

Scottish Hospitals Inquiry
Witness Statement of Janice MacKenzie
21 February 2023

Introduction

1. My name is Janice Margaret MacKenzie.
2. I am now retired from my role as Project Clinical Director with Lothian Health Board (“NHS Lothian”). I previously provided a written statement to the Scottish Hospitals Inquiry (“the Inquiry”) for the purposes of the May 2022 Hearing relating to the Royal Hospital for Children and Young People (“RHCYP”) and Department of Clinical Neurosciences (“DCN”) in Edinburgh. That statement outlines my roles with NHS Lothian, qualifications, and work history.
3. The Inquiry has asked me to provide a second written statement, the focus of which is the procurement stage which took place in the period 2012 to 2015 of the RHCYP/DCN project. I was the Clinical Director from the point the procurement exercise commenced until Financial Close. I was part of the Project Team lead by Brian Currie, who was the Project Director. As explained in more detail below, there was a Core Evaluation Team who evaluated the bidders’ final tenders and the bidder with the highest overall score was appointed as the Preferred Bidder.
4. This statement seeks to provide that information to the best of my recollection. It has been provided in response to specific questions I was asked at an interview by the Scottish Hospitals Inquiry on 24 November 2022.

Reference Design

5. A reference design was developed for inclusion with tender documentation for potential bidders. I did not start in my role with the RHCYP/DCN project until April 2011. Initially, this was in a part-time role because I was also part-time Chief Nurse for NHS Lothian Children’s Services working as part of the clinical

management team. I was aware of discussions about a reference design and the decision to use a reference design, but I was not involved in the decision to utilise a reference design.

6. Before I joined the Project Team in April 2011, significant clinical engagement had already been undertaken. I am aware that NHS Lothian has produced a Chronological Table detailing the Clinical Input in to the Design (the Chronological Table) to assist the Inquiry in its investigations. I provided input in to the Chronological Table and it is accurate to the best of my knowledge. Although I was not part of the Project Team until 2011, as the Chief Nurse I was supporting clinical staffs' involvement in the design process and recall attending some of the design meetings in my role as Chief Nurse.
7. I am aware that from the outset of the re-provision of RHSC project, clinicians spent significant time considering what their particular service requirements were and how those requirements could be met in a newly built hospital. By way of example, in relation to critical care, it is noted in the Chronological Table that there was a sub group who met on at least 6 occasions between April and October 2008. The membership comprised of 12 clinicians, including nurses and pharmacists.
8. Isabel McCallum, the Project Director before Brian Currie, set up a Clinical Design Task Group in around 2009. At this point, the Project was capital funded and the design was progressing with BAM as the PSCP. There was significant clinical engagement to inform and review Nightingale Associates' (NA) architectural design. This work was undertaken by the RHSC Clinical Design Task Group. It is stated in the Chronological Table that the RHSC Clinical Design Task Group met on at least 21 occasions between 17 September 2009 and 30 September 2010. The Clinical Design Task Group comprised representation from: department clinical leads; Edinburgh University; a family/public representative; Infection Control; Equipment Commissioning; Health & Safety, a Partnership Rep; NA (architects); Tribal (healthcare planners); BAM Construction (PSCP); and, the NHS Lothian Project Team and project support. In around November 2010, when the change in funding was

announced, the Project Team was at the point of planning for the third round of 1:50 meetings scheduled to start on the week of 8 November 2010 and to last for three weeks but these were cancelled due to the switch to NPD.

9. When the switch to NPD was announced, the design for the RHSC stand-alone hospital was at a relatively advanced stage. Following the switch to an NPD funded model, there was continued engagement with the clinicians (i.e. the user groups) to try and utilise and continue the design work undertaken to date. This is around the point at which I became directly involved.
10. I gave input and advice in relation to the reference design itself. Initially, when I was the Chief Nurse, it was about ensuring that the clinical staff were involved in developing the reference design and responding to any queries from the Project Team. When I joined the Project it was about facilitating those discussions, liaising with clinical teams and providing clinical advice. I attended some of the user group / clinical design task meetings.
11. During this time, I was liaising with NHSL Capital Project Managers, the clinicians, the Architects (Nightingale Associates), the Technical Advisors (Mott MacDonald/'Motts'), Healthcare Planners (Capita) and Project Managers (Davis Langdon). We had various clinical design task groups who met to discuss the 1:500; 1:200 and 1:50 drawings for key and generic rooms. The reference design team had m&e engineers, Hulley & Kirkwood, but as far as I can recall I did not speak to them directly. My main contact at Motts was David Stillie, who was an architect. The clinical design task group meetings were held in the hospital and were lead by Davis Langdon and NA were always there and as far as I can recall Motts were also normally in attendance.
12. The clinicians' input at the meetings would include explaining the requirements of their department, particularly what accommodation they required. They would provide information around specific rooms and what they were used for. For example, clinicians would explain what activities would be happening in a specific room and the equipment required so that the architects and other advisers could plan accordingly. The architects could also explain their proposals to the clinicians to seek to ensure that spaces were designed

appropriately. Various design changes were discussed during these meetings and subsequently captured in the next revised set of drawings, which were then issued for further review. This process was repeated until the drawings were physically signed off by all parties, including the lead clinicians. Davis Langdon kept a register of the process and there was a final set of signed off drawings.

13. Looking at critical care as an example, the nominated clinical leads for critical care would review NA drawings in advance of the meeting, obtain feedback from their colleagues, and then meet with NA, Davis Langdon and Motts at the user group / design task group meeting to review / revise and eventually sign off on the NA drawings for the critical care department. The clinicians were there to provide input in relation to their service requirements, i.e. operational functionality. The clinicians reviewed and signed off on the operational functionality elements of reference design for their department at 1:500; 1:200 and 1:50 stages (for key and generic rooms). The user group output was ultimately the drawings that were provided to bidders as part of the reference design package. In terms of the detail in the drawings, the 1:500 drawings were on a large scale showing departmental adjacencies; the 1:200 drawings showed the departmental layouts and the 1:50s individual room layouts. The Chronological Table at pages 3– 5 details the reference design review for critical care from July 2011 to February 2012 by way of example.
14. The reference design drawings which were the output of these meetings captured NHS Lothian's operational functionality requirements, for example departmental adjacencies and room layouts, but that is all. I understand that the reference design was there to present a diagram of the clinical adjacencies between departments and then, within departments, of the rooms; in particular, the size of rooms and the number of rooms. It was important that the bidders didn't stray too far from the operational functionality elements of the reference design because it had been designed to capture and meet the clinical/operational needs of the users, i.e. the patients, staff and families.
15. I recall that the Project Team worked closely with the clinical teams to agree the critical adjacencies between departments. This was an extremely important

factor to consider to ensure effective patient pathways and staff efficiency. Examples of this would be locating the Surgical Day Case Unit within the Theatre Department which minimised the time it took for a child to get to theatre; locating the Emergency Department adjacent to the Paediatric Acute Receiving Unit; and Critical Care on the same floor as Theatre Department.

16. Operational functionality, from my perspective, relates to adjacencies. The adjacencies between departments, adjacencies of rooms within departments, and the size of those rooms. In a way, the reference design was the diagram of what, from a clinical perspective, was needed to function and operate well. It did not include engineering requirements such as ventilation.

Clinical Output Specifications

17. Another output to support the reference design that was provided to bidders were Clinical Output Specifications (COS). The COS were developed to provide bidders with information about each department, including: the function of the department; the function of the rooms within the department; the average number of people that would be in the rooms; the processes within the department; and any specific requirements from a clinical perspective. I prepared a paper for the Project Steering Board (PSB) dated 12 October 2012 called: Clinical Output Specifications Development an Approval Process (the "COS Paper"). The purpose was to provide the PSB with an update on the development of the COS and to note the approval process for the COS.
18. By way of background, during the capital funded phase, Design Briefs for each department were developed in 2010 - 2011 which outlined each departments' clinical design needs. Following the switch to NPD, the Design Briefs were later reviewed and became known as the COS. As part of the KSR for the Design (August 2012), Scottish Futures Trust (SFT) identified a number of gaps within the Design Briefs which were addressed in the development of the COS.
19. The Design Briefs were used as a basis for the COS and the nominated clinical leads for each of the areas reviewed the content of the COS. The COS became

one of the key documents in ITPD Volume 3 and provided the preferred bidders with the detailed requirements and functions of each of the clinical departments.

20. The template used for the COS was recommended by Capita (healthcare planners). The template included Sections 8 re Environmental and Service Requirements, Section 9 re Design Guidance; and section 10 re Other Specifications. The COS were reviewed by the Technical Advisors, Motts, and Capita and further changes were made. Motts cross referenced the COS to the Schedule of Accommodation, Adjacency Matrix, Board Construction Requirements (BCRs) and relevant Health Building Notes. A workshop was held with Motts, the Project Team and other key stakeholders to ensure there was consistency across the ITPD documentation.
21. The final version of the COS were sent to the relevant Clinical Management Team (CMT) for sign off. Following sign off by the CMT, I signed off the specifications as the Project Clinical Director.
22. From my perspective, the review of the COS by Motts included ensuring that the correct design guidance was stated, including in relation to mechanical and electrical (“M&E”) engineering. Motts’ role would have been to ensure the relevant guidance was set out at section 9 of the COS. I nor the Clinical Leads would not have known the specific design guidance that was relevant to each department. The clinicians would provide input on some environmental issues relevant to a particular department or room in terms of specific patient needs but they would not be responsible for ensuring that any technical design guidance was followed. An example of the type of environmental issue included in the COS for Critical care is “Patient rooms should have natural daylight but ensure privacy”.
23. From my perspective, the intention was that the bidders would use the COS to influence their design and to ensure their design met our requirements so that we could deliver the care that was needed within those rooms and departments.

24. I would have envisaged that COS would be used to populate certain sections of the room data sheets, particularly the section in the RDS re “clinical activities” that would be happening within that department. The COS also referred to the Design Guidance to be adhered to.
25. Each department had very specific requirements and the COS were an aid for the designers to allow them to understand the operational processes that would be happening within that department and the accommodation required to deliver these processes.
26. The clinicians were very engaged as they saw the reference design and COS as an opportunity to ensure that the new hospital was fit for purpose. The Project Team recognised the importance of effective clinical engagement as the clinical teams are best placed to know what accommodation and equipment is required to deliver patient care. This was also backed up by visits the Project Team made to other new hospital projects where their project teams emphasised the importance and benefits of strong clinical engagement throughout the design process.
27. I was involved in preparing the COS including the one for Critical Care. I can understand that initially there may have been some confusion as to what services were delivered within the Critical Care Unit, however the COS clearly explains the critical care service and the scope of that service. The opening statement in the specification states “The department will provide a comprehensive critical care service this includes Paediatric Intensive Care (PICU), High Dependency Unit (HDU) , and Surgical Neonatal Unit (SNNU)”
28. I worked closely with the clinical leads for Critical Care Unit and acted as a conduit between them and the bidders. I would provide clarity and advice to the bidders on a variety of issues for example the type of patients that would be within those areas and the care that they required. Also from a clinical perspective, what was required in relation to equipment. I would respond to

queries from bidders in relation to the clinical design liaising with the clinical leads where appropriate.

29. From my perspective the Critical Care COS was a key document for bidders as it provided a wealth of information in relation to the scope of the service, work patterns, operational processes, accommodation requirements, patient and process flows, communication systems, key departmental relationships, environmental and service requirements and design guidance.
30. The COS clearly stated the need for flexibility in the use of critical care beds, for both High Dependency and Intensive Care, to ensure efficient use of these high specification beds. It also states that these bed spaces must be of the same specification to allow greater flexibility of use. An example of this would be if Intensive Care was at full capacity a patient requiring this level of care could be nursed in a High Dependency bed space and vice versa. This was also emphasised to bidders at design meetings by the Clinical Leads and Project Team.

Mott MacDonald

31. Mott MacDonald were our technical advisors and we had a very good working relationship with them. They had been involved during the capital phase and into the NPD phase. They advised and assisted us in relation to the use of the reference design, the ITPD, competitive dialogue, the appointment of the preferred bidder through to financial close and then going forward for the duration of the Project. They were very much part of the Project Team.
32. When we moved into competitive dialogue, Motts had some of their staff based with us, the Project Team, in the office so we were working very closely and this allowed them to be embedded in the project. Some of them would be there the majority of the time whilst others would be there less frequently. You got to know individuals, as you were working beside them. I was predominantly working with David Stillie, who was their architect, and he would attend most of the design meetings.

33. To give you an example of the type of thing Motts would assist with, when we were developing the 1 in 200s drawings, we were looking at interior design, specifically the finishes etc., which are very important, particularly from an infection control point of view. Motts were able to provide advice on types of suitable paints and flooring for specific areas. Motts input from an architectural perspective included a number of areas, for example, landscaping, signage and art.
34. There were many other types of interaction with Motts which were not architectural. It might be about the lighting, for example, what lux level you need in a light fitting to allow you to perform a clinical task in a particular room. Or it could be about drainage, acoustics or fire strategy, but I was not usually involved in that side of things unless clinical advice was required. They were our technical advisors who could and did advise on all technical issues.
35. David Stillie was an architect but there were range of advisors in the Motts team including engineers. The engineer that I predominately knew was Colin McRae. There were other people from Motts that would offer their expertise about specific issues. As far as I can recall Colin was dealing with ventilation issues.
36. Colin McRae would come to discuss certain matters with myself, Fiona Halcrow or James Steers in relation to some M&E issues where a clinical perspective was required. A good example of this would be a question along the lines of: "They're proposing this lux level in the treatment room, can you clarify the types of procedures that will be undertaken so that we ensure the correct lux level is provided".
37. Colin McRae would sometimes need to discuss ventilation specific issues with us and Infection Control. This would be around what type of patient was going to be nursed within that area. For example, what types of patients would be cared for in a single bed room or in isolation rooms as it could be someone who has got an infection or susceptible to infection.

38. It would be my expectation that Colin McRae would know what was required in terms of ventilation requirements including any specific air changes, air pressure, or anything to do with the ventilation system, as would the relevant bidder. If Motts and/or any of the bidders needed clinical input about the types of patients or clinical activities in a room, they could and would come to myself or one of the project managers with a clinical background to discuss it. I think it is also important to say that Infection Prevention and Control would always be involved in those discussions, either the IPC nurse or a consultant microbiologist. There is an example of such a discussion below at paragraph 124 onwards.
39. The relationship with Motts was a productive one. I was happy with the advice and assistance I received from them.

Infection Prevention Control (IPC) Input

40. There was IPC input at both the reference design stage and the detailed design to financial close. IPC were invited to all the meetings and sent relevant drawings prior to the meetings. At the time of the Reference Design the IPCNs involved were mainly Carol Horsburgh and Jean Harper. Janette Richards, IPCN, became the main IPC contact after the reference design was completed and she attended design meetings and was sent any drawings. An IPCN would attend the majority of the design meetings but if unable to attend they would provide input prior to the meeting. The other clinicians involved in the design meetings included the charge nurse and lead consultant for the area, and also if required allied health professionals, radiologists, play specialists and administrative staff.
41. The IPCNs provided input into the adjacencies of rooms and activities within rooms, for example ensuring the dirty utility was not adjacent to the ward kitchen. They would also advise on equipment required and placement of fixed equipment. For example, ensuring that there is a clinical wash hand basin in

particular rooms or hand sanitisers in the corridor and the most suitable location for specific types of equipment.

42. I am not best placed to comment on what level of input an Infection Prevention and Control nurse would have in relation to ventilation system technical requirements as they would be best placed to answer this. However I would expect that if they were asked for advice they would seek assistance from relevant individuals if they did not have the necessary knowledge or expertise. As set out at paragraph 124 onwards below, at one point Janette Richards contacted Health Facilities Scotland to ask for their advice on an aspect of the ventilation system. An Infection Prevention and Control specialist is not an engineer. Therefore, they would not know detailed technical issues concerning the ventilation system. The IPCNs and clinicians' expectations would be that the engineers would build to the requisite national standards. If there was a proposed derogation that concerned patient safety, then it would be appropriate to consult with clinicians and/or infection prevention control and/or HFS / HPS in relation to the proposal.

Healthcare Planner (Capita)

43. The NHSL Healthcare Planning Team's main purpose was related to bed modelling for the new hospital. They provided information to Capita, external Healthcare Planners, for their review. The healthcare planners reviewed the current levels of patient activity and predicted what the activity would be in future years taking account of a number of factors including age profile and birth rate. This information was incorporated in the COS within the Activity Indicators Section (1.2.1). This piece of work was undertaken to determine the capacity needed within the new hospital including the number of beds, theatres, outpatient rooms etc. This in turn informed the Reference Design and the accommodation required.
44. Capita were also asked to review the COS as they had previous experience of this from other projects.

Scottish Design Guidance

45. In my role as Clinical Director, I would have been familiar with the term SHTMs or HTMs and was aware that they contained Scottish Design Guidance that should be followed. I would not have necessarily been familiar with these before I joined the RHCYP/DCN Project.
46. I was familiar with the need for specific air changes and air pressure regimes. I was aware that these related to the activities that were being carried out in the rooms, which was one of the reasons for the COS, so that bidders understood those needs. It would be fair to say that I had an awareness that there were requirements but not the specifics of what technical requirements were needed in particular rooms. At the time I would not have been able to tell you how many air changes you needed for specific spaces.
47. My role would have been to explain the requirements from a clinical perspective. For example, neutropenic patients are susceptible to infection, so need to be protected from infection. I would explain if required that clinical requirement and would defer to NHSL Technical Advisors, Motts, to ensure that satisfactory technical solution was delivered to achieve these requirements.
48. I do not specifically recall the document titled 'Chief Executive letter 19 of 2010' and the requirement for Health Boards to comply with a design policy issued with the letter. I was not on the Project at the time this letter was issued.
49. I have been asked if a single room in critical care still requires to be classified as "Critical care" for the purposes of SHTMs. The answer is yes. It is a single room in the Critical care department. As I have mentioned above, it was clear in the COS for Critical Care that all rooms in the critical care unit had to be used interchangeably. I understand that the SHTM also has particular requirements for "Critical care" so I don't know what else that would apply to if not to all rooms in the critical care department. If Multiplex had any queries as to whether there were any rooms in critical care that should not be subject to the particular

critical care requirements in the relevant SHTM, I would have expected these queries to have been directed to the Project Team, most likely Mott MacDonald in the first instance who would have consulted with me, Brian Currie or Fiona Halcrow depending on the nature of the query.

Hulley & Kirkwood – Environmental Matrix

50. I understand that prior to the switch to the Non-Profit Distributing model, Hulley and Kirkwood were employed as the m&e engineers and drafted an environmental matrix (EM). As far as I can recall I became aware of this after joining the project team.
51. I can recall at times being asked questions around the type of patient that might be nursed within a particular area. I do not recall scrutinising the environmental matrix in any detail as I would not have the expertise to do this.
52. I stated earlier that I joined the Project part time in April 2011. I do not recall liaising with Hulley & Kirkwood directly. I understand that they were part of the reference design team but, as far as I can recall, they did not attend the design task group / user group meetings. However Davis Langdon, Mott MacDonald and Nightingale Associates did.

Invitation to Participate in Dialogue (ITPD)

53. I had some involvement in reviewing the documents that were part of the invitation to participate in dialogue (ITPD) or Invitations to Submit the Final tender (ISFT). For example, the clinical output specifications were part of those documents. As far as I can recall, I also reviewed parts of the ITPD and ISFT to ensure that they reflected clinical, patient and family needs. For example, I would have reviewed the sections on specific factors driving the need for change and the clinical benefits within the new RHCYP and DCN. I would also have reviewed other sections, for example, artwork, the family hotel.

Evaluation Criteria

54. I had input into the tender evaluation criteria and weightings during workshops held prior to competitive dialogue. My input was as part of a group of people that were looking at how we would split the weightings. From my perspective, and others within the team, quality was very important.
55. However, my understanding was that the 60/40 (price/quality) split was immovable. I think generally, as a Project, we raised our concerns but the feedback we were getting from SFT was that that this would not change, so we had to look at how we could make the best of the 60/40 (price/quality) split.
56. From my perspective we needed to ensure that the quality criteria weightings reflected key quality aspects from a clinical and patient perspective. It was suggested that some of the criteria could be pass or fail thus allowing other parts of the quality criteria to be scored.
57. I cannot comment on the M&E score being low relative to other elements, however I recall a lot of the M&E requirements were assessed on a pass/fail basis. This would mean that if a bidder did not pass the criteria they could not proceed.

Competitive Dialogue

58. The competitive dialogue meetings involved meeting with the bidders, key people from the Project Team and NHSL advisors to discuss bidders' current proposals. Prior to each of the dialogue meetings, bidders would submit their latest updates and proposals which were reviewed by the evaluation team and advisors prior to the dialogue meeting. At the competitive dialogue meetings, the day would start with an initial meeting with the NHSL Core Evaluation Team, the Advisors and the relevant bid team. This would be followed by breaking out into a series of sub-meetings concentrating on the three workstreams (legal, technical and commercial). The day would end with the full core evaluation team, NHSL advisors and the Bidder's team meeting again for a wrap up session.

59. I was part of the technical workstream as design was part of this. Richard Cantlay from Motts was the key person dealing with the technical aspects at the competitive dialogue meetings and then he would, as necessary, have other advisers from Motts attend. Brian Currie, the Project Director, was the nominated lead for NHSL for the technical workstream which included all aspects of the design.
60. The technical workstream was split further into different sections. For example, one of the sub-meetings would be with the bidder's architects to discuss and give feedback on their latest set of design drawings and proposals.
61. From my perspective, I was looking to see whether the bidders' design satisfied our operational functionality requirements. Myself and Fiona Halcrow both led on this aspect of the design and we would have had a pre-meet before the competitive dialogue meetings to review the bidders' proposals along with James Steers, who was Project Clinical lead for DCN. We would look at bidders' proposals in relation to the reference design and identify if they were deviating from areas previously agreed with the user groups in relation to operational functionality.
62. On occasion, we would go back to the relevant clinical lead/s to discuss what the bidders were proposing and whether their design proposal was acceptable. Sometimes we could deal with issues by email or telephone call with the clinical lead/s but sometimes we would arrange a meeting to discuss the drawings.
63. The clinicians were not directly involved in competitive dialogue meetings and evaluation of tenders, however as noted, clinical input was sought when required and the NHSL Project Team would act as the conduit between clinicians and bidders. For example, as set out in the Chronological Table, on 16 July and 24 July 2013 there were additional extraordinary meetings between IHSL and NHSL (without clinicians present) in relation to the 1:200 Design and Planning for Critical Care. Fiona and/or I would have raised the queries with critical care leads who reviewed the drawing and made various comments and

we then fed those comments back to IHSL during competitive dialogue so that they could develop their design for final tender. The same process was used for all of the bidders.

64. I was also involved in reviewing some of the other design criteria during competitive dialogue including interior design and wayfinding proposals.
65. There was some further involvement with clinicians during the dialogue process. For example clinical representatives were involved in an AEDET review with each of the bidders during competitive dialogue.
66. I have been asked if I know what an exemplar design is as there is a reference from IHSL to exemplar design. I do not recall the context of this and what IHSL meant by that.

Tender Evaluation

67. I was part of the core evaluation team, which comprised five people who each represented the following interests in evaluation:
 - (i) Brian Currie, Project Director;
 - (ii) Iain Graham – Commercial and Legal; (iii) myself – Clinical and Service User;
 - (iv) Carol Potter – Finance; and (v) Jackie Sansbury – Operations and Commissioning. The core evaluation team was supported by a number of advisers - legal team (MacRoberts), technical team (Mott MacDonald) and financial advisors (Ernst & Young). The core evaluation team was also supported by other members of the Project Team and NHSL corporate departments, for example, Estates, Fire, Infection Prevention Control as required.
68. There were three main workstreams: commercial, legal and technical and I was in the technical workstream. The technical workstream was further split into a number of areas including design, M&E, civil and structural. I was not in the M&E discussions or involved in scoring this section and so I cannot say how

ventilation was evaluated during that period, although as previously mentioned I was aware that many of the criteria were pass/fail.

69. I was involved in the evaluation and scoring for other elements of the design for example landscaping, interior design, wayfinding and also in the strategic management section. My focus as Clinical Director related to design in terms of operational functionality, meeting clinical and stakeholder requirements. For the design criteria, people involved included Fiona Halcrow, Infection Prevention and Control, and James Steers. We separately reviewed and scored the submission and then came together to discuss and agree a collective score and provide collective comments. The process followed is set out in the “Evaluation Manual – Evaluation of Technical Submissions” section.
70. I have been informed that that Bidder C had marked up their tender in relation to ventilation requirements. I was not aware of this at the time. I had no involvement in the evaluation of M&E engineering. At no stage did I have cause to consider SHTM 03-01 in the evaluations that I undertook. My understanding was that the hospital would be built in compliance with the Scottish Design Guidance.

Design Development from Preferred Bidder to Financial Close

71. After IHSL had been appointed as the Preferred Bidder, they had to undertake further detailed design to Financial Close. To my knowledge, the intention was that the reference design would have served its purpose by the time financial close was achieved. This was because IHSL’s design solution would have superseded the reference design.
72. I prepared a Board Paper called “Design Development to Financial Close” for the PSB dated 29 November 2013. It is in Brian Currie’s name as the Project Director but I was the author of the paper and as far as I can recall I presented it to the PSB. The purpose of the report was to inform the PSB of the staffing resource that would be required for the Design Development process from appointment of preferred bidder to financial close and the proposal to support

this process from the clinical management teams' whose services would be transferring. Additional support was also needed from other corporate departments, including infection control.

73. Paragraph 3.1 of the Board Paper notes that all bidders as part of their final tender had to submit their proposed programme for design development for the period between preferred bidder and financial close. During this period design development was split into three main phases:
- (i) review of 1:200s developed through competitive dialogue process;
 - (ii) development and sign off of 1:50s for each room including the production of Room Data Sheets (RDS) and;
 - (iii) Development and sign off of technical design, eg. Interior and external design, fire strategy, ICT etc.
74. Paragraph 3.2 of the Board Paper states that the preferred bidder will have a dedicated Design Manager leading the design team of architects who will work in conjunction with the Project Team Leads (i.e. me and Fiona Halcrow) for design development. It is stated that these individuals will manage the design programme which will include the consultation and engagement with users, monitoring of progress and sign off of the design. This is what happened.
75. The design manager for Multiplex (the Building Contractor to be appointed by IHSL) was Lianne Edwards. She was our main point of contact in Multiplex and all design would go through her. For example, HLM (the architect to be appointed by IHSL) drawings would be issued by Lianne to the Project Team (including Motts), rather than directly from HLM to the Project Team. Lianne would also attend the majority of the detailed design development meetings that we were having with HLM, Multiplex and the clinicians.
76. The Preferred Bidder, IHSL, was appointed in March 2014 and on 27 March 2014 I emailed the department leads setting out the process for detailed design development with the preferred bidder with an explanation of the process as follows:

“The first detailed design development with the Design Team will cover the following:-

- Review of the 1:200 departmental plan. This was signed off during the competitive dialogue process and therefore we are not anticipating any change to this. Where the Design Team have made changes from the Reference Design they will explain the rationale for this and the benefits. The 1:200 drawing issued will identify the rooms (key and generic rooms) that were all ready signed off by users at 1:50 as part of the Reference Design. This drawing needs to be read in conjunction with the explanatory notes.*
- Review of the relevant key and generic rooms for your department to ensure that no changes are required*
- The Design Team will also start preliminary discussions with you on some of the non-key and generic rooms within your department in preparation for Round 2 & 3 meetings. As we have previously indicated some departments will not require three meetings”.*

77. 'Design development' is the term used for this period between appointment of preferred bidder and financial close. I have been asked if this included M&E engineering. It would have done, yes, but I would not have been directly involved in that because I was focusing on operational functionality in relation to the 1:200 and 1:50 drawings.

78. Fiona Halcrow and/or I would have been at the design development meetings with David Stillie from Mott MacDonald, the relevant departmental clinical leads, an HFS representative (in relation to equipment requirements) and the IPCN. Drawings would be sent to attendees prior to the meeting to allow them to review and consult with their colleagues. If infection control or HFS were not able to attend, then they would submit their comments in advance of the meeting so that they could be discussed at the design meeting. Facilities

Management representatives also had the opportunity to make comments on the drawing and submit those for discussion at meeting.

79. I have been asked who actually signed off on the 1:50s. At the design development meetings, the drawings would be marked up with the changes discussed and then everyone who attended would sign the drawing. Ultimately, once we had got to a stage where we were all in agreement that all the changes had been implemented, then either myself or Fiona Halcrow would confirm it was complete and physically sign off on the 1:50s.
80. When I have spoken about the interaction I had with Mott MacDonald, I explained they were embedded in the team and located in the same office. At that time, we were also all co-located with IHSL in the same portacabin. Whilst we were not in the same office as IHSL, we were located near them. While I did not see Lianne Edwards, MPX Design Manager, every day, I certainly saw her frequently. Contact was sometimes informal and she would pop into our office with a query. At other times contact was via email or phone. During the design development phase we had a physically close relationship with both Motts and IHSL.

Project Steering Board

81. The Project Steering Board (PSB) was involved in the governance of the Project. The PSB met monthly. I was a permanent member of the PSB and I attended regularly. The purpose of the meetings was to provide the attendees with updates on how things were progressing, raise any issues of concern that the Project Team had, and escalate any matters necessary.
82. The input I had with the PSB was varied. I was the clinical lead and also the lead for patient and public involvement from the PSB perspective. I would write reports and papers and present them to PSB. The Board Papers about the Approval of the Clinical Output Specifications and the Detailed Design Development as noted above are good examples.

83. I also contributed to the project dashboards, which were issued to the PSB and reviewed at the meetings. The project dashboard was a summary document providing an update on progress and key issues. It was split into different sections that nominated

individuals completed. It was circulated to the PSB members in advance of the meetings and discussed at the meetings.

84. I prepared the clinical update and also contributed to the stakeholder and communication and design sections of the project dashboard. Often, there were more detailed underlying papers that were part of the agenda for the PSB that were referenced in the dashboard for further information.

85. The type of issue that was included in the project dashboard from my perspective would depend on the stage in the project and the issues at that time. For example, after the appointment of preferred bidder, I would confirm the number of user group meetings that had been held or were still to be held. I would flag any issues with the bidder that might need to be resolved, e.g. around the flow of information.

Risk Registers

86. Risk registers played an important part in the project. In general terms, within the NHS, risk registers are an integral part of governance and are embedded within every service. Therefore the Project, like every service, had a requirement to have a risk register to identify any risks and the mitigation that could be put in place to reduce or avoid those risks.

87. Regarding the document, "Design risks to the board" (**A36308801 – Design Risks to the Board to Financial Close**) this is a Mott MacDonald document. I do not recall this document specifically but expect I would have seen it at the time. The first entry relates to ventilation and this is the type of issue in a risk register which would be relevant to my role as Clinical Director, as I would want to know that the design was complying with the necessary ventilation guidance.

I would be relying on Mott MacDonald's advisers, including Colin McRae, to say what the solution potentially would be. I would have expected that the solution would follow the national guidance such as SHTMs.

88. Regarding another document I have been shown, "Technical Risks to the Board to Financial Close" (**A36308810 – Technical Risks to the Board to Financial Close – 31 January 2014**) this is also a Mott MacDonald risk register and it's dated the 30 January 2015, which was just prior to financial close. I do not recall this document specifically but expect I would have seen it at the time. There is an entry:

i. "Despite best efforts of the board, more reviewable design data than was expected by the board. Risk to project, less well-defined proposals, therefore less certainty by the board, lack of design. IHSL pushed very hard to achieve maximum information during preferred bidder stage."

89. To clarify, the last line should really say: "IHSL were pushed very hard by NHSL to achieve maximum information during preferred bidder stage".

90. I would have expected to have been copied into most of these types of risk registers because, if you take the above as a specific example, the reviewable design data information included various aspects that would be within my remit. So, yes, as a Project Team, we would generally be aware of all risks, even if some of them were not directly related to our areas of expertise.

91. At this time I do not specifically recall having seen either of the two risk registers outlined above, however I acknowledge that as I was involved in discussions in relation to the Project's Risk Registers throughout the project the likelihood is that I would have seen them both at the time.

AEDET

92. AEDET stands for Achieving Excellence Design Evaluation Toolkit and it is a tool to evaluate the design. It is split into three key areas with each area having subsections:

(1) Impact (Character and Information, Form and Materials, Staff & Patient Environment, Urban & Social Integration); (2) Build Quality (Performance, Engineering & Construction); and (3) Functionality (Use, Access, Space).

AEDETs were undertaken at different stages in the project and involved a range of individuals.

93. We undertook AEDETs in October 2009, April 2010 and August 2010 which was during the capital funded phase. I attended the first two of these AEDET reviews as part of the clinical management team (i.e. before I joined the Project Team in April 2011) and which as far as I can recall HFS facilitated. I note that on the AEDET dated 12 August 2010 (I was not present) there is a report by HFS of the AEDET review as follows:

“NOTE: The AEDET workshop provides an evaluation by the stakeholders of the design presented to them. It does not provide an assessment of the compliance of the design with current healthcare planning or technical guidance. HFS acted as independent facilitators of the workshop and this report does not necessarily reflect the views of HFS.”

94. After the switch to an NPD funded model, AEDETs were undertaken in August 2011 (though I was not in attendance) and March 2012. The March 2012 AEDET was facilitated by the Architects, NA and BMJ.

95. You are not able to always score all of the sections because it depends on the stage the design is actually at and who is in attendance at the AEDET. M&E was not evaluated in any of the AEDETs I attended.

96. I cannot recall exactly where the requirement to use AEDET originates from but think it was a requirement of NHS Scotland. It was not just a requirement of the NPD model because AEDETs were completed in the capital-funded days.
97. As previously stated, I had no involvement in discussing the M&E requirements at the AEDETS. The people that were at the AEDETs I attended certainly would not have been in a position to either. Those who attended included patient representatives, clinicians, infection control and union representatives, known as "Partnership".
98. The criteria would be scored, although as previously mentioned not all of the criteria were able to be scored. There were two options for scoring: either all individually score and then do an average or you can collectively, as a group, following discussion give an agreed score. It partly depends on the size of the number of people you have attending. The outputs from the AEDET reviews were fed back to the architects to allow them to make changes to their design in light of comments and scores made by the attendees.
99. During competitive dialogue each of the Bidders undertook an AEDET review. These were held over two days on 17th and 18th June 2013. This was to help bidders further develop their design and proposals from the feedback they received from clinical staff, patient representatives, and Infection Control. Prior to attending, participants were provided with a written briefing explaining the purpose of AEDET, the process that would be undertaken including the scoring process. It also confirmed that not all criteria would be scored. As can be seen from the scoresheet for Bidder B all of the Impact section was scored and only one question within the Performance criteria of the Build Quality section was scored. Within the Functionality section Use and Access criteria were fully scored and only two questions within Space criteria were scored. The outcome of each of the workshop was shared with the relevant bidders.

HAI-SCRIBE

100. Healthcare Associated Infection – System for Controlling Risk in the Built Environment, known as HAI-SCRIBE, is a well recognised risk management tool used to identify any risks to patients, families and staff and to mitigate against or to manage them if you cannot mitigate against them. It is widely used within the NHS in relation to any building works. HAI-SCRIBE is split into four stages that are done at different points in the development of a project. The first stage is undertaken at the beginning of the development of a project. The second stage relates to design and planning for the new development. The third stage is undertaken when you prepare to move into the construction / redevelopment stage. The final stage, Stage 4, is undertaken prior to occupying the facility.
101. Each of the stages have set criteria with a list of questions for the review group to respond to. The composition of the review group will vary depending on what stage the project is at. Infection Control are always present and review is either led by a Project Manager or Infection Control. You would not undertake an HAI-SCRIBE if Infection Control were not present.
102. There are a list of questions asked which require either a Yes, No or N/A answer and the proforma has space for any additional comments to be made. At each of the different stages there are different questions. The group undertaking the HAI Scribe will meet and complete the form together.
103. As an example of attendees I note that the HAI Scribe stage 3 (construction / redevelopment phase) dated 13 January 2015 was attended by me, Janette Richards (IPC), David Stillie (Motts), Ken Hall (IHSL), Stewart McKecahnie (IHSL), and Brian Rutherford (IHSL).
104. Regarding a new build, some of the questions are around planning. For example, whether adequate clinical hand washing facilities are being planned. There is a general section on ventilation. There is no reference in Stage 3 to the ventilation SHTMs. In relation to this Project, the main concern during the

construction phase was around the impact on the RIE as a functioning hospital. So when we did the Stage 3 HAI-SCRIBE, it involved key people from the Royal Infirmary. In HAI Scribe 3 it was noted that there was an infection risk in terms of exhaust ventilation. There is a comment to the effect that “Clinical staff in the areas located near to where building works are to be carried out will be advised to contact their local IPCN if building is affecting their clinical environment. Domestic Services within the RIE will be advised of building work schedule. Part of the Schedule of Conditions is related to the checking of the Hepa Filters by Cofley and liaising with IHSL.”

105. When we did the Stage 4, three HAI-SCRIBES were undertaken as we split the areas into three with one HAI-SCRIBE covering the inpatient areas, another covering theatres and imaging, and the third covering Outpatients. At the Stage 4 HAI- SCRIBES there was representation from the Project Team, this included Ronnie Henderson, Estates and Facilities Lead, myself and/or relevant commissioning manager; Infection Prevention and Control and Multiplex.

106. Over the course of the Project I attended some of the HAI-SCRIBE assessments or reviews but not all of them.

107. I have been asked what a RIBA Stage E is and I do not recall this.

Room Data Sheets (RDS)

108. RDS contain information including a description of the clinical activities carried out in the room, the number of personnel that will use it, room characteristics including flooring and wall finishes, a schedule of components and equipment for use in the room and environmental data. There are various documents which inform the RDS.

109. I have been asked if it is correct that 1:50 drawings inform the content of the RDS. The 1:50s show the layout of a specific room, for example location of equipment, sockets and lights. So from an equipment perspective, the information in the 1:50 would inform the RDS. I have been asked whether it is

correct that the 1:50 for every room would have to be completed and signed off to allow the RDS to progress. I would say that the RDS might not be able to be finalised until the 1:50s are complete, as a final equipment list is needed, but they could still be progressed.

110. In relation to equipment, a crib sheet “1 – 50 Drawings review notes – Equipment” dated April 2014 was drafted by NHS Lothian with input from HFS to capture what was required in terms of reviewing the equipment requirements during the 1:50 process. It is stated:

- *Lists of equipment to be procured (or transferred) are generated from RDS (Room Data Sheets) which, in turn, are derived from the 1:50 drawings. Consequently, if items do not appear on the drawings they will not appear on the equipment lists. It is therefore important to ensure that all required equipment is identified at the 1:50 review.*
- *Room design and environmental characteristics are not shown on the 1:50 drawings but appear on the RDS or separate spreadsheets. Particular requirements should be highlighted to the Architects in order that they can be incorporated in the RDS (e.g. if lasers are to be used in Operating Theatres this should be highlighted in order that the appropriate laser protection can be included in the RDS and to highlight the need for RPA input).*
- *Layouts and equipment provision should (unless specifically derogated) comply with current guidance, Scottish Health Planning Notes, Scottish Health Technical Memoranda etc.*
- *Health Facilities Scotland (HFS) will be supporting NHSL in development of equipment specifications and procurement of equipment.*

IHSL Room Data Sheets at Financial Close

111. I have been shown the following excerpt from the ITPD:

A41674462

1. *“Section 3: discussion of key issues*

ii. *All bidders, as part of their final tender, must submit their proposed programme for design development for the period between preferred bidder and financial close. During this period, design development can be split into three main phases: review of 1:200s; developed through competitive dialogue process; development and sign-off of 1:50s for each room, including the production of room data sheets.”*

112. In August 2014, there was a special Project Steering Board that was convened. I was not in attendance. I have been shown a minute of the special PSB. It records that an agreement was reached that IHSL did not need to produce 100% of RDS prior to Financial Close.

113. As I was not present at the special PSB in August I was not party to this decision. However, I did have input in to the rooms which we agreed did need to have RDS for Financial Close – i.e. the key rooms and generic rooms. Key rooms were those rooms that had critical operational requirements, for example critical care single cubicle; and generic rooms were rooms that were replicated more than 4 times in a building, for example a dirty utility and a single bedroom children en-suite. The combination of the two represented 52% of the rooms in the building. The remaining 48% of the rooms comprised a range of rooms, for example, ward kitchens and play rooms. The Paper called “Design Development to Financial Close” for the PSB dated 29 November 2013 referred to in paragraph 72 of this statement has the list of Generic Rooms in Appendix 1 and List of Key Rooms in Appendix 2.

114. On 10 September 2014, Lianne Edwards from Multiplex emailed Graeme Greer at Motts with a PDF list of the rooms Multiplex proposed to provide RDS for for FC. Lianne noted “that during RDD (i.e. after FC) all room types would be generated as an RDS, culminating in and RDS attributable to each room. C-Sheets will be provided from the room list attached too”. Graeme then forwarded Lianne’s email and PDF list of rooms for RDS to me, Fiona Halcrow

and David Stillie at Motts and asked us to review and see if there were any additional rooms we wanted to add.

115. On 11 September, Fiona Halcrow responded to Graeme Greer with some comments and a note of additional rooms to be added to the list. On 12 September, I responded to Graeme Greer to advise I'd spent time reviewing and had collated all the rooms into a spreadsheet by department. I did that because the list Multiplex had provided was very difficult to interrogate. I added a column suggesting other rooms that should be done, which also incorporated Fiona's suggestions.

116. On 12 September, David Stillie responded to Graeme Greer to say that he had no further comment to make in addition to those made by Fiona and I. Graeme Greer then responded to Lianne's original email providing the spreadsheet I'd prepared with my comments. Lianne Edwards responded on Saturday 13 September to say that she would review in advance of Tuesday's meeting. I am unsure what meeting Lianne is referring to in her email but this issue was discussed at the Project Management Group (PMG) however it met on the Wednesday, which would have been the 17th September 2014. She commented in her email that "time would be the most limiting factor at this stage". I was not a member of the PMG, so was not in attendance, the meeting was attended by representatives from NHSL Project Team, Mott MacDonald and IHSL.

117. Having reviewed the notes of the meeting on 17th September 2014. The note of the meeting states:-

"RDS Sheets for IHSL list will be issued as one transmittal by 22/9/14. Boards additional room list issued to IHSL. Board to re-review, due to time constraints"

118. However, I note that the RDS produced at Financial Close are dated 18 September 2014 so I can only assume that it was agreed that the list of key and generic rooms for RDS were agreed following that meeting.

119. The RDS produced by IHSL at FC were for the agreed set of generic rooms and key rooms. The key rooms in critical care were: 4 beds Low Acuity; Single-bed cubicles (isolation): single bed cubicle; 4 beds High Acuity; Open Plan Bay 3 cots (neonatal); and Single cot cubicle: Neonatal.
120. By the time the special steering board meeting in August 2014 and the subsequent emails in September 2014 took place, my working relationship with Lianne Edwards was still productive. I think, in general terms, the relationship did change a bit over time, but as for exactly at what timeframe it changed I cannot recall.
121. I would have reviewed the RDS provided by IHSL at FC along with Fiona Halcrow in relation to operational functionality, i.e. not in relation to the m&e environmental data. I would have relied on Motts as our Technical Advisors to review the RDS in relation to that environmental data and flag any issues with the Project Team. If Motts needed clinical input in relation to any issues with the RDS, they would flag this with myself or Fiona Halcrow.

Emails – Openable windows

122. I have been shown an email that was sent by Graeme Greer at Motts to Brian Currie on 13 November 2014, concerning the environmental matrix and single room ventilation. I am not copied in to this email. However, I would have been aware in or around November of an issue with single bed rooms and ventilation. I cannot recall why I was not copied into the email, but Fiona Halcrow was and I am sure that Fiona would have discussed it with me.
123. From a patient perspective, the ability to open a window makes you feel better because of the fresh air. It can be important for patients' mental well being to be able to open a window. However, there are some circumstances, for example in Child and Adolescent Mental Health, where you would ensure you have sealed windows to prevent ligature risks. You also would not have openable windows in isolation rooms because it would impact on the air pressure within the room and also potentially introduce infection.

124. I have been told that prior to January 2015, a mixed-mode ventilation system had been promoted which is a mechanical ventilation system that is assisted by fresh air being provided by opening a window. I was aware that this was being proposed at the time and as far as I can recall was being reviewed by NHSL technical advisers. However, my understanding is that the mixed-mode ventilation was only in relation to single rooms and did not apply to critical care, which had its own specialist ventilation requirements.

125. On 13 January 2015, there was a HAI-SCRIBE meeting with IHSL at which there was a request for clarification in relation to the negative/positive pressure regime within bedrooms. This is summarised in the IHSL RHSC+ DCN RFI Summary.

126. On 14 January 2015 I emailed Fiona Halcrow attaching the air movement report for single bed rooms. I wrote:

“FYI, we discussed this yesterday and what was meant to have been the HAI-SCRIBE Stage 3 workshop. But other than the M&E people who were there to talk about the ventilation, clearly the correct people weren't there. Anyway, David is going to discuss with Colin and Janette with HFS. IHSL do appear to have followed the relevant SHTM, so we await the outcome of these discussions.”

127. The David I have referred to in the quoted paragraph is David Stillie. He was going to discuss the matter with Colin McRae, the m&e engineer at Motts, and Janette Richards was to discuss with HFS. As previously mentioned we would expect Motts and HFS to have a greater insight into the SHTM requirements and would rely on their expertise.

128. As agreed, on 14 January 2015, Janette Richards emailed Ian Stewart at HFS to seek his input. Janette forwarded Ian's advice to me and David Stillie, who confirmed that he had forwarded Ian's email on to Colin McRae for comment.

129. Clarification is then provided by email from Motts to Ken Hall at Multiplex on 29 January 2015. The email states the Board's response to the recent RFI is as follows:

"The single room with en-suite ventilation design shall comply with the parameters set out in SHTM 03-01.

- *The design solution should not rely in any way with the opening windows as these will be opened or closed by patient choice.*
- *The critical factor from SHTM 03-01 for infection control will be the resultant pressure within the room being balanced with or negative to the corridor.*
- *Isolation room ventilation shall comply with SHPN 04 Supplement 1. Under the heading, "Attribute 2", the email refers to M&E building services."*

130. I was copied in to this email because I had been involved from the outset at the HAI Scribe meeting on 13 January and because there was potential impact and risk to the patients that would be being looked after in those rooms.

131. In my view this does resolve the specific query – i.e. we responded to the request for information by IHSL in relation to the pressure issue as we agreed to do at the HAI Scribe meeting on 13 January 2015. I was aware that there were some design issues that were unresolved at financial close and, accordingly, were subject to the Reviewable Design Data (RDD) process, It was part of my role as Clinical Director to engage the clinicians during the RDD process to review the continuing design.

132. I have been asked whether I would have been concerned in my role as Clinical Director about the number of issues that were not resolved by February 2015 and the answer is yes, because the expectation was that those were meant to have been resolved by FC. I think it is something that the Project Team, as a group, were concerned about. However, a pragmatic solution had to be reached and we knew that there was a contractual mechanism in place, the RDD process, to resolve the outstanding issues.

133. I had an awareness of the pressures on the Project to proceed to Financial Close in February 2015. I do not recall any pressure being put on me personally, but I was aware from feedback from Brian Currie that there were discussions at a senior level.

Reviewable Design Data (RDD) Process

134. As noted, it was part of my role as Clinical Director to engage the clinicians during the RDD process to review the continuing IHSL design. The RDD process included the architectural and technical drawings and the RDS. The RDD process involved the NHSL Project Team, supported by NHSL specialist advice from a number of different disciplines/corporate departments, for example Infection Control, Pharmacy, Health & Safety and Fire Safety; and Motts.

135. On 3 March 2015, myself, Fiona Halcrow and David Stillie at Motts prepared a paper: "Reviewable Design Data (RDD) Process – Information for Service Leads" and provided it to the clinical leads for all departments by email. The paper explained to the lead clinicians that the RDD process was the next stage in the design development process following the detailed design development from preferred bidder to FC during April – July 2014, at which time the 1:50s for each room were signed off by the nominated lead/s.

136. The paper references that design guidance was used in the development of the current 1:50s which included: relevant Health Building Notes (HBNs/SHBNs), departmental clinical output specification, guidance from manual handling, infection prevention and control and e-Health and dementia standards.

137. IHSL were to provide a pack of information to be issued to the nominated lead/s a minimum of 5 working days in advance of the meeting. The IHSL pack was to comprise:

- 1:50 Loaded Floor Plans – Copies of the individual signed-off department layouts from the previous round of user group meetings;
- C Sheets – Individual room plans and wall elevations based on the 1:50 layouts reviewed and commented on previously;
- Room Data Sheets (RDS) – Written description of each room including details of function, environment, fittings and equipment;
- Equipment List – Full departmental list covering all equipment in Groups 1, 2 and 3; and
- Reflected Ceiling Plans.

138. The paper makes it clear that sign off of the 1:50s and associated information was to confirm operational functionality only, as defined in the Project Agreement. However, if there were further changes, there was a Change Protocol in place. The meetings involved the lead user/s, representatives from the Project Team, Motts and the equipment lead and drawings were to be reviewed by facilities management, infection control and equipment representatives. The purpose of the meeting was to discuss and agree any comments that had to be fed back to IHSL.

139. The clinical departments were split in to 14 Production Groups for the RDD meetings. Critical Care was in Production Group 10 (PG10). There were 6 or so submissions from IHSL for review by PG 10 between November 2015 and October 2016. However, as I recall initially the RDS were issued for the early PG meetings but IHSL then stopped issuing them.

140. I have been asked to comment on what my understanding as to the root cause failure to produce or fully populate the RDS was. My personal view is that IHSL did not appear to view the RDS as a priority at that time as their priority was to progress with finalising the drawings for sign off as these informed the RDS. Within the RDS the relevant series of drawings would be referred to.

141. I think myself and my team were probably the first from NHS Lothian Project Team to realise that the production of RDS during the RDD process was not progressing. As I recall we discussed this within the Project Team and Motts.

142. In my role as clinical director, I viewed RDS as essential as it was a contractual requirement. In terms of developing the final 1 in 50s, from the point of view of how those rooms were going to be laid out, the RDS was not a crucial element at that time because we had the information that was required to do the layouts, for example the COS and equipment lists. However, the RDS needed to be reviewed to ensure all of the architectural and technical information contained within them was correct, e.g. in relation to the equipment, and correct series of drawings. The RDS are important at the end of the Project as a collective record of what has been built in each room. IHSL did eventually submit final RDSs and these were reviewed by a number of people. For the purposes of operational functionality myself, Fiona Halcrow, or relevant commissioning manager reviewed the relevant sections. We would review them for operational functionality (i.e. room layouts, clinical activities and equipment). Motts advisers reviewed the technical sections and if there were any issues with the environmental data I would have expected Motts to flag this.

143. I believe that the facts stated in this witness statement are true. I understand that this statement may form part of the evidence before the Inquiry and be published on the Inquiry's website.