SCOTTISH HOSPITALS INQUIRY

Hearings Commencing
13 May 2025

Day 2

14 May 2025
Frances Wrath
Mairi Macleod

CONTENTS

10.03

THE CHAIR: Good morning. Now, Mr Mackintosh, we're ready to begin.

MR MACKINTOSH: Yes. My witness this morning is Frances Wrath, my Lord.

THE CHAIR: Oath or----? Oath. Good morning, Ms Wrath.

MS WRATH: Good morning.

THE CHAIR: As you know, you're about to be asked questions by Mr Mackintosh who's sitting opposite you at the table. However, first of all, I understand you're prepared to take the oath. Sitting where you are, could I ask you to raise your right hand and repeat these words after me?

Ms Frances Wrath

Sworn

Thank you very much. Now, my hearing is not what it was, but you appear to me to have a good clear voice, but in giving your answers could I encourage you to maybe speak a little louder than you might usually and maybe a little bit slower? You have the microphones; it's their job to make you heard. I don't think there's going to be any problem but if I could just-- maybe just a little louder than you would normally speak.

Now, I anticipate your evidence will take about the morning. We will break at about half past eleven for coffee, but – and this is quite important – if at any other time, for any reason at all, you wish to take a break, just give me an indication and we'll take a break. What I would like you to feel is that you're in control of the situation if you if you want to take a break We'll take a break.

MS WRATH: Thank you, my Lord.

THE CHAIR: Now, Mr Mackintosh.

MR MACKINTOSH: Thank you, my Lord. Before we start with the evidence of Ms Wrath, it occurred to me I might wish to explain something for the benefit, probably, of the people watching on the YouTube feed, my Lord. I'm going to put to Ms Wrath a number of documents that contain her signature, and I don't think it's necessary to broadcast her signature on the YouTube feed, and therefore what I'll be doing is, when I call documents out, I'll be mentioning there is a signature and, although they'll be visible to her and you and everyone at the table, they won't go on the YouTube feed until we've gone to a part of the document that doesn't contain the signature.

Now, that has a disadvantage for the core participants in the room with us today because the screens they can see are the YouTube feed, and that was set up when the Inquiry started and so I'm very conscious that they're all sitting there using quite small laptop screens

and I'll, therefore, take my time before getting to the meat and drinker of the individual document so they have an opportunity to get it on the screens, but it does mean that if we are discussing a signature block signed, in this case, by Ms Wrath, those watching on the YouTube feed won't be able to see what we're talking about.

THE CHAIR: Right. Well, it doesn't occur to me that there's a real problem there and no doubt if anyone feels there's a problem they can raise the matter.

MR MACKINTOSH: Thank you.

THE CHAIR: Mr Mackintosh.

Questioned by Mr Mackintosh

Q Ms Wrath, I want you to give us your full name.

A Frances Martin Hunter Wrath.

Q Thank you. Now, did we send you a questionnaire which you then answered and ended up being the form of your statement?

A Yes.

Q Are willing to adopt that as part of your evidence?

A Yes.

Q Thank you. Now, I'm not going to go through your statement from beginning to end because we've read it and, no doubt, we'll reread it again before the Inquiry is concluded. I'm going to pick up a number of topics as we go. Sometimes I will go back to the statement, sometimes I won't, and the place I'll start was to explore something about your role in the project. You explained that you joined the Project team in April 2007?

A Yes.

Q And you mentioned your previous experience in the past, but what was your previous experience when you arrived in 2007? What had you done before?

A I had been a capital planning officer, capital planning manager for South Glasgow Hospitals, which meant that I did project management for a number of projects, which had been run across Southern General, Victoria Infirmary----

Q And professionally, what's your background?

A I'm a quantity surveyor.

Q Thank you. Now, Mr Baird, who was divisional director for Currie & Brown, explains in his statement that you'd worked for the NHS for many years, been involved in many products for the NHS, and had a working knowledge of the guidelines, e.g. an awareness of whether particular guidelines were being reviewed by HFS for update, for example. Would you agree with his assessment?

A Yes.

Q Now, we understand that you-- if we look at bundle 43, volume 3, document 1, page 7, this is a structure plan for----

A Yes.

Q But you seem to be described, and I'm not going to jump to you unless we need to, as project manager enabling works.

A That's right.

Q Can you take this off the screen?

A When I joined the project at first, my role was to clear the sites, do the preparatory work to clear the site for the new hospital, basically demolish a few buildings, reroute services.

Q I see.

A So, I was loosely associated with the new hospital team.

Q But more the fact that they needed you to get this done so they could build it?

A Yes.

Q Right. What consideration did you give, at the time of that piece of work, to the risk to patients from demolition, particularly construction work in relation to airborne transmission of pollutants, fungi, that sort of thing?

A I'm just trying to think. The demolition work which was carried out was to a couple of small nursing homes which were-- sorry, nurses' quarters, which were not adjacent to the general hospital.

Q So, you saw it as adjacency as the real issue?

A Uh-huh, yes.

Q And then your role changed, and we have your answer to that in Question 15 of your statement, which is on page 528 of your statement bundle. You describe-- 528. No, 258.

THE CHAIR: Just a moment, Mr Mackintosh, you might be right about----

MR MACKINTOSH: No, I'm wrong.

THE CHAIR: -- but that's not the number I have.

MR MACKINTOSH: So, the top right-hand corner of the statement bundle should be 258.

THE CHAIR: Oh, 258.

MR MACKINTOSH: 258, yes. I just----

THE CHAIR: I wonder if you actually said that, rather than----

MR MACKINTOSH: I got it wrong, my Lord.

THE CHAIR: Right, okay. Well, 258

MR MACKINTOSH: (To the witness) So, we ask you-- at Question 15, the Inquiry understands you were the technical lead from about 2007. Now, you describe your job description in that statement as "ASR Programme – Capital Planning Manager" and you refer to Mr

Moir as a technical lead.

A Yes.

Q So you wouldn't see yourself as a technical lead at this point?

A No, not at all.

Q Not at all? Was there any way that your, as it were, relationship with technical matters changed over the life of the project?

A They changed in that towards the end of project I changed job. Sorry, my role changed slightly in that I then installed what's called Group 5 specialist equipment, X-ray machines, the washer-disinfecters, that kind of thing. So that's slightly more technical than doing a 1:50 room layout or equipment layout.

Q So you saw that that part of your job, that later part of job, was more technical than the stuff you were doing beforehand?

A Yes.

Q Right. So when you were capital planning manager, at that time, Ms White of Nightingale, now IBI, who gave evidence yesterday, she described in her statement that you were the GDC lead for the Room Data Sheets. Is that something you agree with?

A That's correct.

Q Now, yesterday-- This is only my note – there will be a transcription due course – so this may be approximately correct. She seems to have described you as being more technically minded, "Not an M&E engineer, but she worked with us at the beginning to help develop Room Data Sheets. She was initial reviewer of the right room types in the ADB briefing." Does that something that you'd recognise as your role?

A It's-- I recognise it, but it's not the full story. What probably she meant was, as opposed to the other members of the team who were carrying out the ADB reviews, who were general management, as in Mairi Macleod, who was the children's project manager; Heather Griffin, who was the adult project manager; and Fiona McCluskey, who was senior nurse; Jackie Barmanroy, who was Infection Control; and Karen Connolly, who was Facilities. I then was the-- what they would call the technical person. I was the one who knew about Estates, about project management generally.

Q Are you saying that in a sense you were more technical than them?

A Yes.

Q Right. She then describes how, after the User Groups, she took the view that you had more understanding of the equipment requirement in rooms, of the technology in the rooms, not the M&E, who would use the rooms and what the specialist equipment was. Would that be something you recognise?

A Yes, that's my specialty.

Q Yes, and that you led on the Room Data Sheets and you were the point of contact----

THE CHAIR: Could I maybe just take that last point? When you said, "That is my specialty"----?

A That was my specialty within the team.

THE CHAIR: Could I just ask you to repeat what you saw your specialty as?

A It's also-- When you're sitting down with general clinical users, they have a problem, which we all do if we're not used to it, they have a problem of taking a 2D drawing and seeing it in three-dimensional. So, you become the interpreter for the architect almost and, given that I had worked in-- for Greater Glasgow Health Board for about 20 years by that time, I knew most of the-- generally most of what all the departments kind of did. So I could say to them, "What is it you do in this room? What kind of piece of a kit?" and ask more-- tease out more detail, if you like, for the architect to make sure they've got the right size, they've got the right power points, right water situation, that kind of thing.

MR MACKINTOSH: So you were able to read drawings----

A Yes.

Q -- to some degree, and felt you could enable the managers and the clinicians to, in a sense, give their best evidence of what they wanted?

A Yes, it meant that they had a better chance of getting a room which reflected their needs.

Q Right. She then describes you as the "public face of the Room Data Sheets from the GGC."

A Yes.

Q Right. Now, I think you've already answered this question, but I feel I should just put it to you straight. As a quantity surveyor with the career you had, did you feel professionally equipped for the tasks you carried out in this period between 2007 and, say, when you started doing the category five equipment?

A I felt that the general principle of my job-- I was-- yes, I was able to do because it was room layouts, it was equipment and it was ADB codes. It was nothing to do with the M&E behind it. It was a case of "That light fitting is positioned in such a way that it will not be above a bed, this ventilation will not be above a bed extract," and that kind of thing. So it's more-- Given that my background as a conservator is general building, it's still within that remit.

Q So, let's just pick up ADB codes because they came up yesterday and there was some evidence heard from Ms White about your role in ADB codes,

and I hesitate to go to the documents. I think I can probably just deal with it at the very highest level because it only concerns one ADB code. Are we right to understand-- Or what's an ADB code? How does it get used and where does it come from?

A There are two different kind of levels of ADB code. There's the ADB code which I don't really use, which is it comes from a general standard room layout. So you will have-- Under the activity database, there is a standard code which says, "This is a single bedroom," and you take that as a template, if you like, and you adapt it to suit, and that has everything, all the environmentals on it and everything which should meet current legislation. The ADB codes, which I used to know almost all of them, is actually equipment. So, if you like, what the code was for a socket, what the code was for a bed, what the code was for a light fitting, what the code was for a sink. I could bore on those.

Q So, if you imagine a room, it has an ADB code for the room.

A Yes.

Q And within that document there will be a general description.

A Yes.

Q There'll be some details of the ventilation, the water, the electrics and then there'll be a list of equipment.

A Yes.

Q And it's the list of equipment that's your thing?

A Yes.

Q Right. And are we right to understand that the process in a sense goes you initially define every room by reference of ABD code----

A Yes.

Q -- and then the architect draws that up and then you discuss the drawing?

A Yes. There are a few iterations of it until you-- with the team until you get the one which reflects what they need.

Q Yes, and what comes from the ABD code is both a drawing and the Room Data Sheet?

A Yes.

Q For every room?

A Yes.

Q Right. So the individual one I want to mention is the ADB code for the individual rooms in what eventually became Ward 4B, the bone marrow treatment ward in the adult hospital. Do you have any recollection of you having to select the ADB code?

A No.

Q Because there wasn't one on the list?

A No, no, I-- That's the sort of

thing the architect does. The architect selects the ADB code for the room based on what the output specs-- the clinical output specs which were in the document give. I wouldn't have----

Q But it is Ms White's position that there is no ADB code for a bone marrow treatment individual room.

A No, you would take a standard room and you would adapt it.

Q Yes, and her position is that you are the person within the GGC system who selected – let me get to the end of the question and then we'll get your answer – the standard room as the base for that which they would then adapt.

A No. The standard rooms were already part of the Employer's Requirements----

Q No, I understand that, so the----

A I didn't-- The ADB codes for the individual rooms were selected before I joined the team.

Q We'll get into Ward 4B in a moment, but since we're on it we might as well just explore it. So Ward 4B – stop me if I get this wrong – was originally going to be a adult haematology ward for non-bone marrow. Now, we have someone doing a transcript and they can't do nodding.

A Sorry.

Q So please say "yes" or "no."

A Yes.

Q So the original plan is to have what is now Ward 4B was going to be adult haematology. That's right?

A Yes.

Q Yes, and then in 2013 or thereabouts there is a change?

A Yes.

Q And they propose to turn that space into an adult Bone Marrow treatment ward.

A Yes.

Q We'll get into that in more detail in a moment, but just sticking with the ADB codes, it's Ms White's position that at that point someone has to pick an ADB code for those rooms in the BMT ward that's going to be there and that you suggest they use the standard room.

A I wasn't involved in adapting the ward for the bone marrow transplant. I was already busy doing the equipment lists and removing the Group 5 equipment, setting up all that.

Q Could you have been involved in selecting the ADB code in the original iteration of Ward 4B when it was just going to be adult haematology?

A No, it would have been it would have been in the Employer's Requirements documents as a standard room and that would have been adapted during our meetings.

Q Right. I'm going to come back to 4B in more detail but I will stop that for the moment otherwise we're going to get back to the documents. It's probably easier to do it with them. Right, now what I want to do is think about your role. Who reported to you?

A No one.

Q And who did you report to?

A Peter Moir.

Q Right. Now, before you started this job, do you have any previous familiarity with Mr Moir, Ms Griffin or Ms Macleod as project managers?

A I knew-- I didn't know Mr Moir. I knew Ms Macleod because I had worked for a time on the Victoria Acute-- ACH, which was built a few years before. I had-- did a similar job on that, as in pulling together the schedule of accommodation and the standard 1:50s.

Q Okay. Was there any difference between the type of work that project managers were doing in this procurement from previous procurements? By the nature of the procurement mechanism chosen.

A I'm sorry, I don't----

Q I'll try-- Well, I suppose the question is had you previously worked on a hospital procured through Design and Build?

A No.

Q No? The previous hospital, the Victoria acute unit, how had that been procured?

A That was a PPP.

Q Yes. So is there any difference in the role of project manager in those two projects that you are aware of or are aware of?

A There are slight differences but, given that I was never a project manager, I was more a project manager on a selection of work that I've not really-- I had no real contractual role in it.

Q Well, I suppose I'm going to ask this of everybody, so I'll ask you. It's that what knowledge or understanding did you have of how Design and Build and the NEC3 contract is supposed to work?

A It's supposed to be a partnership.

Q Right. Explain that. How do you mean that?

A I'm only-- I'm going back to my being-- quantity surveying, you know, contracts, and it's supposed to be a partnership. It's supposed to be a case of that you work together to come up with solutions and there's usually a mechanism where you kind of gain a kind of cost mechanism, I'm on it and it's out in packages, but I don't really know an awful lot about it. The NEC3 was always very much an engineering contract which I had never dealt with.

Q And this idea of partnership,

did any member of the team – perhaps in the more Senior Management team – ever express to you a view that this procurement was a partnership?

A Yes, in the way that we were co-located in the one building to make it easier for sharing information, quicker for sharing information, so that you didn't have to go through sending letters away waiting for three days for a response, that kind of thing.

Q Right. What I wanted to do now is move on to the role of Currie & Brown.

THE CHAIR: Could I say something at this stage?

MR MACKINTOSH: Yes, of course, my Lord.

THE CHAIR: Ms Wrath, we all have our pace of speaking and it's going to be very difficult for you to change that. I'm finding you speaking just a little fast.

A Okay.

THE CHAIR: Now, I'm not looking for dictation speed, but I am trying to get at least the important elements in what you have to say. I'm very conscious that, just as I have my pace of speaking, everyone has their pace of speaking, but almost everybody in the west of Scotland speaks quite quickly.

A Yes, I'm aware of that.

THE CHAIR: So, if you just bear that in mind. Thank you.

MR MACKINTOSH: So, when did you first come across Currie & Brown in this project?

A Early doors. I've known Currie & Brown for many years, working on other projects, and I was aware of them not so much when I started at first, involved with them but I knew they were on the project because I was doing the cleaning the site.

Q What role did they have at Stage 1? That is before the contract was actually signed.

A They were technical advisors. Well, they led a team of technical advisors with M&E, structural, and they basically were associate project managers.

Q Who were their technical advisors, if you can remember? I mean, I can prompt you, but I'd like to hear what you remember.

A I'm sorry, it's-- I can't remember.

Q Could a company called Buchan have been their healthcare----

A Buchan is a hospital planner.

Q And could their architects have been HLM?

A Yes. Harry Smith.

Q And who were their M&E engineers?

A I can't remember, I-- because the one I'm going to say isn't the one that

was there.

Q Well, could it have been Wallace Whittle as a company?

A Wallace Whittle, that's-- yes.

Q And if we jump ahead in the story to the signing of the contract at the end of 2009, did the role of Currie & Brown and their team change after that date?

A I'm not really sure. It-- Not-- From my point of view, we didn't have, as a team, during the 1:50s and doing all the User Groups, we didn't really have an awful lot of dealings with the technical advisors as such. David Hall was primarily-- from Currie & Brown was primarily our link to the Technical team.

Q I mean, I will eventually take you to a Room Data Sheet and you'll know that in a Room Data Sheet there are three rows or four rows about ventilation.

A Yes.

Q And you know that's a big issue in this Inquiry, and ultimately you signed off quite a lot of Room Data Sheets.

A Yes, but as I said in my statement, I did not check those----

Q No, we'll get to that, but I want to just stick with a basic question at this stage. Did you ever have any involvement before contract signing with anyone from Wallace Whittle? By emails, you've seen them in the threads, you've seen documents they wrote.

A Yes, I would have had contact with them.

Q Right. What about after contract signing? Any involvement with Wallace Whittle?

A No, not really.

Q And after authorisation to proceed – so we're now into Stage 3 – any involvement with Wallace Whittle?

A No, not that I can recall.

Q Similarly, would the same be true for Buchan and HLM?

A Yes.

Q Right. So, it's been put to us that Currie & Brown have set out their position, this part of it. They stood down their Technical team in the early months of 2010 and there were no healthcare consultants, architects or M&E engineers working with them for the Health Board after contract close. Is that something you were aware of?

A No. I would have said that it's very possible there's no healthcare planner because healthcare planners tend to leave at that stage and there's probably no architect because there is an architectural team, Ms White's company, but I-- No.

Q So who was providing technical advice on M&E matters to the project after contract close?

A As I said, my link was David Hall.

Q Was David Hall? Right, so we have to ask David Hall that question.

A Yes.

Q Can I take you to bundle 40, document 119, page 354? So, this appears to be the first minute of a Technical Design Group and there are 11 of them in this bundle and you see that in the apologies you are listed as an apology, at the bottom of the first page. If I can just make sure I can go to the right pages here. I think I made the mistake of not opening this bundle on my own computer. I'll just do that. Do you remember going to any of these meetings of the Technical Design Group?

A Yes----

Q So, for example, if you go to page 358, you're at the Technical Design Group.

A Yes.

Q Who is looking out for NHS Greater Glasgow's interests in terms of the quality of the technical design in this meeting?

A That was David Hall, Peter Moir, Alan Seabourne, David Louden.

Q So, they would all have the technical skills to understand, for example, the ventilation of the hospital?

A I wouldn't have thought they would have known it themselves, no.

Q Well, where would they get it from?

A I assumed there was a Technical team.

Q Right.

A As David Hall was my link.

Q You mention in your statement, I won't go to it, a gentleman with the name of Alistair Smith.

A Yes.

Q I think it's quite important that we get from you what you thought Alistair Smith was doing and what his background was. So, who was Alistair Smith?

A He was an engineer who had worked recently for a company called DSSR, and Peter Moir employed him to go through a number of technical issues, electrical installations, I think, and he would also check the technical information on the ADB sheets, the lighting, the ventilation.

Q Would you deal with him directly?

A In that I gave him a pile of ADB sheets and collected them back from him again, and if there was any comments on them, that was it.

Q So, when we come to Room Data Sheets----

THE CHAIR: It's my fault in not noting quickly enough. We're talking about Alistair Smith. He was an

engineer. Now, engineer's a----

A I think he was----

THE CHAIR: -- fairly general expression.

A I know. I'm trying to remember. I think he might have been specialty-- He might have been electrical, but I'm not-- It's a while ago and I can't remember----

THE CHAIR: Right, okay.

A -- but I think it might have been electrical, his background was.

THE CHAIR: Right, and Peter Moir employed him and then, I'm afraid I failed to keep up.

A Peter Moir employed him and he was-- I was to use him for checking the sections of the ADB sheets which had the environmentals on them.

MR MACKINTOSH: Right.

THE CHAIR: Right. Check the sections of the ADB sheets.

A Which has the environmental, which is ventilation----

THE CHAIR: Sorry, which had the?

A Environmentals.

THE CHAIR: All right.

MR MACKINTOSH: So, I'm just going to focus that down. I want to jump ahead of myself and show you a Room Data Sheet for what I understand to be a standard room in the Ward 2A. It's actually in the Teenage Cancer Trust area. It's bundle 47, volume 3, document 8. It should be on page 393. So, I think we can go to the previous page, please. Just jump one back, one page for 392. Yes. So, help me out. What is this?

A This is how you set up the room. So, if you like, I would say----

Q Is this is the first page of the Room Data Sheet for this room?

A This is the first page of the Room Data Sheet and it gives you a brief description of what the room is. It gives you the size of the room, and it gives you details of what activities would take place in that room.

Q Some of them will be quite generic, I mean----

A Yes.

Q -- getting undressed and, "Displaying cards and pictures."

A But there might be a specialist treatment room which----

Q Has a lot more.

A -- is a one off, uh-huh.

Q Yes, of course. Then we go to the second page, so 393. Now, what I really want to do is we'll talk about what this page covers. Is this the environmental page?

A Yes.

Q Now, what parts of this page are you saying that you would show to Mr Smith?

A That whole page.

Q The whole page? Who told

you to do that?

A Peter Moir.

Q Would you have been able to check this page yourself?

A Oh no.

Q Would you read it yourself, or would you just pass it on to Alistair and get it back?

A I got help because I had read one of them and thought I am not qualified to do this, so I got help from Peter Moir. We got an engineer to have a look at it.

Q Right. Now, I think we'll come back to this in detail when we get to that part of the hospital. If we could take that off the screen. One of the documents that's quite important to the Inquiry is the technical guidance for ventilation in hospitals, SHTM-03-01 Part A. Is that something, before we put it on your documents list, that you had read?

A No.

Q No. So, you wouldn't have known what it has to say about the presence or absence of HEPA filters, air change rates, neutropenic wards---

A No, that is well without my skillset, so----

Q Right. Let's turn to the sign-off process and I know it's more complicated than I've just said. We had Ms White in detail about it and I really want to get your understanding of particular part of it. So, again, I'm going to set out what I understand to be the very broad top-level structure, and I want you to stop me, tell me whether I've got the stages in the right order.

A Okay.

Q So, you start with the clinical output specifications. Would that be the first point?

A Yes, right.

Q Yes. That then becomes the Employer's Requirements----

A Yes.

Q -- via process and some ADB categorisation happens at that point.

A Yes, in the Employer's Requirements there are some standard room 1:50 layouts included within document.

Q Yes, and then all the rooms in the hospital will be categorised by ADB code at that point.

A A code will be sent to each individual room within the hospital.

Q Yes, yes, because there will be a----

THE CHAIR: Sorry. Sorry, Mr Mackintosh. My fault entirely. You're taking us through----

MR MACKINTOSH: The process.

THE CHAIR: The process, starting with the clinical output specification, and that's expressed in the Employer's Requirements.

MR MACKINTOSH: So, I'll perhaps re-ask the question of Ms Wrath. What goes into creating the Employer's Requirements----

A In the----

Q -- from this point of view about specification?

A Right. In the Employer's Requirement, there will be each individual's specialties, output spec, clinical output spec. There will be a schedule of accommodation which is based on, Buchan have given out the standard room sizes if you like, from our template and there will be a list of standard ADB code 1:50s within the document. There is also a list of equipment.

Q All of this will have been built around the exemplar design----

A Yes.

Q -- or the architect's design?

A Yes.

Q Right. That all gets packaged up and that goes in the tender documentation?

A Yes and, sorry, the only other document I've missed out is there's also a document of adjacencies so that Department A would like to be beside Department B and does not necessarily need to be beside department C.

Q Understand, and that all goes out to the tenderers.

A Yes.

Q They then come into send a bid document in?

A Yes.

Q They're assessed?

A Yes.

Q There is a dialogue but with three of them in this case?

A Yes.

Q That involves meeting people from across the hospital in a structured series of meetings?

A Yes.

Q They revise their designs and they reissue their bid?

A Yes.

Q Or update their bid. What level of drawing do they produce in their bid in terms of scale?

A There was, within the ERs, a list of room types they had to deliver as part of their bid.

Q So, you have to do drawings of these rooms?

A Yes.

Q Right. So, there'll be 1:500 drawings, 1:200 drawings, and 1:50 drawings of those bits?

A Yes, uh-huh.

Q Will there be Room Data Sheets for some of those rooms?

A Yes.

Q Right. Then once the contract is signed, what's the process that

happens in the year after contract signed, the Stage 2 process?

A We start meeting with each individual specialty and we-- Well, first of all, we agree a programme of when groups of rooms are going to come out and we meet with each individual specialty and we go over the room types, both standard and special rooms within each area.

Q Is this the User Group meeting?

A Yes.

Q But you've already met the department back at the beginning when you wrote the (inaudible) booklet?

A Yes, but it's very high level back then.

Q Right, and in this year, 2010, what sort of level of drawings and detail are being produced by the architects at this point?

A It's a tremendous amount of drawings.

Q But not every single room at this stage?

A Not every single room, but what tends to happen is, say that we've started with 200 room types, by the time we meet the first round of User Groups, that might go up to 300 room types because there are more specialty rooms than the architect had thought.

Q Then at the end of that User Group meeting process, are these individual rooms all signed off?

A Yes.

Q Did you have a role in signing those off?

A Yes, I signed them off.

Q Right. Then what's the stage that happens after authorisation to proceed? Is there another sequence of drawings and documents?

A What tends to happen is when the construction-- the drawings start coming out, column positions, cabling positions sometimes throw a dimension out slightly. So, a sink that you might have put in one place will not fit there anymore, and you have to then go to each individual room, or occurrence where that happens, and sit with the User Group again, and amend it slightly.

Q So, it's effectively a third round of users?

A I think we had something like five or six rounds. It is a very long ongoing process.

Q We get the impression, and I want you to correct me if I've got this wrong, that you're signing an awful lot of these drawings and Room Data Sheets in '10, '11, and into '12, but----

A Yes.

Q -- not quite-- Then you begin to sort of not sign them anymore. It's more Mr Hall. Is that that roughly right?

A Yes. Well, Mr Hall signed off all the M&E type drawings. I signed off the room-- the room-- the 1:50s, we would call them. The room layouts.

Q Right. So, these are 1:50 drawings of a bit of the hospital? 25 rooms, other bits and pieces? I'll come to some of those. Right, now, what I wanted to do was----

THE CHAIR: Sorry. Again my fault. You were asked about signing off Room Data Sheets and I think you said Mr – and I missed his name – signed off the----

A Hall.

THE CHAIR: It was Mr Hall?

A Yes.

THE CHAIR: Right. So, just what was the distinction between what Mr Hall was doing and what you were doing?

A Well, the drawings which David Hall would have signed off were M&E drawings. They were from-- If you like, the M&E contractor would have signed up. What I'm looking at is a room which-- a room like this, which gives you the position of everything within the room. It doesn't tell you what's behind it, but it just gives you the position of everything within the room.

THE CHAIR: Thank you.

MR MACKINTOSH: So, you might find that a drawing at 1:50 that you would sign off would have the location of sinks and ventilation systems----

A Yes.

Q -- but a drawing that Mr Hall would sign off would have the actual trunking.

A Yes.

Q Got it. Now, Ms White explained yesterday that she interpreted you signing off Room Data Sheets and drawings as the Board signifying its approval----

A For the 1:50 layouts.

Q -- of the 1:50 layouts, but it wouldn't have been you on your own. It would have been with the members of the team?

A Oh, yes.

Q Okay. Now, what I want to do is ask a sort of process-driven question. Well, I'm going to ask it now and I'm going to re-ask it when we get to individual drawings. So, at a very high level, you've already started to answer it. Let's imagine you've been given a 1:50 drawing of part of a ward and all its Room Data Sheets, and you're asked to sign for it for the Board. What's your process to ensure that it's good to go?

A What we would have had-- We would have met with the User Group. I would have all the signed drawings, copies of all the signed drawings, all the-- any queries, any amendments which the User Groups had wanted on the drawings which the architects had produced. I

have a copy of all those. I get the new drawings. I check against it. If there is an amendment which is because of a structural issue or because of-- a light fitting has changed position or something, I would speak to the rest of the team. Marie, if it was Kids'; Heather if it was Adults; Fiona, Jackie and Karen. It was very much a team thing. I co-ordinated it.

Q So, to take an example, if at the one User Group a sink had been moved and there's a drawing, it's written on the drawing, "Move that sink," when the new drawing comes back, you check the sink has moved?

A Yes.

Q Now, those 1:50 drawings, as we'll see in a moment, have the external aspects of the ventilation system drawn on them. So, they have marks for the chilled beams and the inputs and outputs and the----

A No.

Q No?

A No.

Q Not in the ceilings?

A No. All the 1:50s have is they have a floor plan. They have-- If you think of the walls being collapsed out, the four walls collapsed out, and that's it.

Q So, you're not involved in drawings which show the whole ward as a piece?

A No.

Q Okay. Right.

A That's a service drawing.

Q I'll come back to that issue in a moment. In 18(c) in your statement, which is on page 261 of the statement bundle, we asked you this question:

"How can you sign off on RDS unless you know the ventilation requirements to which the room must comply? How could you do that if you did not know about [in this case the ventilation] derogation which we've asked you about [and which you didn't know about]?"

A No.

Q You've recorded:

"On the RDS there is a recorded ventilation rate, Lux levels… In addition, in the main body of the RDS was equipment to be supplied and fitted by the contractor, supplied by client, fitted by contractor, and supplied either by client or specialist contractor. This was the section I had to check in detail, cross-referencing with cost of equipment list and room layouts. The service requirements on the RDS, ventilation and lux levels, were checked by David Hall and the Technical team, I was told, and also provided were the contract ER's [I'm assuming that's Employer's Requirement] sections, which had tables detailing the different requirements for each room type."

A Yes.

Q

"...and I was unaware of any derogation which changed these requirements."

A Yes.

Q Now, two things. We've seen how on some of the drawings, changes are marked on. So, a User Group will comment about an aspect that they don't like and the architect will change it. Where's the signed and annotated documents that show that Mr Hall and the Technical team have approved the environmental page on the Room Data Sheet?

A The environmental-- the initial environmental sheets on the Room Data Sheets-- environmental page on the Room Data Sheets was from the ERs detailed. I didn't check them.

Q I appreciate you didn't check them----

A David Hall and the Technical team would have checked those before final sign off.

Q But the point I'm trying to get across is that there aren't signatures from----

A No.

Q -- David Hall and the Technical team saying, "We checked this. It's fine, Frances. You can sign."

A I was just told that that was what it was.

Q Were you told separately for every single document?

A No, I was just told that that was-- there was no problems with them. I wasn't told there was any problem with them at all.

Q You've given a complicated answer and I need to break it down. Did Mr Hall, and I'll ask you about other people in a moment, tell you for each individual Room Data Sheet that the environmental table was correct?

A No.

Q No.

A Not for each individual room.

Q How did he tell you that the environmental data on all of them was correct?

A Both he and Peter Moir told me at the start when I was going through the Room Data Sheets that I was only looking at the Room Data Sheets from a point of view of the equipment which was going into the rooms, not from the environmentals because they were checked elsewhere.

THE CHAIR: Right. What I'm taking from that answer is that really before you'd looked at any Room Data Sheets, there's a conversation with Mr Hall, Mr Moir, and they had essentially said that your job, as it were----

A Yes.

THE CHAIR: -- did not involve the environmental or checking the environmental----

A Yes, because I would not be comfortable with the checking----

THE CHAIR: Right, I mean, have I got this right?

A Yes.

THE CHAIR: What your evidence is that it was an instruction or a piece of information looking to the future?

A It was a general instruction as to what my scope of work for within those Room Data Sheets.

MR MACKINTOSH: Because the problem that we find, and I'm sure that part of the problem is that there's a lot more going on in this hospital than the ventilation system. That's the first thing. We are very aware as an inquiry that we're getting very interested in one aspect of a very complicated building.

Secondly, we're recovering information years after the event when we may not have all the documents. But, we've never found a written record that anybody has ever checked the environmental sheet on any of the Room Data Sheets apart from the fact that you've signed the whole sheet.

A Mm-hmm.

Q So, where is the record of the fact that someone checks this?

A I couldn't say really. As I was given the task of checking the ADBs, as in the Room Data Sheets, as it pertained to the 1:50 drawings, which is the equipment. The people in the room, the description of the room, the functions within the room and the equipment within the room, not the environmental sheet.

Q When you meet the User Groups----

A Yes.

Q -- did they know that the ventilation system of their ward and the water system of their ward was not on the agenda?

A The environment-- you don't go through the ADB sheets with the 1:50 User Groups. It's the actual drawing that you use with the ADB equipment at the side.

Q Okay.

A The air ventilation rates are any specialist-- water or any specialist requirements would have been in their clinical output specs.

Q In your statement, if you put page 261 back on the screen, do you see how the fourth last line of your answer to (c), you say:

"I was told [i.e. you were told that these were checked by David from the Technical team] and was also provided with contract ER sections which had tables detailing different requirements for each room type."

Why would that have been necessary if you weren't checking the environmental----

A No, I just remember seeing, as part of the Employer's Requirements documentation, a list of them.

Q So, you weren't provided with them for that purpose?

A No, no, no. I actually think I remember seeing him at the time when Alistair Smith was checking them.

Q So, the only three people you've named who might have checked these are Mr Moir, Mr Hall and Mr Smith?

A Mr Smith definitely checked them later on, but he was-- he didn't come into it until the job was on site and under construction.

Q Ah, right. Yes, because that was the only thing I'm worried about here. There is a theme that we've noticed, and we're not sure it's right yet, but you may be able to help us. If we go back to that bundle we were looking at with the Room Data Sheet, which is a page 393 of bundle 43, volume 3, and we look at that page, do you see how there's no entry against extract air changes per hour and no entry against supply?

A Yes, I see that.

Q That seems to be a theme throughout, not just all the versions of the Room Data Sheets and the ADB sheets, all the way back to the beginning.

A Right.

Q So, by the time Mr Smith's involved, these have been through a series of iterations already, haven't they?

A Yes, as in they've been through a series of iterations with regard to the equipment detailed on them. I don't know about----

Q Right. Okay.

A -- if the environmentals had been through any iterations.

Q So, what I want to do now is to understand your understanding of where these conversations are happening about these technical matters, not just the checking because we discussed that, but during the design process in Stage 2, that's in 2010, and during the early stages of Stage 3 when the construction drawings are being produced, where are the meetings taking place to discuss the ventilation system?

A I'm not sure. I knew that-- I was aware of the meetings with-- regarding ventilation systems. I know that Dr Craig Williamson had been there at various meetings; I hadn't been myself.

Q Is this in 2010?

A I'm sorry, it's such a long time ago. I can----

Q Well, let's go back to bundle 40 and page 358. So, this is a meeting, it's the second meeting of the Technical Design Group, and you are recorded as

being present. I appreciate you're not the chair, by any means, of this meeting, but you're here in front of me, so I'm going to ask you this question, and if we scroll down onto page 362, there's a box, 7.09, M&E design. It's on the agenda. Now, we go through all those meetings that year, nothing's ever written in that box. There was never a-- you're nodding at me.

A I'm sorry, I'm not surprised that there's nothing written in those boxes because none of the people who are detailed as being present would have had any dealings with M&E since then.

Q Yes, so what perturbs me and I'm----

A Sorry, there were separate M&E meetings.

Q Were there?

A Yes.

Q Who was at them?

A Oh, I couldn't tell you. There would have been Alan Seabourne, David Loudon, Peter Moir----

Q Mr Loudon isn't on the project at this point so this is----

A Well-- and David Hall.

Q But none of them are M&E engineers?

A I-- Sorry, I wasn't part of the team.

Q Well, you were part of the team.

A Sorry, I wasn't part of the team who was doing the technical details, so I'm only guessing at who would be at the meetings.

Q Because I think this is going to be a common theme we'll ask a lot of your colleagues, and you're first so you get to be asked first. Is there not something a little bit strange that the ventilation parts of these Room Datasheets are examined through a separate process, which isn't mentioned in the minutes of the Technical Design Group, which can't involve any board-appointed M&E engineers. Is that not a bit odd?

A Yeah. The way you're saying it, yes, is odd that----

Q I realise I'm putting a particular angle on it, but react----

A But from our point of view who-- as a team who were meeting with the users and pulling together the Room Data Sheets and the-- from the equipment side of things and doing the 1:50s and the 1:200s. There-- It's not odd to us because it was not within our remit.

Q So, if we go back to your original skill, your core skill, which you described as being an interpreter of clinicians and managers. I know that's not quite how you put it but you----

A Yes.

Q -- gave the impression that you

felt you had a particular skill at getting the information out of people about what they wanted from their rooms so they got what they were asking for?

A Yes.

Q Right. I mean, you'd be aware that, in some specialisms, by no means all, ventilation is a bit of a topic.

A Yes, but it's not a topic when you're doing physical 1:50 rooms. The only-- What I would say the only technical involvement that our group had was for things like picking a surgeon's panels, theatre lighting, that kind of thing, none of the systems.

Q And do you know-- I mean, when you were at these User Group meetings, was there ever an occasion when someone would say, "Is this room HEPA filtered?" You'd say, "Well, we're not discussing that. You need to go and tell somebody else." Is that something that would happen?

A If the room-- if it was discussed-- if somebody had said that the room-- because I do remember if somebody had said, "What was the ventilation in here? Is it HEPA filtered?" David Hall would answer that he was always there with us.

Q Okay.

THE CHAIR: Right, David Hall was always there with you?

A When we would-- he was-- Yes, he was always there with us.

THE CHAIR: Right, thank you.

MR MACKINTOSH: Now, could I take you, please, to a document that may well have a signature on it, which is bundle 43, volume 5, document 24, page 156. I'll say that again for the benefit of my colleagues. Bundle 43, volume 5, document 24, page 156. Now, we're not going to show this bit in the room, but I'm going to ask my colleague with the technical crew to go to the bottom right hand corner and zoom in on the signature block. So, this has your signature from 2010?

A Yes.

Q And also someone from Brookfield, and if we go to the bottom right hand corner completely so you can see what the drawing is. It's a ceiling finishes strategy plan.

A Yes.

Q Now, what I want to do now is to step back out to the whole drawing, and-- It's the fourth floor. So, if we look at the drawing, there is the main tower. It's the top left-hand arm of the tower I'd like to zoom in on. Now, stop there, a bit far-- Right. Now, we can now put that on the-- there's no longer a signature visible. So, this is a fourth floor drawing. It's a bit of a bad scan. I appreciate that, Ms Wrath.

Now, Ms White said in her

statement that the 1:200 ceiling strategy plans confirming the proposed ceiling types, represented in the Appendix K technical review workshops for the GDC Project team, including their technical advisors, Currie & Brown, and was returned as approved, and this was approved as Status B. Now, the one she's talking about is, in fact, a Ward 2A plan----

A Yes.

Q --which I haven't got in the bundle, but this is the fourth floor, and the one we're looking at is a fourth floor, but on the Ward 2A pro-ceiling(?) types of things:

"This was approved by Frances Wrath and Peter Moir for the Project team on or around 18 October 2010."

Now, just at the very general level, if it's a ceiling strategy plan like this, albeit this isn't the right one----

A Yes.

Q -- what role would you have in saying, "That's the right ceiling/that's the wrong ceiling"?

A There was a list of ceiling types that we had put out in the Employer's Requirements, which say certain ceilings have to be solid, theatre ceilings, certain ceilings were ceiling tiles, certain ceilings had to be plaster, and that's what the grid at the side is, the key. And, as a team, we all checked the drawings to make sure that it was reflective of what the ceiling types that was on that list.

Q Okay, so this particular arm eventually becomes Ward 4B, the Adult BMT unit, but at this point that's not in contemplation. This is going to be an adult haematology ward.

A Yes.

Q And would you ever have read the clinical output specification for that ward?

A I probably read it.

Q Can we just look at it? I'll just make sure I've got it to hand. It's in bundle 16, and it is document 15, page 1595, and this appears to be the clinical output specification for the Adult hospital. Have you seen this before?

A I can't say.

Q Well, I'm going to point to one bit, which either you'll remember or you won't, and if you don't remember it, I'm not going to be able to go much further. So, if we jump forward to the bottom-- Sorry, I'm looking at the wrong one, so just me a moment just to get that. Yes, I'm in the right place. Yes, if you look at page 1597, the text called, "Ventilation." I'm going to read a bit and ask you if this is something that you remember from the time and if you don't, it will be different. So:

"As described, for the haemeto-

oncology ward there should be no opening windows, no chilled beams. Space sealed and ventilated. Positive pressure to the rest of the hospital and all high pressure filtered air, greater than 90 per cent, probably best HEPA with adequate number of positive pressure sealed HEPA filtered side rooms for neutropenic patients, as in the Beatson West of Scotland Cancer Centre."

If we go back to the drawing we were just looking at, staying where we were, would you and the team be looking at the clinical output specification and checking it against this drawing, or are you checking it against something else?

A We'd be checking-- the clinical output specs are the base document. So from the base document, the ERs had a ceiling type plan, if you like, which detailed which individual areas would have different types of ceilings and that's what we checked it against.

Q So, if you-- Stop me when I say something that you know. I'll ask you a series of questions. When you read that description, would you know that in order to be positive pressure to the rest of the hospital, you probably need a lobby at the entrance to the ward? Would you know that?

A No.

Q Would you know that you need to have sealed ceilings in all the rooms?

A No.

Q Would you know that you need to have pressure gauges on the outside of the rooms?

A In each individual room?

Q Yes.

A Yes.

Q Right. So, from the point of view of the Board as a whole, as the client in this process, who is checking that this is done right, that this ward has been ultimately drawn correctly at this stage, in terms of its ventilation output that is required?

A That would have been Peter Moir and David Hall as part of the services groups.

Q So, if we look at bundle 47, volume 3, I'm just going to check whether it's one I need call out. This, again, has signatures on it. This is page 4 of bundle 47, volume 3, and if we look in the bottom right-hand corner, it's a 2011 drawing.

A Mm-hmm.

Q And it's called a second floor plan, Schiehallion Ward, Day Case unit, aesthetic offices and hospital at night, ceiling finishes strategy plan. In fact, it may be the document that Ms White was talking about. If we go up on this right-hand side, again, without putting it on the YouTube feed, we have a signature block and you've signed it----

A Mm-hmm.

Q -- and then somebody else has signed it below. Do you recognise that other signature?

A No, not at all.

Q No. So, if we move a little bit to the left so we can get the signature off the screen – and now we can put it on the YouTube feed – this shows the Schiehallion unit, doesn't it?

A Yes.

Q What role or capacity did you have to spot that there's no entry lobby in this ward, there's no double doors at the start of the ward, the top left-hand of the racetrack, just below the purple staircase in the middle, where the----?

A I wasn't aware there had to be one.

Q Who would have been aware?

A That would have been part of the clinical output specs on it.

Q It is part of the clinical output specs, so who would check that they were being properly complied with?

A It wasn't something that I was involved in.

Q You signed for it?

A I signed for the ceiling layouts.

Q But you signed the drawing?

A For the ceiling layout to check against what was on our list. In the Schiehallion unit, the only area which I had any real involvement in a detailed design area is the specialist radiation

shield room because that's a one-off. That was a really----

Q And that's at the bottom of the screen at the moment.

A That's a really specialist area which Professor Bradnum(?), we basically had to sit down and design it from scratch----

Q Yes, because it has a solid wall around it and internal walls.

A Yeah.

Q So, your understanding of the process for this drawing, would be: check the ceilings and don't check anything else?

A That's all we're doing, just checking the ceiling type.

Q Could it be that by adopting that process, errors creep in and aren't spotted? Because in this case, we had evidence yesterday, and we're not quite sure of the order of events, that there is an early sketch by the architects, which has a lobby in that position at the entrance to the ward. Then this drawing doesn't have one and so, if you're not noticing – you, the team – that there are errors at this stage, in 2011, surely that reduces the chance of them being spotted before the hospitals built.

A I take your point but the clinical users were involved in this plan as well. I would----

Q But you just told me wouldn't

get involved with ventilation?

A No, I'm not saying with ventilation, but you said about a plan which had a second door, a lobby door.

Q Well, there was a sketch plan but we're not sure they saw that.

A So, if it was done at a User Group meeting they would have seen that and said whether they needed it or not. Ventilation is not really----

Q I understand, Ms Wrath, and it will feel for the next hour and a half that I keep asking you the same question, and I'm only really asking because your signature is on the documents, and I do understand your position, but do you have any view about whether the system being adopted for you to sign off things was sufficiently robust?

A In a smaller project, you would probably have more oversight of more sections within it, but in such a big project you just accepted that this was the body of work that you were given.

Q From your perspective – and it may be you don't know the answer – was there anybody taking an overarching view of the technical aspects of the ventilation system from GGC's point of view?

A That was supposed to be Peter Moir; he was supposed to be overseeing the whole project that way. We were giving-- We were given a section of it, which was basically the 1:50s, 1:200s, 1:50s and the-- I then moved on to doing specialist Group 5 equipment.

Q Can I go back to the Room Data Sheet we're looking at before, and I think I know the answer to these questions but I feel I should ask them. This is bundle 47, volume 3, document 8, at page 393, and it doesn't have a signature. It's a Room Data Sheet. If we look at this document, which you explained that you didn't check, I'm going to take you down a particular rabbit hole and I really want you to tell me when you've stopped going down there, effectively. Do you see under "Mechanical ventilation notes" it says, "Supply air rate at 40 litres a second"?

A Yes.

Q When was the first time you ever heard that the supply air rate of 40 litres a second in this hospital was unusual?

A I wasn't aware. I wouldn't have looked at that. It wouldn't have been something which would've been on my radar.

Q Because the position that we've we're looking at in this Inquiry – and it might be described as a hypothesis – is that during the contract negotiations two days before contract sign, an agreement was reached between Brookfield Europe, now Multiplex, on the

Health Board to not supply air to the individual rooms of the hospital at 6 air changes an hour, as is set out in SHTM 03-01 guidance, but instead supplied the rate of 40 litres a second which, when there were four people in the room, calculates out at something like 3 air changes an hour, and so this would be a red flag if you knew what the air change rates were supposed to be. You're shaking your head.

A I'm sorry. I'm shaking my head because I-- it's like Latin or Greek to me. I have-- Ventilation rates are – sorry – not within my remit. Yes, you're right. Me, reading 40 litres per second and me reading 3 air changes or 10 air changes, I wouldn't be able to say which one 40 litres a second was.

Q And if we go to a different drawing, which is also-- a Room Data Sheet, sorry, so it'll safe for signature, which is bundle 47-- same bundle, bundle 47, volume 3, document 8 at page 45. This is an isolation room, round the corridor, down near the radiological room we were just discussing, and do you see here in the ventilation section, again, there's no extract air and no supply air, but the notes are different. They are "CHBN 04-01, supplement 1, for further details of specific requirements." I take it you'd have never read that guidance?

A No.

Q And you would have no opinion about whether an isolation room designed in accordance with it was suitable for this patient group?

A No, at all. I-- Just by reading that I would have assumed that the room was designed in accordance with the HBN.

Q Well, that's an interesting question of itself, but I'm not going to ask you about that. So, I suppose the problem is-- and we could do the same exercise for Ward 4B as well, but you weren't involved at that stage. If I understand, is your position effectively this? "My primary job was either interpreting the needs of clinicians in terms of what they wanted in the room or checking that what ended up on the other parts of the Room Data Sheet, apart from this page, was what the Employer's Requirements and the clinicians wanted."

A Both.

Q I mean, both of those things.

A Both.

Q Yes, but at different times?

A Yes.

Q Right, and your job, as you see it, wasn't to check that the temperature, ventilation, lighting and-- if we scroll to the bottom of the page, we're not-- Okay, go onto the next page. "Safety," which is about a water system.

A Yes.

Q It was not to check those in any way at all?

A No. If someone would have asked me to check those I would have said, I do not have the skill set to do it.

Q Now, this may just be me being a lawyer and therefore being intensely paranoid about signing things, but I was always taught when I became a lawyer for the first time you don't sign other people's written submissions in the court because the judge might ask you questions about it and it might not be what you-- It used to be a practice as advocates that would sign other people's documents and we're taught, "Don't do that because you might sign something that's wrong." You're sort of nodding.

A Yes, I agree with you. I thought that I was signing within my remit. There are documents, if you like, which I have made. They have not been full-- with all the details are on them and I've actually made a comment, "This is a B with-- accepting of it doesn't have the equipment for such and such on it." I always felt that I signed off the documents, especially the 1:50s, in the knowledge that I had all the back-up paperwork, documentation and User Group signatures for each of those rooms.

Q You can take this off the screen, but you didn't, if I understand your evidence, have a note from Mr Hall or Mr Moir saying, "The environmental page for this room is good," did you?

A Apart from verbally telling me that my job was-- Mr Moir telling me and Mr Seabourne telling me that my job was to become part of the team and was to do the 1:50s room layouts and to check the equipment on the ADB.

Q Right, so let's flip this around before we have a coffee break, and I do appreciate this is quite an odd question. Let's think about it from the point of view of other people. So, let's start with the point of view of IBI Nightingale. They get a signed signature, and you're nodding, and you've said that that would be them thinking you signed for the Board.

A Yes.

Q So they think the whole thing's good?

A They think that ceiling plan reflects what we had asked for in the Employer's Requirements, yes.

Q And they think that Room Data Sheet, the whole sheet, all the pages, is what you asked for?

A No, because in the hierarchy of documentation, the ADB sheet comes well, well at the bottom.

THE CHAIR: When you use the expression ADB sheet, you're meaning----

A That sheet within----

THE CHAIR: In other words, a completed Room Data Sheet.

A Yes.

MR MACKINTOSH: Because it happens to say ADB in the top right-hand corner, but is it actually a Room Data Sheet in the ADB format? Let's go and look back at one.

A Yes.

Q We'll go back to page 45.

A Yes, it is.

Q Yes? So, in the hierarchy of documents, what document higher up the hierarchy would contain the specification of the ventilation for this room we're looking at, page 45 of bundle 47, volume 3?

A The environmentals would be taken care of in the clinical output specs and the sections of the Employer's Requirements which had specialist-- or just general mechanical and electrical and plumbing sections.

Q Yes, but----

THE CHAIR: Sorry, I'm not sure if I quite followed that.

MR MACKINTOSH: So you explained there's a hierarchy of documents----

A Yes, and they are higher up.

Q Yes, and this document is lower down.

A Yes.

Q So, above it, you've got the clinical output specification, the Employer's Requirements?

A Yes.

Q What else?

A That would be the engineering design.

Q Would the contract itself and its M&E logs have some priority in this process?

A Yes. I'm saying "yes" theoretically. I don't know what the actual definition of-- If for example you had-- as you're saying, if you had a contract which had an amendment to it and had been signed up by all parties, yes, that would be high up the----

Q Because-- and I recognise this is still free to be determined by the Inquiry, but we put out a provision position paper, number 13, last year which sets out what I'm about to say to you and I want to know whether this is news to you. So, the understanding that we developed in that document is that the Employer's Requirements, which include a requirement to comply with SHTM 03-01 amongst others, were varied in an M&E log that was signed up before the contract was signed to this new 40 litres per second ventilation standard. Would you have known about any of this?

A No.

Q But then this wasn't your area?

A It wasn't my area, but I would

have-- I would have expected to have heard of it.

Q What I'm going to suggest we do, my Lord, is this might be a good place to have a morning break because I'll just restructure some of my questions while I have an opportunity to reflect.

THE CHAIR: Very well. We'll do that. We're now at ten past. We'll sit again at twenty to twelve and I hope we get a chance for a cup of coffee.

THE WITNESS: Thanks, my Lord.

(**Short break**)

THE CHAIR: Mr Mackintosh.

MR MACKINTOSH: Thank you, my Lord. Now, Ms Wrath, I want to just pick up a few remaining issues around Ward 4B. So, you've explained in your statement, which is Question 24, page 268 of the bundle, that by 2013, you were almost completely involved in equipment matters, specialist Group 5 installations and confirming 1:50 layouts which User Groups had signed off were delivered on site. So, you weren't involved in the decision at that stage to convert 4B into an adult BMT ward?

A No. Sorry, no. The decision came solely on that I was tied up finishing off the Room Data Sheets that were already been through the process and I was doing the tendering for the X-ray equipment, a septic unit, that kind of thing. That was taking up most of my time.

Q Okay, but there is a point when you might have been involved, according to a document I want to show you, earlier on. I wonder if we can look at bundle 43, volume 1, document 3, page 13, and this is a long time ago. Page 13. So, it's a meeting----

A Yes.

Q A minute of an operational policy meeting from 14 August 2008, "Haemato-oncology - New South Glasgow Hospital" with three people present: Myra Campbell, Heather Griffin and you. Now, I would have to confess I don't remember what I was doing on 14 August 2008, but I'm trying ask a little question about process. So, if you go on to look at that outcome, do you see there are four outcomes listed? Where does this document sit in that process we describe? Is it well before the clinical output specification?

A That would have-- that would have been taken on as an amended clinical output specification, and we'd have drawn up from that the changes which were required to the ward. It would have gone through a checking process. Brookfield would have given a cost for it. The board would have agreed.

Q Well, this is 2008. This is

before tender.

A I don't-- but I don't think it-- Although that might have been shown then, it wasn't the okay to go ahead with it. It wasn't given----

Q No, no, I think I might be confusing you. Let's sort of wind back. So, if this minute is accurate, it's from 14 August 2008, which is even before the tender has been issued.

A Yes.

Q Before the Employer's Requirements have been produced, and potentially before the clinical output specification has been finished.

A Yes, it would have been. Uh-huh.

Q Yes. So, is this effectively an example of a very early stage discussion of what the ward, this particular ward, is going to need?

A Yes, it would have been an early draft.

Q Yes. Now, if we look at those four bullet points, one of them-- well, two of them involve elements of ventilation.

A Yes.

Q So, that's the Pentamidine treatment room and the positive pressure in a significant number of the rooms. What I want to understand, if you can help me, is, as this goes forward through to sign-off-- I know it never gets built because this is going to be turned into something else----

A Yes.

Q -- but as it goes through the process, who is looking out to make sure the Board gets what it wants at each stage? So, at this stage, who is checking that these ideas are incorporated into the project?

A Heather would have taken that to the project board and it would have been-- then, it would have been Alan Seabourne then, would have discussed it with the Health Board's directors as to whether this was to go forward or not.

Q Then once it's in the Employer's Requirements, who checks that it gets built?

A It's on the-- it's on the schedule of accommodation. It's on the ERs, and all the User Groups are actually checking that this is getting built.

Q But if you-- I'm assuming, and you probably can't remember this meeting, I appreciate.

A Sorry, I'm-- Given it's August 2008, it looks like I have gone along to have an early meeting with Heather just to be introduced.

Q Well, indeed, but could it well be that effectively what's happening here is that Ms Campbell is telling Ms Griffin what she wants.

A Yes.

Q And effectively, Ms Campbell

will have got that from her clinicians, to some degree.

A Yes, but the clinical output spec would have required the clinicians to sign off the document as well.

Q Yes, and so what I'm wondering is: is there any criticism that can be made of the process of the User Group meetings, along these lines, that it's probably not actually a good idea not to deal with ventilation and other technical matters at the User Group meetings, because these seem to be inherent parts of this room, this ward.

A Yes, I would say.

Q Because----

A If you would-- you would have to increase your team to include a specialist on it----

Q I appreciate that.

A -- but yes.

Q Because if your understanding of how the User Group meetings operated is how they were supposed to operate.

A Yes.

Q That is without a technical involvement. That's done separately. Is there not a risk that what happens is that the User Group, the users, never really notice something might have gone awry in ventilation?

A No, because there were specialist ventilation meetings. I wasn't involved in them but there were specialist ventilation meetings with, I think it was Dr Craig Williams at that time, and earlier, Dr Penelope Redding, which the ventilations and requirements were discussed. I only know from that because I was involved in a specialist meeting with renal for how you set the renal panels with the clinical physics specialists that do that. So, there was ventilation meetings.

Q So, I suppose the problem that I need to put you on that is that, if you know you can have a specialist meeting, and there's another one we know about, which is the dialysis room, when-- are you aware of dialysis room where Professor Hood and Professor Jones are involved in a dialysis room for ventilators?

A No.

Q You've not heard of that, but you know you can request or cause to happen, a specialist-- you, the team, a meeting with specialists?

A Yes.

Q How do you ensure that the Project team know there's a problem that needs to be considered by specialists?

A From whose point of view?

Q So let's imagine you're the-- I know you're only one part of it, but think of the Project team as a whole. A proposal comes back from the contractor. It's required to be reviewed and signed off. How does the Project team know that

that aspect requires a specialist input if they don't have a specialist in their team?

A I see what you mean. However, the specialist areas which I am aware of, as in specialist ventilation with the clinicians and the microbiologists, and the same with Renal, the ones that I'm aware of for them, those were from the very beginning of when the Employer's Requirements were written up, they had an involvement in it. From other specialties, there were meetings. Each hospital had a medical-- a chief medical, if you like, link----

Q A doctor?

A Yes, who was supposed to deal with colleagues. They had meetings on that which, again, I would not be party to, but there was a senior medical who dealt with-- one for the children's and one for the adults, all the way through.

Q Can you help us about whether either of those two ventilation aspects I took you to, the 40 litres or the HBN 04 isolation rooms, were ever raised with Professor Williams at the time? Can you help me about that?

A I wouldn't know.

Q Right. What I'd like to do now is just move on the topic of commissioning. We came across a commissioning structure for the hospital team, which was actually sent by Ms Macleod, seemingly, to the Edinburgh hospital team on 23 October 2013. It's in bundle 43, volume 6, document 49 at page 1001. So, that's bundle 43, volume 6, page 1001. Yes. Now, I wondered if-- I don't know whether you even appear on this structure?

Yes, I do, under technical project managers.

Q Yes. That's an odd thing. Why are you a technical project manager at this point?

A Because I belong to Capital Planning.

Q Right.

A And it's just-- it's how it's-- the nomenclature of it, because you'll see that Karen Connolly and Ian Powrie and Karen Macsween, they have belonged to the Estates directorate.

Q Because I understand: this is Alistair Smith, he's the engineer we talked about?

A Yes.

Q What's Hugh McDermott's professional background?

A Hugh McDermott is a structural civil engineer.

Q And Anna Daly(?), what's her background?

A I have no idea. Oh, I think Anna Daly might have been involved in an additional building to the site, the teaching centre.

Q Right.

A She didn't say her real name.

Q If you can't remember, I won't press you for it, but the thing that I wanted to ask is that what was your role in commissioning the new hospital in 2015?

A Didn't have a role in commissioning at all because I-- the only commissioning that I did was Group 5 equipment, making sure that the MRI scanners were in position and that kind of thing. I wasn't involved in the commissioning.

Q Would you arrange that to be done or would that be done by the contractor who supplied the equipment?

A That would be done by the clinical physics team actually.

Q So, the hospital would effectively validate that the kit had been put in right and was working?

A Yes, it's different steps of the process on specials kit like that. Once the lead lining is up in the room, the hospital clinical physics team bring in a radioactive source and they go elsewhere and they check that it is within requirements and then when they put the cage in, they check that.

Q They check the room effectively?

A Yes, they check all the separate way through it.

Q This occurred to me, which is a little bit odd, but it might be true. They check that a room that's going to have an X-ray machine in it is sufficiently clad with----

A Lead lining, yes.

Q -- lead or whatever, to isolate that X-ray source from the rest of the hospital.

A Uh-huh.

Q Who checks that an isolation room is correctly set up so that it isolates either the patient inside from the hospital or an infectious patient inside from the rest of the hospital?

A Infection Control.

Q They would check the room was correct?

A I would have said Infection Control, yes.

THE CHAIR: Right, when you say "I would have said"----?

A I wasn't involved in it.

MR MACKINTOSH: But from your awareness of the project in that last few years, who was checking, if you know, the isolation rooms were correctly set up?

A That would have been through an Infection Control team. Jackie Barmanroy was our link to the Infection Control team.

Q Yes, but I appreciate she was only there for two years, wasn't she?

A Yes, but before that there had always been a representative.

Q I understand that, but by 2014 or thereabouts when you're doing commissioning, if you know, who was checking the isolation rooms were working properly and was set up?

A I have no idea.

Q Do you know what the difference is between validation of a ventilation system and commissioning a ventilation system is?

A No, not really.

Q What do you know about that?

A I would understand that that checking would be that you check that it has reached the certain levels, but validation would be that someone has to come in from an external specialist company and re-check that it meets requirements. It's not something that I've already done.

Q It's not your field. Okay, I'll move on then. Now, just picking up some smaller items. In her statement, Ms McCluskey says that you signed off the PPVL rooms, that's those isolation rooms that mention HBN 04 so that contractors can start work?

A That was-- no, I signed off the 1:50. Yes, that's to start work.

Q Yes, but that's the process that you've already discussed where you get-- somebody else checks the other page.

A No, 1:50 is the 1:50 layout as in what the physical things are going to be in the room. I didn't do the services background to that. As in the electrical a cabling to it, the ventilation to it, that was just the 1:50.

Q So, who would have checked those?

A That's part of the Technical team which David Hall-- my understanding was David Hall was leading on.

Q Because we keep coming back to this problem and I think before moving on, who were the Technical team?

A I have no idea. It wasn't-- in such a big job you are giving a stream of work and I must say that there were so many iterations of the Room Data Sheets and 1:50 layouts and 1:200 layouts that you really are having to keep up with your own work.

Q Okay. Well, let's look at something which you might be able to give us some context for the benefit of somebody else. Can we look at bundle 43, volume 2, document 16, page 256. Now, this is an email sent by you to Shiona Frew, who, I understand, might have been, at this point, Mr Seabourne's PA.

A Yes.

Q And the attachment is a document that sets out questions and comments by one of the bidders.

A Yes.

Q And I mean, you're not involved in the earlier stages in this thread, but you do send it on to Ms Frew.

A It looks like Ms Frew has asked me, in passing, did I have a copy of this since I've sent it onto her.

Q What involvement did you have in this feedback process?

A Looking at it at the date, this was when we were meeting with the bidders and I was sat in on some of those meetings because the bidders may have had questions about the existing services to the site, as in where the existing water mains were placed, where the high-voltage cable ran, that kind of thing, and I had cleared the site.

Q Because the attachment isn't, for some reason, I don't quite understand why, it's in a different bundle, but in 43, volume 1, document 13, page 41. That's 43, volume 1, document 13, page 41. 41, please. Yes, this is the Laing O'Rourke feedback document. What involvement did you have with this document?

A That looks like----

Q It was the thing that was attached to the email.

A Yes, it looks like notes I would suggest Mark Baird had made.

Q Right.

A And the main incoming utilities-- I have probably shown them on a drawing where they made the incoming utilities.

Q So, you might have had some involvement in this process as well?

A Yes.

Q Well, we'll show this to other people. Can I ask you to look at a question you were answering in June 2013? So, that's bundle 14, volume 1, page 32, and this appears to be an email from Pamela Joannidis to Tom Walsh and Sandra McNamee, copying Craig Williams and Jackie Stewart. At that point, Jackie Stewart, I think, was a nurse consultant within Infection Control rather than in the Infection Control team, but do you see how----?

A Yes, but that just looks to me like Jackie or Pamela have asked me, could I manage to get hold of some of these figures for them?

Q Yes, but what I want to understand is where do you get them from?

A I would go to David Hall and Peter Moir and ask them for it.

Q Literally that?

A Yes.

Q This wouldn't be because you knew?

A No.

Q So, you wouldn't know where the HEPA filters were in the BMT vent in Schiehallion?

A No.

Q No. Okay. Let's move on to another email exchange from January 2015. That's bundle 27, volume 8, document 4, page 44. So, I mean, you're copied into an email, and this is unusual because what seems to be happening here is you see the emails from Tom Walsh, but actually, "Dear David, using Tom's computer" is actually Craig Williams?

A Yes.

Q Right. Now, suddenly there is a discussion about the appropriateness of using-- of designing the isolation rooms in the way they have been designed. Were you aware of this suddenly happening in early '15?

A No, given it was only copied to me and I was too busy on-- with my job on the Group 5 equipment, I wouldn't have even bothered with it because it was only just copied to me. I don't know why, actually.

Q Right. You weren't involved in this process?

A No, I don't know why it was copied to me, actually.

Q Let's move on to Horne taps. The suggestion in Ms White's statement that you would-- let's look at bundle 43, volume 5, document 31, page 168. Right. No, let's not look at that. Let's take it the other way, because that's the wrong document. There's a note from Ms White's statement. Just from my colleagues, it's Question 60(c) of her statement. She suggests that you might have approved data sheets for Horne taps in August 2012. Were you involved in Horne taps?

A No, there was-- as a team, it was approved, but it was mainly Fiona McCluskey, who was the nurse; Jackie Barmanroy, Infection Control; Peter Moir, and I don't know if there's some other people in. I actually think, a lot of the time, because Emma saw me as a link, she just assumed but no, I wasn't really involved in it.

Q Who was providing technical advice to the people deciding whether to fit Horne opto-therm taps to the hospital?

A I have no-- I have no concrete idea. I do know that Health Facilities Scotland were actually part the discussion as well. I do remember that.

Q Could that have been in 2014?

A I have no idea. It was later on in the-- but I have no idea when.

Q Okay.

THE CHAIR: You mean----

A There wasn't a major discussion about taps.

MR MACKINTOSH: So, could it be that there were two moments when the taps arose? One is in 2012 when there was, when Ms McCluskey and Ms Barmanroy might have gone off to see

other hospitals and had a meeting with Horne. Is that something that rings a bell?

A Yes, that could have been.

Q And then in 2014 there was a meeting with HFS, HPS, and Horne, and a Dr Walker about the taps. Is that something also you might have heard of?

A It could have been. I was only on the periphery of it as in you're in the same office so you hear it. That was it.

Q Right, but you weren't involved in any of those meetings?

A No.

Q What we finally want to do is to put one document to you and then we'll have a short break to see if any of my colleagues have further questions they want to ask you. I wonder if you look at Mr Seabourne's email of 23 June 2016. So, that's in bundle 12, document 104, page 813. Now, did you have an opportunity of reading this email?

A I did.

Q Can I assume that you hadn't seen it before?

A No, I hadn't seen it before.

Q The reason I'm showing it to you is because the Inquiry understands that this email was produced by Mr Seabourne after he retired, at a point when there had been a sudden-- I think a sudden, awareness of this ventilation change around the 40 litres a second had happened, and he is commenting on the history of the design of the hospital and the issue I wanted to put to you-- firstly, have you had a chance to read it?

A I had a chance to read it, yes.

Q Now, without going into the specifics of who the people he names and that sort of-- is there any aspect of that document that you think you would challenge or you would-- or you think is inaccurate or any aspect you think is particularly accurate and relevant?

A I would say that from-- being involved on the periphery, it sounds reasonable. It sounds that that seems-- that was the steps that were taken, from my point of view.

Q Yes, because effectively his position is we are where we plan to be.

A What he's saying is about the Infection Control being involved in it and going through all the different steps, that's what happened but----

Q Well, I need to ask you about a few bits more specifically. So, you see in the first paragraph on line 4, line 3:

"Also, no matter what the Infection Control people say, they were involved in every aspect of the design and the member of my team responsible for Infection Control, Annette Rankin, was the person responsible. I designed dialogue and evaluation for ensuring that appropriate liaison in the case of the

Infection Control and microbiology would carry out effectively."

You wouldn't happen to recollect when Ms Rankin left Greater Glasgow?

A No, I think it was-- I think it might have during-- She was there during the three bidders when those were being evaluated. It might have been kind of not long after that.

Q Right. Was she immediately replaced or was there a gap?

A There wasn't a permanent position, but there was someone who-- there was someone from Infection Control, but I think it took them a wee while to put Jackie into the job.

Q Could Jackie be in early 2010?

A Yes.

Q So there might have been a few months in between.

A Yes.

Q You wouldn't happen to recollect which Infection Control nurses were involved in the gap between Annette Rankin and----

A Well, the one that I remember who-- because she was Jackie's boss as well, who oversaw this, was Sandra McNamee.

Q And then after Jackie left-- So if you've left two years. Sometime in '12, she left the team.

A Did she?

Q Well, she maintains she did.

A Well, Jackie was still involved in the team right-- She was still involved when I left.

Q Because the way she pictured it in her statement, and we'll hear from her tomorrow, is that was seconded for a two-year secondment to the Project team and then she left the Project team and took on a nurse consultant role in the wider Greater Glasgow that happened to involve the hospital as it was being built. Did you know whether formally she was still in the team in, say, '13?

A I couldn't be sure, but I was under the impression that she was-- it might have been because she's still involved in the hospital as part of our overall remit, but I----

Q We'll ask her. That's fine, no problem. Do you see how the second paragraph begins:

"Douglas's timeline is correct in that decision on ventilation regarding the general rooms was made at design dialogue stage and confirmed at evaluation stage."

Do you have any recollection in the second half of 2009 of ventilation of single rooms being discussed at any meetings you were at?

A No.

Q No? Moving on to the third paragraph, there is a reference to that in the first sentence:

"There was no reason for the decision on ventilation to be made without the input or approval of those responsible for Infection Control facilities."

Do you remember whether Ms McNamee, as she then was, was attending meetings of the Project team in the latter half of 2009?

A I don't know. The only one I really remember was Dr Williams.

Q So how many meetings of the Project team did he attend in late 2009 that you remember?

A I've-- It wasn't Project team as in overall Project team. It was meeting with the project-- specific Project team members, who were dealing with----

Q At this point I'm rather going out on a limb and I don't know whether you'll know this, but we have a suggestion there was a meeting a couple of days before the contract was signed in the Hillington office on 16 December to discuss ventilation. Now, you wouldn't have been at the meeting; I appreciate that.

A No.

Q But do you have any recollection of Professor Williams being involved in meetings in December or November 2009, but in the months weeks before contract close?

A No, not at all. It's-- I have very vague memories of that time.

Q Because we really try and work out when you're saying Professor Williams was involved. Was it then or maybe in '10 or '11? When do you----

A From my understanding, it's that there was always-- there was Dr Penelope Redding from the Victoria and there was someone whom I can't remember the name from the Kids' who were in and out of it, but it wasn't really something that I was involved in.

Q Right, okay. Now, in the fourth paragraph, there's a discussion-- I think I know what your answer is going to be, but I feel I should just do this. The fourth paragraph is a discussion about why they had an issue about 26 degrees temperature in the summer months getting too warm. Is that anything you were recollect being an issue?

A No, not at all.

Q No? Okay, and over the page there's a discussion of "We had a discussion about the design process" and suggesting that Ms Rankin and Ms Redding gave a view against natural ventilation. Is that something that you have any knowledge about?

A No, but it wouldn't surprise me.

Q Why is that?

A Because it was standard. From what I know, it was standard at that time that hospitals were a more controlled

environment.

Q Would the proximity of the sewage works at Shieldhall have had any influence on these decisions as far as you know?

A No.

Q No? Okay. No, you don't know? Or no, it had no influence?

A I don't know but I wouldn't have thought it would have an influence because at that time when-- just doing general projects, a lot of-- where possible, a lot of buildings were closed just because it gave you better control over the environment.

Q Okay. We can take that off the screen. What I'm going to do now Ms Wright is ask you to take a seat back in the witness room and I'll see if any of my colleagues here from the core participants have any questions they'd like me to ask. It shouldn't be more than a few minutes.

A Okay.

THE CHAIR: Thank you. All right.

(Short break)

THE CHAIR: Mr Mackintosh?

MR MACKINTOSH: None of the core participants, counsel and legal team have any further questions for me, so I have no more questions.

THE CHAIR: If you could ask the witness back in. Ms Wrath, I understand there's no further questions for you, which means that you will be free to go, but before you go can I say thank you for the time you put in in preparing the answer to the questionnaire and for your attendance today? It has been helpful.

THE WITNESS: Thank you.

THE CHAIR: So, thank you very much and you're free to go.

THE WITNESS: Thank you very much.

(The witness withdrew)

THE CHAIR: Now, my understanding, Mr Mackintosh, is that the next witness is Ms Macleod, but she's scheduled for two o'clock.

MR MACKINTOSH: She's scheduled for two o'clock, my Lord, yes.

THE CHAIR: Right. Well, we'll sit again at two.

(Adjourned for a short time)

THE CHAIR: Now, Ms Macleod?

MR MACKINTOSH: Yes, indeed, my Lord, please.

THE CHAIR: Good afternoon, Ms Macleod.

THE WITNESS: Good afternoon.

THE CHAIR: As you know, you're about to be asked questions by Mr

Mackintosh, who is sitting opposite to you. But before you do that, I understand you're prepared to affirm.

THE WITNESS: Mm-hmm, yes.

Ms Mairi Macleod

Affirmed

THE CHAIR: Thank you, Ms Macleod. Now, I don't know how long your evidence will take. We will certainly sit on till four if the evidence takes that time. But if at any stage you want to take a break, just give me an indication and we can take that break. Now, something I say to everyone at this stage is that it's important that you're heard. These microphones are there to help and they should do the job. I'm very conscious of this because my hearing is not what it is, and I think you've maybe got quite a quiet voice.

THE WITNESS: Mm.

THE CHAIR: So, can I encourage you to speak louder than you would normally speak and possibly a bit slower. It's Mr Mackintosh's responsibility to set the pace and to make sure that you're reminded about keeping your voice up but if I could ask you to bear that in mind, I'd be very grateful.

THE WITNESS: Okay, no problem.

THE CHAIR: Now, Mr Mackintosh.

Questioned by Mr Mackintosh

Q Thank you, my Lord. Ms Macleod, I wonder if I can take your full name?

A It's Mairi Macleod.

Q Are you currently retired?

A I am.

Q Yes. Did you produce a statement in response to a questionnaire from the Inquiry?

A I did.

Q Are you willing to adopt that as part of your evidence?

A Yes, I am.

Q Thank you. Now, what I want to do is just to turn to almost the last page, which is, on the bundle, page 305. It's part of your CV and I note at the top of the page you describe your role in 2002-2003 as Corporate Affairs Manager at South Glasgow University Hospitals NHS Trust and then in 2003-2006 you become Project Manager, Acute Services Strategy: ACH Project. Now, what's the ACH in that?

A It was Ambulatory Care Hospital, they called it----

Q Where was that built?

A It was the Victoria.

Q Was that procured through a private finance or something?

A It was.

Q It was, right.

A It was.

Q Now, Acute Services Strategy, that was a rather large procurement process that GGC was running.

A Mm-hmm.

Q Now, the transcriber can't do, "Mm-hmm," so if you----

A Yes.

Q -- agree with me, or you're----

A Yes, it was.

Q -- saying yes, please say "Yes."

A Yes.

Q To whom did you report when you were project manager for the ACH project?

A I reported to Jane Sandbrook and also to Alec McIntyre.

Q Where in the system did Helen Byrne sit? Because I understand she might have been director of the Acute Services Strategy, or maybe that would have been a bit later.

A I think she was a bit later.

Q All right.

A I can't-- She was definitely for the Glasgow hospitals. I don't recall her being for the ambulatory care hospital.

Q Okay. Now, the ambulatory care hospital. I may have misunderstood, so I want to just check whether I'm talking about the right project. Was this a project that ended up having some problem of overheating in a glass atrium?

A It-- I don't think it was a Victoria.

Q Right.

A It may well have been Stobhill.

Q You weren't involved in Stobhill?

A I wasn't involved in Stobhill.

Q We move on to the second part of the Project Manager, the final part, the New Children's Hospital. Am I right in thinking you stepped from one job to the other, so it's 2006 you start?

A I did, but I applied for the job for the New Children's Hospital and was successful.

Q Right.

A It wasn't just a slot over.

Q I understand, and to whom did you report?

A I reported to Alan Seabourne.

Q He was the director of the whole new hospital?

A Yes.

Q Right.

A Yes.

Q The project manager, sorry, for the whole----

A Yes. Uh-huh. Yes.

Q Okay. Now, if we go, again, within your questionnaire, this time to Question 5, which is on page 292. We asked you:

"When did you first become involved in the design of QEUH/RHC. Please

describe your role and responsibilities."

And you said:

"I first became involved in the design of the RHC in 2006. I was the Project Manager overseeing the clinical input and the views of the young people and their carers'."

Was that the limit of your job in 2006? Was there other aspects to it?

A That was the limit, but that's a huge-- that's a huge workload because there are so many clinical specialties within Children's Hospitals and there was quite a lot of parent groups, kind of like----

Q So, is this a sort of User Group type system where you're consulting the clinicians and the managers?

A I was, yes. I was.

Q Now, it's quite important that we understand the nature of your job as project manager of the Children's Hospital, and I suppose there's two possibilities here. One might be that every single decision that involved the Children's Hospital, as it were, went through you. The other might be that you were actually only responsible for various aspects of the building, and other bits of decision went directly to Mr Seabourne or Mr Moir without passing through you. Which of either of those might be closer to reality?

A It would be the first. So, some aspects, but not all aspects. So, I was involved in the clinical design of the hospital. So, ensuring that the needs of the patient and the staff were made to deliver care to----

Q So, one of the issues that's particularly important to this Inquiry of interest, and I appreciate it's not by any means the only factor when you design a new hospital of hundreds of millions of pounds, is the ventilation system.

A Uh-huh.

Q To what extent does the ventilation system of the Children's Hospital, to any extent, fall within your responsibility as project manager of the Children's Hospital?

A No, it didn't. I have got no technical knowledge to advise on that, so.

Q How could you ensure that, for example, the Schiehallion unit or the critical care areas on the first floor met the standards required by the clinicians and the patients if you weren't involved in ventilation?

A We were-- I was only involved in the spatial design of the building. So, from initially what department would be beside what department to make sure that, for example, accident and emergency or emergency department would need to be beside imaging. So, they would need to be together, wards near Theatre, for example.

Q I wonder if we can go to page 302 of the bundle, which is Question 31 – I'm sorry to jump around a bit – where we asked you a similar question. 302, yes. Something exciting has happened. There we are. The bottom of the page, if we can zoom in:

"As project manager responsible for the tendering, planning, design, commissioning and delivery of the Royal hospital for Glasgow. Please explain why you are unable to answer the relevant questions above which are clearly within your remit as described by you."

This was our sort of follow-up question to you.

A Mm-hmm.

Q

"The Inquiry is keen to understand what you say your role was and why, if it is the case, it was not your role to ensure that the RHC was handed over in all respects as desired?"

You've said, "Issues relating to hard [Facilities management]..." I'm assuming that's "FM"? You're nodding.

"...which would include water and taps, were there responsibility of Ian Powrie and the Estates team and were not within my remit. My role was to manage the stakeholder input to the design of the Children's hospital, this involved ensuring that expectations were managed and that the programme targets and costs were contained. Engineering, Plumbing and Electrical design for the build were not within my remit."

Now, what I don't understand is if, to take an example, you are Professor Gibson who leads the Schiehallion unit at the time----

A Yes.

Q -- and you feel, as I understand she might have done, that the offices were in the wrong place and it was inconvenient to the way she worked-- Is that something that she was concerned about?

A Yes, but there were a number of clinicians in the Children's Hospital----

Q I mean, not just her, but she was one of them.

A Yes. Uh-huh, yeah. That's----

Q So, would that-- would that-- not "dispute"; it's the wrong word. Would that debate and discussion have been within your remit?

A It was-- I would be involved in the discussions about that, but that was a decision that had already been made because if we'd put-- built the offices within the hospital build, it would put the costs up because to build a hospital, her square foot is much dearer than to build an office block, square foot, and with technology, the way it was moving with IT and-- It was decided, not by me personally, but that was the decision that

had been made, that the hospital-- the offices would be separate from the build, but attached.

Q What I mean to say is that if Professor Gibson goes to a User Group and says, "I don't like the fact that our offices are going to be the next building," would that be some of the expectation management that you're involved in?

A Yes.

Q Yes, right.

A And I would say to her, "That decision has been made and that's not what we're here to discuss. We're here to discuss the clinical layout of Schiehallion."

Q Now, if-- Well, the clinical layout of Schiehallion. So, if, and I don't know whether she did this so I'm not going to put her name but I imagine if a clinician in the Schiehallion unit had come to you, and said, "I'd like to double check that the isolation rooms in the Schiehallion unit are the right sort of isolation rooms, because I have a particular immunocompromised group of patients who are going to be accommodated in them," was that something that you would get involved in?

A I wouldn't have the answer, but I would take her concerns and go back and find out what----

Q To whom would you take the concern?

A I would take it to probably David Hall, Currie and Brown – he was our technical advisor to the ward – or to Peter Moir.

Q Ultimately, and if we take a similar example, if someone had looked at the drawings for Schiehallion unit and noticed that there was no double door lobby at the entrance to the ward, as had been the case in the old Schiehallion unit at Yorkhill, and had drawn that to your attention, would that have been something you would have been involved in addressing?

A If it was-- Yes, if it was at the 1:200 or the 1:50 meeting, so when we were doing the design, then yes that would be-- that would be flagged up.

Q To what extent do you consider it to have been your responsibility to ensure that the Children's Hospital met the needs of the Greater Glasgow and Clyde Health Board?

A Yes, I think that was my responsibility, but I couldn't-- I couldn't advise on technical things----

Q No, I appreciate that.

A -- that were going on behind the walls.

Q But to what extent was it your responsibility to make sure that somebody did look at the technical

matters?

A I would pass that information to the Technical team, and they would take it on board. That would be my understanding and if there was a reason why, for example, the double doors couldn't be designed in, I would take that back to the users.

Q Would it be your responsibility to ensure, to make sure, that the hospital, the Children's Hospital, was built in accordance with the requirements set by the Health Board and approved by it in, what was it, April 2009? Was that your responsibility?

A No, I didn't have that level of responsibility. I had people I reported to that made those decisions and I would report up the way----

Q So, who would have had the responsibility to make sure that the hospital was built as the Board in its April-- in fact, it wasn't the Board. It was one of the subcommittees, the Board subcommittee in April 2009 approved?

A That would be the project-- the executive Project team, who were----

Q The executive Project team?

A -- comprised of-- who would be Alan Seabourne and David Louden, with that level.

Q You weren't a member of the executive project----

A No, I wasn't a member.

THE CHAIR: Mr Mackintosh, can you remind me why you're taking the April 2009 date? I'm sure I should know.

MR MACKINTOSH: There is a minute – I can't immediately recollect which bundle it is – of one of the Board subcommittees in which in April 2010 a presentation is made of the----

THE CHAIR: No, you've just said April 2010----

MR MACKINTOSH: 2009, sorry, is made of the Employer's Requirements to that board subcommittee, which appears----

THE CHAIR: Right, okay.

MR MACKINTOSH: -- but we're not quite clear to have approved those Employer's Requirements.

THE CHAIR: Right.

MR MACKINTOSH: Let me move on, Ms Macleod. What structures did you set up or operate to ensure that the clinical teams had input into the design and construction of the hospital?

A So, the management of Yorkhill, so the Children's Hospital, they had a kind of-- they had a management team, so I would approach them, or Jamie Redfern, who was the general manager, to get nominations for the people I was to lease with to take forward the design.

Q And so these are the User Group meetings?

A These are the User Groups.

Q To what extent did you have any involvement in processes to ensure that the technical aspects of the building were checked by the clinicians at Yorkhill and the managers at Yorkhill till they met their standards?

A That wasn't my remit. Mine was spatial. I don't have that expertise, that technical information, that knowledge.

Q How would the system you've described ensure that patient safety is protected?

A In terms of Infection Control or----?

Q Yes.

A At the User Group meeting, there would be myself there; Fiona McCluskey who was the nurse lead for the team; Jackie Barmanroy who was the Infection Control nurse for the team; Frances Wrath would be there for Capital; and David Hall was there from Currie & Brown.

Q Now, Frances Wrath has just told us this morning that the User Group meetings didn't discuss ventilation.

A No, it didn't.

Q So, how were the IPC implications of ventilation decisions discussed with the clinicians and managers at Yorkhill?

A It wasn't. We took the design to them being satisfied spatially and location-wise for the 1:200s, and then for the room layouts, and then it went to our Technical team which would be the mechanical engineering and plumbing.

Q So, who was the mechanical engineer and plumbing advisor to the project that you led in 2010?

A There was a few technical advisors. I can't remember the name of them all, but in----

Q Well, let's go back a bit and we'll work it through. So, in 2009, what I understand is to be called "Stage 1" before the contract signing. Can you remember the name of the healthcare planners who were consulting or----?

A Buchan Associates.

Q And who were the architects who was consulting to the Health Board?

A HLM, I think.

Q And who are the name of the M&E engineers who are helping the Health Board?

A I don't know----

Q Might have been a company called Wallace Whittle?

A It could have been, yes----

Q We then look after contract close into 2010 and what we understand is the reviewable design period. Were there any health care consultants involved advising the Health Board? Was Buchan still involved?

A 2009.

Q In ’10.

A ’10. I think they were in the background. If we needed them, we could call on them, but I don’t think by that time we used them.

Q Was HLM available in 2010?

A Yes, they were available in the same way. I think they were slightly more involved, my recollection.

Q Was Wallace Whittle involved in 2010?

A I wouldn’t be at the meetings that Wallace Whittle would be at.

Q And in 2011 onwards, into what’s called Stage 3, were those three consultants involved in any way?

A Certainly, I think we used Buchans because we were having issues getting the flow to work in the theatre complex in the Children’s Hospital because we had patients, clinicians and we also had parents. So, we really were getting in a bit of a jumble and they came assist with that to facilitate the meeting but apart from that I don’t remember.

Q What was the role of Currie & Brown in 2000?

A They were at-- David Hall was at all the meetings.

Q What role did he hold?

A I understood that he took back any concerns and information that required-- ventilation, for example, and all these things----

Q To whom did he take them?

A He took them to that project exec meeting. So, they had a meeting weekly, I think it was, a Technical team meeting weekly, and issues that had come up at the user meetings were discussed at those meetings.

Q You see, his position in his statement, and indeed, Currie & Brown’s corporate position, is that soon after contract closed at the end of 2009, those consultants, Buchans, HLM and what have you, were stood down and had no further involvement in the hospital in 2010 or 11. How would you respond to that?

A I may be wrong about the date of the discussions around about threatres, but certainly they disappeared and it would have made them coming back at that----

Q I realise it wasn’t your direct responsibility according to your version of the structure, but in those, what is it now, ’10, ’11-- in the five years of the construction period, who was providing technical advice on M&E to NHS Greater Glasgow in the procurement of the Royal Hospital for Children for which you were a project manager?

A I don’t know. I presumed-- I presumed they were sitting around the meeting with the Technical teams and advising the Board in the-- when the--

during their discussions with Multiplex, or Brookfield, as we call them at that point.

Q So, would you have attended these weekly meetings?

A No, no, but they would occasionally come out and ask for further information or-- I didn't go to the meetings.

Q Just a moment, just to check a document. Okay. Can I take you to-- well, I want to check it's the right document. I think you've already sent it to us, but if we look at bundle 43, volume 6, document 49. Yes, that one, please. So, this seems to be an email from you to colleagues in Edinburgh on 23 October 2013. Did you have an opportunity to look at this?

A No.

Q It was on your documents. Do you remember sending an email like this?

A Yes, we did have a lot of discussion and a few meetings with the Edinburgh team.

Q Yes. So, it appears that you've sent some job descriptions.

A Yeah.

Q And you see how you say in the second paragraph of your first email:

"I've also attached the job descriptions I have. Most are pretty historic, written on appointment to the design stage, but they might be some assistance."

I wonder if we can go to page 1015, which appears to be your job description. Do you see that?

A Yes.

Q Now, if we look at this job purpose, it seems to be rather wider than simply managing the connection with the spatial planning. Would that be a fair description?

A Yes, that would be fair.

Q Okay, and you see how the project is described as a £100 million then in capital costs. The second last paragraph?

A Mm-hmm.

Q If you go on to the next page.

A Yes, yes.

Q The description of what Glasgow has, then there's the phases. Now, off the next page, please, and then there's structure, and do you see how in this structure, this organisation, which dates back to when the project was being started, external and internal support is supposed to report to the two project managers and not the project director?

A Yeah.

Q Did it?

A No.

Q No. Look on the next page, please. Now, I'm assuming the role with the department is the whole of the Project team? That paragraph, section 5, isn't just you, it's talking about here, it's talking

about the whole team----

A No, it's the whole team.

Q -- and then six key areas. Now, I wonder if we could just look for a moment at (e).

"Set up and maintain appropriate structures to lead, manage, and coordinate a development and implementation programme to design, procure, construct and commission the New Children's Hospital."

Was that part of your job description?

A No, not once-- not once I was in post. That's not-- that's-- No.

Q So, who was doing that?

A Well, I was doing some of it. So, I would be doing the design.

Q But not the ventilation system or the water system?

A No.

Q No. So, who was doing the rest?

A Well, that would be the Technical team. So, that would be Alan Seabourne and Peter Moir and, I assumed the-- I understood that it was the Board's technical advisors with Brookfield.

Q Because, of course, Brookfield was the contractor?

A Mm-hmm.

Q Could it be that the team was relying on technical advice from Brookfield's technical advisors?

A Well, I don't know because I wasn't at those meetings.

Q Okay. Over to the next page, please. Do you see (m)?

"Coordinate the formulation of the clinical output specifications including the whole hospital model, clinical agencies and aggregations, and departmental clinical operational policies."

Did you do all that role?

A Yes, mostly, yes.

Q Mostly? So, were you involved in formulating the clinical output specification?

A Yes.

Q Okay. You seem to have ticked it, or someone's ticked it. I think it might be the person in Edinburgh has done the ticking so maybe it's not you.

A It wasn't me.

Q Let's move on to the next page. Then it reports to whom you report, and then "the most challenging part of the job." Then over the final page. And did you meet the qualifications?

A Yes.

Q Yes, but you applied for this job?

A I applied for this job.

Q Okay. It's on the screen. How did you react when it became clear that you weren't being asked to do all of what was described in the job description of

the job you'd applied for?

A Well, initially, my expectation was that I would be more involved in all meetings, but then I wasn't, but once the project developed, I realised the workload that was involved and therefore I didn't really have time to think about being at other meetings.

Q Right. Can we go back to this document, please? No, sorry. I've already asked that question; we don't need to go back to it. Now, what I want to do is: did you receive any particular project management training or training about the form of procurement that was being chosen for this hospital?

A We had a workshop just to explain because I had done a PFI previously, so it was a bit more of a collaborative way of working, so----

Q Why do you say it was a more collaborative way of working?

A That was the model that I understood when we were going down, was it was a more collaborative type of procurement where we worked with the----

Q And what was the form of the procurement called, in this case?

A Well, it was a-- what's the word? It was a government funded so----

Q Was it a Design and Build contract?

A Design and Build, that's the one, yeah.

Q Had you previously worked on a contract involving the NEC 3 standard form contract?

A No, I hadn't at this point.

Q Had you any training about how it works?

A Well, just-- Not training. I mean, I haven't claimed to be any expert on it, and I didn't need to be, but we understood what the principles were and how the project was going to operate.

Q So, given that you hold a job title of project manager, I think it's important that I ask you this question. Can you explain to the Inquiry the role of the project manager in an NEC3 standard form construction contract?

A I wasn't a project manager in NEC, I was a NHS project manager.

Q What do you see as the differences?

A I was employed by Greater Glasgow Health Board as a project manager, not in terms of construction or technical knowledge.

Q How would the other professionals involved in this project – the architects, Brookfield staff itself, its subcontractors, its consultants – know that you weren't a project manager in their terms and that you were a project manager in a different way?

A I don't know; you'd need to ask

them that because when we would be at the meeting it would become quite apparent that my role was-- well, I would only be going to meetings within my role. I wouldn't be going to other meetings, so----

Q If someone's saying-- I will have to ask them, of course we will, but if you're talking to someone who works in Multiplex, for example, who does a particular job for them, turns up on the project, is there for a few years and they come across people called the project manager, why wouldn't they be entitled to assume that you're a project manager in their mind? In NEC3; this is an NEC3 contract.

A I know what you're saying, but that's not the way the Health Service works. I was working on this project to manage it, not in any----

Q And not the whole thing? Just parts of it?

A No, just parts of it.

Q When you joined the project, was Mr Seabourne already in post?

A Yes.

Q And was Mr Moir already in post?

A Yes.

Q So, who was planned to be, by any definition, the project manager of the project after contract close when you first joined?

A I don't know.

Q So, was it going to be Mr Seabourne or Mr Moir, or was it going to be an external company brought in to provide management services? Was that ever discussed?

A No, not to my knowledge, no.

Q No. What----

THE CHAIR: Sorry, you're using "project manager" in this context as sort of "capital P" and "capital M" under the under the NEC3?

MR MACKINTOSH: (To the witness) I think what I'm asking because you-- you candidly explain you don't know what the job involves for the NEC contract is that if we think of 2008/2009, was there ever any discussion in the meetings that you were at about how the project was going to be managed once the contract had been signed with Brookfield?

A No.

Q Was there any discussion of what somebody refers to in a document is a one-team approach? I think Mr Louden calls it that at some point.

A No.

Q No?

A I don't know. I don't recognise that term.

Q Okay. Now can you explain the role of the NEC3 supervisor in an NEC standard form construction

contract?

A No.

Q Who was the NEC3 supervisor on this project?

A I thought that was Currie & Brown, but that might be wrong.

Q What were Capita doing on this project?

A I can't recall.

Q Did you come across their staff?

A Not particularly, no. No.

Q Could it be that Capita had staff on site who in some way were checking that the building was built correctly?

A They could be, yes. They didn't come into my way of working so I was aware of Capita, but I couldn't tell you what they did. Perhaps at that time I could, but I can't recall.

Q So, I'd like to look at the Acute Services Review Programme Board governance changes in February 2010. So, we look at bundle 30, document 6, at page 45, and this is the Project team.

A Mm-hmm.

Q Now, you are described as a member of the Project team.

A Yeah.

Q Were you member of the Project team?

A I was a member, yes.

Q And it met weekly?

A It met on a Friday, yes.

Q So, what was the other weekly meeting that you weren't at?

A It was a Technical team with Brookfield, or Multiplex.

Q On to the next page. Were you a member of the NCH Project Group?

A Yes.

Q And that meant monthly?

A Yes.

Q Right. Next one, please. The users groups, you would have attended some of those or you have sent Frances Wrath?

A I attended all of those for the Children's Hospital.

Q Can we go back to 44, please. So, this is the Joint Project Steering Group which doesn't involve you.

A That's right.

Q And this met monthly, so is this the one you're talking about?

A No, there was another meeting that was held weekly with some of these people, I think. I couldn't' say. I didn't attend, so----

Q So the reason I ask this is that this document, if you look in the top right-hand corner, is mentioned as being the ASR Programme Board, which approved it, we think, on 19 February 2010, and this is the governance structure for the whole project, and so are you saying

there was a meeting that took place weekly that wasn't in the governance structure?

A But it reported to that group.

Q But the group that reported to that group was the one you were in, the next document, page 45.

A Well, that was the Project team; that was just an NHS one. This is a----

Q Yes, so is it not-- Am I wrong here? I mean, I've understood this whole document as that – the document on the next page, page 45, please – the Project team, of which you were a member, reported to the document on the previous page, page 44, the Joint Project Steering Group in some way.

A No, no, we had discussions that were then taken to the Project team. The internal Project team had discussions and issues that we had were taken by Alan and Peter to that Joint Project Steering Group.

Q I'm going to just check where I am because I don't want to jump around too much, so if you allow me a moment just to get a document in front of me. If we go to page 38, please. This is the organogram from February 2010 and I see we have the Project team – actually I was wrong – reporting to the Acute Services Strategy Board Executive Subgroup, which is on page 41. What

was that meeting?

A That was a meeting-- That's an exec meeting of senior officers of the Board.

Q So that's not the technical meeting you're talking about?

A No, no.

Q Right, okay. We'll go back to 38 please, and if we look at the Joint Project Steering Group, do you see that it has a number of groups reporting to it?

A Yes.

Q Including the Project Management Group. I wonder if on this diagram is the meeting that you say took place weekly and discussed technical matters?

A Construction Interface Group.

Q The Construction Interface Group, that's what you think it was?

A Yes.

Q So, one thing that intrigues me about that is-- I'll just ask my colleagues in the next room to see if we've got a minute of the Construction Interface Group I can put to you, but if the Technical Design Group-- which is bundle 40, and it is bundle 40, first meeting is page 354, document 119. Now, did you attend these ones? There are 11 of them. You're not at the first one, but you're mentioned as an apologies.

A Yeah, yes----

Q And then if we go on to next

one, which is on page 358, we have you attending.

A Technical Design meeting, yeah.

Q Do you remember going to the Technical Design groups?

A I hadn't until you've brought that up.

Q The reason I ask you is because what's interesting about these minutes is there are 11 of them, eventually they become the Medical Planning & Technical Design Group. Does that ring a bell?

A No, it doesn't, but groups changed all the time and we evolved as the----

Q Well, these groups only happened in 2010 as part of the reviewable design period.

A Yeah.

Q I wonder if you can help me with one particular oddity about these minutes. If you go to page 362, which is in the same meeting, the second meeting, do you see how Item 7.09-- there is an item called "M&E Design"?

A Yes.

Q So this is the Technical Design Group, and if we go through all the minutes of that meeting that year there is never anything in the M&E Design field. You're nodding.

A Yes, I-- because-- Yeah, we wouldn't have that information, that wouldn't be—yeah, it'd be the wrong group for that discussion.

Q Well, it's called the Technical Design Group, coming back to page 358, and there's a representative from the architects there and two people from Brookfield. Mr Hall is there; Mr Seabourne is there. Why wouldn't the Technical Design Group discuss technical design?

A I don't recall. I don't know why. I think it was discussed elsewhere.

Q Because this is the problem. We can't find anywhere else it's discussed.

A Can you not?

Q And obviously the Constructed Interface Group if of interest and we'll look at that. Who do you think-- I've already asked that question so I won't repeat it. Let's move to the User Group process. We'll take that off the screen.

A Okay.

Q Ms Wrath talked about the User Groups this morning.

A Yeah.

Q What did you understand the function of the User Group meetings to be?

A To do the spatial design for the hospital.

Q And not to do technical ventilation or water matters?

A No.

Q No. Can I ask you to look at an email that you might have sent in April 2010? That's bundle 43, volume 5, document 26, page 160. So this appears to be an email sent by you to the lead architect, copying in Frances Wrath, Heather Griffin, Peter Moir, Mark Baird and David Bowen, I think, but we've redacted his email address, and it's called the 1:50 Room Programme and you set out details of both the adult and the Children's Hospitals. So did you deal with both hospitals at times?

A No, no, I didn't. I'm not sure why----

Q So if you look at that first bullet:

"We will include the general wards, but not haemato-oncology. Most rooms in haemato-oncology will have the same layout as general wards with the addition of the HEPA filter. The children's will look at cardiology."

So that first bullet point reads like you're talking about what will become Ward 4B.

A Yeah, it does, it does.

Q And then the third from the bottom of that list, "Dermatology OPD", there wasn't a separate dermatology department at the Children's Hospital, was there?

A No.

Q No, so were you involved in User Group administration of both the adult and the Children's Hospitals?

A I wasn't, but-- I don't know why. We must have been putting the two things together and I was the scribe for that meeting, but I must have had input from Heather and see she's copied in on it.

Q So if there is a--- I mean, I don't know whether it's fair to say this, but if you look at the first bullet point:

"We will include the general wards, but not haemato-oncology. Most rooms in haemato-oncology will have the same layout as general wards with the addition of the HEPA filter."

Where are you getting that information from do you think? Because you're not a technical person, you just said that.

A No, no, no. So I'm taking from that-- I can't remember the context that's come up in. I take----

Q Well, there's an email from Emma White below.

A Yes.

Q She's trying to sort the timetable out.

A I think it was just the timetable gets sorted out and I'm telling her how we, as a Project team, are going to do that.

Q Because one way to read that

email, Ms Macleod, is that you, at that point were perfectly happy to find out from somewhere that haemato-oncology adult was to have some form of special ventilation and to attempt to describe that to Ms White in an email

A Yes. That was information that we'd obviously-- I would assume, had discussed at a Project team and I had to respond to the architects in terms of what that programme would be.

Q Yes, but doesn't that demonstrate that you were involved in passing on information about technical matters?

A No.

Q Well, you are passing on information.

A No, I'm not. I'm just explaining how we are going to process it. I'm not saying I personally will be doing----

Q I'm not saying you're saying that, Ms Macleod, but I'm saying that you are passing on to the architect in those brackets what amounts to something like an explanation of how they're to design the ventilation of that ward, and that's a technical matter.

A Yeah, because-- but I'm-- I I don't understand what a HEPA filter is, so I'm explaining that that's what we are expecting to be doing, but that's----

Q Well, where are you getting the information from?

A The Project team, I would imagine. I think there's been a meeting with myself and Heather and Peter to discuss how we were going to respond to Emma's request, and I've been a scribe for that.

Q Okay, let's look at bundle 43, volume 5, page 591. Now, this is a User Group meeting for the-- well, I think it's agenda for Adult. Do you see how each of the days—a heading, "Adult"? This is for 16 May, '11, 17 May----

A Yes.

Q -- 19 May and 20 May, and there's meetings going to take place in the office in the Hargate Road, and the Board membership is written down on the left-hand side, and you are described as the second attendee. So could it be you're attending Adult User Group meetings as well?

A No, I wouldn't be.

Q Right, if we can go back to volume 43, volume 1, this might well have signatures. So what we're going to do here, Ms Macleod, is we're going to show this document to you, but we're not going to put it on the YouTube feed because it might have a signature on it.

A Okay.

Q It is bundle 43, volume 1, document 25, page 100. So this appears to be-- Well, what is this? (After a pause) Have you signed it, firstly?

A I can't see my signature there.

Q If it's not you, we can sort of ask you questions, but I appreciate that----

A No, I can't see my signature there, no.

Q Right. Would you ever have signed a design acceptance documents like this?

A For the 1:200s, yes.

Q Yes. So I appreciate this isn't your one but, just thinking about this, this is a 1:200 design acceptance form for haemato-oncology. I'm assuming that the project manager signature there is probably Ms Griffin's.

A It looks like Heather's, yes.

Q So it would therefore be an adult haemato-oncology-- it would make sense.

A Yes.

Q But if it was a paediatric place, you'd have signed it, normally.

A Yes.

Q Yes, and you wouldn't be the only signer because you'd have a signature from the Infection Control lead and the Facilities Management lead, Ms Stewart and Karen Connolly.

A Yes.

Q Yes. Now, how are the architects supposed to know that you've not approved the technical aspects of the design when you sign these documents?

A Because they wouldn't be on that-- the drawings. These are the 1:200 drawings, so that's just spatial.

Q So these wouldn't be about-- Just spatial?

A Yeah.

Q Okay, we can take that off the screen. I think I might just go back to something to check I covered it properly with you. This is page 293 of your statement, of the statement bundle. It's your answer to Question 6(d). Now, we were just talking about this group that you thought might be the Construction Interface Group. You've used a different name here. So, you see at (d) you were asked:

"How were designs approved for construction? Who signed off the agreed design?"

You said, as you've just explained:

"The spatial designs are signed off by myself as project manager, the clinical lead for the User Group, and the Infection Control nurse. Jackie agreed the room adjacencies were appropriate in terms of Infection Control compliance. The MEP, (mechanical, electrical and plumbing) design for each department and room now were developed by the MEP group. I was not a member of this group."

So, you can't help us about who was in the MEP group?

A I'm just using that as a general

term, the mechanical, electrical and plumbing group, and that would be-- well, that would actually probably have been the project exec that you were talking about.

Q The Construction Interface Group that we were----

A No, no, the one above that. The board that Alan and Brookfield were sitting in.

Q So your position is that the-- If we go back to bundle 30 and page 44, your position is the Joint Project Steering Group would be approving all the mechanical, electrical and plumbing aspects of the hospital.

A No, that's probably not right either. There must have been a group that fed into that that did that.

THE CHAIR: Sorry, Ms Macleod, I think you were----

A Sorry, there must have been----

THE CHAIR: You allowed your voice to sort of----

A Sorry. There must have been a group that reported that information into that and I-- as I wasn't a member of it, I can't recall what the name of it was.

MR MACKINTOSH: So, you were a member of the Technical Design Group but it wasn't that?

A But we didn't discuss that.

Q Yes. There was a Design and Healthy Environment Strategy Group. Does that ring a bell?

A Design and Healthy----?

Q Environment Strategy Group.

A I can't remember that term.

Q Okay, there was a Joint Commissioning Group? Maybe it's not important. Let's go to page 50 of bundle 30 please. Remember we looked at the meetings of the Technical Design Group from 2010?

A Yeah, yes.

Q Of which you're a member, and that's the middle column. It's yellow.

A Yes.

Q And you see your membership is described and Darren Smith from Brookfield is the lead.

A Yes.

Q Now, let's look at the remit. Ensure the planning application is submitted in time," so maybe that's not important today and so let's move onto the fourth one down: "Monitor design compliance with the ERs and the CPs." What are the ERs?

A The Employer's Requirements.

Q And what are the CPs?

A Don't-- can't recall that term.

Q And:

"Monitor design sign off, monitor progress of key design strategies via access control acoustics, manage any derogations from Employer's

Requirements and CPs."

Surely this group is designed to discuss technical design matters, or have I misunderstood?

A You can see from the minute we didn't.

Q Well, I can see from the minute you didn't, but it looks like this is the group that's supposed to do it.

A But we didn't.

Q And if we actually look at the Construction Interface Group, which is the group that you felt might have met weekly, do you see it blue, its membership? It doesn't include Mr Moir and Mr Seabourne. It doesn't really engage with technical matters, does it?

A No. When I look that group in that diagram, that was-- that Interface Group was the group that was the interface of all the projects on the campus. So that was my mistake.

Q Right, okay, but then it might have been-- Could it have been the Project Management Group that you're talking about? The one in green?

A No. (After a pause) No, I would-- No, that doesn't look like a group that would talk about mechanical and engineering, no.

Q Because the reason that I'm pressing you is that Ms Wrath----

A I know----

Q -- gave evidence this morning that when she signed off the Room Data Sheets for the Children's Hospital, the environmental page wasn't checked by her.

A That's right.

Q Yes, that's right, and she was told by Mr Moir and Mr Hall that it had all been checked and all fine.

A Yeah, that's right.

Q But you can't point to where it was done.

A No. No. There was-- I'm sure there was another group.

Q Right. (After a pause) Now, let's turn to guidance. So this is Question 7 of your witness statement and the bottom of page 293, where we were before. We asked you to explain the purpose of the guidance relied upon by the Design Team and why it was important. Now, it's a very wide question, but the answer you responded with was:

"The team used the Health Building Notes (HBNs) or the Scottish Health Building notes if they existed. This was important as it gave the room requirements and specifications for Health Buildings in the UK/Scotland."

How familiar were you with HBNs and SHBNs?

A If I had to look at an HBN, I'd be looking at what rooms were expected to be in that department. So, if it was an emergency department, what rooms

would generally be in that room and how many for the patient population going through that department.

Q So, would you, for example, have ever looked at HBN 04-001, which set out the specifications of isolation rooms?

A The specification for isolation rooms?

Q Yes.

A In terms of spatial, yes, but not in terms of technical.

Q So, even though there's a sort of caveat in there that it's not suitable for immunocompromised patients, you wouldn't read that bit?

A I wouldn't have that knowledge. I would expect my Infection Control Nurses colleagues to have that information. They were the people who would advise on an isolation room, why it was required and how many we would need.

Q You see, Mr Walsh, and I think Mr Vine, have been quite clear that the Infection Control nurses have no expertise in ventilation of water. Is that something you've heard before?

A In terms of water, no. I'm talking about in terms of number and what-- and the function of an isolation room, I would expect Infection Control to tell me why they needed that.

Q But you specifically said, Ms Macleod, Infection Control nurses.

A Uh-huh.

Q Mr Walsh, who was the Infection Control Manager at the time, was very clear in his evidence that he does not consider that Infection Control nurses have competence in ventilation. So, if he's right, you couldn't have relied on Infection Control Nurses to tell you about isolation rooms, could you?

A Only in terms of how many I need and what the function of that room would be in terms of the patient population. I couldn't-- I wouldn't expect Jackie Barmanroy to tell me it needs whatever it needs. Saying that----

Q Would she be able to tell you which sort of isolation room would be appropriate for that patient group?

A In terms of-- only in terms of the numbers, no. She----

Q So, would she be able to describe the difference between a positive pressure ventilated lobby room and a negative pressure room?

A She would.

Q She would.

A Uh-huh.

Q Can you do that?

A I could at that time because I heard other people talking about it but it's not my knowledge----

Q Can you explain to us why the isolation rooms in the Schiehallion unit

were all built as positive pressure ventilated lobby rooms when that turns out possibly not to have been the right sort of room?

A I couldn't tell you that.

Q When did you first become aware that might have been a problem?

A I didn't know that was a problem until you've told me.

Q Now, you mentioned in your answer to Question 7, HBNs and SHBNs. Did you ever have dealing with Scottish Health Technical Memoranda, SHTMs and Health Technical Memoranda, HTMs?

A Only in terms of reading about numbers and throughput. I wouldn't read other parts because that wasn't what I was looking at when I was doing the Children's Hospital.

Q So, who was checking that, for example, the right wards were defined as neutropenic wards in terms of SHTM-03-01?

A Well, I understood that that was Peter Moir and David Hall and that team.

Q Right. Now, if you look at answer 9, which is on the next page, page 294, you're asked quite a long question:

"Describe the intended use and purpose of the following wards in RHC: Ward 2A/ 2B, what guidance was considered in the design of these wards, what processes were in place to ensure guidance compliance? Were there any changes to the design during the design and build, if so, please describe any such changes, describe the impact, if any, on guidance compliance, and described the sign off process for any such changes, your involvement and how any changes were communicated to the Board. Was external advance [I'm assuming "advice"] ever sought in respect of design changes?"

Now, firstly, my apologies for asking you a terrible question that we shouldn't have asked you a question that long. That was a mistake on our part. But your answer contains an interesting sentence. You start by:

"I am unable to recall the name for the HBN used for the design of wards 2a & 2b. The process for the sign of the 1:200s and 1:50 layouts was sign off by myself, the Infection Control nurse on the Team and the Clinical Lead from the RHC. To the best of my recollection there was no deviation from the HBN in terms of the layouts."

So, is that you distinguishing between no deviation from the HBN in terms of, say, ventilation?

A Mm-hmm, yes.

Q Right.

THE CHAIR: Mr Mackintosh, you're

using the term HBN. Ms Macleod has, I think, already explained that she has a familiarity with the SHTMs. Are you distinguishing between the building notes and the technical memoranda at this point?

MR MACKINTOSH: I'm using HBN deliberately because, my Lord, in the answer to Question 7, Ms Macleod referred to HBNs then on the previous page, if you could just jump back to page 293.

THE CHAIR: Right, so I should be thinking about building notes?

MR MACKINTOSH: We're talking about building notes, yes.

THE CHAIR: Right, okay.

MR MACKINTOSH: I'm assuming you're talking about building notes here?

A Yes, uh-huh.

Q Yes, because this is a spatial aspect you're focusing on.

A Yes, uh-huh.

Q Right, and the point you want us to understand is that you think that the room adjacencies and layout was in compliance with HBN and SHBN?

A Yes, uh-huh, and-- yeah, with-- in terms of-- yes, yes.

Q But you're not able to tell us whether the rooms were built in accordance with the ventilation aspects of HBN or SHTM-03-01?

A No. No, I can't.

Q Right.

A I couldn't tell you that.

Q Well, what I want to do now is talk about something called BREEAM, which you deal with page 295 in Question 11. Now, we asked you a question:

"What role, if any, BREEAM played in the acceptance of this design."

And you responded:

"I was not involved in BREEAM meetings."

So, it wasn't quite what we asked you. Is BREEAM something you'd heard of in the project?

A Yes, yes. I heard about it, yes.

Q So, do you know what role BREEAM played in the acceptance of this design?

A It was too-- It was a bit environmental and-- and, yeah.

Q Were you involved in the evaluation of the bids?

A At procurement?

Q Yes.

A Only the clinical design.

Q That's the spatial stuff again?

A That's the spatial stuff again. We looked at the proposed designs from the bidders and we checked that they worked for myself and Morgan Jamieson, who was the medical director for the Children's Hospital at that time, looked with Fiona McCluskey at just ensuring that that design would meet the needs of

the Children's Hospital, but we----

Q So, you were dealing with one particular aspect of it?

A Yeah.

Q Okay. Now, I'd like you to look at an email. Well, firstly let's look at an answer. Go back to the top of this page. We asked you a question about sign off processes for technical requirements and you took the position, 12 on top of this page:

"I am unable to comment as I was not involved in the technical requirements for the rooms."

Can I ask you to look at an email Pamlea Joannidis appears to have sent on 14 June 2013? So, that's that bundle 14, volume 1, page 32. So, this is an email seemingly sent by Ms Joannidis to Mr Walsh and Ms McNamee, and she describes a meeting between her, Craig Williams, Ms Stewart, Fiona McCluskey, and you, about the design plans for the New Children's Hospital.

A Mm-hmm. Yes.

Q Now, lots of questions that come out of this. I'll start with the first one. If we think of 2013, this is during the construction period, isn't it?

A Yes.

Q Do you remember attending any meetings with Professor Williams about the Children's Hospital design before this meeting?

A Yes, yes.

Q Can you help us, even approximately, when they might have been?

A It must have been early on. It must have been 2007, 2008.

Q Might there have been any meetings with Professor Williams for the Children's Hospital that you were aware of between contract close and this meeting in June 2013?

A I can't recall any. I can't recall any.

Q Now, I'm absolutely clear that this is obviously not your email. This is Ms Joannidis's email and, to be fair to her, she doesn't remember sending it. What I'm wondering is, in this process, you see how it says in the penultimate section of the first big block of text, "We discussed mechanically ventilated isolation rooms"?

A Yeah.

Q How could you be in a conversation about mechanically ventilated isolation rooms given what you described in your technical involvement?

A I couldn't be.

Q Why might you have been in this meeting at all then?

A I-- She'd met with us, yeah----

Q Yes, she'd met with you. Well, five of you had met together.

A I remember having a meeting,

but I couldn't remember discussing ventilated isolation rooms.

Q Because she's saying how Craig asked her for information on air flows in and out of the three-walled----

A Yeah.

Q -- cubicles in the main emergency department, and the discussion of the mechanically ventilated isolation rooms.

A Yeah. It seems a very odd membership to discuss that.

Q Well, is it? I mean, it's the lead Infection Control doctor, a nurse consultant who is going to go on – though she probably doesn't know this at this point – to set up the Infection Control team for the Children's Hospital, Jackie Stewart who had at some point been the Infection Control nurse on the project, Fiona McCluskey who is the lead nurse and you, who's the project director.

A Project manager.

Q Project manager. Is it not a sensible sort of meeting?

A To discuss, yes, but to discuss mechanically ventilated isolation room seems very odd.

Q Okay. What I want to do now is to jump back to your statement, so page 295. Could this be the meeting you're talking about in your answer to Question 13?

"The Project team Infection Control Nurse – Jackie Barmanroy; from the RHC Craig Williams and Pamela Joannidis. There was at least one meeting but my recollection is that Jackie discussed the design with Infection Control colleagues and these views were brought to User Group meetings. I can't recall the date of the final design sign off."

Could it be you're talking about the same meeting or am I pushing you too much?

A I think that's-- I think that's pushing it too much.

Q Pushing it, okay.

A Yeah, yeah.

Q What I want you to do is look at bundle 46, volume 1, document 16, page 98. This is an email from you in July 2014. It's to Janis Hughes. Who was Janis Hughes?

A She was-- she was the planning manager. Just trying to remember what the name was. Planning manager for the Women and Children's Directorate.

Q Right. So, the final message from you is expressed:

"Technical viewpoint:

"Barrier" is created by hepa filtered supply to lobby with extract from isolation room/en suite therefore no cross infection between room and corridor in either direction. Reversal to create [positive] lobby is not possible as no extract in

lobby and no supply in isolation room/en suite."

How could you have sent that message?

A Somebody gave me that information.

Q Who might that have been?

A I would say it was David Hall.

Q You'd think it was David Hall?

A Yeah.

Q Okay. Because if we go back a page-- page 99 rather, and we go on to page 100-- Right, I think this is the start of a thread. So, Janis Hughes emails you with a list of-- She's obviously spoken to you. It says "discussed", so, obviously there's been a phone call. You don't remember this phone call?

A I met regularly with Janis, to be honest, so that's not unusual.

Q Okay, so she sent you a list. Let's go to the next page, 99. So you reply, "There are 8 Hepa filtered isolation rooms within the Unit "and you give the code numbers for them all.

A Mm-hmm.

Q

"And these are +ve pressure with separate air handing units for each individual room."

They're not positive pressure isolation rooms are they? They're positive pressure ventilated lobby rooms.

A Yes, uh-huh. Yes, I suppose

they are. Yeah----

Q Is that important? Is it different?

A Well, there's a bedroom above. So, I would've-- I would-- Reading that now, I would think the HEPA-filtered isolation room was the bedroom, the SHC (sic) one.

Q What's the difference, Ms Macleod, between a positive pressure ventilated lobby room, and a positive pressure isolation room?

A So, the lobby leads into the room. So, there's a kind of a-- almost a small area before you go into the actual isolation room.

Q What use would you make of a positive pressure room as opposed to a positive pressure ventilated lobby room?

A It was designed so that one door would close and the other door-- I can't remember whether it's positive or negative air flows, but you would come in off the corridor, go into the anteroom, that door would be closed. My recollection is there's hand washing facilities in that room and then you would go into the isolation room and that would----

Q What would be----

A -- make sure the air flow couldn't go through----

Q So, what direction would the----

A -- but I can't remember which--

--

Q In these rooms, what direction would the air be flowing?

A Well, that's what I don't know. That's what I don't-- I would have been able to tell you at the time, but I can't remember----

Q Because the reason I'm asking you, Ms Macleod, is because a positive pressure room is, I understand it, different from a positive pressure ventilated lobby room, and the airflow is in a different direction.

A Right.

Q Is that something you've ever known?

A I would have known that at the time----

Q So, why did you tell Janis that this was a positive pressure room? Because they aren't.

A That must have been what I was told, because I wouldn't know that. I would have that information----

Q In fact, you----

A -- at that time but I would get it from----

Q So, she then sends the message on to Alanna McVeigh. Who's Alanna McVeigh?

A I don't know who she is.

Q But she copies in Brenda Gibson and Coral Brady and Jamie Redfern.

A Yes.

Q So, are they relying on what you're sending?

A Yes.

Q Right. Then they ask a question, "Do you want to ask if its possible to have any neg pressure rooms for source isolation? "And then they ask that question at 9.12 on 1 July. Do you know what a negative pressure isolation room is?

A Not now, but at that time I would have had some information that gave me the information to pass that on.

Q Okay, so on 1 July, you get that question at 9.12. Let's look at page 98. Three minutes later, they send that on to you and then you get the email, and you reply half an hour later. So, do you see how you've got an email on 1 July at 9.15----

A Yes.

Q -- and you reply half an hour later:

"My understanding is that it is possible – but it is through the Building Management system- not sure why you would want to.

The lobby is +ve and therefore ensuring that both the bedroom and the corridor are protected with the air being vented through the lobby's air handling unit."

That seems to be your voice. You

didn't go and get advice, surely?

A I did.

Q In that half hour?

A David Hall was two doors along from me.

Q Okay. How would you react if someone said to you that's not necessarily accurate?

A I was-- I was passing on information I was given by a technical person. So, I would go with my notepad and he would tell me and I would reply that----

Q Then on 1 July at 12, so the same day just before lunch, Janis Hughes replies and she explains that they need to change rooms between patients for different needs and they ask for a technical opinion.

A Mm-hmm.

Q You reply three hours later at 3.08 with the technical viewpoint email. So, you're saying that would have come from-- Who would that come from, that technical viewpoint?

A I think it would be David Hall I would go to.

Q Okay. This morning I rather unfairly gave you some documents I found only this morning, which are the extension of this email. I wonder if we can go to bundle 46, volume 3, document 5. So, this is a little bit earlier. So, this is in February 2013 and this is Coral Brady in exchange with you. She's sending you in 2013, an email:

"Hi Mairi,

You may recall this email trail from a couple of years ago..."

And it's obvious that the senior SCT team, they were discussing the HEPA filtration in the transplant rooms and they had some issues. Now, back in 2011, on 19 September, you said there were eight isolation rooms. If we go on to the next page, do you see how you sent an email on 29 August 2011?

A Yes.

Q And you say:

"The plans for the Haemato-oncology area in the NCH include Hepa filter and pressure as necessary. When we are further in design we will contact staff as and when required. We do however have a full NHS Technical team supported by external technical advisors who are aware of the building requirements of the unit."

Now, so the question is, who are the Technical team?

A David Hall and the external advisors.

Q Who's the NHS Technical team?

A Well, we would be-- we're health service managers. We're not a Technical team.

Q I realise that, but you just told

Coral-- who does Coral work for?

A She worked in the Schiehallion unit. She was their business manager.

Q You just told the business manager of the Schiehallion unit that "we do have a full NHS Technical team." Who were those people?

A I can't remember what that-- I would have thought that would be at that time.

Q Because the difficulty here, Ms Macleod, is that this is at a point when it is Frances Wrath's evidence that she is signing off Room Data Sheets without checking the environmental page because David Hall and Mr Moir have told her they're all good, and we need to know who the Technical team are who's accountable for that decision, but you can't help us?

A I can't help you.

THE CHAIR: Well, my recollection is – and I may be wrong about this, Mr Mackintosh – that it wasn't the Room Data Sheets were good, but that it wasn't her responsibility.

MR MACKINTOSH: That's a fair point, my Lord. It was that she didn't need to worry about them because they've been checked by others.

A Yeah.

Q But you can't help us with who the Technical team is?

A No.

Q The first sentence is interesting as well, of that paragraph.

"The plans for the Haemato-oncology area in the NCH include Hepa filter and pressure as necessary."

What do you think "pressure as necessary" would have meant?

A Depending whether they needed negative or positive pressure.

Q Would you know?

A No.

Q Who would know?

A Peter and David Hall.

Q Who else in NHS Greater Glasgow and Clyde, at that point, would have known what pressure regime is required in the isolation rooms in the Schiehallion unit?

A I suppose the people who are running the-- the hospital----

Q Yes, so----

A -- the Capital team----

Q So, Professor Gibson might know----

A The technical Capital team over at Yorkhill rather than Brenda, I would have thought.

Q Might Professor Jones, Dr Hood – he later became Dr Hood – might they have been?

A I don't know that name.

Q Because the next thing:

"When we are further in the design, we'll contact staff as when required."

Now, if the Room Data Sheets that Ms Wrath signed, having been told she didn't need to worry about the environmental sheets, are a correct statement of the design in 2011, at this point, those isolation rooms have been defined as positive pressure ventilated lobby rooms. Would that make sense to you?

A I can't recall.

Q Because what I'm suggesting is that, when you send this email, the die has been cast these are already the wrong rooms and you're telling people, "We'll contact you later." How is that listening to the clinicians?

A Because that was advice I was given, was that that information would be fully discussed and implemented later on.

Q From the point of view of the architect, if the Room Data Sheet has been assigned, that's good to go for the next design stage, isn't it?

A I don't know what their processes were so I couldn't comment.

Q But their position is that, once you get a sign back of a particular design stage, they can go on to the next design stage.

A Uh huh.

Q Yes. Right, so if documents have been signed by Ms Wrath on behalf of board that include what turned out to be inaccurate----

A Oh, I see.

Q -- information in 2011, it gets harder to fix it, doesn't it?

A It does.

Q It does. In this email you're effectively saying to the business manager of the Schiehallion unit, you don't need to worry about this at this point.

A That was what I was told that----

Q But you're the project manager the Children's Hospital?

A Yes, of the spatial design.

Q Of the spatial design. I wonder if we could go to page 777. In fact, let's not go to 777; let's go to 717 because I can't read my own handwriting. That's the problem there. We've already been there. Let's look at an email that I think you might have sent to Mr McLaughlin from Health Facility Scotland.

So, that's the same bundle, but it's document 6, page 716. No, it's not page 716. Let me just get that right. Allow me a moment just to get the right document in my hand. Yes, it's a page 719, sorry. So, this appears to be an email from you to Eddie McLaughlin at HFS who gave evidence in our last block of hearings, copied to Ms Griffin and Peter Moir on 26 March 2013. It's a detailed note about the isolation rooms. Would you have written this?

A Yeah. I think I pulled it together, yes.

Q Yes. Does it explain what sort of isolation rooms they are?

A No, just isolation rooms.

Q Is that an oversight of any importance?

A I don't know why he'd asked; the question was he asked.

Q Well, let's go to the next page and the next page-- If we go back. We don't have it. What we do have is the first sentence of your email which says:

"Please find below the process followed for adult and Children's Hospital."

And you assert that:

"Infection control involved throughout the project with a nurse seconded to the team who's linked back to the Board Infection Control nurse. [I think it's a different nurse because it might have been Annette Rankin, but] she was fully involved in the Competitive Dialogue process with the three bidders who bid to build the new hospitals and participated in all the User Group meetings where the schedules of accommodations, the 1:200 departmental layout drawings and the 1:50 room layout drawings were agreed."

Now, you just told us that these User Group meetings didn't discuss technical matters.

A We didn't. All we were saying is how many isolation rooms. So, some of those isolation rooms aren't Bone Marrow. They're just an isolation room within a ward for enhanced Infection Control.

Q Yes, but you've just said in your first sentence that you're describing the process followed for the isolation rooms, and in the next paragraph, you've reassured Mr McLaughlin that, in this case, Ms Stewart has been involved in the User Group meetings but in your evidence about an hour ago, you said the User Group meetings didn't discuss technical matters like ventilation.

A We didn't. I don't know where it says that we discussed----

Q It doesn't say you did.

A No, no.

Q It just says that-- it just reassures you that ICN had been involved.

A ICN, yeah.

Q Yes, but if you're right that the User Groups never discussed technical matters, why is it of any assurance to Mr McLaughlin that Infection Control nurses have been involved in the User Group meetings? Because the isolation rooms ventilation wasn't discussed at the User Group meetings. You just said that.

A This is the numbers of rooms, not what was-- how it came about.

Q Your first sentence, Ms Macleod, says, “Please find below the process followed.” So, you’re telling him the process. What I’m putting to you is that that second paragraph is an issue because you are reassuring him of the involvement of Infection Control nurses by reference to meetings that didn’t discuss ventilation.

A What was his question? Was that what his question was? This looks to me as if I’m answering a question he’d sent and I don’t think that that would-- I-- from my response, it doesn’t look as if I have said, “In terms of designing isolation rooms.” I think this is about how we’d include Infection Control and what infection and what isolation rooms are included in each of the hospitals.

Q Yes, but----

A I don’t see----

Q -- is there anything strange in your eyes that you’ve not explained to him?

A I don’t know what his question was.

Q Well, you’ve told him there are isolation rooms, but you haven’t told him what sort they are.

A No, because they’re all different isolation rooms. Two had----

Q Does it matter?

A Well, I don’t know. No. It does, yes. The Schiehallion rooms would be completely different from the Cardiology ward.

Q What sort would the Cardiology ward be?

A It would be to stop infection getting into particularly vulnerable patients. So, each ward had a few isolation rooms. I can’t remember whether it was positive or negative. I can’t remember. They would not have lobbies in them. They would just be what we would describe as isolation rooms so that a patient was more protected in terms of Infection Control as described and advised by my-- by Jackie Barmanroy or Annette Rankin, and Schiehallion Bone Marrow rooms were a whole different level of Infection Control. They’re completely different rooms.

Q The difficulty that I’m finding, and I’m grateful if you could help me, is that I have evidence from Mr Walsh that the Infection Control nurses have no expertise in ventilation. I mean I recognise you didn’t hear that but that’s what he said.

A No, and I understand that that’s what you’re saying to me, that that does not describe how to design an Infection Control room----

Q No, but it does describe----

A -- and an isolation room. It tells you-- I don’t know what his question was, but I’m assuming from my answer

he's asked me how many infection rooms are in the hospital and why did we come up with that number----

Q Well, exactly.

A --and I'm telling him it was Infection Control nurses that told us what number we needed, and this is where the isolation rooms are. I haven't described what those isolation rooms are and Schiehallion Bone Marrow Transplant rooms are completely different from an isolation room in a cardiology ward.

Q Why do you think the veteran control nurses told you how many isolation rooms to have?

A Because they looked at the patient cohort, how many people were coming through and what was a reasonable number to have in these areas.

Q How could they give that advice if they don't have any experience in ventilation systems?

A This isn't about ventilation; this is about isolation of patients. This is to put-- some of the Children's Hospital is four bedded wards, some are individual, and this is about particularly vulnerable children who could not be in the four bedded ward and couldn't be in the middle of a busy ward with people coming in and out. They tended to be at the quiet end of the ward and there was less throughput and there would be less

chance of infection going into those rooms. That's what those rooms are. Bone Marrow is completely-- in the middle of a department with extremely ill children and it was a completely different number.

Q From your perspective, what role does ventilation play in the design and operation of an isolation room?

A Well, from my recollection, I have no expert knowledge to tell you this, but it was either positive or negative and I can't remember why you needed one-- so, if the corridor was-- I can't remember.

Q Okay. If we can go on to next page. So, let's move on to Question 14 on your statement, which is on page 295. So, this describes how a phone call was made in the spring of 2015 by Jennifer Armstrong to you saying the clinicians from the Royal Hospital of Children had contacted her to inform the Bone Marrow room to not properly completed. Do you mean the isolation rooms in the Schiehallion unit in Ward 2A?

A That's why-- my recollection is that's what it was.

Q And do you think it might have helped to prevent that happening if, when Carol Brady had been back in touch with you back in 2013, rather than saying, "We'll get back in touch with you later," you'd sought her help then?

A This was actually about-- The

unit was actually not there. This isn't about what it should be or what it shouldn't be doing. The physical-- My understanding is it was a physical----

Q A filter was missing.

A -- air control unit that should sit above the bone marrow, wasn't actually in the position at all.

Q Are you aware of whether any other faults emerged with these rooms later?

A No.

Q During 2015?

A No. I left the project in June that year.

Q And what did you do after that?

A I went on to procurement.

Q I'd like to look at an email in bundle 23, document 118, page 1104. So, this is an email from Fiona McCluskey, the bottom page, to Craig Williams, 20 August 2014, and she's sending the ADB sheet for the isolation rooms in the Schiehallion unit to Craig Williams because we're talking about the lobbied rooms in the New South Glasgow Hospital. If you look at the bottom, it says:

"I understand that Mairi Macleod is arranging a meeting to discuss the isolation rate from the new haemato-oncology unit to discuss the ventilation of rooms."

So, you seem to be organizing meetings about ventilation?

A I don't remember that. I don't know. I don't remember that.

And then on 20 August 1'4, Professor Williams' response to her, and I recognise you weren't included in the email:

"Thanks for the information but I need an assessment from the design team to assure me the room has met the specification I described in the early email [which I think is 2013]. This is because the Brownlee is moving to the south and all of our MRTD patients will be managed there."

Now, that's an adult patient issue.

A Yeah.

Q But I'm wondering to what extent-- were you actually arranging meetings about ventilation?

A I can't remember. I wouldn't have thought so.

Q Why would you----

A Because isolation rooms are discussed-- I don't recall what-- I don't recall having meetings about that.

Q Because there was an issue in late '14 about the isolation rooms in the Children's Hospital because questions were being asked about whether they were the right rooms and so a meeting would be a thing to do.

A Yes.

Q And you don't remember the meetings?

A No.

Q Because people had noticed and suspected they were the wrong sort of room.

A Right.

Q You don't remember any meetings?

A No. I don't.

Q Now, if we go to page 297 of your statement, we ask you a question about something we have called a ventilation derogation. Now, I wanted to check you I'm talking about before I ask you the question. This is the idea that in the final days of the contract negotiation, an agreement was reached encapsulated in M&E clarification log that the air supply to single rooms in-- now, there is different interpretation to this, either just the tower or the whole hospital, were to be at 40 litres a second rather than six air changes an hour as required by SHTM 03-01. To what extent have you been aware of that?

A I wasn't aware of that.

Q Because, for example, you were talking a moment ago quite animatedly about the adult haematology ward and how there was rooms that don't have lobbies.

A No, I was talking about the Children's Hospital.

Q Oh, you were talking about the children's-- right, okay. Well, in that case, I won't press you on that, but you weren't aware of this decision to reduce the ventilation capacity of large parts of the hospital?

A No.

Q Do you think that's something you have been told as the project manager for the Children's Hospital?

A Yes, I would have thought so.

Q Well, would it have made things easier?

A Well, yeah, I suppose, but I wouldn't have had that knowledge to say whether that was the right decision or not, so maybe that's why I wasn't told.

Q What role did you have in commissioning and handover?

A Really just about-- we did some walk around snagging rooms, just going around----

Q So, how did they work?

A So, we went around and just checked that tiles weren't missing, that sinks weren't hanging off walls, just obvious things.

Q Was that a sort of structured process?

A Yeah, we kind of walked around routinely to just see areas that Brookfield were saying were finished off, and then before handover we walked around to see-- just a general snag, not

what was behind the walls, but just generally what was in a room.

Q Because you just explained to me how important the isolation rooms were. What steps did you take to make sure that they were properly working?

A Well, I didn't have that knowledge to check that.

Q Did you ask somebody else to do it because they did?

A Peter was-- Peter Moir was involved in doing that with-- I don't know who it would be at that time. I'm not sure who were the Board's technical advisors at that time on that. There were people working with Peter on that.

Q Right. Now, I have to get back to the right page my notes. I can't start asking questions I've already asked you because that will just confuse all of us.

I'd like to raise the issue of Horne taps. Now, before we do that, can we go back to page 297 of your-- not 297, page 296. Sorry, page 298. Now, you say in answer to question 18 that you are not responsible or involved in decision to use Horne taps. Now, I think that Ms McCluskey might have said you attended the meeting in 2012 about the Horne taps – also present were Mr Seabourne, Mr Moir, Ms Griffin and Mr Hall – and that you viewed a demonstration of the tap and that representatives of Horne were present. Do you have any recollection of that?

A No.

Q Do you think it's accurate?

A No. I don't remember a meeting with taps.

Q Are you aware of any particular problems with taps?

A Only when I was giving my interviews to the police.

Q Right. I need to ask you about demolitions. So, if we look at bundle 46, volume 3, document 7, page 721. This is another one I gave to you this morning and it's an email from you to Janis Hughes on 7 August 2013.

Now, at this point, of course, there are no patients in the new hospital, and if we go over the next page – we'll read it in order, that's probably more sensible – and we keep going a bit further on-- Right, so there's a flyer message at the bottom of page 723 to lots of people. Over the page, 722, we see an email from Dr Ewins to Lynne Robertson about demolitions on site that were going to take place after the move. Do you see that?

A Yes.

Q And Dr Ewins, who gave evidence in our second hearing, asked:

"Has the Board considered the impact on the Hematopoietic Stem Cell transplant programme, as well as the increased risk to solid organ transplant

patients and other immunocompromised patients? We would anticipate a significant increase in the number of mould infections among these patients if adjacent buildings are going in demolition."

Now, Ms Robertson very candidly says, "Probably not," but she goes and asks a question. Over the next page on 721 we have Mr Beattie. What was Mr Beattie doing on that point?

A I think he might have been the medical director for the women and children.

Q Right. Mr Beattie says he'll pass it on to you and he thinks:

"To my mind, there's little in the way of immediate adjacency to the new build surgical box, but elsewhere, the demolition was pretty close to the SCT units."

What would SCT be in this context?

A SCT? I don't know, but I-- it was about-- it's about the Bone Marrow rooms, as far as I recall, that term.

Q However you reply to him on 15 July at 4.04:

"We looked earlier at this process and demolitions are far enough away. However I will get our guys to look at the actual distances and feed back to due course."

And you reply-- Well, you don't reply, you get reminded and then you reply on 7 August:

"I've just spoken to our technical advisor who advises the demolition of the surgical block is 150 m from the air handling unit for Schiehallion, which would be sufficient in itself, however it should be stressed that the NCH is a sealed building. There are no windows and all air handling units will be filtered. Over and above that, bone marrow transplant rooms will have HEPA filters."

Now, first question, who might well be the technical advisor at this point?

A David Hall.

Q David Hall. Now, what awareness do you have that by this point the Board had removed the requirement for carbon filters on the ventilation system?

A I didn't know that.

Q So where would you have got the information about filters on the air handling units?

A David Hall.

Q Would you know the difference between a HEPA filter, a carbon filter and a standard filter?

A No.

Q Before I go to the final document, I think you've already answered it, but I think I should give it to you-- give you an opportunity to think about this question. How did this project ensure that the Employer's Requirements

for this hospital were actually built in respect of ventilation?

A (After a pause) I don't know.

Q I recognise it's not the job perhaps I might have thought you were doing, but you were the project manager, but only for spatial matters, you say.

A Only spatial.

Q Okay. I'd like to show you an email that Mr Seabourne sent in 2016. I don't know whether you've seen this before until we put it on your document list. It's an email, 23 June 2016. It's in bundle 12, document 104, page 813, if we could get it on my screen too. Although Ms Griffin received it, you didn't receive it at the time. Had you seen it before you got this?

A No.

Q Have you had the opportunity of reading it?

A No.

Q You've not read it? Okay. Well, maybe what I might do is what we normally do at this point is we have a short break to see if there are any further questions that you might want to look at, and what I'll do is I'll get someone to print a copy out and bring it through and ask you to read it and I'll ask you a question about in about 10 minutes.

A Okay.

Q Thank you. My Lord, this might be an appropriate point for a break.

THE CHAIR: Right. As Mr Mackintosh says, towards the end of a witness's evidence, we'll take a break in order to see if there's any questions in the room that are required to be asked and that's what we're going to do now. It might take us about 10 minutes but, as he explained, in the course of that you'll be provided with a copy of Mr Seabourne's email, but if I can ask you to leave and you'll be asked to come back in 10 or so minutes.

THE WITNESS: That's great. Thank you.

(Short break)

MR MACKINTOSH: I have just the email and one other question, my Lord, from my colleagues.

A Yes.

Q So, Ms Macleod, the reason I'm showing you this email, or asking you some questions about, it is because we understand it emerged in June 2016, which is a few weeks after Mr Powrie sent an email to Mr Loudon and Dr Inkster, describing this ventilation change around 40 litres a second that affected many of the rooms, and this email emerges a few weeks later. I'm not quite sure there's definitely a connection between the two, but there might be, and Mr Seabourne had retired by this point.

A Mm-hmm.

Q So, this does read as if he's setting out his position as he understood it at the time. In essence, it might be summed up by the first few words of the penultimate paragraph, if we go on the next page, is-- over the page, "We are where we plan to be." If we go back to the previous page, having read it, at the very sort of general level, do you feel it's an accurate description of what went on in the project, or do you have some questions about it?

A No. I mean, I've read it. I clearly wasn't involved in-- I wasn't included in the distribution list. My rough reading looks as if it's from the adult hospital, which is why Heather's included, but I've got no view on it.

Q I mean----

A Seems fairly-- The first thing that struck me was that Alan had long retired by that time.

Q Well, indeed. He retired in, what was it, '13 or '14?

A Mm-hmm.

Q The bit that I wanted just to ask you about, in case you knew anything about it, because I touched on it with you at the very beginning – and it hadn't applied to your treatment centre at Victoria; you thought it might have been at Stobhill – was that penultimate paragraph on page 813:

"One of the key issues that we faced from the outset of the project was that facilities specify the building could rise in temperature above 26 degrees in the summer months, not usual. This has been problematic with previous buildings, such new buildings as the ACHs."

Now, I appreciate it might not have been your ACH, but in your work in the Project team before contract close, is this something you ever heard discussed?

A No.

Q It wasn't something that came across your radar?

A No, no, it wasn't.

Q No, okay. If we could take that off the screen. I've got one final question, which is, at the beginning of your evidence, if I understand correctly, you were explaining that if an issue arose of a technical matter from a clinician or a manager, you would take it up----

A The chain.

Q Up the chain. I think we've shown you some emails when issues have arisen of a technical matter and, in each occasion, am I right in thinking your evidence has been you go along the corridor and speak to Mr Hall?

A Mm, yeah.

Q Yes, and then you've replied to the email.

A Mm-hmm.

Q Was there any sort of formal

way of doing this where you could sort of prompt a formal review rather than just going and speaking to Mr Hall?

A I could have brought it up at the Project team on a Friday if there was an issue, but----

Q Did you do that on any occasion?

A If I thought there was-- Yeah, if there was an issue. I mean, I think that would be discussed a lot would be the offices, because we got a lot of heat from the clinical staff about the offices.

Q Yes.

A Yeah, I mean, things-- people would have expectations about, "Can we do this or can we do that?" and if I thought it was reasonable, I would ask the question and be told the answer, so----

Q I mean, I recognise that it's not your field----

A Yeah.

Q -- but given that you did field a number of questions that touch on, to some degree, ventilation albeit, you say, by discussing the matter with Mr Hall and effectively repeating his words, was there ever an occasion when you received a question or query or challenge from a clinician or manager about ventilation that you took to the Friday meeting?

A I can't recall. Those meetings were minuted though, so if I had brought it up, it would be there. I certainly remember the issue about the demolition and I'm sure I brought that up at the Project team when it was first raised with me.

Q Because I just wonder whether the isolation room issue, which does seem to have been a bit of a theme and just the emails we can find, and which obviously prompted some sort of question for Mr McLaughlin – we don't know exactly what the question was – could you have raised that in the Project team meeting?

A Yes, I could have.

Q Do you have any recollection of what the response from someone other than Mr Hall was about isolation rooms?

A I don't know because I can't remember a discussion at the internal Project team on isolation rooms apart from numbers required.

Q Not the types?

A No.

Q That's not something you remember?

A No, and my response to-- I think it was Coral about it could be negative or positive, my understanding was that that could be changed easily by the mechanics of whatever unit was getting put in, but that might not be right. That's my understanding.

Q Thank you very much. I don't

think I have any more questions, my Lord.

THE CHAIR: Right. Ms Macleod, thank you. You're now free to go, but before you leave, can I say thank you for your work in responding to the questionnaire and thank you for your attendance this afternoon and answering the questions as you have. It's been very helpful, and I appreciate it. Thank you very much.

THE WITNESS: You're welcome.

THE CHAIR: But you're now free to go.

THE WITNESS: Okay, thank you. Thank you.

(<u>The witness withdrew</u>)

THE CHAIR: Now, Mr Mackintosh, do I understand we resume tomorrow-- or at least the plan is that we resume tomorrow with Fiona McCluskey?

MR MACKINTOSH: We've all indications that she will be here.

THE CHAIR: Right.

MR MACKINTOSH: Then the afternoon, Ms Barmanroy who was previously Ms Stewart. I've asked Ms Barmanroy to come a little bit earlier in case we could use a half an hour before lunch if that's available.

THE CHAIR: Right, right. Well, all being well, we'll see each other tomorrow at 10. Thank you.

(<u>Session ends</u>)

16.05