 Can you recall, did you contact Exova and refer that 18 matter to them?

19 A. No. I don't remember, but I don't believe I would have 20 done that, no.

21 Q. Why don't you believe you would have done that, given 22

Exova are being flagged here by Max Fordham as someone

23 who might be best placed to advise on that?

24 A. I didn't recognise -- you know, the team I'm engaging 25 with is Max Fordham, so reference to another party that

164

6

7

8

9

10

| 1 | | I recall were advising the contractor you know, | 1 | | should write to set out the situation and recommended |
|----|----|--|----|----|---|
| 2 | | I don't think I did anything with this and I wouldn't | 2 | | action although should letter come from you?" |
| 3 | | have done anything with this . | 3 | | Then can we see another email that you send to |
| 4 | Q. | So does that go back to your evidence that at the time | 4 | | Simon Cash on 15 September. This is at page 1 |
| 5 | | you wouldn't have seen Exova as part of the TMO team? | 5 | | $\{ART00009332/1\}$. It's that email at 7.02 on |
| 6 | A. | Correct. | 6 | | 15 September. You say: |
| 7 | Q. | Yes. Okay. | 7 | | "I can't find that email on my phone but to my |
| 8 | | So the CDM Regulations, we know that, just as you | 8 | | knowledge our client has not been advised about options |
| 9 | | joined this project, the CDM Regulations changed, didn't | 9 | | in any formal sense." |
| 10 | | they? So prior to April 2015, the CDM Regulations 2007 | 10 | | Do you see that there? |
| 11 | | were in effect . We know that there was then | 11 | A. | Yes. |
| 12 | | a transitional period between April 2015 and | 12 | Q. | "Andrew and I have an action for Claire to advise how |
| 13 | | October 2015, and then from 6 October 2015 the new | 13 | | she wishes to address the need for a PD appointment but |
| 14 | | regime was in place. That's right, isn't it? | 14 | | I had hoped we could spell out the options for Claire |
| 15 | A. | That's correct. | 15 | | from our team in order to assist her. |
| 16 | Q. | Now, I just want to pick up this question about who was | 16 | | "I will have to refer Claire to Paul direct when |
| 17 | | going to be the principal designer. I want to pick it | 17 | | this is raised today." |
| 18 | | up in September 2015 with some emails at that point. If | 18 | | If we look to the top of the chain at page 1, |
| 19 | | we can go to {ART00009332}, this is an email chain | 19 | | Simon Cash tells you in the second email from the top: |
| 20 | | between 10 and 15 September 2015, and I want to take you | 20 | | "Simple fact is that we can not act a PD. So |
| 21 | | through a number of exchanges in it . | 21 | | choices are to ask [Rydon] to take on the role, [as] |
| 22 | | If we can start at the bottom of page 5 | 22 | | they are responsible for design, but they are not |
| 23 | | {ART00009332/5} and look at that email, this is an email | 23 | | obliged to take it on. If not, TMO will have to engage |
| 24 | | from Colin James to you of 11 September 2015. | 24 | | someone direct." |
| 25 | | Can you just remind us who Colin James was on the | 25 | | Then you say in your response to that: |
| | | 1/5 | | | 167 |
| | | 165 | | | 167 |
| 1 | | project? | 1 | | "Ok. Thanks Si. That is my understanding but |
| 2 | A. | I think Colin James was the CDMC at that point. | 2 | | I didnt know if Paul had found a way or desire for |
| 3 | Q. | Yes. He says to you: | 3 | | Artelia to provide it given discussions at Wisley." |
| 4 | | "The client needs to appoint a Principal Designer | 4 | | Then you sign off. |
| 5 | | prior to 6 October 2015. I am not sure what the scope | 5 | | Now, with those emails in mind, do you agree that at |
| 6 | | of our involvement is on this project; however, if we | 6 | | this point, in September 2015, the client, the TMO, had |
| 7 | | have control over the designers we can be appointed as | 7 | | not been given formal advice about the options in terms |
| 8 | | Principal Designer (please see attached appointment | 8 | | of principal designer under the CDM 2015? |
| 9 | | template). | 9 | A. | Okay, this conversation started in July. |
| 10 | | "Kind Regards, | 10 | Q. | Agreed, yes, and Mr Cash was shown some emails back in |
| 11 | | "Colin ." | 11 | | July which |
| 12 | | Then if we go back to page 4 {ART00009332/4}, | 12 | A. | Right. |
| 13 | | Simon Cash then sends an email to you on | 13 | Q. | Did you see that part of his evidence? |
| 14 | | 13 September 2015, and he says: | 14 | A. | Yes. |
| 15 | | "Neil, | 15 | Q. | Yes. |
| 16 | | "I thought that this question had already been | 16 | A. | I think so, yeah. But, I mean, I recall the |
| 17 | | raised with Claire and we had advised her that Artelia | 17 | | conversation began in July . |
| 18 | | are not in a position to take on the Principal Designer | 18 | Q. | Yes. |
| 19 | | Role and that the TMO should approach Rydon's to take it | 19 | A. | Because it came up in meetings. I was led to believe, |
| 20 | | on as they are in control of the design process now." | 20 | | through some of the emails and other evidence, that |
| 21 | | Then he signs off "Simon". | 21 | | Claire was aware of that before the formal |
| 22 | | If we can go to the bottom of page 3 {ART00009332/3} | 22 | | acknowledgement, if you like, that did follow later, |
| 23 | | to see your response to that, you email Simon Cash back | 23 | | because I understood that Claire was going to try and |
| 24 | | and you say: | 24 | | appoint another party from one of the TMO frameworks, |
| 25 | | "Not formally to my knowledge. I think Paul/Colin | 25 | | which from memory is recorded in a meeting in either |
| | | | | | |

1 early September or late August.

- $2\,$ Q. Yes, I see. But I think you're telling Simon Cash in
- 3 this chain that we've just seen that the TMO haven't
- 4 formally had advice about the principal designer role.
- 5 Do you agree with that?
- 6 A. Yes.
- 7 Q. Is it right that, as at 15 September 2015, when you send
- 8 this email that we're looking at here, you yourself were
- 9 still not clear whether Artelia could act as principal
- designer for this project?
- 11 A. Correct.
- 12 Q. And is it right that as at this date --
- 13 15 September 2015 -- Artelia had not made it clear to
- 14 the TMO that they were not prepared to act as principal
- 15 designer?
- 16 A. Sorry, could you repeat that?
- 17 Q. Yes. As at 15 September 2015, is it right that Artelia
- had not made it clear to the TMO that they were not
- prepared to act as principal designer?
- 20 A. I thought they had.
- 21 Q. Okay.
- Now, can we go to {ART00006731}. These are the
- 23 minutes of progress meeting 15 on 15 September 2015. Is
- it right that you took these meeting minutes?
- 25 A. (Witness nods).

169

- 1 Q. It says "From Neil Reed" there.
- 2 A. Yes.
- $3\,$ $\,$ Q. We can see you're present at the meeting at the bottom
- 4 of that table there, one line up.
- 5 If we go on to page 7 $\{ART00006731/7\}$ at the top of
- 6 the page, point 7.3, we can see there's a minute there:
- 7 "CDM2015 CW [Claire Williams] to appoint
- 8 a Principal Designer from the TMO's new Consultancy
- 9 Framework."
- Do you see that there?
- 11 A. That's right.
- $12\,$ Q. So is it right that, as at the date of this meeting, you
- 13 were clear that the TMO knew it had to appoint someone
- 14 other than Artelia to be the principal designer?
- 15 A. Yes.
- 16 Q. Had that been made clear to the TMO at this meeting?
- $17\,$ A. I don't recall . I don't recall the dialogue at the
- 18 meeting. I remember there was a discussion, and that
- $19 \hspace{1.5cm} \text{the framework was -- this framework arrangement was} \\$
- an option, so this was -- you know, the action coming
- away from that meeting is that's what the TMO are going
- 22 to do. So it was clearly in consideration before the
- 23 meeting.
- 24 Q. Yes
- 25 A. So this wasn't discussed at the meeting and a decision

- $1 \hspace{1cm} \text{made at the meeting; this is just a record of a decision} \\$
- 2 they had made following exhausting, from memory, the
 - other options that may have been available to them.
- 4 Q. I see.

3

5

6

At this point, the TMO would have around three weeks to appoint a principal designer, wouldn't they, prior to

- 7 the new regime coming into force on 6 October 2015?
- 8 A. Yes.
- 9 Q. Were you aware that both Rydon and Studio E were asked
- 10 to be principal designer but they both refused?
- 11 A. Yes.
- 12 Q. Do you know why they refused?
- 13 A. No.
- 14 Q. Is it also right that, at one time, some consideration
- was being given -- this is later in September -- to the
- idea that the clerk of works organisation, JRP, might be
- the principal designer? Were you aware of that?
- $18\,$ $\,$ A. Yeah, I was. I think there's an email from me somewhere
- that acknowledges it.
- 20 O. Yes.
- $21\,$ $\,$ A. Because I think it was raised as an option through some
- discussion I was privy to.
- Q. Yes, let's look at that: {ART00009336}. This is
- an internal email within Artelia on 23 September 2015.
- You say there to Paul Burrows and Simon Cash:

171

- 1 "Claire will be appointing the CoW organisation JRP
- $2 \hspace{1cm} \text{who tell me all there CDMCs are simly(sic) becoming} \\$
- 3 [principal designers] and they see no issue with this
- 4 transition . I understand other organisations are
- 5 exercising the same approach."
- 6 So we can see that you were aware of that.
- 7 A. Yes.
- 8 Q. Do you know why the TMO did not eventually appoint JRP
- 9 to be the principal designer?
- 10 A. No.

25

- 11 Q. We can see from the emails that the TMO subsequently
- 12 decides to perform the role of principal designer
- 13 itself . If we can look at $\{ART00004824\}$, this is
- an email chain between you and Claire Williams on 1 and
- 2 October 2015, and if we could go down to page 2
- 16 {ART00004824/2} and pick this up there, this is
- 17 Claire Williams to you, 1 October 2015, and there's
- a number of points raised, she wants a catch-up with you and she's got some issues.
- Under point 5 at the bottom is relevant to this topic. It says:
- 22 "CDM Regulations change: As long as the project team
 23 agree the Design is fundamentally complete then we
 24 believe the provisions within the legislation allow
 - KCTMO to request the Principal Contractor to compile the

1 1 [health and safety] File and issue direct without the PMN ..." 2 2 formal appointment of a Principal Designer. Can we get I think that's post-meeting note; is that right? 3 3 this put into the meeting next week - and check that the 4 4 team agree the design is 'fundamentally complete', and "... on previous minutes. Copied here for 5 get this minuted?' 5 completeness." 6 6 So we can see what she is saying there, and then So what's happened here is that a minute from the 7 7 I want to show you your response on page 1 October progress meeting has been copied over, and that 8 8 {ART00004824/1} to this. So you respond on 2 October note reads as follows: 9 9 and under "CDM" you say: "PMN: Under the 2015 regulations if the [principal 10 10 "I think this needs to be your call Claire Re [is] designer] appointment finishes before the end of the 11 the design sufficiently complete. Re the [health and 11 works then the Principal Contractor takes on the 12 safety] File - it does leave the question as to who then 12 [principal designer] role. This means the Principal checks the file and confirms it is compliant. Would you 13 13 Contractor puts together the [health and safety] file 14 14 like Artelia to provide a due diligence role in this for the client. For discussion at the next progress 15 15 regard to ensure the file complies with the [employer's meeting." 16 16 requirements] and the CDM regulations as I think we may Do you see that there? 17 be able to provide a CDM Advisor type role as opposed to 17 A. Yes. 18 18 the [principal designer] role." Q. Then you can see these minutes continue: 19 19 So we can see that's what you say there. "It was agreed that Rydon are not the [principal 20 20 Can you help us as to where Claire Williams had designer] ... under the CDM Regulations 2015. The TMO 21 21 referred to the design being "fundamentally complete", as the client are to undertake this role." 22 22 can you help us as to what she meant by that? Then we can see, over the page {ART00005184/3}, it 23 23 I don't know. I didn't really understand what she meant says 24 24 by that. "It was further agreed that Rydon would be 25 25 Q. You say there very clearly that it needs to be her responsible for collating and presenting the [health and 173 175 1 1 call -safety] File information in accordance with the 2 A. Yes. 2 Employer's Requirements and the ..." 3 3 Q. -- regarding whether the design is sufficiently Is that the pre-contract information? 4 4 complete. A. Yes. 5 To your knowledge, what if anything did the TMO do 5 Q. and present to the TMO as [principal designer]."

To your knowledge, what if anything did the TMO do to check they understood the duties they would be taking on?

8 A. I have no idea.

9 Q. So you can't help us as to what, if anything, the TMO 10 did to satisfy itself that those duties would be within 11 the capacity of the TMO to perform?

12 A. No.

6

7

Q. I want to pick it up now at a progress meeting from
 November 2015. If we can go to the minutes of that
 meeting, {ART00005184}. If we look here, this is
 a progress meeting, 17 November 2015. We can see you're
 present.

Is it right you chaired this meeting? Would you chair these meetings?

A. Yes, I would normally chair the progress meetings andAndrew would take the formal minutes.

Q. This CDM issue is picked up on page 2 {ART00005184/2}, if we go to item 2.8 at the bottom of that page. It says there:

25 "Item 3.2: CDM Regulations 2015 - AM noted the

So we can see what's said there about who is going to take responsibility for what, what the TMO are going to do and what Rydon's going to do.

9 Do you remember anything further about what was said 10 about the TMO taking on the role of principal designer 11 at this meeting?

12 A. No

6

7

8

Q. Can you remember anything further that was said about
the collation of the health and safety file? We can see
it was agreed that Rydon would be responsible for
collating and presenting that information. Can you
recall any further discussions about that at this stage?

recall any further discussions about that at this stage?

A. Not further discussion, no, save I know Rydon went on to

employ another party to help compile the building
manual, which encompassed the health and safety file, as
I understood it.

22 Q. I see.

So how was it going to work, as you understood it at this meeting? The TMO's taken on the principal designer role, but is it right that what was agreed was, in

174

- 1 practice, Rydon would be responsible for collating and 2 presenting the health and safety file information under 3 the CDM regs?
- 4 A. Correct.
- 5 Q. I see.

6 Now, I think it's right -- and we saw it from your 7 email to Claire Williams a little bit earlier, when we 8 were looking at that email chain from the beginning of 9 October -- that Artelia did offer a role as adviser to 10 the TMO; is that right? In their role as principal 11 designer, Artelia said it could provide some advice to

- 12 the TMO to assist it in discharging that role; is that 13
- right?
- 14 A. That's what I understood, yes.
- 15 Q. Yes. There are some emails about that.
- 16 Do you know whether the TMO ever took up that offer 17 to get advice from Artelia?
- 18 A. Well, I don't think a formal offer was made, and no, 19 they didn't take up an offer.
- 20 Q. No.
- 21 A. No.
- 22 Q. So we can see it's floated in a number of emails --
- 23 A. Yes.
- 24 Q. -- that you could provide that type of support if they 25 wanted it.
 - 177
 - 1 A. Yes, that's right.
 - 2 Q. Is it right that they never got back to you saying,
 - 3 "Yes, please, we would like that support"?
 - 4 A. That's correct.
 - 5 Q. Yes.
- 6 Now, on the health and safety file, were you aware 7 when you were performing your role as employer's agent 8 that there was no health and safety file for the
- 9 original building, so no health and safety file had been
- 10 passed on, on to this project, from any previous
- 11 projects? Were you aware of that?
- 12 I think I was aware of it, but it doesn't surprise me, 13
- it's a very old building.
- Q. But it was an old building that had had a number of key 14
- 15 pieces of building work going on within it; so there had
- 16 been a flat door replacement project, there had been
- 17 a lift replacement project. Were you aware that there
- 18 had been those previous building projects in relation to
- 19 this building?
- 20 A. No.
- 21 Q. So I think you're saying it didn't surprise you that
- 22 there was no health and safety file .
- 23 A. Correct.
- 24 Was that common at the time, that you would get
- 25 a building like Grenfell with no existing health and

- 1 safety file?
- 2 A. I mean, the regs came into play in the 1990s, so health
 - and safety files as a term and as an output didn't exist
- 4 really before then in any formal sense. So on the basis
- 5 this was a very old building, that doesn't surprise me.
- 6 Q. Okay.
- 7 Can we now look at an email {ART00006299}. This is
- 8 an email chain in March and April 2015. This is
- 9 specifically about the subject of the health and safety
- 10 file, and I want to start by looking at page 2
- 11 $\{ART00006299/2\}$ in the middle of the page. We can see
- 12 an email from Keith Bushell on 23 March 2015 there about
- 13 the Grenfell health and safety file. That email was
- 14 sent to various people on the project, including
- 15 individuals from Rydon, Max Fordham, Curtins and
- 16 Studio E, and you are cc'd into that. Can you see that?
- 17 A. Yes.
- Q. Is it your understanding that, around this time, 18
- 19 Keith Bushell was collecting information to help compile
- 20 the health and safety file?
- 21 It would certainly appear that way from the email, yes.
- 22 Q. Yes. Is that what you would expect him, as the CDM
- 23 co-ordinator, to have been doing?
- 24 A. Yes. I mean, in practice much of the information that's
- 25 required for the file does tend to come towards the
 - 179
- 1 latter part of the project. So we're in March here,
- 2 so ... but I think he's setting out here what he is
- 3 going to be requiring, isn't he?
- 4 Q. Yes. I understand that. I understand that -- and other
- 5 witnesses have said it -- in practice it's often left to
- 6 the end of the project.
- 7 A. Yeah.
- 8 Q. But in reality, wouldn't it have been the position that
- 9 some information could have been gathered earlier? So
- 10 the specifications for the products that are used,
- 11 certificates like fire testing certificates for the
- 12 products being used could have been gathered, even
- 13 as-built drawings. I mean, surely if the construction
- 14 work is well progressed, those ought to be available.
- 15 Isn't it good practice to start compiling the health and
- 16 safety file as you go?
- 17 A. I'm not sure what that -- what purpose that would serve,
- 18 fundamentally. Because as-built drawings -- we're in 19
- March 2015 here. The project wasn't finished until the 20
- summer of 2016, so you wouldn't be seeing an as-built
- 21 drawing until the building had been finished. 22 Specifications, they're embodied in the contract
- 23 documents. This is why, yes, the process can start, but
- 24 the reality is the information that's relevant to the 25
 - file, in my view, doesn't become available until the 180

- 1 latter part of the project, and that --
- 2 Q. Can I suggest to you that one purpose that might serve
- 3 would be for the CDM co-ordinator to be checking that
- 4 what's in those specifications is indeed what's been put
- 5 on the building, because we know in this project -- and
- 6 this is scrolling forward -- that the health and safety
- 7 file has been examined, and there are either omissions
- 8 in it or inaccuracies in it in terms of what's there.
- 9 So isn't one purpose to start gathering the information
- 10 and checking it to check that it's consistent with
- 11 what's actually on the building?
- 12 A. The CDMC, in my view, wouldn't be checking the accuracy
- 13 of the as-built drawing and that it reflects what's on
- 14 the building; that would be the builder's responsibility
- 15 to provide the information for the file.
- 16 Q. I see. So a CDM co-ordinator wouldn't exercise any
- 17 independent judgement about, for example, if he's been
- 18 given specification information about products or
- 19 testing information about products, he wouldn't check
- 20 that that is in fact what's been installed; he would
- 21 just assume that what he's provided with was what was on
- 22 the building; is that correct?
- 23 Well, he is expecting the information to come through
- 24 from the various disciplines that would be responsible
- 25 for checking those things.

- 1 SIR MARTIN MOORE-BICK: Mr Reed, can you help me, I'm still
- 2 finding it difficult to understand why you can't start
- 3 building this file at a much earlier stage in the
- Δ construction programme. For example, we know that in
- 5 this case changes were made to the dry riser inlet, and
- 6 there must have been drawings or some sort of
- 7 documentation relating to that which would reach a final
- 8 stage when the work was finished.
- 9 A. Yes.
- 10 SIR MARTIN MOORE-BICK: And that would probably be a long
- 11 time before the last piece of panelling on the cladding
- 12 was put in place. Why can't you build the file as you
- 13 go along?
- 14 A. I'm not saying you can't build the file as you go along,
- 15 you can build the file as you go along, but using the
- 16 very example you refer to, works in the risers are
- 17 happening right up until the last few weeks of the
- 18 project.
- 19 SIR MARTIN MOORE-BICK: Well, they may be, but they may not
- 20 be, may they not?
- 21 A. They were on this project for sure. So the
- 22 commissioning data and the information relative to what
- 23 you're using may well be available sooner, and it would
- 24 be for the CDMC to compile the file , and I would be
- 25 interested in ensuring that, you know, the file is

- 1 provided at a pertinent point in the project, which is
- 2 at PC

6

8

- 3 SIR MARTIN MOORE-BICK: I asked the question because I got
 - the distinct impression from other witnesses that the
- 5 practice is that no one really does anything about
 - compiling this file until everything is done, and the
- 7 impression I got, perhaps wrongly, from reading the
 - regulations was that they may contemplate that things
- 9 will be compiled as you go along. But is that not your
- 10 experience?
- 11 Okay, so I sit here in a -- as a PM, as a discipline. A.
- 12 I'm not a CDM expert.
- 13 SIR MARTIN MOORE-BICK: No.
- 14 A. I'm not overtly familiar with all of the regulations,
- 15 but I am familiar with the principles and the
- 16 fundamental output from the process.
- 17 So I don't disagree with the sentiment, and it's
- 18 common practice that the file is collated along with the
- 19 O&Ms as part of a building manual, as it's often
- 20 referred to, and indeed was on this project, towards the
- 21 latter end of the project, when all the information --
- 22 when the project is finished and all the information can
- 23 be provided and made available.
- SIR MARTIN MOORE-BICK: All right. 24
- 25 A. Does that help?

183

- 1 SIR MARTIN MOORE-BICK: Yes, it does, thank you very much.
- 2 MS GRANGE: Just picking up a little bit on that, isn't
- 3 there a danger if you leave it to the end that the
- 4 compiling of that file becomes chaotic?
- 5 A. I don't think so, no.
- 6 Q. On this project, are you saying that, because of the
- 7 nature of the project and lots of strands not coming
- 8 together until the end, are you saying that, in
- 9 practice, you think it would have been difficult to
- 10 start compiling the health and safety file any earlier
 - than at the end of the project?
- 12 Sorry, could you repeat that question?
- 13 Q. Yes. On this project, are you saying that, because of
- 15
- coming together until the end, are you saying in 16
- 17 that file any earlier?

11

14

19

- 18 A. I think that was the case for this project, but it is
 - the case for most projects in which I have been involved

the nature of the project, with lots of strands not

practice it would have been difficult to start compiling

- 20 anyway, whether they're a significant change or not.
- 21 Q. I see. So are you saying that even on a well run, well
- 22 organised project, you think that, in reality, the
- 23 health and safety file perhaps doesn't need to be put
- 24 together until the end?
- 25 A. I'm not saying need, I'm saying in practice what happens

182

2

- 1 is that's when it happens. And when you say the end, 2 I mean, the end can be -- you know, what's the end? It
- 3 can be two weeks, it can be six months.
- 4 Q. Yes.
- 5 A. I mean, I think -- I recall from reviewing the
- 6 preliminaries that formed part of the contract documents
- 7 that the file is requested two weeks before practical
- 8 completion. Now, I read that as -- that's often
- 9 a common benchmark for the provision of the file, but to
- 10 get to a point where you have the file available, you
- 11 certainly need to start thinking about it and compiling
- 12 it before then, and I guess this -- coming back full
- 13 circle to Keith's email -- is the process by which
- 14 I think he's kickstarting and reminding people what he
- 15 needs
- 16 Q. Exactly. And bringing it back to this email, would you
- 17 have expected that some information would have been
- 18 provided in response to this request that he is making
- 19
- 20 A. Possibly, not necessarily.
- 21 O. I see.
- 22 A. Because he is setting out here, "will need information
- 23 from the various disciplines", so he is priming the team
- 2.4 for what he will need.
- 25 O. I see.

185

- 1 A. Whether it follows, I --
- 2 Q. Were you aware of any information being provided to
- 3 Mr Bushell in response to this request at this point in
- Δ March 2015?
- 5 A. No.
- 6 Q. If he didn't get information in response to this email,
- 7 would you have expected him to follow it up?
- 8 A. If he was expecting something particularly or
- 9 explicitly, then yes.
- 10 Q. Now, if we go up to the top of the first page of this
- string {ART00006299/1}, this is an email from 11
- 12 Paul Burrows to Claire Williams on 28 April 2015. It's
- 13 copying you in, together with Nick Valente.
- 14 Had Paul Burrows taken over from Keith Bushell by
- 15 this stage as the CDM co-ordinator?
- 16 A. Yeah, I think that's correct. I don't follow the
- 17 timeline exactly, because Paul was working with Colin as
- 18 well, so I think there were perhaps two people involved,
- 19 Paul and --
- 20 Q. And we can see -- sorry.
- 21 A. Sorry, Paul and Colin is what I remember seeing.
- 22 Q. I see, yes.
- 23 We can see the subject is still "Grenfell H&S File",
- 24 and he says:
- 25 "Hi Claire,

"I will be managing the process, but this may be completed by one of my colleagues.

- 3 "However, to date I have not received any
- 4 information, but to be honest, it is rare to receive
- 5 information during the project - it usually comes 6
- through at the end when there is little or no likelihood 7 of it changing."
- 8 So we see that there.
- 9 A. Yeah.
- 10 I think that's consistent with what you have just been 11 telling us in terms of your experience.
- 12 Yeah. I didn't particularly remember that email, but
- 13 yes, that's correct.
- 14 But is that the case if there is no pre-existing health
- 15 and safety file? So this was a building which had no
- 16 health and safety file in existence. Is it still the
- 17 case that those files aren't usually compiled until the
- 18 end of a project, where there is no existing one?
- 19 That's my experience, yes.
- 20 Q. Yes.
- 21 Can we just look at the Approved Code of Practice
- 22 for the 2007 CDM Regulations at this point.
- 23 {INQ00013936}. This is also known as L144. There we
- 24 have what's sometimes referred to as the ACOP, the
- 25 Approved Code of Practice for the CDM Regulations. It's

187

- 1 quite a long document. We can see at the bottom it's 2 106 pages.
 - Were you familiar with this Approved Code of
- 4 Practice?

3

- 5 I was aware of it, and some of the key features of it,
- 6 but not the entire document.
- 7 Q. Yes. If we go to page 58 {INQ00013936/58} and just have
- 8 a look at paragraph 259, it's at the bottom of that 9 page, we can see there it says, "What you must do", and
- 10 then it says:
- 11 "Clients, designers, principal contractors, other
- 12 contractors and CDM co-ordinators all have legal duties
- 13 in respect of the health and safety file:
- 14 "(a) CDM co-ordinators must prepare, review, amend 15 or add to the file as the project progresses, and give 16 it to the client at the end of project."
- 17 Do you see that there?
- 18 A. Yes.
- 19 So would you agree that this Approved Code of Practice
- 20 appears to be contemplating that the file will be
- 21 compiled during the project as it progresses and not
- 22 just right at the end?
- 23 A. Yes.
- 24 Q. Indeed, it's contemplating that it might be reviewed,
- 25 amended, added to, so that it's an iterative process of

1 building up this file; would you agree with that? 1 comprise, and we've got various parts, part 4 being the 2 2 A. Iterative process? health and safety file. Do you see that there? 3 3 Q. Yes, a stage-by-stage process of building up the A. Yes. 4 4 information you need in that health and safety file. Q. Do we take it that at this point you realised that the 5 A. I was going to say "iterative" would imply it was going 5 health and safety file was going to be incorporated as 6 6 backwards and forwards. But building it as it goes part of the O&M manual? 7 7 along, ves. (Pause) 8 8 Q. Fair enough, a stage-by-stage process of building it. A. Yes. It's often in practice provided as a separate 9 9 If practical completion were to be in October 2015, document, but we talk here in terms of a building manual 10 when would you expect that the health and safety file 10 and the three fundamental components of the manual. 11 might be complete? 11 Q. I see. 12 A. Well, the requirement under the contract was for it to 12 Can we then go on to page 5 of this notebook 13 13 {ART00009446/5}. Under point 11, I think we can see be provided two weeks before completion. In practice, 14 a list of what the health and safety file is to 14 it's provided in draft for comment probably before that. 15 15 comprise. It's got: Q. Yes. 16 16 A. And in some cases the process continues after PC, "[Health and safety] file . 17 subject to other parties being happy with anything 17 "[Building] Control. 18 fundamental that might be missing --18 "Planning. 19 19 Q. Yes. "Service schedule ... 20 20 "Residual Risk assessment ..." A. -- is my experience. 21 21 Q. Now, I just want to look at some extracts from your Do you see that there? 22 22 notebooks. We have recently had disclosure of some of A. Yes 23 23 your notebooks. Can we go to {ART00009454/4}. This is Q. Can you help us, do you think these are notes of 24 24 your third notebook, and what we're looking at is a meeting you had? 25 25 a transcript. So the notebooks were in your handwriting A. Yes. 189 191 1 and this is a transcript. 1 Q. Does this record a discussion of what the health and 2 2 What we can see on this page is there seems to have safety file was going to contain? 3 3 been some notes you have made about health and safety A. I think we need to be a little careful here. The 4 4 file, CDM related matters. So you have got: requirements for the health and safety file would have 5 "O+Ms - Gary compiles - MF to sign off." 5 been set out by Keith and in his -- by the -- Colin or 6 6 What does "Gary compiles" refer to? Paul would follow, in the sense that I understood the 7 7 A. I think Gary was one of the site managers within the contents hadn't changed. These are my notes in this 8 8 Rydon team. meeting where I'm recording some of the things that 9 9 Q. Right, yes. I would see are key --10 A. I believe. 10 Q. I see. 11 11 A. -- to the file. O. Yes. 12 Sorry, was there a date on this at all? 12 Q. Yes, I understand, that's helpful. 13 13 Q. I know it's your third notebook. I'm not sure we're Do you know if the final health and safety file did 14 aware of a date, but we'll just double check. 14 contain documents relevant to these items? Was that 15 15 Then we can see it says: ever something that you were aware of? 16 "[Health and safety] file - CDMC was to compile -16 A. I didn't see the final health and safety file get issued 17 Rydon were to provide Building Manual." 17 to the TMO, but I certainly saw the Building Control 18 So possibly around the time of the meeting in 18 certificate . We were very aware of where we were with 19 19 November 2015; is that possible? the planning conditions. The service schedule is a very

190 192

20

21

22

23

24

25

Q. Yes.

typical item to be included.

elements of the O&Ms for Rydons.

A. And the "Residual Risk Assessment (Steve Butler

compiling), was just a note in relation to an action he

would undertake. I think Steve was putting together

A. I honestly can't say.

A. That's correct.

Q. Okay. Then we can see it says:

"The Building Manual is the O+Ms ..."

Q. And then you've said what the building O&Ms will

That's operation and maintenance manuals, isn't it?

20

21

22

23

24

| 1 | Q. | | 1 | Q. | director; is that right? |
|-----|----|---|-----|----|--|
| 2 | | the TMO, can we now go to {ART00004765}. This is | 2 | Α. | |
| 3 | | an email from Paul Burrows to Claire Williams, copying | 3 | Q. | |
| 4 | | you and Simon Cash in on 9 September 2015, and he says: | 4 | | Paul Burrows says this . He says to Andrew Malcolm: |
| 5 | | "I will be consolidating the CDMC document for the | 5 | | "Andrew, |
| 6 | | Artelia project so that it can be issued to the | 6 | | "The only information we have is attached. |
| 7 | | Principal Designer under CDM 2015. | 7 | | "This includes: |
| 8 | | "I envisage this to be completed within the next few | 8 | | "1) Reviews of the Principal Contractors |
| 9 | | days and will forward to yourself directly. | 9 | | Construction Phase H&S Plan |
| 10 | | "If you have any questions with regards to the | 10 | | "2) The old and updated F10." |
| 11 | | handover, or documentation, please do not hesitate to | 11 | | That's the form, isn't it, setting out who's got the |
| 12 | | contact me." | 12 | | relevant CDM roles; is that right? |
| 13 | | So do we understand this correctly: is this | 13 | Α. | |
| 14 | | Paul Burrows, as the CDM co-ordinator from the 2007 | 14 | Q. | , 1 |
| 15 | | regime, handing over health and safety file information | 15 | | project. |
| 16 | | to the new principal designer, the TMO, under the 2015 | 16 | | "4) Agreed template for the H&S File." |
| 17 | | regulations? That's what's contemplated here? | 17 | | Do you see that there? |
| 18 | A. | Yes. | 18 | A. | Yes. |
| 19 | Q. | Can we go, then, to $\{ART00004949/2\}$ at the bottom. This | 19 | Q. | Now, would you have expected there to be more prepared |
| 20 | | is an email on 23 October 2015 internally within | 20 | | for this health and safety file at this stage, ie in |
| 21 | | Artelia. I'm looking right at the very bottom for the | 21 | | October 2015? |
| 22 | | moment. We can see it's from Andrew Malcolm. Then if | 22 | A. | I don't think I gave a lot of thought to it, to be |
| 23 | | we go over the page to page 3 {ART00004949/3}, we can | 23 | | honest. This was the information that was available in |
| 24 | | see it's to you, copying in Simon Cash and | 24 | | October 2015, this is what Paul had handed over. |
| 25 | | Michelle Lowe, subject: "Grenfell Tower". He says this: | 25 | | I don't remember giving any more thought to its |
| | | 193 | | | 195 |
| 1 | | "Neil, | 1 | | sufficiency otherwise. |
| 2 | | "Apparently you have all the CDM information. | 2 | Q. | · |
| 3 | | "Apparently Simon has spoken with Claire. | 3 | | a bit thin given that 2 and 4 don't really add much to |
| 4 | | "Seems as if, Neil can you send the information to | 4 | | the substance of the file, so you have only really got 1 |
| 5 | | Claire referencing conversation that she had with Simon. | 5 | | and 3? You don't remember thinking that? |
| 6 | | "Kind regards | 6 | A. | No, my focus in October was on completion, where we |
| 7 | | "Andrew." | 7 | | started the process of discussing what would be required |
| 8 | | Do you see that there? | 8 | | on the run-up to completion. At that time I think that |
| 9 | Α. | Yes. | 9 | | was envisaged to be around January. |
| 10 | Q. | | 10 | 0. | I see. |
| 11 | | you respond on the same day at 6 o'clock, that's at the | 11 | | Can we then go to {ART00009356}. This is an email |
| 12 | | bottom of that page | 12 | | from you to Simon Cash on 27 October 2015, and you say |
| 13 | A. | . 0 | 13 | | this in point 1 at the top: |
| 14 | 0. | | 14 | | "CDM:- |
| 15 | ٧. | "I don't have anything guys. And whatever is being | 15 | | "Following a further completion meeting today it |
| 16 | | issued needs to come from Paul and /or via Simon does it | 16 | | transpires that Claire has had no call from Paul. |
| 17 | | not?" | 17 | | "Accordingly despite all the effort to ensure |
| 18 | | You see that there? | 18 | | a smooth transition re CDM Claire considers Artelia's |
| 19 | Δ | Yes. | 19 | | efforts in this regard appalling. |
| 20 | Q. | | 20 | | "Andrew and I were quite embarrassed by the lack of |
| 21 | ų. | be issued to the TMO needs to come from the CDM | 21 | | professional closure that I think we all expected and |
| 22 | | co-ordinator, Paul Burrows | 22 | | planned for from Paul. |
| 23 | Δ | Yes. | 23 | | "Can you exert some pressure on Paul to wrap this |
| 24 | Q. | if necessary via Simon Cash as the project | 24 | | up? Much in the way you suggested in a previous email - |
| 25 | - | Yes. | 25 | | Claire still needs a CDM advisory type role and will |
| ∠ ⊃ | n. | 100. | ر ب | | ciane sun necus a com auvisory type role and will |

8

9

10

11

1 probably bite Paul's arm off if he is able to offer this 2 role.

> "As at today we have an expired F10 and a client expecting a handover of documents to inc a partial H&S File. Someone will need to help compile a completed H&S File so there remains scope for Artelia to see extra fee."

So we can see what you've said there.

9 Now, I want to ask you again: would you have 10 expected by this stage more to have been handed over 11 from Artelia to the TMO?

12 Well, I say there to include a partial health and safety 13 file. I mean, what constitutes a partial health and

safety file wouldn't be for me to gauge, but certainly

15 at that moment in time perhaps I was expecting to see

16 more, I acknowledge that.

17 Q. Yes. Do you think it was acceptable to hand the client

18 a partial health and safety file at this point, in

19 October 2015?

3

4

5

6

7

8

14

20 A. Well, it certainly wouldn't have been a completed one 21 because the project hadn't completed.

22 Q. I see.

23 A. So -- sorry, that may have come across a bit flippant

24 then, it wasn't intended.

25 Q. You say there that Claire Williams thinks Artelia is

197

1 appalling and that you're quite embarrassed. Can you

2 help us as to what in particular you found embarrassing

3 about the situation?

4 A. Yeah, well, this stems from the process that started in 5 July where the dialogue had started on the fact change

was coming, and I thought it was incumbent on Artelia,

6 7 our team, to be very clear with the TMO and Claire what

8 was happening, perhaps what their options were, and

9 I did my best to encourage, I think, Paul at the time,

10 or Simon -- I can't recall who, there's an email --

11 setting out how I thought we should do that. And that

12 was my view of how you professionally conclude a smooth

13 transition in the matter. And that didn't happen in the

14 way I'd like to have seen.

15 Q. Yes. I see.

16 On reading this, it appears to be a complaint to

17 Simon Cash about the CDM team at Artelia. Was it meant 18 to be read that way?

19 A. It's me escalating the issue and expressing how I felt .

20 Does that constitute a complaint? It could be read that

21 way, but it is what it is. You know, I was -- we were

198

22 embarrassed.

23 Q. I see.

24 A. It's not --

25 Q. Yes. A. What had happened was not what I had anticipated or

2 expected.

3 To your knowledge, was there ever any handover of

documents or a file in relation to the health and safety

5 file to the TMO from Artelia?

6 A. I believe there was subsequent to this dialogue.

7 Q. I see.

> What about a handover of any documents to Rydon? Obviously they were going to compile the O&M manual which was going to incorporate the health and safety file. Were you ever aware of handing over documents to

12 Rvdon?

13 A. No.

14 Now, the final topic I want to ask you about is about

15 the construction phase itself, and it's really about

16 Rydon.

17 Just before we get to that, we know that JRP,

18 John Rowan and Partners, were employed as clerk of works 19

and were doing quality checks of Rydon's work; yes?

20 Α.

21 Now, we've heard in evidence in this Inquiry that

22 John Rowan and Partners were only contracted to perform

23 a site inspection role and were only on site once

24 a week, and that they were observing the work in

25 snapshots. That's what we have been told.

199

1 Was that your understanding at the time?

2 A. Yes

3 Q. Did you think that that was a sufficient amount of time

for a clerk of works to be spending on a project such as

5 this?

4

6 A. Yes, I didn't have reservations about how much time they

7 were spending in their role.

8 Q. Right, yes.

9 Now, in your witness statements you have made 10 a number of comments about Rydon during the construction 11 phase of the project, and I want to ask you about

12 a number of those passages in your statement.

13 You say at paragraph 81 of your statement

14 {ART00006663/25} -- I don't think we need to turn this 15 one up -- that Rydon had resource issues and they were

16 causing delay.

17 Can you just help us, were there problems with the 18 resourcing of key personnel within the Rydon team, as

19 far as you perceived it?

20 Yes, I -- that's how I felt . I think if we're talking

21 around the period where -- do you have a specific period

22 in mind here or generally?

23 Q. Well, I tell you what, let me show you that part of your

200

24 witness statement, to be fair. This is

25 {ART00006663/25}, paragraph 81. You say in the first

1 line:

2

3

4

5

6

7

8

9

"There were also resource issues within Rydon's own supply chain and within its own team. These contributed to the delays to the construction works."

You have identified some of the comments that John Rowan and Partners raised in its site inspection reports in an earlier paragraph, and then you refer to a site visit in August 2015. So that's the context in which you have said this.

- 10 A. Yes.
- 11 Q. I just wanted to ask you if you can help us explain what
- 12 you thought Rydon's resource issues were within its own
- 13 team?
- 14 Well, I think this was around the time that
- 15 Simon Lawrence was leaving. Are you able to clarify
- 16 that for me, just to help jog my memory? I think it was
- 17 around this time.
- 18 Q. Yes, that Simon Lawrence left and Steve Blake took over 19 as project manager.
- 20 A. Right, okay. So, yeah, this was the period where
- 21 I started to feel and sense we weren't getting quite the
- 22 service we were expecting from Rydons. There was a --
- 23 there appeared to be resource issues, in my view, with
- 24 some of the things that needed to happen on site, hence
- 25 the reference to the site inspection reports. So this

201

- 1 was a perception I was forming over time.
- 2 O. I see.
- 3 A. From around this time.
- 4 You also mention in your statement that there were
- 5 resource difficulties with Rydon's subcontractors and,
- 6 in particular, the cladding subcontractors. Can we look
- 7 at that. This is at page $10 \{ART00006663/10\}$ of this
- 8 witness statement, paragraph 41. You say:

9 "The main issue evident from the reports, was the 10 delay in the cladding works, which was a threat to the 11 programme on the Project. This was an issue that, as EA, 12 I was concerned about and I formally raised it with 13 Rydon. Examples of the comments causing concern from JRP

14 about the progress of the cladding installation in its

15 Site Inspection Reports include ..."

> You give a number of examples, and for example the first one, 29 July 2015, you have highlighted that the clerk of works was saying there were only seven external cladding fixers

20 I want to ask you just more generally: did you form 21 the view that the cladding installation was

22 under-resourced?

16

17

18

19

23 A. Well, yeah, that's essentially what was being reported, 24 you know, progress was starting to suffer, and the

202

25 view -- the observations of the inspectors were that 1 there was inadequate workforce on site, and I think

2 reference was made to the number of climbers being in

- 3 use at any one particular time. So, yeah, concerns were 4 being expressed about the workforce for that team and
- 5 the delays that were beginning to appear.
- 6 Q. I see. Yes.

7 Delay. You also raise the issue of delay, and you 8 have spoken about it at the very beginning of your

9 evidence. If we can look at paragraph 95 of your first

10 statement on page 32 {ART00006663/32}, you say there:

11 "Whilst the project is one of the most delayed

12 projects I have ever worked on, none of the issues that

13 I identified to Rydon were related to any concerns about

14 the quality of the work."

15 Do you see that there?

- 16 A. Yes.
- 17 In your opinion, what were the key factors that
- 18 contributed to the delay on this project?
- 19 A. Generally?
- 20 Q. Yes.
- 21 Α. General delay?
- 22 Q. Yes.
- 23 Because I think -- sorry, with respect, you're
- 24 jumping -- I think there are large gaps between these --
- 25 when I've made -- I can't get across my message,

203

1 apologies.

2 We're talking about fundamentally different parts of 3 the project here, aren't we? So my comment in relation

Δ to 95, I can't recall whether that was in relation to

5 the beginning, when I came on board, or towards the

6 latter part. But certainly the project was in delay

7 when I joined, and that delay was exacerbated by other 8

factors --

- Q. Yes. 9
- 10 A. -- to the point that the project ended up being handed
- 11 over even later than we were envisaging, some six or
- 12 seven months later.
- 13 Q. I think you are dealing with the end phase of the
- 14 project here because the next heading is "Lead-up to
- 15 practical completion".
- 16 A. Right.
- 17 Q. You have talked about exchanges you had with Steve Blake
- 18 in April 2016 just immediately above.
- 19 Yes, that's helpful, thank you. Yes.
- 20 O. I see.
- 21 Is it right, then, that despite the delay and the
- 22 resourcing issues, you didn't have any concerns about
- 23 the quality of Rydon's work?
- 24 A. No, only insofar as the clerk of works, the site
- 25 inspectors, were monitoring and indeed measuring through 204

1 a KPI system the quality, which was quite high right 2 from the beginning and then dipped and was brought back 3 up as their issues and observations were resolved.

4 So, in broad terms, I wasn't concerned about quality 5 because the clerk of works ultimately were satisfied.

- Q. I see. So you took comfort from the clerk of works?
- 7 Very much so.
- 8 Q. Yes.

6

- 9 A. Yeah.
- 10 Now, responsiveness. You also mention in several places 11 in your witness statement Rydon's what you say was
- 12 a lack of responsiveness. I want to look at an email on
- this that you refer to, {ART00005053}. This is an email 13
- from you to Tony Batty of Silcock Dawson and 14
- 15 Claire Williams. Tony Batty was the M&E clerk of works,
- 16 wasn't he?
- 17 A. Yes.
- 18 Q. You have copied in others, including Simon Cash, to
- 19 this. It's 6 November 2015, and I just want to pick it 20 up in the second paragraph -- sorry, it's to Tony Batty
- 21 and Claire Williams, we can see at the top there.
- 22 You say:
- 23 "Claire - either way this is a shoddy management by
- 24 Rydon of our teams time/effort and I would urge you to
- 25 elevate this to Peter for his discussions with Steve.

205

1 "This demonstrates again that Rydon must do better. 2 I hold a perception, from their inaction here, that they 3 are apathetic to our efforts to help and need to be far 4 more proactive in getting work complete and right first 5 time.

> "Do we need a high level meeting to discuss the new elephant in the room? Tony/Jon - thoughts?"

This appears to be about a voids inspection that's been done on 5 November 2015. We can see that from the subject matter of the email.

Can you just help us: what was the "new elephant in the room" you're referring to there?

- 13 A. Okay, so from memory here we were trying to ensure that 14 work elements were ready for Jon and Tony to inspect, 15 and they had been raising observations, and we were in 16 a period here, I believe, where, having been told the 17 work was ready, they would arrive and the work wasn't 18 ready, observations that had been raised in previous
- 19 reports hadn't been addressed. So this was shoddy, this
- 20 was clumsy, this was frustrating.
- 21 Q. Yes.

6

7

8

9

10

11

12

- 22 A. So, you know, that's the essence of what was happening
- 23 here. Time was being wasted, works were not being
- 24 finished when we were told they were being finished, and
- 25 observations weren't being closed out in the way that

- 1 perhaps they had been before.
- 2 Q. Right, I see.
- 3 A. But we were trying, I think, as a team -- you know,
- 4 I worked quite closely with Tony and Jon, so as a team
- 5 we were working hard with Rydon to help get them and the 6
- elements of work over the line, by bringing -- being
- 7 a bit more methodical in the inspection regime. There 8

was better dialogue.

9 When I came on board, I created what I felt was 10 a better dialogue between them. I mean, Jon and Tony

11 hadn't been sitting in progress meetings. I saw that as

12 critical, so I advised that to the client and they sat 13

in the progress meetings. So they were very much at the 14 forefront of the issues, the challenges and ultimately

15

some of these resource challenges that we've -- that

16 I allude to here.

17 Q. We can see in this email that you are urging

18 Claire Williams to ask to elevate this to Peter for his

discussions with Steve. Is that elevate it to

20 Peter Maddison?

19

- 21 A. Yes, I believe so.
- 22 Q. And for him to discuss, you say, with Steve; is that
- 23 then Steve Blake, who we know was the --
- 24 A. Yeah, I think so.
- 25 -- Rydon project lead at this point?

207

- 1
- 2 Q. So by this time, were you aware that Peter Maddison and
- 3 Stephen Blake were having regular discussions?
- 4 A. I think it was around this time that I had learnt that
- 5 they were having conversations, yes.
- 6 Q. And were those discussions bypassing Artelia? Were you
- 7 sometimes not aware of exactly what they were
- 8 discussing?
- 9 A. That was the impression I was given when I learnt that
- 10 was happening.
- 11 Q. What did you think of that at the time?
- 12 A. I was surprised. I didn't think that that was right.
- 13 It didn't faze me, but I think there was much email
- 14 traffic on this matter later.
- 15 Q. Right.
- 16 Can we look at an email, {ART00006206}. This is
- 17 an email on 1 October from Simon Cash to you.
- 18 A. Yes.
- 19 Q. I just want to look at that first paragraph. He says:
- 20
- 21 "For your [information], I had a good meeting with 22 Peter Maddison this afternoon and we went through the
- 23 various concerns regarding quality, programme, costs

208

24 etc. He is conscious that his relationship with Steve 25

goes back a long way and Steve talks to him direct.

However, Peter, does not want that relationship to circumvent Artelia and by pass the role that we are playing in trying to get the project finished to the required quality and within budget. Peter fully appreciates what we are doing and is very supportive of our approach. What we did agree was that he and I would meet with Steve next week to have an offline chat to review the overall situation and try and explain that no one is threatening Rydon's or trying to be aggressive, but rather we are trying to guide them as to what they need to do to sort themselves out. Hopefully, this might make Steve open up a little more [than] when he is in meetings where he feels under threat and is therefore less forthcoming."

So that's what Simon Cash is saying to you. I think it was Simon Cash's evidence that he had heard or learned that Peter Maddison and Steve Blake were having discussions shortly before this email, in October 2015.

Can you help us, what does Simon Cash mean there where he says, four lines up, "try and explain that no one is threatening Rydon's or trying to be aggressive"?

23 Well, that never really made much sense to me at all, 24 because no one was ever threatening Rydon or trying to 25 be aggressive, it's just not in my nature, and

209

I dismissed that. I found Steve to be somewhat, you know, defensive about some of the observations that we were making, and hence the reference to, you know, opening up a little bit more. I mean, that would imply that he wasn't opening up, and that's certainly a perception I held.

In the progress meetings we were trying to discuss expectations. We were trying to help by introducing, you know, a control mechanism, a tracker, to manage effectively the completion process, and I just recall getting a sense that Steve wasn't really bought into what we were trying to do.

13 Q. Yes.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

1

2.

3

4

5

6

7

8

9

10

11

12

14 Did you feel at the time that you received this 15 email that it was effectively telling you to back off 16 and not be so demanding of Rydon?

17 A. No. Not at all.

18 Q. Do you think that your performance of your role and 19 expectations you had made clear of Rydon in your role 20 might have contributed to them feeling under pressure or threatened?

21

22 A. I don't believe that, no. I mean, we were trying to 23 help set out a route map to completion. There were 24 frustrations with resource, there were issues with the 25 supply chain, contractors had gone bust, we had access 1 issues with tenants. There was a myriad of challenges 2 that needed managing here, and I imagine, with respect, 3 that Steve was under some immense pressure to manage the 4 team to do what it needed to do. We were trying to help 5 do that by introducing tools and manage what needed to

6 be managed. The meetings were attended by the entire 7 team, and at no times were we in any way aggressive.

8 So if somebody felt threatened, being aware of that 9 was useful in terms of the way I would have gone into 10 the next meeting, but I don't believe I changed my style

11 or attitude or, frankly, my collaborative nature.

12 Q. I see. So were you puzzled, then, when you received 13 this?

14 Yeah, I was surprised, yeah.

15 Q. Okay.

16 A.

17 Q. Now, we know that much later, in March 2016, Artelia and 18 the TMO did end up writing a formal complaint about

19 Rydon. Can you remember that? In fact, you have

20 referred to it earlier in your evidence to us. Is that

21

22 A. Yes.

25

1

2

3

4

5

6

7

14

15

16

17

18

19

20

21

22

25

23 Can we go to your initial draft of that complaint, 24 {ART00005451}. It's dated 26 March 2016, and you sent

it to David Gibson and Peter Maddison for comments and

211

thoughts. So we can see that in the top. You say:

"In Claire's absence may I invite your comments/thoughts in relation to the following email which I have drafted to Rydon on account of their recent efforts to complete this project. Tony Batty and Jon White are in full support of the content. Happy to discuss."

8 A. Yes.

9 Q. Then if we can just read down the draft that you were 10 proposing to send to Steve Blake -- is that right?

11 That's right. A.

12 Q. We can see you say: 13

"We are writing to set out our frustrations and concerns about a number of current issues with this project as both the client team and consultant team hold a perception that Rydon could and should be doing far better in the run up to completion.

"We would like to see this email treated as a formal complaint, elevated to requisite level in [Rydon Maintenance] to ensure those empowered to resolve these matters have the opportunity to do so at the earliest convenience."

23 Then you say:

24 "In no particular order ..."

And you set out a number of complaints. It begins

| 1 | | at item 1 with resource. You say: | 1 | Q. | Yes. |
|----|----|--|----|-----|--|
| 2 | | "We are stunned to have learnt | 2 | A. | I can write fairly emotive emails and then reflect on |
| 3 | | "a. Gary Martin has been withdrawn from the | 3 | | them and take the emotional bits out. For me, the |
| 4 | | project | 4 | | substance of the email was key, and I wanted them to be |
| 5 | | "b. You are withdrawing and being replaced with | 5 | | cognisant and aware and in support of the substance of |
| 6 | | a Mike Brown." | 6 | | my complaint, which they were, along with Tony and Jon. |
| 7 | | I'm not going to read all of that, but if we go to | 7 | | By this stage we were starting to get quite cross, |
| 8 | | item 2 lower down {ART00005441/2}, item 2 was about | 8 | | and this is what this email was seeking to do, to |
| 9 | | meeting attendance: | 9 | | escalate the issue. |
| 10 | | "Neither you nor Mike were present at the Progress | 10 | Ο | Can you remember at whose suggestion was that final |
| 11 | | | 11 | Ų. | · |
| | | Meeting last week. | | | paragraph removed? |
| 12 | | "We find this incredible when, yet again, the target | 12 | | I think it was David Gibson that replied, from memory. |
| 13 | | completion date has moved" | 13 | MS | GRANGE: Yes. |
| 14 | | Then 3, "Handover Matters": | 14 | | Mr Chairman, I am aware of the time. I am on the |
| 15 | | "We are concerned that our vision of a successful | 15 | | last two pages of my questions, so if I could just |
| 16 | | 'soft landing' is being compromised by the lack of | 16 | SIF | R MARTIN MOORE-BICK: What does that indicate in terms of |
| 17 | | proactive effort to provide" | 17 | | time? |
| 18 | | And you list out a number of things that you feel | 18 | MS | GRANGE: Five minutes. |
| 19 | | are missing there in terms of handover. | 19 | SIF | R MARTIN MOORE-BICK: Are you happy to keep going for |
| 20 | | Then at the end of this draft email, you say: | 20 | | a little longer than we |
| 21 | | "Finally - our biggest issue remains what appears an | 21 | TH | E WITNESS: Of course. |
| 22 | | extremely lacklustre approach to completing the project | 22 | SIF | R MARTIN MOORE-BICK: Thank you. |
| 23 | | with no real sense of urgency, willingness nor | 23 | MS | GRANGE: Thank you, I'm grateful. |
| 24 | | commitment from the Rydon team. It just doesn't feel | 24 | | If we can then go to Steve Blake's response to this |
| 25 | | like this project is important to Rydon or that you have | 25 | | complaint, {ART00006648/2}, his email is at the top. So |
| | | 213 | | | 215 |
| | | 210 | | | 213 |
| 1 | | grasped what success will look like for the client in | 1 | | we see Steve Blake, 4 April 2016, he says: |
| 2 | | May. This is a real frustration given our early | 2 | | "Neil, |
| 3 | | adoption of the Completion Countdown process and | 3 | | "Whilst I appreciate your concerns regarding |
| 4 | | meetings which we have not seen Rydon embrace as | 4 | | completion I do not consider your comments to be |
| 5 | | proactively and seriously as hoped." | 5 | | representative of the team's effort. |
| 6 | | So that's your draft for comment that is sent to the | 6 | | "We have worked every weekend since the beginning of |
| 7 | | TMO. | 7 | | 2016 and numerous out of hour sessions to accommodate |
| 8 | | If we can look at the version that was actually | 8 | | resident access. |
| 9 | | sent, {ART00006149}, if we look at the bottom of page 1 | 9 | | "In terms of resource my involvement remains the |
| 10 | | and on to page 2, here we see the email that you send to | 10 | | same and Mike Brown has been introduced to help me with |
| 11 | | Steve Blake. It appears to be identical to what you had | 11 | | my duties. |
| 12 | | drafted, except if we look at the next page, that final | 12 | | "Gary Martin has started a new contract and Keith |
| 13 | | paragraph that you had previously included "Finally - | 13 | | Miller has been brought in to complete the new build |
| 14 | | our biggest issue remains [about the] lacklustre | 14 | | fiats . |
| 15 | | approach", that final paragraph isn't in this version. | 15 | | "Our motivation to provide a quality product for |
| 16 | | That's right, isn't it? | 16 | | KCTMO and their residents remains undiminished. |
| 17 | A. | That's right. | 17 | | "In the interim to our next progress meeting - happy |
| 18 | | 9 | 18 | | |
| | Q. | Can you help, why was that final paragraph removed? | | | to get together regarding any detailing you are not |
| 19 | A. | It was quite a serious email. It's quite a serious | 19 | | clear about." |
| 20 | | complaint. | 20 | | So that's his response to you. It's clear that he |
| 21 | | Yes. | 21 | | doesn't agree with the complaint, does he? |
| 22 | A. | I have never had to write a complaint like that before, | 22 | | No. |
| 23 | | so out of courtesy I invited the TMO's comments, and | 23 | Q. | |
| 24 | | they responded and suggested that that was a little | 24 | | performance following the complaint? |
| 25 | | emotive. I didn't disagree with that. | 25 | A. | Fundamentally, no. |

Q. Did you actually discuss the matters directly with 1 late, works were still not being presented as complete 2 2 Steve Blake? If so, can you help us as to what was in the way the clerk of works had expected, and I think 3 said? 3 this was the straw that broke the camel's back in this 4 4 A. I had a conversation with Steve Blake, yes, in response email where, you know, the O&Ms -- following comments 5 to this. I think there are a couple of responses 5 made by the O&Ms -- by the clerk of works, the O&Ms were 6 6 because I follow up on this later requesting an update still unacceptable. 7 7 on a couple of the items, but this come back to the Q. Yes. 8 8 phone call, I remember speaking to Steve briefly, just A. So I just took the view that, you know, does anyone 9 9 explaining, "Look, you know, I've got to set this out, actually care? 10 this is our position". He reiterated some of the points 10 Yes. So that was that the operation and maintenance 11 that he had made. He had explained to me that there is 11 manual that's been provided to the clerk of works --12 nowhere else to escalate this issue, he is the regional 12 13 13 director, and he put me right on a couple of points Q. -- they didn't think was acceptable, did they? 14 about Mike Brown and my understanding about resources, 14 A. Correct. 15 15 which was fine, I think that's reflected in a further Q. Yes. 16 16 email. Now, can we just go back finally, one last document, 17 Q. Yes. 17 to your notebook. This is notebook 4, {ART00009448/3}. 18 A. And, as I say, there was a subsequent email where 18 We can a note, right in the middle of that page, that 19 19 I think I acknowledge the discussion, "But can you still says, with a little asterisk next to it: 20 advise on a couple of the items?" That's how I recall. 20 "SB response is not adequate." 21 21 Q. So was it a cordial conversation you had with Then you have written: 22 22 Steve Blake? "No emotion calm." 23 23 A. Yes, I think it was cordial. It was professional. But Can you help us, was that a note about Steve Blake's 24 24 nonetheless, we're discussing the fact that we're response to the complaint? 25 unhappy. 25 If the date of the meeting coincides, then yes. But 217 219 1 Q. Yes, and you made it clear you were unhappy? I'm -- again, I'm -- it's the timeline that's thrown me, 2 2 A. I think the email --I'm sorry. If my emails follow this note, then there is 3 Q. Yes. 3 a direct correlation. But writing "no emotion" --4 A. -- made it clear we were unhappy. Δ I don't remember this note, but writing that down 5 Q. Yes. 5 doesn't surprise me. 6 If we go to {ART00006672}, this is an email you sent 6 Q. I think if we look at page 1 {ART00009448/1} of this 7 7 to Simon Cash on 9 May 2016. fourth notebook, at page 1 we can see it 's saying: 8 8 A. Yeah. "Grenfell complaint. 9 9 O. We looked at this earlier --"Monday. 10 10 "Tweak the 'I' to 'we' client + project team. A. Yes. 11 11 -- when I was asking you about being sucked into design "David Gibson + Peter Maddison to comment. 12 issues with the TMO, but I want to ask you about the 12 "[Simon Cash] other amends." 13 first few lines of this email. You say: 13 So that appears in the beginning of this notebook to 14 "Simon. 14 be you noting down some things about the complaint 15 "O&Ms are unacceptable to the CoWs. 15 email, and so this is after that in your notebook. It's 16 "This is just to flag that this is becoming a farce; 16 three pages on in your notebook on page 3. 17 despite all our efforts to ensure a smooth landing 17 Was "no emotion calm" an instruction about what tone 18 I have to say I do not think I have ever worked with 18 to take in your discussions with Rydon, or was it 19 19 a Contractor operating with this level of nonchalance." a comment on Stephen Blake's demeanour? 20 Do you see that there? 20 A. It was a note on Stephen Blake's demeanour. 21 21 Q. Okay. A. Yes.

218 220

22

23

24

25

Q. Why, despite the complaint that you'd made, do you think

A. I don't know, but they continued -- you know, some of

the things did not change, information was still coming

Rydon continued to perform in this way?

22

23

24

25

Now, considering all of those issues that you raised

have a concern that Rydon's performance compromised the

quality of their work, or compromised health and safety,

about Rydon, I want to ask you finally: did you ever

| 1 | including attention to fire safety on the project? | 1 | SIR MARTIN MOORE-BICK: Thank you very much. |
|--|---|--|--|
| 2 | A. No. | 2 | THE WITNESS: Thank you. |
| 3 | MS GRANGE: Mr Chairman, thank you. I have come to the end | 3 | SIR MARTIN MOORE-BICK: Would you like to go with the usher, |
| 4 | of my questions. If we could have just a short break. | 4 | and that's it. Thank you. |
| 5 | SIR MARTIN MOORE-BICK: Would 4.45 give you long enough? | 5 | THE WITNESS: Thank you. |
| 6 | MS GRANGE: Yes. I'm just looking only one question so | 6 | (The witness withdrew) |
| 7 | far, so maybe we could even go | 7 | SIR MARTIN MOORE-BICK: Right, Ms Grange. Well, that must |
| 8 | SIR MARTIN MOORE-BICK: No, no, let's not be too | 8 | be it for the afternoon. |
| 9 | | | |
| | MS GRANGE: Sorry, I can't see the clock for the lights. | 9 10 | MS GRANGE: Yes, thank you. Thank you for sitting late. |
| 10 | Yes, quarter to, yes. | 11 | SIR MARTIN MOORE-BICK: And indeed for the week, and we will |
| 11 12 | SIR MARTIN MOORE-BICK: Well, Mr Reed, Ms Grange has come to | 12 | resume on Monday at 10 o'clock. |
| | the end of her questions, but she needs to check that | | MS GRANGE: Yes, with the first of the TMO witnesses. |
| 13 | there is nothing she's omitted, and there may be | 13 | SIR MARTIN MOORE-BICK: Right, good. |
| 14 | questions from others who aren't in the room that we | 14 | Thank you very much. 10 o'clock on Monday, then, |
| 15 | need to consider putting to you. | 15 | please. Thank you. |
| 16 | THE WITNESS: Understood. | 16 | (4.50 pm) |
| 17 | SIR MARTIN MOORE-BICK: So we're going to have a short | 17 | (The hearing adjourned until 10 am |
| 18 | break. We will come back at 4.45 and then see if there | 18 | on Monday, 12 October 2020) |
| 19 | are any more questions for you. All right? | 19 | |
| 20 | THE WITNESS: Okay. | 20 | |
| 21 | SIR MARTIN MOORE-BICK: So would you like to go with the | 21 | |
| 22 | usher, please. Thank you. | 22 | |
| 23 | (Pause) | 23 | |
| 24 | Right, 4.45 then. | 24 | |
| 25 | MS GRANGE: Thank you. | 25 | |
| | 221 | | 223 |
| | | | |
| 1 | (4.38 pm) | 1 | INDEX |
| 1 2 | (4.38 pm) (A short break) | 1 2 | INDEX PAGE |
| | | | |
| 2 | (A short break) | 2 | PAGE |
| 2 | (A short break) (4.45 pm) | 2 | PAGE |
| 2 3 4 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there | 2 3 4 | PAGE MR PHILIP BOOTH (continued)1 |
| 2 3 4 5 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. | 2 3 4 5 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 |
| 2 3 4 5 6 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. | 2 3 4 5 6 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 |
| 2 3 4 5 6 7 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? | 2 3 4 5 6 7 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) |
| 2 3 4 5 6 7 8 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. | 2 3 4 5 6 7 8 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) |
| 2 3 4 5 6 7 8 9 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much | 2 3 4 5 6 7 8 9 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. | 2 3 4 5 6 7 8 9 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very | 2 3 4 5 6 7 8 9 10 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, | 2 3 4 5 6 7 8 9 10 11 12 13 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have | 2 3 4 5 6 7 8 9 10 11 12 13 14 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. It's important to me, if there is an opportunity for | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. It's important to me, if there is an opportunity for me just to say, I would like to offer my condolences to | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. It's important to me, if there is an opportunity for me just to say, I would like to offer my condolences to all the bereaved and everyone affected by this dreadful | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. It's important to me, if there is an opportunity for me just to say, I would like to offer my condolences to all the bereaved and everyone affected by this dreadful event, and I do hope that the Inquiry can help establish | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. It's important to me, if there is an opportunity for me just to say, I would like to offer my condolences to all the bereaved and everyone affected by this dreadful event, and I do hope that the Inquiry can help establish what the industry can learn from this so that it really | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. It's important to me, if there is an opportunity for me just to say, I would like to offer my condolences to all the bereaved and everyone affected by this dreadful event, and I do hope that the Inquiry can help establish what the industry can learn from this so that it really will never happen again. So I just wanted the | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. It's important to me, if there is an opportunity for me just to say, I would like to offer my condolences to all the bereaved and everyone affected by this dreadful event, and I do hope that the Inquiry can help establish what the industry can learn from this so that it really will never happen again. So I just wanted the opportunity to say that. | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 | (A short break) (4.45 pm) SIR MARTIN MOORE-BICK: Right, Mr Reed, we will see if there are any more questions for you. Yes, Ms Grange? MS GRANGE: Mr Chairman, no, I have no further questions. I'm sorry if that's disappointing. It just goes to us to thank the witness very much for his assistance. SIR MARTIN MOORE-BICK: Yes, well, again, thank you very much for coming here today to give your evidence, Mr Reed. I'm sorry to have kept you waiting a bit, but it is really has been very helpful to hear what you have to tell us, and we are very grateful to you, and now you are free to go. THE WITNESS: Thank you. It's important to me, if there is an opportunity for me just to say, I would like to offer my condolences to all the bereaved and everyone affected by this dreadful event, and I do hope that the Inquiry can help establish what the industry can learn from this so that it really will never happen again. So I just wanted the | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 | PAGE MR PHILIP BOOTH (continued)1 Questions from COUNSEL TO THE INQUIRY1 (continued) MR NEIL REED (affirmed)104 |

able (6) 13:2 115:24 161:25 173:17 197:1 201:15 abnormally (2) 36:1,5 above (8) 5:3 14:12 35:23 38:13 39:18 51:13 62:11 204:18 absence (2) 4:13 212:2 absolutely (5) 34:8 48:16 57:2 60:10 121:24 academy (3) 8:9 10:8,14 accept (5) 38:25 58:17 83:5.19 100:9 acceptable (3) 90:25 197:17 219:13 accepted (2) 74:15 161:12 access (7) 92:25 124:6,9 126:10 159:20 210:25 216:8 accessibility (1) 93:10 accessible (1) 93:4 accommodate (2) 6:17 216:7 accordance (2) 78:21 176:1 accordingly (3) 7:1 9:16 account (3) 130:5 132:6 212:4 accounts (2) 107:14,15 accuracy (1) 181:12 accurate (1) 74:18 achieve (4) 20:22 48:20 63:25 134:8 achieved (3) 63:9,20 121:9 acknowledge (2) 197:16 217:19 acknowledgement (1) 168-22 acknowledges (1) 171:19 acm (6) 58:17 59:1,2,12 90:25 110:9 acop (1) 187:24 acoustic (1) 92:17 across (3) 160:14 197:23 203:25 acted (1) 76:11 action (13) 5:21 7:22 22:14 92:15 93:21 94:5,20 95:18 96:9 167:2.12 170:20 192:23 actions (2) 96:4 139:4 actively (1) 119:7 activities (2) 97:22,23 activity (1) 14:18 actual (5) 11:14 20:23 41:5 47:1 84:6 actually (23) 3:17 11:24 18:5 33:13.21 34:8 41:16 43:8 53:20 64:19 71:6 81:7 91:7 92:1 127:12 130:6 133:14 138:8 144:25 181:11 214:8 217:1 219:9

ad (4) 99:3,9 142:20,25 adamant (1) 41:7 add (2) 188:15 196:3 added (4) 31:1 37:17 55:4 188:25 addendedsic (1) 22:16 addendum (13) 13:3 14:1 15:11,13 16:25 17:11,21 18:23 19:8,20 21:20,21 23.13 additional (5) 6:1 97:11 158:11.11 159:7 additions (1) 55:16 address (5) 8:2 49:7,25 138:21 167:13 addressed (3) 40:14 143:18 206:19 addressing (1) 157:11 adequate (1) 219:20 adequately (1) 65:9 adhered (1) 38:24 adjourned (1) 223:17 adjournment (1) 104:6 adjustments (1) 21:24 administer (1) 115:14 administering (2) 24:10 68:5 administration (3) 24:13,18 140:3 administrator (1) 144:14 adopting (1) 125:23 adoption (1) 214:3 ads (2) 87:12,13 advanced (1) 110:19 adverse (3) 85:7,25 86:19 advertising (1) 27:20 advice (28) 6:4 7:5 11:9 13:13.25 14:11 15:2.7 16:15,17 17:21 36:24 50:2 61:19 64:2 76:9 80:17 88:15 141:7 142:5,20,25 153:13 159:17 168:7 169:4 177:11.17 advise (12) 24:3 37:20 40:5 61:17 64:4 80:5.10 153:23 164:16,23 167:12 217:20 advised (5) 6:16 19:10 166:17 167:8 207:12 adviser (10) 118:13 136:24 142:12 160:19 161:11,25 162:2,7,12 177:9 advising (5) 7:25 83:11 84:2 89:4 165:1 advisor (2) 144:18 173:17 advisory (1) 196:25 aesthetic (1) 59:20 aesthetics (1) 67:4 affect (1) 14:5 affected (1) 222:20

after (18) 58:9 69:4 79:2 81:18 92:17 98:25 100:16 107:12.14 114:1 125:18 138:7 140:25 147:23 152:11,17 189:16 220:15 afternoon (5) 56:21 104:15 163:5 208:22 223:8 again (33) 18:3,6 29:19 33:18 39:20,23 41:2 44:12 55:25 71:16 81:20 92:12 93:10,18,21 94:3.19.19 95:7.22 97:4 103:13 105:22 119:14 151:16 154:3 164:4 197:9 206:1 213:12 220:1 222:11,23 against (11) 7:25 15:17 17:3 27:23 40:8 58:16 118:3 119:1 121:11,16 144.22 agenda (5) 44:16,18,20 58:23 132:8 agent (42) 23:9 24:9 33:25 64:3 65:16 67:12,22 68:5 70:9 83:12.16 84:1.6.16 86:15.15 100:10 108:3.16.22 110:13.19 111:2.15 115:7.12.13 122:2,20 136:15 137:15 144:2.4.7.25 145:4,20 150:13,15,20 162:3 178:7 agents (1) 111:3 aggressive (4) 209:9.22.25 211:7 ago (2) 46:4 113:10 agree (24) 4:20 13:25 26:10 35:18 36:24 39:20 44:6,9 48:12 58:18 85:15,19 90:20 126:12 129:20 132:6 168:5 169:5 172:23 173:4 188:19 189:1 209:6 216:21 agreed (19) 13:22 21:20 23:22 28:5 31:13 33:3 38:23 40:6 43:24 46:22 56:19 83:18 91:2 168:10 175:19,24 176-15 25 195-16 agreement (8) 48:3,20 51:5 70:10 94:14 97:21 108:19 109:2 ail (1) 132:15 aired (1) 129:13 alarm (3) 86:2,4 141:8 alarms (3) 151:20 152:9 164:8 albeit (2) 108:23 155:14 align (1) 5:8 aligned (1) 6:13 allow (1) 172:24 allowed (3) 4:11 97:4 129:10 allows (1) 17:12 allude (1) 207:16

along (9) 82:10 152:22 182:13.14.15 183:9.18 189:7 215:6 already (12) 8:16 48:21 52:24 80:24 112:24 113:14 125:5 133:1,4 137:17 144:20 166:16 also (31) 9:9 10:15 11:12 12:3,3,7 38:25 39:7 40:15 41:10 50.22 66.22 75.18 86:21 90:2 96:11 101:1.8 112:5 119:11 120:23 125:9 136:20 153:2 154:6 171:14 187:23 201:2 202:4 203:7 205:10 alter (1) 68:7 alteration (1) 49:16 altering (1) 22:12 alternative (1) 49:16 alternatives (2) 12:2 90:22 although (4) 2:6 48:19 53.9 167.2 aluminium (1) 59:1 always (7) 75:9 84:5.5 91:12 102:20 122:18 amend (2) 14:15 188:14 amended (1) 188:25 amending (2) 23:3,23 amendments (1) 54:17 amends (1) 220:12 among (1) 154:9 amongst (1) 45:4 amount (3) 34:4,7 200:3 analysis (3) 2:17 85:9,17 andrew (15) 87:12.19 88:3,14,17 111:2 141:2 151:23 167:12 174:21 193:22 194:7 195:4,5 196:20 anomalies (1) 152:3 another (18) 8:6 24:5 28:19 41:20 46:21 57:11 70:25 104:10 111:14 128:17 131:24 151:15 156:19,20 164:25 167:3 168:24 176:19 answer (12) 8:5 26:20 41:13,15 46:20 62:12 68:2 71:1 84:22 96:3 117:14 159:3 answered (1) 84:23 answering (1) 137:24 answers (4) 45:24 46:16.24 118:23 anticipate (2) 63:21 anticipated (5) 64:25 68:21 80:25 110:14 199:1 anybody (3) 83:15 96:8 106:5 anyone (8) 37:20 51:24 57:19 77:18 94:8 139:11 163:8 219:8

anything (28) 4:24

14:18 32:22 40:22

56:22 57:8 60:13 64:1 65:4 77:23 102:2.24 105:2 115:21 127:8 129:21 139:13 163:9 165:2.3 174:5.9 176:9,13 183:5 189:17 194:15.20 anyway (5) 103:8,20 104:18 110:10 184:20 anywhere (1) 15:24 aov (1) 139:7 apart (1) 152:9 apathetic (1) 206:3 apologies (1) 204:1 apologise (1) 51:19 apologised (2) 157:9.13 appalling (2) 196:19 198:1 apparent (4) 118:4 124:7 133:10 135:5 apparently (4) 151:20 164:8 194:2.3 appear (6) 69:19 132:16 134:12 161:3 179:21 203.5 appearance (2) 59:11.21 appeared (8) 123:25 148:4 154:8,21 155:5 157:10,13 201:23 appears (11) 21:23 56:7 58:15 94:3 129:12 188:20 198:16 206:8 213:21 214:11 220:13 appleyards (8) 5:11 7:1.21 18:23 19:19 21:19 79:18,20 applicable (1) 27:14 application (1) 121:21 appoint (17) 86:22 92:16.19 94:9 96:17.22 97:1.11 119:12 162:2,7 166:4 168:24 170:7,13 171:6 172.8 appointed (24) 47:23 79:22 82:25 83:2.4 94:13 96:1,6 97:23 98:6.11 106:25 108:18 111:13 114:10 116:21,24,25 122:16 135:18 141:15 151:13.13 166:7 appointing (8) 91:8 94:15 95:3,16,19 96:9 162-12 172-1 appointment (17) 79:6 80:20 81:18,19,22 98:2.25 109:3 114:5 123:2 140:16 143:6 148:1 166:8 167:13 173:2 175:10 appointments (6) 79:11,18,25 95:14 141:13,18 appraisal (1) 14:20 appreciate (6) 67:20 112:9 126:18 142:19 144:21 216:3 appreciated (1) 104:25

appreciates (1) 209:5

67:9,11 166:19 172:5

approach (8) 47:4

209:6 213:22 214:15 approached (1) 68:21 appropriate (13) 16:15 26:14.15.19 32:24 40:23 47:2 59:25 67:18 79:14 88:25 89:20 148:20 appropriateness (1) 148:3 approval (7) 63:14 67:6 79:9,19 121:3,5,9 approve (1) 121:7 approved (7) 13:7 34:18,23 187:21,25 188:3,19 april (21) 1:21 3:5,7,21 15:13 21:19 75:14 90:1.25 92:10 128:20 132:1 138:21.23 139:4 165:10.12 179:8 186:12 204:18 216:1 architect (6) 32:14,23 33:16,19 34:3 84:18 architects (1) 91:13 architectural (9) 34:3 117:11,16 118:11 132:17 136:20 137:7 138:9 139:14 area (3) 95:1 136:23 138:10 areas (3) 52:21 134:17 137:5 arent (5) 22:21 152:9 187:17 204:3 221:14 arising (3) 132:19 139:4 150:24 arm (1) 197:1 arnold (1) 55:25 arose (2) 140:19 151:18 around (42) 3:16 33:23.23 38:3 39:4 46:18 53:6 59:20 60:1 67:4,4,5 68:24 77:23,24 91:9 97:5 98:16 107:13 109:23 113:24 118:12 119:8 125:2.14.20 128:8.14 129:18 135:9 136:16 149:24 154:21 171:5 179:18 190:18 196:9 200:21 201:14,17 202:3 208:4 arrange (1) 95:12 arrangement (3) 113:24 141:22 170:19 arrangements (3) 8:15 65:2 79:6 arranging (2) 21:25 22:7 arrive (1) 206:17 arrived (1) 125:17 art00002197 (1) 34:15 art0000219712 (1) 34:24 art0000219713 (1) 36:18 art000021974 (1) 34:17

art00002210 (1) 55:8

art00002256 (1) 89:24

art000022564 (1) 90:4

art00002797 (1) 93:16

art000027972 (1) 93:20

art00003150 (1) 95:5

art00004709 (2) 153:19 164:5 art00004765 (1) 193:2 art00004824 (1) 172:13 art000048241 (1) 173:8 art000048242 (1) 172:16 art000049491 (1) 195:3 art000049492 (2) 193:19 194:10 art000049493 (1) art00005053 (1) 205:13 art00005184 (1) 174:15 art000051842 (1) 174:22 art000051843 (1) 175:22 art000054412 (1) 213:8 art00005451 (1) 211:24 art0000574247 (1) 144:23 art00006149 (1) 214:9 art00006206 (1) 208:16 art00006232 (1) 13:4 art000062323 (1) 13:6 art000062326 (1) 14:9 art00006252 (1) 8:23 art00006299 (1) 179:7 art000062991 (1) 186:11 art000062992 (1) 179:11 art00006418 (1) 15:9 art00006433 (1) 48:7 art00006473 (1) 21:14 art00006577 (1) 156:20 art00006629 (1) 131:25 art00006637 (1) 153:4 art00006641 (1) 126:7 art000066482 (1) 215:25 art000066561 (1) 152:13 art000066562 (1) 151:22 art00006657 (1) 138:22 art00006659 (1) 128:18 art00006663 (1) 105:10 art0000666310 (1) 202:7 art0000666319 (1) 147:21 art000066632 (1) 106:10 art0000666322 (1) 154:1 art0000666325 (2) 200:14,25 art000066633 (3) 124:25 143:25 147:8 art0000666332 (1) art00006670 (1) 148:8 art000066702 (1) 149:3 art00006672 (2) 157:20 218:6 art00006678 (1) 112:2 art00006731 (1) 169:22 art000067317 (1) 170:5 art0000852710 (1) 2:4 art0000852711 (1) 13:21

affirmed (2) 104:13

afford (2) 2:23 6:18

affordability (1) 6:20

almost (1) 8:17

affordable (1) 6:14

afraid (2) 96:7,15

224:8

| art0000852723 (1) 37:5 | 197:6,11,25 198:6,17 |
|---|--|
| art0000852725 (1) 88:2 | 199:5 208:6 209:2 |
| art0000852732 (1) | 211:17 |
| 31:21 | artelias (18) 1:21 |
| art0000852734 (1) 49:2 | 2:17,22 7:12 11:9 19 |
| art0000852738 (1) 59:6 | 20:20 34:15 43:19 |
| art0000852752 (1) | 49:7 100:9 114:8 |
| 76:19 | 132:6 137:14 145:3 |
| art00008632 (1) 55:24 | 154:14,16 196:18 |
| art000086322 (1) 56:6 art00008667 (1) 87:11 | articulated (1) 3:19 asbestos (1) 61:14 |
| art000087111 (1) 79:23 | asbuilt (5) 101:10 |
| art000087112 (1) 79:16 | 180:13,18,20 181:13 |
| art00008755 (1) 56:9 | ashton (2) 140:25 141 |
| art00008794 (1) 60:17 | ask (42) 1:6 12:14 22: |
| art000087941 (1) 63:6 | 27:2 37:2,25 38:2 |
| art000087942 (1) 60:20 | 42:18 43:2 49:15 |
| art00008832 (1) 32:9 | 60:16 70:8 72:16 |
| art00008870 (1) 44:17 | 75:18 78:23 96:12 |
| art000088718 (1) 27:7 | 99:17 102:3 105:3 |
| art00008891 (1) 79:1 | 106:8 126:22 140:15 |
| art000089093 (1) 38:6 | 143:22 147:18 148:1 |
| art000089095 (1) 39:15 | 150:5 153:17 155:15 |
| art00008969 (1) 45:15 | 158:15 159:24 163:6 |
| art00008974 (1) 69:10 | 164:2 167:21 197:9 199:14 200:11 201:1: |
| art00008976 (1) 29:20 | |
| art000090201 (1) 17:7 art000090202 (1) 16:21 | 202:20 207:18 218:1: 220:23 |
| art000090202 (1) 10.21 art00009101 (1) 3:6 | asked (30) 22:20 |
| art0000910118 (1) 5:2 | 42:22,23 43:6 45:20 |
| art0000910125 (1) 6:6 | 46:12 49:17 53:5 |
| art000091015 (1) 3:23 | 64:24 66:11 74:7 |
| art00009106 (1) 18:9 | 75:24,25 99:3 |
| art00009332 (1) 165:19 | 101:24,24 125:5 |
| art000093321 (1) 167:5 | 141:16 143:10,13 |
| art000093323 (1) | 148:16 149:6,9,17 |
| 166:22 | 152:11 155:23 156:7 |
| art000093324 (1) | 157:16 171:9 183:3 |
| 166:12 | asking (9) 1:17 61:10 |
| art000093325 (1) | 82:17 96:24 105:3 |
| 165:23 | 141:7 156:14 164:6 |
| art00009336 (1) 171:23 art00009356 (1) 196:11 | 218:11 aspect (2) 81:11 85:17 |
| art00009330 (1) 190:11 art00009419 (1) 105:20 | aspects (2) 34:3 85:23 |
| art000094465 (1) | assess (3) 41:3 80:3,21 |
| 191:13 | assessed (3) 30:12 34: |
| art000094481 (1) 220:6 | 40:20 |
| art000094483 (1) | assessing (3) 32:4 33:3 |
| 219:17 | 36:4 |
| art000094544 (1) | assessment (12) 31:6 |
| 189:23 | 33:18 37:24 38:2 |
| artelia (84) 1:5 2:13 3:5 | 40:3,5 43:21 50:13 |
| 6:4 7:24 10:5 | 100:4,15 191:20 |
| 13:4,13,16 19:21 | 192:22 |
| 23:17,22 28:9 31:14 | assist (6) 87:14 154:5 |
| 35:9 36:14,20,25 37:16 20 52:14 54:25 | 161:25 162:7 167:15 177:12 |
| 37:16,20 52:14 54:25 74:12,20 78:2,5,17 | assistance (1) 222:10 |
| 81:4 83:4 87:13 88:14 | assistante (1) 222.10 assistant (1) 141:2 |
| 93:6 100:21 104:10 | assisted (1) 111:1 |
| 106:21,22 | assisting (1) 104:24 |
| 107:1,3,5,21 | associated (2) 150:24 |
| 108:9,13,18,23 112:10 | 195:14 |
| 113:24 114:10 118:14 | association (1) 106:16 |
| 138:1 144:22 | assume (3) 17:24 69:2 |
| 146:14,16 148:20 | 181:21 |
| 149:9,14 153:13 | assumed (2) 43:4 70:6 |
| 155:22 156:3 159:17 | assumes (1) 121:19 |
| 155.22 150.5 155.17 | assumption (2) 32:18 |
| 160:21 161:24 166:17 | |
| 160:21 161:24 166:17 168:3 169:9,13,17 | 65:14 |
| 160:21 161:24 166:17 168:3 169:9,13,17 170:14 171:24 173:14 | assumptions (1) 134:4 |
| 160:21 161:24 166:17 168:3 169:9,13,17 | 65:14 assumptions (1) 134:4 assurance (2) 74:8 75:25 |

assurances (3) 74:16,18 76:23 assure (1) 42:20 assured (3) 74:13 75:10 89:13 assuring (1) 76:14 asterisk (1) 219:19 attached (5) 15:13 16:25 52:20 166:8 195:6 attaching (2) 15:11 56:10 attachment (2) 79:13,15 attend (5) 126:22 150:6.9 151:4.9 attendance (1) 213:9 attended (2) 37:12 211:6 attendees (1) 45:10 attending (6) 113:1 135:21 148:3.15.20 149:14 attention (7) 32:11 34.5 69.5 86.10 91:20,22 221:1 attitude (2) 131:21 211:11 audible (1) 152:9 audit (1) 13:2 auditing (1) 118:2 august (6) 25:6 27:3,8 160:11 169:1 201:8 auk (9) 109:22 144:13,16,17 147:11.13.14.25 148:3 auks (6) 144:9,11 147:11 148:1 154:4,7 author (2) 34:22 55:14 authored (2) 13:6 18:10 authority (1) 115:24 availability (1) 112:14 available (8) 121:6 171:3 180:14,25 182:23 183:23 185:10 average (1) 37:17 averaged (2) 43:15,19 avoid (2) 13:23 73:16 aware (63) 1:21.25 2:21 10:20 13:13 22:3 23:15,17,19 28:14,16 41:21 47:13 53:2.5.17 54:6 56:25 57:7 61:22 62:19 65:10 69:22 71.14 72.1 5 73.20 98:24 99:4,7 100:21,24,25 101:2,4,5 118:25 119:4 140:21 143:17 145:21 160:19.20 162:22 168:21 171:9.17 172:6 178:6,11,12,17 186:2 188:5 190:14 192:15,18 199:11 208:2,7 211:8 215:5,14 awareness (2) 142:6 150.18 away (2) 22:14 170:21

В

b (1) 213:5 b4 (1) 85:4 **b8 (1)** 36:13 back (50) 7:22,23 8:9 11:18 19:19 31:14 35:12,14 50:24 51:6 52:25 55:10 57:16 62:18 66:4 68:1,18 69:4 70:13 79:23 85:20 102:2 106:7 114.7 125.12 143.7 145:5 147:7,14 149:23 151:11 153:25 155:25 157:24 158:15 164:2 165:4 166:12,23 168:10 178:2 185:12,16 205:2 208:25 210:15 217:7 219:3.16 221:18 backdrop (1) 58:16 background (3) 106:9 139:19 144:23 backwards (1) 189:6 barrier (1) 66:25 based (7) 9:13 17:4 33:9 43:20 55:14 100:6 134:5 baseline (1) 130:18 basically (2) 9:4 14:17 basis (7) 89:1 98:24 99:3,9 142:24 143:1 179:4 bathrooms (2) 9:8 11:25 batty (5) 125:10 205:14.15.20 212:5 bearing (3) 3:7 146:7 154:11 became (4) 71:2 118:4 124:6 125:17 become (5) 118:25 135:11 141:1 147:23 becomes (1) 184:4 becoming (3) 158:3 172:2 218:16 before (50) 4:2 16:14 17:25 30:12,16 31:13 33:3 36:19 44:21,25 46:6.6.7 47:6 48:3 49:14,19 53:4 56:1 57:13 61:22 66:14 73:4 75:7.18 81:17.22 87:17 89:7 97:21 106:5 109:19,21 110:6 130.18 131.5 164.1 168:21 170:22 175:10 179:4 182:11 185:7,12 189:13.14 199:17 207:1 209:18 214:22 beforehand (2) 46:22 began (4) 106:20 124:15 131:10 168:17 begin (1) 1:4 beginning (16) 4:3 8:11 21:16 33:11 80:15 83:18 96:13 160:25 161:1 177:8 203:5,8 204.5 205.2 216.6 220:13 begins (2) 145:1 212:25

behalf (2) 37:16 115:25

bigger (1) 129:2

behind (3) 10:8,15 32:2 being (64) 4:24 7:5 10:11 11:5 12:20 13:1 36:8 44:7,9,10 46:21 51:1 53:17 60:5 63:21 67:5 71:4 72:8 85:18 88:21 92:1 98:12 99:8 107:17 111:7 113:18 116:15 118:5 120:11 127:16 129:13,23 130:17 140:21 141:10 149:15,17 151:7 155:1.22 157:9.16 164:22 171:15 173:21 180:12 186:2 189:17 191:1 194:15 202:23 203:2,4 204:10 206:23.23.24.25 207:6 211:8 213:5,16 218:11 219.1 believe (26) 4:23 10:2,8 31:17 43:6.9 50:9 51:21 55:13 76:16 101:14 111:19 137:23 142-12 14 162-5 164:19,21 168:19 172:24 190:10 199:6 206:16 207:21 210:22 211:10 believed (3) 32:5 75:9 76:3 bells (1) 86:2 below (7) 26:3,10 55:22 107:24 147:16 152:4 153:6 belowwhich (1) 148:16 benchmark (1) 185:9 benefits (1) 39:16 bereaved (1) 222:20 best (14) 12:22 21:22 24:2 33:24 36:7 47:20 87:2 110:10 149:21 153:13,22 164:15,23 198:9 better (11) 5:9 6:2 26:18 42:1 45:24 46:16 68:17 206:1 207:8,10 212:17 between (34) 2:17,21 8:18 12:9 17:16 19:13 22:15 33:24 35:24 48:8 53:18 54:25 59:10 60:18 70:11 72:2,5 73:15 76:21 98:21 99:20 106:21 111-12 114-10 115-11 122:20 126:8 139:17 141:11 165:12,20 172:14 203:24 207:10 beyond (1) 129:21 bid (3) 27:21 32:11 34:25 bidder (6) 40:13 49:14,19,20 50:14 54:10 bidders (13) 25:7,24 26:2 28:7,15,17,20,24 29:12 30:1 35:17 40:1 48:1 bidding (1) 27:22 bids (3) 30:16 33:1 34:4 big (2) 28:1 63:9

biggest (3) 11:9 213:21 214:14 binding (1) 48:19 bit (21) 12:20 15:16 18:20 19:15.17.18 25:15 37:2 75:22 78:23 127:12 140:12 157:15 158:17 177:7 184:2 196:3 197:23 207:7 210:4 222:13 bite (1) 197:1 bits (3) 68:20 88:19 215:3 blake (13) 52:11,17 201:18 204:17 207:23 208:3 209:17 212:10 214:11 216:1 217:2.4.22 blakes (4) 215:24 219:23 220:19,20 blocks (1) 109:24 blythe (7) 29:21,25 30:11 37:15 56:10,14 58:13 board (17) 16:15 66:13 92:18 95:2 107:8,25 108:1 117:20 118:4.21 119:11 135:18 145:25 160:25 161:15 204:5 207:9 body (1) 138:24 bold (1) 55:22 bondwarranties (1) 95:13 booth (20) 1:5,6,7,9,15 57:15 58:2.8 74:12 101:21 102:11 103:4 108:5 110:12 111:6,12 112:5,12 113:12 224:3 bore (1) 138:7 borough (1) 10:3 both (16) 8:14 16:24 28:9,11 31:14,22 53:21 54:25 109:12 111:3 112:24 127:12,14 171:9,10 212:15 bottom (30) 5:3 6:24 7:10 14:9,12 18:13 35:4.14 36:20 48:9 52:9,10 59:7 67:25 79:17,24 95:9 129:3 157:2 165:22 166:22 170:3 172:20 174:23 188:1,8 193:19,21 194.12 214.9 bought (1) 210:11 boxing (5) 9:6 11:16,20 149:11 159:20 brackets (1) 18:20 break (16) 57:10.15.25 101:18 102:1,9 103:19.22 105:5 134:13 162:24 163:4,19 221:4,18 222:2 brief (6) 4:11 6:17 14:15 100:19 150:16 153:15 briefing (5) 44:25 45:6 46:2 112:23 113:7 briefly (2) 45:9 217:8 brigade (1) 98:18 bring (11) 6:19 7:23

11:17,23 12:4,19 86:23 95:2 100:7 126:3 164:4 bringing (6) 3:18 87:1 94:23.24 185:16 207:6 broad (3) 44:2 48:5 205:4 broader (3) 115:17 124:5 132:7 broadly (1) 36:22 broke (1) 219:3 broken (1) 33:7 brought (5) 50:24 69:4 111:8 205:2 216:13 brown (3) 213:6 216:10 217:14 bruce (4) 31:25 32:3,12 34:2 budget (17) 1:23 2:1,21 3:1 4:16 5:20 6:10 11:10,18,23 12:4 50:9.24 51:6.14 52:1 209:4 build (22) 50:14,15 86:7.13.22 87:6 89:17 91:20 115:14,15 117:21.25 127:24 131:4 132:21 146:1,5 160:17 182:12,14,15 216:13 builder (2) 118:9 121:10 builders (1) 181:14 building (74) 48:4 60:3 61:2.7 63:13.18.22 64:4,7 65:12.14.19.20.21 67:5 72:14 77:25 80:4.11 85:7 86:1 87:23 88:22 89:2 93:4,11 99:21,24 100:6.12.16 106:14 110:5 119:20,21,23,24,24 120:25 121:3,4,6,10,13 143:14,19 159:22 176:19 178:9,13,14,15,18,19,25 179:5 180:21 181:5.11.14.22 182:3 183:19 187:15 189:1,3,6,8 190:17,22,25 191:9,17 192:17 built (3) 2:9 10:16 143-19 bullet (8) 4:8 14:13 30:5 58:24 148:18,24 149:4.12 bum (1) 74:15 bunched (1) 112:13 burn (1) 76:15 burrows (7) 171:25 186:12,14 193:3,14 194:22 195:4 bushell (5) 100:24 179:12,19 186:3,14 business (2) 107:15 111:10 bust (1) 210:25 busy (2) 8:8 30:6 butler (1) 192:22

buy (3) 45:21 46:13

buyin (2) 47:14,16 bypassing (1) 208:6

calculation (1) 53:16 call (9) 107:14 113:19 152:17 154:8 157:8 173:10 174:1 196:16 217:8 called (6) 18:9 92:11 108:10 117:23,23 148:12 calm (2) 219:22 220:17 came (19) 28:11 43:23 54:16 74:16 82:11 111.22 117.20 118.4 142:12,14,16 168:19 179:2 204:5 207:9 camels (1) 219:3 campbell (1) 128:19 cannot (4) 48:17 74:23 75:12 124:9 cant (19) 20:25 35:7 167:7 174:9 182:2,12,14 190:20 198:10 203:25 204:4 221.9 capacity (5) 36:6 108:16 118:6 144:14 174:11 care (2) 34:7 219:9 career (1) 109:8 carefully (1) 162:20 carried (2) 66:2 161:9 88:13 163:21 carrying (2) 119:1,5 cases (1) 189:16 cash (41) 8:25 15:10

123:12 131:6,7 135:20 55:7 78:16 84:16 96:3 139:13 148:23 155:18 capital (2) 55:21 124:19 careful (2) 109:10 192:3 carry (5) 1:11 58:3 87:6 16:24 21:18 23:3.13.22 48:8.11 50:3 107:21 112:3 113:8,10 114:17,21 144:16 152:13,16 154:9 156:22 157:21 160:24 166:13,23 167:4.19 168:10 169:2 171:25 193:4.24 194:24 196:12 198:17 205:18 208:17 209:15,19 218:7 220:12 cashs (2) 48:10 209:16 cassette (1) 60:4 catch (1) 157:8 catchup (1) 172:18 categories (1) 35:2 cause (3) 16:20 124:3,7 causing (3) 32:23 200:16 202:13 cavity (1) 66:25 cc (1) 49:4 ccd (2) 52:14 179:16 cdm (37) 71:12.13 100:10,22 163:1 164:2 165:8,9,10 168:8

174:22,25 175:20 177:3 179:22 181:3.16 183:12 186:15 187:22.25 188:12.14 190:4 193:7.14 194:2,21 195:12 196:14,18,25 198:17 cdm2015 (2) 157:5 cdmc (7) 71:19 100:24 166:2 181:12 182:24 190:16 193:5 cdmcs (1) 172:2 cease (1) 14:18 centre (2) 10:8,15 certain (6) 23:24 65:8 85:24 97:22 126:10 certainty (1) 128:14 certificate (2) 109:2 192:18 certificates (2) 180:11,11 cetera (6) 4:17 21:4 76:5 120:10.13 127:3 chain (15) 48:7 53:11 60:18 66:14 86:23 138:23 156:19 165:19 167:18 169:3 172:14 177:8 179:8 201:3 210:25 chair (2) 174:19,20 chaired (2) 74:12 174:18 chairman (7) 57:9 101:16 104:10 162:23 215:14 221:3 222:7 challenges (5) 124:3 152:18 207:14,15 challenging (3) 38:21 110:21 158:13 chance (2) 28:4 41:25 change (37) 5:22 6:16,17 7:16 11:13 12:3 13:17,25 14:3,10 17:21.25 18:1 30:25 50:23 58:25 59:23 66:16 67:3 68:6 69:2 94:19 124:1.1 125:20 126:3 127:23,25 131:8 133:9.22 150:1 172:22 184:20 198:5 216:23 218:25 changed (14) 3:2 13.14 17 14.14 15.2 16:13 23:17 66:23 67:1 99:19 128:10 165:9 192:7 211:10 changes (18) 6:18 23:13.20 55:11.14 56:3 68:12,14 85:6 133:9.13 140:10 141:5,8,9 150:24 154:21 182:5

changing (6) 8:1 11:15

chaps (2) 60:25 151:25

chart (2) 39:10 68:11

chartered (1) 106:14

chasing (1) 70:2

chat (1) 209:7

chaotic (1) 184:4

12:2 15:4 59:21 187:7

cheaper (2) 20:17 59:12 cheapest (1) 32:11 cheaply (1) 12:12 check (26) 31:1 64:19 65:6 68:1 70:18.20 73:3 76:25 82:13,18 83:19 84:10,16,17,18,19 114:9 143:10,13 164:10 173:3 174:6 181:10.19 190:14 checked (8) 13:7 34:18,22 89:2 90:3 92:12 93:19 95:7 checking (23) 30:6,7 31:7 35:13 42:14 78:21 118:1 119:1.5.17.19 120:3,11,20,23 121:11,12,15,20 181:3.10.12.25 checks (6) 66:1 83:21 84:21 88:13 173:13 199-19 chelsea (3) 8:9 10:4,7 chimney (1) 76:12 choice (1) 144:12 choices (2) 11:18 167:21 choose (1) 39:23 chronology (2) 8:22 48:5 chweechen (10) 8:18 20:11 34:22 36:3 87:14.17 88:18.19 148:2,9 chweechens (1) 31:22 circa (1) 52:23 circle (2) 140:12 185:13 circulated (1) 76:10 circulating (1) 30:11 circumstances (1) 16:19 circumvent (1) 209:2 cladding (53) 52:24 58:18 59:11 60:7,12 61:8.9.14 62:1.19.25 63:3 64:11,11 65:7 66:3,11,19,20 67:4,24 69:14.16 71:4.18.24 72:3,12,13,14,25 73:10 74:2 75:10 76:3.11.24 77:19,23,23 78:18 86:23 90:20 97:23 99:19 109:25 110:9 182:11 202:6,10,14,19,21 claire (77) 37:13,15 45:16 52:13 58:12 60:16.19.22 62:11 65:25 66:7 69:11 70:8.20 71:6 73:5 76:21 78:2 112:5,11 117:5,18 118:18 119:7,19 120:4 124:16,17 125:9 126:9 132:1,4 135:1 136:8 138:25 139:18 140:24 141.7 148.12 151.23

152:20 154:7,22

155:5,16,16 156:10,25

157:8 158:13 166:17

code (4) 187:21,25

188:3,19

167:12,14,16 168:21.23 170:7 172:1,14,17 173:10,20 177:7 186:12.25 193:3 194:3.5 196:16.18.25 197:25 198:7 205:15,21,23 207:18 claires (1) 212:2 clarification (5) 40:21 64:14 65:4 69:15 102.15 clarify (3) 137:15 160:9 201:15 clarifying (1) 91:9 clarity (4) 129:25 136:16 140:7 161:14 class (1) 106:12 clear (56) 6:4 8:4 15:6 45:23 46:15.21 48:19 68:11 72:24 73:9 74:25 77:13 79:10,14 84:2 89:19.21 99:12 103:1 105:7 113:25 115:6,8 118:17 122:19 132:16 133:5 134:12 135:4,11,16,20 136:4.5.21 137:14 138:3,7,17 144:10 156:3,8 160:24 161:16,18 169:9,13,18 170:13.16 198:7 210:19 216:19.20 218:1.4 clearer (1) 136:7 clearly (8) 22:16 26:17 75:17 96:21 138:9 139:5 170:22 173:25 clerk (19) 119:12 120:16 135:14,17 136:16 138:12 139:14 157:23 171:16 199:18 200:4 202:18 204:24 205:5,6,15 219:2,5,11 client (47) 4:11 14:3 16:12 25:3 33:11,25 64:14 67:18 68:13,16 83:11 86:17 98:8.21 99:18,22 100:3,15,16 107:15 113:23 115:25 117:24 118:13 119:16 136:24 144:18 145:8 156:13 160:18 161:10.24 162:2.7.12 166:4 167:8 168:6 175:14,21 188:16 197.3 17 207.12 212:15 214:1 220:10 clients (5) 12:14 13:17 14:4 107:16 188:11 climbers (2) 74:1 203:2 clock (1) 221:9 close (3) 8:12 128:12 146:24 closed (3) 96:10 125:25 206:25 closely (3) 2:13 24:21 207:4 closure (1) 196:21 club (4) 9:6 11:16,20 159.20 clumsy (1) 206:20

codes (1) 121:16 cognisant (2) 129:16 215:5 coincide (1) 113:9 coincides (1) 219:25 colin (7) 165:24,25 166:2,11 186:17,21 192:5 collaborative (1) 211:11 collated (2) 101:9 183-18 collating (6) 82:8 85:21 101:2 175:25 176:16 177:1 collation (1) 176:14 colleagues (2) 7:6 187:2 collecting (1) 179:19 collective (1) 54:24 collectively (2) 43:24 54.24 colour (1) 60:1 column (1) 145:6 columns (1) 35:7 come (28) 1:6 21:3 42-23 43-3 52-25 57:15 70:13 91:1 102:2 108:3 112:15 118:7 119:11 123:7 135:18 145:25 157:24 158:15 167:2 179:25 181:23 194:16.21 197:23 217:7 221:3.11.18 comes (1) 187:5 comfort (2) 17:1 205:6 comfortable (2) 16:18 coming (24) 4:22 36:15 66:4 94:12,19 103:5,9 104:23 106:5 118:20 127:18 134:16 151:11 152:23 160:25 161:14 170:20 171:7 184:7,15 185:12 198:6 218:25 222.12 comment (12) 36:5,10 109:18 147:3 148:16 158:16,19 189:14 204:3 214:6 220:11,19 commented (1) 31:25 commenting (1) 34:3 comments (14) 31:23 32:21 34:12 54:16.21 55:8,16 200:10 201:5 202:13 211:25 214:23 216.4 219.4 commentsthoughts (1) 212:3 commissioning (1) 182:22 commit (1) 50:18 commitment (2) 4:15 213:24 committing (1) 79:12 common (5) 49:13,18 178:24 183:18 185:9 communal (1) 109:24 communicated (2) 96:18,25 communication (4)

37:10 38:14 120:10

community (1) 39:16

127:9

company (2) 108:10,18 compare (1) 29:8 compared (4) 21:8 34:12 43:23.24 comparison (2) 22:14 107:20 competence (1) 41:1 competition (2) 28:24 competitive (2) 21:7,7 competitors (1) 26:21 compile (7) 172:25 176:19 179:19 182:24 190:16 197:5 199:9 compiled (3) 183:9 187:17 188:21 compiles (2) 190:5,6 compiling (7) 180:15 183:6 184:4.10.16 185:11 192:23 complaining (1) 10:17 complaint (15) 198:16,20 211:18,23 212:19 214:20,22 215:6.25 216:21.24 218:22 219:24 220:8.14 complaints (2) 131:12 212:25 complete (17) 85:17,23 88:23 89:10.12 91:16 145:13 172:23 173:4.11.21 174:4 189:11 206:4 212:5 216:13 219:1 completed (16) 50:7 51:23 82:14,18 83:20 84:12,13 88:24 90:6 91:18 95:21 187:2 193:8 197:5,20,21 completely (4) 13:16 74:14 76:15 77:19 completeness (1) 175:5 completing (1) 213:22 completion (21) 38:20 80:12,18 81:1 87:7 108:24 109:2 110:15 185:8 189:9,13 196:6,8,15 204:15 210:10.23 212:17 213:13 214:3 216:4 compliance (21) 60:9 64:16 85:4 86:14 117:11,16 118:1,11 119:1,5,17,19 120.3 21 24 132.18 136:21 137:8 138:9 139:14 146:12 compliant (3) 50:22 126:11 173:13 complied (2) 87:2 93:9 complies (1) 173:15 comply (4) 63:22 64:12 65:12 93:15 complying (1) 121:12 component (1) 65:20 components (1) 191:10 composite (2) 59:1 73:11 comprise (2) 191:1,15 compromised (3) 213:16 220:24,25

computed (1) 37:17

concentrate (1) 32:10 concentrated (1) 32:3 concentrating (3) 32:1,9,17 concern (20) 10:16 16:20 28:25 32:24 50:4 66:9 71:10 72:13 74:7 89:9 124:4 127:17,19 129:13 152:6 158:10,12 162:19 202:13 220:24 concerned (17) 28:23 33:2 41:17 69:6 71:6.8 98:5 99:8 128:2 134:14 137:7 149:14 151:19 152:22 202:12 205:4 213:15 concerning (2) 126:9 144:12 concerns (18) 52:5 66:1 71:3 72:10,11 73:22 76:12 83:15.17 87:19 158:23 162:15 203:3,13 204:22 208:23 212:14 216:3 conclude (1) 198:12 concluded (1) 52:2 conclusion (2) 13:22 28:11 conclusions (4) 6:7,23 7:10 150:2 concrete (1) 71:25 conditions (3) 21:4 58:21 192:19 condolences (1) 222:19 conduct (2) 14:20 44:25 confirm (4) 38:13 63:15 70:14 108:12 confirmation (2) 64:1 confirmed (3) 53:14 85:8 91:17 confirms (1) 173:13 connection (1) 159:22 conscious (1) 208:24 consider (8) 70:2 75:11 88:9 91:24 92:5 143:3 216:4 221:15 consideration (7) 29:9 48:23 79:7.8 146:22 170:22 171:14 considered (7) 14:25 29:15 85:6 88:21 129:21 132:13 162:16 considering (3) 12:2 162:17 220:22 considers (1) 196:18 consistent (6) 36:23 120:13 126:25 155:15 181:10 187:10 consolidating (1) 193:5 consortium (1) 19:6 constitute (1) 198:20 constituted (3) 125:20 141:25 162:22 constitutes (1) 197:13 construction (23) 4:15 17:3,13 38:10 42:9 80:6,10,17 106:12 109:7.10.17 123:8 124:2 150:23 160:2

172:22 173:9,16,17

180:13 182:4 195:9,14

199:15 200:10 201:4

| consultancy (5) 108:19,23 109:1 114:6 170:8 consultant (16) 33:17,20 79:5 93:1 94:10 95:19 96:1,6,9 98:4,5,10 132:21 | 218:19 contractors (27) 25:22 26:8,13 27:22 28:2 | correctly (3) 30:8 31:2 193:13 | david (14) 17:7 37:12 |
|--|--|---|--|
| 170:8 consultant (16) 33:17,20 79:5 93:1 94:10 95:19 96:1,6,9 | | 193:13 | i . |
| consultant (16) 33:17,20 79:5 93:1 94:10 95:19 96:1,6,9 | 26:8,13 27:22 28:2 | | 52:11,17 61:5 63:15 |
| 33:17,20 79:5 93:1 94:10 95:19 96:1,6,9 | | correlation (1) 220:3 | 72:17 73:6 77:2 78:4 |
| 94:10 95:19 96:1,6,9 | 30:7 34:6 36:15 48:19 | cost (18) 1:21,25 | 112:3 211:25 215:12 |
| | 68:6 76:8 82:3,12 89:4 | 2:17,22 4:5 5:20 | 220:11 |
| 98:4,5,10 132:21 | 117:25 118:2 120:4 | 7:4,14 11:3 20:14,23 | dawson (2) 125:10 |
| | 129:7,24 131:4 146:24 | 67:7 127:24 128:15 | 205:14 |
| 142:10 143:4 212:15 | 151:10,11 188:11,12 | 132:21 140:9 149:9,20 | day (9) 46:6,7 56:22 |
| consultants (10) 79:22 | 195:8 210:25 | costing (1) 87:14 | 68:19 86:25,25 152:14 |
| 92:16,20 93:7,22 | contracts (3) 43:1 | costs (9) 2:9,17 5:19 | 153:2 194:11 |
| 95:16,16,17 97:1,4 | 79:11 141:17 | 6:12 18:24 20:8,9 | days (2) 103:6 193:9 |
| consulting (1) 109:12 | contractually (1) 8:16 | 61:10 208:23 | dda (4) 92:17,23 93:23 |
| consumed (1) 6:19 | contribute (1) 33:17 | couldnt (2) 50:15,18 | 95:17 |
| contact (7) 52:18 90:8 | contributed (4) 40:19 | counsel (5) 1:8 101:21 | deadline (2) 22:4,17 |
| 91:4,24 92:5 164:17 | 201:3 203:18 210:20 | 104:22 224:5,10 | deal (3) 16:8 42:8 |
| 193:12 | contributing (2) 33:20 | countdown (1) 214:3 | 159:10 |
| contain (2) 192:2,14 | 144:11 | couple (8) 30:21 57:12 | dealing (3) 63:10 145:3 |
| contemplate (1) 183:8 | contributory (2) 4:9,20 | 152:3 164:3 | 204:13 |
| contemplated (1) | control (12) 65:21 | 217:5,7,13,20 | dealings (1) 8:7 |
| 193:17 | 88:22 89:2 99:10 | course (10) 5:9 8:17,20 9:20 58:4 117:19 | dealt (2) 113:1 159:19 |
| contemplating (2) | 119:24,24 121:6 | | debatable (1) 60:9 |
| 188:20,24 | 166:7,20 191:17 192:17 210:9 | 120:17 139:17 163:4 215:21 | debated (1) 44:1 december (1) 28:19 |
| content (1) 212:6 contents (3) 105:16 | | courtesy (1) 214:23 | december (1) 28:19 decide (1) 99:13 |
| 106:2 192:7 | controlfire (1) 87:23 controlled (1) 4:13 | courtesy (1) 214:23 cover (1) 65:1 | decide (1) 99:13 decided (9) 37:22 40:4 |
| context (6) 77:19 | convenience (1) 212:22 | cover (1) 05:1 covered (1) 161:13 | 44:10 51:23 70:14 |
| 110:25 136:1 148:23 | convenient (1) 163:5 | cow (2) 132:17 172:1 | 89:22 96:16,25 99:11 |
| 152:10 201:8 | conversation (14) 21:23 | cows (1) 218:15 | decides (1) 172:12 |
| continue (3) 108:15,22 | 78:17 112:8 113:21 | cps (1) 129:6 | decision (14) 1:18 8:11 |
| 175:18 | 114:1 142:17 149:18 | create (2) 74:13 100:22 | 12:17 14:5 19:13 |
| continued (7) 1:7,8 | 162:6,10 168:9,17 | created (3) 3:25 128:14 | 27:21 39:5,11 40:9 |
| 108:13 218:23,24 | 194:5 217:4,21 | 207:9 | 88:25 118:18 119:12 |
| 224:3,6 | conversations (4) | creep (3) 148:15 | 170:25 171:1 |
| continues (2) 4:6 | 139:19 152:21 156:24 | 149:15,16 | decisionmaking (1) |
| 189:16 | 208:5 | criteria (7) 27:22 31:15 | 140:13 |
| continuing (2) 15:3 | coordinating (1) 24:16 | 32:13 33:8 40:7 46:22 | decisions (10) 7:20 |
| 71:23 | coordination (4) 37:10 | 50:13 | 12:18 29:3 115:25 |
| contract (52) 18:25 | 38:14 152:19 153:14 | critical (1) 207:12 | 119:8 125:8 126:21 |
| 20:3 25:12,25 | coordinator (10) | cropping (1) 159:11 | 127:2 140:9 143:23 |
| 48:4,12,15,16,24 | 71:12,13 100:10,22 | cross (1) 215:7 | declined (2) 118:16 |
| 50:14,16,18 51:14 | 179:23 181:3,16 | crown (1) 159:20 | 144:18 |
| 58:10 61:2 63:9 68:5,7 | 186:15 193:14 194:22 | crystallised (1) 121:20 | decorations (1) 139:8 |
| 69:2 95:12 | coordinators (2) | culminated (1) 131:12 | deemed (3) 26:21 |
| 97:12,12,15,18 | 188:12,14 | current (6) 7:2 112:25 | 33:5,6 |
| 114:8,9,11 115:14,15 | cope (1) 129:15 | 113:15,17 129:21 | defensive (1) 210:2 |
| 118:3 119:2 120:7 | copied (17) 8:25 16:24 | 212:14 | defined (1) 4:15 |
| 122:12 125:22 127:24 | 17:8 29:22,24 48:10 | currently (3) 6:10 52:19 | definitely (5) 25:21 |
| 129:22 132:14 139:3 | 49:3 52:15 69:12,13 | 72:7 | 29:18 74:20 77:4 |
| 140:2 142:7 | 72:9 112:6 141:2,10 | curtins (2) 91:13 179:15 | 78:19 |
| 144:5,5,8,14,22 145:3 | 175:4,7 205:18 | custom (3) 68:23 95:20 | definition (1) 115:20 |
| 146:1 157:20 180:22 | copies (1) 78:6 | 101:6 | degree (1) 106:12 |
| 185:6 189:12 216:12 | copy (5) 49:11 | cut (2) 69:18 130:16 | delay (15) 13:23 89:7 |
| contracted (3) 142:5 | 78:3,18,21 126:22 | cvs (3) 41:22,24 42:19 | 113:19 123:16,24 |
| 144:15 199:22 | copying (5) 112:4 139:1 | cw (1) 170:7 | 125:1 200:16 202:10 |
| contracting (1) 109:12 contractor (69) 2:7 | 186:13 193:3,24 cordial (2) 217:21,23 | cyclical (1) 139:8 | 203:7,7,18,21 |
| 5:22,25 6:12 7:25 | ` ′ | | 204:6,7,21 |
| 5:22,25 6:12 7:25 8:1,6,14 11:1,4,15 | core (1) 82:23 corners (1) 130:17 | | delayed (1) 203:11 |
| 8:1,6,14 11:1,4,15 12:3 14:23 15:4 18:14 | corners (1) 130:17 correct (47) 7:7 13:19 | d (1) 80:11 | delaying (2) 21:24 73:16 |
| 21:6,10 24:6 26:15 | 15:6 18:11 26:1 27:18 | danger (1) 184:3 | delays (2) 201:4 203:5 |
| 37:24 38:19 40:25 | 28:22 35:11,13 40:17 | data (1) 182:22 | delegated (1) 115:24 |
| 41:12,17,20 | 56:4 64:17,18 | database (1) 61:10 | deliberate (1) 42:10 |
| 44:17,18,21 47:25 | 69:20,25 87:16 94:6 | date (14) 3:7 5:7 44:17 | deliberately (1) 155:13 |
| 48:14,22 51:5,10,25 | 102:22 105:17 | 75:12 80:21 132:9 | delighted (1) 63:8 |
| 54:4 66:13 79:6,21 | 106:3,23 107:1,2 | 148:5 169:12 170:12 | deliver (9) 18:25 19:22 |
| 83:1 86:7,13,22 87:6 | 108:4,6,11,25 110:17 | 187:3 190:12,14 | 20:3,5,19 22:16 |
| 89:17,25 91:12,20 | 111:5 112:21 113:13 | 213:13 219:25 | 42:5,25 122:3 |
| 98:2 101:9 118:3 | 120:15 130:2 132:25 | dated (16) 13:5 34:16 | deliverables (1) 129:17 |
| 120:12 121:8 124:10 | 136:18 154:6 165:6,15 | 54:9 55:13,25 60:20 | delivered (7) 38:22 |
| 125:22 130:1 145:8 | 169:11 177:4 178:4,23 | 72:20 75:20 85:1 | 50:21 61:2 63:8 83:10 |
| 146:4,5,10,19 151:7 | 181:22 186:16 187:13 | 87:11 105:11,21 | 90:12,13 |
| 158:6,14 159:2 165:1 | 190:24 219:14 | 125:11 128:20 153:19 | delivering (1) 107:16 |

lelivery (7) 21:25 73:15 107:1.11.22 112:19 117:25 lemanding (1) 210:16 lemeanour (2) 220:19,20 lemonstrable (1) 20:7 lemonstrate (12) 10:10 13:2 18:25 19:21 20:2,14,21,25 21:1 29:1 139:20 156:2 lemonstrated (3) 20:15.16 155:16 lemonstrates (1) 206:1 leparture (1) 111:7 lepending (5) 14:4 21:2,4 33:12 144:5 leputy (1) 111:3 lescribe (3) 24:23 111:20 129:11 lescribed (5) 44:2 119:2.6 122:12 127:5 lescribes (1) 73:1 lescribing (3) 69:9 127:1 144:2 lesign (131) 14:18 62:10 65:3.23 67:15,16,20 68:3,4,9 70:10 71:17 73:13 75:2 77:6,7 82:11 84:3.17 85:23 86:3,5,7,11,12,13,20,22 87:2.5.5.7 89:15.17.18 91:16,20,23 93:9,15 96:21,23 97:23 98:17 99:2.10.12 113:24 115:14 117:10,15,20,21,25 118:13 119:8 121:2,20 123:2,3 127:23 131:4 136:24 142:20 143:20.23 144:12,15,18 145:21,25 146:5,6,15,17,19,25 147:12,13,20,25 148:4.21 149:18.24 150:6,9,11,17,19,21,22,23 151:3,4,6,10,12 152:18 153:14 154:7 155:9,23 156:7,9,14 157:9,17 158:12,13 159:6,10,17,25 160:4,17,18 161:11,23,25 162:2 7 12 166:20 167:22 172:23 173:4,11,21 174:3 218:11 lesignated (6) 114:14 116:6.11.20.24.25 esigner (33) 32:14 65:17 68:13 70:12 85:15 93:13 165:17 166:4,8,18 168:8 169:4,10,15,19 170:8,14 171:6,10,17 172:9,12 173:2,18 175:10,12,20 176:5.10.24 177:11 193:7,16 lesigners (16) 65:23 67:17 68:25 84:20

86:24 91:10,11 94:15.24 99:14 101:8 145:13,15 166:7 172:3 188:11 designing (2) 66:15 146:20 designs (3) 67:1 162:17,20 desire (3) 10:6 41:10 168:2 desires (1) 6:16 despite (7) 108:12 158:4 159:18 196:17 204:21 218:17,22 detail (12) 18:24 19:24 20:2 29:3.15 31:1 36:4 74:4 76:17 111:24 159:19.24 detailed (8) 19:16 22:22 23:12 29:8 39:10 90:13 99:24 146:25 detailing (1) 216:18 details (4) 52:19 65:17,18 75:13 detectors (1) 152:10 determine (3) 5:9 20:23 33:8 develop (1) 4:11 developed (1) 112:10 development (5) 73:14 75:2 77:7 86:3.11 dialogue (9) 120:9 138:11 149:24 154:21 170:17 198:5 199:6 207:8,10 dictated (1) 41:9 dictating (2) 93:12 96:22 didnt (79) 16:1,8,20 26:5,20 32:12 33:17.21 39:11.23 40:5 41:20 44:12 50:17 51:19 57:7 61:25 62:12 64:22 66:4,9,19,24 67:11,24 70:4,19 71:3 72:7,24 77:6.8.21 78:20 81:9 82:9,22 83:12,16,21,23,24 84:9 86:2.18 87:3 89:1 91:1 94:18 97:11 99:17,21 100:7 133:5 135:16 148:19 150:18 156:13 160:3,6 161:3 162:19 164:24 165:9 168-2 173-23 177-19 178:21 179:3 186:6 187:12 192:16 198:13 200:6 204:22 208:12,13 214:25 219:13 difference (2) 12:9 115:11 different (7) 14:7,8 33:7 71:18 105:4 131:3 204:2 difficult (6) 110:18,19 162:3 182:2 184:9,16 difficulties (2) 8:15 202.5 difficulty (2) 105:2 disrupt (1) 39:4 151:18 dig (1) 30:25 disruption (3) 38:18,21

diligence (1) 173:14 diligent (3) 28:10 31:10 34:8 diligently (3) 31:3 34:10 50:10 diminishing (1) 6:12 dipped (1) 205:2 direct (9) 2:6 67:23 68:25 82:25 167:16,24 173:1 208:25 220:3 directed (2) 66:8 70:25 directing (1) 154:5 direction (2) 119:9 154:23 directly (3) 98:6 193:9 217:1 director (4) 106:22 107:6 195:1 217:13 disability (4) 93:1,7 95:17 97:4 disabled (2) 92:25 126:10 disagree (2) 183:17 214:25 disappointing (1) 222:8 discharge (4) 58:20 83:11 96:23 99:12 discharged (1) 137:23 discharging (1) 177:12 discipline (5) 125:7 126:3,20 127:2 183:11 disciplines (2) 181:24 185:23 disclosure (1) 189:22 discrepancies (1) 2:21 discrimination (1) 95:17 discuss (16) 18:4 47:22 49:13,18 79:5 98:10 126:23 132:6,23 139:11 152:17 206:6 207:22 210:7 212:7 217:1 discussed (19) 17:1,21 21:12 33:10 60:7,8 76:21 77:5 78:15 91:7 96:17 98:13,15,21 106:4 139:6.10 159:16 170:25 discussing (5) 116:7 136:23 196:7 208:8 217:24 discussion (23) 28:8 48:13.18 50:4 58:15 59:9 60:1 61:4 70:10 74:25 77:11 97:3,5 99-22 128-8 134-17 138:11 170:18 171:22 175:14 176:18 192:1 217:19 discussions (28) 17:12.14.15.16.20 23:12 41:19 48:23 59:20 60:5,11 71:23 72:2 77:24 98:8 100:11 119:7 131:22 150:2,23 168:3 176:17 205:25 207:19 208:3,6 209:18 220:18 dismissed (1) 210:1 disparity (1) 73:15 display (1) 74:3

| 39:1 | 164:19,19,21 165:2 | ea (9) 115:18,22 122:12 | 156:19 157:20 | 211:18 213:20 | etc (9) 92:17 95:13 | except (1) 214:12 |
|---|---|---|---|--|--|---|
| distinct (1) 183:4 | 170:17,17 173:23 | 144:9,14 145:14 | 165:19,23,23 | 221:3,12 | 125:8 126:21 129:19 | exceptionally (1) 13:1 |
| distinction (2) 72:5 | 177:18 183:17 184:5 | 147:11 151:9 202:11 | 166:13,23 | endeavouring (1) | 149:11 158:13,14 | excess (5) 1:22 2:1 3:1 |
| 122:20 | 186:16 194:15 | earlier (16) 17:3 18:3 | 167:3,5,7,19 169:8 | 158:10 | 208:24 | 5:20 50:9 |
| distress (1) 113:21 | 195:22,25 196:2,3,5 | 75:15,25 136:23 138:2 | 171:18,24 172:14 | ended (3) 67:1 109:3 | european (1) 24:11 | exchange (1) 49:1 |
| distressed (1) 113:20 | 200:14 210:22 211:10 | 161:14 164:4 177:7 | 177:7,8 | 204:10 | evaluated (3) 30:17 | exchanges (4) 53:2 |
| dived (1) 36:4 document (16) 3:17 | 218:24 220:4 door (1) 178:16 | 180:9 182:3 184:10,17 201:7 211:20 218:9 | 179:7,8,12,13,21 185:13,16 186:6,11 | endless (1) 158:11 engage (5) 38:1 39:8 | 37:11,14 evaluation (3) 37:8 | 71:15 165:21 204:17 exclude (3) 11:20,21,21 |
| 54:17 55:9,10,15 63:7 | double (1) 190:14 | earliest (2) 153:12 | 187:12 193:3,20 | 40:4 47:18 167:23 | 45:18 54:5 | exclude (3) 11:20,21,21 excluded (2) 150:16,16 |
| 79:15,24 80:19 99:18 | doubt (1) 125:21 | 212:21 | 194:10 196:11,24 | engaged (5) 39:5,24 | even (15) 2:1 12:13 | exercise (9) 5:11 29:8 |
| 119:2 188:1,6 191:9 | down (28) 6:9 8:19 | early (7) 52:25 94:11 | 198:10 205:12,13 | 134:23 142:9,11 | 20:11 28:2 31:13 50:8 | 33:11 34:13 40:21 |
| 193:5 219:16 | 12:19 13:24 21:16 | 109:22,23 131:24 | 206:10 207:17 | engagement (5) 40:3 | 129:14 148:14 155:10 | 47:6 58:9 66:17 |
| documentation (3) | 26:8 27:13 29:17 33:7 | 169:1 214:2 | 208:13,16,17 209:18 | 82:22 83:22 125:3,15 | 158:23 162:8 180:12 | 181:16 |
| 87:10 182:7 193:11 | 36:19 41:19 44:7,9 | eas (1) 144:7 | 210:15 212:3,18 | engaging (3) 100:2 | 184:21 204:11 221:7 | exercises (2) 24:25 34:9 |
| documents (18) 16:3 24:14 54:15 82:24 | 52:16 80:1 104:15 111:23 128:12 129:3 | easier (1) 41:14 easy (3) 25:17 35:6 | 213:20 214:10,19 215:4,8,25 217:16,18 | 141:24 164:24 engineer (4) 84:5 88:24 | event (2) 81:13 222:21 events (2) 42:16 47:22 | exercising (1) 172:5 exert (1) 196:23 |
| 85:22 88:11 101:1 | 134:13 148:11,25 | 123:15 | 218:2,6,13 219:4 | 89:14 118:6 | eventually (3) 135:9 | exhausting (1) 171:2 |
| 118:3 123:20 138:19 | 151:11 172:15 212:9 | economies (1) 8:13 | 220:15 | engineering (3) 58:9 | 155:16 172:8 | exhibit (2) 16:3 156:20 |
| 151:17 180:23 185:6 | 213:8 220:4,14 | effect (7) 85:7 86:19 | emailing (1) 152:20 | 66:17 97:22 | ever (53) 21:12 28:7,23 | exist (1) 179:3 |
| 192:14 197:4 | draft (14) 15:13 55:2 | 129:23,25 151:19 | emails (21) 16:2 17:24 | engineers (2) 91:13 | 29:9 34:9 42:18 56:25 | existed (1) 74:20 |
| 199:4,8,11 | 81:14,21 90:11,16 | 164:8 165:11 | 71:8 72:10 76:21 | 140:17 | 60:5 70:2 71:1 77:18 | existence (1) 187:16 |
| does (36) 14:4 20:1 | 96:12 102:19,20 | effective (1) 124:17 | 126:6 139:19 141:11 | enough (5) 28:12 | 78:5,12 83:21 | existing (6) 6:19 11:1 |
| 32:24 36:10 49:10 | 189:14 211:23 212:9 | effectively (6) 5:16 | 157:4,10,12 158:12 | 137:20 149:22 189:8 | 96:17,24 98:5,8,15,21 | 80:3 102:19 178:25 |
| 61:25 64:11,11 76:25 77:1 84:18,22 95:25 | 213:20 214:6 drafted (4) 3:13 25:2 | 38:10 55:2 128:13 210:10,15 | 165:18 168:5,10,20 172:11 177:15,22 | 221:5 | 99:15,22 100:21 101:2,4 109:20 110:8 | 187:18 exo00001106 (1) 84:25 |
| 113:8 129:24 | drafted (4) 3:13 25:2 212:4 214:12 | effects (1) 85:25 | 215:2 220:2 | enquire (1) 99:15 ensure (13) 10:6 22:1,8 | 118:25 121:25 137:7 | exo00001106 (1) 84:25 exo000011069 (1) 85:3 |
| 153:6,8,21 157:14 | drafts (1) 102:18 | effort (3) 196:17 213:17 | embarked (1) 7:3 | 79:9 84:11 125:24 | 141:13,15 | exo000011009 (1) 03.5 |
| 158:22 164:14 165:4 | draw (3) 91:19,22 | 216:5 | embarrassed (3) 196:20 | 136:15 158:4 173:15 | 143:3,6,10,13,17 | 140:24 |
| 173:12 179:25 | 152:20 | efforts (6) 32:3 158:4 | 198:1,22 | 196:17 206:13 212:20 | 150:5 158:5 159:5,9 | exova (44) 78:23 |
| 183:5,25 184:1 190:6 | drawing (4) 7:17 84:18 | 196:19 206:3 212:5 | embarrassing (1) 198:2 | 218:17 | 162:6,10,15,19 177:16 | 80:2,3,5,10,16,23,25 |
| 192:1 194:16 198:20 | 180:21 181:13 | 218:17 | embodied (1) 180:22 | ensuring (1) 182:25 | 192:15 199:3,11 | 81:14 82:14,18,22 |
| 209:1,19 215:16 | drawings (8) 120:5,13 | either (11) 5:6 82:25 | embrace (1) 214:4 | enter (1) 51:4 | 203:12 209:24 218:18 | 84:11 88:5,7,9 90:6,13 |
| 216:21 219:8 | 121:15 129:11 130:3 | 92:21 117:22 118:8 | emotion (3) 219:22 | entered (3) 48:3,15 | 220:23 | 91:3,8,18 92:21,21 |
| doesnt (15) 9:7 12:18 26:16,19 38:19 78:19 | 180:13,18 182:6 drawn (1) 155:1 | 120:12 122:16 151:12 168:25 181:7 205:23 | 220:3,17 emotional (1) 215:3 | 58:10 entering (1) 48:24 | every (8) 21:5 41:12,13,17 70:21 | 98:1,2,24 99:8 102:17 140:17,20 141:11 |
| 97:16 121:19 178:12 | dreadful (1) 222:20 | electronic (1) 78:7 | emotive (2) 214:25 | entire (6) 41:10 50:7 | 78:8 84:4 216:6 | 142:5,12,19,24 |
| 179:5 180:25 184:23 | drew (1) 86:10 | electronically (3) 75:6,7 | 215:2 | 59:9 109:8 188:6 | everybody (1) 45:2 | 143:7,11,15,18 153:22 |
| 213:24 216:21 220:5 | driven (1) 41:6 | 78:9 | emphasis (1) 14:14 | 211:6 | everyone (4) 1:3 44:24 | 164:15,17,22 165:5 |
| doing (38) 10:22 | driver (10) 10:5,9,23 | elements (8) 44:11 | emphasising (1) 154:3 | entirely (3) 16:18 67:21 | 138:16 222:20 | exovas (9) 78:24 |
| 11:20,21,22 12:12 | 11:1 14:4 16:14,16 | 87:14 98:12 115:3 | employ (1) 176:19 | 136:4 | everyones (1) 79:10 | 83:9,21 85:16 86:16 |
| 22:14,18,18 23:14 | 17:25 19:1 20:4 | 141:24 192:25 206:14 | employed (1) 199:18 | entry (1) 157:1 | everything (7) 30:8 | 99:3,23 102:19 143:6 |
| 24:12,25 31:8 42:13 43:5,16 45:6 49:20 | drivers (1) 12:15 drop (3) 25:17 95:19 | 207:6 elephant (2) 206:7,11 | employer (1) 67:23 employers (49) 23:9 | environments (1) 109:12 | 31:1,2 62:13 81:10 115:21 183:6 | expect (9) 84:3 99:25 101:13 119:9 126:1 |
| 57:11 85:16 115:22 | 97:5 | elevate (3) 205:25 | 24:9 33:25 64:3 65:16 | envisage (1) 193:8 | evidence (23) 1:5 23:2 | 146:9,24 179:22 |
| 117:18 119:17 128:9 | dropped (1) 96:4 | 207:18,19 | 67:12,22 68:5 70:9 | envisaged (5) | 57:19 71:21 72:17 | 189:10 |
| 129:16 132:11 | dry (1) 182:5 | elevated (1) 212:19 | 83:12,16 84:1,6,16 | 27:3,14,18 73:10 | 75:22 76:25 83:18 | expectation (1) 6:11 |
| 133:2,25 | due (4) 9:20 39:2 | else (5) 37:20 102:2 | 86:15 100:10 | 196:9 | 96:16 103:6 104:17 | expectations (2) |
| 136:4,6,17,25 155:13 | 120:17 173:14 | 127:8 138:16 217:12 | 108:3,16,22 110:13,18 | envisaging (2) 92:21 | 105:8 106:4 131:16 | 210:8,19 |
| 158:7,20 179:23 | duncan (1) 128:21 | elsewhere (1) 98:13 | 111:1,3,15 | 204:11 | 163:9 165:4 168:13,20 | expected (11) 5:5 47:8 |
| 199:19 209:5 212:16 | dunkerton (3) 16:23 | email (152) 8:23,25 | 115:6,11,13 117:6 | equal (1) 34:4 | 199:21 203:9 209:16 | 80:16 145:21 185:17 |
| done (22) 26:17,17 | 79:2 81:6 | 9:22 15:9,23 16:21 | 120:14,21 122:2,20 | equitably (1) 41:12 | 211:20 222:12 | 186:7 195:19 196:21 |
| 41:11,14 50:13 64:15 66:13 70:24 80:23,24 | during (22) 17:20 24:21 37:11 38:9,15 40:3 | 18:4,5 21:14 22:13 29:20,21 31:22 32:1,8 | 129:7,24 136:15 137:15 144:2,4,6,25 | er (1) 27:6 erecting (1) 74:1 | evident (2) 156:10 202:9 | 197:10 199:2 219:2 expecting (7) 46:23 |
| 84:11 86:5,6 91:23 | 48:23 49:11 54:4 76:7 | 45:15,16 46:2,5 | 145:4,20 150:12,14,20 | erm (2) 78:13 90:15 | evidently (1) 20:7 | 121:1 181:23 186:8 |
| 116:14 129:16 138:5 | 80:5,10 81:25 100:23 | 48:7,10 49:11,23,24 | 162:3 173:15 176:2 | err (1) 35:21 | exacerbated (1) 204:7 | 197:4,15 201:22 |
| 164:20,21 165:3 183:6 | 123:8 140:18 147:10 | 50:3 52:5,10,16 | 178:7 | ers (1) 129:5 | exact (1) 76:16 | expense (1) 6:1 |
| 206:9 | 150:21 163:4 187:5 | 53:1,2,4,9,11,14 56:9 | employing (1) 141:22 | es (1) 67:1 | exactly (9) 42:13 94:2 | expensive (1) 34:5 |
| dont (80) 15:23 | 188:21 200:10 | 58:11 59:5 60:18,20 | empowered (1) 212:20 | escalate (3) 156:16 | 117:17 125:15 133:19 | experience (19) 4:24 |
| 17:17,18 20:6 23:19 | durkan (3) 26:9 32:6 | 61:22 63:5 65:25 | enable (2) 22:1,8 | 215:9 217:12 | 144:6 185:16 186:17 | 8:6 21:5 25:20 |
| 25:19 26:15 31:10 39:11 40:22 43:7 44:9 | 35:10 duties (11) 84:1 100:13 | 69:10,18 70:15,17,21,25 | enact (1) 12:1 encompassed (1) | escalating (1) 198:19 essence (4) 118:21 | 208:7 examined (1) 181:7 | 26:16,23 30:15 32:10 41:24 42:2 49:13 |
| 46:5 47:16 | 117:23 122:3,4,5,11 | 71:7,14,22,22 72:9 | 176:20 | 135:2 146:11 206:22 | example (20) 38:12 | 112:22 115:17 116:4 |
| 53:19,22,25 55:5,6 | 174:6,10 188:12 | 77:21 78:25 79:1 81:5 | encounter (1) 147:24 | essential (1) 38:11 | 40:24 41:21,22 55:21 | 131:3 183:10 |
| 61:15 64:22 65:16,18 | 216:11 | 87:11,19 88:8,19 | encourage (1) 198:9 | essentially (4) 111:14 | 99:19 122:7,25 127:20 | 187:11,19 189:20 |
| 69:25 73:5 76:19 | duty (5) 83:15 119:14 | 112:2,3 114:16 120:10 | encumbered (1) 133:24 | 114:7 141:23 202:23 | 132:18 134:2,2 136:16 | experienced (2) 66:13 |
| 77:10 78:10,19 82:16 | 122:9 137:21,22 | 125:4,10,20 126:7 | end (29) 22:6 65:22 | establish (1) 222:21 | 140:23 149:21 151:15 | 109:17 |
| 85:15 93:8 95:20 | | 127:6,17 128:17,19 | 84:14 100:2,18 | estimate (7) 2:9,25 | 181:17 182:4,16 | expert (4) 24:24 25:3 |
| 96:2,2,5,14,19 97:2,7 | E | 131:24,25 132:5,13 | 101:9,16 105:21 | 20:10,12,12 35:9 | 202:16 | 63:19 183:12 |
| 99:1 101:14 102:24 | | 137:12 138:23,24 | 131:17 175:10 180:6 183:21 | 36:14 | examples (13) 38:23 | expertise (2) 41:1 87:1 |
| 111:9,19,23 136:2,3,9 139:16,23 140:4,21 | e (11) 31:23,25 59:10 | 139:13 140:24 141:6 142:4 148:2,4,7,8 | 183:21 184:3,8,11,15,24 | estimates (3) 1:22,25 2:22 | 39:17,18 41:8 147:15,17 155:19 | expired (1) 197:3 explain (9) 26:12 35:8 |
| | 83:1,2 91:14 118:7 | 149:2,19 151:23 | 185:1,2,2 187:6,18 | et (6) 4:17 21:4 76:5 | 159:20 160:11,14 | 47:7 107:10 121:2 |
| 149:2 154:19 158:12 | 05.1,2 51.14 110.7 | 149.2,19 131.23 | 103.1,2,2 107.0,10 | Ct (0) 4.11 21.4 10.5 | | |
| 149:2 154:19 158:12 162:5 163:8 | 146:1 158:10 171:9 | 152:4,14 153:3 154:10 | 188:16,22 204:13 | 120:10,13 127:3 | 161:22 202:13,16 | 131:7 201:11 209:8,20 |
| | | | | | | |

fordham (13) 31:23

118:5 125:4 126:8

explained (4) 64:6 69:22 111:12 217:11 explaining (3) 46:18 155:21 217:9 explains (1) 72:23 explicit (1) 144:9 explicitly (2) 121:2 186:9 express (1) 158:9 expressed (1) 203:4 expressing (1) 198:19 expressions (1) 25:7 extended (2) 117:10.15 exterior (1) 58:17 external (10) 36:13 63:1 65:8 66:19.23 85:4.8 86:1 139:9 202:18 extra (1) 197:6 extract (1) 98:16 extracts (1) 189:21 extremely (2) 4:2 213:22 eye (1) 68:17

f (1) 80:11 f10 (2) 195:10 197:3 faade (5) 36:13 58:21 59:22 94:25 109:25 facade (1) 58:25 faced (1) 134:1 facilitating (2) 67:15,22 factors (6) 4:9.17.20 5:23 203:17 204:8 fail (1) 7:4 fair (10) 7:12 25:15 30:22 33:1 37:25 109:18 137:20 149:22 189:8 200:24 fairly (4) 41:12 114:1 123:1 215:2 fairness (3) 36:12 102:18,22 fall (1) 153:6 familiar (9) 3:11 24:25 63:17 78:8 82:9 123:23 183:14.15 188:3 fantastic (1) 104:2 far (14) 32:2 45:3 47:13 57:7 89:18 91:15 125:19 142:2 158:7,20 200:19 206:3 212:16 221:7 farce (2) 158:3 218:16 fashion (1) 4:12 fastforwarded (1) 158:25 favourably (2) 23:18,24 faze (1) 208:13 features (1) 188:5 february (3) 29:21 31:25 75:20 fee (9) 82:15,19 83:5,10 84:11 128:25 132:6,21 feedback (2) 54:22.25 feel (10) 42:1 79:7 102:21 121:25 130:23

fees (1) 80:20 felt (12) 15:6 86:3 88:25 89:19 137:12 155:1.22 156:4 198:19 200:20 207:9 211:8 few (10) 27:13 58:8 95:23 110:15 113:6 143:22 147:18 182:17 193:8 218:13 fiats (1) 216:14 fibre (1) 71:25 figures (2) 2:9 5:8 file (74) 100:20.23 101:3,7 157:25 173:1,12,13,15 175:13 176:1.14.20 177:2 178:6,8,9,22 179:1.10.13.20.25 180:16.25 181:7.15 182:3,12,14,15,24,25 183:6,18 184:4.10.17.23 185:7,9,10 186:23 187:15,16 188:13.15.20 189:1,4,10 190:4,16 191:2.5.14.16 192:2,4,11,13,16 193:15 195:16,20 196:4 197:5,6,13,14,18 199:4,5,11 files (3) 74:23 179:3 187:17 final (22) 34:15 55:4 56:3.8 81:16 85:1 99:15,23 100:5,11 113:15 143:10,13,17 182:7 192:13,16 199:14 214:12,15,18 215:10 finalised (1) 48:4 finally (7) 90:21,23 100:19 213:21 214:13 219:16 220:23 financial (1) 132:20 find (7) 16:25 53:6 62:7 129:11 153:9 167:7 213:12 finding (1) 182:2 fine (2) 157:11 217:15 finish (1) 128:7 finished (8) 101:21 180:19,21 182:8 183:22 206:24,24 209.3 finishes (1) 175:10 finishing (1) 99:23 fire (99) 60:6,6,8 61:22 62:4 65:1,9 66:2,10 67:24 69:15 70:16 71:4 72:4 73:23 74:17 75:9 76:10.22.23.23 77:22 78:24 80:3,5,10,17 81:14,21 82:4 83:13,25 84:5,7 85:1,4,8 86:1 87:9,22

99:16,24 100:4.6.11.14.15 102:17,19,21 140:16.17 141:8 143:4.11.14.18 151:20 152:8 153:23 157:8 164:8,16 180:11 221:1 fireproof (1) 60:13 fires (1) 62:19 first (58) 2:3 3:15 13:20.21 15:12 18:13 31:20 32:17 35:6,8 37:4 40:14 44:21 47:11 49:1 55:22 58:24 59:5 72:19 73:4.18.20 76:18 79:23 81:15,17 93:21 97:24 105:10 106:7.8.12 114:3 121:7 123:11.13 124:14,23 125:12 137:21 141:16 143:24 147:8,20 152:5 153:25 154:1 157:21 159:15 163:7 186:10 200:25 202:17 203:9 206:4 208:19 218:13 223:12 fit (2) 73:18 86:9 fits (1) 145:2 fitted (1) 74:2 five (11) 25:7,12,24 26:2 27:4.18 28:7.11.17 107:13 215:18 fixed (3) 60:2 67:5 77:25 fixers (1) 202:19 fixings (3) 60:3,4,4 flag (2) 158:3 218:16 flagged (1) 164:22 flambovant (1) 16:10 flame (6) 61:12,14 63:1 64:13,20 66:10 flat (1) 178:16 flats (3) 124:6 126:9,10 flawed (1) 134:5 flippant (1) 197:23 floated (1) 177:22 floor (3) 141:5 151:21 164:9 floors (5) 71:24 72:3,6,6,12 flue (1) 76:12 focus (2) 14:3 196:6 focused (1) 33:14 focusing (4) 95:1 97:8,9,21 follow (9) 61:25 121:8 153:16 168:22 186:7,16 192:6 217:6 220:2 followed (2) 44:3 57:7 following (19) 5:13 16:16 21:23 31:22 53:8 64:12 73:23 76:10 79:19 81:5 95:23 98:2 132:8 141:9 171:2 196:15 212:3 216:24 219:4 followons (1) 95:3 follows (3) 14:16 175:8

128:19 149:7 153:10.18 157:12 164:10.22.25 179:15 forefront (1) 207:14 foresight (1) 152:19 forged (1) 124:16 forget (1) 33:23 forging (1) 139:18 forgotten (3) 10:11,19 form (19) 4:9 30:18.22 75:4,8 78:7,18 82:11 93:1 115:24 121:20,20 144:7 145:3 153:15.22 164:15 195:11 202:20 formal (10) 54:19 167:9 168:7.21 173:2 174:21 177:18 179:4 211:18 212:18 formally (5) 127:7 136:9 166:25 169:4 202:12 format (2) 41:5,14 formed (3) 40:16 108:9 185:6 forming (2) 145:15 202:1 forthcoming (1) 209:14 forward (26) 8:22 18:3 27:20 41:5.23 42:22 48:22 52:2 59:1 71:3 79:10.12.22 80:22 86:12 90:8 91:5.25 92:5,8 100:17 126:19 152:13 161:9 181:6 193:9 forwarded (2) 68:19 152:4 forwards (1) 189:6 found (4) 102:14 168:2 198:2 210:1 foundering (3) 159:6,8,9 four (2) 107:13 209:20 fourth (3) 21:16 80:1 220:7 framework (5) 19:6,14 170:9,19,19 frameworkojeu (1) 14:24 frameworks (1) 168:24 frankly (1) 211:11 free (2) 103:9 222:16 friday (1) 44:19 front (1) 131:17 frustrated (3) 131:10 156:12 157:16 frustrating (1) 206:20 frustration (2) 157:14 214:2 frustrations (2) 210:24 212:13 fulfilling (2) 119:14 137:3 full (9) 22:1,8 68:1 121:4,9,21 135:20 185:12 212:6 fulltime (1) 111:14 fully (2) 29:8 209:4 function (15) 115:16

117:10,16,24

118:11,19 119:2,5

138:10 146:8,12 156:9 161:3.7.19 functions (3) 117:7 123:3 150:20 fundamental (7) 5:21 7:3 8:2 11:10 183:16 189:18 191:10 fundamentally (12) 7:13 12:6 15:16 127:17 139:21 149:19 172-23 173-4 21 180:18 204:2 216:25 funding (1) 12:25 further (18) 1:5 2:1 8:19 19:8 65:3 79:7 80:25 86:4 112:8 138:11 175:24 176:9.13.17.18 196:15 217:15 222:7 future (3) 79:5 85:9,18 gain (1) 136:5 gained (4) 8:13 91:15 123:17 136:7 gantt (1) 39:10 gap (7) 2:16 8:8 83:24 84:6 86:15,18 87:4 gaps (6) 83:20 84:2,4,20 154:21 203:24 garages (1) 11:21 gary (5) 190:5.6.7 213:3 216:12 gas (1) 159:23 gathered (2) 180:9.12 gathering (1) 181:9 gauge (1) 197:14 gave (6) 78:3 83:4 90:18 113:11 142:15 general (5) 11:2 26:23 49:7 159:24 203:21 generally (9) 21:5 47:15 17 68:23 72:13 150:5 200:22 202:20 203:19 generated (1) 4:1 get (48) 4:7 5:16 10:19 22:21 23:12 26:6,13 28-2 29-14 34-4 36-2 42:1,3 44:12 45:21

46:13 51:6 57:12 63:1 65:3.21 68:1.18.24 69:15 71:1 92:5 127:25 149:17 154:23 155:9 156:14 157:15 159:5,9 173:2,5 177:17 178:24 185:10 186:6 192:16 199:17 203:25 207:5 209:3 215:7 216:18 gets (1) 110:25 getting (16) 8:5,19 9:22 12:22 47:11 63:14 70:21 112:24 113:14

128:22 148:22 158:7,20 201:21 206:4 gibson (10) 37:13

52:11,17 61:5 72:17 77:2 112:3 211:25 215:12 220:11

gibsons (5) 17:7 72:16 73:4.6 78:4 gift (1) 40:4 give (18) 5:9 15:17 16:8 17:1 39:18 41:21 74:7 89:18 103:5 104:16 112:14 147:17 152:1 155:19 188:15 202:16 221:5 222:12 given (22) 5:14 7:5 13:17.25 29:9 31:8.13 41:2,13,17 52:18

222:6,7,25 223:7,9,12

153:12 215:23 222:15

grasped (1) 214:1

grateful (4) 103:9

great (3) 16:8 29:15

19:1,22 20:1,3,5,19

greatest (2) 20:21 21:8

grenfell (40) 10:6,10

37:12 38:9 42:16

44:18 45:17 49:5.8

59:22 60:23 62:20

108:2.13.15 109:19

116:5.11.19.23 117:4

128:25 132:3 139:3

141:5 148:10 151:24

152:7 160:20 178:25

69:13 75:9 79:19

112:6,9 114:6

greater (8) 18:24

21:1

75:13 160:14 161:22 164:21 168:3,7 171:15 181:18 196:3 208:9 214:2 gives (1) 75:22 giving (9) 6:12 13:13

15:7 36:25 46:3 50:3 88:15 142:19 195:25 glass (1) 71:25 goes (4) 72:25 189:6

179:13 186:23 193:25 208:25 222:9 220:8 going (108) 1:4 7:19 grip (1) 127:25 10:13.18.19 11:13.22 ground (4) 134:25 12:10 13:23 19:13,19 151:20 152:7 164:9 22:17 23:16 27:23 group (1) 108:10 29:5,12,13,18 31:13 grow (1) 131:10 33:4,4 40:7 41:6,9,19 guarantee (1) 6:2 42:1,4,7 43:3,9 45:17 guess (1) 185:12 46:3 47:7 19 50:20 guidance (1) 28:14 51:7.16.25 52:1 53:2 guide (1) 209:10 guided (1) 65:2 58:20 60:2.12.13 67:6 68:4.12 71:2 72:2 guise (1) 7:2 77:24 79:10,12,22 guys (1) 194:15 80:21 87:19 89:24 90:8 91:5,19,24 92:5 hadnt (16) 51:23,23,24 93:4 94:22 99:11 95:2 98:10 133:11 100:4.16 101:13 111:24 118:10,22 134:17 138:5

123:19 124:3.7 125:12 128:3 131:15 134:7.18 137:2,3 139:17 hamper (1) 4:6 147:2,18 153:17 155:11 158:15 159:23 163:6,6 165:17 168:23 197.17 170:21 176:6.7.8.23 197:10 204:10 178:15 180:3 189:5,5 191:5 192:2 194:20 199:11 199:9.10 213:7 215:19 handover (14)

gone (7) 20:7 42:8 51:20 56:3 85:20 210:25 211:9 good (23) 1.3 9 10 13 15 16 3:17 57:9,14 59:25 98:9 104:3,12,14 112:10 123:13 133:23 134:2 162:23 163:2 180:15 208:21 223:13 google (1) 62:7 governed (1) 119:23 graduated (1) 106:11 grange (40) 1:14,15 57:9,23 58:6,7 101:15.18 102:14,15,24

221:17

103:16,18,21,24

104.2 8 10 21 23

162:23 163:1,16,24,25

184:2 215:13,18,23

221:3,6,9,11,25

161:3.7.10.17 192:7 197:21 206:19 207:11 half (2) 36:20 79:25 hand (3) 78:10,20 handed (4) 75:7 195:24 handing (2) 193:15 100:3.13.18 111:15,20,22 113:11 193:1.11 197:4 199:3.8 213:14.19 handson (1) 113:23 handwriting (1) 189:25 happen (11) 42:16 47:19 62:3 70:10 77:8 96:4 99:25 103:7 198:13 201:24 222:23 happened (15) 1:19 9:20 38:4 42:17 43:9 60:14 62:4 68:22 70:8 77:9 81:7 96:14 137:17 175:6 199:1 happening (11) 10:18 44:24 120:9 135:6 137:2 156:11,17 182:17 198:8 206:22 208:10 happens (8) 62:23 68:7,23 103:12 104:18

137:16 201:21 210:14

213:18,24

feeling (1) 210:20

feels (1) 209:13

88:5,6,7,21,23,24

89:2,5,10,12,13,14,21

90.6 12 13 15 91.18

92:17,20 93:23 94:10

95:16,19 96:1,6,9 97:1

98:3,5,10,12,18,18

186:1

force (1) 171:7

152:11 184:25 185:1

| happy (5) 131:18 |
|--|
| 189:17 212:6 215:19 |
| 216:17 |
| hard (8) 75:4,8 |
| 78:3,6,9,18,21 207:5 harley (1) 67:1 |
| hasnt (1) 101:24 |
| hat (1) 79:10 |
| havent (3) 51:10 86:21 |
| 169:3 having (13) 8:13 62:19 |
| 71:23 73:22 89:11 |
| 113:24 131:22 151:3 |
| 161:10 206:16 208:3,5 |
| 209:17 |
| head (3) 107:10,22 112:19 |
| headed (3) 45:4,5 112:6 |
| header (1) 79:25 |
| heading (5) 27:10 60:23 |
| 61:8 126:13 204:14 headings (2) 133:22 |
| 139:6 |
| heads (1) 106:25 |
| health (49) 100:20,22 |
| 101:3,7 137:9 157:25 |
| 173:1,11 175:13,25 176:14,20 177:2 |
| 178:6,8,9,22,25 |
| 179:2,9,13,20 180:15 |
| 181:6 184:10,23 |
| 187:14,16 188:13 189:4,10 190:3,16 |
| 191:2,5,14,16 |
| 192:1,4,13,16 193:15 |
| 195:20 197:12,13,18 |
| 199:4,10 220:25 |
| hear (3) 63:8 103:8 222:14 |
| heard (3) 29:2 199:21 |
| 209:16 |
| hearing (3) 1:4,4 223:17 |
| heat (2) 134:3 149:5 heating (1) 139:8 |
| hed (1) 101:5 |
| held (7) 58:14 90:1 94:2 |
| 95:6 136:8 138:20 |
| 210:6 |
| help (59) 3:13 12:17 15:25 24:19 40:18 |
| 46:10 59:19 67:11 |
| 70:5 72:1 78:5,16 |
| 92:23 95:18 107:20 |
| 115:10 117:14,17 123:19 125:15 130:22 |
| 133:17 135:16 136:21 |
| 145:11 146:15 148:24 |
| 149:13 150:11 153:10 |
| 155:15,18 157:17 |
| 159:12 173:20,22 174:9 176:19 179:19 |
| 182:1 183:25 191:23 |
| 197:5 198:2 200:17 |
| 201:11,16 206:3,11 |
| 207:5 209:19 210:8,23 211:4 214:18 216:10 |
| 211:4 214:18 216:10 217:2 219:23 222:21 |
| helped (1) 133:1 |
| helpful (9) 62:14 64:23 |
| 103:8 109:15 110:3 |
| 134:9 192:12 204:19 222:14 |
| helps (2) 103:12 121:18 |
| |

hence (5) 126:1 129:12 134:22 201:24 210:3 here (63) 8:3 11:5,18 12:21 18:5 20:13 22:2 30:1.11.24 32:16 36:11,12 42:18 43:10 48:10 49:19 50:14,16 51:1 52:15 65:5 68:20 71:9 84:12 85:4 86:4 103:5 106:5 114:16 122:11 128:3 136:20 139:15 148:22 150:21 154:23 164:12.22 169:8 174:15 175:4,6 180:1,2,19 183:11 185:19.22 191:9 192:3 193:17 200:22 204:3.14 206:2.13.16.23 207:16 211:2 214:10 222:12 hes (8) 15:11 32:9 75:17 152:8 180:2 181:17,21 185:14 hesitate (1) 193:11 hi (1) 186:25 hidden (1) 60:4 higgins (1) 5:6 high (4) 25:13 66:6 205:1 206:6 higher (2) 46:24 91:17 highlevel (1) 124:5 highlight (3) 36:7 84:7.20 highlighted (1) 202:17 highlighting (1) 88:3 highly (2) 26:16 148:13 highrise (3) 109:20 110:4.9 hindsight (1) 66:5 historical (1) 110:24 history (1) 106:9 hiu (3) 149:5,10 150:1 hius (1) 134:1 hoc (4) 99:3,9 142:20.25 hold (5) 106:17 130:5 132:9 206:2 212:15 holding (2) 63:14 64:1 homes (1) 126:11 honest (2) 187:4 195:23 honestly (2) 139:16 190:20 hope (6) 57:12 63:13 79:13 103:11 118:23 222:21 hoped (2) 167:14 214:5 hopefully (2) 113:2 209:11 hour (2) 103:25 216:7 house (7) 61:13,23 62:4 72:11 73:23 76:11.22 housekeeping (1)103:19 housing (1) 19:5 however (10) 21:23 61:11 64:13 73:13 112:12 144:5,15 166:6 187:3 209:1 hs (5) 186:23 195:9,16 inaccuracies (3) 41:23

ibi (1) 59:10 id (19) 22:13 24:23 25:2 62:10 66:7 68:9,20,25 84:3 109:22 118:7 119:11 127:12 143:5 147:2 153:12 156:15 161:1 198:14 idea (3) 98:9 171:16 identical (1) 214:11 identified (4) 8:3 48:22 201:5 203:13 identify (1) 128:3 ie (3) 73:21 117:23 195:20 ill (3) 62:16 117:1 152:17 im (56) 16:8 33:16 35:12 39:23 46:5 49:19 51:16 53:25 54:6 57:11 63:19 65:17 69:5 77:8 78:8 82:17 84:18 85:21 96:15,24 99:5 103:6 104.17 105.3 114.25 123:19 131:15 133:18 139:18 147:17 153:17 154:22 156:6 158:15 159:23 163:1,6 164:24 180:17 182:1,14 183:12.14 184:25.25 190:13 192:8 193:21 213:7 215:23 220:1.1.2 221:6 222:8,13 imagine (1) 211:2 immediate (1) 124:4 immediately (3) 5:3 137:5 204:18 immense (1) 211:3 impact (2) 51:2.8 implications (7) 19:5,16 129:21 132:22 140:10 149:10,20 implicit (1) 60:10 imply (2) 189:5 210:4 importance (2) 14:8 66:6 important (16) 9:15 10:21 11:6 12:16 13:1 14:7 38:22 68:16 70:15,17,18,19 99:18 118:20 213:25 222:18 impressed (1) 123:14 impression (11) 2:7 16.11 36.2 124.22 133:23 142:15 159:5,10 183:4,7 208-9 impressions (3) 123:11.13 124:14 improve (6) 5:6 10:18 11:24 125:3.9 126:2 improved (5) 125:2,7,14 126:3.20 improvement (1) 216:23 improving (1) 14:24

96-13 181-8

inaction (1) 206:2

inadequate (1) 203:1

188:7

inappropriately (1)

155:22 inc (1) 197:4 incident (1) 62:8 incidents (1) 159:16 include (8) 18:24 92:17 93:22 100:5 120:11 144:11 197:12 202:15 included (9) 10:6 31:2 52:23 70:9 82:2 87:10 88:10 192:20 214:13 includes (1) 195:7 including (7) 5:23 50:3 65:8 120:25 179:14 205:18 221:1 incorporate (1) 199:10 incorporated (1) 191:5 incorrect (1) 51:20 incorrectly (1) 74:22 increase (1) 127:24 incredible (2) 129:12 213:12 incumbent (1) 198:6 incur (1) 6:1 independent (2) 30:21 181-17 independently (3) 28:9 31:15 34:11 indepth (1) 62:23 index (1) 224:1 indicate (3) 5:21 158:22 215.16 indicated (2) 73:17 130:3 indicating (2) 52:20 73:14 indications (1) 4:3 individual (2) 16:11 116:15 individuals (3) 42:4 112:4 179:15 industry (3) 118:9 123:5 222:22 inert (5) 74:14 75:10 76:15 77:18,19 inevitable (1) 110:25 inferior (1) 59:2 influenced (2) 31:9.17 informal (1) 48:18 information (41) 17:4 25:18 39:10 100:25 101:3 125:6,23 127:7,18 135:9 161:2 176:1.3.16 177:2 179:19,24 180:9,24 181:9,15,18,19,23 182-22 183-21 22 185:17,22 186:2,6 187:4,5 189:4 193:15 194:2,4 195:6,23 208:21 218:25 informed (2) 10:24 144:16 initial (1) 211:23 initially (1) 94:12 initiatives (1) 39:19 inlet (1) 182:5 input (6) 37:23 38:8 99:3 112:14 140:19 146:19 inputs (1) 146:18 ing00013936 (1) 187:23 inq0001393658 (1)

inquest (1) 73:24 inquiry (9) 1:8 72:18 104:22,24 105:9 199:21 222:21 224:5.10 inserted (1) 55:21 insight (1) 123:17 insofar (1) 204:24 inspect (1) 206:14 inspection (7) 135:19 199-23 201-6 25 202:15 206:8 207:7 inspections (1) 121:7 inspectorate (1) 119:13 inspectors (2) 202:25 204:25 install (2) 73:17 86:25 installation (2) 202:14.21 installed (3) 75:10 76:8 181:20 installing (1) 67:2 instance (2) 41:2 136:18 institute (1) 106:14 instruct (3) 68:7 69:1 70:13 instruction (4) 56:15 83:5 97:13 220:17 insulation (8) 66:22 73:16.18.21 74:9 76:2.4.14 intended (2) 105:1 197:24 intending (1) 94:9 intends (1) 146:10 intent (1) 48:15 intention (3) 48:18 73:17 84:13 interaction (2) 2:6 40:9 interest (1) 25:7 interested (9) 12:12 19:9 25:15 27:22 33:16 137:6 142:2 147:2 182:25 interesting (1) 9:3 interface (5) 129:18.18 134:3 139:8 149:5 interim (1) 216:17 internal (1) 171:24 internally (2) 96:17 193:20 internationally (1) 62:21 interpreted (1) 50:6 interpreting (1) 51:13 interrupt (1) 51:16 interview (9) 41:4,6,15,16,25 42:13,23 43:3 47:1 interviewed (1) 44:21 interviews (11) 40:13.15.18.21 42:3.5 43:13 44:17 45:1 46:7 51:11 into (52) 7:23 11:18,23 12:2.4 23:23 29:3 30:25 31:6 33:7,17,20 36:4 38:8 45:21 46:13 47.12 48.3 15 24

50:24 51:4,6 56:3

83:14 101:1 117:10,15 122:1 123:7.17 134:16 154:12 155:1 156:13 158:7.20 171:7 173:3 179:2.16 210:11 211:9 218:11 intricate (2) 65:17,18 introduce (5) 112:17 114:19 125:2,14 126:2 introduced (7) 24:24 53:21 99:6 113:4.10 144:8 216:10 introducing (5) 125:7 126:19 127:1 210:8 introduction (1) 89:25 investigated (1) 48:24 investigations (1) 104:24 invite (2) 126:23 212:2 invited (7) 25:25 26:24 27:12 28:6.12.17 214:23 involve (8) 47:20 72:25 73:10 110:21 146:3 147:13,25 154:7 involved (35) 15:19 23:3,10,12 24:1 33:21 34:9 40:1 44:11,12,13,14 45:9 47:6 68:9 88:17 93:7 98:18.19 107:11 109:11.24 110:5.8 119:7 124:19 141:1 147:12,24 149:17 150:17 155:9 156:14 184:19 186:18 involvement (8) 37:3 67:3 83:8 131:25 132:9 160:20 166:6 216:9 involves (1) 121:4 involving (2) 110:4 143:4 isnt (22) 7:24 13:16 27:18 39:25 40:24 41:24 56:4 71:6 81:19 94:6 126:13 132:24 149:20 165:14 180:3.15 181:9 184:2 190:23 195:11 214:15.16 issued (10) 3:16 13:8 19:6 77:14 78:9 158:12 192:16 193:6 194.16.21 issues (47) 19:10 61:20 71:4 77:3 112:25 113:15.17 123:18,22,24 124:3,5 131:11 132:19.24 138:21 139:5,11,21 140:19 144:20 147:12,13,25 154:3 155:10,22,23 157:17 159:1,6,11 162:15 172:19 200:15 201:2,12,23 203:12 204:22 205:3 207:14 210.24 211.1 212.14 218:12 220:22 58:10 60:15 62:5,6 issuing (1) 15:21 65:20 79:13 81:8,11 item (10) 45:6 92:14

55:1.14 56:2

93:20 94:3 174:23,25 192:20 213:1.8.8 items (5) 73:20 88:3 192:14 217:7.20 iterations (1) 8:18 iterative (4) 6:11 188:25 189:2,5 its (128) 7:2,24 8:17,25 11:14 13:8,16,17 14:5 15:3 18:19 20:6 24.11 11 11 25:13,13,17 30:20.20.22 35:6 39:15,25 46:7 48:11 52:4 53:14 54:9,9 55:14 56:11 57:1 58:13 59:11 60:9.10.23 70:19 72:4.20 78:21 81:9 82:14.19 84:1,11,12,23 85:23 87:12.17.17 89:19 103:8 104:24,24 105:11,21 110:25 112.3 114.24 115.20 117:21 118:7 121:3,15 122:9 124:9.10 125:22 126:9 128:20 129:3 132:3 134:10 136:9 137:22 139:1,3 140:25 146:6 148:8 151:10 153:9 154:1 156:3.21 159:22 163:5 167:5 177:6.22 178:13 180:5 181:10 183:17,19 186:12 187:25 188:1,8,24,25 189:14 190:13 191:8,15 193:22,24 195:25 198:19,24 199:15 201:3.6.12 202:14 205:19,20 209:25 211:24 214:19 216:20 220:1,7,15 222:18 itself (8) 24:6 37:22 49:15 95:22 123:24 172:13 174:10 199:15 iv (1) 27:9 ive (11) 53:4 62:4 73:5.5 75:16 76:17 83:15 101:16 137:24 203:25 217:9 jackson (10) 24:20 37:7.13.14 41:7 48:8 50:9 54:16 55:1,14 jacksons (1) 56:2 james (3) 165:24,25 166:2 january (3) 28:20 72:20 196:9

januaryfebruary (1) 160:12 jct (1) 115:14 jenny (13) 24:20 37:7.13.14 41:7.16 48:8 50:9 51:24 54:16

197.4 5

hse (1) 76:10

hurdle (1) 26:6

jog (1) 201:16

job (10) 25:14 42:14

43:3,9 56:17,25 68:23

70:20 137:15 150:19

john (4) 120:19 199:18.22 201:6 johnson (3) 9:5 10:1,3 joined (4) 2:20 79:3 165:9 204:7 joining (1) 3:9 joint (1) 107:10 jon (5) 206:14 207:4,10 212:6 215:6 jrp (6) 135:18 171:16 172:1.8 199:17 202:13 judgement (1) 181:17 iuly (11) 48:4 97:16 108:9,20,24 114:8 168:9,11,17 198:5 202:17 jumping (1) 203:24 june (8) 9:19 18:7 21:15 92:8,11 94:5 111:13

136.8 justification (1) 15:17

kctmo (5) 48:17,20 112:11 172:25 216:16 keen (3) 9:12 125:1,13 keep (8) 9:6 15:19 38:19 68:17 94:20 105:6 155:25 215:19 keepmoat (1) 28:19 keeps (1) 156:14 keith (6) 100:24 179:12.19 186:14 192:5 216:12 keiths (1) 185:13 kensington (3) 8:9 10:3,7 kept (4) 95:4 104:17 156:11 222:13 key (18) 65:13 94:15 122:11 123:3.17.20.22.24 124:12 133:22 134:18 147:18 178:14 188:5 192-9 200-18 203-17 215:4 kickback (1) 155:18 kicked (1) 149:23 kicking (1) 9:13 kickstarting (1) 185:14 kind (5) 71:8 114:16 116:8 166:10 194:6 kitchen (1) 149:10 kitchens (2) 9:7 11:24 kneejerk (1) 155:14 knew (14) 45:2 51:13,17 63:3 66:16,19 86:21 88:22 96:19.20 133:23 155:10 156:10 170:13 know (174) 1:20 3:16,19,20 10:16,18 11:22 12:17 14:2,4,6 16:15,16 17:15,17,18 20:6 22:21 23:20 25:1,5 26:23 28:18 29:13 32:21 33:16 34:2 37:25 38:7

59:25 60:8,9 61:11.12.15.25 62:12.12.25 63:19,20,24 64:22,25 65:7,13,16,17,18,21,22 66:4,5,7,15,22,24,25 67:6 68:6 69:25 70:20 73:5 75:6 78:10 81:13 83.5 13 84.2 17 86:12,20,21,24 87:8 91:22 94:25 95:20 96:2,11 98:1,20 99:1,2,10,19 100:3 102:24 104:16 105:5 110:12 114:5,21 118:20.21 127:25 128:3.13 133:23 134:8 136:3 137:1 138:14 140:4 144:24 149:2 150:1 153:7 154:11 155:16 159:2 161:14 164:24 165:1,8,11 168-2 170-20 171-12 172:8 173:23 176:18 177:16 181:5 182:4.25 185:2 190:13 192:13 198:21 199:17 202:24 206:22 207:3,23 210:2.3.9 211:17 217:9 218:24.24 219:4.8 knowing (1) 51:24 knowledge (9) 31:17 62:18.23 91:14 110:10 166:25 167:8 174:5 199:3 known (8) 25:8,9 123:4 133:14 142:9,11,23

187:23

kpi (1) 205:1

54:1,19,24 55:5,6

56:14.20.22 57:8

I144 (1) 187:23 lack (6) 124:6 137:7 152:18 196:20 205:12 213:16 lacklustre (2) 213:22 214:14 lacknall (1) 69:16 lacknallsic (1) 61:13 lady (2) 43:1 105:6 lakanal (8) 61:23 62:4 72:11 73:23 74:21 76:11.20.22 lakanaltype (2) 74:8 76:1 lakehouse (1) 5:6 landing (3) 158:4 213:16 218:17 language (1) 16:10 large (2) 124:18 203:24 largely (1) 98:16 last (12) 17:12,15 21:20 60:1 82:2 117:14 153:11 182:11.17 213:11 215:15 219:16 late (4) 4:15 169:1 219:1 223:9 later (22) 53:23 55:15 68:19 73:18 91:1

93:18 111:2 121:8

131:15 132:24 157:19.25 158:23 162:8,12 168:22 171:15 204:11.12 208:14 211:17 217:6 latter (4) 180:1 181:1 183:21 204:6 laura (3) 9:5 10:1,3 lawrence (25) 58:12 69:11 71:21 73:2,14 74:6.13 75:11 76:13 77:2 90:7,19 91:4 92:16.19 93:22 94:9 95:11,12 123:14,14 138:25 152:5 201:15.18 lawrences (3) 58:23 94:21 96:16 layout (2) 141:6.9 lead (8) 24:20 32:14 33:17,19,20 127:24 158:13 207:25 leadbitter (11) 2:7,14 5:7 8:7,18 9:12 13:23 15:19 19:12 20:12.18 leadbitters (3) 1:25 2:17.22 leaders (1) 84:3 leading (1) 23:15 leadup (1) 204:14 learn (2) 135:21 222:22 learned (1) 209:17 learning (1) 76:9 learnt (7) 76:7 118:16 161:4,15 208:4,9 213:2 least (2) 28:15 86:17 leave (3) 67:12 173:12 184:3 leaving (4) 108:12 111:6.10 201:15 led (5) 25:3 118:12 150:3 151:7 168:19 left (9) 6:11 28:20 100:1,7 108:9 110:15,16 180:5 201:18 lefthand (1) 145:6 legal (2) 5:24 188:12 legislation (1) 172:24 leisure (2) 10:8,15 length (1) 109:8 less (1) 209:14 lesser (4) 59:12,16,18,19 let (4) 73:7 105:5 145:1

200:23 lets (19) 14:9 24:5 27:7 29:19.20 38:5 55:9 69:9 112:2 119:18 128:17 131:24 140:23 146:18 148:7,25 151:15 171:23 221:8 letter (9) 54:7,12,21 55:1,3,12,17 56:10 167:2 letterboxes (1) 159:21 letters (3) 54:20 55:22 56:19 level (9) 36:23 40:9 93:3 112:16 114:18

158:6 206:6 212:19

218:19

levels (3) 14:8 107:21 159:21 leverage (1) 21:8 liaise (2) 42:9 68:13 liaison (9) 38:3 43:1 71:12 132:17 134:14,18,25 135:5 138:8 life (2) 42:12 70:16 lifetime (1) 126:11 lift (13) 129:10,18 130:12,23 139:7 151:24 153:21 157:4,8,11,12 164:14 178:17 lifts (9) 128:18.25 130:7 151:16,18,20 152:7 164:4.8 light (2) 14:14 62:22 lights (1) 221:9 like (49) 10:17 11:24 15:21 17:24 20:11 22:17 26:13 29:18 33:14,19 42:7,10 44:25 47:6 52:21 55:1 59:17,21 60:13 77:24 84:4.16 92:21 98:15 101:7 103:12 112:17 114:19 116:4,10 132:7 134:17 141:11 142:4 155:12 163:12 168:22 173:14 178:3.25 180:11 198:14 212:18 213:25 214:1.22 221:21 222:19 223:3 likelihood (1) 187:6 likely (5) 9:16 25:22 32:18 49:10 80:21 lim (6) 2:12 34:22 87:14,17 148:2,9 limitations (1) 27:11 limited (6) 2:6 8:7 94:13 97:13 108:10 132:9 limits (1) 147:11 line (12) 7:17 15:12 17:9.11.14 36:13 47:11 93:21 157:7 170:4 201:1 207:6 lines (6) 27:13 80:1 113:16 125:13 209:20 218:13 list (7) 5:4 29:25 49:4 90:2 157:6 191:14 213:18 listed (2) 38:12 39:17 listen (1) 47:19 literally (1) 30:23 little (14) 6:10 18:20 37:2 75:22 130:4 177:7 184:2 187:6 192:3 209:12 210:4 214:24 215:20 219:19 located (1) 74:23 location (1) 149:6 log (1) 156:21 logistical (1) 8:15 london (1) 19:5 long (5) 172:22 182:10 188-1 208-25 221-5

longer (5) 12:13,20

longterm (1) 39:16

13:24 19:11 215:20

look (83) 2:3 6:7,23 7:16 9:20 14:9.12 18:13 21:16 22:20 27:7.9 29:20 31:20 32:24 34:16 36:13 37:4 38:5 44:16 48:9,17 49:3 52:8,21 54:7,11 55:2,23 56:1,1,6 59:21,25 62:6 69:9 74:10 77:24 79.16 85.3 90.4 92.10 93:16 100:16 101:7 106:11 112:2 124:23 126:18 128:17 140:23 141:15 143:25 144:22 147:21 148:23 151:15 152:4 153:24 156:19 157:1.19.24 165:23 167:18 171:23 172:13 174:15 179:7 187:21 188:8 189:21 202:6 203:9 205:12 208:16,19 214:1,8,9,12 217:9 220.6 looked (13) 15:11 22:17 32:16 46:3 59:12.17 62:5 88:5 159:17 161:1,6 164:3 218:9 looking (35) 6:8 12:3 17:2.2 21:25 22:7 32:15 35:3 45:22 46:14 61:4.9 63:16 64:8 70:23 71:17 72:19 81:10 83:9,10 92:9 107:12.13 121:15 124:5 134:10 144:24 147:25 149:18 169:8 177:8 179:10 189:24 193:21 221:6 looks (2) 54:15 196:2 loose (1) 129:11 lost (1) 110:25 lot (10) 10:9,16 43:7 85:22 112:15 127:6 128:8 154:21 155:20 195:22 lots (7) 54:22 66:7 68:4 70:7 78:13 184:7,14 low (9) 11:11 25:11.13 26:18 36:1,5 40:18,20 41:2 lowe (1) 193:25 lower (11) 26:12 35:17,20 71:24 72.3 5 6 12 93.3 159:21 213:8 lowest (3) 32:5 35:19 50.8 lowrise (1) 110:9 lpa (1) 59:10 lubrication (2) 15:17 lunch (3) 103:23,25 152:17 lunchtime (1) 57:13 m (1) 45:20

18:17,21 19:20 21:15

46:12 52:14,18 61:5

207:20 208:2,22 209:17 211:25 220:11 maddisons (1) 22:10 mailbox (1) 49:7 main (12) 7:25 8:24 19:1 20:4 24:6 92:17 97:9 98:2 101:8 113:20 138:24 202:9 mainly (4) 19:24 23:15 91:9 120:10 maintain (3) 5:19 112:16 114:18 maintenance (4) 129:19 190:23 212:20 219:10 major (1) 35:1 makes (1) 36:5 making (8) 24:13 45:2 48:17 98:17 103:12 119:8 185:18 210:3 malcolm (5) 111:2 141:2 151:23 193:22 195:4 manage (5) 50:21 124:4 210:9 211:3,5 managed (4) 4:13 33:5 38:14 211:6 management (27) 11:3 106:12,16,22 107:8,25 109:8,11,17 112:20 115:3,4,16 116:14 117:7 122:4,9,21,23 123:4 126:4 140:2.4.13 146:25 159:22 205:23 manager (21) 107:17 112:18 114:14,20,22,25 115:1,7,11,16,20,23 116:6,12,13,20,24,25 117:2 122:2 201:19 managerial (1) 109:11 managers (2) 107:13 managing (7) 122:25 123:1,2 132:20 135:2 187:1 211:2 manifest (1) 95:22 manual (10) 157:25 176:20 183:19 190:17.22 191:6.9.10 199:9 219:11 manuals (1) 190:23 manufactured (1) 76:4 many (8) 16:2,2 27:23 62:10 65:11 85:23 97:11 110:21 map (1) 210:23 marc (1) 58:12 march (40) 34:16 40:14 44:19 45:16 46:8,8 48:2.11 51:10 52:12 53:3,16,18,20 54:9 55:13.25 56:11.21.22 75:14 79:3 105:22 108:5 110:13 111:13 125:4,11 126:7 147:23 148:2,9,10 179:8,12 180:1,19 186:4 211:17,24 mark (2) 33:6.21 maddison (20) marked (4) 31:14 37:15 9:4,10,25 10:2,4 16:23 102:18,20

89:16 marking (1) 38:8 martin (53) 1:3,9,11,13 57:14.18 58:2.5 101:17.20 102:5.11.14 103:3,14,18,22,25 104:3,8,12,14,20 162:25 163:2,12,17,21,23 182:1,10,19 183:3.13.24 184:1 213:3 215:16,19,22 216:12 221:5,8,11,17,21 222:4,11 223:1.3.7.10.13 mast (1) 74:1 material (3) 58:17,25 193:1 materials (5) 66:3 74:14 77:20 90:20 144:12 matrix (1) 38:5 matt (9) 61:3 126:8,18 149:6 153:3,4,5 157:12 164:12 matter (9) 74:6 119:22 144:12 153:6 156:6 164:18 198:13 206:10 208:14 mattered (1) 122:14 matters (8) 119:8 125:20 129:18 156:7 190:4 212:21 213:14 217.1 max (13) 31:23 118:5 125:4 126:8 128:19 149:7 153:10,18 157:12 164:10,22,25 179:15 maximum (1) 27:15 maybe (10) 11:17 28:3 29:17 56:18 68:24 70:9,24 71:13 77:16 221:7 mean (56) 12:18 16:7,9 17:19 22:10 25:13 26:16.19 32:2 33:13 35:22 39:23 44:6 46:11,17 49:10 51:18 59:17.17 62:22 66:4 70:19,19 82:8 92:19 93:8 95:25 96:19,20 98:12 111:24 117:17 123:15,19 124:12,16 125:15 127:19 129:25 135.8 145.12 158.25 160:11 161:13,13 168:16 179:2,24 180:13 185:2,5 197:13 207:10 209:19 210:4.22 means (5) 18:1 45:23 46:15 140:5 175:12 meant (8) 16:9 75:24 118:10 136:22 146:16 173:22,23 198:17 measuring (1) 204:25 mechanism (1) 210:9 meet (11) 18:6 22:3 42.4 43.8 53.12 15 61:7 65:7 126:23 132:7 209:7

39:7.8.9.10.11

40:13.15 41:23

44:1 47:5,16,17

51:3,9,19 53:19

42:9,15,15 43:1,25

meeting (108) 9:3,18

market (4) 20:7,22 21:4

| 18:8,9,10 21:12,20 |
|---|
| 37:11 44:16,23 45:11 52:19 53:8,17,20,21 |
| 56:20,23 58:14,19 |
| 74:12,15,19 |
| 75:2,4,7,8,12,25 76:3,7,13 77:3,4,9,16 |
| 78:14 89:25 90:2,3 |
| 91:8 92:11 93:17 94:2,4 95:6,15 97:6 |
| 113:2,3 114:1,3 |
| 125:18,18 126:22 |
| 132:6,7,23 133:21 135:10 136:8,9,11,12 |
| 138:20 |
| 139:3,6,11,15,23 142:16 148:3,10,13 |
| 149:14 151:10 157:4 |
| 168:25 169:23,24 |
| 170:3,12,16,18,21,23,2 171:1 173:3 |
| 174:13,15,16,18 |
| 175:7,15 176:11,24 190:18 191:24 192:8 |
| 196:15 206:6 208:21 |
| 211:10 213:9,11 |
| 216:17 219:25 meetings (27) 44:25 |
| 73:14 77:5,7,13 78:12 |
| 94:8,11 95:23 135:22 |
| 139:17 147:20 148:21 150:6,9,12 151:4 |
| 158:11 168:19 |
| 174:19,20 207:11,13 |
| 209:13 210:7 211:6 214:4 |
| meets (2) 22:2,8 |
| member (5) 106:14,15 107:8,25 108:1 |
| |
| members (1) 42:11 |
| memberships (1) |
| memberships (1) 106:17 |
| memberships (1) |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 mid1990s (1) 109:9 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 mid1990s (1) 109:9 midconstruction (3) 100:1,7 101:12 middle (7) 4:8 27:10 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 mid1990s (1) 109:9 midconstruction (3) 100:1,7 101:12 middle (7) 4:8 27:10 87:20 90:5 114:16 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 mid1990s (1) 109:9 midconstruction (3) 100:1,7 101:12 middle (7) 4:8 27:10 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 mid1990s (1) 109:9 midconstruction (3) 100:1,7 101:12 middle (7) 4:8 27:10 87:20 90:5 114:16 179:11 219:18 midmarch (1) 54:8 might (30) 5:9 12:20 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 mid1990s (1) 109:9 midconstruction (3) 100:1,7 101:12 middle (7) 4:8 27:10 87:20 90:5 114:16 179:11 219:18 midmarch (1) 54:8 might (30) 5:9 12:20 15:25 21:4 28:2 31:9 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 mid1990s (1) 109:9 midconstruction (3) 100:1,7 101:12 middle (7) 4:8 27:10 87:20 90:5 114:16 179:11 219:18 midmarch (1) 54:8 might (30) 5:9 12:20 |
| memberships (1) 106:17 memory (14) 19:9 42:5 91:9 94:11 96:2,5,20 97:2 107:13 168:25 171:2 201:16 206:13 215:12 mention (7) 15:24 48:25 59:5 95:15 136:20 202:4 205:10 mentioned (5) 4:18 41:4 153:21 157:9 164:14 merely (1) 156:1 message (1) 203:25 met (5) 61:3 66:11 86:14 88:19 124:16 methodical (1) 207:7 mf (1) 190:5 michelle (1) 193:25 mid1990s (1) 109:9 midconstruction (3) 100:1,7 101:12 middle (7) 4:8 27:10 87:20 90:5 114:16 179:11 219:18 midmarch (1) 54:8 might (30) 5:9 12:20 15:25 21:4 28:2 31:9 46:19 56:18 57:9 60:2 |

```
148:24 152:7 161:25
  162:7 164:23 171:16
  181:2 188:24
  189:11.18 209:12
  210:20
mike (4) 213:6,10
 216:10 217:14
milestone (1) 63:9
miller (1) 216:13
million (5) 35:8,10
  36:14 50:17.17
mind (8) 3:7 66:1 70:23
  73:22 146:7 154:11
  168:5 200:22
mindful (1) 147:10
mine (1) 83:23
minimise (1) 38:21
minimum (4)
 27:4.14.18 29:7
minute (11) 18:14 20:1
  75:1,3,6 94:18 95:21
  97:17 142:17 170:6
  175:6
minuted (5) 77:3,5
  78:12 136:10 173:5
minutes (38) 18:8,10,11
  74:19.22.22 77:13
  78:3,6,7,8,20,22 89:25
  90:3 91:3 92:6,8,13
  93:17,19 94:4
  95:5.8.15.19 96:5.12
  98:14 101:19 135:10
  169:23.24 174:14.21
  175:4.18 215:18
misconceptions (1)
 131:18
miss (1) 22:17
missed (1) 36:8
missing (3) 125:25
  189:18 213:19
mistaken (2) 111:19
 142:18
misunderstanding (2)
 154:16,20
mitigating (1) 132:20
mixing (1) 151:5
moment (16) 3:9 46:4
  62:16 69:17 113:10
  123:20 130:9 135:19
  138:6 158:17 161:3.8
  162:24 163:7 193:22
monday (7) 52:25
  53:9,13 220:9
  223:11,14,18
mondaynoting (1)
  148:14
money (20) 9:15 10:13
  11:8 12:9,10,14,23
  13:1 14:24 19:1,23
  20:3.5.15.19.22
  21:2,8,22 50:18
monitor (6) 83:12
  144:15 145:7
  146:15,17 151:3
monitoring (13) 83:9
  118:22 120:4 122:7
  132:18 136:21 137:8
  139:14 145:12 146:3,5
```

| months (5) 110:15,16 |
|--|
| 128:6 185:3 204:12 |
| moorebick (51) |
| 1:3,9,11,13 57:14,18 58:2,5 101:17,20 |
| 102:5,11,14 |
| 103:3,14,18,22,25 |
| 104:3,8,12,14,20 |
| 162:25 163:2,12,17,21,23 |
| 182:1,10,19 |
| 183:3,13,24 184:1 |
| 215:16,19,22 221:5,8,11,17,21 |
| 222:4,11 |
| 223:1,3,7,10,13 |
| more (43) 5:21 11:3 19:15,15,24 21:24 |
| 22:23 23:18,23 34:5 |
| 39:4,14 47:14 51:25 |
| 65:5 72:13 74:4 75:22 78:23 86:20 |
| 102:12,15,24 117:1 |
| 134:21 136:15 150:5 |
| 158:7,20 159:1 162:3 |
| 164:3 195:19,25 197:10,16 202:20 |
| 206:4 207:7 209:12 |
| 210:4 221:19 222:5 |
| morning (7) 1:3,9,10,15,16,17 |
| 112:8 |
| most (12) 11:10 12:16 |
| 14:7 32:11,18 33:2,22 34:8 51:21 78:13 |
| |
| |
| 184:19 203:11 mostly (1) 159:3 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 125:19,19 134:17 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 125:19,19 134:17 154:22 158:23 163:12 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 125:19,19 134:17 154:22 158:23 163:12 179:24 182:3 184:1 196:3,24 200:6 205:7 207:13 208:13 209:23 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 125:19,19 134:17 154:22 158:23 163:12 179:24 182:3 184:1 196:3,24 200:6 205:7 207:13 208:13 209:23 211:17 222:9,12 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 125:19,19 134:17 154:22 158:23 163:12 179:24 182:3 184:1 196:3,24 200:6 205:7 207:13 208:13 209:23 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 56:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 125:19,19 134:17 154:22 158:23 163:12 179:24 182:3 184:1 196:3,24 200:6 205:7 207:13 208:13 209:23 211:17 222:9,12 223:1,14 muddied (1) 68:10 mulalley (3) 26:9 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 58:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 125:19,19 134:17 154:22 158:23 163:12 179:24 182:3 184:1 196:3,24 200:6 205:7 207:13 208:13 209:23 211:17 222:9,12 223:1,14 muddied (1) 68:10 mulalley (3) 26:9 35:11,15 |
| 184:19 203:11 mostly (1) 159:3 motivation (1) 216:15 move (2) 8:22 164:1 moved (1) 213:13 moving (2) 18:3 163:1 ms (42) 1:14,15 2:12 57:9,23 58:6,7 101:15,18 102:14,15,24 103:16,18,21,24 104:2,8,10,21,23 159:5 162:23 163:1,16,24,25 184:2 215:13,18,23 221:3,6,9,11,25 222:6,7,25 223:7,9,12 much (45) 1:13 3:8 8:8 20:8 25:3 40:4 41:5,14 44:13 53:23 56:5 67:6 88:17 91:1 101:17 102:5 103:5,11 104:12,14,25 115:17 119:21 124:19 125:19,19 134:17 154:22 158:23 163:12 179:24 182:3 184:1 196:3,24 200:6 205:7 207:13 208:13 209:23 211:17 222:9,12 223:1,14 muddied (1) 68:10 mulalley (3) 26:9 |

182:6 188:9,14 206:1

```
223:7
myriad (1) 211:1
myself (1) 107:18
narrowing (2) 2:18 8:8
nature (7) 124:20
 125:24 154:3 184:7,14
 209:25 211:11
nbs (4) 62:15
 64:10,16,22
nearly (1) 50:7
nearterm (1) 7:22
necessarily (7) 9:8 21:1
 47:5 84:7 121:1 143:2
 185:20
necessary (6) 12:7
 65:23 112:17 114:19
 147:14 194:24
need (46) 5:7 45:23
  46:15 51:4 63:19
  65:21 70:13 85:15
 86:5.6 89:1 93:11
 100:13 101:8,22,25
 102:2 105:5 109:10
 112:25 116:5.8 119:16
 125:3,8 127:25 128:12
 132:19 140:1 150:18
 158:9,21 167:13
  184:23,25
 185:11,22,24 189:4
 192:3 197:5 200:14
  206:3,6 209:11 221:15
needed (32) 3:1 16:14
 26:24 42:9 46:23 47:7
  50:23 65:9 69:1 72:6
 86:12.21 93:8.9.12.15
 94:16 96:22 99:14,23
  118:20 133:24.25
 140:7 142:21.25
 154:24 159:11 201:24
 211:2,4,5
needing (1) 15:4
needs (13) 7:16 79:7
 112:15 129:13.16
 166:4 173:10 25
  185:15 194:16,21
 196:25 221:12
negative (1) 23:25
negotiate (1) 11:4
negotiating (4) 11:1
 19:12 21:6.9
neil (14) 104:11,13
 112:18.24.24 113:1.14
 166:15 170:1 194:1.4
 208:20 216:2 224:8
neither (1) 213:10
never (10) 60:8,14 69:4
 71:1 103:12 156:7
 178:2 209:23 214:22
 222:23
news (1) 57:5
next (20) 12:7 35:9,22
  50:11 52:1 75:3 84:9
 86:7 96:13 104:9
 163:1 173:3 175:14
  193:8 204:14 209:7
 211:10 214:12 216:17
 219:19
nice (1) 105:7
nicely (1) 60:15
nick (7) 60:22 111:2
```

112:24 113:8 126:22

120:7 136:14

138:25 186:13

```
nine (1) 128:6
nobody (4) 52:14 69:5
 71:1,2
nods (1) 169:25
nonchalance (3)
 158:6,17 218:19
none (1) 203:12
nonetheless (2) 136:11
 217:24
nor (2) 213:10,23
normal (10) 32:10
 33:18 43:7 101:6
 115:4 116:1 118:6
 119:15 125:22 141:19
normally (3) 50:12
 103:18 174:20
notch (1) 107:24
note (11) 36:12 76:9
 105:7 175:2.8 192:23
 219:18.23 220:2.4.20
notebook (10) 136:12
 189:24 190:13 191:12
 219:17,17
 220:7,13,15,16
notebooks (3)
 189:22,23,25
noted (4) 76:11 125:5
 128:24 174:25
notes (9) 35:13,14
 43:23 136:11
 139:15.20 190:3
 191:23 192:7
nothing (5) 48:16 74:16
 77:22 101:23 221:13
notice (8) 24:15 25:5
 27:1.3.8 74:16 87:18
 216:23
noticing (1) 96:8
notified (3) 47:25 48:2
noting (1) 220:14
novated (8) 90:7
  91:4,14,19 98:1 99:11
 118:8 146:2
novation (1) 91:10
november (14)
 60:16.21.23 69:12
 81:17,25 85:2 87:11
 95:6 174:14,16 190:19
 205:19 206:9
nowbut (1) 148:17
nowhere (1) 217:12
number (35) 4:17 5:14
 8:17 25:6,11
 27:4,11,14,15 28:1
 49-4 93-17 94-2 21
 95:6 112:4,12 139:5,9
  147:17 155:19,21
 157:16 159:16 165:21
 172:18 177:22 178:14
 200:10.12 202:16
 203:2 212:14,25
 213:18
numbered (3) 5:4 6:25
numerous (1) 216:7
nursery (2) 9:7 11:16
nutshell (1) 129:15
          0
objective (2) 9:14 132:8
obligations (3) 115:15
```

| | obliged (2) 146:15 |
|---|--|
| | 167:23 |
| | observations (6) 202:25 205:3 206:15,18,25 210:2 |
| | observing (1) 199:24 |
| | obsolete (1) 17:4 |
| | obtained (1) 121:2 obvious (3) 4:3 8:19 |
| | 84:2 |
| | obviously (10) 4:22 10:24 59:22 62:22 |
| | 69:7 80:23 110:24 |
| | 152:6 160:19 199:9 |
| | occasion (1) 156:11 |
| | occasionally (1) 99:3 occasions (2) 76:20 |
| | 147:12 |
| | occupied (1) 38:9 |
| | occur (1) 71:13 occurred (1) 62:19 |
| | occurrence (1) 75:8 |
| | oclock (3) 194:11 |
| | 223:11,14 october (30) 1:1 37:7 |
| | 81:15,16,22,25 |
| | 94:1,2,6 105:12 |
| | 140:25 165:13,13 166:5 171:7 172:15,17 |
| | 173:8 175:7 177:9 |
| | 189:9 193:20 |
| 5 | 195:21,24 196:6,12 197:19 208:17 209:18 |
| | 223:18 |
| | odd (1) 94:18 |
| | offer (15) 81:5 118:12 144:19 160:18,21 |
| | 161:12,15,16,17 |
| | 177:9,16,18,19 197:1 |
| | 222:19 offered (2) 118:14 |
| | 144:17 |
| | offering (1) 119:8 |
| | officer (3) 87:23 89:2 119:25 |
| | officers (3) 58:19 98:18 |
| | 134:25 |
|) | offline (3) 48:13 50:4 209:7 |
| , | offsite (1) 76:4 |
| | often (10) 12:14 14:5 |
| | 54:19,20 115:17 117:21 180:5 183:19 |
| | 185:8 191:8 |
| | oh (3) 62:17 69:5 97:19 |
| | ojeu (12) 9:17 19:5,14 24:5,7,11 25:5 27:1,7 |
| | 37:3 50:21 87:18 |
| | ok (1) 168:1 |
| | okay (59) 11:17 17:23 24:17 29:16 31:19 |
| | 32:20 39:13 40:10 |
| | 44:15 51:22 55:6,20 |
| | 57:17 62:17 66:16 68:8 77:12 78:16 |
| | 83:3,7 84:24 89:23 |
| | 91:2 97:25 101:15 |
| | 102:4,13,23 111:18 |
| - | 112:1 115:13 117:20 118:10 128:3 |
| - | 131:1,17,23 134:16 |
| 3 | 137:11 138:13,18 |
| | 139:25 140:6,23 142:3 |
| | |

```
158:1 161:20 163:11
  165:7 168:9 169:21
  179:6 183:11 190:21
  201:20 206:13 211:15
  220:21 221:20
old (4) 178:13,14 179:5
 195:10
om (3) 157:25 191:6
  199:9
omissions (1) 181:7
omitted (1) 221:13
oms (10) 157:23 183:19
  190:5,22,25 192:25
 218:15 219:4,5,5
onboarding (1) 136:2
once (8) 48:15.16 52:2
  68:5 95:21 123:23
oneoff (1) 130:22
ones (2) 12:16 39:24
ongoing (1) 124:1
onto (1) 75:5
onwards (1) 72:23
open (5) 2:8 20:13
  30:20 40:11 209:12
opened (3) 30:19,21
 31.3
opening (3) 30:18
 210:4,5
operating (2) 158:6
 218:19
operation (2) 190:23
 219:10
operations (1) 100:14
operators (1) 27:11
opinion (3) 7:1 20:20
  203:17
opportunity (11) 40:24
  41:13,18 42:3 101:22
  113:3 134:6,6 212:21
 222:18.24
opposed (5) 78:6 122:2
  140:2 143:19 173:17
option (6) 5:12,16
  14:25 29:11 170:20
options (12) 6:18
  14:20,23 19:17 22:15
  66:20 71:18 167:8.14
 168:7 171:3 198:8
oral (2) 71:21 96:16
orchestrated (2) 33:5
 57:6
order (3) 125:23 167:15
 212:24
organisation (5)
  38:14,24 124:19
 171:16 172:1
organisations (1) 172:4
organised (2) 54:2
 184:22
original (7) 13:22 15:18
 23:8 52:4 133:12.14
 178:9
originally (1) 10:25
others (15) 5:16 12:18
  26:3.11 29:5 32:2
  35:22 45:24 46:16
  48:23 49:21 98:25
  101:25 205:18 221:14
otherwise (6) 69:24
  75:12 98:3 120:5
  123:4 196:1
```

151-1 204-25

124:2 126:1

month (4) 93:18 95:23

monthly (2) 73:13 75:3

ought (8) 36:12 71:14 101:23 102:21 133:14 158:8,20 180:14 ours (1) 43:23 outcome (3) 133:21 134:8 154:24 outline (8) 81:14 82:4 85:1 87:9 90:12 99:16 102:17,21 output (3) 146:21 179:3 183-16 outputs (3) 84:17 146:18 151:11 outset (2) 117:12 136:3 outside (4) 4:4 148:1 155:1 159:18 outstanding (1) 88:3 outturn (1) 128:14 over (37) 4:12 6:10 16:3 23:9 36:18 39:14 52:9,12 74:10 80:22 87:5 90:18 91:12 99:11 103:6 108:5 110:12,14,18 114:13 127-2 129-13 146-2 149:8 166:7 175:7,22 186:14 193:15.23 195:24 197:10 199:11 201:18 202:1 204:11 207:6 overall (13) 5:20 6:17 23:21 24:10 26:7 33:6 36:22 40:16.19 93:15 96:20 100:6 209:8 overclad (1) 72:8 overcladding (1) 110:5 overruled (2) 9:4,25 overrun (1) 39:2 oversight (3) 116:7 117:24 118:11 overtly (1) 183:14 own (6) 81:9 108:9 115:10 201:2,3,12 Р

package (3) 130:23 153:21 164:14 packages (1) 139:9 pages (4) 72:21 188:2 215:15 220:16 panelling (2) 61:14 182:11 panels (1) 73:11 paper (6) 45:5 79:8,21 81:4,7 89:13 papers (2) 81:12 82:11 paragraph (54) 2:3 3:24

6:8.15.24 7:10

13:20,21 16:7 21:16 30:4 31:21 36:19 37:4 49:2 59:6 62:1 63:10 64:9 75:21 76:19 79:4 88:2 106:11,20 108:8 114:17 124:24 125:13 126:16 129:2,3 144:1 147:9,22 148:5,11 152:5 153:11 154:2 155:4 156:21 188:8 200:13,25 201:7 202:8 203:9 205:20 208:19

214:13,15,18 215:11

paragraphs (4) 6:25

72:23,24 147:16

103:11 117:14 120:20 121-21 130-1 136-14 137:14 141:22 142:10 144:7 145:2.13.15 150:8,16 153:15,22 155:10 156:17 164:10.15 165:5 168:13 180:1 181:1 183:19 185:6 191:1.6 200:23 204:6 partial (4) 197:4,12,13,18 participate (1) 27:12 particular (11) 41:19 50:10 71:25 112:11 133-21 140-8 151-19 198:2 202:6 203:3 212:24 particularly (11) 12:25 16:1 23:19 31:11 41:16 42:7 48:14 54:21 59:23 186:8 187:12 parties (5) 132:15 134:12 137:13 154:6 189:17 partners (4) 120:19 199:18,22 201:6 parts (5) 23:24 38:3 65:20 191:1 204:2 party (6) 60:5 76:22 150:2 164:25 168:24 176:19 pass (1) 209:2 passages (3) 23:25 73:3 200:12 passed (3) 28:12 87:5 178:10 passing (1) 91:11 paste (1) 69:18 paul (22) 16:23 79:2 81:6 167:16 168:2 171:25 186:12.14.17.19.21 192:6 193:3,14 194:16,22 195:4,24 196:16 22 23 198:9 paulcolin (1) 166:25 pauls (1) 197:1 pause (10) 57:21 102:6 127:11 133:8 149:1 154:15 162:4 163:14 191:7 221:23 pausing (2) 51:7 63:16 pay (1) 21:9 pc (2) 183:2 189:16 pd (2) 167:13,20 people (20) 25:14,19,21 27:23 30:21 42:19,20,24 43:2,4,8 45.4 94.25 97.11 24 116:16 121:11 179:14 185:14 186:18

parameters (1) 4:4

part (53) 3:17 13:21

32:13 48:17 64:3

67:16,20,25 71:16

82:8,13,16,17,22

83:19 100:9,17 102:16

park (1) 158:17

65:13 66:16

77:2.7

per (2) 111:23 121:15 perceive (3) 83:24 122:19 127:5 perceived (1) 200:19 percentage (1) 40:20 perception (10) 132:10 133:11 134:11,22 138:4,6 202:1 206:2 210:6 212:16 perform (5) 83:21 172:12 174:11 199:22 performance (17) 60:6,6 66:2 72:4 76:23 117:23 122:7 129:17 131:14 145:7 146:4 151:1,3 159:2 210:18 216:24 220:24 performancerelated (1) 131-11 performed (1) 146:8 performing (4) 122:1 144:13 150:19 178:7 perhaps (21) 26:20 35:3 12 42:12 46:18 51:4 102:16 115:22 137:17 143:19 149:23 150:5 154:22 155:14 157:15 183:7 184:23 186:18 197:15 198:8 207:1 period (9) 48:1 107:8 111:15 160:14 165:12 200:21.21 201:20 206:16 person (5) 69:13 116:13,15,15,17 personally (1) 109:20 personnel (2) 131:8 perspective (4) 31:24 86:2 161:20 162:21 pertinent (2) 16:1 183:1 peter (36) 9:4,10,25 10:2,4 16:23 18:17,21 19:20 21:15 22:10,23 29:21.25 30:11 37:15 45:20 46:12 52:14,18 55:25 56:10,14 58:13 61:5 63:14 205:25 207:18,20 208:2,22 209:1,4,17 211:25 220:11 phase (7) 80:18 123:8 195:9,14 199:15 200.11 204.13 philip (15) 1:7 9:2 45:19 74:12 108:5 110:12 111:6.9.12.20.23 112:5,12 113:12 224:3 phone (2) 167:7 217:8 phrase (2) 9:25 16:6 pick (12) 59:7 60:19 74:4 78:25 86:8 126:16 129:2 165:16,17 172:16 174:13 205:19 picked (2) 130:17 174:22

picking (1) 184:2

piecemeal (1) 4:12

182:11

peoples (2) 41:24 84:16

piece (3) 89:13 134:8

pieces (1) 178:15 pitch (1) 5:16 place (17) 40:13 47:22 68:11 84:21 97:12.15 99:14 100:5.15.17 110:2 135:1,12 136:11 146:1 165:14 182:12 placed (6) 33:24 36:7 153:13,22 164:15,23 placement (1) 66:25 places (1) 205:10 placing (1) 48:12 plan (2) 7:22 195:9 planned (1) 196:22 planners (4) 58:14,16 59:23 90:24 planning (6) 9:18 14:22 58:19 67:6 191:18 192:19 plans (7) 121:4,5,7,9,10,11,21 play (2) 24:8 179:2 played (1) 42:6 playing (1) 209:3 please (28) 1:6 16:25 38:13 39:18 50:14 56:19 57:16.18.22 61:17 65:6 73:8 102:7 104:4,11 105:3,5,6 152:1 153:7 163:6.8.13 166:8 178:3 193:11 221:22 223:15 plenty (1) 98:12 pm (20) 9:9 18:16,23 19:6.19 53:12.13.15 56:12 102:8,10 104:5,7 112:19 163:18,20 183:11 222:1,3 223:16 pmn (2) 175:1.9 pointed (2) 62:14 86:17 points (7) 14:13 30:5 58:23 147:19 172:18 217:10.13 polite (1) 12:11 political (3) 10:10 15:16 16:6 posing (1) 71:7 position (7) 3:19 13:17 25:1 88:9 166:18 180:8 217:10 possible (6) 12:12 31:8 42:16 52:22 128:13 190:19 possibly (5) 75:15 130:19 159:13 185:20 190:18 postdates (1) 97:16 postmeeting (1) 175:2 posttender (1) 53:22 potential (3) 38:18 41:25 62:25 potentially (3) 29:11 44:6 70:16 powell (11) 3:14 8:24 9:24 13:7,8 15:10 16:22 17:8 23:7,10,14 ppq (2) 38:3,5

109:2 110:15 185:7 189:9 204:15 practice (28) 30:15 68:23 95:20 101:6 117:17 118:25 119:4 121:16,25 130:6,16 145:11 146:2 177:1 179:24 180:5,15 183:5,18 184:9,16,25 187:21,25 188:4,19 189:13 191:8 precious (1) 12:21 precise (1) 24:12 precisely (2) 75:24 136:22 preconstruction (3) 94:14,17 97:20 precontract (2) 48:3 176:3 precursor (1) 50:20 predicated (1) 130:14 preexisting (1) 187:14 preferred (4) 28:7 47:25 48:14 54:10 prejudge (1) 51:12 preliminaries (1) 185:6 premeet (1) 46:3 premeeting (1) 44:20 premium (1) 21:9 prepare (5) 79:8,20 81:4 89:3 188:14 prepared (9) 57:1 81:14 99:24 143:11.14.18 169:14.19 195:19 preparing (2) 82:24 95:12 prequalification (5) 25:8,16,20 26:4,5 prerogative (1) 91:22 present (11) 17:20 24:2 45:20 46:12 92:12 95:7 147:3 170:3 174:17 176:5 213:10 presented (3) 4:25 146:20 219:1 presenting (3) 175:25 176:16 177:2 preserving (1) 9:14 pressing (1) 94:20 pressure (5) 10:10 112:16 196:23 210:20 211:3 prestart (1) 92:11 pretty (3) 3:8 123:13 138:17 previous (9) 18:23 19:12,20 23:9 175:4 178:10,18 196:24 206.18 previously (3) 153:21 164:14 214:13 price (19) 12:16,19 30:16 31:9.18 32:5 33:2,5,9,12 35:9,17 49:14,18 51:14 54:4 57:1 130:12,14 priced (3) 30:7 50:8 52:24

prices (11) 5:5

pricing (1) 36:23

primary (6) 7:12

30:1.12.24.25 31:4.7

34:25 35:1,5 49:16

78-18 82-5 99-16

product (4) 59:2,18

products (5) 71:25

66:22 216:15

pqq (9) 26:11,12,16,18

28:3,9,13 37:9,9

pqqs (2) 25:9 26:3

practical (6) 108:23

10:23,25 12:15 14:3,4 priming (1) 185:23 principal (34) 5:25 165:17 166:4.8.18 168:8 169:4.9.14.19 170:8,14 171:6,10,17 172:3,9,12,25 173:2,18 175:9,11,12,12,19 176:5,10,24 177:10 188:11 193:7.16 195:8 principles (1) 183:15 print (1) 78:10 prior (7) 20:10 48:24 74:17 76:2 165:10 166:5 171:6 prioritising (1) 32:19 privy (2) 135:8 171:22 proactive (2) 206:4 213.17 proactively (1) 214:5 probably (10) 56:18 62:2 107:24 134:21 149:20 156:12 163:2 182:10 189:14 197:1 problem (17) 11:9,10 47:13 69:5.7 74:8.14 76:1 87:4 124:8,9 127:5,9 130:22,24 154:13 156:5 problems (2) 8:2 200:17 procedure (2) 27:9 33:24 proceed (3) 10:21 17:2 26:19 proceedable (2) 7:23 25:22 process (69) 19:14 21:7,7 24:5,7,10,11,22 28:10 29:10,12 30:20 31:10.11.16 33:3.24 37:3 40:3.5 41:11 44:3,8 45:3 46:21 47:14 50:7,11 51:21 52:3 54:2,5 57:3 68:11 71:17 87:7 91:16 94:23 110:25 119:24 121:4 123:3 125:2,3,9,14 126:4 127:8 135:1.2.11 138:8 146:25 151:12 160:2 166:20 180:23 183:16 185:13 187:1 188:25 189:2,3,8,16 196:7 198:4 210:10 214.3 processes (3) 132:17 134:13 135:3 procurement (25) 8:11 13:24 14:5 18:14 19:14.25 20:13 21:22 22:15 24:21.22.23 25:3 34:9.13 41:11 50:11 54:3 79:8,21 81:4,7,10,11 94:22 produce (2) 78:6 80:17 produced (14) 3:5,8 7:21,21 13:4,11 21:19 74:19 75:3,4 77:6

180:10,12 181:18,19 professional (15) 16:12,17 24:14 36:6 82:23 89:3 145:7.15.23 146:4.22 151:2,12 196:21 217:23 professionally (2) 20:10 198:12 programme (23) 7:4,14 9:14 10:21.25 11:2.6 12:10 18:24 19:5.16.25 22:14 38:19 39:2 40:1 128:7,15 146:9 157:4 182:4 202:11 208:23 progress (31) 4:6 9:7 17:13 45:14 93:17 94:1.16 95:6 135:22 141:22 142:16 144:15 145:12,21 146:6,15,17 150:19 169:23 174:13,16,20 175:7,14 202:14,24 207:11,13 210:7 213:10 216:17 progressed (1) 180:14 progresses (2) 188:15,21 progressing (2) 9:12 112:9 progression (1) 4:1project (247) 1:18,20 2:10,20,23 3:9,18,21 4:5.14.22 5:17,17,19,19 6:10 7:2.13.14.18.23.23 8:9 10:5,7,20 11:2,14 12:4.7 13:18 14:14,19,21 15:20 16:2,14 19:1,22 20:4 21:5 25:18 33:19 38:11.20.22 39:10 42:1,5,21,25 43:5 49:8,11 62:20 65:22 70:17 71:14 73:17 78:24 79:3,20 80:16 82:1 83:22 84:4.14 85:13 86:6 88:17 91:15 98:6.13 100:1.20.23 101:11 106:16,22 107:1,11,13,17,22 108:13,15 109:3,19,22 110:18 111:14 112:14,18,18,19,20,23 113-1 2 5 11 19 114:6,14,20,20,22,25 115:1,3,4,7,11,15,16,20,21,23 116:5,6,7,10,11,11,13,14,19,20 117:2,4,7,21 118:22 121:25 122:1,4,9,21,22 123:4.7.10.16.18.23 124:2 125:1 126:23 128:23 130:24 131:10,22 134:16,19 137:8,18 138:2 140:1,2,4,7,18

141:1,14,15 143:4,23

150:6,15 151:6 152:24

144.9 16 147.10 24

158:8,21,23 159:11

154:12 156:5

160:1,4,8,16,17 161:9 162:8.13 165:9 166:1,6 169:10 172:22 178:10.16.17 179:14 180:1.6.19 181:1.5 182:18,21 183:1,20,21,22 184:6,7,11,13,14,18,22 187:5,18 188:15,16,21 193:6 194:24 195:15 197:21 200:4 11 201:19 202:11 203:11.18 204:3,6,10,14 207:25 209:3 212:5,15 213:4.22.25 220:10 221:1 projects (20) 12:15 14:6.7 38:12 39:17 100:2 107:14.17 109:17,21 110:4.6.8.21 112:12 116:4 178:11,18 184:19 203:12 promise (1) 22:16 promised (4) 82:14,19 85:18 143:7 prompt (2) 88:8 137:1 proper (1) 66:1 properly (3) 116:5 133:12 162:16 proposal (10) 18:4,5 58:25 79:18 82:15.19 83:5.10 84:11 146:21 proposals (7) 32:15 68:6 118:2 120:5 121:9 129:8,24 propose (4) 32:15 79:7 132:7.23 proposed (11) 6:18,18 42:19.22.23 61:6 71:5 79:20 85:6 120:12 proposing (4) 15:8 59:24 120:6 212:10 provide (18) 80:11 117:22.24 118:19 124:9 135:18 146:10 153:13 159:17 168:3 173:14.17 177:11.24 181:15 190:17 213:17 216:15 provided (15) 31:23 80:22 83:13 100:25 101:8 115:18 181:21 183-1 23 185-18 186-2 189:13,14 191:8 219:11 providers (1) 129:19 providing (8) 29:25 117:6 118:10 142:5.25 146:19 161:5,18 provision (2) 132:20 185:9 provisions (1) 172:24 provoke (1) 77:1 public (2) 12:25 93:10 published (3) 24:15 25:5 87:18 pull (1) 29:4 pulled (3) 28:18,19 122:1 pulling (2) 29:2 88:14

purely (4) 40:21 67:4,4 144:13 purpose (6) 7:15 44:23 82:7 180:17 181:2.9 purposes (1) 103:19 pursuant (2) 108:19 109:1 push (1) 147:14 pushing (1) 155:25 puts (1) 175:13 putting (4) 23:25 137:8 192:24 221:15 puzzled (2) 135:24 211:12

q (660) 1:17,25 2:3,16,20 126:5.14.16 3:3,11,13,15,22 5:1 6:23 7:9,24 8:10,21 9:12 10:12 11:5,8,19 129:2.10 12:5.9.24 13:3,11,13,16,20 14:9 15:6,9 16:3,6,18,21 17:18.20.23 134:3,9,20 18:2,13,19,21,23 19:4,19 20:1,19,24 136:5,13,19 21:1,11,14 22:19,25 23:2,6,8,10,12,17,22 24:4,17,19 25:4,11,23 139:3.22.25 26:2.7.25 27:7.18.25 28:6,14,17,23 29:6.9.16.20.24 30:4,11,15 31:5,8,19 32:20 33:1,16 34:4.15.20.22 35:20,22 36:1,9,12,18 37:2.20 38:5 39:13.25 40:10.12.18.24 41:21 42:18 43:4.11.18.22 154:18.25 44:2,5,15,23 45:6.9.13.15 46:2.7.10 47:9,11,21 48:7 49:7.10.13.18.23 50.2 25 51.7 16 22 161:6,21 52:4,8 53:5,8,20,24 54:3.7.15.23 55:1,6,8,19,21 56:6,14,20,25 57:4 58:22 59:5 60:5,15 61.22.25 62:6,16,18,24 63:3.5.23 64:3.6.19 65:7.13.25 66:12,16,19,22,25 67:8.20 68:8.15 69:3,9,22 70:2,5,15,22 71:6,12,20 72:9,15 73:7.9 77:12.15.18 78:1,12,16,23 80:9,15,25 81:4,13,21,24 82:4,7,13,17,21 188:7,19,24 83:2,4,8,18 84:9,23,25 85:12.15 86:8.15 87:8,17 88:1,8,13 191:4,11,23 89:10.23 90:11.20.24 91:3 92:1,4,7,23 193:1,19 93:1.6.14.16 94:1.8.18 95:5.25 96:8.16.24 195:1,3,14,19 97:3,15,19,25 196:2,10 197:17,22,25 98:8.20.23 198:15,23,25

101:2 105:14,16,18,25 199:3,7,14,21 106:2.4.7.19.25 200:3.8.23 201:11.18 107:3,5,7,9,19,23 202:2,4 108:2,5,8,12,15,18,22 203:6.17.20.22 109:1.6.13.15.19 204:9.13.17.20 110:1,3,8,11,18,23 205:6,8,10,18 206:21 111:1,6,11,18,21 207:2,17,22,25 112:1,22 113:14,22 208:2,6,11,15,19 114:4,13,16 210:13,18 211:12,15,17,23 115:2,6,9,19,23 116:2.4.10.18.23 212:9.12 214:18.21 117:1,4,9,13 215:1,10 216:23 118:15.24 119:4.10.16 217:1,17,21 120:8,11,16,19,23 218:1,3,5,9,11,22 121:14,17,19,23,25 219:7,10,13,15 122:6.8.10.13.15.17.19.24 220:6.21 123:6,10,19,22 qs (3) 5:19 36:2,7 124:11.13.21.23 qualifications (1) 106:8 qualified (3) 20:11 127:5,13,15,22 84:19 89:14 128:1,5,11,16 qualify (1) 25:19 qualities (1) 26:24 130:5,8,10,12,16,20,22 quality (44) 12:16 21:11 131:1,3,7,9,13,15,20,23 28:12 30:6,12,16 132:3 133:1.11.17.19 31:6.9.12.15.16 32:13 33:6,7,13,14,18,20,22 135:3.7.13.16.23.25 34:6 40:2.25 45:7,12,17 46:20 137:4,7,11,20 59:12,16,18,19,25 138:1,13,15,18 65:1 84:19 127:19,23 199:19 203:14 204:23 140:6,11,14,23 205:1.4 208:23 209:4 141:5.13.18.20 216:15 220:25 142:1.3.9.14.19.23 quantity (3) 2:12 20:11 143:3,6,10,13,17,22 33:25 145:11.16.18.20.23.25 quarter (1) 221:10 146:13,23 147:1,5,7 queried (1) 148:3 148:25 149:22.25 queries (19) 62:10 66:7 150:4,8,11,18,25 68:4,9 125:8 126:21 151:8,14 152:16 153:2 127:2,6 133:13 149:8 157:4.12 159:25 155:3,8,19,25 160:4,7,15 156:18,24 157:19 161:23,23,24 158:2,19 159:5,9,14 query (12) 60:15 160:4,7,11,14,18,23 67:15,18,23 68:1,3,16,24 70:25 162:2.6.10.12.15.19 73:1 94:8 157:12 164:21 165:4,7,16 question (43) 37:9 166:3 167:12 38:6,7,13,16,17,18 168:10.13.15.18 39:9.14.15.18 169:2,7,12,17,21 41:13,15,18 42:18 170:1,3,12,16,24 52:4,4 70:23 71:7 171:4.9.12.14.20.23 74:17 78:4 84:9.22.23 96:24 99:17 105:3 172:8,11 173:25 174:3,9,13,22 118:23 119:3 175.4 18 176.5 13 22 137-21 25 141-21 177:5,15,20,22,24 143:12 154:17 157:24 178:2,5,14,21,24 159:4 162:9 165:16 179:6.18.22 180:4.8 166:16 173:12 183:3 181:2,16 184:6,13,21 184:12 221:6 185:4.16.21.25 questionnaire (1) 25:16 186:2,6,10,20,22 questionnaires (2) 25:8 187:10.14.20 questions (46) 1:8,18 189:3,8,15,19,21 5:24 26:20 31:12 190:9,11,13,21,25 33:22.22 37:9,14,16,21 39:5 192:1,10,12,21 41:9 43:12 45:7,12 58:8 75:18 100:19,19 194:10.14.20.24 101:16 22 25 102:12,15 104:22

143:22 153:17 164:3,6 193:10 215:15 221:4,12,14,19 222:5.7 224:5.10 quick (2) 64:10 124:17 quicker (1) 19:17 quickly (8) 10:22 52:16 118:5 123:17 124:7 128:12 135:21 147:24 quite (26) 12:25 16:10 25:17 33:14 99:20 104:16 115:4 116:1 117:10.15 119:14 124:1 125:22 138:9 155:20 156:12 158:25 188:1 196:20 198:1 201:21 205:1 207:4 214:19,19 215:7 quo (1) 126:24 R radically (1) 99:20 rainscreen (8) 58:17

73:11,16,18,21 74:9 76:2.14 raise (5) 22:2 65:25 83:15 86:2 203:7 raised (26) 60:15 61:16 67:23 68:16 71:2 73:2,22 74:6 75:2 76:12 22 77:22 88:20 98:23 138:22 139:12 152:6 164:7 166:17 167:17 171:21 172:18 201:6 202:12 206:18 220:22 raising (7) 32:23 73:1 77:2 127:6 133:13 161:23 206:15 ramps (1) 93:2 range (4) 28:4 35:19 107:14 160:4 rapid (1) 63:1 rare (1) 187:4 rates (1) 20:22 rather (7) 5:22 53:12 78:9 114:24 116:13 127:8 209:10 ratio (1) 33:10 rbkc (2) 12:11 90:24 re (8) 108:10 152:18 157:4,8,12 173:10,11 196:18 reach (2) 159:12 182:7 reached (3) 13:22 88:9 101:16 reaching (1) 159:7 react (2) 42:12,15 reaction (1) 155:14 read (26) 3:15 4:19 13:11 23:18,23 52:5 73:3,5,5,23 75:16 82:4 85:12,20,21,24 89:11 105:14,25 114:9 156:13 185:8 198:18,20 212:9 213:7 reading (8) 62:3 74:21 82:7 86:18 87:3 148:17 183:7 198:16

reads (2) 18:15 175:8

85:22 104:18 163:21

ready (8) 1:11 58:2

206:14.17.18

105:1 113:6 125:24

137:19 140:15 141:16

real (6) 41:10 42:12,16 84:4 213:23 214:2 realise (1) 90:14 realised (1) 191:4 realising (1) 47:4 reality (5) 129:12 155:8 180:8,24 184:22 really (31) 10:21 16:8 22:21 23:2 25:14 29:7 36:2,3 40:11 44:12 49:19 69:7 70:20 95:1 99:20 111:9 112:15 114:2 136:1 138:11.14 173:23 179:4 183:5 196:3,4 199:15 209:23 210:11 222:14.22 realms (1) 6:20 reason (3) 4:23 28:6 75:11 reasonable (2) 30:22 37:25

reasons (4) 5:13.14 112:13 132:8 reassurances (1) 59:24 reassure (1) 47:18 reassured (1) 29:4 rebrief (1) 79:20 recall (41) 3:15 21:13 23:21 46:5 48:5 49:25 59:9 60:5 73:13 74:20.21 75:12 76:20 77:18 92:1 96:8 97:3 111:9.10.17.18 113:17.19 114:2 139:23 140:21 141:10 142:13 144:8 164:6.17 165:1 168:16 170:17,17 176:17 185:5 198:10 204:4 210:10 217:20 recalled (1) 76:9 recap (1) 47:23 receipt (1) 31:22 receive (2) 75:6 187:4

received (16) 5:5 16:2 49:10 56:14 62:10 reflected (3) 125:3 71:22 72:9 75:5 82:10 148:1 217:15 83:14 88:8 95:11 reflects (1) 181:13 97:18 187:3 210:14 211:12 receiving (1) 62:9 116:4,10 recent (1) 212:4 refusal (1) 162:2 recently (4) 73:22 105:14,25 189:22

recognise (2) 118:7 196.19 164:24 recognised (5) 50:8,15,22 86:4 125:9 recollection (9) 25:9 49:23 54:18 74:25

142:18 recommencement (1) 29:10 recommend (2) 67:8 129:15 179:2

recommendation (5) 7:13 14:15 15:18 17:3 93.6 recommendations (6)

75:1 77:1,10 111:25

recipient (1) 8:24

6:7 7:9,11 17:11 23:21 73:23

167:1 recommending (2) 21:22 29:9 reconfiguration (1) 15:5 reconfiguring (1) 14:19 record (7) 20:1 31:3 80:19 92:6 101:10 171:1 192:1 recorded (2) 78:17 168-25 recording (3) 75:1 78:3 192:8 records (5) 30:19,23 80:12 81:1 84:14 redefine (1) 7:3 reduce (1) 57:1 reduced (1) 6:13 reduction (1) 54:3 reed (13) 104:11,13,14,23 112:18 163:4.21 170:1 182:1 221:11 222:4,13 224:8 reemphasised (1) 154:6 refer (10) 80:2 147:15 148:5 151:15 164:17 167:16 182:16 190:6 201:7 205:13 reference (10) 47:11 49:4 50:4 113:14 129:11 149:16 164:25 201:25 203:2 210:3 referenced (1) 39:3 references (1) 62:14 referencing (1) 194:5 referred (7) 87:8 114:25 149:15 173:21 183:20 187:24 211:20 referring (13) 17:16 62:1.2 70:15 88:4.6.7 92:23 114:21 126:6 148:7 156:24 206:12 refers (2) 113:7 114:7 reflect (2) 157:14 215:2 refurbishment (6) 81:13 108:3 109:19 114:14 refused (2) 171:10,12 regard (6) 74:16 82:13 140:8 153:14 173:15 regarding (4) 174:3 208:23 216:3,18 regardless (1) 51:15 regards (3) 166:10 193:10 194:6 regime (4) 165:14 171:7 193:15 207:7 regimented (1) 24:12 regional (1) 217:12 regs (3) 65:19 177:3 regular (1) 208:3 regularly (1) 156:7 regulations (28) 61:7

recommended (2) 93:8

99:2,7,15,18 100:9,19

63:13,18,22 64:4,7

65:14 119:20,21,23

120:25 121:3,4,13

| 164.2 165.9 0 10 |
|---|
| 164:2 165:8,9,10 172:22 173:16 174:25 |
| 175:9,20 183:8,14 |
| 187:22,25 193:17 reinforced (1) 71:25 |
| reiterated (1) 217:10 |
| rejected (2) 160:21,23 |
| relate (1) 72:11 related (5) 37:10 59:11 |
| 158:12 190:4 203:13 |
| relating (3) 4:5 163:9 182:7 |
| relation (16) 46:2 52:21 |
| 85:7,16 86:1 118:13 |
| 128:18 134:15 149:17 160:10 178:18 192:23 |
| 199:4 204:3,4 212:3 |
| relationship (5) 112:11 |
| 124:17 139:18 208:24 209:1 |
| relationships (1) 8:16 |
| relative (1) 182:22 |
| relevant (11) 38:25 39:21 47:24 70:16 |
| 148:4 150:12,14 |
| 172:20 180:24 192:14 195:12 |
| relied (1) 140:9 |
| relocating (2) 149:10,20 |
| rely (1) 84:20 remain (2) 76:25 152:22 |
| remained (2) 24:9 |
| 107:25 |
| remaining (2) 30:1 37:14 |
| remains (7) 4:4 103:4 |
| 197:6 213:21 214:14 |
| 216:9,16 remember (31) 27:2,4 |
| 42:24 45:9 53:21 |
| 55:7,19 57:18 91:7 |
| 96:14 97:7,7,7,20 111:23 139:16 148:23 |
| 151:6 164:19 170:18 |
| 176:9,13 186:21 |
| 187:12 195:25 196:2,5 211:19 215:10 217:8 |
| 220:4 |
| remembers (1) 77:16 |
| remind (5) 23:6 147:14 156:16,16 165:25 |
| reminding (1) 185:14 |
| removed (2) 214:18 215:11 |
| repairs (1) 109:25 |
| repeat (7) 105:3 116:22 |
| 119:3 143:12 162:9 169:16 184:12 |
| replace (1) 14:23 |
| replaced (1) 213:5 |
| replacement (4) 6:3 61:13 178:16,17 |
| replacements (1) |
| 109:24 |
| replacing (1) 5:25 replied (2) 66:8 215:12 |
| replies (3) 70:21 153:18 |
| 155:17 |
| reply (2) 62:11 153:19 report (45) 3:4,11,20 |
| 5:3,15 6:8 7:6 8:5 |
| 9:13 10:24 13:3,11,23 14:1 15:11,13,18,22 |
| 17.1 13.11,13,10,22 |

192:22 resist (1) 65:9 19:8.20.21 21:19.21 81:12 85:9,18 89:11 90:17 141:22 145:8 212:20 reported (3) 10:2 154:9 205:3 resource (9) 200:15 reports (10) 3:24 12:1 216:9 representative (3) 43:2 204:22 203:23 211:2 respective (1) 35:4 representing (1) 34:2 reprocure (4) 1:18 9:16 194:11 76:13 214:24 response (21) 17:7 reprogramme (1) 14:21 125:23 127:7 172:25 responses (1) 217:5 18:23 19:7.19 185:7 responsibilities (9) 99:13 132:15 134:11.15 responsibility (8) 115:21 117:7 122:11 125:6 126:10 132:21 140:8,12,19 144:10 176:7 181:14 requirement (5) 61:12 responsiveness (2) 205:10,12 rest (2) 86:5 120:2 136:24 129:7,17,24 153:23 164:16 173:16 176:2 resume (2) 104:1 223:11 retained (4) 98:3 117:22,24 118:5 retardant (1) 61:15 resident (15) 37:2 23 reticence (1) 97:10 38:1,3 40:3,8 42:25 returns (6) 6:12 30:6 residential (1) 109:21 reveals (1) 36:22 review (18) 7:3,14 39:1,1,4,6,21,21,24,25 188:14 209:8 46.13 19 47.2 5 12 18 reviewed (4) 34:12

16:12,25 18:24

22:1,8,12,16

23:3.13.18.23

202:23

206:19

70:11

13:18

17:13

reporting (1) 10:4

22:22 81:8 195:14

201:7,25 202:9,15

represent (1) 38:2

representatives (1)

117:6 216:5

17:2 19:11

reprocurement (1)

reprocuring (2) 7:25

request (6) 25:18

185:18 186:3

requested (5) 12:21

requesting (1) 217:6

requests (1) 127:18

179:25 196:7 209:4

64:21 67:24 134:7

requirements (18)

13:18 22:2,9,10

120:2.14.21.24

requires (1) 64:13

requiring (1) 180:3

requisite (1) 212:19

reservations (2) 50:2

47:14 132:17

138:8 216:8

134:14.18.25 135:5

residentfocused (1)

residents (37) 10:17

38:2,7,11,15,18,21

42:10 43:14,16,20

44:7,10,13 45:21

93:11 110:2 134:24

148:10 216:16

residual (2) 191:20

11:25 37:11.12

65:8,19

192:4

200:6

required (17) 5:21 21:24 48:21 86:20

34:16.18 36:6 61:5

195:8 revise (1) 14:22 resistance (1) 67:24 resolution (4) 125:8 126:20 127:2 153:14 resolve (3) 69:1 89:8 resolved (3) 70:6 88:20 201:2.12.23 202:5 207:15 210:24 213:1 resources (1) 217:14 resourcing (2) 200:18 respect (4) 25:1 188:13 respond (3) 63:5 173:8 responded (3) 70:18 33:22 63:6 64:8 67:19 69:23 70:2 94:22 120:6 153:12 166:23 167:25 173:7 185:18 186:3,6 215:24 216:20 217:4 219:20,24 137:13,16,22 138:3,16 96:21,23 113:25 139:12 154:4 156:9 responsible (7) 65:3 107:16 167:22 175:25 176:15 177:1 181:24 result (3) 2:16 102:25 results (2) 21:3 37:8 retardance (5) 61:12 64:13,20 69:16 77:22 return (2) 25:15 46:20 returned (2) 25:7 30:24 returning (2) 25:16 64:8 25:11.12 29:14.14 14:23 18:23 19:20 22:1,8 54:20 64:10 71:17 139:3 141:13,17 146:12 147:3 151:13 68:12 146:11 188:24 reviewing (1) 185:5 reviews (3) 6:11 60:11 42:25 47:23,24 48:2

revised (1) 21:21 revision (1) 19:8 revisions (1) 81:24 revisit (1) 134:7 revisiting (1) 12:6 rfi (1) 127:7 rics (2) 144:6 145:3 rightly (1) 66:6 ring (1) 152:1 riser (1) 182:5 risers (2) 159:21 182:16 risk (10) 62:25 69:6 100:4,15 130:12,16,19 137:9 191:20 192:22 risks (1) 132:19 robert (18) 3:14 8:4,24 9:24 13:7.8 15:8.10 16:9.11.22 17:8 22:12 23:4,6,7,10,14 robustness (1) 72:3 role (81) 24:7,7,19 32:12 34:2 64:3 65:16 67:14.25 68:4 79:10 82:13,16,18 83:12.19.23 84:9,10,15,15 100:9 107:10 108:2,5,22 111:2,15 113:23 114:24 115:6.16 118:13,16 119:13,17 120:20 122:1.2.20.21 123:1 136:25 144:2,4,9,11,17 145:14 146:2 147:11,15 150:8 154:14,16,20 156:4 160:19 162:3 166:19 167:21 169:4 172:12 173:14.17.18 175:12.21 176:10.25 177:9,10,12 178:7 196:25 197:2 199:23 200:7 209:2 210:18,19 roleplay (2) 41:8 42:11 roles (14) 107:3.5 109:8,11 132:15 134:11.15 137:13.15.22 138:3.16 139:12 195:12 rolled (1) 81:11 room (5) 57:19 163:10 206:7,12 221:14 round (1) 95:3 route (3) 13:24 21:22 210:23 routes (1) 19:25 rowan (4) 120:19 199:18,22 201:6 roval (1) 10:3 rules (2) 54:3 57:7 run (3) 8:17 184:21 212:17 runup (2) 125:18 196:8 ryd00003310 (1) 52:8 ryd000033101 (1) 53:10 ryd000033102 (1) 52:13 ryd00004154 (1) 58:11 rydon (136) 26:2,7 28:6 32:1,4,9,17 35:9,16 36:1,13,14 41:22

53:5,18 54:7,10 55:23.25 56:10.20.25 58:10 61:3,6 63:15 64:14 65:2.6 66:8 67:10.11.17 68:13,17,20,21 69:23 70:2,12 71:7,23 72:2 73:1,14 74:1 76:13 77:16 86:8 90:1 91:8 92:1 93:15 94:12 95.18.25 96:9,16,21,25 97:8 98:1.3.6.10.23.25 99:10 123:12,13 125:5,7 126:20 127:6 129:10.16.20 130:5.16 131:3 132:11 133:2,6,9,11,19,23,23 134:24 136:9 141:14.15 142:10,11,13 145:25 158:16 167:21 171:9 175:19,24 176:15,18 177:1 179:15 190:8,17 199.8 12 16 200:10,15,18 202:13 203:13 205:24 206:1 207:5.25 209:24 210:16,19 211:19 212:4,16,19 213:24,25 214-4 218-23 220:18.23 rydons (22) 31:23 57:5 86:10 98:25 124:8 125:2,14 130:12 166:19 176:8 192:25 199:19 201:2,12,22 202:5 204:23 205:11 209:9.21 216:23 safety (70) 21:11 60:6

65:11,19 70:16,16 81.14 82.4 85.1 87.9 90:12 96:9 98:3 99:16 100:20.23 101:3.7 102:17,19,21 137:9 140:17 157:25 162:15,20 173:1,12 175:13 176:1.14.20 177:2 178:6,8,9,22 179:1.3.9.13.20 180-16 181-6 184:10,23 187:15,16 188:13 189:4.10 190:3,16 191:2,5,14,16 192:2.4.13.16 193:15 195:20 197:12,14,18 199:4,10 220:25 221:1 sales (1) 43:8 same (19) 8:14 11:23 23:21 34:7 41:13,18 90:16 93:21 94:3.5 108:16 110:22 148:5 152:14 153:2 154:4 172:5 194:11 216:10 sample (1) 74:3 sand (1) 7:17 sat (3) 96:21 156:9 207:12 satisfactory (1) 143:3

satisfied (1) 205:5 satisfy (2) 86:13 174:10 save (1) 176:18 saves (1) 11:2 savings (8) 48:17,21.21 49:13,18 52:22,24 53:6 220:7

saw (18) 18:3 68:19 69:21 84:12 86:8,9 87:4 88:15 119:7 120.9 9 123.17 22 160:7 164:9 177:6 192:17 207:11 saying (36) 7:17 9:24 11:24 12:5,11 14:17 20:16 23:1 29:13 32:16 52:17 75:17 77:8 83:8.20 96:6 97:9 134:10 148:19 151:2 164:12 173:6 178:2.21 182:14 184:6.8.13.15.21.25.25 194:20 202:18 209:15 sb (1) 219:20 scale (1) 8:13 scan (1) 52:16 scanned (1) 75:5 scenario (1) 42:6 schedule (6) 125:6,23 141:23 144:7 191:19 192:19 scheduled (1) 133:21 scheme (7) 4:2,4 5:20 6:13,17,19 9:16 scope (45) 4:13 7:3.14 11:14 12:7 14:19 15:5 94:13 114:7 122:3 128:7 129:22 132:11,17 133:2.6.12.15 135:14,17,20 138:12 144:2,9 148:15 149:15,16 153:6,22 154:7,14 155:2,11 156:3.17 157:9 159:18 164:11,15 166:5 197:6 scoping (1) 153:14 score (14) 26:5 32:12 33:4,8,14 38:2 40:7,16,19,22 46:24.24.25 47:1 scored (14) 26:2,12 28:9 31:15 34:10,10 39.21 43.25 25 44.11 46:19,20 51:20 57:6 scores (14) 26:7 31:8,9,12,17 33:20 34:12 37:16 43:14.15.18.19.24 44.7 scoring (16) 26:16,18 32:13 34:1 37:21 38:5 40:1.8 43:12 44:8.14 45:3,11 46:22 47:3 51:21 scroll (3) 35:12 53:10 152:12 scrolling (1) 181:6 scrutinising (1) 162:20 scrutiny (1) 162:22 se (2) 111:23 121:15

second (26) 3:24 6:8 16:7 17:9 22:5 30:4 60:19 63:10 75:19 79:25 81:16.18 91:6 105:19 126:16 137:24 141:21 148:11,23 149:2,4,12,19 157:7 167:19 205:20 section (1) 27:9 sector (1) 12:25 see (270) 3:24 4:8,10 5:4,14,18 6:4,21,24 7:5.11 8:21 9:1 11:12,15,19 12:5,24 13:5,6,9 14:10,17 15:1 16:18.21.24 17:5.7 18:5,9 19:2,17 22:19.25 23:22 24:17 25:23 26:7.25 27:1.16 29:25 30:2.9.11 31:5 32:7,20 34:17,20,25 35:4.6.7.16 36:9.16.20 37:18 38:6,16,17 40:12 42:11 43:4,11 45:6.7.25 47:9.21 48:9,25 49:4,5 50:25 52:13 53:10 54:9.11.12.15 55:12,13,15,17,20,21,24 56:1,6,11,12 59:3 60:20 61:19 62:7.11 63:7,23 64:15,19 66:5 67:8 69:3.10.18 70:19 71:20 75:16 78:1 79:17,24 80:1,7,9,13 81:1 83:12 85:4.10.16 86:8,18 87:3,18,24 90:1,2,5,9 91:3 92:1,12,15 93:19,21,24 95:7,10 97:19 98:13 99:7 102:2.12 105:11.21 111:11 113:4 114:16 115:5 118:6 119:9 125:22 126:1 128:20 133:11 134:9 135:7 138:18.19.23 139:5,13,15 141:3,6 142:14 143:6 145:1.6.9 146:9.13 149:3,22 151:14,17 152:5,25 153:2,18 154:2.25 155:3 159:13 161:2,7 166:8,23 167:3,10 168:13 169:2 170.3 6 10 171.4 172:3,6,11 173:6,19 174:16 175:16,18,22 176:6,14,22 177:5,22 179:11,16 181:16 184:21 185:21.25 186:20,22,23 187:8 188:1.9.17 190:2,15,21 191:2,11,13,21 192:9,10,16 193:22,24 194:8,18 195:17 196:2,10 197:6,8,15,22 198-15 23 199-7 202-2 203:6,15 204:20 205:6,21 206:9 207:2,17 211:12

| 212:1,12,18 214:10 |
|---|
| |
| 216:1 218:20 220:7 |
| 221:9,18 222:4 |
| seeing (8) 42:14,24 |
| 49:23,25 94:5 159:25 |
| |
| 180:20 186:21 |
| seek (4) 14:15 54:3 |
| 64:14 159:12 |
| |
| seeking (6) 32:21 61:19 |
| 152:20 154:23 156:2 |
| 215:8 |
| |
| seems (3) 152:3 190:2 |
| 194:4 |
| seen (7) 11:8 53:4 |
| |
| 68:20 165:5 169:3 |
| 198:14 214:4 |
| segues (1) 60:15 |
| |
| selected (7) 49:14,19 |
| 50:14,23 51:5 |
| 90:21,23 |
| |
| selection (3) 24:6 37:24 |
| 53:22 |
| send (13) 43:7 54:19 |
| |
| 56:15,16,19 96:12 |
| 152:7 153:2 167:3 |
| 169:7 194:4 212:10 |
| 214:10 |
| |
| sending (2) 151:20 |
| 164:8 |
| sends (2) 69:11 166:13 |
| |
| senior (4) 107:3,5 |
| 112:18 114:19 |
| seniority (1) 107:21 |
| |
| sense (10) 117:8 159:3 |
| 161:16 167:9 179:4 |
| 192:6 201:21 209:23 |
| |
| 210:11 213:23 |
| sensitive (2) 33:12,13 |
| sent (16) 15:23 37:7 |
| |
| 54:7 55:1,23 56:8,11 |
| 69:19 125:4 148:2 |
| 156:21 179:14 211:24 |
| 214:6,9 218:6 |
| |
| sentence (5) 22:5,11 |
| 85:25 91:6 157:22 |
| |
| |
| sentiment (1) 183:17 |
| |
| sentiment (1) 183:17 separate (5) 73:21 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,225 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,225 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4.6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,225 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,225 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 services (11) 94:14,17 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,225 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 services (11) 94:14,17 107:16 114:6,7 115:18 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 services (11) 94:14,17 107:16 114:6,7 115:18 144:6,7,25 145:4 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 services (11) 94:14,17 107:16 114:6,7 115:18 144:6,7,25 145:4 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 services (11) 94:14,17 107:16 114:6,7 115:18 144:6,7,25 145:4 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 services (11) 94:14,17 107:16 114:6,7 115:18 144:6,7,25 145:4 |
| sentiment (1) 183:17 separate (5) 73:21 119:22,22,25 191:8 separately (1) 76:9 separation (2) 74:9 76:1 september (25) 93:18 94:6 151:18 152:16 153:20 154:10,12 157:2 160:10 164:13 165:18,20,24 166:14 167:4,6 168:6 169:1,7,13,17,23 171:15,24 193:4 serious (3) 74:7 214:19,19 seriously (2) 69:8 214:5 serve (2) 180:17 181:2 served (1) 6:2 service (11) 108:19 109:1 112:17 114:18,25 135:19 137:3 161:19 191:19 192:19 201:22 services (11) 94:14,17 107:16 114:6,7 115:18 144:6,7,25 145:4 |

112:23 113:7 161:1 73:2,14 74:6,13 75:11 sessions (1) 216:7 76:13 77:2 90:7.19 set (15) 4:5 8:16 15:1 91:4 92:16,19 93:22 48:14 53:8.17 64:15 94:9.21 95:11.12 71:14 106:8 167:1 96:5.16 107:24.25 192:5 210:23 111:22 112:3 113:8,10 212:13,25 217:9 114:17,21 123:14 setting (8) 79:21 120:6 138:25 144:16 146:10 156:6 180:2 152:5,13,16 154:9 185:22 195:11 198:11 156:15,22 157:21 seven (3) 110:16 202:18 160.22 24 166:13,21,23 167:4,19 several (1) 205:10 169:2 171:25 193:4.24 shall (1) 149:23 194:3,5,16,24 196:12 share (2) 25:2 30:15 198:10,17 201:15,18 shared (2) 71:19 135:10 205:18 208:17 sharing (1) 30:24 209:15,16,19 218:7,14 shes (6) 149:6 220:12 152:4.6.11 172:19 simple (5) 52:20 105:1 221.13 115:20 122:18 167:20 shiny (1) 10:14 simplified (1) 35:1 shoddy (2) 205:23 since (6) 4:2 62:4 106:13,15 109:9 216:6 206:19 short (15) 22:22 43:12 single (2) 21:6,9 52.4 57.25 58.8 sir (51) 1:3.9.11.13 101:18 102:9 103:19 57:14,18 58:2,5 101:17.20 102:5.11.14 104:6 105:1 131:7 163:19 221:4,17 222:2 103:3,14,18,22,25 shorter (1) 105:20 104:3,8,12,14,20 shortform (1) 71:9 162:25 shortly (3) 79:2 147:23 163:2,12,17,21,23 209:18 182:1,10,19 should (19) 17:1 183:3.13.24 184:1 32:15.23 37:21 67:9 215:16.19.22 79:22 86:16 93:7 221:5,8,11,17,21 98:23 128:24 132:7 222:4.11 137:17 138:1 148:15 223:1,3,7,10,13 166:19 167:1,2 198:11 sit (5) 24:19 66:9 212:16 104:15 119:25 183:11 shouldnt (1) 156:17 site (16) 61:2 119:13 show (5) 39:14 75:19 128:6 129:14 134:1 145:1 173:7 200:23 158:11 190:7 showed (1) 68:10 199:23,23 showing (2) 55:10 77:1 201:6,8,24,25 202:15 shown (2) 76:17 168:10 203:1 204:24 shows (1) 55:8 sites (1) 8:12 sitting (4) 105:6 111:23 si (1) 168:1 side (3) 119:16 120:1,1 207:11 223:9 sift (1) 26:13 situation (6) 4:10 126:2 sign (2) 168:4 190:5 138:4 167:1 198:3 209:8 signature (5) 55:3 56:2.7 105:12.22 six (4) 28:15 110:16 signed (9) 30:23 54:12 185:3 204:11 87:22 88:22 95:11 sixth (2) 36:19 129:3 97:12,15,18 109:3 size (4) 26:14,23 significant (14) 5:8 160.1 5 59:22 117:10,15 skill (1) 116:8 123:1,16 124:1,8 skills (2) 110:22 116:16 127:24 131:8 132:12 sl (2) 90:7 97:17 150:1 156:5 184:20 sleeving (1) 159:21 significantly (1) 32:5 slight (1) 89:7 signoff (1) 65:21 slightly (2) 23:24 71:8 signs (1) 166:21 slow (1) 4:2 silcock (2) 125:10 slower (1) 19:18 205:14 slowly (1) 128:22 similar (4) 10:7 28:11 small (1) 103:11 47:4 159:16 smith (7) 61:3 126:8 149:6 153:3,4,18 simlysic (1) 172:2 simon (84) 8:25 15:10 164:12 16:24 21:18 23 25 smoke (2) 98:16 152:9 22:7,12,18,22 23:3,13 smooth (4) 158:4 48:8,10,11 50:3 196:18 198:12 218:17

snelling (3) 87:12,19 88:3 soft (1) 213:16 sol (1) 108:10 somebody (4) 69:6 89:11 119:17 211:8 someone (8) 56:15 78:16 92:21 123:15 164:22 167:24 170:13 197:5 something (32) 3:1 7:16 12:14 25:2 29:15 37:22 39:20 42:8 61:10 62:3 68:21 70:24 71:18 84:13 86:8.16 89:8 103:12 122:16 125:21 130:15 137:17 138:5 143:5 147:3 153:9 155:1 157:19 161:8 164:3 186:8 192:15 sometimes (11) 16:10 25:18 40:21 93:2 103:7 104:18 141:10 144:14 155:14 187:24 208:7 somewhat (1) 210:1 somewhere (2) 36:10 soon (3) 114:1 125:18 138.7 sooner (1) 182:23 sort (25) 7:16 8:14 24:25 25:11 26:23 39:9 41:8 47:2,3 49:15 50:23 51:12 62:10 66:5 67:3 80:20 81:8,9 83:1 84:4 94:15 99:25 124:5 182:6 209:11 sorted (2) 68:22 69:25 sorts (2) 160:7.15 sought (2) 48:20 76:23 sound (2) 78:19 155:12 sounes (4) 31:25 32:3.8.12 southbank (1) 106:13 span (1) 160:11 speak (1) 109:25 speaking (1) 217:8 spec (3) 62:15 64:10,22 specialist (4) 83:1 84:4 86:23 93:12 specific (4) 71:7 96:24 139:9 200:21 specifically (10) 34:5 54.19 65.13 72.4 73.2 136:20 139:24 140:22 150:15 179:9 specification (5) 61:16 62:13 64:16 76:24 181:18 specifications (4) 120:13 180:10.22 181:4 specifics (2) 23:20 144:4 specify (1) 64:11 speed (4) 3:18 112:25 113:15 128:22 spell (1) 167:14 spelled (2) 31:12 74:21

spend (1) 155:20

spending (4) 12:23

snapshots (1) 199:25

152:22 200:4,7 spent (1) 10:14 spoke (1) 69:25 spoken (5) 21:18 119:16 126:18 194:3 203:8 spotted (1) 86:16 spread (5) 63:1 65:9 85:5,8 86:1 spreadsheet (2) 52:20 53:12 spring (1) 123:7 stage (50) 1:22 5:25 6:5 7:6.24 9:8 25:24 26:11,18 27:24 28:3,13 55:3 80:11 85:12.24 86:7 90:6,11,20 94:12 103:20 110:19 113:18 132:24 143:20 146:3.8 150:21.22.23 151:6 152:24 156:15 158:8.15 159:1 160:1,5,8,10,15 162:8 176:17 182:3,8 186:15 195.20 197.10 215.7 stagebystage (2) 189:3,8 stages (3) 9:23 15:2 50:11 stakeholders (1) 122:25 standard (3) 30:15 63:24 145:3 standards (13) 64:12.16.19.23.25 65:1,6,11,24 66:11 69:19 93:10 126:11 stands (1) 4:4 standstill (1) 48:1 start (20) 1:17 6:8 35:3 52:11 72:18,21 97:10.13 100:2 130:18 143:24 165:22 179:10 180:15,23 181:9 182:2 184:10,16 185:11 started (14) 1:20,20 10:5 33:3 94:24 135:11 136:3 147:24 168:9 196:7 198:4,5 201:21 216:12 starting (3) 129:14 202:24 215:7 statement (45) 2:4 13:20 15:24 31:20 37:5 40:15 49:1 59:5,15 72:19,20 73:4 75.13 20 76.18 78.2 88:1 105:19,20,25 106:7 108:8 124:24 143:24 146:14 147:7,8,21 148:6 151:16 153:25 154:2 155:5,20,21 156:2,21 159:15 200:12.13.24 202:4,8 203:10 205:11 statements (5) 72:18 105:9 106:4 120:5 200:9 status (13) 3:4,11,20,21 9:18 10:24 12:1 13:3 81.8 12 87.4 126.24 128:23 statutory (1) 120:24 stay (2) 91:15 147:20

stayed (1) 94:21 staying (1) 110:2 stems (1) 198:4 step (1) 12:7 stephen (3) 208:3 220:19,20 steps (3) 29:2 52:2 100:21 steve (27) 52:11,17 192:22,24 201:18 204.17 205.25 207:19,22,23 208:24.25 209:7.12.17 210:1,11 211:3 212:10 214:11 215:24 216:1 217:2.4.8.22 219:23 stick (1) 13:23 still (30) 5:11 10:13 12:6 14:2 15:4 17:8 23:10 26:21 28:3 29:5,12 80:24 100:1,7 101:11 106:17 117:23 128:22 146:5 154:13 158:22 169:9 182:1 186:23 187:16 196:25 217:19 218:25 219:1,6 stood (1) 2:23 stop (2) 7:13 163:6 stopped (1) 7:2 strands (2) 184:7,14 strategies (5) 81:15 82:4 90:12 102:17.21 strategy (44) 18:1 19:12 78:24 79:6 80:3,5,10,11,17 81:21 83:13.25 84:7 85:1 86:11 87:9,22 88:5,6,7,10,21,23 89:5,10,12,13,15,21 90:6,13,15 91:18 99:16.24 100:6.11.14 102:19 134:4 140:16 143:11,14,18 straw (1) 219:3 strike (2) 36:1 94:18 string (2) 149:3 186:11 strong (1) 97:2 strongarmed (1) 23:23 stronger (3) 32:5 140:2.4 structural (1) 91:13 structure (2) 101:6,13 struggling (2) 159:9,10 studio (11) 31:23,25 59:10 67:1 83:1,2 91.14 118.7 146.1 171:9 179:16 stunned (1) 213:2 style (1) 211:10 subcontracted (1) 87:13 subcontractor (2) 141:13.18 subcontractors (8) 92:18 94:16,23 97:10 141:19,24 202:5,6 subdesigners (1) 97:9 subject (14) 45:17 69:13 98:15 126:13 128-24 132-3 141-5 148:9 151:24 179:9 186:23 189:17 193:25 206:10

subjective (2) 37:9,16 submit (1) 29:14 submitted (5) 5:7 48:13 121:5.6.8 submitting (1) 29:5 subsequent (2) 199:6 217:18 subsequently (4) 74:17 85:21 136:5 172:11 substance (4) 59:18 196.4 215.4 5 substantial (3) 154:13.16.19 substantially (4) 26:3,10 35:17,20 substantive (2) 127:9,16 subsumed (1) 81:8 success (4) 7:19 38:11 112:15 214:1 successful (1) 213:15 sucked (3) 158:7.20 218:11 suffer (1) 202:24 sufficiency (1) 196:1 sufficient (3) 26:22 28:24 200:3 sufficiently (3) 6:13 173:11 174:3 suggest (6) 5:12 40:6 64:14 92:4 103:22 181:2 suggested (8) 15:19 55:16 99:20 138:20 149:15 156:15 196:24 214:24 suggesting (4) 91:23 126:2 132:5 138:4 suggestion (2) 126:1 215:10 sum (3) 35:6.8 36:1 summary (1) 4:9 summer (1) 180:20 supplied (1) 63:21 suppliers (2) 86:24,24 supply (5) 66:14 86:23 159:23 201:3 210:25 support (8) 116:16 119:13 147:4 159:7 177:24 178:3 212:6 215:5 supported (2) 15:8 116:15 supportive (1) 209:5 sure (36) 12:22 16:9 22:20 23 24:13 29:1 30:20,21 41:11,17 44:23 45:2 46:5 50:21.24 61:16 63:25 68:17 87:1 93:4,9,9 98:17 100:13 101:23 103:12 120:18 123:21 145:13 148:14 163:8,22 166:5 180:17 182:21 190:13 surely (1) 180:13 surprise (5) 161:8 178:12,21 179:5 220:5 surprised (12) 53:25 63-12 99-5 138-2 142:24 154:22 156:11 161:2,7,10 208:12 211:14

58:12,23 69:11

surprising (1) 143:1 surrounding (1) 59:11 surveyor (3) 2:13 20:11 34:1 sustainable (1) 36:23 sweep (2) 101:19,22 switched (1) 118:8 symptomatic (1) 130:24 synonymous (1) 114:24 system (8) 58:18 63:3 75:5 76:24 98:17 141:8 159:22 205:1 systems (1) 152:6

table (7) 20:17 35:1,1 36:19.22 157:2 170:4 taken (9) 22:13 26:22 69:7 119:12 161:4,8,17 176:24 186:14 takes (1) 175:11 taking (7) 9:23 23:24 100:22 131:21 136:24 174:6 176:10 talk (12) 14:6 22:23 57:18 58:20 67:17 68:25 116:13 120:16 123:15 163:1,8 191:9 talked (5) 41:20 51:1 66:14 139:23 204:17 talking (12) 11:13,16 49:20 65:2 66:20 67:9 139:20 149:19 152:8 160:9 200:20 204:2 talks (3) 15:21 92:20 208:25 tangent (1) 41:19 target (3) 14:24 52:23 213:12 task (1) 146:20 tasks (1) 145:13 taylor (1) 59:10 team (72) 16:13 24:14 30:16 31:14.14 32:14 42:4.11.14.22.23 43:8 67:16,20 82:11,23 99:2 107:6,12 112:10,19,20 116:14 117:22 118:1.21 123:2 124:4 129:19 131:11.19 142:10.20 145:7.15.23 146:4,19,22 147:3,20 148:21 150:6.9.11 151:2,4,10,12 164:24 165:5 167:15 172:22 173:4 185:23 190:8 198:7,17 200:18 201:3,13 203:4 207:3,4 211:4,7 212:15,15 213:24 220:10 teams (2) 205:24 216:5 technical (1) 31:24 telephone (2) 154:8 156:24 telling (12) 16:13 19:21

template (2) 166:9 195:16 ten (2) 28:4 101:19 tenants (1) 211:1 tend (1) 179:25 tender (68) 5:17 20:6 21:2 25:25 26:6,24 27:12,24 28:6,12,17 29:8 30:18,24 31:24 32:4,6,22 33:3,11 34:16 35:22 44:14 45:3,7,11 47:14,17 48:13 49:14.15.18 50:7,8,22 51:3,4,8,9,17 54:4 57:6 62:15 64:10 65:5 68:24 70:9 82:2,8,11,24 83:14 85:22.22.24 87:5,10,20 88:10,14 89:1,7,20 90:6,15,22 99:20 101:1 tendered (4) 20:8 36:1 57:1 90:18 tenderers (2) 40:7 49:17 tendering (11) 18:25 19:22 20:2,5,19,20 24:10 52:2 54:2 89:4,17 tenders (7) 27:4 30:19 31:3.14 40:22 43:7 51:13 tenstorey (1) 109:23 term (6) 108:1 109:10 111:22 115:13 118:8 179:3 terms (41) 11:3 12:9 13:18 41:24 44:2 46:23 48:12 71:9 83:9.21 107:21 114:5 115:14 117:11,16,25 118:11 120:2,2 124:4 127:16 129:17,23 132:21 141:21 143:6 144:10 146:6 150:19 151:1 159:6 168:7 181:8 187:11 191:9 193:1 205:4 211:9 213:19 215:16 216:9 terry (2) 140:25 141:8 terse (2) 157:10,14 test (2) 40:24 41:25 testing (2) 180:11 181:19 text (2) 55:22 149:8 thank (50) 1:13 57:14,20,23 58:5,7 101:17 102:4.5.7.23 103:2,5,11,14,15,16 104:2.4.12.14.19.23

24:24 25:21 27:18 28:4.18.22 30:23.24 32:24 33:10,13 38:4 40:14.17.20.23 43:6.9 44:22 49:2 51:20 53:1,15 54:7,14 55:10 56:3,8 59:14 63:24 64:18 65:5 67:20 68:16,22 69:21 81:19 83:14 87:16 91:5.16.21 92:3.6 94:6,20,25 95:3,14,14 96:4 97:17.20.23 100:17 107:2 108:1,4,11,25 109:5.15.18 110:3.17 111:5,17,22,24 112:21 113:4.13.15 114:2 115:4 116:1 119:21.22.25 122:14,25 123:8,9 124:2 126:13.25 130:2,13,19 132:24,25 134:3,9 137:19 142:2.13.18 145:3 149:19 152:10,14 155:7 165:14.15 170:11,21 173:19 175:2,3 177:14 178:1,4 179:24 180:24 185:1,8 186:16 187:10.13.19 190:23.24 192:12 193:17 194:11.13.20 195:11 199:25 200:20 201:8 202:23 204:19 206:8,22 209:15 210:5 212:11 214:6,16,17 216:20 217:15,20 219:11 220:1 222:8 223:4 theme (2) 113:20 themes (2) 114:2 140:8 themselves (5) 118:19 121:16 133:6 161:19 209:11 theory (1) 121:12 therefore (10) 7:12 43:4 112:16 114:18 130:5 133:13 147:10 149:13 159:6 209:13 theres (14) 12:15 30:22

35:19 54:21 79:15

86:3 92:15 110:24

theyd (3) 91:14 94:14

26:14.19.21 44:9.10

67:17 100:4 102:18

121:5 125:24 141:24

180:22 184:20

thing (6) 16:13 39:8

43:7 60:9 99:25

thinking (5) 62:18

thinks (2) 101:21

143:5 185:11 196:2,5

theyve (1) 26:17

thin (1) 196:3

110.20

46:7 49:19 54:10 65:1

theyre (18) 22:22

118:16

105:18 109:13

184:1 204:19

222:9,11,17,25

thanked (1) 157:11

132.5 168.1

thanks (4) 17:9 61:18

thats (160) 6:4 7:8 9:11

11:22 12:20,25 13:19

16:16 18:6 20:8 23:1,1

163:12.13.16.17.23.25

215:22,23 221:3,22,25

223:1,2,4,5,9,9,14,15

113.14 140.12 170.6

171:18 172:17 198:10

third (8) 6:15.23 64:9 79:3 80:1 84:25 189:24 190:13 thorough (5) 31:16 34:13 54:1 57:3 138:9 thoroughly (1) 41:12 though (4) 26:12 129:14 155:10,12 thought (25) 8:1 12:6 16:8 42:18 57:2 67:19 71:22 95:25 101:19 111:9 125:19 139:16 148:17 150:8 156:7 161:10,11,13 166:16 169:20 195:22.25 198:6,11 201:12 thoughts (2) 206:7 212:1 threat (2) 202:10 209:13 threatened (2) 210:21 threatening (3) 209-9 21 24 three (17) 12:15 28:20.24 29:7.14 30:1 39:18 51:13 81:14 90:11 109:23 134:24 137:5 151:5 171:5 191:10 220:16 through (35) 26:22 28:3.10 29:12 31:11 41:10 45:17 47:3 49:24 51:20 57:5 73:7 80:17.25 87:7 88:19 89:6 94:5,22 108:23 111:24 123:19 127:7 146:19 153:16 159:21 160:12 161:9 165:21 168:20 171:21 181:23 187:6 204:25 208:22 throw (1) 12:18 throwing (1) 5:23 thrown (1) 220:1 thursday (5) 1:1 18:6,6 21:21 22:3 thus (1) 91:15 tickbox (1) 145:5 ticked (1) 144:6 tiling (1) 159:20 time (125) 2:12,14,24,25 3:16 4:5,12,19 6:1 8:6 11:17,23 12:16,21 15.7 20.18 21.25 22:7,13,23,24 28:14 47:23 49:11,24,25 50:6 51:21 53:5.17 54:16 57:9 59:9 62:6.9.18.20.24 65:10,25 66:9,21 67:12.16 68:15 70:4,25 71:3,11,16 73:25 75:3,4 77:8 81:3 82:1.17 85:21 86:3,11,18,19,21 87:3 88:16 89:20 90:14 93:16 95:25 96:8 97:3 98.7 99.2 100.23 105:5 107:12 110:14 120:19 128:17 130:23 134:22 135:9,19 138:6

140:1,18,25 141:14 142:6.19.23 147:8 152:22 154:4 155:9,9,20 159:1 160:14.20 165:4 171:14 178:24 179:18 182:11 190:18 196:8 197:15 198:9 200:1,3,6 201:14,17 202:1,3 203:3 206:5.23 208:2.4.11 210:14 215:14,17 timeeffort (1) 205:24 timeline (2) 186:17 220:1 times (6) 10:7 73:15 94:21 102:17 157:16 timescales (1) 38:23 timetable (2) 38:20 39:4 timewise (1) 46:6 timing (1) 19:10 tmo (150) 1:22 2:1,23 3:5 6:2.16 10:9.20 12:1,11 14:15 15:14.17 16:16 18:9 19:7 23:18,25 28:7,9,14 31:14 34:11 37:7,8,13,20,22,23 40:9 43:17.20 44:10 45:4.4 47:17 48:2.8 51:14 52:18 53:5.18 54:25 56:15.20 68:13 70:11 71:23 72:2,17 74:23 75:5 79:11 80:12 81:1 82:25 83:4 84:14 86:15,17 91:11 93:6 98:9 99:19.22 100:11 112:4 113:23 114:10 117:5 118:14,17,25 119:4,12 120:3 122:19 124:8,9,14 125:4,10 129:13 133:7 134:22 135:18 136:25 137:2 138:10 140:16 141:11 142:20 143:6,7 144:18 147:13,14,25 151:19 153:13 154:5.14 155:8 158:9,21 159:17 160:23 161:4,17,18,23 162:6.10.16 164:7 165:5 166:19 167:23 168:6,24 169:3,14,18 170:13 16 21 171:5 172:8,11 174:5,9,11 175:20 176:5,7,10 177:10,12,16 192:17 193:2,16 194:21 197:11 198:7 199:5 211:18 214:7 218:12 tmo00000887 (1) 72:19 tmo0000088718 (1) 72:22 tmo0000088719 (1) tmo00832490 (1) 92:9 tmo008324903 (1) 92:14 tmo008423108 (1) 75:21

tmo10005474 (1) 54:8 tmo100054742 (1) 54:11 tmos (12) 24:20 39:5 40:4 43:15 50:9 98:18 124:9 144:17 162:2 170:8 176:24 214:23 today (8) 1:4 21:18 104:23 106:5 167:17 196:15 197:3 222:12 todays (1) 1:4 together (19) 24:14 25:20 34:11 37:17 43:16,23 61:11 88:14 101:5,14 141:2 145:2 175:13 184:8.15.24 186:13 192:24 216:18 told (9) 11:6 89:12 111:6.7 113:18 157:15 199:25 206:16,24 tomorrow (1) 113:2 tone (1) 220:17 tony (9) 125:10 205:14,15,20 206:14 207:4.10 212:5 215:6 tonyjon (1) 206:7 too (6) 11:11 97:11 125:19,19 156:10 took (20) 12:13 18:10 23:9 29:1 32:25 40:13 47:10.22 72:14 80:22 108:5 110:12.14 114:13 136:11 169:24 177:16 201:18 205:6 219:8 tools (1) 211:5 topic (4) 24:5 164:1 172:21 199:14 topics (4) 45:21 46:14 47:12 57:12 tops (1) 35:7 touched (3) 133:3 144:20 160:18 towards (7) 17:13 33:15 65:2 66:8 179:25 183:20 204:5 tower (24) 10:6,10,14,15,19 37:12 38:9 49:5 59:22 74:2 75:9 79:19 108:2 109:19,24 112:6,10 116:5.11.19.23 117:4 141:5 193:25 track (1) 125:24 tracker (1) 210:9 traffic (5) 125:20 127:6,17 132:13 208:14 trained (1) 116:5 transcript (4) 32:8 49:2 189:25 190:1 transition (3) 172:4 196:18 198:13 transitional (1) 165:12 transparent (2) 2:8 30:20 transpires (1) 196:16 treated (1) 212:18 tried (1) 147:13 true (3) 105:16 106:2 130:19 try (4) 62:13 168:23

209:8,20 trying (20) 47:17 64:23 65:4 80:19 133:18 153:9 154:5 155:8 206:13 207:3 209:3,9,10,21,24 210:7,8,12,22 211:4 tuesday (5) 53:8,12,15,15 56:21 turn (9) 3:23 24:5 27:2 28:1 43:18 105:11 119:18 140:9 200:14 turned (1) 134:5 tweak (1) 220:10 type (6) 70:7 112:23 122:4 173:17 177:24 196:25 types (1) 161:22 typical (2) 151:9 192:20 typo (1) 35:14

uk (1) 62:21 ultimately (3) 42:25 205:5 207:14 unacceptable (3) 157:23 218:15 219:6 uncommon (1) 25:17 underneath (2) 30:4 38:17 underperforming (1) 83:16 underresourced (1) 202:22 understand (45) 2:12 5:1 9:23 11:5.5 16:6 19:7 21:17,18 45:22 46:14 50:10 52:19 72:10 74:22 88:4 90:11 98:20 114:13 116:19,23 119:11,18 120:19.23 121:17 126:5 128:16 133:6 135:13 137:22 140:14 147-5 149-9 150-18 151:14 154:8 155:5 172:4 173:23 180:4.4 182:2 192:12 193:13 understanding (28) 62:22,24 72:24 73:9 89:11.19 90:17 105:2 117:12 118:12 120:22 122:19 129:5 133:19 134:21 136:1.5.7.25 137:2 142:13 144:13 147:2 154:14 168:1 179:18 200:1 217:14 understands (1) 155:17 understood (25) 9:11 32:2 44:24 46:11 67:21 91:12 117:5,18 120:3 124:18 132:12 133:3,12 134:22 135:1 157:10 161:20 163:11 168:23 174:6 176:21,23 177:14 192:6 221:16 undertake (2) 175:21

54:10 56:18 89:14

91:21 113:9 156:1,4

169:2 187:11 210:15

tells (2) 73:25 167:19

192:24

undertaken (2) 37:8

undertaking (1) 122:22

undervalued (1) 36:8

underway (1) 5:11 undiminished (1) 216:16 unfortunate (1) 136:10 unhappy (3) 217:25 218:1,4 unique (2) 115:13 130:25 unit (1) 149:5 units (2) 134:3 139:8 university (1) 106:13 unless (1) 7:1 unlikely (2) 22:3 148:13 until (16) 20:6 75:8 91:1 102:1 110:15 163:6 180:19.21.25 182:17 183:6 184:8.15.24 187:17 223:17 unusual (6) 33:10 124:2 128:10 136:10 160:7.15 update (4) 9:18 45:10,14 217:6 updated (1) 195:10 upon (3) 5:6 7:3 9:13 upper (1) 72:6 urge (1) 205:24 urgency (1) 213:23 urgent (1) 148:9

39:17 77:18 90:8 91:5;24 92:5 114:22 182:15;23 usual (3) 95:20 159:25 160:4 70:8 96:3;4 100:2 115:23 187:5,17

urging (1) 207:17

117:22 159:8

180:10,12

uses (1) 9:24

useful (1) 211:9

usher (4) 163:7,13

using (11) 38:12,23

221:22 223:3

used (9) 74:14 76:16

98:24 99:8 115:13

valente (6) 60:22 111:2 112:24 113:8 138:25 186:13 value (24) 5:9 9:15 11:8 12:9,10,14,22 13:1 14:24 19:1.22 20:3,5,15,19,21,25 21:2,8,22 48:13 58:9 66:17 97:22 variation (1) 129:20 variety (1) 116:16 various (13) 33:7 45:21 46:13 47:12 64:16 112:13 140:19 157:6 179:14 181:24 185:23 191:1 208:23 vary (1) 144:5 ve (1) 6:18 verify (1) 61:6 version (13) 55:4,12,23,24 56:3,8

82:2 87:9 99:15

143:10,13 214:8,15

versus (1) 21:6 via (4) 9:16 24:10 194:16,24 viable (2) 5:12,15 views (2) 152:1,12 virtue (3) 116:14 121:10 133:25 visible (1) 60:3 vision (1) 213:15 visit (1) 201:8 visits (1) 158:11 visual (1) 59:23 vivid (1) 96:2 voice (1) 105:6 voids (1) 206:8 volume (1) 159:25 vs (1) 19:5

w (2) 79:10 158:10 wait (1) 63:15 waiting (4) 61:6 104:16,17 222:13 wall (2) 65:8 66:23 wanting (4) 47:19 50:10 59:24 137:1 wants (3) 9:6 11:15 172:18 warrant (1) 81:9 warranted (1) 138:11 warranty (1) 129:19 wasnt (53) 8:5,19 10:11

wasnt (53) 8:5.19 10:11 16:4 22:12,18 23:19 24:2 29:15 32:13 51:2.7 53:19 61:24 64:1 65:4 67:16 70:15.17 71:18 72:5 77:7.9.17 84:14 86:15 88:17 89:8.22 93:12 98:14,15 99:18 130:13 133:19 135:5.8.20 136:4,21 137:14 138:4 155:10.18 162:22 170.25 180.19 197.24 205:4,16 206:17 210:5.11 wasted (1) 206:23 watered (2) 44:7,9

wasted (1) 206:23 watered (2) 44:7,9 waters (1) 68:10 wates (1) 28:18 watterson (1) 58:12 way (30) 12:11 20:13 45:20 46:13 50:19 105:4 111:20 114:22 116:6 119:22 130:5 131:18 135:6 143:4 154:12 156:8,13 168:2 179:21 196:24 198:14,18,21 205:23 206:25 208:25 211:7,9 218:23 219:2 ways (1) 48:17 wealth (1) 112:22 website (1) 24:15

206:25 208:25 211:7,9
218:23 219:2
ways (1) 48:17
wealth (1) 112:22
website (1) 24:15
wed (13) 11:12 19:10
22:15 29:17 33:3,3
45:11 51:3,9 66:11,20
90:22 101:12
week (8) 17:12,15
21:20 173:3 199:24
209:7 213:11 223:10

weekend (1) 216:6

weeks (5) 171:5 182:17 185:3,7 189:13 weighting (1) 40:8 welcome (2) 1:3 126:21 went (16) 16:14 20:13 28:10 31:11 57:5 82:3,12 83:14 87:5 88:19 89:6,7 100:25 118:9 176:18 208:22 werent (16) 39:25 49:3 69:22 72:7 78:12 82:22 83:2 96:22 122:16 135:4 137:13

138:3,7 162:19 201:21 206:25 weve (20) 7:18 11:8,17 34:25 52:2 70:14 88:5 116:6 128:6,7 139:6,7 144:20 159:19 161:13 164:12 169:3 191:1 199:21 207:15 whatever (3) 40:11

84:21 194:15
whats (23) 10:17 12:20
14:7 39:7,8,8 100:3,5
122:11 128:3,4 139:17
175:6 176:6
181:4,4,8,11,13,20
185:2 187:24 193:17
whenever (1) 96:11
whichever (2) 20:13

51:25 whilst (7) 5:5,11 8:7 97:11 110:24 203:11 216:3

white (1) 212:6 whoever (2) 50:23 70:12 whole (5) 57:6 72:14 81:11 116:7 157:24 whom (2) 111:3 153:7 whos (1) 195:11

whose (2) 84:15 215:10

wider (1) 130:24
williams (42) 37:13,15
45:16 52:13 58:12
60:16,19,22 65:25
69:11 71:6 73:5 76:21
78:2 112:5 117:5,18
118:18 119:19 120:4
125:9 126:9 132:1
138:25 140:24 141:7
151:23 154:7 155:5
156:25 159:5 170:7
172:14,17 173:20
177:7 186:12 193:3

172:14,17 173:20 177:7 186:12 193:3 197:25 205:15,21 207:18 willingness (1) 213:23 win (2) 32:18 33:9 window (2) 61:4 109:24 windows (9) 60:24 61:1,6 63:11,13,21,22,24 139:7

63:11,13,21,22,24 139:7 winning (1) 28:4 wish (1) 156:15 wishes (1) 167:13 wisley (1) 168:3 withdrawing (1) 213:5 withdrawn (1) 213:3 withdrew (2) 103:17

223:6

witness (49) 1:10,12 2:3 13:20 15:24 37:5 40:15 49:1 57:11.13.17 58:4 59:5.14 72:17 75:19 76:18 88:1 102:4,13,23 103:2,11,15,17 104:11,19 106:7 124:23 143:24 153:25 155-4 21 159-15 163:11,22 169:25 200:9.24 202:8 205:11 215:21 221:16,20 222:9,17 223:2,5,6 witnesses (3) 180:5 183:4 223:12 won (7) 51:2.3.8.9.17.23.25 wonder (1) 46:10

51:2,3,8,9,17,23,25 wonder (1) 46:10 wondering (2) 158:9,21 wont (3) 8:14 21:1 25:19 wording (1) 23:17

work (65) 2:16 5:8 19:15 20:8 24:21 25:16 47:7 48:20 51:5 62:2 78:24 79:11 80:12,16,18,23,24,25 81:1 82:14,18 83:9,13,20 84:10,12 85:16 86:16.20

94:13,17 99:23 106:9 108:13,15 118:9 124:19 128:7,18 129:10,15 130:13,17 132:11 134:5,8

139:9,9 140:8 141:25 145:21 176:23 178:15 180:14 182:8 199:19,24 203:14 204:23 206:4,14,17,17

207:6 220:25 worked (12) 62:20 100:23 109:7,20,22 110:8 131:4 158:5

110:8 131:4 158:5 203:12 207:4 216:6 218:18 workforce (2) 203:1,4

working (17) 2:13 38:10 82:23 85:13 106:20 112:10,13,22 124:15,16,18 126:19 131:12,19 141:14 186:17 207:5

workload (1) 32:19 works (48) 9:6 11:16,21,22 12:12

> 21:11,11 37:11 38:10,15 47:19 81:14 109:25 119:12 120:16,20,24 129:10,14 130:1 133:2,12,15 135:14,17

133:,12,13 139:14,17 136:16 138:12 139:14 157:23 159:18 164:11 171:16 175:11 182:16 199:18 200:4 201:4 202:10,18 204:24 205:5,6,15 206:23 219:1.25.11

workstream (1) 119:25 world (1) 27:21 wouldnt (28) 39:1 44:14
47:5 84:5 95:21,22
99:7 121:1 125:25
141:19 142:9,10 143:5
146:16,24 150:12,14
151:9 165:2,5 171:6
180:8,20 181:12,16,19
197:14,20
wrap (1) 196:23
write (10) 64:22 78:20
95:22 96:11 100:16

158:9,21 167:1 214:22

215:2 writing (6) 22:13 69:15 211:18 212:13 220:3,4 written (6) 11:9 23:8 41:4,14 69:24 219:21 wrong (3) 42:8

130:13,14 wrongly (1) 183:7 wrote (5) 8:4 10:25 63:17,17 157:21

yeah (34) 16:5 34:21 35:24 39:23 43:16 63:4 83:23 90:22 116:1 117:19 127:14 131:2 132:2 139:2,16 147:6 152:15 168:16 171:18 180:7 186:16 187:9,12 198:4 201:20 202:23 203:3 205:9 207:24 208:1 211:14,14,16 218:8 year (1) 91:1 yesterday (5) 61:3,3 68:11 79:5 132:5 yet (5) 51:11 90:13 95:2 126:18 213:12 youd (2) 126:21 218:22 young (1) 59:10 youre (32) 8:24 10:18 11:5 12:5 14:17 17:8 20.16 21.5 27.20 29:22,24 57:19 67:20

90:1,23 92:12 93:19 95:7 112:6 144:1 146:3 148:7 163:9 169:2 170:3 174:16 178:21 182:23 194:20 198:1 203:23 206:12 yourself (8) 64:19 68:15 83:8 104:15 112:5

83:8 104:15 112:5 114:9 169:8 193:9 yous (1) 129:15 youve (10) 2:20 64:6 67:17 95:7 106:13 141:1 156:24 157:1 190:25 197:8

zinc (3) 59:1,2,13

00s (1) 109:23

0

1 (31) 5:18 17:6 35:24 52:9 53:10 63:6 81:21 90:1 92:10 132:11 133:1 142:16 152:12,18,21 167:4,18 172:14,17 173:7 195:3,8 196:4,13 208:17 213:1 214:9 220:6,7 224:3,5 10 (11) 35:8,23 44:19 50:17 79:2 144:1 165:20 202:7

50:17 19:2 144:1 165:20 202:7 223:11,14,17 100 (1) 41:6 1000 (1) 1:2 101 (3) 38:13 39:18 74:24 1010 (1) 39:15 103 (2) 37:9 38:6 1036 (1) 60:21

103 (2) 37:9 38:6 1036 (1) 60:21 104 (4) 35:15 38:17 224:8,10 106 (1) 188:2 11 (8) 21:15 87:11

105:22 147:9 152:16 157:2 165:24 191:13 1120 (1) 57:24 113 (1) 31:21 1135 (3) 57:16,22 58:1 114 (1) 145:5 116 (1) 19:6 11833 (2) 49:5,24

11833 (2) 49:5,24 119 (1) 49:2 12 (9) 34:16,24 60:21,23 69:12 94:3 95:9 97:17 223:18 1237 (1) 102:8 1245 (3) 102:1,7,10 1248 (1) 104:5

1248 (1) 104:5 13 (5) 36:18 52:12 92:11 124:24 166:14 133 (1) 59:6 14 (4) 93:20 153:20 154:10 164:13 145 (3) 104:1,4,7 15 (9) 28:20 165:20

15 (9) 28:20 165:20 167:4,6 169:7,13,17,23,23 16 (3) 93:18 148:5 160:10 1627 (1) 16:22

17 (6) 29:21 54:9 55:13 138:21 148:10 174:16 173 (1) 76:19 17th (1) 139:4 18 (13) 5:2 47:24 53:16,18,20 55:25 56:11,21,22 72:21,21 95:6 105:12

19 (6) 31:24 72:21 125:4 126:7 140:25 147:21 1990s (1) 179:2

1990s (1) 179:2 1993 (1) 106:13 1997 (1) 106:13

2 (25) 35:24,25 46:21 52:9 54:11 56:2,6 93:20 94:4 106:10 132:15 134:10 142:16 152:20 172:15,15 173:8 174:22 179:10 194:10 195:10 196:3 213:8,8 214:10 20 (8) 25:6 27:3,8 31:25 125:11 147:23 148:2,9 2001 (1) 106:21 2002 (1) 109:23 2003 (1) 109:23 2004 (1) 106:15 2007 (3) 165:10 187:22

193:14 2008 (1) 106:21 2009 (1) 61:23 2012 (3) 81:15,22 143:8 2013 (26) 1:19,21

3:5,7,21 4:3 9:1 13:4,5,9 15:10 16:22 21:15 25:6 27:3,8 28:19 37:7 79:2,3 81:16,17,25,25 85:2 87:11 **2014 (36)** 28:20 29:21

31:25 34:16 40:14 45:16 47:24 48:2,4,11 51:10 52:12 53:3,18,20 54:8,9 55:25 58:13,15 60:16,23 69:12 90:1,25 92:8,10,11 93:18 94:2 95:6 97:16

90:1,25 92:8,10,11 93:18 94:2 95:6 97:16 106:21,25 107:12 114:8 **2015 (69)** 75:14 108:5,9,20 110:13 111:13.13 123:8

111:13,13 123:8 125:5,11 128:20 132:1 138:21,23 139:4 140:25 147:23 148:2,9 151:18 153:20 154:10,12 157:2 160:11 165:10,12,13,13,18,20,24

100:5,14 100:0,6 169:7,13,17,23 171:7,24 172:15,17 174:14,16,25 175:9,20 179:8,12 180:19 186:4,12 189:9 190:19 193:4,7,16,20

193:4,7,16,20 195:21,24 196:12 197:19 201:8 202:17 205:19 206:9 209:18 **2016 (12)** 108:24

1016 (12) 108:24 157:19,21 158:24 160:12 180:20 204:18 211:17,24 216:1,7 218:7

2018 (1) 105:12 **2019 (2)** 72:20 75:20 **2020 (3)** 1:1 105:22 223:18

21 (4) 9:1,22 18:14 94:2 22 (2) 15:10 154:1 23 (6) 3:7 72:20 75:21 171:24 179:12 193:20 24 (2) 13:9 16:22

25 (3) 6:6 48:2 88:2 259 (1) 188:8 26 (2) 36:14 211:24 27 (1) 196:12 28 (2) 174:23 186:12

29 (1) 202:17 2nd (1) 148:18

| | I. | I. | l | l | l | İ |
|---|-----------------------------------|----|----------|----------|---|-------|
| 3 (16) 5:24 13:5 35:25 | | | | | | |
| 43:25 48:11 51:10 | 9 | | | | | |
| 92:14 93:17 132:19 | 0 (0) 07 7 05 0 104 0 | | | | | |
| 152:1 166:22 193:23 | 9 (8) 37:7 85:2 124:2 | | | | | |
| 195:14 196:5 213:14 | 126:1 132:1 157:21 193:4 218:7 | | | | | |
| 220:16 | 915 (1) 44:19 | | | | | |
| 305 (1) 163:18 | 92 (2) 35:10,16 | | | | | |
| 32 (2) 174:25 203:10 | 93 (1) 88:2 | | | | | |
| 320 (3) 163:6,15,20 | 94 (2) 72:23 73:9 | | | | | |
| 35 (2) 43:25 92:14 36 (1) 36:16 | 95 (2) 203:9 204:4 | | | | | |
| 38 (1) 36:15 | 96 (1) 73:19 | | | | | |
| 39 (1) 105:11 | 97 (1) 73:25 | | | | | |
| () | 98 (1) 74:4 | | | | | |
| 4 | 989 (1) 35:11 | | | | | |
| 4 (13) 34:17 43:25 45:6 | 99 (2) 35:22 74:10 | | | | | |
| 46:20 90:4 94:2 | 994 (1) 35:10 | | | | | |
| 106:11 166:12 191:1 | 9pointwhatever (1) 50:16 | | | | | |
| 195:16 196:3 216:1 | 30.10 | | | | | |
| 219:17 | | | | | | |
| 40 (2) 33:5,8 | | | | | | |
| 41 (2) 36:16 202:8 | | | | | | |
| 438 (1) 222:1 | | | | | | |
| 445 (4) 221:5,18,24 | | | | | | |
| 222:3 | | | | | | |
| 45 (2) 2:3 145:1 | | | | | | |
| 450 (2) 16:3 223:16 47 (1) 145:5 | | | | | | |
| 47 (1) 145.5 | | | | | | |
| 5 | | | | | | |
| F (12) 2 22 27 14 20 15 | | | | | | |
| 5 (12) 3:23 27:14 39:15 | | | | | | |
| 40:16,19 75:20 95:6 106:20 165:22 172:20 | | | | | | |
| 191:12 206:9 | | | | | | |
| 50 (2) 13:20,21 | | | | | | |
| 500 (1) 35:24 | | | | | | |
| 51 (1) 26:8 | | | | | | |
| 53 (1) 90:5 | | | | | | |
| 555 (1) 56:12 | | | | | | |
| 58 (1) 188:7 | | | | | | |
| 6 | | | | | | |
| | | | | | | |
| 6 (13) 14:9 18:7 45:16 | | | | | | |
| 46:8 58:13 87:21 | | | | | | |
| 105:21 108:8 165:13 | | | | | | |
| 166:5 171:7 194:11 | | | | | | |
| 205:19 60 (2) 33:6,14 | | | | | | |
| 60s (1) 26:9 | | | | | | |
| 64 (1) 147:16 | | | | | | |
| 65 (1) 147:22 | | | | | | |
| 6675 (1) 26:9 | | | | | | |
| 695 (1) 26:9 | | | | | | |
| 6th (2) 9:19 18:6 | | | | | | |
| | | | | | | |
| 7 | | | | | | |
| 7 (8) 14:10 36:22 40:14 | | | | | | |
| 44:19 46:8 81:17 85:2 | | | | | | |
| 170:5 | | | | | | |
| 700000 (1) 35:24 | | | | | | |
| 702 (1) 167:5 | | | | | | |
| 71 (2) 154:2 156:21 | | | | | | |
| 73 (1) 170:6 | | | | | | |
| 76 (1) 147:16 | | | | | | |
| 8 | | | | | | |
| | | | | | | |
| 8 (6) 1:1 27:9,15 55:9 | | | | | | |
| 58:15 128:20 | | | | | | |
| 800000 (1) 53:6 | | | | | | |
| 800k (1) 52:23 | | | | | | |
| 81 (2) 200:13,25 89 (1) 37:4 | | | | | | |
| 89 (1) 37:4 | <u> </u> | 1 | <u> </u> | <u> </u> | I | l |