

Written Statement

Brian Currie

Introduction

1. My name is Brian Currie. I am the currently employed as the Senior Programme Director for NHS Lothian. My role involves overseeing the three major projects that NHS Lothian currently have underway. Those projects are the new Edinburgh Cancer Centre at the Western General Hospital, the re-provision of the eye hospital, known as the Princess Alexandra Eye Pavilion and also the National Treatment Centre Lothian. They are all major projects with the latter two costing well in excess of £100 million each. I was appointed to oversee these projects on behalf of my line report, which is currently Susan Goldsmith as Director of Finance and also on behalf of the Senior Responsible Officer for those projects, which is currently Jim Crombie.
2. I was involved as the Project Director in the planning, design, and construction of the Royal Hospital for Children and Young People (RHCYP) and the Department of Clinical Neuroscience (DCN) (“the Project”) on behalf of NHS Lothian. My role in the project was Project Director. I have been asked to provide a written statement to the Scottish Hospitals Inquiry (SHI) in relation to my involvement in the Project from the commencement up to the start of the procurement exercise. I have been provided with a list of questions and a bundle of documents from the SHI. This statement seeks to answer the list of questions that are relevant to my role in the Project to the best of my recollection. Some of the events I’ve been asked about occurred fifteen or so years ago and, given the passage of time, I cannot recall all of the events and documents.

Background

3. I graduated in 1978 with a degree in Architecture and was awarded a Diploma in Advanced Architectural Studies in 1980. I worked as an Architect in private practice for around 8 years before moving on to Project, Construction and Design Management roles in the construction industry across a broad spectrum of sectors. Immediately prior to the Project Director role in NHS Lothian, I was Regional Director for Scotland and NE

England for Lendlease Projects and was managing a variety of construction projects with a total construction value in excess of £450million. I have significant experience of delivering high value and complex construction projects including the RBS Edinburgh Property Strategy and RBS Gogarburn Campus.

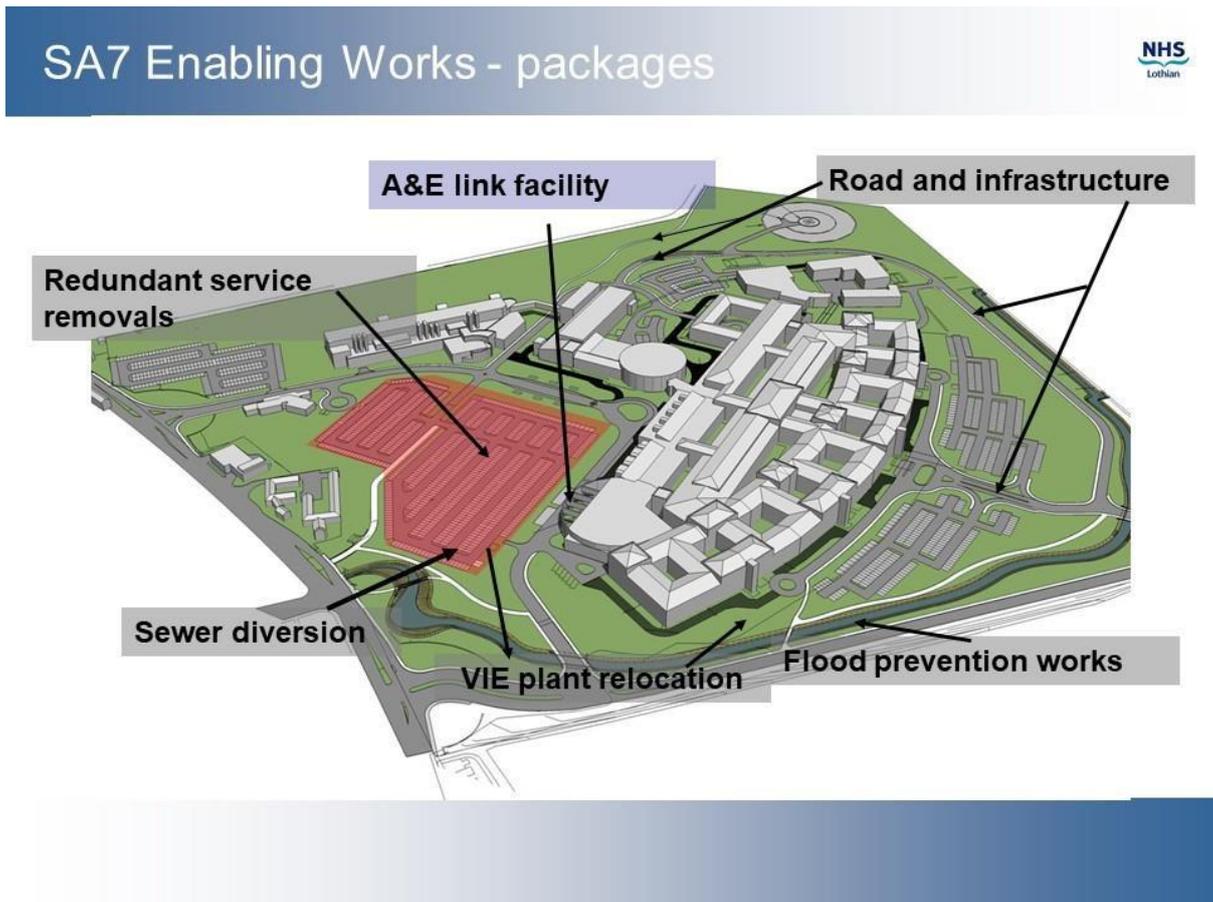
4. In my role as Project Director I was responsible for aspects of project delivery on behalf of NHS Lothian within the defined scope, quality and timescale of the Project. I led NHS Lothian Project Team of twelve managers across various disciplines. I was involved with the procurement and management of technical, legal and financial advisors. I liaised with a variety of internal and external stakeholders. I led the redirection of the Project from a capital funded procurement route utilising a national established procurement framework (Framework Scotland) and NEC 3 form contract to a revenue funded NPD (non-profit distributing) project from November 2010 onwards. I led the Project Team through the development of the reference design process utilising a full external design and management team. I led the Project Team on the NPD procurement processes through PQQ (pre-qualification questionnaire), Competitive Dialogue, Preferred Bidder and Financial Close stages. I then led on the construction and commissioning phase to complete a phased operational handover in March 2021.

The need for a new hospital

5. I have been asked why a new hospital was required. The business case for the re-provision of the RHSC (Royal Hospital for Sick Children) (Bundle 3; Volume 1; Document number 12; Page 272) had already been approved by the Scottish Government when I joined NHS Lothian in August 2009. My brief was to manage and develop the build of the new hospital. Although I was not involved in considering the need for a new hospital, it was generally known that the old RHSC was a tired and old building, as was DCN at the Western General. In addition, there was a desire on the part of NHS Lothian to have DCN built on the same site as the re-provision of the RHSC so that the Board could provide a major trauma centre for all of NHS Lothian and realise the benefits of co-locating a children's hospital with clinical neurosciences, maternity, emergency department and a university teaching hospital.

Site Constraints

6. There were significant site constraints which we had to work through. What added to the complexity of the site constraints was that Royal Infirmary Edinburgh (RIE) which is situated at Little France, Edinburgh, was an existing PFI (public finance initiative) site run by Consort Healthcare (“Consort”) and Balfour Beatty who were an equity holder in Consort. The introduction of an NPD project to an existing PFI campus presented challenges technically as well as legally and commercially. This was due to the fact that we would have two PFI operators on the same campus. The complications came from separating and clearly defining services, utilities and responsibility for those. We had to create a separation and try to make one autonomous from the other in the technical sense. In the operational sense, the challenges were in relation to things such as groundskeeping and snow clearing. The competing demands of two private operators on one campus was the principal reason for the challenges. The re-provision of RHSC and DCN was to be as autonomous as possible from RIE in the way it was funded and serviced to simplify legal and commercial considerations albeit there had to be physical and clinical connections between the buildings.



7. The diagram above shows an illustration of the enabling works that were carried out on both the site of the project and the immediate RIE Campus. I often thought of the “A&E link facility”, being the connection between the RHCYP/DCN and the RIE, as a “docking station”. As Consort were in control of the RIE, it was their building, so they undertook the works to create the docking station. That included demolitions and creating a new building as an extension to the existing RIE. Project Co (IHSL) could then plug into that, without directly interfering with Consort’s building.

8. As part of the A&E Link Facility, there are two link corridors between the RHCYP/DCN and RIE, one on the ground floor and one on the first floor. One of the corridors linked DCN patients directly through to critical care and theatres in RIE. This was needed because it was determined that it was not viable to have a critical care centre for DCN patients in the new facility and that the existing critical care in RIE should be expanded to accommodate DCN patients instead. Enlarging the area for critical care resulted in reconfiguration works for other areas/services within RIE, namely the relocation of renal. Other clinical enabling works also took place in relation to pharmacy and

reconfiguration of the Emergency Department following the creation of the “docking station”.

9. The VIE plant is for medical oxygen. The road and infrastructure relates to the rerouting of buses to the new bus hub. Flood prevention works were required because upgrading was needed since RIE’s design in the 1990s to match new flood risk requirements. There were other external works such as new flood defences (on and off site) and road infrastructure around RIE campus. A gas mains and twin trunk sewer also required diversion.
10. Below ground, we also had significant diversion works (redirection of water, drainage and other utilities from underneath the proposed footprint of the new facility in car park B).
11. The majority of the enabling works were agreed via a Supplemental Agreement (SA7) between the Board and Consort. As Project Director, I was involved in the negotiation of SA7 to the extent that the physical works necessary were appropriate to enable the eventual proposed development. Once SA7 was agreed, the enabling works were carried out by Balfour Beatty on behalf of Consort. SA7 covered the following works which were implemented by Consort via Trust Additional Works Orders (TAWOs):
 - TAWO 158 – Medical Oxygen Plant or VIE (Vacuum Insulated Evaporator)
 - TAWO 160 – Sewer Diversion
 - TAWO 57 – Road
 - TAWO 159 – A+E Link (*the Docking Station*)
 - TAWO 161 – Services Diversions - TAWO 156 – Flood Defences
12. The following were not included in SA7 but were also delivered by Consort via TAWOs:
 - TAWO 165 – RIE Critical Care and Renal - TAWO 180 – Pharmacy
13. As above, Consort and Balfour Beatty were undertaking the works but we had an interest in them as the ultimate client and paymaster so kept an eye on progress and were involved to the extent that a project manager from Capital Planning represented the Board at meetings and acted in a liaison role between the Board and Consort. Capital

Planning are responsible for placing project managers to projects. Iain Graham is responsible for this department, he will be able to speak in more detail about this.

Supplemental Agreement 6 (SA6)

14. Before the procurement process could commence, the Board had to enter in to negotiations with Consort to secure the land required by NHS Lothian for construction of the new RHCYP and DCN (on car park B). We needed to acquire a new car park for RIE (car park F) to swap for car park B. It was not straightforward because the plots for the new car park (car park F) were owned by Scottish Enterprise and a third party based in the USA, Alexandria Real Estate, had rights to the plots so the negotiations were difficult. The Director of Finance, Susan Goldsmith, led on these negotiations and she is better placed to speak to them than me.

15. We used car park E for our site offices from June 2017 in a co-located manner with IHSL and their supply chain following IHSL's and our move from the original co-located site establishment/ offices situated on the actual construction site of the new hospital. Then when the site offices were no longer required, car park E became a functional car park again.. As part of the planning consent, we were given 230-240 spaces. However, to build the hospital, we had to build on an existing car park (car park B). We therefore created Car Park F to the east of the new hospital. That was done as quickly as possible so that the site could be available to Project Co. By creating Car Park F we maintained the same level of car parking numbers at the Royal, even though we were building on the site. When we cleared out of Car Park E, that became the 200 or so spaces that was the net addition to the overall car parking once the hospital became live.

Switch to NPD model

16. I had no awareness of the change in funding until it was announced by the Scottish Government on 10 November 2010. As Project Director, I would not have expected to be consulted on this matter however I would have expected NHS Lothian to be consulted in some capacity. I do not know why the decision was made. I can only comment on what I read in the press at the time, which was that there was a tightening on the financial

budget following on from the 2007/2008 financial crisis and funds had to be raised by private finance initiatives such as the NPD model. Before this change in position we were well advanced in our negotiations with the principal supply chain partner, BAM Construction. We were pushing towards what's called the agreed target price. We were just about to make a planning application to the council, so the design was well developed. The announcement on the 10 November 2010 brought that to a halt.

17. I have been asked whether the change in funding and also the SA6 and SA7 negotiations had an impact on timescale and cost. It is difficult to separate these issues out. I have been referred to paragraph 3.1 of Finance and Performance Review Committee (F&PR) Minutes dated 9 August 2010 (Bundle 7; Document number 31; Page 685). In summary, issues around SA6 at that time (i.e. before the change in funding) were adding up to 4 months' delay and so the January 2011 start date for construction was no longer possible. The revised date for the hospital being fully operational was mid 2014 (rather than late 2013).

18. However, any delay to a start date did not play out because, between this F&PR Committee meeting in August 2009 and the original start date of January 2011, the Scottish Government announced the change to funding model and the addition of DCN, which caused delays to the start date independent of the SA6 (land transfer, access during construction, wayleaves for utilities, land provision for anew sub-station, oversail rights and right to connect to the RIE) and SA7 (Enabling Works) negotiations. As a by-product of the announcement, we had more time for SA6 and SA7 to be finalised. However, it is very difficult to say when we would have been in a position to commence construction had we proceeded with the capital funded project as planned. I think the SA6 and SA7 negotiations eventually took around two years, with SA6 completing in August 2012 and SA7 completing in December 2012. The enabling works took around 18 months, starting in the spring of 2013 and finishing in the autumn of 2014. So although the capital funding scheme would have endured a delay due to the protracted negotiations with Consort, the introduction of NPD definitely made those negotiations more difficult and, in my opinion, most likely longer.

19. The switch to NPD definitely increased costs and an increased workload for NHS Lothian. We had to prepare a revised business case, prepare for a new procurement

model and consider how best to utilise the design work already done. This involved liaising with internal and external stakeholders and independent advisors. We had numerous meetings with lawyers and technical advisors which were costly and time consuming.

20. I have been asked whether this was a particularly complex project from the outset. Healthcare projects are always complex, however, this Project was extremely difficult from the start, particularly due to: the site constraints; undertaking works on a site that was a live major acute hospital; dealing with various internal and external stakeholders; and the need to acquire land where a third party had rights. However, in my experience, all major and high value projects have significant complexities. What added an additional layer of complexity to this Project was the change in funding to NPD and the technical, legal and commercial challenges that came with trying to join an NPD project to an existing PFI site. In addition, the reintroduction of DCN added further complexity.
21. To clarify, the inclusion of DCN was welcome in that it met NHS Lothian's desire to build a major trauma site, but the lateness of that announcement and the change of funding model, particularly given how advanced we were with the re-provision of RHSC as a standalone project, brought with it further complexities and delays to timescales. It meant that we had to rewind again in terms of some of the design processes and look at the integration of DCN as a significant part of the build. The two areas that particularly took a lot of time were theatres and imaging facilities. We had to try and create services and support areas common to both RHSC and DCN serving these two clinical facilities and achieve economies of scale.

The Reference Design

22. By the time the NPD funding route was announced by the Scottish Government in November 2010, the Board had already developed a detailed design for the re-provision of RHSC ready to be submitted as a detailed planning application. The Board had to consider (i) if/how to use the design team and/or the design work already undertaken by BAM (BAM were appointed the principal supply chain partner ("PSCP") to support the Capital Design project in around April 2009 and (ii) how to present the information to bidders in a new procurement process.

23. Following a review meeting including Scottish Futures Trust (SFT), Scottish Government Healthcare Directorate (SGHD) and MacRoberts LLP (NHS Lothian's legal advisors) on 23 December 2010, it was concluded that it would be beneficial to take a "reference design" to the market. This was not just a case of taking BAM's design and re-badging it as a reference design. We had to break down BAM's design into the component parts then retain and salvage the design principles already agreed through discussion and agreement with clinical teams. Essentially what we did was take the hard-won components and principles of the design such as patient pathways, clinical models and the relationship of spaces to one another and then utilise these as the design principles and building blocks for the NPD process and competitive dialogue.
24. It is important to understand that the reference design was nowhere near what the final design of the Project would be and was never intended to be. We were just providing the bidders with an architectural representation of one possible concept design but which critically illustrated the mandatory requirements imposed on the Board by Consort as a result of the SA6 negotiations. These requirements included constraints on us on a practical, technical, legal and commercial level. Our operational functionality requirements remained a design responsibility of the Board. We were always clear that the reference design was to be replaced with the Preferred Bidder's full design solution. We had an open day for bidders and this was explained to them then as part of the presentation (see Speakers' Notes provided). I have reviewed and included my Notes from the presentation at the open day for bidders and have copied the relevant sections as an Appendix to this statement. It is noted that:
- "Following the close of Competitive Dialogue, and the appointment of the Preferred Bidder, the Reference Design will be replaced with the Preferred Bidder's affordable and commercially acceptable design solution."*
25. I consider these Speakers' Notes demonstrate that NHS Lothian had a clear and articulated strategy and approach which we communicated to the bidders from the outset. We also laboured the point that the reference design was to be replaced by with the Preferred Bidder's design throughout the competitive dialogue process.

26. One of the key driving factors in adopting a reference design, which was set by everyone involved, was to salvage as much of the time, effort and cost that had already been incurred. It was the sensible thing to do. We did not want to throw out what had been hard-won clinical input, for example discussions around clinical models and pathways. To repeat the process would eat into precious clinical time for the clinicians and medics.
27. In summary, the benefits of a reference design were: (i) enhanced cost certainly at the outline business case (OBC)(Bundle 3; Volume 2; Document number 61); Page 672; (ii) fundamentals of the clinical design were complete to the extent that there would be very limited future engagement of scarce clinical resource; (iii) it would shorten the competitive dialogue phase; (iv) utilise available programme time in that it would run in parallel with Consort negotiations to minimise delay to the strategic programme; and (v) it would minimise abortive design cost and tendering risk for unsuccessful bidders.
28. The Project Team initially intended to complete the reference design within 12 months based on three rounds of consultation with clinical staff (Bundle 7; Document number 32; Page 687). The Project Board immediately sought to reduce this period to eight months with two rounds of clinical engagement. My recollection is that it was SFT (who sat on the Project Board) who were keen to shorten the the programme of activities in relation to the reference design production, competitive dialogue and between preferred bidder and financial close, rather than NHS Lothian.
29. SFT supported the reference design approach because they were keen to minimise prospective bidders tendering costs by reducing the length of tender process and interaction between them and clinicians (three bidders, as it transpired, each having lengthy design dialogue with clinicians). The Board was also conscious of the additional demand on clinicians' time this would bring. This is not to say that there wasn't clinical dialogue during competitive dialogue, just less than there would have been had there not been a reference design. This is because we didn't have to start from scratch. We had the principles in clinical terms sorted out through the reference design and, as such, we did not have to go through the same process with three different bidders during dialogue. This saved a huge amount of time.

30. We also had to take advice in relation to the procurement process and, in particular, how to present the reference design to bidders. This advice was sought from Davis Langdon, Mott Macdonald, SFT and Macroberts. As set out in section 6 of the project update to the Finance and Performance Review Committee in January 2011 (Bundle 3; Volume 2; Document number 34 i); Page 318), we explored a variety of procurement options with variations of the reference design approach with external advisors. This resulted in the Procurement Options Paper dated June 2011 (Bundle 3; Volume 2; Document number 47; Page 409) and a strategic programme prepared illustrating potential delivery timelines (Bundle 3; Volume 2; Document number 44; Page 395).
31. We instructed our advisors, Davis Langdon and Mott MacDonald Ltd (Motts), to prepare a report on the Approach to the Reference Design. The first version of this is dated January 2012, with various iterations until the version dated May 2012. (Bundle 3; Volume 2; Document number 68; Page 898) I authored a paper (the “Reference Design paper”) for the Project Steering Board Meeting on 11 May 2012 (Bundle 3; Volume 2; Document number 66; Page 892), which recommended that the Approach to the Reference Design report (being an earlier version dated March 2012) was used as the basis for accurately conveying NHS Lothian’s intentions to bidders in relation to mandatory and non-mandatory elements. The Approach to the Reference Design report by Motts outlines and recommends the approach which the Board ultimately adopted (see Project Board Action Minutes dated 11 May 2012 Bundle 3; Volume 2; Document number 67; Page 896).

Operational Functionality

32. The reference design needs to be understood in the context of operational functionality. I have been asked by the SHI to refer specifically to contractual provisions in the Project Agreement between NHS Lothian and IHSL (Project Co) dated 13 February 2015 and have consulted with NHS Lothian’s legal team in this regard. The following represents my understanding of the contractual position but I fully appreciate that there are other interpretations.
33. My understanding is that Project Co had to design and build the Project in line with the Board’s Construction Requirements (BCRs) (clause 12.1). The BCRs provided that Project Co had to comply with the requirements of SHTM and adopt them as mandatory

(clause 2.3 (v) generally and elsewhere). Where there was a contradiction in standards, the BCRs provide at clause 2.5 that the most onerous shall take precedence.

34. Overall responsibility for the design sat with Project Co (clause 12.3). Project Co had to develop and finalise the design and specification of the Works and the Board had to review the Reviewable Design Data (clause 12.6), insofar as it related to operational functionality.
35. The only element of design that was retained by the Board was operational functionality. Operational functionality is narrowly defined in the Project Agreement and, most importantly, did not encompass matters such as ventilation and pressure regimes within wards and rooms. In summary, it comprised the information as indicated in interdepartmental layouts (1:500); Departmental Layouts (1:200) and Room Layouts (1:50) for Key and Generic Rooms and departmental corridor layouts. We referred to Operational Functionality as opposed to Clinical Functionality because some of the mandatory areas of the Reference Design covered non-clinical functions such as Supplies, Storage, Distribution and Waste Management (Soft FM) and ICT Requirements).
36. Operational Functionality means the point of access to and within the development, buildings and departments; the adjacencies between different departments; the adjacencies between rooms within the departments; the quantity, description and areas of those rooms and spaces shown on the Schedule of Accommodation. It is about the geography of a room or department and the geography of equipment within such a room or department. It considers practical questions that the Board needs to consider in relation to room layouts to ensure that they were operationally functional. For example, could medical staff approach patients from both sides of a room? Could catering trolleys enter and exit a room? Operational functionality did not include consideration of design requirements such as ventilation and pressure regimes within wards and rooms.
37. That said, if NHS Lothian identified any errors beyond issues with operational functionality, it would bring those errors to Multiplex/IHSL's attention. I personally was acutely aware that I had obligations in respect of the health and safety of the occupants of the new facility, professionally as a Chartered Architect and a responsibility, as an

officer of the Board, to the Accountable Officer to enable him to fulfil his responsibilities. The Accountable Officer is the Chief Executive of NHS Lothian.

Mandatory Elements

38. I have been asked to explain my understanding of the mandatory elements within the reference design. This comprises the information that defines Operational Functionality as already noted above, i.e .Interdepartmental Layouts (1:500; Departmental Layouts (1:200) and Room Layouts (1:50) for Key and Generic Rooms

39. There are also Compulsory Requirements:

- Planning in Principle as granted by The City of Edinburgh Council.
- Interface, access/egress and infrastructure provisions enshrined in (SA6 + SA 7) □
Clinical, D+C and FM Output Specs.

40. To clarify, the Reference Design drawings are a diagram or graphical representation of these requirements. We were always clear that the Board's Construction Requirements would always take precedence over the Reference Design for matters which do not define Operational Functionality.

Non-Mandatory Elements

41. I have been asked to provide a description of the non-mandatory elements of the reference design. The non-mandatory or indicative elements were information that had been developed to verify the feasibility of the reference design in terms of architecture and engineering (e.g. the Environmental Matrix (EM)) and information developed for issue to Bidders in regard to site and servicing information (e.g. the borehole logs). Bidders response to the non-mandatory and indicative elements, which they had to develop through their design, still had to be in compliance with mandatory guidance such as SHTM 03-01. The premise of the indicative elements was to allow bidders to introduce innovation in their response. Whilst bidders still had to comply with the mandatory guidance, it enabled the bidders to bring private sector innovation to the table. My impression and understanding was that this approach was strongly promoted by SFT.

42. I have been referred to paragraph 2.5.3 of the ITPD, which relates to Room Data Sheets (RDS)(Bundle 3; Volume 3; Document number 74; Page 200). RDS give a detailed description of the activities, personnel, planning relationships, space data, environmental performance, clinical risk category, finishes and equipment that will be required for each room or space in a project. Paragraph 2.5.3 of the ITPD states that RDS had not been prepared by the Board for the Project. It was for bidders to develop their own RDS to form part of their proposals. The Room Information at para 2.5.3 of the ITPD provided to inform the bidders' development of the RDS included the Environmental Matrix. It is my understanding that the only element of RDS which NHS Lothian retained any design responsibility for was in the context of operational functionality.
43. Paragraph 2.6 of the ITPD (Bundle 3; Volume 3; Document number 74; Page 200201)sets out the Indicative Elements of the Reference Design, and describes it as other information that has been generated both as a by-product of preparing the reference design and as a general Project requirement. One such indicative element in Section 2.6 is "building services engineering solutions". This was issued "for information only" to assist the bidders in understanding the intent of the reference design and they were advised to refer to the BCRs.
44. It has always been my understanding that the EM issued within the ITPD suite of documentation was one such indicative element and as such fell into the category of "disclosed data" in a similar way to the geotechnical reports or ground bore holes' surveys carried out previously by BAM in the capital funded scheme. I have been asked by the SHI for a definition of disclosed data. Disclosed Data is defined in the Project Agreement as any Design Data and any other written information, data and documents made available or issued to Project Co or any Project Co Party in connection with the Project by or on behalf of the Board. Clause 7.2 of the Project Agreement provides that the Board gives no warranty in respect of the Disclosed Data and it should not be relied upon for accuracy.
45. It might assist the Inquiry if, at this stage, I provide some more detail on my understanding of the design function and relevance of the EM, which is a document I understand may be of particular interest to the Inquiry. I do so here because it may assist to place the EM in its contractual and design context. The EM is a table which sets out

the environmental design parameters for each space within the hospital. The sole purpose of an EM is taking the environmental criteria that exists in room data sheets and putting them in to an Excel spreadsheet. There could be hundreds or thousands of room data sheets so rather than designers having to go through every room data sheet it is all in the EM. It is a summary of environmental performance and environmental requirements. It is used whether the project's capital funded or private finance funding. The EM was generated by Hulley & Kirkwood (a sub consultant to BAM) during the initial design stages when the project was to be capital funded. After the change to NPD, Motts appointed Hulley & Kirkwood as a sub-consultant. and Hulley & Kirkwood produced a further version of the EM which was issued with the ITPD. It was considered that whilst this information was not warranted by the Board and should not be relied upon for accuracy (clause 7.2 of the Project Agreement), it may prove useful to engineers employed by the bidders in any initial design assessments and in informing further investigations and studies they may care to undertake.

46. To explain the relevance, the EM issued at ITPD stated 4 Ac/hr for the single-bed rooms and 4 Ac/hr for the multi-bed rooms in relation to critical care rooms. However, the EM was prefaced with guidance note 15 which prescribed a ventilation rate of 10 Ac/hr for critical care rooms. There was, therefore, a conflict in the EM. The EM was to be revised as necessary by the successful bidder (IHSL/Multiplex) as the design and construction developed. The EM was no different from other technical data that was given to the bidders to assist them. It was intended to give design teams an idea as to where they should be going. It's not guaranteed or warranted in any way (clause 7.2 of the Project Agreement) but it was to assist them and enable them to have a head start. The successful bidder was responsible for the final design and had to their own studies as well. Although an EM is not part of standard form contractual documentation, it was (and still is) a widely used procurement mechanism on NPD/PPP projects. It is still used because the theory is that it helps the engineers. They get one document with all the information, rather than sifting through hundreds or thousands of other documents. In my experience it is not unusual for clients to share previous prepared information pertaining to the site or parts of any earlier design exercises with those that will design and build the proposed facility.

47. I have been asked whether the adoption of the reference design approach was unusual given the number of mandatory elements. I would say that it probably was but we were working with an unusual set of circumstances. I advised the Project Steering Board in the Reference Design paper (para 3.3) that, because of the particular and unique issues surrounding the Project, greater input and a more mature reference design had been necessary than may have been the case in other Healthcare NPD projects because of, for example: the site constraints; the connections required to the existing RIE building; the site being part of an existing PFI/PPP site; and, the interface and access requirements with the existing RIE/PFI service provider. Due to these specific constraints that we were tied to, there was not the latitude for the bidders to digress from that. We had to communicate that to them clearly and succinctly, which we did at the open day for bidders and throughout the competitive dialogue process. This differs from other projects, where the term “exemplar design” is probably used, which is not as prescriptive as “reference design”. Reference design goes beyond exemplar design because of the specifics that we had to adhere to in this case.
48. Importantly, and as discussed above, I advised the Project Steering Board in the Reference Design paper (para 3.4) that following the close of Competitive Dialogue and the appointment of the Preferred Bidder, the reference design will be replaced with the Preferred Bidder’s full design solution(Bundle 3; Volume 2; Document number 66; Page 893) This was a fundamental point that we communicated to bidders.
49. I have been asked what the difference is between an Exemplar Design and a Reference Design. A reference design is more prescriptive. That was necessary in this Project due to the constraints imposed on the Board by Consort. The use of the reference design went beyond what is usually provided to bidders, known as an exemplar design. However, both a reference design and an exemplar design, whilst communicating mandatory and indicative requirements to a lesser or greater extent, manifest themselves visually as one possible architectural representation amongst many.
50. I have been asked whether the Scottish Ministers supported the reference design approach. I refer to paragraph 2.5 of the ITPD (Bundle 3; Volume 3; Document number 74; Page 198) prepared by Motts for use by NHS Lothian. It is stated there that the use

of reference design in NPD projects is being promoted by the SFT and Scottish Government.

51. I have been asked about the role, if any, of healthcare planners. I do not recall this issue specifically but note that at paragraph 4.2 of the Reference Design paper it is stated that *“Given the previous Healthcare planning input to the project from an external Healthcare Planner and NHSL’s extensive internal resource, the lack of an appointed advisor as Healthcare planner during procurement is deemed to be a minor and manageable risk”*. Nevertheless, I’m aware that Tribal, a healthcare planner, was employed during the development of the reference design to assist with bed modelling.
52. We also received advice from Ernst & Young in relation to the cost, time and risk elements of the procurement process and from MacRoberts LLP in relation to the legal aspects. Architectural and engineering input was provided by BMJ Architects / Nightingales, Hulley and Kirkwood and Arup to the reference design process as sub consultants of Motts.

Design Assurance

53. I was not involved at the initial planning and design stages of the Project.
54. By the time I was appointed as Project Director in August 2009, the RHSC project had formally commenced as a capital funded project in April 2009 following the appointment of a Principal Supply Chain Partner (BAM Construction), Lead Adviser (Davis Langdon) and Cost Consultant (Thomson Gray). These organisations were procured by mini competition from a framework established by HFS in January, 2008 (Bundle 3; Volume 1; Document number 6; Page 154) A Q+A document issued by HFS in July 2008 outlines the preferred partnering approach to procurement of building contractors and professional services advocated by HFS (Bundle 3; Volume 1; Document number 11; Page 265).
55. A project overview document in October, 2009 (Bundle 3; Volume 1; Document number 14; Page 572) and clinical design structure diagram in August 2009 (Bundle 3; Volume 1; Document number 13; Page 571) describe the status of the project and extent of

clinical engagement in the design process respectively. The Board confirmed to Davis Langdon in November 2009 (Bundle 3; Volume 1; Document number 15; Page 575) that they and the PSCP were to continue to develop a design for a joint RHSC + DCN whilst also preparing a “shadow” design for a RHSC only facility.

56. A programme of briefing activities for 2010 (Bundle 3; Volume 1; Document number 17; Page 581) sets out the extent of engagement and range of topics discussed in conjunction with a note of the clinical representation (Bundle 3; Volume 1; Document number 18; Page 582) in these activities and meetings. Clinical input would not have referred to SHTM 03-01 and other parameters such as air changes per hour.
57. The NEC3 contract mandated by HFS defines a collaborative process between the parties to develop jointly and agree the “works information” for the final building contract. An unsigned version of a Stage 3 contract was prepared in June 2010 which illustrates this approach (Bundle 3; Volume 1; Document number 23; Page 860) In general terms and had the project continued along a capital funded / NEC3 route this collaborative process would have involved the PSCP responding to the Board’s initial “Employers Requirements” (Bundle 3; Volume 1; Document number 19; Page 583) with their “Contractor’s Proposals” which eventually, following continuous engagement with the Board and design development, result in the agreed “Works Information”. Unless specific derogations are agreed and documented in the “Works Information” all design responsibility for compliance with recognised and current healthcare requirements rests solely with the PSCP.
58. Two Gateway Reviews were undertaken. The first was in 2008 before I was appointed as Project Director (Bundle 3; Volume 1; Document number 9; Page 249) (Bundle 3; Volume 1; Document number 10; Page 263) and the second in 2010 (Bundle 3; Volume 1; Document number 20; Page 797) (Bundle 3; Volume 1; Document number 21; Page 813) This Scottish Government review process (Bundle 3; Volume 1; Document number 1; Page 4) applies to all organisations covered by the terms of the Scottish Public Finance Manual that have a budget of £5 million in value or over (anything which meets the definition of Mission Critical being automatically considered as High Risk).

59. Capital funding was withdrawn by Scottish Government in November 2010. The Board commissioned a report from Davis Langdon in December 2010 on the viability of combining the RHSC requirement with the DCN requirement (Bundle 3; Volume 2; Document number 30; Page 5)
60. Motts were appointed as Lead Consultant and Technical Adviser via the OGC Buying Solutions Framework in March 2011 to provide NPD procurement, Facilities Management and Design and Construction advice.
61. On 22 March 2011 the Scottish Government Health Directorates ('SGHD') sent a letter to all NHS Board Chief Executives regarding funding conditions for delivering projects through the NPD model, which made it clear that a project scope needed to be agreed with SGHD and SFT (Bundle 3; Volume 2; Document number 43(i); Page 377) It is my understanding that the process of independent project review and subsequent approval of the outline business case was how SFT agreed with the SGHD the scope of the construction of the Project, and the other acute health projects within the NPD programme.
62. On 21 June 2011, Scottish Government Health Directorate gave approval for an updated business case to be developed under Non-Profit Distribution (NPD) funding route in which the DCN project was to be incorporated alongside the RHSC (see letter from SGHD to NHS Lothian dated 21 June 2011) (Bundle 7; Document number 7; Page 292).
63. Motts and Davis Langdon (sub consultant to Motts) prepared a "Procurement Strategy" paper in November 2012 which formed an appendix in the approved OBC (Bundle 3; Volume 2; Document number 71; Page 946)
64. Two Achieving Excellence Design Evaluation Toolkit (AEDET) Reviews were undertaken on 12 August 2011 and 8 March 2012 however I was not directly involved in the AEDET reviews. In order to avoid bias, the Project Team were detached from the process and it was Nightingales architects who led the reviews. My understanding of the process of these reviews is that it's a testing proposition from all user group angles. For example, is the entrance in a visible and obvious place? What are the distances from entrances and from car parking? What are the walking distances to bus stops? Then for example, from inside the building it tests if you can see a stair from the main entrance

or if people know how to get to other floors. It focuses on orientations throughout the building. It then goes in to more specific departmental detail. This is a UK wide accepted design evaluation process.

65. One aspect of design assurance was clinical engagement and in particular IPCT (infection prevention control team) engagement to assure the Board that the performance specifications had gone through a process of negotiation and agreement in relation to operational functionality. My understanding is that the Project Agreement and BCRs relied on SHTMs being mandatory and the fundamental basis of Project Co's ventilation design. Ultimately, our design assurance was that Project Co would deliver a final product in line with those requirements.
66. I have been asked whether an NHS Design Assessment process (NDAP) ever took place in respect of the Project. It did not because we had already secured business case approval. There was so much else happening in terms of the reviews and KSRs introduced by SFT. From memory it was never highlighted as an essential review process. I have been referred to an email chain between Susan Grant (Health Facilities Scotland) and Alan Morrison (Scottish Government) dated 5 July 2019 (Bundle 3; Volume 3; Document number 78; Page 1309) which discusses whether, if a new hospital was being designed and the ventilation system in critical care unit had a non-compliant number of air changes per hour, would NDAP pick that up, and the answer from Susan Grant is that *"As you know, NDAP is only a proportionate review... and we may or may not catch the many many details in each project"*.
67. I have been asked specifically about the role of HFS. I don't think the role of HFS changed significantly from when the process was capital funded to the NPD process in that they were the engineering and infection control specialists that we could have consulted as/when necessary. However, the gateway process performed by HFS was taken over by SFT after the switch to NPD, who then replaced it with their KSR process.
68. As detailed above, the EM is a table which sets out the environmental design parameters for each space within the hospital. There was undoubtedly a conflict in the EM regarding the number of air changes required in critical care. Whether or not an NDAP would have picked up that conflict is very difficult to say. They would have had to go through the

EM line by line. It is a 2350-line document each line representing a room with detailed information so the likelihood of them doing that is slim. It may be they would have reviewed the contract documents in the first instance and noted the mandatory requirement to comply with SHTM 03-01 and felt that provided sufficient assurance, but it's not for me to say. Susan Grant in her email seems to recognise that they may or may not have, given the many details in such projects.

69. I have been asked about the role of SFT in respect of design assurance. I cannot recall SFT providing advice to NHS Lothian as regards whether an NDAP assessment should take place or not. I cannot recall whether SFT provided any particular advice on what guidance should be followed for the OBC process as regards the NDAP process. Oversight and review was carried out by SFT by way of their KSR process. SFT also commissioned WS Atkins to undertake a design review of the Project which made various recommendations as laid out in SFT's Project Review of December 2011.

70. I have been referred to a letter from SFT to NHS Lothian (Jackie Sansbury, chief operating officer) dated 1 June 2011 (Bundle 3; Volume 2; Document number 46; Page 399) which sets out their role. In relation to Assurance and Approvals it sets out the SFT will review and provide support to the CIG (Capital Investment Group at Scottish Government) in consideration of both the OBC and full business case (FBC) for the Project and work with us in relation to the development of these documents.

71. It also sets out that they will introduce a Key Stage Review (KSR) process which negated the need for further Gateway reviews. There were 5 further KSRs completed and reported by SFT through the NPD procurement: (i) Approval of the Project pre OJEU stage (2012); (ii) Pre ITPD stage (March 2013); (iii) Pre-close of dialogue (December 2013); (iv) Pre-preferred bidder appointment (February 2014); and (v) Pre-financial close (February 2015).

72. SFT described themselves as our "critical friend". We formally reported to SFT via the KSRs which were managed by Donna Stevenson. Donna was the principle point of contact with SFT as far as the Project Team were concerned. We also had an SFT employee, Gordon Sheriff, embedded within the Project Team for a few days a week in

the Spring of 2011. Subsequently, when the Project became operational, Tony Rose from SFT became the public interest director sitting on the IHSL Main Board. Tony had also acted as the final signatory for SFT for all KSRs.

73. I have been asked about the role of the Scottish Ministers in design assurance. Their role was to approve the business case and they had to be satisfied with all aspects of it, which included elements of design. Mike Baxter was the contact at Scottish Government who we dealt with in relation to the business case process. I do recall one or two meetings with the national infrastructure group where they looked at the risks of NPD but I cannot recall particular discussions around design assurance.

74. I have been asked about the role of Motts in the design assurance process. Motts were appointed as our technical advisor and played a key role in design assurance. They prepared the Approach to Reference Design report which made recommendations the Board ultimately adopted. Motts were the prime author of the ITPD (invitation to participate in dialogue) (Bundle 3; Volume 3; Document number 72; Page 3) and prepared the suite of documents issued to bidders, which included the EM on the basis it was disclosable data. They prepared the performance specifications for NHS Lothian, including the references to SHTM 03-01 re ventilation guidance. They put the ITPD package together which offered significant design assurance to NHS Lothian.

75. I have been asked whether the design assurance processes in place throughout this Project were adequate. Whether a more robust design assurance process at the outset would have caught the error in the EM is very difficult to say. Ultimately, and irrespective of the error in the EM, Project Co (IHSL / Multiplex) had responsibility for the design. NHS Lothian were relying on Project Co (IHSL / Multiplex) operating the Project in accordance with the Project Agreement which included mandatory guidance SHTM 03-01 for ventilation requirements.

STATEMENT OF TRUTH [to be signed by witness once statement is finalised]

I, Brian Currie, confirm that:

- (i) The contents of this statement is the truth to the best of my knowledge and

recollection;

- (ii) I am willing for this statement to form part of the evidence before the Scottish Hospitals Inquiry.
- (iii) I am willing for this statement to be published on the Scottish Hospitals Inquiry website.

Signature:

Date:

Appendix 1

Extract from Speaker's Notes for NHS Lothian's Presentation at the Open Day for Bidders

Brian Currie, Project Director

The Project – Slides 27 – 49

Slide 27 – The Project

- Almost unique in the UK, as far as we know, where the intention is to develop a new NPD/PPP hospital within an existing PFI hospital and campus.
- Determined to normalise this situation and provide a site and Project and an opportunity which does not present challenges beyond what would be typically expected.
- Prior to going to market.
- Reached that point evidenced by our compliance with a rigorous governance process both internally and externally to the Board.

Presentation will highlight aspects of IM/PQQ documentation emphasising the importance of:

- Enabling and Interface Works
- Reference Design
- Sustainability + Community Benefits
- Operations (not of the medical kind!)

Presentation will expand on the programme, process and project management aspects of the project.

Slide 28 – Wider site

□

North to top

- Dalkeith Road – A7 leading to A68 and The Borders
- SE Wedge – one of last remaining development zones
- Residential – Niddrie + Craigmillar to North. Moredun to South
- Emerging Bio Quarter + further housing to East
- Little France Drive – cross connection
- The Tram
- Site nestling in valley of Niddrie Burn
- Craigmillar Castle prominent to North

Slides 29 & 30 – The site

- “normalisation” process - determined to create equal opportunity for all bidders to compete on a “level playing field”.
- proposition where no one bidder is either advantaged or disadvantaged has been achieved - by specifying that although there will be a physical link between the new facility and the RIE at ground and first floor levels, in all other respects the development will be delivered as a standalone new build facility.
- links, driven by necessity, will ensure clinical functionality and efficiencies, particularly between the emergency departments, theatres and critical care departments on site.
- minor operational links between the new facility and the RIE in respect of connecting services mainly in terms of infrastructure associated with ICT, pneumatic tube system and fire alarm systems.
- in all other respects the facility is fully autonomous with a dedicated energy centre, standby power generation and FM goods yard. Public utilities are also independent of the existing RIE PFI facility.

Slides 31-36 – Enabling Works

RIE Campus also needs enabled to accommodate the new facility. Consort Healthcare, on behalf of the Board, is undertaking certain ‘enabling’ works on the Little France site in preparation of the Project.

External enabling works relate to the following and are due to be substantially complete prior to financial close.

□

- Enhancement to Existing Flood Defences within and out with RIE
Revision of Road Infrastructure and creation of new Bus Terminus
- Relocation of Medical Gas Plant (VIE – Vacuum Insulated Evaporator)
- Creation of Link Building to the current RIE and alterations to Existing Emergency Dept.
- Diversion of existing Trunk Sewer
- Disconnection and Removal of existing services in Car Park B.

Slide 37 – Clinical enabling

- Clinical enabling works within the RIE include changes in critical care, pharmacy and laboratory services and will be completed prior to the new facility opening.
- All required the completion of a Supplemental Agreement to modify the existing Project Agreement at the RIE with Consort Healthcare.
- This remains to be completed.

Slide 38 – Interface Works

- The new facility will interact with its neighbours both during and after construction
- The existing RIE was procured as a PFI contract (1st Generation) between the former Royal Infirmary of Edinburgh NHS Trust and Consort Healthcare (ERI) Ltd.
- The Project Agreement for the RIE was signed in August 1998 and covers a 25 year operational period until February 2028.
- The RIE was financed, designed and built by Consort Healthcare, and a range of soft and hard facilities management services are provided through the RIE Project Agreement.
- The site is leased from Scottish Ministers to Consort Healthcare for a term of 130 years, thus any site development requires Consort Healthcare approval together with appropriate changes to the RIE Project Agreement.
- The Board has concluded negotiations on a Supplemental Agreement (SA6) to the RIE Project Agreement which includes the land transfer of the site earmarked for the Project and also covers:
 - access during construction
 - wayleaves for utilities
 - land provision associated with a new sub station

□

- oversail rights
- right to connect to the RIE

The DBFM contract will reflect these provisions.

Slide 39 – Reference design

To clarify what we really mean by a Reference Design.

What were the attractions given the departure from previous PPP/PFI projects where an “exemplar” design was the norm?:

- assists with the OBC and accuracy of pre-procurement costing.
- provides greater certainty over the final design solution.
- assists significantly in defining a quality threshold.
- optimises the input required from stakeholders and in particular clinicians and clinical management teams.
- utilises programme time available as a result of essential parallel activities prior to commencement of procurement.
- reduces risk and bidding costs to bidders, we would contend.
- shortens the competitive dialogue phase.

Slide 40 – Ground Floor site plan

A glass half full (not half empty)

Half full part is the Mandatory and Compulsory requirements, the other, empty part, the Indicative or Non Prescriptive requirements which the bidders will require to fill.

Mandatory Requirements

Comprises the information that defines Operational Functionality* and is indicated in:

- Interdepartmental Layouts (1:500)
- Departmental Layouts (1:200)
- Room Layouts (1:50) for Key and Generic Rooms

Compulsory Requirements

- Planning in Principle as granted by The City of Edinburgh Council.

□

- Interface, access/egress and infrastructure provisions enshrined in (SA6 + SA Enabling)
- Clinical, D+C and FM Output Specs.

The Reference Design drawings are a diagram or graphical representation of these requirements.

**We refer to Operational Functionality as opposed to Clinical Functionality since some of the mandatory areas of the Reference Design will cover non-clinical functions such as Supplies, Storage, Distribution and Waste Management (Soft FM) and ICT Requirements).*

Operational Functionality means:

- *The point of access to and within the development, buildings and departments.*
- *The adjacencies between different departments.*
- *The adjacencies between rooms within the departments.*
- *The quantity, description and areas of those rooms and spaces shown on the Schedule of Accommodation.*

Slide 41 – sections

The level of design development can be described as approximating to **RIBA Plan of Work Stage C +** (Concept Design) and covers 52% of all spaces at 1:50 scale including the key and generic rooms.

Bidders will be required to generate up to 10 other room types at 1:50 scale for final tender with the remainder being concluded before Financial Close.

Room Data Sheets

Standard format Room Data Sheets have not been prepared by the Board for the Project instead specific room requirements are detailed in a combination of the following documents:

- General Requirements
- Clinical Output Spec
- Environmental Matrix
- Schedule of Operational/Design Notes
- Equipment Schedule
- Schedule of Accommodation
- Operational Functionality elements of the Reference Design

Note: Bidders will be required to develop Room Data Sheets as part of their proposals. The full set of RDS will be completed from appointment of Preferred Bidder to Financial Close.

Schedule of Accommodation

The Schedule of Accommodation, based on the Reference Design drawn layouts, along with the Target or Model (Minimum) Schedule of Accommodation will be issued to Bidders.

This “Drawn” Schedule of Accommodation for Plant Rooms and Hard FM Rooms is indicative only and should certain other rooms vary in area terms from the Model Schedule this is acceptable on a specific room only basis.

Slide 42 – *Stacking Diagram*

Indicative Requirements

Bidders will be encouraged to propose innovative solutions in response to:

- Information that has been developed to verify the feasibility of the Reference Design in terms of architecture and engineering.
- Information developed for issue to Bidders in regard to site and servicing information.

Bidders must however refer to the Board’s Construction Requirements for the detailed requirements for all such indicative elements of the Reference Design for which they may ultimately carry the risk.

Note: The Board’s Construction Requirements will always take precedence over the Reference Design for matters which do not define Operational Functionality.

Innovation

Whilst there is an absolute requirement to maintain Operational Functionality, Bidders will have latitude and will be encouraged to develop innovative solutions for the external and internal architectural expression and site layout for the facility promoting their unique approach to an appropriate architectural language and ambition.

We would hope this would consider:

- expression and representation
- order
- conformity and contrast
- integrity and honesty
- detailing and materials etc.

whilst complying with mandatory and compulsory requirements.

This should apply equally to the:

- layout and disposition of facilities
- pattern of site planning
- scale of the pieces
- relationships with differing site boundaries

but again within the mandatory and compulsory design requirements.

As an example, features such as curved walls and the external landscaping forming part of the Reference Design are indicative only given that these have no influence on the Operational Functionality.

Other Indicative elements are:

- Circulation and Communication space (however minimum dimensions specified will be treated as mandatory).
- Structural engineering solutions.
- Building Services engineering solutions.
- Architectural Expression
- Hard FM solutions and space allocations.

Bidders will be encouraged to apply a unique design strategy founded on sound architectural principles whilst complying with the mandatory elements of the Reference Design and other Compulsory Requirements.

Following the close of Competitive Dialogue, and the appointment of the Preferred Bidder, the Reference Design will be replaced with the Preferred Bidder's affordable and commercially acceptable design solution.